CRAFT BEER REVOLUTION: appropriability regime of the innovation and business model archetypes adopted by most growing craft breweries in U.S.

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“Taste, like identity, has value only when there are differences”

Carlo Petrini – founder of the Slow Food movement
Acknowledgments

First of all, I want to say thanks to professor Dell’Era for accepting to oversee this thesis discussing about such an unconventional topic. I also would like to express gratitude to all the professors of the “Design Management, Innovation and Entrepreneurship” specialization, for teaching me that management is not only connected with profits and market share but it’s based on meanings and on creating products that people love. I hope to always live by this principle along my career.

I also want to say “cheers” to all my closest friends, university mates, colleagues and the random people I met during the different experiences I had along these years at Politecnico. I won’t never forget the amazing time I had. I’m sorry if I haven’t dedicated a specific caption to anyone of you but I think that this dissertation is long enough!

Last, but not least, I want to dedicate this graduation to my family for supporting (and “sopporting”) me every day in everything I do.
Abstract

The beer industry is concentrated in the hands of three main multinational companies that together control around the 50% of the global market share. The consolidation is estimated to increase in the years to come after the merger of the world’s biggest companies, AB InBev and SAB Miller. The deal, closed in 2016 after the acquisition of the firm by AB InBev for $103 billion, recorded the third-largest merger in corporate industry.

In such a concentrated market, few small independent companies have challenged the standard products developed by these multinational organizations by providing new meanings to customers. By offering a broad variety of flavours and building a strong community of enthusiasts, craft beer movement has been able to disrupt the market reaching in 2016 around the 22% of total retail dollar sales in US. Multinational leaders of the industry adopted several moves recently to slow down the trend and to appropriate the additional profits introduced with the innovation. In particular, they acquired several craft brewing companies, they created the so-called “crafty” brands, they built strong connections with distributors to cut-off competition and they implemented different initiatives with the aim to blur the definition of craft beer.

The goal of this thesis is to understand how these small companies could be able to reach such a popularity and how they could protect the disruption they introduced in a historically consolidated market.

The dissertation starts with a comprehensive presentation of the innovation management and appropriability literature, in order to support the research with a strong theoretic basis. Building on the articles and the books analysed, we designed a framework through which we have studied the craft beer disruption according to three main levels: industry level (zoom-out), company level and value proposition level (zoom-in). Selecting the most growing craft breweries in the last 5 years among the 100 biggest in US, we have been able to assess the appropriability regime of the innovation and to present the most successful business model archetypes implemented. In order to contextualize the evolution of the market and to present the four archetypes to a broad audience, we built the timeline of development of the business models identified and we took advantage of metaphors to express the meanings represented by them.

Keywords: craft beer, appropriability of innovation, disruptive innovation, business model, design-driven innovation, innovation of meanings
Abstract – Italian version

Il mercato della birra è concentrato nella mano di tre aziende multinazionali che insieme controllano circa il 50% del market share globale. Questo consolidamento aumenterà notevolmente negli anni a venire in seguito alla fusione dei due maggiori operatori nel settore, AB InBev e SAB Miller. L’accordo, chiuso nel 2016 grazie all’acquisto dell’azienda da parte di AB InBev per 103 milioni di dollari, ha registrato la terza più grande fusione aziendale nella storia.

In un mercato così concentrato, alcune piccole aziende indipendenti hanno messo in discussione i prodotti standardizzati offerti da queste organizzazioni multinazionali, fornendo nuovi significati ai clienti. Creando un’offerta varia nei sapori e creando una comunità di appassionati coesa, il movimento della birra artigianale è stato in grado di sovvertire il settore raggiungendo nel 2016 il 22% delle vendite totali in dollari negli Stati Uniti. Le multinazionali leader del mercato hanno tentato in tutti modi di rallentare il trend e di appropriarsi dei guadagni introdotti con l’innovazione. In particolare, acquistando diversi birrifici artigianali, commercializzando i cosiddetti brand “crafty”, creando un forte network di distributori per tagliare fuori la concorrenza e implementando diverse iniziative volte ad offuscare la definizione di birra artigianale.

L’obiettivo della tesi è quello di capire come queste piccole aziende sono state in grado di raggiungere tale popolarità e come possono difendere la rivoluzione che hanno introdotto in un mercato storicamente concentrato.

Lo studio parte con un’ampia panoramica della letteratura sui temi del management dell’innovazione e dell’appropriabilità. Basandosi sugli articoli e sui libri analizzati, abbiamo sviluppato un modello grazie al quale abbiamo studiato la rivoluzione della birra artigianale secondo tre livelli: a livello di mercato, a livello aziendale e a livello di value proposition. Selezionando i birrifici artigianali che sono cresciuti di più negli ultimi 5 anni, all’interno dei 100 più grandi negli Stati Uniti, siamo stati in grado di valutare il regime di appropriabilità dell’innovazione e di presentare gli archetipi di business model più efficaci. Per contestualizzare l’evoluzione del settore e per presentare gli archetipi ad un’audience ampio, abbiamo stimato la sequenza temporale di sviluppo dei business model e abbiamo utilizzato metafore per esprimere i significati che hanno rappresentato per affacciarsi sul mercato.

Parole chiave: birra artigianale, appropriabilità dell’innovazione, innovazione disruptive, business model, innovazione design-driven, innovazione di significato
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Chapter 1: Executive Summary

In this chapter, we will present the executive summary of the dissertation. We will start explaining briefly the problem setting and we will continue presenting the research objectives, in which the research questions are explained. Following the objectives set, the research process is explained, in order to clarify achieved results from the systematic literature review. At the end of the chapter we will also express briefly the main findings of the study.

1.1 Problem setting

Beer is the most consumed alcoholic beverage in the world and the most popular drink after water and tea. The market has been historically concentrated in the hands of three main multinational giants, AB InBev, SAB Miller and Heineken, that together control around the 50% of the global market share. The consolidation of the industry will be increasing exponentially after the $103 billion acquisition by AB InBev of SAB Miller in 2016.

In such a competitive context, however, craft beer has been a revolution that disrupted the market by leveraging on meanings provided to customers. We can compare the trend to the Slow Food grassroots organization founded by Carlo Petrini in Italy in 1986 starting with the protest against the opening of McDonald’s near the Spanish Steps in Rome. The two movements, in fact, are a revolution against the standardization of taste, promoting the diversity of flavours, the value of local culture and the concept of quality over speed and costs.

Craft breweries, leveraging on those values, could be able to steal the position built by the leaders of the market and to change the rules of the game. In 2016 craft beer industry in US represented the 12,3% of market share in sales volumes and the 21,8% of market share in dollar sales, representing a disruption in the industry. The relevance of the innovation led to an increasing number of operating craft breweries; since 2010 in US more than 3.400 companies started their business in the segment, recording an average boost of the 58,84%.

Multinational leaders implemented several moves to slow down the trend and to internalize the additional profits introduced with the innovation. The main actions taken to appropriate the craft beer culture are acquisitions, made with the goal to incorporate the know-how developed by companies along the years. When a purchase by non-craft companies exceeds the 25% of stakes, the acquired entity couldn’t be considered craft anymore according to the Brewers Association definition. In particular, AB InBev founded the business unit High End dedicated to the development of craft beer brands, Miller Coors founded the division Tenth and Black under which it commercializes craft and premium foreign brands while Heineken took advantage of the purchasing of Lagunitas giving to the company the role of leading brewery of the new American craft division.

Big multinational companies implemented additional initiatives to avoid the definitive disruption of the industry. In fact, they created the so-called “crafty” brands inspired by craft products, they built strong connections with distributors to cut-off competition and they implemented different moves with the aim to
blur the definition of craft beer. The initiatives implemented, in general, have successfully slowed down the
trend decreasing the sales growth from 13% in 2015 to 6.2% in 2016.

Our study focuses on the appropriability of innovation literature both from an industry and a single firm point
of view. The model designed starting from the papers and the books analysed, will be applied to the most
successful craft breweries.
1.2 Research objectives

This dissertation provides a comprehensive analysis of the craft beer movement in the US both from an industry context and from a business model point of view. The aim is to define the appropriability regime of the innovation and to define successful strategic archetypes implemented by the most successful companies in the segment.

The specific objectives of the research are:

- To assess the appropriability regime of the industry and to contextualize the levels of competition connected to it.
- To identify the most innovative and successful companies in the segment in order to understand how they have profited from the craft beer disruption.
- To understand similarities and differences among the cases selected classifying them according to business model clusters.

The output of the dissertation could be used by different operators coming from a variety of industries. Our ultimate goals are:

- To propose actions that could be implemented by craft breweries and organizations to avoid the monopolization of the industry in US.
- To present new business models to other geographical markets and industries facing similar problems of innovation appropriability.
- To suggest real-world case examples of the problem of profiting from innovation to the scholastic literature.
- To connect with other craftsmanship related markets and movements that are opposing against the standardization of taste trend and the monopolization phenomenon.
1.3 Research process

We started our research by selecting the most successful case studies in the US in order to analyse winning strategies in the market. In particular, we took advantage of annual beer sales volumes data provided by Brewers Association selecting the 10 most growing craft breweries in the last 5 years in US.

Reiterating the selection and refining the criteria of inclusion we ended up with the following case studies selection.

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<tbody>
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<td>1</td>
<td>TWO ROADS BREWING CO</td>
<td>42,000</td>
<td>32,200</td>
<td>16,896</td>
<td>6,645</td>
<td>40*</td>
<td>16507.50%</td>
<td>154.19%</td>
<td>90.69%</td>
<td>30.43%</td>
<td>41957.70%</td>
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<td>2</td>
<td>FUNKY BUDDHA BREWERY***</td>
<td>26,959</td>
<td>19,190</td>
<td>6,799</td>
<td>2,020*</td>
<td>150*</td>
<td>1246.67%</td>
<td>235.30%</td>
<td>192.61%</td>
<td>40.82%</td>
<td>426.30%</td>
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<tr>
<td>3</td>
<td>RHINEGATE BREWING</td>
<td>55,502</td>
<td>31,470</td>
<td>10,520</td>
<td>2,000</td>
<td>0</td>
<td>-</td>
<td>425.96%</td>
<td>199.15%</td>
<td>79.54%</td>
<td>234.89%</td>
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<td>4</td>
<td>DEEP ELLUM BREWING CO</td>
<td>53,390</td>
<td>22,639</td>
<td>7,750*</td>
<td>6,091</td>
<td>800*</td>
<td>661.36%</td>
<td>27.24%</td>
<td>92.12%</td>
<td>46.21%</td>
<td>231.73%</td>
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<tr>
<td>5</td>
<td>MODERN TIMES BEER</td>
<td>40,500*</td>
<td>19,000</td>
<td>6,543</td>
<td>2,000*</td>
<td>0</td>
<td>-</td>
<td>227.15%</td>
<td>190.59%</td>
<td>131.16%</td>
<td>176.90%</td>
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<td>6</td>
<td>FAT HEADS BREWERY</td>
<td>28,782</td>
<td>25,480</td>
<td>15,172</td>
<td>12,759</td>
<td>1,915</td>
<td>566.27%</td>
<td>18.91%</td>
<td>67.94%</td>
<td>12.96%</td>
<td>166.52%</td>
</tr>
<tr>
<td>7</td>
<td>JACK'S ABBY BREWING</td>
<td>34,500*</td>
<td>26,000*</td>
<td>14,200</td>
<td>6,200</td>
<td>2,500</td>
<td>148.00%</td>
<td>129.03%</td>
<td>40.85%</td>
<td>72.50%</td>
<td>97.59%</td>
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<td>8</td>
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<td>72,774</td>
<td>64,441</td>
<td>52,045</td>
<td>25,475</td>
<td>8,098</td>
<td>214.58%</td>
<td>114.30%</td>
<td>23.82%</td>
<td>12.93%</td>
<td>88.91%</td>
</tr>
<tr>
<td>9</td>
<td>PIZZA PORT</td>
<td>34,250*</td>
<td>23,450*</td>
<td>18,955*</td>
<td>6,130</td>
<td>4,934*</td>
<td>25.83%</td>
<td>210.25%</td>
<td>23.71%</td>
<td>46.95%</td>
<td>75.96%</td>
</tr>
<tr>
<td>10</td>
<td>MOTHER EARTH BREW CO LLC</td>
<td>30,000*</td>
<td>22,000</td>
<td>15,500</td>
<td>6,400</td>
<td>4,900</td>
<td>30.61%</td>
<td>142.39%</td>
<td>41.94%</td>
<td>36.36%</td>
<td>62.77%</td>
</tr>
</tbody>
</table>

* Data estimated through excise tax data
*** Funky Buddha’s stakes have been acquired by Constellation Brands the 10th August 2017. For this reason the company cannot be considered craft anymore according to the Brewers Association definition.

Table 1: Case studies selection

Starting from the theory about innovation appropriability mechanisms we designed the framework through which we analysed the case studies selected. The concept of business model has been the core of our analysis, as it creates a distinction between a firm’s value creation and value appropriation activities and it connects them with the economic model. The business model canvas by Osterwalder (2010) has been identified as the most complete and successful among the ones presented. In order to overcome to the tool’s weaknesses identified by scholars we included different levels of analysis in the research and we made some adjustments to the tool.

We can summarize the framework as follows:

1. **Industry level (zoom-out)** – at the first step of the analysis we will focus on the industry structure and on competition. In particular, we started assessing the appropriability regime of the disruption through the parameters identified by Teece (1986) in its iconic paper “Profiting from innovation”. We also studied the competitive structure and the average profits available in the industry taking advantage of the Porter’s 5 forces model.
2. **Company level** – the core of the analysis is represented by the companies’ business models, designed through the business model canvas by Osterwalder, adjusted with sub-underline sections. In order to make the process easier and to standardize the output, we identified reference tables to be filled for some components of the model.

3. **Value proposition level (zoom-in)** – in the last stage of the study focused our attention on value proposition, analysing the values and meanings represented by the brands and listing the products and services offered by the selected firms.

We can summarize the research process with the following figure.

![Research process visual reference](image)

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**Figure 1: Research process visual reference**
1.4 Main findings

Following the objectives set for the research and the framework designed the main findings of this study will be briefly explained.

We started from the analysis of the appropriability regime of the innovation according to the parameters identified by Teece (1986) in its iconic paper “Profiting from innovation”. We concluded that craft breweries are in weak position compared to multinational competitors in appropriating the disruption introduced, as the instruments of protection they have in their hands are not effective.

In particular:

- The *nature of technology* not only is not the main source of the innovation but it’s also easy to imitate given the open knowledge nature of the segment.
- *Legal instruments* are limited to the protection of brands and trademarks and they are not a strategic tool of secrecy.
- Ultimately, the *speed of innovation* is not a relevant parameter for the segment.

We can summarize the appropriability regime of the craft beer innovation with the following figure.

![Appropriability Regime of the Innovation](image)

*Figure 2: Craft beer appropriability regime and impact on the average profitability of the segment*

We continued with the study of the 10 business cases selected, assessing from a broad point of view the competition they face to interact in the market and designing their business models through the canvas developed by Osterwalder. According to differences and commonalities identified among the strategies adopted, we classified the firms into four business model archetypes as we can see from the image below.
**Single brand brewery** – is the standard strategy adopted by the vast majority of companies in the sector and it’s strongly affected by the three-tier distribution system set by law after prohibition. According to this structure, a brewery cannot sell their products directly to customers but it must interact with distributors, that are the medium channel to reach retailers. The three tiers identified cannot be owned by the same organization and taxes are set at each step of the process. Craft companies interacting in this context depend strongly on distributors and on their bargaining power. For this reason they focus the resources they develop and the revenues they capture on wholesalers, centralizing the production in 1-2 main facilities.

The average competitive forces experienced by single brand breweries could be summarized with the following figure.

![Porter's five forces model typical for a single brand brewery archetype](image)
An exception is represented by the firms Rhinegeist and Deep Ellum that, taking advantage of exceptions to the three-tier distribution system, could self-distribute directly to retailers lowering considerably the bargaining power of the downstream market.

The single brand brewery archetype could be considered the strategy that introduced the disruption in the industry. In fact the oldest operating craft brewing company in the US, Anchor Brewing founded by Fritz Maytag in 1965, followed a distribution-focused business model.

In order to communicate our findings to a wide audience and to assess the meanings represented by the different strategic clusters, we took advantage of the metaphor exercise introduced by Verganti (2008). In particular we compared the craft beer firms selected to the ones competing in the coffee industry.

For the single brand brewery strategy we identified the Italian company Lavazza as metaphor. Compared to other firms in the market, Lavazza focused its business model on distribution reaching a global network in over 90 countries. The meanings represented by the comparison are a solid quality perception given by the brand and a capillary presence of products given by distribution partnerships.

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![Lavazza logo](image)

*Figure 5: Single brand brewery archetype's metaphor of meanings*

**Gypsy brewing** – the archetype has been implemented by Two Roads and it’s a de-verticalization trend that is becoming common in the segment in different forms. In the most common scenario, gypsy brewers operate under contract externalizing the production of their beers to contract breweries like Two Roads. The consequence is the possibility for this companies to focus on marketing and sales activities as well as recipes prototyping, outsourcing manufacturing activities to a specialized company. By this way, gypsy companies could decrease initial investments needed to enter in the market and the incidence of fixed costs on the balance sheet.

On the other side contract breweries could focus their business model on manufacturing, decreasing the bargaining power of suppliers and avoiding to interact with the competitive distribution market. The average competitive forces experienced by contract brewing companies could be summarized with the following figure.
Gypsy brewing archetype was born, according to Tom Acitelli, in 1982 when Matthew Reich closed a contract with F.X. Matt Brewing Company for the production of New Amsterdam amber lager. This form of agreement has been adopted by other famous craft breweries such as Brooklyn Brewery founded in 1987 and Boston Beer Company founded in 1985.

The metaphor we identified for the gypsy brewing strategy is Ublend, a custom roasting, blend and packaging service provided by the Australian Group Kaffeina. Ublend offers those services to café bars, online coffee merchants and wholesalers that want to differentiate from competitors creating branded products. The meanings represented by the service are the focus on production activities for the manufacturing company and “marketing company” effect for contract firms.

**Brewpubs** – the model could be considered an alternative to the single brand brewery one, as it’s concentrated on business to customers revenues. Companies belonging to this group could be able to disrupt the three-tier distribution system by taking advantage of brewpubs, an innovative form of retailing. In some US states such as California, Ohio, North Carolina and Pennsylvania, in fact, breweries are allowed to self-distribute a limited quantity of the volumes directly to consumers when produced inside brewpubs, particular retails in which production and consumption occur under the same roof. Companies adopting this strategy have been able to offer a wider portfolio of products to their customers thanks to a
flexible supply chain and a decentralized production orientation. Modern Times, in particular, developed a mixed model dedicating specific resources to end customers and others to distributors.

The impact on the industry structure is mainly connected with the bargaining power in the hands of buyers. Integrating in the downstream market, companies have been able to internalize the additional profits shared to them and to create an innovative experience through which they differentiated from competitors. The average competitive forces experienced by brewpubs companies could be summarized with the following figure.

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**Figure 8: Porter's five forces model typical for brewpubs archetype**

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The brewpub concept is born in 1981 when Bert Grant filed incorporation papers with the state of Washington to open Grant’s Brewery Pub, the nation’s first brewpub since prohibition. The phenomenon had success instantly and the popularity of this innovative form of retailing grew nationally. Just a decade after the opening of the first brewpub, more than 360 brewpubs were recorded in the US. The first brewpub chain has been founded in 1991 when Frank Day opened its first Rock Bottom Brewpub in Denver (Colorado), followed by other pubs in Houston (Texas), Portland (Oregon) and Minneapolis (Minnesota). The trend has been followed by some of the major companies in the segment such as BJ’s Restaurant and Brewery, Gordon Biersch Brewery and McMenamins Breweries.

We decided to compare the brewpub model to the Starbucks Reserve Roastery concept store, inside which operating machineries roast and blend raw coffee beans in front of customers. The meanings represented by the creation of these innovative form of retails are the reduction of distance between the production and the consumption of products and the creation of an immersive experience where customers could assist to the manufacturing process in first person.
Multi brand brewery - the archetype has been implemented by Jack’s Abby that developed two different brands, Jack’s Abby and Springdale, targeted to two distinctive customer segments and following a specific distribution strategy. Jack’s Abby is dedicated to the production of lagers, beers produced through a bottom fermentation and matured through a cold storage process called “lagering”. The beers produced under this brand represent a craft version of the most consumed products in the market such as Budweiser, Heineken and Coors Light and are commercialized both through distribution and the owned taproom. We can conclude that the offering is dedicated to average beer drinkers, representing an alternative to commercial products offered by multinational market leaders.

Springdale is dedicated to the production of experimental sour and barrel-aged beers, produced through the fermentation of different strains of yeast and bacteria and consumed after an aging period in wood barrels. The company uses a “owned-premise” approach for the brand, making the products available only in the owned tasting room. Given the super-premium nature of the offering and the limited availability, the brand is dedicated to high-end beer connoisseurs.

Jack’s Abby focused its strategy on segmentation, dedicating each brand with a specific business model to a defined category of customers. Jack’s Abby is dedicated to offer a craft alternative to the products offered by leaders in the market and, for this reason, is dedicated to average beer drinkers. On the other side, Springdale is dedicated to high-end customers through an exclusive distribution in the branded tasting room. Through this segmentation the company could serve different customers with specific needs at the same time, building a strong connection with them. The average competitive forces experienced by a multi brand brewery company are similar to the standard single brand one, and they could be summarized with the following figure.
It’s very difficult to assess the foundation of the multi brand brewery business model as we can compare it to umbrella branding marketing approach. The strategy, in fact, is the most adopted by multinational beer companies that developed a broad product portfolio through mergers and acquisitions. AB InBev for example, after the acquisition of SAB Miller, can count on more than 200 brands. The archetype, in general, is adopted by the majority of consumer goods multinational companies such as Nestlé, P&G and Unilever and, for this reason, is almost impossible to define its foundation. In the US craft beer segment, Pizza Port has been a pioneer in introducing this strategy developing in 2006 the side project Port Brewing. Under this unit the company launched different brands such as Port Brewing, Lost Abbey and The Hop Concept.

We identified the Nestlé coffee division as metaphor for the multi brand brewery archetype. The company in fact, under the unit, developed an individual branding portfolio structure, with three main brands: Blue Bottle Coffee, Nescafé and Nespresso. Each of them has a specific product orientation, a defined business model and it’s targeted to a distinct customer segment. In particular, Blue Bottle Coffee is focused on high-quality single origin artisanal coffee dedicated to passionate consumers, Nescafé produces soluble blends distributed through big supermarket chains and Nespresso is dedicated to the production of coffee machines and capsules sold only through owned exclusive channels.
Chapter 2: Introduction

2.1 The starting problem: standardization of taste and illusion of choice

My passion for craft beer was born in 2011 when a group of friends gave me, as gift for my 18th birthday, a basic kit to start producing beer at home. From that day I started homebrewing periodically and with a certain level of “geekiness”, succeeding to design my first recipes and to experiment with creative ingredients such as fruit and spices after several years of experience (and a couple of undrinkable batches). I don’t consider craft beer a simple interest but I would define it a sort of obsession. During my free time, in fact, I like to participate at tasting courses, attend festivals around the world and read books that discuss about the topic from different points of view.

The idea for this thesis has come up to my mind the last summer, during a road trip I made around the Californian coast. I was driving the Toyota I rented together with my friends on the vivid highway toward San Clemente, when we decided to have a break and to stop to buy some water. I followed the sign to the closest exit and we ended up, a couple of miles later, in a giant Walmart hypermarket. Like I usually do in a supermarket I passed by the beer section to observe the beers offered in different countries and to discover some products I’ve never seen. I remember I was shocked by the choice offered, having in front of me a 20-foot long hallway hosting refrigerated shelves full of multi-coloured labels. Beside the central section hosting popular brands such as Bud Light, Coors and Corona I noticed the presence a huge selection of the most famous American craft breweries such as Dogfish Head, Stone and Sierra Nevada. I realised I was in the epicentre of the craft beer revolution.

In Italy, the biggest wine producing country in the world, the trend is still at a pioneering stage of its development and supermarket shelves are still dominated by the world biggest brewing companies such as AB InBev, Heineken and Carlsberg. Even if the movement is becoming more and more popular, if I want to get quality flavourful craft products I must visit pubs, bars and shops specialized in craft beer.

Given the advanced development of the innovation in US, we will try to answer the following questions:

- How have these revolutionary companies reached such a popularity in US?
- How did they disrupt an historically oligopolistic market?
- Which have been the meanings they represented that changed the homogenous taste developed by the mainstream market along the years?

Fascinated by the colourful graphics of the labels and the eccentric names chosen for the products, I looked closer and I started reading the information written on some bottles. A big number of beers displayed on the

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shelves are not what they seem to be. The Belgian witbier Blue Moon, Grapefruit Sculpin by Ballast Point, Lagunitas IPA and Big Wave by Kona couldn’t be considered craft products as the brands are owned by the same companies that monopolised the market.

Given the attempt by multinational companies to appropriate from the innovation introduced by craft breweries, we will try to answer the following questions:

- How can craft breweries orient customers’ choice in such an overcrowded industry?
- How could they protect the innovation represented by craft beer from the multinational companies’ attack?
- Are the meanings introduced by the craft beer innovation powerful enough to disrupt the market definitively?

2.2 Craft beer defined

Beer is, at present, the most consumed alcoholic beverage in the world and the most popular drink after water and tea. There are records of beer being produced by Egyptians and also pilgrims aboard the Mayflower had approved a ration system for the beverage along their journey.

The market is controlled globally by three main multinational giants: AB InBev controlling the 20.8% of the global beer volume sales, SABMiller controlling the 9.7% and Heineken controlling the 9.1% in 2014. The concentration of the market will be increasing exponentially after the $103 billion acquisition finalised by AB InBev of SABMiller in 2016, recording the third-largest merger in corporate history according to Financial Times. In such a consolidated market, however, craft beer is considered a disruption as it has stolen the market shares possessed by leaders and it’s changing the rules of the game.

It’s very difficult to define a beer craft only by looking at its label or tasting its flavour. The beverage, unlike wine that is strongly connected to agriculture and geography, is mainly defined by the nature of the firm producing it. Around the world there is not a common shared definition of craft beer but different associations and entities reflect their vision about the topic.

The oldest attempt to regulate the product is Reinheitsgebot, also called German beer purity law, adopted in Bavaria in 1516 that limited the ingredients used in the production of beer to water, barley, hops and yeast. Even if the law is still operative in Germany, the vast majority of actors in the market consider it obsolete as it limits the use of spices and alternative grains for the production.

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4 Source: Financial Times (2016). “Shareholders back AB InBev and SABMiller £79bn ‘Megabrew’ deal”, retrieved on 2017/11/20 [at: https://www.ft.com/content/925d4c1e-84f7-11e6-a29c-6e7d9515ad15]
In United States, Brewers Association introduced a clear and delineated definition of craft beer that is widely accepted by the workers in the sector and considered one of the most successful worldwide. According to the definition an American Craft Brewer is:

**Small**

- Annual production of 6 million barrels (7,040,865 hL) of beer or less (approximately 3 percent of U.S. annual sales).
- Beer production is attributed to the rules of alternating proprietorships.

**Independent**

- Less than 25 percent of the craft brewery is owned or controlled (or equivalent economic interest) by an alcohol industry member that is not itself a craft brewer.

**Traditional**

- A brewer that has a majority of its total beverage alcohol volume in beers whose flavour derives from traditional or innovative brewing ingredients and their fermentation.
- Flavoured malt beverages (FMBs) are not considered beers.

Even if there is a school of thought that assert that is not possible to define craft beer (for example the platform RateBeer\(^5\) and the author Pete Brown\(^6\)) the Brewers Association initiative has been taken as an example by several countries for a legal and tangible delineation. In Italy, for example, the Parliament approved in 2016 the MoBi’s proposal of defining craft beer legally as a beverage, produced by a small independent brewery, that has not been pasteurized or filtered during its production. The influence of the Brewers Association orientation is evident.

Analysing more in detail the American craft beer definition we can make some considerations about it. First of all, the delineation is based on a company-based orientation, limiting the dimensions and the ownership methods available to firms. This decision has been made to limit the strategic moves made by multinational companies to profit from the innovation and to decrease the oligopolistic dimension of the market. The consequence is a difficulty for customers to recognise a beer as craft at a first sight, as quality and ingredients are not a primary focus of the definition. The only recommendation is to avoid the use of any adjunct used with the aim to cut costs, such as corn and rice.

Another interesting consideration is the nature of the products created by modern craft breweries. We can consider them a blend between tradition and innovation, in which the creativity of brewers is expressed through

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the use of unusual ingredients, the crossing of traditional beer styles and the use of new techniques of production or fermentation. For this reason a strict limitation on the process and the ingredients allowed would negatively affect the movement.

In summary, we can define craft beer as a disruption based on meanings rather than technology, providing new values to customers. We can compare the movement to the Slow Food grassroots organization, founded by Carlo Petrini in Bra, Italy in 1986. The movement started with the protest against the opening of McDonald’s near the Spanish Steps in Rome and it promotes, since then, the preservation of traditional and regional gastronomy against the global standardisation of taste. The organisation has expanded to include over 100,000 members with branches in over 150 countries.

The two movements, craft beer and Slow Food, could be considered a revolution against the taste homogenization, promoting the diversity of flavours, the value of local culture and the concept of quality over speed and costs.

2.3 United States, epicentre of the craft beer revolution

United States are univocally considered the nerve centre of the craft beer innovation, moving the segment towards a phase of consolidation of its development and reaching the mainstream market. To demonstrate this assumption we can analyse, more in depth, the relevance of the market, the dimensions of the disruption and the economic impact of the sector.

USA are the world’s second-best beer producers after China, with 22 million of kilolitres produced in 2015\(^7\), and the second-best consumers, with more than 24 million kilolitres consumed in 2015. As regards to per-capita consumption, the country recorded the 20\(^{th}\) position on the Global chart in 2015, with 75.4 litres of annual consumption\(^8\). The industry encompassing brewers, distributors, retailers and importers, contributed $252.6 billion to the US economy in 2015\(^9\). The impact on the economy is higher than the whole video game industry.

According to Tremblay and Tremblay (2009), the US brewing industry has been oligopolistic since 1968, when the industry CR4 (four-firm concentration ratio) exceeded the 40% and it has increased dramatically since then reaching the 95% in 2000. The key factor that determined concentration were mergers and acquisitions. As a matter of fact, Greer (2002) reports that there has been more than 600 mergers and acquisition of facilities and brands in the US brewing industry since 1950. The vast majority of these actions were the result of smaller

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firms’ inability to compete in the market, allowing macro-producing breweries to standardize their beers around pale light lagers and to eliminate styles and local tastes.

The craft beer movement was born after many veterans stationed overseas during World War II and had developed a taste for European style ales. Returning to their homeland they couldn’t find such beers and they started self-producing them as homebrewers. Anchor Brewing is considered the first and oldest craft brewery in US, founded by Fritz Maytag in 1965. From that day the innovation emerged as an increasing trend in terms of production and sales. For example, while in 2016 the US overall beer sales and production volumes have remained stable compared to the previous year, the craft beer market recorded a considerable boost, with an increment in sales volumes of the 6,2% and an increment in production volumes of the 6%. The craft beer market represented the 12,3% of market share in sales volumes and the 21,8% of market share in dollar sales in 2016\textsuperscript{10} representing a disrupting innovation in the industry.

As we can see from the map below the disruption is spreading all around the country, without focusing in specific states.

![Figure 12: Top 50 US craft breweries in 2016 on a map (Source: Brewers Association)](image)

The American Brewers Association subdivides the brewery segment into four main types of operators: microbreweries, brewpubs, contract brewing companies and regional breweries.

- **Microbrewery** – a brewery that produces less than 15.000 barrels (17.600 hectolitres) of beer per year, with 75 or more of its beer sold off site.

- **Brewpub** – a restaurant-brewery that sells 25% or more of its beer on site. The beer is primarily brewed for sale in the restaurant and bar.

• **Contract brewing company** – a business that hires another brewery to produce its beer.
• **Regional brewery** – a brewery with an annual beer production between 15,000 and 6,000,000 barrels.

As we can see from the graph below, brewpubs and microbreweries represent the main operators in the segment. Their number increased exponentially in the last years, showing the disruptive impact on the market. In fact the number of operating breweries has been increasing since 2010, recording an average boost of the 58.48% reaching the 5,234 companies in 2016\(^\text{11}\).

![Graph showing the increase in the number of breweries from 2010 to 2016](image)

Table 2: Number of craft brewing companies in US 2010-2016 (source: Brewers Association)

### 2.4 Global consumption and expansion of the revolution

According to the International Wines and Spirits Record, the volume of alcoholic drinks consumed globally fell by 1.4% in 2016 to 250 billion litres. The decline is caused by beer consumption, which shrank by 1.8% to 185 billion litres\(^\text{12}\). Despite the overall decline, beer is still the most consumed drink around the world, accounting three-quarters of the total alcoholic volume consumed.

The most beer consuming countries around the world are China with 43 million of kilolitres in 2015, United States with 24 million kilolitres, Brazil with 9.28 million kilolitres, Russia with 8,633 million kilolitres and Germany with 8,45 million kilolitres\(^\text{13}\). The Global decline in beer consumption could be appointed to the recession experienced in three of the most important countries: Brazil, China and Russia.

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Analysing the global beer production by country we noticed that the most consuming areas correspond with the most producing ones, except for the presence of Mexico in the 4th position\textsuperscript{14}. For this reason, we can conclude that imports and exports has a limited impact on the industry from a Global perspective.

The international brewing industry is dominated by three giant multinational companies that as a whole control around the 50% of the Global market: AB InBev, Heineken and Carlsberg. According to Ascher (2012) the following countries are experiencing a duopolistic market structure: USA, Mexico, Canada, Australia, New Zealand, Brazil, India, Japan, Korea, Russia, South Africa and Turkey.

The craft beer revolution has started in the last century in United States and it’s expanding all across the globe with a rapid diffusion. Given the lack of a homogeneous definition of craft brewery and the absence of a cross-national entity protecting the innovation, it is difficult to assess the reach of its development. However, according to the following chart, developed by Forbes, United Kingdom, France, Italy, Russia and Canada are in the introduction phase of the innovation. These countries could be considered followers in the development of the disruption as the trend hasn’t reach the mainstream market yet.

![Figure 13: Countries ranked by number of regional craft breweries in 2015 (Source: Forbes)](image)

2.5 American brewing history

The US brewing industry has changed in size and shape over the years, influenced by the big number of mergers and acquisitions made by the biggest actors in the market. In order to have an overview of the different periods experienced by the industry we will take as reference the following figure, showing the trend of the number of breweries operating along the last 125 years.

The market, starting as a group of small local breweries in the colonial days, grew modestly until 1870 when scale production has been introduced. In 1873 the number of breweries reached a record level but it declined in the following decades as companies started to take advantage of new technologies such as pasteurization, refrigerated rail cars, ice houses and railroad growth. Anheuser-Bush was the first company to begin brewing on a national industrial scale, being able to be more efficient and to take advantage of economies of scale.

The number of alcoholic beverage producers dropped practically to zero during the Prohibition years, 1919-1933, after the ratification of the 18th Amendment of the US Constitution. A number of brewing companies remained in business by producing beer with low alcohol content as well as soft drinks, ice cream and other products. At the end of prohibition, by 1934, only 703 breweries were back in operation.

Immediately after the repeal of Prohibition, the responsibility to regulate and tax was given to each state. This was achieved through the implementation of a three-tier distribution system. Under this system alcohol cannot be sold directly to consumer from brewer, distiller or winemaker. The first tier must produce alcoholic beverages; producer must then sell its products to a wholesaler that is the middleman selling the products to retailers. At each step in the process new taxes and mark-ups are applied. Brewpubs are one exception of this system as they operate as both producers and retailers. In 35 states, moreover, self-distribution is allowed under some forms\textsuperscript{15}.

With the suburbanization consequent to World War II, the introduction of can packaging and refrigerated trucks beer sales improved. In the period between 1960s and 1970s the beverage was heavily advertised on television and sold taking advantage of economies of scale. For this reason a huge number of local and regional breweries were closed and bought during this period. The number of breweries dropped to 54 in 1975 as consequence of the standardization of taste around national brands.

Despite a consolidation of the market in the hand of three main firms, AB InBev, SAB Miller and Pabst, the period also saw the rising of the craft beer movement. Jack McAuliffe founded the nation’s first microbrewery, New Albion Brewing, influenced by the recent acquisition of Anchor Steam by Fritz Maytag. On October 1978 president Jimmy Carter signed the bill H.R. 1337 which legalized the home production of a small amount of beer and wine for personal consumption. Since then the United State has witnessed a resurgence of the brewing culture and a proliferation of small local companies. In 2016 Brewers Association recorded more than 5.000 craft beer companies in its annual list.

2.6 Big beer moves to suppress the disruption

As we said in the previous section, the American beer market is at the mature stage of its development and it’s dominated by three main companies. AB InBev controls around the 45% of the market in US\textsuperscript{16} and the share is estimated to increase radically after the acquisition of the second Global actor in the industry SABMiller. Despite the almost monopolistic position possessed by the firm, the new meanings represented by craft beer could disrupt the advantage built along the years by the company and different moves had been done to slow down the innovation and to appropriate the profits introduced by it.

In the following section we will further analyse the structure of the biggest operators in the industry, AB InBev and SAB Miller, their merger closed in 2016, the main acquisitions made in the craft beer segment and the other actions made with the goal to blur the separation between the craft and the mainstream market. The moves implemented, in fact, slowed down considerably the disruption decreasing the sales growth from 13% in 2015 to 6,2% in 2016\textsuperscript{17}.

2.6.1 History of the main brewing giants: AB InBev, SABMiller and Miller Coors

In order to clearly understand the merger between the two main breweries in US, AB InBev and SAB Miller, and its consequences on the market it’s important to understand their history and the acquisitions through which they have been formed.

**ANHEUSER-BUSH INBEV**

Anheuser-Bust inBev is a Belgian transnational beverage and brewing company based in Leuven, Belgium. The company has realized $45.5 billion in revenue in 2016\textsuperscript{18} and it currently employees around 200.000


\textsuperscript{17} Source: Brewers Association (2017). “National beer sales and production data”, retrieved on 2017/12/04 [at: https://www.brewersassociation.org/statistics/national-beer-sales-production-data/]

workers around the globe, making it one of the largest Fast-Moving Consumer Goods organizations in the world.

In order to have a visual reference of its structure, the following diagram summarize the major mergers and acquisition through which the firm has been formed before the acquisition of SAB Miller.

Figure 15: Anheuser-Bush inBev structure before SAB Miller acquisition (source: AB InBev official website)

AB InBev was formed in 2008 after the acquisition of the American brewery Anheuser-Bush by Belgian-Brazilian brewery InBev, which is a merger of AmBev and Interbrew. Let’s see in the specific the history and the brands owned by the different subdivisions of the company:

- **Interbrew** has been founded in 1987 from a merger of the two largest breweries in Belgium Artois and Piedboeuf. In 2002 the firm acquired Beck’s, the maker of the largest top selling German beer.
- **AmBev** was created in 1999 from the merger of the two biggest Brazilian breweries, Antartica and Brahma
- **Anheuser-Bush** has been established in 1852 and in 2006, after the acquisition of Harbin, Fujan Serdrin Brewery, the third largest brewery in China, the company has become the world’s largest beer maker.

In 2012 the firm acquired the Mexican Group Modelo for $20.1 billion adding Corona Extra, Modelo Expecial and Victoria to its portfolio. As we will see in the next section the American section of the Group has been sold to Constellation Brands in 2016 to satisfy US anti-trust demand.
SAB MILLER

Prior the acquisition of the company by AB InBev, the company was the world’s second largest brewery measured by revenues and the major bottler for Coca-Cola.

In order to have a visual reference of its structure, the following diagram summarize the major mergers and acquisition produced before its acquisition by AB InBev

![Diagram of SAB Miller structure before the acquisition by AB InBev](image)

The origins of the company date back to the creation of South African Breweries (SAB) in 1895. After the listing on the London Stock Exchange in 1999, the Group acquired Miller Brewing company in North America and Altria Group, changing its name in SAB Miller.

The company acquired Bavaria S.A., South America’s second larger brewery, and Fosters, after a hostile takeover in 2011 during which the organization has been obliged to exclude the brand from UK and Europe, where it is currently owned by Heineken.

In 2014 the company attempted to acquire a controlling stake in Heineken International without any success. Despite this fail, the company agreed to combine the bottling operations with Coca-Cola Company and Gutsche Family Investments creating the new bottler company Coca-Cola Beverages Africa.

In 2015 SAB Miller acquired the British brewery Meantime Brewing.

MOLSON COORS AND MILLER COORS

Molson Coors is a multinational brewing company formed by the merger of Molson in Canada and Coors in United States. In 2008 the company founded a joint venture with SAB Miller creating MillerCoors, the second largest brewery in US.
As we will see in the following section, the firm acquired different assets after the merger of the two brewing giants, becoming the third world largest brewery by enterprise value\textsuperscript{19}.

### 2.6.2 AB InBev and SAB Miller merger to control the market

In October 2016 Anheuser-Bush InBev closed the acquisition of SABMiller for $103 billion, recording the third biggest acquisition in history. The new company, Anheuser-Bush InBev SA/NV, is the world’s largest beer company. The entity has more than 400 brands in its portfolio with an estimated annual sale of $55 billion and an estimated global market share of the 28%\textsuperscript{20}.

The approval of the deal required an international antitrust approval by regulatory agencies that pushed the two companies to spin off many popular brands.

In particular:

- In 2013 AB InBev, after an anti-trust suit, transferred all the United States rights on Grupo Modelo to Constellation Brands, including the brand Corona.
- SAB Miller sold the 58% of the stakes owned in the MillerCoors joint venture to Molson Coors for $12 billion\textsuperscript{21}. In Canada Molson Coors regained the right to produce and market Miller Genuine Draft and Miller Lite together with the full ownership of all the brands in the portfolio for the US and Puerto Rico. Thanks to this agreement the firm became the world’s third largest brewery.
- In December 2016 Coca-Cola Co. bought many of the former SAB Miller’s Coca Cola operations, including those in Africa\textsuperscript{22}.
- The company sold Peroni, Pilsner Urquell, Meantime and Grolsch brands to Asahi together with SAB Miller business in Poland, Czech Republic, Slovakia, Hungary and Romania in October 2016 for 7.8 billion\textsuperscript{23}.
- SAB Miller sold 49% of share in Snow Beer to China Resources Enterprise


2.6.3 Acquisitions to appropriate the craft beer culture

In the last period very different acquisitions have been made by big multinational companies in the craft beer segment to appropriate the knowledge built along the years and to internalize the additional profits introduced with the innovation. Multinational organizations, focusing on a light-lager beer offering, have lost the opportunity to develop a broad knowledge on the different beer styles and on the historical heritage of this beverage. When the acquisition done by operators in the alcoholic beverages industry that are not craft breweries exceeds the 25%, the acquired entity couldn’t be considered craft anymore according to the Brewers Association definition.

These are the most relevant acquisitions and moves made by biggest operators in the market to internalize the know-how and be part of this innovation of meanings.


AB InBev, after becoming the distribution partner, acquired in 2013 32,2% of Craft Brew Alliance, the 9th biggest brewing company in US composed by 5 beer and cider brands: Redhook Brewery, Widmer Brothers Brewery, Kona Brewing Company, Omission Beer and Square Mile Cider.

**Miller Coors** – the company dedicate a business unit specifically for craft beer brands called Tenth and Blake. Under this division the company acquired brands such as: Terrapin Beer Company (minority shares in 2012 and larger stakes in 2016), Saint Archer Brewing (2015), Hop and Valley (2016) and Revolver Brewing (2016). MillerCoors also operates under this unit AC Golden Brewing Company, a prototype brand from which Blue Moon has been created and through which the brands Pilsner Urquell and Peroni Nastro Azzurro were distributed before the transfer to Asahi.

**Constellation Brands** – the current US distributor of Corona and Modelo, purchased Ballast Point for $1billion in 2015 and Funky Buddha in 2017.

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Heineken – the organization followed a slightly different strategy compared to the other multinational companies. The acquisitions started in 2015 with the purchase of 50% of Lagunitas with the goal to expand its presence internationally. The company decided to give freedom to the Lagunitas unit and to put the company at the head of its craft beer strategy. In particular, it purchased Moonlight Brewing in 2016, Independence Brewing in 2016 and Short’s Brewing in 2017. Heineken completed the buyout of Lagunitas in 2015 and made it the leading brewery of the new American craft division.


North American Breweries – the company, subsidiary of KPS Capital, has been purchased by Florida Ice and Farm Co., excluding from the US craft breweries list Pyramid Brewing, Magic Hat and Portland Brewing.

Other acquisitions from foreign companies – also other foreign multinational companies showed interest in the craft beer disruption introduced in US. For example, Founders sold 30% of its shares to the largest Spanish brewing company Mahou San Miguel in 2015, Brooklyn Brewery sold 24.5% to second-biggest Japanese brewer Kirin (the company can still be considered craft) and Anchor Brewing, the oldest craft brewery in US, sold to Sapporo, Japanese’s fourth largest beer brand.

2.6.4 The creation of “crafty” brands

Another strategy implemented by multinational companies to blur the definition of craft beer among consumers is the creation of the so-called “crafty” brands. Crafty products are launched by multinational companies, taking inspiration from beer styles produced by craft companies, with the aim to diffuse the innovation to a larger audience making the product cheaper and easier to drink.

The most famous examples of this category are Blue Moon, a Belgian-style wheat ale created by Miller Coors, Shock Top, produced by AB InBev and Leffe, premium Belgian-inspired beer brand owned by AB InBev. Usually the products are marketed hiding the mother company that brews them and they are communicated as hand-crafted products, often confusing the average consumers. According to an advertising brief published by the wholesaler Labatt, in fact, 75% of consumers believe that Shock Top is produced by a small brewery instead of AB InBev.25

Multinational companies received different lawsuit claims because of the marketing communication used for these brands. In particular, court documents have been filled in the Superior Court of California, claiming that Miller Coors has disassociated the Blue Moon brand from its name practicing a deceptive marketing practice. The suit mentions that the company charges up to 50% more for Blue Moon than it charges for other products being able to convince customers that the beer has been brewed by a smaller craft company.

Also AB InBev has been sued in the federal court of Miami through a class-action that claimed that the company misled customers to consider Leffe as produced in a Belgian abbey.

2.6.5 Distribution deals to cut-off competition

Given the three-tier distribution system set by law after prohibition, wholesalers have a crucial role in a craft beer business model. Companies, in fact, in most of cases cannot sell their products directly to customers but they have to sign long term contract with distributors.

Taking as reference the biggest company in the market, AB InBev, the company has purchased five distributors in three different states in 2016, adding them to the 12 previously acquired in major cities like Los Angeles, New York and Boston. Moreover, the company closely collaborates with other 500 distributors across the US, making difficult for craft breweries to reach the final market. AB InBev, in fact, introduced in 2015 a new incentive program through which the firm requires the independent distributors to spend a certain amount each year to advertise owned brands. Under this plan, AB InBev refunds 75% of the money spent if its beers make up 98% or the distributor’s total sales. US antitrust is currently investigating over this new incentive aimed to cut-off smaller craft beer producers.

State regulators have charged AB InBev in Massachusetts in 2017, for pay-to-play issue. The organization, in fact, gave away nearly $1 million worth of equipment to hundreds of retailers as an illegal incentive to serve its products. This was the third case in a year, as the firm has found itself being charged with offering illegal inducements in Seattle and in Southern California.

The Department of Justice, in order to avoid any monopolization moves in the downstream market that could happen after the fusion of the company with SAB Miller, decided that AB InBev couldn’t acquire any distributor if doing so would result in more than 10% of its annual volume being distributes through wholly-owned distributorship in US\textsuperscript{32}.

2.6.6 Monopolization of the South-African hops market

In 2017 some craft brewers such as Proclamation Ale Company, Cellarmaker Brewing and Modern Times claimed that craft breweries have been cut off by AB InBev from the purchasing of South African hops after the company has become monopolist of the market. According to an interview to Willy Buholzer, company’s Global Hops Procurement Director, 90% of the South African-grown hops will be dedicated to local brand production due to poor hop yields\textsuperscript{33}.

2.6.7 Other initiatives to blur the craft beer definition

Additional initiatives have been implemented by the leaders of the industry in order to blur the delineation between craft beer and commercial offering perceived by customers.

In particular:

- AB InBev founded ZX Ventures in 2016, a global incubator and venture capital firm built with the aim to develop innovative products, services and technologies that could support company’s brands. The Venture also seeks to develop partnerships with start-ups, entrepreneurs, designers and engineers to launch new ideas on the market.

- Two different blogs have been created by AB InBev to communicate its philosophy in a more authentic form. In particular The Beer Necessities, a collaboration between Wasted Talend (owner of Mixmag) and High End division and October, a website funded by Condè Nast in collaboration with ZX Ventures.

- RateBeer, the world’s most famous beer rating platform counting more than 470,000 beers from 26,000 breweries, has sold a minority of its stake to the incubator ZX Ventures in 2017\textsuperscript{34}. The purchase led to concerns of conflict of interest, citing that the company could present bias towards AB InBev brands. For this reason several craft breweries required to be removed from the platform.


• Northern Brewer, leader in the homebrewing supply industry for more than 20 years, has been acquired by ZX Ventures in 2016. The purchase shows a clear interest of the company to appropriate the know-how on which craft beer is based and to internalize this knowledge through acquisitions.
• During the Super Bowl AB InBev-owned Budweiser hired an advertising intended to parody craft beer consumers. The company has chosen the most expensive and followed television space in order to differentiate one of its brand from the disruptive movement.

### 2.7 Big beer strategy from a broader perspective

In order to understand the strategic logic followed by the leaders of the market, I will take as a reference the article written by Chris Herron: “Watch the hands, not the cards – the magic of megabrew”\(^{35}\). Herron has worked for some of the companies that are trying to slow down the craft beer disruption and, for this reason, he is able to understand their strategic goals. In fact, he spent three years at Miller Brewing and then another 10 years at Diageo finishing his career as Finance Director before starting its own craft beer company Creature Comforts.

According to Herron, the reasons behind the acquisition of a craft brewery by a multinational company are multiple and not limited to the simple appropriation of the additional profits. The starting point is the risk of impairment charge that a company could experience after the collapse of its brand value. With new disruptive and higher quality competitors in the market a loss on the balance sheet is probable and it would cause impact on a firm’s share price and market value.

Let’s take as reference the leader of the market AB InBev. The company’s 2016 balance sheet shows that its goodwill, the intangible value of its brands, represents nearly 53% of their assets. Budweiser is the 25\(^{th}\) most valuable brand in the world valued $24.6 billion in 2016\(^{36}\), with around 40% of its volume coming from US. In this market, the brand has experienced a loss of market share, going from a 19% in 2010 to a 16% in 2016. Budweiser could face potentially huge write downs in the future caused by an impairment charge.

From this perspective the moves made by multinational companies are made with one main goal: lower the price of craft products.

This downward pricing accomplishes three main things:

- It better aligns acquired craft brands price with the new company’s brand equity, that decreased when they bought the brewery.

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• It starts a competition on price with smaller companies forcing them to lower the price. Given their limited resources, it will be difficult for them to win this battle.
• It shrinks the price gap between craft beer and legacy brands such as Bud Light and Budweiser.

In summary, big multinational companies are not interested, in the short term, to get into craft beer innovation and to build the craft brands they acquired. Their main goal is to avoid impairment charges and protect their legacy brands value that represents their main asset on the balance sheet.

2.8 Craft brewers counterattack

In order to defend the innovation they introduced, to communicate the meanings represented by the disruption and to avoid acquisitions in the segment, craft breweries implemented different initiatives. In particular:

• Brewers Association launched in 2017 Independent Craft Brewer seal. The new seal is a visual signal that will help consumers during the shopping to recognise if they are really buying a beer from a craft brewer. The logo looks like a beer bottle flipped upside down and it represents the radical change of the US beer scene caused by craft beer. The initiative could have an important impact on the consumers’ behaviour. In fact, according to a study conducted by Nielsen, the term “independent/independently owned” is the most recognized one by craft beer appreciators and it has a high influence in purchase decisions37.

• Some companies took advantage of alternative methods of financing, different from acquisitions by mega corporations. These companies could also keep the definition of craft breweries, following the ownership limits set by Brewers Association definition. For example Duvel Moortgat, Belgium-based brewery owning brands such as Duvel and La Chouffe in its portfolio, acquired Ommegang Brewery, Boulevard Brewing and Firestone Walker under its parent company Duvel Moortgat USA. Other companies chose to be financed by venture capitalist and specialized capital partners: Rock Bottom and Gordon Biersch acquired by Centerbridge Capital in 2010, Utah Brewers Cooperative (2012), Oskar Blues (2015), Perrin Brewing (2015) and Cigar City (2016) acquired by Fireman Capital Partners, Dogfish Head sold 15% of stake to LKN Partners in 2015 and VMG invested $89.5 million into a partnership with Stone Brewing.

• For craft breweries, the creation of new platforms of financing could be an alternative to selling majority interest to private equity or to sell out to big beer companies. For example, Stone Brewing

founder Greg Koch announced the launch of True Craft, a $100 million fund of investment in quality food and beverage companies. 

- CraftBeer.com is only one of the several blogs related to craft beer topics. The website, created by Brewers Association, has the goal to spread the craft beer culture to a wide audience.

- The campaign Take Craft Back has been developed with the aim to drive the attention on the recent mergers and acquisitions made by AB InBev to monopolise the market. The campaign simulates the creation of the biggest crowdfunding campaign in history to purchase the company AB InBev. The initiative is an example of guerrilla marketing; by taking advantage of low investments, the campaign has been able to catch the attention of media on recent events with an unconventional approach.

- The unity of craft brewers against the recent appropriation moves made by big multinational companies is strong. A proof of that could be seen from the decision to boycott the Wicked Weed Funkatorium festival by the majority of craft breweries, after the announcement of its acquisition by AB InBev. The company has been obliged to reschedule the event.

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Chapter 3: Literature Review

The innovation topic has been studied by many scientific disciplines with different perspectives and could be considered the buzzword of the modern economy. According to the Economist (Survey of Innovation in Industry, 1999) “innovation has become the industrial religion of the late 20th century. Business sees it as the key to increasing profits and market share. Governments automatically reach for it when trying to fix the economy. Around the world, the rhetoric of innovation has replaced the post-war language of welfare economics”.

One of the first authors that analysed technological improvements was the English economist Adam Smith. According to Smith (1776) the specialization of labour force creates greater productivity and it stimulates technological innovation as well. Tasks’ specialization, in fact, causes incentives to automation, increases in efficiency and productivity and promote workers’ learning by doing.

According to Kennedy and Thirwall (1972), neoclassical economic theory treated “technical progress as manna from heaven, as something exogenous to the economic system”.

Nowadays this point of view is widely regarded as mistaken. Innovation does not occur by accident but it requires investments, resources and knowledge to be generated. In the following section of the chapter we will define innovation and define its main characteristics.

3.1 Innovation management

In order to have a systematic overview on the topic we will start by listing the different definitions of innovation among the most influential ones.

3.1.1 Innovation definitions

Thompson (1965) in its definition simply states: “Innovation is the generation, acceptance and implementation of new ideas, processes, products or services”.

Schumpeter (1934), one of the most influential authors on the topic, defines innovation as “a process of industrial mutation, that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one”.

Damanpour (1996) provides a detailed definition: “innovation is here broadly defined to encompass a range of types, including new product or service, new process technology, new organization structure or administrative systems, or new plans or program pertaining to organization members”.
According to OECD Oslo Manual on Innovation (2005), innovation is “the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations”.

Bessant (2005) suggests that “innovation represents the core renewal process in any organization. Unless it changes what if offers the world and the way in which it creates and deliver those offerings it risks its survival and growth prospect”.

Baregheh and colleagues (2009), through a literature review of 60 definitions collected from different disciplinary fields, proposed a multidisciplinary definition: “Innovation is the multi-stage process whereby organizations transform ideas into new/improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace”.

The significance of innovation is not restricted to business organisations. It’s a theme of strategic interest also for nations and governments. The US has its own Department for Innovation (2008) and UK has developed its own innovation agency to foster Research and Development and to sustain companies through funds.

3.1.2 Innovation classifications

Having in mind a cross-disciplinary view on the different innovation definitions, we can now focus on the different dimensions and characteristics connected to the topic. In particular, we will analyse the main innovation types and the novelty factors.

INNOVATION TYPES

The first mainstream distinction that is normally introduced talking about the topic is the difference between invention and innovation. Invention is the first occurrence of an idea for a new product, service or process. Innovation is the commercialization of that idea. Sometimes these two stages are closely linked, to the extent that it’s hard to divide one from the other. In other cases, there is a consistent time lag between the two. While inventions may be carried out anywhere, for instance in universities, innovations take place only in firms. In fact, an invention needs structured capabilities, resources, skills and knowledge to be turned into an innovation.

Innovations can be classified according to types. Schumpeter (1934) distinguished five different types of innovation: new products, new methods of production, new sources of supply, exploitation of new market and new ways to organize business.

The Doblin Group (2013) went further in the classification. By analysing more than 2,000 successful innovations, including Cirque du Soleil, the early IBM mainframe and Ford Model-T, the authors applied a proprietary algorithm and determined ten innovation types. The authors classified in the configuration category profit model, network, structure and process innovations in the offering one they classified product performance and product system innovations and in the experience one they classified service, channel, brand and customer engagement innovations.
NOVELTY

Freeman et al. (1982) in their famous work “Unemployment and technical innovation: a study of long waves and economic development”, introduced the concept of incremental and radical innovations.

- **Incremental innovations** often occur as the outcome of inventions and improvements suggested by engineers and other employees directly involved in the production. Even if a single incremental change does not have a dramatic effect, its combination is very important for the growth of productivity.
- **Radical innovations** are discontinuous events, usually results of a deliberate research and development activity by enterprises or universities and laboratories. Their introduction in the market have a substantial impact on different industries, creating new markets and changing dramatically social and business practices.

We can now focus on the industry dynamics that drive incremental and radical innovations. To study the phenomenon, we will take advantage of the S-shaped technology curve, a centrepiece in the theories about technology strategy.

The framework, introduced by Christensen et al. (2013), defines the performance of a specific technological innovation over time.
• At the introduction of a technology most of the resources are spent on Research and Development in order to win the competition between the various players in the industry. A dominant design hasn’t been established yet and it’s crucial to win the competition as a winner takes all the market.

• In the growth phase, thanks to incremental innovations, the productivity grows and the product is adopted by the early majority. A dominant design has established and, for this reason, the market is characterized by a rapid growth in production.

• During the maturity the product is adopted by a large portion of the society and the majority of the resources are spent to lower production costs. Products at this stage are completely standardized and, for this reason, only few players survive in the market.

• When the market is saturated usually a discontinuity occurs, as a new S-curve pattern can rise. Innovators start a new product life cycle which is defined as a disruption in the market.

Anderson and Tushman (1990), starting from the framework we’ve just presented, made a longitudinal study of different industries where patents are not a significant factor. In the industries analysed the technological discontinuity is generally followed by the settlement of a single standard, that is rarely introduced by the disruptors.

As suggested by Dosi (1982) any innovation implies understanding both technologies and markets. A new level of novelty has been introduced by Verganti (2009) with the innovation of meanings framework. Technology is not the only leverage on which it is possible to build innovation but it plays an important role in the context. Users, overwhelmed by an almost infinite choice of solutions, give value and choose products that consider meaningful to them. For this reason companies, to be relevant in the contemporary market landscape, have to leverage their innovations on the “why” people buy their products and provide new meaningful solutions to their customers. Let’s take as an example the Nintendo Wii. From a technological point of view the console has an inferior quality compared to its main competitors, PlayStation and Xbox. However the company has been able to disrupt the market and compete with its rivals, innovating the meanings represented by video games. Nintendo Wii transformed videogame in an active physical entertainment while the competitors’ products were a passive immersion in a virtual world.

In order to unify the theories presented we can take as reference the innovation matrix introduced by Verganti (2008).
Three different innovation strategy approaches are identified from the diagram.

- **Market pull innovation** starts from the analysis of user needs and subsequently connect technologies and languages that can actually satisfy them. User centered design methodologies can be classified in this cluster operating within existing socio-cultural regimes.

- **Technology push innovation** is the result of technical research and results in technological discontinuities. Traditional academic literature focused its attention on this type of innovation.

- **Design driven innovation** starts from the identification of unspoken dynamics in socio-cultural models and results in defining radically new meanings. As we can see companies can also take advantage of technological breakthroughs to provide new meanings.

Talking about craft beer as innovation, we can define it as a new archetype. Craft breweries have created a disruption in a defined and historically monopolistic market by providing new meanings to their customers. Taking advantage of the metaphor exercise introduced by Verganti (2009), we can define the new paradigm introduced. Metaphors are a powerful tool to extend concepts beyond the ordinary, understanding and experiencing one thing in terms of another. Taking as example Swatch, we can analyse the main meanings represented by the innovation through the metaphor introduced by the company. The old conception of the watch could be compared to a “tool”, a functional instrument to read the hour. Swatch, by leveraging on the meanings represented by the product, compared the watch to a “tie”, a fashion accessory to wear and to pair to the clothes.

Applying the same exercise in our reference market, we can compare the old conception of beer to a “coke to drink”, a refreshing beverage purchased with a low commitment in the decision making and a consumption highly influenced by the price. Craft beer, instead, can be compared to a “wine to taste” purchased to appreciate the creativity of the master brewer and the variety of the different beer styles’ flavours.

Having classified the different types of innovation and contextualized our reference market in the frameworks, we can now proceed to analyse the main scholars that studied the topic from an economic theory point of view.
By this way we will be able to understand the main elements influencing innovation, the factors that drive its development and the threats that influence its process.

### 3.1.3 Economics of innovation

Economics of innovation studies the nature, the characteristics, the determinants and the consequences of innovation at firm, industry and economic system level. We will focus on the firm and industry’s perspective defining the structures that are most conducive to innovation, given its beneficial effects on the whole economic system.

Firms, in general, have few incentives to invest in innovation and when the market logic works they obtain a suboptimal level of innovation. In fact:

- **Innovation** is in part a public good whose private benefits are lower than public ones. For this reason knowledge *spillovers* create an externality problem. An externality occurs when a cost or benefit affects a party who did not choose to incur that cost or benefit.
- **Competition** and fear of *cannibalization* of extant products may discourage innovation.
- **Information asymmetries** make it difficult to finance innovation due to the risk of *free riding*.

Given the limited incentives to innovate, which are the factors and the characteristics that boost innovation and foster its appropriability? Let’s analyse the main economic scholars’ view on the topic.

Since Schumpeter (1942), the focus has been on the role of market structure and firm size as determinants of enterprise innovation. The author’s theories are based on the concept of innovative entrepreneur, an individual who can transform an invention into an innovation. The expectation to gain a temporary monopoly rent stimulates the entrepreneurial firm to invest in innovation. Firms that operates in competitive markets, on the other side, have no incentive to innovate as they aim to exit from the industry. In short, for Schumpeter competition discourages innovation.

Arrow (1983) sustained in his publications the opposite idea, arguing that competition spurs innovation. With high level of competition, in fact, firms don’t gain any extra profit from the existing product and have great incentives to innovate in order to become leaders in the market. Monopolistic firms have less incentives to invest in innovation as they fear the cannibalization of profits.

Who is right, Schumpeter or Arrow? Scherer (1965) analysing a sample of 448 firms on Fortune’s list of the 500 largest U.S. industrial corporations, discovered a U-shaped relation between innovation and firm size.
Figure 20: Scherer’s (1965) U-shaped relation between innovation (measured by the Ratio\(= \frac{R\&D \text{ Investments}}{Sales}\)) and firm size (measured by Sales)

In the left part of the curve (small levels of competition) an increase of the level of competition increases the rate of innovation. The Arrow’s theory is valid in this context. In the right part of the curve (high levels of competition) an increase of the level of competition decreases the rate of innovation. The Schumpeter’s theory is valid in this context.

As argued by Mansfield (1968) there is not a significant relationship between the extent of concentration in an industry and the industry’s rate of technological change. In some industries, like the high technology and biotechnology ones, smallest firms are the most innovative.

Summarizing the findings we got from the theories that we have analysed:

- Large firms have several advantages in comparison to their smaller rivals. They can take advantage of high market power thanks to the possession of tangible resources, intangible assets and distinctive capabilities. Such resources can be used to either increase marginal revenues from innovation investments either decrease the expected marginal revenues of smaller rivals. Big firms can also finance themselves internally without resorting to capital markets.
- Large firms have cost disadvantages in developing innovations. Managerial slacks and bureaucratic organizations generate inefficiencies. They incur in agency costs to monitor R&D activities. They face difficulties to attract the talents needed to develop disruptive products.
- In some industries, small firms are considered the most innovative ones.

Having now a clear idea about what we mean when talking about innovation, how we can classify its different types and which are the parameters influencing its development, we can now focus on our problem of interest. Craft beer, as we introduced in the “innovation classifications” chapter, can be considered a disruptive shift of meanings in the market. Craft breweries, taking advantage of new “reasons why” of their products and the
culture represented by their commercialization, had the opportunity to change customer’s behaviours, lowering their price sensitivity, and to revolutionize the rules of the market, changing its oligopolistic structure.

Those companies, however, are struggling to profit from the innovation they introduced and to internalize the additional profits created. As we highlighted analysing innovation economics literature, market structure and firm’s size are not enough to explain the appropriability regime of an industry. In the following chapter we will focus our attention on the different elements influencing a company’s ability to profit from innovation.

3.1.4 Innovation appropriability and strategy

*Value creation* and *value capturing* are two distinct phases of the process of innovation. *Value creation* can be associated to the development of an idea while *value capturing* (or appropriability) has to do with the commercialization of the idea on the market.

The term “appropriation” was introduced by the English philosopher John Locke (1951) describing “the right of having the control over the profits of land and labor”. Levin et al. (1987) argued that in theory a patent confers perfect monopoly of the innovation.

In reality, perfect appropriability is extremely rare and patents are not a powerful tool of defence. It’s quite common to see competitors/imitators outperform innovators in commercializing a new product, service or process in the market. Teece (1986) described different examples of this situation, like we can see in the matrix below.

![Figure 21: Taxonomy of outcomes from the innovation process (source: Teece 1986)]

Quadrant 4 and its corollary quadrant 2 describes the problem of profiting from innovation. EMI CAT scanner is a classic example case of this phenomenon. EMI (Electrical Musical Industries) introduced Computerized Axial Tomography (CAT) in the 1960s, a machine that has been designed to generate cross-sectional pictures of the human body. Even if the company was the first to take the technology to the market and the product was initially successful, EMI has not been able to catch the profit from the innovation introduced and after 8 years the market was dominated by late entrants. Other examples include RC Cola (the first to introduce cola in a
can and diet cola) outperformed by the imitators Coca Cola and Pepsi, Apple that beat Xerox in the office computer business taking advantage of key product ideas introduced by the company such as the mouse and Bowmar which introduced the pocket calculator but went out the business years later.

**TEECE (1986) “PROFITING FROM INNOVATION”**

Why those companies struggled to capture the profits from the innovative products they introduced? Teece (1986) developed a framework, based on three main blocks, to explain the distribution of innovation outcomes. The “Profiting from innovation” framework is based on three main topics: the *regimes of appropriability*, the *dominant design paradigm* and the *complementary assets*.

*Regime of appropriability* - it’s defined as the environmental factors, excluding firm characteristics and market structure, that define the innovator’s ability to capture profits generated by an innovation. With a gross simplification, we can draw a distinction between weak appropriability regime (when it’s easy for imitators to profit from the innovation introduced) and tight appropriability regime (the opposite situation).

The most relevant factors influencing appropriability are gathered in three main dimensions: *nature of technology, legal instruments of protection and speed*.

- The *technology* can be embedded in the product or in the process. Another important variable to be considered is the degree to which knowledge is codified and tacit. In particular codified knowledge is easier to transmit and receive and, for this reason, it’s exposed to the risk of imitation. Tacit knowledge is difficult to articulate and for this reason it’s easier to build secrecy around the technology.
- Let’s now discuss about the main *legal instruments of protection* a firm can use to protect innovation. Like we said in the introductory section, patents do not work in practice as they do in theory. In fact many patents can be deceived through reverse engineering and it’s possible to “invent around” at low costs. Dosi et al. (2006) studied the influence of Intellectual Property Rights arguing that at best they don’t have impact on innovation but sometimes they can also bring to negative rates of it. Trade secrecy is an alternative protection to patents, especially when the innovation is embedded in the process. For example the secret ingredients for the Kentucky Fried Chicken original recipe are known only by few selected employees and that are bound by a confidentiality agreement. Another legal instrument of protection is the copyright. A survey research published by Levin et al. (1984) indicated that methods of appropriability can change not only across industries but also within industries as well.
- *Lead time*, in the appropriability mechanism context, is referred to the time needed to be the first to enter the market with a new product/service/process, being ahead of their rivals. First movers have advantages by being the first to offer the innovation in the market, but unfortunately speed is not enough to internalize the margins from the innovation introduced. Levin et al. (1987) found that lead time along with complementary sales and service efforts and learning curve are the most effective tools for protecting product innovations.
**Dominant design paradigm** - Utterback and Abernathy (1975) introduced with the dominant paradigm theory the concepts of preparadigmatic phase and paradigmatic phase of innovation.

- The **preparadigmatic stage** describes the earlier stages of an innovation. Firms at this point focus on the design and they go through trials and errors to develop a technology that fit the needs of the customers.

- In the **paradigmatic stage** firms’ competition moves from design to price taking advantage of economies of scale and learning. During this phase, a dominant design among the different ones introduced in the market has emerged. When imitation is relatively easy and the instruments of protection are weak, imitators can defeat pioneers in the dominant design game. It’s important to notice that the dominant design is not always the best from a technological performance point of view, due to network externalities (Arthur, 1989).

According to Teece (1986) the Abernathy-Utterback framework is not suitable to all the industries but it’s works well with mass markets characterized by homogenous consumers’ tastes. In niche markets, where scale and learning economies are absent, the logic is different.

**Complementary assets** - in almost all the cases, to be successful the commercialization of an innovation must be a combination of technical know-how and other capabilities or assets. An invention needs to be supported by different activities, defined as “complementary assets”, in order to be manufactured and commercialized as a product. The image below classifies the different complementary assets that could be developed by a firm to take an innovation to the market.

![Figure 22: Appropriability regime and complementary assets needed to commercialize an innovation (source: Teece 1986)](image-url)
The nature of complementary assets is studied more in detail, correlating the dependence of assets on the innovation and the dependence of the innovation, in general, on complementary assets. The framework identifies three different types of complementary assets: *generic*, *specialized* and *cospecialized*.

- **Generic assets** are general purpose assets, that do not need to be tailored on the innovation.
- **Specialized assets** are identified when there is a unilateral dependence between the innovation and the complementary asset. Those assets need to be tailored to fit the characteristics of a given innovation.
- **Cospecialized assets** are identified when there is a bilateral dependence between the innovation and the complementary asset.

![Figure 23: Complementary assets and innovation dependence (source: Teece 1986)](image)

We can now relate each other the three main appropriability pillars introduced, in order to have a clear idea about why pioneers struggle to profit from innovation.

In *strong appropriability regimes* innovators can take advantage of solid patent or copyright protection, or where the nature of the product allows trade secrets to effectively deny competitors to get the access on relevant knowledge. Even if the innovator doesn’t possess the resources needed to commercialize the product, protection gives him more time to get the access on these assets. In case of generic assets pioneers can think about licensing the technology, while in case of specialized/co-specialized assets they can integrate or get the assets through contractual relationships.

Tight appropriability is rare. The vast majority of markets are characterized by a *weak appropriability regimes*, in which being the first-mover gives the company a limited advantage. In this situation, competitive process is influenced by the fact that the industry is or in the paradigmatic or in the preparadigmatic phase.

- In the *preparadigmatic phase* an innovator must be connected to the market, in order to design a product that is fully influenced by users’ needs. Different designs are presented to the market until
some of them start to be considered as industry’s standards. A pioneer innovator has low probability of emerging as winner in markets characterized by large development and prototyping costs.

- In the **paradigmatic phase** leading designs begin to be revealed. Sales volume increases and opportunities for economies of scale induce firms to begin working on mass production. As core technology is easy to imitate, commercial success relies on complementary assets, in particular specialized and co-specialized ones.

**INSIGHTS AND CONTEMPORARY CHALLENGES**

Even if the paper “Profiting from Innovation” by Teece was written more than 30 years ago, it still represents a reference for scholars in the innovation literature. However, the new dynamics established in the contemporary economy has led scholars to update and revise the Teece’s perspective.

*New role of the complementary assets* - recent evidence shows a decreasing importance of complementary assets in the appropriability of innovation as long as necessary intermediary markets exist. Firms could profit not only by putting the product to the market, but they can also commercialize the knowledge underlying the product. Chesbrough (2006) noticed hints of an emerging secondary market for intellectual property. This phenomenon enables innovators to access an increasingly large market without investing in complementary assets.

![Figure 24: Traditional value capturing compared to contemporary market for know-how](image)

It’s also interesting to notice that new opportunities to access complementary assets are possible, leveraging various forms of alliance with larger firms. As Colombo et al. (2006) argued, alliances can operate not only at the development level but also at the marketing ends of the value chain.

*The case of network markets* – network markets are industries in which the value of a product is not given only by its performance but it’s strongly influenced by the additional services and products offered. In these markets is very common to see an establishment of a standard, a product’s specification that allows the interoperability
(for example the interrelation between software and hardware). In the battle for standards it’s important to differentiate direct network effects, when the innovation value increases with the number of users of the product, and indirect network effects, when the innovation value increases with the number of complementary products or services offered.

Jacobides et al. (2006) argued that in this context companies can benefit to externalize the creation of complementaries, appropriating the value without owning the assets and fostering network effects.

New systems of innovation - the innovation system in which inventor firms operate has changed drastically. The opening of new financial markets and the open innovation movement, on one side increased the possibility to finance innovative projects and on the other side decreased the Research and Development investments needed to develop them.

According to Antonelli and Teubal (2006), new venture capital markets provide positive effects on the exploitation and generation of knowledge. The creation of these institutions generated specialization by innovative firms in technological knowledge and decreased the risk of spillover effect given by the shares.

As Chesbrough noticed, the open innovation movement has increased large firm’s openness to partnering with small firms and users in both the sourcing and the deployment of new technologies. The complexities undermining innovation have led to increased permeability of organizational boundaries and require companies to interact with their stakeholders along the innovation process in more open ways.

From the review of the main literature about profiting from innovation we understood that appropriability is not given by the market structure and by the characteristics of the average firm but it’s strongly influenced by the strategy implemented by leaders and the responses made by followers. These decisions are not generic but are tightly connected to the market and the context in which are made. We can now analyse the main views emerged in the strategic management field in order to understand how to introduce an innovation successfully in the market beating competition.

3.1.5 Strategic management and competition

According to Ohmae (1983) business strategy is, in a word, all about competitive advantage. The only purpose of strategic planning is to enable company to gain a sustainable advantage over its competitors.

Henderson (1989) added that only a robust plan of action leads to business’s competitive advantage, which can only happen at someone else’s expenses.

Magretta (2011) argued that “strategy explains how an organization, faced by competition, will achieve superior performance”.

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The strategy is a coherent set of strategic decisions aimed at obtaining superior performance in the long term against competitors. Decisions in this field are classified as non-reversible, long term oriented and they involve top management. In order to be coherent and to be effective in the market, strategy, has to follow a roadmap that starts from the analysis of the external context and continues with the analysis of the internal resources.

In the last decade two main different views has emerged in the Strategic Management field (Asad, 2012): the positioning school, that emphasized the exploitation of market power, and the resource-based view, that emphasized competences development.

- The first cluster, the positioning school, is represented by Porter’s “Competitive Forces Approach” (1980) and Shapiro’s “The Theory of Business Strategy” (1989).
- The second one, the resource-based view, is represented by Wernefelt’s and Barney’s (1995) theories and by Teece’s “Dynamic Capabilities and Strategic Management” (1997).

MICHAEL PORTER’S VIEW ON COMPETITION AND STRATEGY

According to Porter (1985) “strategy explains how an organization, faced by competition, will achieve superior performance”. The main goal of a company is not competing to be the best company on the market but to be unique and differentiate from its competitors.

We can define Porter’s view by analysing its three main pillars: the right mindset to competitive success, the correct connection with industry structure and the company’s relative position described through the value chain model.
The right mindset - according to the scholar, one of the main reasons why many companies failed to develop good strategies is that people running them have misconceptions about what competition is and how it works. For most managers, “be the best” is what competition is all about, reinforced by popular and common metaphors coming from warfare and sports. Winner-takes-all the market model presupposes that there is only one single scale curve in each industry and all the companies must move down the curve to reach competitive advantage.

Porter offered a different and more complex vision on competition. When companies converge around standard offerings, the average customer may fare well but some customers’ needs could be underserved or overserved. Competition means choosing a path different from that others. The goal is no more compete and fight to be the best, but companies have to diversify to be unique.

The same concept has been reframed by Kim and Mauborgne (2004) with the introduction of the “Blue Ocean Strategy” framework. Red oceans represent all the industries in existence today, where companies try to outperform their rivals to capture existing demand. Blue Oceans denote all the industries not in existence today, where the demand is created rather than fought over. In this context there is ample opportunity for growth that is both profitable and rapid. Blue ocean strategies are not created leveraging on technology, but innovating the values offered to customers and reaching beyond the existing demand.

Industry structure - another misconception is that most people think of competition as a direct contest between rivals. The real point of competition is not to beat your rivals but to earn profits in a more complex context. In fact competition is a struggle involving multiple players over who will capture the value an industry creates. Industry structure tend to be stable over time and for this reason determines the average profitability of the firms operating in it.

Porter introduced the Five Forces Framework in order to study and classify the level of competition and profitability of an industry.

![Figure 26: Five Forces model and impact on profitability (source: Porter 1985)](image-url)
The general rule behind the model is simple: the more powerful the force, the more pressure it will put on prices or costs or both, decreasing the industry levels of profitability.

The five forces introduced by the scholar and their impact on profitability can be summarized as follow:

- **Buyers** are powerful when they can force prices down or when they demand more value in the product.
- **Suppliers** have power when they can insist to have more favourable terms or leverage to charge higher prices.
- **Substitutes** are products or services that meet the same needs as the industry’s product but in a different way. Coming from different industries it’s often difficult to identify indirect rivals.
- **Entry barriers** defend any market from *new entrants* that can steal market share to established companies.
- **Internal rivalry** among current competitors can take a variety of forms not only price competition. When direct competition is more intense, profitability will be lower.

We will analyse more in depth the factors influencing every single force and apply the model to the reference industry in the following chapter.

*Company’s value chain* - competitive advantage cannot be understood by looking at a firm as a whole. It stems from the many distinctive activities a company performs to design, produce, take to the market, deliver and support its products. A firm’s value is embedded in a larger stream of activities called value system. The value chain is a powerful tool for disaggregating a company into its strategically relevant activities in order to focus on the sources of competitive advantage.
As we can see from the image above, activities have been divided in two main categories:

- **Primary activities** are involved in the physical creation of a product or service and its selling to the buyers. In this category we can find inbound and outbound logistics, operations, marketing and sales and after-sale services.
- **Support activities** hold up primary activities and reinforce the whole value infrastructure. In this category we can find procurement, technology development, human resource management and infrastructure activities.

Competitive advantage is possible following two different strategies: *cost advantage*, when the firm has a superior profitability from its products/services managing to produce at lower costs than their rivals, and *differentiation advantage*, when the company can charge a premium price offering something that is both unique and valuable to customers.

**CARL SHAPIRO’S THEORY OF BUSINESS STRATEGY**

The approach introduced by Shapiro (1989) takes advantage of the tools of game theory to analyse the nature of competitive interaction between competitor firms. The core concept of this theory is based on the fact that every action taken by a company influence the behaviour of rival firms and thus the market environment. Examples of such moves are investments in capacity, R&D investments and advertising that have been made with an irreversible commitment.

The papers connected to this literature has led to the appreciation of the role of sunk costs and underlined the possibility to influence rivals’ behaviour through signalling. Unfortunately, game theory strategy could be considered an efficient tool of study only in industries where leaders do not have deep-seated competitive advantage.

**RESOURCE-BASED PERSPECTIVE**

Resource-based approach lies on the idea that competitive advantage lies on the firm’s difficult-to-imitate resources built along the years. Learned et al. (1969), pioneers of the approach, argued that “the real key to a company’s success or even to its future development lies in its ability to find or create a competence that is truly distinctive”. Even if these scholars anticipated the resource-based approach, they didn’t create a theory or a systematic framework to analyse strategy. A more systematic definition has been introduced with the recent developments in organizational economics.

The resource-based approach has two main seminal works that can be considered its roots: the writings on business strategy by Andrews (1980) and Penrose’s (1959) work. Andrews (1980) focused its attention on the responsibilities of senior management in shaping the future destiny of their firms. He argued that strategy
should define the businesses in which a company will compete, “in a way that focuses resources to convert distinctive competence into competitive advantage”. Penrose (1959) identified specialization as the main source of competitive advantage for a firm. Specialization is defined in a much wider sense than the logic of industrial efficiency (cost minimisation and price competition) and it’s referred to the development of a particular ability in a defined area that gives an advantage position vis-à-vis direct competitors.

**TEECE ET AL.’S DYNAMIC CAPABILITIES APPROACH**

Some well-known companies like IBM, Philips and Texas Instruments have followed a resource-based approach, developing valuable technology assets but they were not able to profit from the innovation they introduced. Those assets are not enough to support a significant competitive advantage; winning firms has been able to demonstrate to be flexible and responsive in product innovation. We refer to this ability to achieve competitive advantage as *dynamic capabilities*. Helfat (2007) defines dynamic capabilities as “the capacity of an organization to purposefully create, extend, or modify its resource base”.

The term dynamic is referred to the ability to develop new competences, connected to the changing business environment. The term capabilities underline the role of strategy in reconfiguring internal and external skills, resources and competences.

The basic assumption of the framework is that core competencies should be used to be able to evolve and modify short-term competitive positions, in order to change its core capabilities and build long-term competitive advantage.

**SIMILARITIES AND DIFFERENCES BETWEEN THE FRAMEWORKS**

The four frameworks analysed are quite different and we can say that the first two have much in common each other as do the last two. Let’s take as reference Teece and Pisano’s (1994) paper in order to analyse the main topics that created differences and similarities among them.

- **Efficiency vs. market power:** the competitive forces approach suggests that the source of competitive advantage is embedded in the industry structure and leads to see concentrated industries as the most attractive. Dynamic capabilities and resource-based approaches see competitive advantage coming from the high-performance routines inside the firm shaped by processes. Distinctive capabilities and competences cannot be acquired but require years and possibly decades to be built.

- **Strategic change:** competitive forces and the strategic conflict approach pay little attention to skills, know-how and path dependency. For this reason they tend to see strategic choice occurring with relative facility. On the other side from the capabilities perspective, strategy involves choosing the long-term trajectory of know-how development.
• **Unit of analysis and analytic focus:** in the capabilities and resources theory, business opportunities come from the company’s unique processes and for this reason strategy analysis is situational. In contrast, in the competitive forces approach the unit of analysis is industry specific and, for this reason, the market analysis is the starting point for strategy.

• **Entry strategies and timing:** resources and capabilities approach argues that entry decisions must be made following the competences paths that new entrants have compared to competition. The more industry-specialize assets a firm has, the more likely it’s to create an emerging technological discontinuity in its industry. Positioning theories base their entry decisions on the industry characteristics and on the possible reactions from existing actors operating in the market.

• **Diversification:** five forces approach values acquisitions that raise rivals’ costs or enables firm to develop unique features for its products. In the resources/capabilities framework related diversification is the only form of diversification considered when firm’s traditional markets decline.

• **Focus and specialization:** the focus for strategy must be the development of distinctive competences not products, according to the resource/capabilities frameworks. Product and market specialization may cause firms to neglect capabilities that could diversify them in the long-term and make it flexible to change. Porter stressed the fact that firms need to focus on the market in which they compete, in order to understand deeply the surrounding context.

Observing the main theories about strategic management we can now understand and assess how a company could compete in a market and which are the factors that influence its success. In particular the five forces model focused its attention on the industry structure and the context in which the company performs. The levels of competition identified determines the average profits for a firm operating in the market, and the bargaining power possessed against suppliers and buyers. Competitive advantage can be reached by focusing on a cost or differentiation strategy, leveraging on the value chain’s main activities. Resource-based and dynamic capabilities approaches focused their attention on the know-how and processes built along the years by a company. These mechanisms allow a firm to be flexible and to respond to its environment adaptively, being ready to be positioned correctly after an innovation discontinuity.

Profiting from innovation framework by Teece has narrowly defined the decisions to reach competitive advantage around complementary assets. Every company competes in a context influenced by very different actors, sometimes coming from different markets, and for this reason the model is considered basic nowadays.

Business Model became popular with the advent of the internet (mid-1990s) and it has been since then the focal point for scholar and business practitioner as documented in several publications, articles, books and scientific journals. It’s an extremely useful framework not only to identify the complementary assets owned by a company, but also to identify the features to be included in the product, the customers to be targeted, the items to be bundled in the offering and the distribution channels to be exploited. For this reason the tool has
been widely used not only by scholars studying innovation but also by entrepreneurs to commercialize effectively their visions on the market.

3.2 Business model innovation

Business model is a relatively young phenomenon. Tracing the citation of the term in a large variety of journals, Osterwalder et al. (2005) discovered that it appeared for the first time in 1957 in an academic article written by Bellman and Clark (1957). Ghazani and Ventresca (2005) searched for the use of the term in management articles from 1975 to 2000, the search returned more than 1,700 publications. The framework has been widely used also by non-academic people and entrepreneurs given its implementation-oriented nature. Zott et al. (2011) discovered that the term has been mentioned in more than 8,000 non-academic articles.

According to Hamel and Ruben (2000), firms, in order to be successful, must develop new business models in which value creation and value capturing occur in a value network. Value network includes different actors: suppliers, partners, distribution channels and coalitions. Chesbrough (2007) theories went in this direction too. For the scholar, contemporary innovations rely on business models rather than just on technology and Research and Development. In fact business model performs two important functions: value creation and value capturing. In general a better business model often beats a better idea or technology.

We can conclude that business model is a tool that connects value creation and value capturing activities of a firm. Given its characteristics and its nature, the tool can be considered an extension of the complementary assets concept by Teece and of the value chain framework by Porter.

Let’s now take a deeper look to the most relevant business model definitions and classifications provided by scholars.

3.2.1 Business model definitions

Given its action-oriented nature, it is very difficult to find a unique and systematic definition of the business model concept. According to Linder and Cantrell (2000) there is a lot of confusion and fuzziness about the topic as different authors, writing about it, do not necessarily mean the same thing. The expression, in the literature, stands for various things such as parts of business model, types of business models, concrete real world examples or concepts.

For this reason we will analyse the first definitions that anticipated the phenomenon and we will present the main classification made by scholars following different units of analysis and points of view.

MAIN ANTECEDENTS TO THE BUSINESS MODEL CONCEPTS

According to Chesbrough (2002) the main antecedents to the business model concept are the following:
Abernathy et al. (1983) examined innovations and developments in the automotive industry; according to him, incumbent firms were able to capitalize on incremental innovations while their expertise became a liability in facing radical technology changes.

Henderson (1993) concluded, through a study of different pharmaceutical companies, that both economic and organizational factors explained firm’s ability to respond to technical changes. Incumbents could adapt themselves to the change if they develop integrative capabilities.

Christensen (1997) explored a technological shift called “disruptive technology”. It’s common to see managers reacting to these shifts by focusing resources on their current market and overlooking potential markets outside.

In sum, technological management literature shows that companies have difficulties to manage innovation that comes from outside the market and on which their earlier beliefs do not apply.

BUSINESS MODEL DEFINITIONS

Different business model concepts have been introduced in the literature with different points of view and different focus. Let’s start analysing the two basic words composing the term.

Based on WordNet 2.0 a model is “a simplified description and representation of a complex entity or process”. According to Genesereth and Nilsson (1987) representation implies conceptualization, described by the authors as “the objects, concepts and other entities that are assumed to exist in some area of interest”. Also based on WordNet 2.0 business is “the activity of providing goods and services involving financial, commercial and industrial aspects”.

According to Drucker (2014) a good business model answers the following questions: Who is the customer and what does the customer value? What is the underlying economic logic that explains how we can deliver value to customers and appropriate cost?

Amit and Zott’s (2011) definition is less broad and more precise. The scholars argued that “a business model depicts the content, structure and governance of transactions designed so as to create value through the exploitation of business opportunities”. The content is referred to the goods or information exchanged, as well as resources and capabilities required, structure focuses on the parties that participate and governance includes the way flows of information, resources and goods are controlled.

According to Chesbrough and Rosenbloom (2002) the functions of a business model are to “articulate the value proposition, identify a market segment, define the structure of the value chain, estimate the cost structure and profit potential”

Teece (2010) followed a similar approach proposing that a good business model design involves determining which market segments should be targeted, what benefits the product/service provide the customers, how the business’s revenue and cost structures should be designed and how value will be captured.
Defined the main business model definitions, we can now introduce its main classifications and we will connect the concept to the profiting from innovation theories by Teece.

BUSINESS MODEL DEFINITIONS CLASSIFICATIONS

Different scholars focused their studies in classifying the different business model definitions, in order to give a coherent and complete view on the different perspectives.

Osterwalder’s view on the topic - according to Osterwalder et al. (2005) the literature often treats the topic superficially without understanding its roots, its role and its potential. The scholars described business model as the blueprint of how a company does business. “It’s the translation of strategic issues, such as strategic positioning and strategic goals, into a conceptual model that explicitly states how the business functions”.

Trying to bring some clarity to the business model domain, Osterwalder et al. (2005) hierarchically classified the authors writing about business models in three categories, hierarchically linked.

The three categories vary in their modelling details, ranging from simple definitions to a listing of elements to a set of conceptualized categories. The hierarchy is referred to the level of rigour followed by the category and, for this reason, all must be considered equally important.

- At the 1st level we find overarching business model concepts, in which the scholars classified definitions of what a business model is and what belongs to them. At this level of detail business model is seen as an abstract concept that describes what a company does for a living.

Figure 28: Business model concept hierarchy (source: Osterwalder et al. 2005)
• At the 2nd level we find *taxonomies*, types of meta-models that are generic and contain common characteristics. With meta-models we refer to different models that also applies to specific industries.

• At the 3rd level we find *instance level* where we find concrete real-world business models conceptualization and description. Different authors used the business model perspective to describe companies such as Xerox (Chesbrough and Rosenbloom, 2002) and Dell (Kraemer el al., 2000).

Along the years the research and the role of business model matured and some sort of progress can be observed. Basing on an extensive review of the literature, the authors proposed a five phases evolution of the concept.

![Figure 29: Evolution of the business model concept (source: Osterwalder et al. 2005)](image)

In the 1st phase, different authors suggested business model definitions and classifications. In the 2nd and 3rd phases authors started proposing elements that could be included into a business model. At the beginning these propositions were simple “shopping lists” but they later become detailed descriptions of these components. In the 4th section a conceptual research started with the creation of meta-models and reference models. Finally, in the 5th phase, reference models have been applied to management through the proposal of conceptual tools.

*Toward a unified perspective of business model* - analysing more than 30 definitions from various perspective, Morris et al. (2003) identified three main categories of definitions: *economic*, *operational* and *strategic*.

• The *economic* cluster includes concepts in which profit generation is represented through variables such as revenue streams and cost structures. The first definitions provided could be included in this category, missing the role of complementary assets.

• The *operational* class includes the definitions that are directed at the architectural configuration of business model, by aiming at creating value through infrastructural design of a business.

• The *strategic* category defines business model as a tool aimed to determine the positioning of a firm to define its competitive advantage.

The scholars went deeper in the analysis identifying the main contents that have been included in the vast majority of the business model theories, creating a unified framework. The most common topics covered, represented by six key questions, are:
• How do we create value? To answer this question offering components have been introduced.
• Who do we create value for? To answer this question market related factors have been introduced.
• What is our source of competence? To answer this question internal capability factors have been introduced.
• How do we competitively position ourselves? Strategy factors have been introduced to answer this question.
• How do we make money? Economic factors have been introduced to answer this question.
• What are our time, scope and size ambition? Personal and investor factors have been introduced to answer this question.

Business models as models - Fuller and Morgan (2010) pointed out that business models can act as different forms of models with different purpose.

• They can be investigated as scientific models by scholars that use them as representation for a class of thing. Case business models, like the McDonald’s one for example, are to management scholars what organisms model are to biologists: “real-life examples to study”. The main goal of these types of models is to understand why certain types of models are successful, trying to find a correlation between the theory and real-world examples.
• The tool could be compared to a recipe for creative managers, that use it to understand the impact of strategic changes and decisions. Entrepreneurs use business model case examples from other successful firms as benchmark and take inspiration from them. The main ingredients, in particular, are a variety of strategic elements: resources, capabilities, products, customers, technologies and markets. As argued by Morgan (1999) “the integration of a new set of ingredients demands a new recipe otherwise the result will fall apart. However, a recipe is not unique in the sense that it’s not the one and only way to integrate a certain set of ingredients”.

To conclude, the business model tool doesn’t play just one of the roles we presented. It’s both a scientific instrument of analysis and a recipe to experiment with in order to build a concrete competitive advantage.

Business as stories and scientific experiments - Magretta (2002) introduced an interesting view on business models in his article. The main starting point of the article is the idea that “a good business model begins with an insight into human motivations and ends in a rich stream of profits”. According to the scholar business models are, at heart, stories that explain how enterprises work. The most successful ones have been able to represent a better way than the existing alternatives and to tell a better story to their customers.

Once an enterprise starts to compete, the different components of its model are subject to continuous testing in the market. Success also comes from the ability of management to be flexible and to tweak the model on
the fly. From this point of view business modelling is the managerial equivalent of the scientific method: you start with a hypothesis, you test it through experiments and you revise it if necessary.

When a business model doesn’t work there are two different problems that it could have experienced: it failed the narrative test when the story told by the company is not powerful enough, or it failed the numbers test when the profit and loss account doesn’t add up.

*From strategy to business models and onto tactics* - while managers have a good understanding of how a business model works, academics just talked about the topic recently. Masanell and Ricart (2010) argued that this is partly because of a lack of a clear distinction between strategy, business model and tactics.

- **Business model** is referred to the logic of the firm, how it operates and creates value for its stakeholders.
- **Strategy**, on the other side, is connected to the choice of the business model through which the company competes in the marketplace and differentiates towards competitors.
- **Tactics** describe the residual decisions that a firm has to make.

To integrate these three concepts the scholars introduced a two-stage competitive process framework that could be summarized with the image below.

![Generic two-stage competitive process framework](source: Masanell and Ricart, 2010)

- At the first stage the firm chooses its business model identifying the logic of value creation and value appropriation.
- At the second stage the firm makes tactical choices guided by its goals. The strategy plays an important role in the design of business model, the choice of which determines the tactics available to the firm to compete against rivals.

*Porter’s view on the concept* - from the book “Understanding Michael Porter” (Magretta, 2011) Porter describes his view about the concept of business model. As we said in the introduction, the author claimed that
the term is getting a lot of attention in the business press, but it has not been precisely defined yet. For this reason it can mean a lot of different things to different people.

Business model is also a powerful framework for entrepreneurs. It can be useful when starting a new company and when it’s not clear how it’s going to work. In the specific, it helps managers to understand the way they are making money, the costs associated to the activities they perform and the profitability of their business.

Strategy and business model are two different concepts and have two different roles. While strategy helps to develop or to assess competitive advantage, business model framework simply highlights the connection between revenues and costs. It won’t give any insight about how you will stack up against competition.

In order to correlate the tool to the value chain theories, Porter claimed that business models link activities of your value chain to the revenues and cost structure of a company.

The last topic we covered was the difference between strategy and business model. Strategy is connected with differentiation and its main goal is to build a sustainable competitive advantage. Business model tool, on the other side, is a powerful tool to turn strategies into actions and it connects the revenues and costs sustained by a company with the activities and know-how it possesses.

Following this point of view the business model framework could be seen as a modern evolution of the complementary assets concept, being able to explain both the value creation both the value capturing process of a firm. Its use, however, has to be connected and anticipated by a strategic evaluation of the industry in order to follow a coherent direction. In the following chapter, we will analyse the main scholars sustaining this perspective and we will illustrate our definition of business model

3.2.2 Business model framework and the profiting from innovation issue

In the industrial era, economies of scale were so important that capturing value was relatively simple. The enterprise simply packed its technology and intellectual property into a product which was sold either as a discreet item or as a bundled package. The growth of internet raised new questions about how business delivers value to the customer and how companies can capture this value delivering new information services. As a consequence the vast majority of companies had to rethink their distribution strategies if not their whole business model.

CONNECTING BUSINESS MODEL WITH THE PROFITING FROM INNOVATION THEORIES

In order to build a connection between the appropriability issue introduced at the beginning of the chapter and the business model literature representing an evolution of the concept, we will present the main papers comparing the two topics.
Weaknesses of classic economic theories - economic theories implicitly assume that trades take place around tangible products. For this reason capturing value in a competitive market is simple. Inventions are assumed to create value naturally and firms capture this value simply selling output in established markets. This situation is far from the real world.

Putting aside the “public good” and “free ride” issues, business models are redundant from an economics point of view. Suppliers and producers create and capture value simply disposing their output at competitive market prices. This strategy doesn’t include any differentiation based on premium price.

The theoretical assumptions behind the economic models we introduced in the dedicated chapter were fully developed markets, strong property rights, zero cost of information, no innovation and no relevance of complementary assets. Customers, in short, will buy a product if its price is lower than the utility yielded and producers will supply if price is at or above the costs sustained.

Classical economic models are a caricature of the real world and they don’t explain markets like they really are.

Changing balance between customers and suppliers - in the modern economy, customers are overwhelmed by alternative choices, have variegated needs and companies compete in a global environment. Business needs to be more customer centric to allow the lower cost provision of information and customer solutions.

Another issue to be considered is the fact that nowadays firms have to consider not only how to address customer needs but also how to capture value from providing new products and services. Without a well-developed business model, innovators will fail to deliver or capture value from their innovations.

Business model and profiting from innovation - according to Teece (2010) “a business model articulates the logic and provides data and other evidence that demonstrates how a business creates and delivers value to customers. It also outlines the architecture of revenues, costs and profits associated with the business enterprise delivering that value”.

In order to be relevant in an overcrowded market, each new product has to be coupled with a business model that defines its go-to-market approach and its value-capturing strategies. Technology itself is not sufficient but it needs a good business model design and an effective implementation.

Figuring out how to deliver value to customers and how to capture value while doing so are key issues in designing a business model. It’s not enough to do the first without the second.

Intellectual property is not an effective instrument of protection against imitation. However, according to Teece (2010) different alternative strategies could be used to impede copycat behaviour. Implementing a business model requires assets, systems and processes that are hard to replicate. Let’s take for example the pioneer
subscription service offered by Netflix. Blockbuster responded with a similar offering but, handicapped by cannibalization concerns and acting as a second mover, it couldn’t innovate its business model and survive. Another protection system is the *level of opacity* defined by Lippman and Rumelt (1982) as the uncertainty factors connected to imitability. In fact there are some elements that are difficult for outsiders to understand and imitate when it comes to implement an existing business model. Incumbents in an industry may be reluctant to innovate because of the *fear of cannibalization* of existing sales and profits.

We can see business model as a bridge to connect value creation and value capturing for a company. Having a differentiated business model architecture is important to establish a long-term competitive advantage.

*Business model as innovation itself* - in most advanced societies, technological revolutions are considered the major source of progress and the main form of innovation. While such innovation type is seen as the most important and the most influential for society, without a business model sustaining the product incorporating the technology, the capacity of a firm to capture value will be deeply compromised.

Even a famous celebrated inventor as Thomas Edison had to face the consequences of this issue. He failed to get his invention, direct current, as industry standard for electricity and he also abandoned the recording business. The more radical the innovation and the more challenging the revenue architecture, the greater the changes likely to be required to the traditional business model.

History has shown that innovators, unless they can offer compelling value propositions to customers and set up profitable business systems, will fail to introduce disruptive products, even if the innovation is remarkable and could have a deep impact on society.

**OUR VISION ON THE BUSINESS MODEL CONCEPT**

Following the framework introduced by Masanell and Ricart (2010) there is a hierarchical distinction between the concepts of *strategy*, *business model* and *tactics*.

- **Strategy** has to do with the company’s competitive advantage and its capability to differentiate from rivals. A firm, at the strategic stage, analyses its competitors and the market characteristics in order to understand the best business model to compete.
- **Business model** is the logic of the firm, the way it operates and how it creates value.
- **Tactics** describe the residual short-term oriented decisions made from amongst those available depending on business model choice at the strategic stage.

To connect the concept of business model with the profiting innovation theories introduced, we can define it as a mechanism that connects the value creation with the value capturing activities of a company. According to Chesbrough and Rosenbloom (2002) business models are mediators. In fact technology and its economic
value is mediated by the construct of a business model. The tool is powerful for managers and entrepreneurs as gives them the opportunity to capture the potential or latent technological value and to make it marketable.

Zott et al. (2011) argued that business model is a connector between an innovative technology and customers, or between technology and resources of other firms. The tool is nothing less than the organizational and financial architecture of the business.

To conclude, we think that the definition that represents best our vision of the topic is the one introduced by Zott et al. (2010) in the paper “The business model: theoretical roots, recent developments and future research”. According to the scholar “The business model […] complements technology, but technology is seen as an enabler of the business model rather than a part of the concept per se. […] The core logic of a business model, instead, revolves around a firm’s revenues and costs, its value proposition to the customer and mechanism to capture value. Thus conceived, the business model can be a vehicle for innovation as well as a subject of innovation”.

3.2.3 Business model tools
As Fuller and Morgan (2010) introduced in their paper, business model concept has a different role and scope for scholars and business practitioners. Scholars consider the tool a mathematical model to represent reality and to find a match between findings from the theory and real-world examples. On the other side, creative managers consider the tool a recipe to experiment and to create successful strategies through the ingredients they have.

Even if the business model has been the focus of strategic literature in the last decades, the tool has a gap of consideration between scholars and entrepreneurs. Business literature about business model has not achieved consensus for an ideal business model construct. Scholars have different opinions about the definition, the structure, the purpose and goals represented by the tool. Moreover, academics focused more on a descriptive approach rather than on a practical orientation (Zott et al. 2010). There is the need to align the business practice to cope with this practical relevance issue.

Coes (2014) analysed further the issue and presented business model tools as the solution to fill the gap between the business model literature and real-world practice. In fact:

- They visually represent the main business model contents, connecting them together in a visual approach
- They are based on solid literature but they aim to be easy to use for both managers and innovators
- They are a connector tool between the innovative technology, customers and the resources of a firm representing the architecture of the business
Business model tools are the best instruments to understand how a company has been able to profit from the innovation introduced, as they are considered solid by both scholars, given their foundation on literature, and managers, given their orientation to action. For this reason, we will analyse in the following section the main business model canvas designed by companies and academics and we will list the main strengths and weaknesses of each tool. By this way we will understand which is the best framework for us to understand how craft breweries profited from the innovation they introduced.

OSTERWALDER AND PIGNEUR BUSINESS MODEL CANVAS

One of the most iconic business model tools is the canvas created by Alexander Osterwalder and Yves Pigneur (2010). The concept at the base of the book was to introduce a framework that could be able to help entrepreneurs presenting their ideas and figuring out the resources and the assets needed to build a sustainable business. The canvas is designed to facilitate the description and the discussion around the commercialization of an idea and the components needed to take it to the market. For this reason the model is simple and intuitively understandable to use.

Business model canvas consists of nine basic components. The scholars decided to put the components in a canvas in order to have a better visualization of the different relationships among the single parts of the model.

To connect our definition of business model with the canvas and to recall the profiting from innovation issue introduced by Teece (1986) we can distinguish two main sections. The right side of the canvas, made of customers, value proposition, channels and customer relationships, represents the value capturing activities of a company describing how a product/service is delivered to customers and how fidelity is built. The left side of the canvas, made of key resources, key activities and key partners sections, represents the value creation
activities of a company describing the actors involved in the creation of value, inside and outside the company. The lower part of the canvas, represented by revenue and costs, explains the *financial architecture* of the business.

*The main strengths of the model* - according to Coes (2014) the main strength of the model is its construction around the value proposition, the main differentiation source for a company. The visual representation of the business model is also a good choice to allow different use of the tool from different perspectives and with different starting points. The framework is based on a solid literature but, in order to be used by both scholars and managers, the canvas was designed as a brainstorming tool. The fact that there is no consideration of the industry, the context and competition allows more creative thinking with a structural effect.

*The main weaknesses of the model* - analysing the literature, we have found different recent papers analysing the business model canvas and its use. In general the tool has been accepted and considered a valuable resource by both scholars and managers.

- **Spanz** (2012) argued that the model has three main positive features: simplicity, practice orientation rather than academic definitions and the so called plug-and-play principle. Because of these characteristics business model canvas is a good framework to implement early ideas. However its simplicity leads to different problems. First of all, there is not a broad analysis of competition and of its structures. Another limitation is the lack of consideration of business goals and the absence of any performance measurement activity through KPIs. For these reasons the model seems not relevant for business models transformation.

- **Kraaijenbrink** (2012) presented three main critiques to business model canvas. The framework exclude any strategic purpose and it doesn’t consider a company’s vision, mission and strategic objectives. Another weakness of the model, noticed also by Spanz (2012), is the lack of consideration of competition. The scholar noticed also a problem of mixing levels of abstraction, in particular in the customer relationships and channels sections as well as key activities and resources sections.

- **Maurya** (2010) came up with some elements missing from the model. The problem of reference, as any product or service is designed starting from a problem or an opportunity. The fit of the solution to the problem configured. And the KPIs needed to identify the main strengths and weaknesses of the solution.

- It’s also interesting to notice that the framework is not suitable for the analysis of social enterprises and no-profit organizations.
Osterwalder et al. (2013) introduced the value proposition design tool to cope the limitations given by their early model. The tool has the main role to better understand the customers profile and to target the value proposition according to their characteristics. The ultimate goal is to create fit between customers and value proposition and to design specifically what consumers want.

The canvas zooms into some section of the original business model canvas. In particular it focuses on the value proposition and customer segments by emphasizing the relation between consumers and the actual product/service.

- On the right part of the canvas we find the customer profile section that describes a specific segment in a more structured and detailed way. The design of the canvas starts with customer jobs that describe the things consumers are trying to get done in their work and their life. The jobs could be represented by tasks they are trying to complete, the problems they are trying to solve or the needs they are trying to satisfy. The next part to be filled is the customer pains one. In this part it’s described anything that annoys customers and prevents them from getting a job done. Pains also describe risks and potential bad outcomes for the solution. Customer gains include the outcomes and benefits customers want. Some of them are required, expected or desired and some would surprise them.

- On the left side of the canvas we find the value map section that describes the features of a specific value proposition of a business model in a more structured and detailed way. The products and services part include a simple list of what a company’s offering include. Pain relievers describe how products and services alleviate specific customer pains. They specifically outline how to eliminate or reduce some of the things that annoy customers the most. Gain creators explain how products and services create gains to customers.
The model is a useful tool to make value proposition more understandable and it helps optimizing products and services at the same time. It also describes how your offering is answering customer needs and how to reduce risks, helping to design a more targeted business model.

MAURYA LEAN BUSINESS MODEL CANVAS

The main objective of Maurya (2012) with the lean canvas was to make the tool as actionable as possible while staying entrepreneur-focused. He proposed to address four main issues missing from the original model, including them in the canvas.

As we can see from the picture the scholar substituted the partners, key activities, key resources and customer relationships sections respectively with problem, solution, key metrics and unfair advantage.

The decision to exclude the key resources and key activities sections has been done because they are more outside-in than inside-out oriented, meaning that they are more useful for people from outside the company than for the entrepreneur himself. The box connected to customer relationships has been deleted because every product should be built and developed through a close customer connection.

KING ADVANCED BUSINESS MODEL CANVAS

King (2010) added sub-underlines on the left side of the business model canvas, in order to help the user to fill it out. In fact the subsections added outline the differences between several key boxes in a more effective way.
The scholar went further in the modification by visualizing the canvas in a different way. In fact, in the second step the different parts of the frameworks have been grouped together into four main blocks.

**Figure 34: Advanced business model canvas (source: King, 2010)**

**Figure 35: Advanced business model canvas’ diagram (source: King, 2010)**

**FLUIDMINDS BUSINESS MODEL CANVAS**

The concept of value is a central topic in the business model design and the consultancy agency Fluidminds developed its own model following this principle. For every building block, the company explored the main value features that influence the reference section. In addition, the model includes the value of teams and the interaction between them, in order to give a clear idea of the competences and know-how needed to implement the solution.
The value proposition has to be analysed in depth and for this reason it’s divided in different parts. One part is connected to the architecture required to bring the innovation to the market while another section is related to the customers’ characteristics. The teams are analysed according to the values and the competences associated to their day-by-day activities.

IBM COMPONENT BUSINESS MODELLING

IBM introduced the business component modelling in order to design products and services to include in its portfolio. The model is based on a functional matrix defined by business competences on one side and by operational leverages on the other side. Component business modelling is focused on resources and technology rather than business architecture and the value proposition is not a part of its construction.
The model has been created by IBM to manage innovative projects inside a well-defined business reality. For this reason it doesn’t consider the creation of new resources and competences and it’s design to be fit in a structured and defined process. Relations are managed basing on functional and restricted competences and, for this reason, it’s not clear how the different blocks are connected together. To conclude the model should be considered more a project management framework than a business model canvas.

AFUAH AND TUCCI BUSINESS MODEL COMPONENTS

Afuah and Tucci (2001) analysed the main business model theories proposed in the scholastic literature and classified them according to the main components they included, in order to find similarities and differences.
The main components identified in the paper are: customer value, scope, revenue sources, sustainability, connected activities and implementation capabilities. As we can see from the table the clusters identified by the scholars not only have evidence in the literature but there is correspondence also with the business model canvas proposed by Osterwalder and Pigneur (2010).

JOHNSON ET AL. BUSINESS MODEL

Johnson et al. (2008) argued that great business models can reshape industries and drive growth. For this reason they designed a process aimed to determine whether a firm should change its business model:

- The *starting point* is the articulation what makes an existing model successful.
- The *second step* is the search for signals that indicates that a model needs to be changed.
- The *last step* is the decision whether the change of a business model is worth the effort.

The scholars also articulated the main elements that need to be identified, in order to design a successful business model.
Every business model, according to the authors, starts with the *customer value proposition* that identifies the consumer target, the offering and the needs satisfied by the products/services offered. The value proposition controls the remaining components of a business model: *profit formula, key processes and key resources*.

Considered all the different business model tools created by scholars, companies and consultancy firms and analysed their strengths and weaknesses we can now choose our method of analysis. The business model canvas by Osterwalder and Pigneur (2010) has been accepted by the majority of scholars as one of the easiest to use and one of the most complete. In fact, it’s based on a solid theoretical base and it’s easy to fill in given its visual structure. To make even more easy the compilation of the model and to avoid the presence of sections with different abstraction level, we will follow the direction given by King (2010). In particular, we will include subsections in some critical components of the model.

We will integrate the canvas with the more recent framework “value proposition design” introduced by Osterwalder et al. (2014). The model focused on the two most crucial parts of the canvas: value proposition and customer segments. Analysing in depth the desires, need, fears and opportunities of customers and the way through which products and services respond to them, it will be possible to understand better the fit between business model and final consumers.
In our case study analysis, we will also dedicate a section to the vision and mission of the selected companies, in order to assess their strategic purposes.
Chapter 4: Research Objectives and Methodology

Having introduced the main theories about innovation from different points of view, we can now proceed introducing our research. In this chapter we will explain the goals of our study and introduce our research methodology connecting it with the scholastic literature. We will also present our selection of business cases that we will exploit to deduce findings about the market.

4.1 Objectives of the study

The problem of reference from which our research has started is the issue of profiting from innovation applied to the beer industry. Craft breweries, as we explained in the introduction, are facing difficulties in appropriating the profits from the disruptive innovation they introduced in the market. Multinational non-craft firms, in fact, have implemented successfully different initiatives to prevent the erosion of their brands’ value, to avoid the decrease of their market share and to internalize the extra profits generated by the innovation.

The situation is even more complicated because of the nature of the product. According to the most popular definition given by Brewers Association, an American beer could be defined craft when it’s produced by a brewery that is:

- **Small** – its annual production doesn’t exceed 6 million barrels of beer (approximately 3% of U.S. annual sales).
- **Independent** – less than 25% of the brewery is owned or controlled by an alcohol industry member that is not a craft brewery itself.
- **Traditional** – the majority of its total beverage alcohol production is beer (flavoured malt beverages are not included)

Defining a beer craft is very difficult. The characteristics of the product, in fact, are not connected to its organoleptic qualities or the ingredients and methods of production but they are specific to the nature of the company. For this reason the consumers, overwhelmed by an almost infinite offering of choice, have problems in identifying a craft beer at the first sight or just tasting it. Companies, operating in an overcrowded industry, are facing problems in communicating the “craft” value to end users, represented by their independence.

The main questions we will try to answer through our analysis are: how could craft breweries disrupted such an established and concentrated market? Which is the appropriability regime of the market and the profitability connected to it? Which are the strongest competitive forces influencing competition? Which strategies and business models have most successful craft breweries implemented? How are they defending themselves from multinational companies with superior financial resources? How could they appropriate the extra profits they
introduced with the innovation? How could they communicate the meanings of craft represented by their products, given the fuzzy definition?

The research will be designed with the aim to be useful not only for the market of reference but also in other contexts and industries. It will be also a real-world case evidence that could support and develop literature.

The objectives of the research process could be summarized as follows:

- To assess the appropriability regime of the industry and contextualize the levels of competition connected to it.
- To identify the most innovative and successful companies in the segment in order to understand how they have profited from the craft beer disruption.
- To understand similarities and differences among the cases selected to find insights for existing companies operating in the segment.

The ultimate goals are to drive the actions of operators coming from a variety of industries and to enrich the appropriability issue’s literature. Our aims for the study are:

- To propose actions that could be implemented by craft breweries and organizations to avoid the monopolization of the industry in US.
- To present new business models to other geographical markets and industries facing similar problems of innovation appropriability.
- To suggest real-world case examples of the problem of profiting from innovation to the scholastic literature.
- To connect with other craftmanship related markets and movements that are opposing against the standardization of taste trend and the monopolization phenomenon.

4.2 Research methodology

In this section we will explain the main steps and reiterations we followed in order to select relevant case studies to be analysed. Case studies have been selected with the objective to design a research framework coherent with the literature and capable to give insights.

4.2.1 Selection of the geographical market

The first decision we had to make was the selection of the geographical market of analysis, given the Global impact of the disruption.

The selection of the American market has been done for several reasons. The first reason is the fact that the beer industry has an important relevance on the overall economy of the country. USA, in fact, are the world’s
second beer producers after China recording 22 million kilolitres of annual production\textsuperscript{40} and $107.6 billion of overall market sales\textsuperscript{41}. The industry, encompassing brewers, distributors and importers, contributed $252.6 billion to the U.S. economy\textsuperscript{42}. That’s slightly higher than the videogame industry’s economic impact.

The second reason for the selection of the market is the fact that the U.S. are Globally considered the root and the epicentre of the craft beer innovation, for its historical influence and its growth. In 2016 the segment represented the 12.3\% share in sales volume (10\% share in dollar sales) recording an annual increase of the 6.2\%\textsuperscript{43}. The craft beer segment growth has been stable and continuous throughout the last years as we can see from the chart below.

![Chart showing craft breweries' production volumes in million barrels](image)

\textit{Table 3: Craft breweries’ production volumes in million barrels (source: Brewers Association)}

The total number of craft breweries operating in 2016 has been 5,234, recording an annual increase of 16.2\%\textsuperscript{44}. Given the growing impact of the craft segment on the industry and the increasing number of companies operating in it, we can say that craft beer is a movement that is disrupting radically the market going toward a consolidation phase.

The last reason for the decision to select the American market is the presence of a strong community of companies sharing a common vision about the industry. Brewers Association represents this agreement and it’s considered the most successful and influential union in the segment worldwide. In other geographical markets, associations like the English CAMRA, Brewers of Europe and regional unions like the Italian

\textsuperscript{42} Source: Fortune Magazine (2015). “Here’s how massive the American beer industry has become”, retrieved on 2017/10/06 [at: http://fortune.com/2015/08/05/beer-industry-craft-beer]
\textsuperscript{44} Source: Brewers Association (2016). “Number of Breweries”, retrieved on 2017/10/06 [at: https://www.brewersassociation.org/statistics/number-of-breweries]
UnionBirrai, don’t have such an impact on the industry and sometimes create divisions among Companies operating in it. Brewers Association could be also an important source of data that could be used for our study.

4.2.2 The line of reasoning behind the research framework

In order to analyse the breweries that contributed most to the disruption of the market and that profited the most from the innovation, we decided to select the best 10 breweries by growth in the last 5 years. We will explain more in detail the steps we followed for the collection of data and the final selection of business cases in the following chapter.

From the theory, we understood that business model is the main framework used to study a Company’s mechanism of appropriation. In fact the tool has been widely accepted by both scholars and entrepreneurs as a modern development of the concept of complementary assets by Teece (1986) and of value chain by Porter (1985). Business model creates a distinction between a firm’s value creation and value appropriation processes, connecting them with its economic model. Being easy to draft and having a clear and visual representation the tool will represent the core part of our analysis.

The business model canvas by Osterwalder (2010) has been identified as the most iconic and successful framework among the ones we presented. However considering the literature and the critics, we can say that the tool has the following weaknesses:

- It doesn’t consider competition and industry structure. For this reason it’s not clear the distinction between the strategic and the tactic decisions made by a company.
- It doesn’t include references to any strategic purpose of a firm such as vision and mission statements, strategic objectives and metaphor of meanings. For this reason it’s not clear the “reason why” of some strategic decisions.
- It includes mixed levels of abstraction in a couple of sections inside the model. For example customer relationships and channels, key activities and key resources.
- It doesn’t focus enough on the concept of value proposition. Its design, in fact, is not driven by customers’ needs, desires and problems.

To overcome these problems we will include different levels of analysis in the research and we will make some adjustments to the business model canvas by Osterwalder.

In particular the study will be divided into three main dimensions:

- We will analyse the industry and the competition structure thanks to the Porter’s (1985) 5 forces model. Taking advantage of the framework, we will understand which are the main players shaping the market and the level of profits resulting from their competition. We will also include in the context
analysis a discussion about the *appropriability regime* of the innovation according to the parameters introduced by Teece (1986).

- The central part of the study will be represented by the draft of each single company’s *business model* using the canvas created by Osterwalder (2010). In order to avoid the problem of different levels of abstraction among the components of the framework and to make its compilation easier we will include sub-underlines sections in some parts of the model. This solution has been suggested us by the advanced business model canvas introduced by King (2010).
- In the last part of the analysis we will focus our attention on each company’s *value proposition*, taking inspiration from the “Value proposition design” framework introduced by Osterwalder (2014). The tool is an interesting method to assess the values represented by a firm’s offering, connecting them with the relative customer segment characteristics. Given the analytical aim of our study and the limited amount of information available about each company we will limit our study on the mission and vision statements and on the products and services offered.

In order to have an overview of the research process we will follow, we can summarize the process in three main steps:

1. The *first step*, defined as the “zoom-out” stage, will be focused on the analysis of the industry structure, its appropriability regime and the levels of competition.
2. The *central part* will be represented by the draft of 10 companies’ business models, selected among the ones that profited most from the innovation represented by craft beer.
3. The *last step*, defined as the “zoom-in” stage, will be concentrated to the study of each company’s value proposition, the core part of the business model canvas.

The research will be followed by a section dedicated to the findings in which we will make a cross-case analysis of every single part of the canvas and we will identify common strategies and differences between the companies selected.

### 4.2.3 Identification of data sources

The models we selected for our research (Porter’s 5 forces model, Teece’s appropriability regime, Osterwalder’s business model canvas and Osterwalder’s value proposition design) have a qualitative nature and, for this reason, are subjective. However, numbers and data could be useful resources to give a solid base to our propositions and assumptions.

The main sources of data and information we will consult for the compilation of our analysis will be:

- **Brewers Association** – the organization, constituted by more than 46,000 members, collects every year data and statistics from the industry providing insightful resources. In particular we will take advantage
of studies about the distributors and suppliers’ markets for our analysis about competition and industry structure.

- **ORBIS by Bureau van Dijk** – the database collects information about companies across the world with a focus on private ones. The platform has data about around 250 million firms from all over the globe and about the market they belong to.

- **Alcohol and Tobacco Tax and Trade Bureau** – also known as TTB, is a bureau under the Department of Treasury that has the mission to collect Federal excise taxes on alcohol, tobacco, firearms and ammunition and to assure compliance with requirements to protect consumers. Taxes data filled every year by each brewery, could be used to select the most growing companies for our analysis.

- **RateBeer platform** – it’s the most visited, user-generated source for beer information. The website is a rating platform that collects together data about the different products sold by breweries and their global distribution presence. We will use data collected by the platform to analyse the product offering and the geographical presence of each company.

- **Companies’ websites** – they will be the main sources of information for the draft of business models. In fact a company’s website gathers together information about the products and services offered, the strategy implemented, the resources and know-how developed as well as the assets owned that we will include in the different sections of the canvas.

- **Specialized forums** – the most famous forums talking about the craft brewing business are Good Beer Hunting, Craft Beer.com, Craft Brewing Business and BrewBound. These websites collect together articles written by entrepreneurs and managers of the industry, news from the market and reflections written by economists and journalists.

- **Local newspapers and online magazines** – they will give us news about company’s expansion plans and future directions of the market.

- **Books and articles from google scholar** - the craft beer market has been analysed from different points of view. We will take advantage of books and academic articles to have references on which build our analysis.

### 4.3 Collection of data and selection of case studies

As we said in the research methodology section of the chapter, our goal is to select the most growing craft breweries in the last 5 years in order to analyse the companies that profited the most from the innovation. These case studies will be our representative sample of the segment and we will use them to analyse the successful strategies that lead to the disruption of the market.
COLLECTION OF DATA

Finding financial data about craft beer companies has not been easy. Being the firms independent by definition and not listed on the American stock market, they don’t have the duty to disclose their historical financial statements.

We will summarize the collection of data process as follows:

- We started examining generic databases such as ORBIS, looking for the last 5 years’ financial statements such as the balance sheet and the profit and loss account. Unfortunately we have found data coming from the last financial year only.
- Given the difficulty to find disclosed financial data, we focused our search on production volumes. This indicator is widely used in the industry as a measure of a company’s expansion and could be considered an index of its economic performance. We tried to collect company’s annual production volumes through federal excise taxes. The Alcohol and Tobacco Tax and Trade Bureau, in fact, collects every year a form called “Brewer’s Report of Operations” (TTB F 5130.9), on which breweries declare their annual output. Unfortunately the association provides statistics aggregated by firms’ dimensions and it does not disclose single brewery’s output.
- We went further in the research taking as reference the top 50 craft brewing companies in US chart published by Brewers Association. We got in touch with the association via e-mail and we received a file containing the annual beer sales volumes (in barrels) from 2012 to 2016. The data we received have been collected by the organization through a survey filled every year or they have been estimated through excise tax data.

SELECTION OF CASE STUDIES

Collected the data we needed for the research, we can now analyse the process of selection of business cases. In order to select the breweries that profited the most from the innovation and contributed to the disruption of the market, we decided to select the best 10 breweries by growth in the last 5 years.

We can summarize the process of selection with the following steps:

- We gathered together breweries’ annual production volumes and standardized the data on an excel file.
- We calculated the $\text{AGR}_t$ (annual growth rate) = \frac{\text{production year}_{t+1} - \text{production year}_t}{\text{production year}_t}$.
- We computed the CAGR (Compound Annual Growth Rate) = \frac{\sum AGR_t}{T}$.
- We selected the best 10 companies according the Compound Annual Growth Rate they recorded.
We reiterated the process by selecting the best 50, 75 and 100 breweries by sales volumes in 2016 in order to:

- Have a **significant growth** in term of volume along the 5 years, in order to select the most innovative breweries.
- Choose **relevant case studies** from a sales volume point of view, in order to avoid the study of small and secondary firms.

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<td>38.90%</td>
<td>34.29%</td>
<td>60.47%</td>
<td>22.61%</td>
<td>39.07%</td>
</tr>
<tr>
<td>GORDON BIERSCHE K</td>
<td>96,000</td>
<td>82,700*</td>
<td>58,000*</td>
<td>37,000*</td>
<td>19,550</td>
<td>56.76%</td>
<td>0.00%</td>
<td>42.59%</td>
<td>16.08%</td>
<td>28.86%</td>
</tr>
<tr>
<td>21ST AMENDMENT BREWERY</td>
<td>104,968</td>
<td>102,709</td>
<td>71,086</td>
<td>56,988</td>
<td>43,715</td>
<td>30.36%</td>
<td>24.74%</td>
<td>44.49%</td>
<td>2.20%</td>
<td>25.45%</td>
</tr>
<tr>
<td>STEVENS POINT BREWERY CO</td>
<td>132,000</td>
<td>142,000</td>
<td>140,000</td>
<td>75,000</td>
<td>63,600</td>
<td>17.92%</td>
<td>86.67%</td>
<td>1.43%</td>
<td>-7.04%</td>
<td>24.74%</td>
</tr>
<tr>
<td>GREEN FLASH BREWING CO</td>
<td>91,040</td>
<td>81,287</td>
<td>64,640</td>
<td>55,840</td>
<td>42,280</td>
<td>32.07%</td>
<td>15.70%</td>
<td>25.75%</td>
<td>12.00%</td>
<td>21.40%</td>
</tr>
<tr>
<td>SWEETWATER BREWING CO</td>
<td>226,420</td>
<td>238,420</td>
<td>192,400</td>
<td>144,000</td>
<td>110,000</td>
<td>30.91%</td>
<td>33.61%</td>
<td>13.52%</td>
<td>3.66%</td>
<td>20.43%</td>
</tr>
<tr>
<td>ALLAGASH BREWING CO</td>
<td>91,907</td>
<td>80,181</td>
<td>70,406</td>
<td>58,613</td>
<td>45,257</td>
<td>29.51%</td>
<td>20.12%</td>
<td>13.88%</td>
<td>14.70%</td>
<td>19.55%</td>
</tr>
</tbody>
</table>

*Table 4: Case studies selection, 1st iteration (picking top 50 breweries by sales volumes in 2016)*

In the 1st iteration for the selection of case studies, the lowest threshold has been fixed on the 50th company by sales volumes in 2016. Real Ale Brewing Co., with 59.962 barrels (70.047 hectolitres) of annual sales volumes, represented the smallest company among the ones selected. Implementing the CAGR computation process we identified Allagash Brewing Co. as the company with the smallest Annual Compound Growth Rate among our business cases with the 19.55%. Being this value too low to identify companies that profited the most from the innovation we reiterated the process moving down the lowest sales volume threshold.

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45 * Data estimated through excise tax data.

** Data estimated through Ommegang brewery output volumes, acquired by Duvel Moortgat in 2003.
79

Table 5: Case studies selection, 2nd iteration (picking top 75 breweries by sales volumes in 2016)

In the 2nd iteration for the selection of case studies, the lowest threshold has been fixed on the 75th company by sales volumes in 2016. Coronado Brewing, with 39,095 barrels (46,617 hectolitres) of annual sales volumes, represented the smallest company with the 0.162% of craft beer market share. Implementing the CAGR computation process we identified Foothills Brewing Co. as the company with the lowest Compound Annual Growth Rate among our business cases with the 35.35%. This value is still too low for our selection of case studies and for this reason we will reiterate the process once again.

In the 3rd iteration for the selection of case studies, the lowest threshold has been fixed on the 100th company by sales volumes in 2016. Fulton Beer, with 25,560 barrels (29,994 hectolitres) of annual sales volumes, represented the smallest company among the ones selected. Implementing the CAGR computation process we identified Pizza Port, as the company with the lowest Compound Annual Growth Rate among our business cases with the 75.96%. The companies selected will be an insightful sample of the craft beer disruption because of the growth they recorded.

Table 6: Case studies selection, 3rd iteration (picking top 100 breweries by sales volumes in 2016)
Before presenting the final selection of the 10 companies on which we will focus our analysis, a couple of considerations need to be made:

- **Duvel Moortgat USA** is a subsidiary of the Belgian company Duvel Moortgat. The company owns more than 10 different craft beer brands around Europe (such as La Chouffe, Duvel, Maredsous, De Koninck and Birrificio del Ducato) and created the American branch through the acquisition of Ommegang Brewery in 2003, Boulevard Brewing in 2013 and signing a partnership with Firestone Walker in 2015. The company’s volumes growth has not been organic but determined by acquisitions and mergers. For this reason the CAGR could not be considered consistent with other companies’ ones and for this reason we decided not to include the case in our research.

- **Rhinegeist Brewing** and **Modern Times Beer** have been founded in 2013 and because of that the two companies could be defined start-ups. As we have seen from the theory, in different industries the most innovative ideas and business models have been introduced by small and young start-ups. For this reason we decided to include these cases in the analysis, even if the CAGR of these two companies is based on 4 years production.

- **Funky Buddha Brewery** has been acquired completely by Constellation Brands the 10th August 2017. The company could not be considered a craft brewery anymore according to the Brewer Association definition. Constellation Brands is the third largest US beer supplier, distributing and taking to the market more than 100 brands. The company includes in its portfolio valuable brands such as Corona, gained through a US distribution deal signed with AB InBev, and ex-craft breweries such as Ballast Point, acquired in 2015 for $1 billion dollars. We will include the company in our analysis because of the volume growth recorded and because we think that this recent deal won’t interfere with our analysis.

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The final selection of case studies is the following:

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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TWO ROADS BREWING COMPANY</td>
<td>42,000</td>
<td>32,200</td>
<td>16,896</td>
<td>6,643</td>
<td>40*16507,50%</td>
<td>90,69%</td>
<td>30,43%</td>
<td>41,95,70%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>FUNKY BUDDHA BREWERY**</td>
<td>26,939</td>
<td>19,130</td>
<td>6,799</td>
<td>2,020*</td>
<td>150*1246,67%</td>
<td>235,10%</td>
<td>182,61%</td>
<td>40,82%</td>
<td>426,30%</td>
</tr>
<tr>
<td>3</td>
<td>RHINEGIST BREWING</td>
<td>56,502</td>
<td>31,470</td>
<td>10,520</td>
<td>2,000</td>
<td>0</td>
<td>429,99%</td>
<td>199,15%</td>
<td>79,54%</td>
<td>234,89%</td>
</tr>
<tr>
<td>4</td>
<td>DEEP ELLUM BREWING COMPANY</td>
<td>33,100</td>
<td>22,639</td>
<td>7,790*</td>
<td>6,091</td>
<td>800*163,38%</td>
<td>27,24%</td>
<td>192,12%</td>
<td>46,23%</td>
<td>231,73%</td>
</tr>
<tr>
<td>5</td>
<td>MODERN TIMES BEER</td>
<td>40,500*</td>
<td>19,000</td>
<td>6,543</td>
<td>2,000*</td>
<td>0</td>
<td>227,15%</td>
<td>190,39%</td>
<td>113,16%</td>
<td>176,90%</td>
</tr>
<tr>
<td>6</td>
<td>FAT HEAD’S BREWERY</td>
<td>28,782</td>
<td>25,480</td>
<td>15,172</td>
<td>12,759</td>
<td>1,915</td>
<td>566,27%</td>
<td>18,91%</td>
<td>67,94%</td>
<td>32,96%</td>
</tr>
<tr>
<td>7</td>
<td>JACK’S ABBY BREWING</td>
<td>34,500*</td>
<td>20,000*</td>
<td>14,200</td>
<td>6,200</td>
<td>2,500</td>
<td>148,00%</td>
<td>129,01%</td>
<td>40,85%</td>
<td>72,50%</td>
</tr>
<tr>
<td>8</td>
<td>REVOLUTION BREWING</td>
<td>72,774</td>
<td>64,441</td>
<td>52,045</td>
<td>25,475</td>
<td>8,098</td>
<td>214,58%</td>
<td>104,30%</td>
<td>25,82%</td>
<td>12,95%</td>
</tr>
<tr>
<td>9</td>
<td>PIZZA PORT</td>
<td>34,250</td>
<td>23,450*</td>
<td>18,955*</td>
<td>6,110</td>
<td>4,954*</td>
<td>23,85%</td>
<td>210,23%</td>
<td>23,71%</td>
<td>46,06%</td>
</tr>
<tr>
<td>10</td>
<td>MOTHER EARTH BREW COMPANY</td>
<td>30,000*</td>
<td>22,000</td>
<td>15,500</td>
<td>6,400</td>
<td>4,900</td>
<td>30,61%</td>
<td>142,19%</td>
<td>41,94%</td>
<td>36,36%</td>
</tr>
</tbody>
</table>

Table 7: Final case studies selection

4.4 Research framework

In the line of reasoning section of the chapter we introduced our approach in the research process and the main structure of our framework. The core part of the analysis will be represented by the draft of business models of the companies selected. Analysing their different components, we will be able to study similarities and innovative strategies implemented by them.

The business models will be associated to an analysis of the industry, to get the bigger picture of the context, and to a focus on the companies’ value proposition, to understand the meanings represented by the brands.

In order to have a clear and simple representation of the research we decided to summarize it through the following visual framework.

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50 * Data estimated through excise tax data

*** Funky Buddha’s stakes have been acquired by Constellation Brands the 10th August 2017. For this reason the company cannot be considered craft anymore according to the Brewers Association definition.
The research will be divided in 3 main steps:

1. **Industry level (zoom-out)** – at the first stage of the analysis we will focus on the industry structure and competition. We will start identifying the appropriability regime of the innovation through the parameters identified by Teece (1986) in its paper “Profiting from innovation”. We will also study the rivalry characteristics and the profits available in the market using the Porter’s 5 forces model.

2. **Company level** – the focus of our analysis will be represented by companies’ business models that will be analysed through the business model canvas by Osterwalder. In order to make the process easier and to standardize the different canvas we will take advantage of reference tables for some components of the model.

3. **Value proposition level (zoom-in)** – in the last stage of the research we will focus our attention on value proposition studying the values and meanings represented by the brands and listing the products and services offered by the selected firms.

### 4.4.1 Industry level (zoom-out)

At the industry stage we will study the main forces shaping the market and the characteristics influencing innovation appropriability with the goal to assess the profits available. This level of the research will be also important to understand which components and decisions will be crucial in determining a company’s competitive advantage towards rivals.
We can summarize the industry level research with the following visual representation:

![Diagram of Porter's 5 Forces Model and Teece Appropriability Regime]

**APPROPRIABILITY REGIME**

In the iconic paper by Teece (1986), the author introduced the problem of profiting from innovation. The scholar, in fact, noticed that it is quite common for innovators, that commercialize first a new product in the market, to experience the fact that imitators have profited most from the innovation introduced.

This situation has been explained in the paper through the regime of appropriability concept. The appropriability regime is defined as the environmental factors that control a pioneer’s ability to capture the extra-profits generated by an innovation. The factors excluded traditional economics dimensions such as firm size and market structure. The most important dimensions of such a regime are: the nature of technology, the legal instruments of protection and speed of innovation.

**Nature of technology** – the dimensions to be analysed are product- versus process-embedded technology and codified versus tacit knowledge. Usually innovations based on process technology are more difficult to imitate given the impossibility to use reverse-engineering practices. Tacit knowledge is another instrument of protection given the difficulty to articulate the basic concepts at the base of the innovation and because of the possibility to build secrecy around the technology.

**Legal instruments of protection** – the main legal instruments that companies can exploit to protect their innovations are patents, copyrights and trade secrecy. Like we argued in the literature review section, these instruments do not always work in practice as they do in theory. In particular, patents can be deceived through...
reverse engineering. Copyrights could be fooled “inventing around” the product at low costs. Trade secrecy is very expensive to maintain and is a powerful tool only in case of process embedded technology innovations. The new dynamics introduced by the open innovation strategy framework, introduced new intellectual property rights methods and contracts that could be exploited in the system.

*Speed* – first movers have advantages by being the first to introduce the innovation in the marketplace, but being pioneers is not enough to appropriate the extra margins. Being fast, flexible and responsive to customers’ changes and, in general, to market shifts is fundamental to remain relevant in the industry.

To summarize we will assess each factor’s impact on appropriability, determining whether the regime is weak (↓) or strong (↑). Ultimately, we will connect industry profits to the appropriability, trying to understand if craft breweries could have been able to profit from the innovation they introduced (+) or the extra profits generated have been internalized by imitators (-).

**PORTER’S 5 FORCES MODEL**

The essence of the model introduced by Porter (1979) is the concept that strategy formulation means to cope with competition that hinges of five main forces: internal rivalry, threats of new entrants, threats of substitutes, bargaining power of buyers and bargaining power of suppliers. A company must understand how they work and how they affect the context in order to establish a strategic advantage. The strongest force or forces, in fact, determine the profitability of an industry.

The idea behind the 5 forces model is simple: higher levels of competition lead to a lower level of profitability. We will assess, for this reason, whether a specific factor leads to higher or lower levels of competition and we will specify consequently its positive or negative impact on each company’s profitability.

*Internal rivalry* – this force represents the rivalry among companies competing in the market for market shares. Porter sustains that when an industry matures, its growth rate changes and decreases resulting in declining profits.

The main elements determining direct competition, according to the scholar, are:

- *Concentration and balance of the market*: the more a market is concentrated on the hands of few companies that possess most of market shares, the lower are the levels of competition. The firms operating in this type of market, in fact, compete for a small part of the market share only. The concentration of an industry is estimated through the indexes CR4 (four-
concentration ratio) or CR8 (eight-concentration ratio) that measure the aggregated market share of the four and the eight largest firms. To summarize high values of CR4 or CR8 determine a concentrated market and high levels of profitability.

- **Diversity of competitors**: homogenous companies with similar structure cause low levels of competition and a positive influence on profitability.
- **Industry growth**: high levels of growth bring profitability growth for every company in the market and so a positive impact on profitability.
- **Product differentiation**: when the products offered tend to differentiate, companies have the tendency to serve a specific market bringing positive impact on profitability.
- **Switching costs**: are the costs that customers sustain to change suppliers. Even if most prevalent switching costs are monetary in nature, there are also psychological, effort- and time-based switching costs. When these costs are important companies fight to capture new customers with a consequent negative impact on competition.
- **Fixed costs**: when the levels of fixed costs are low a big amount of costs is variable and based on volumes, leading to a positive impact on profits. DOL (Degree of Operating Leverage where \( DOL = \frac{\Delta EBIT}{\Delta Earnings} \)) is the main index used to explain the impact of fixed costs on profit. When fixed cost have a low impact on costs, DOL≈1 and the impact of small increase in sales have a small effect on net operating income. The company faces less risks and higher levels of profitability.
- **Storage costs**: high storage costs bring to lower levels of units in stock and a higher stock-out probability, with a negative impact on profits.
- **Excess capacity**: refers to a situation where a firm is producing at a lower scale of output than it has been designed for. High levels of excess capacity mean that we are producing more than the demanded quantity, with a negative impact on profits.
- **Exit barriers**: are the constraints that firms face when they want to go out the market. The barriers are different by nature and the main factors influencing them are: government and social restrictions, emotional barriers, strategic interrelationships with other business, fixed costs and specialized assets. With higher level of exit constraints there is a higher level of competition.

**Threats of new entrants** – or potential competition is defined as the probability that new firms decide to enter in the market and it considers the possible reactions by incumbents. In general, if the market is unattractive for new entrants the profits for existing competitors are higher. The main factors determining the threats of new entrants are:
• **Entry barriers**: structural determinants that discourage new firms to compete in the industry. With high entry barriers, there are low threats of new entrants. The key factors influencing potential competition are economies of scale and capital requirements. Bigger firms, with a longer experience on the field have advantages in terms of costs and financial resources. Other determinants dependent on size that need to be considered are brand identity, access to distribution channels, legislation or governmental actions and switching costs. In order to have a broader prospective on the issue Porter analysed also cost advantages independent from a firm size such as availability of technology, access to war materials, favourable location, economies of learning and government subsidies.

• **Incumbent’s expected reactions**: also called retaliation, explain the possible actions made by incumbents to restrict the access to new companies.

*Threat of substitutes* – or indirect competition is represented by goods, coming from different industries, that can satisfy the same needs on which the products we are analysing are targeted. From this perspective it’s possible to identify rivalry from a broader point of view, identifying other levels of competition: direct, broadened and indirect.

![Diagram of competition levels](image)

*Figure 42: Threat of substitutes force: different competition levels*

• **Direct competition** occurs between companies offering products with similar characteristics and belonging to the same sector. Buyers often prefer a brand among the different competing in the market and, for this reason, the competition is between brands.

• **Broadened competition** occurs when substitute products respond to comparable basic needs and functions to our offering. Companies producing these items often come from a different sector and sometimes take advantage of a different technology.

• **Indirect competition**, also called “from above” competition, occurs when companies coming from other sectors and offering different products steal our customer’s financial resources.
Threat of substitutes is mainly influenced by two main factors:

- **Price elasticity**: is a measure of the relationship between a change in the quantity demanded of a good and a change in its price. If a small change in price leads to a large change in quantity demanded, the demand is said to be elastic to price and responsive to price changes. The elasticity of demand is mainly influenced by the availability of substitute products. For example, in case of absence of substitutes consumers are insensitive to price and the demand is completely inelastic to price increases.

- **Price/performance ratio**: this index measures how convenient is a substitute compared to the product of reference. The more attractive is this ratio for indirect competitors, the higher is the risk to lose customers, with a negative impact on profitability.

*Bargaining power of buyers* – or downstream competition affects market profitability when buyers can exert their bargaining power to force down prices or demand higher quality or more services. The impact of this force derives from:

- **Relative concentration**: when the buyers’ business sector is less concentrated than the market of reference, downstream bargaining power is low and, for this reason, the impact on profitability is positive.

- **Product’s features**: if the product offered by the firms competing in the market has low differentiation, it determines low fixed costs and it has a weak impact on customer’s final performance the bargaining power is in the hand of the downstream market, with a negative impact on profitability.

- **Buyer’s characteristics**: the first issue we need to analyse is the buyer’s profitability. When buyers have low profits, they ask for discounts and they push the price of products down. We also need to identify the risk of backward integration; with high probability of integration the impact on profitability is negative. The last topic we need to cover is the impact of materials or components on the total costs. When raw materials represent a high percentage of the total costs, the power is in the hand of buyers.

*Bargaining power of suppliers* – or upstream competition affects market profitability when suppliers can exert their bargaining power by raising up prices or reducing the quality of purchased goods and services. The structural determinants of this force are dual to those influencing the bargaining power of buyers, with the opposite impact. In particular:
• **Relative concentration:** oppositely to the upstream market situation, when supplier’s sector is less concentrated than the reference market, upstream bargaining power is low and the impact of profitability is positive.

• **Product’s features:** if the product offered by the firms competing in the market has low differentiation, determines low fixed costs and it determines a weak impact on customer’s final performance the bargaining power is in the hand of the firms operating in the industry, with a positive impact on profitability.

• **Supplier’s characteristics:** with a low market profitability, companies can ask for discounts pushing the price of materials down. We must also identify the risk of backward integration; with high probability of integration the impact on profitability is positive as companies have the opportunity to integrate suppliers’ extra profits. The last topic we need to cover is the impact of materials or components on the total costs. When raw materials represent a high percentage of the total costs, the power is in the hand of buyers with a positive impact on the overall industry profitability.

To summarize, the basic idea behind the model is the fact that any factor increasing the level of competition brings to a lower average profit in the market (and vice versa). In the research process we will identify whether each force will imply a low (↓) or high (↑) level of competition for the firm, consequently pushing up (+) or down (-) the profitability of the industry.

### 4.4.2 Company level

The core of our research will be represented by the analysis of companies’ business models. We will take advantage of the business model canvas by Osterwalder to analyse the selected firms’ value creation and value capturing activities, their interconnection and their combination with the financial structure.

In order to make the process of business model draft easier we will introduce in the canvas sub-underlines sections and, for some components of the framework, we will design a chart we could use as reference during the compilation. We will also use three different post-it colours inside the canvas, through which we will identify the specific business segment an element is addressed to. In particular we will use the green colour for the business to customers segment, the red one for the business to business segment and the yellow one for the generic segment. In the image below we can see the backbone of the business model canvas.
In order to have a guidance during the company level research and the business model compilation we will analyse each component and we will design some tables we will take as reference. The tables will be composed following the suggestions given by the book “Business model canvas” by Osterwalder and Pigneur (2010) and considering the characteristics of the market.

**Customer segments** – this building block defines the groups of people or organizations an enterprise aims to serve and reach. A business model may be dedicated to one or more, large or small customer segments, separated if their needs justify a distinct offer, if they are reached through different distribution channels, if they require different customer relationships or they are interested in different aspect of the offering. The different types of customer segments are mass market, niche market, segmented, diversified and multi-sided platforms.

According to Osterwalder (2010) the main questions we need to answer in this section are:

- For whom are we creating value?
- Who are our most important customers?

Focusing on the craft beer market, we can now connect the main segments identified in the industry and the average companies’ offering. Given the product characteristics, a beverage produced by process plants, is very difficult to have a substantial customization and it’s almost impossible to create a one-to-one marketing
approach. However, craft breweries have a large number of beer styles in their product portfolio and they change it frequently to follow the always evolving customers’ taste. Compared to traditional beer companies, craft breweries aim to promote the variegated culture of beer and to showcase the creativity of the master brewer.

The main segments we identified in the canvas are business to business (B2B) and business to customers (B2C). B2B represents the most relevant target for the average brewery, given the three-tiered distribution system of the industry. B2C is less relevant, in general, in term of volumes but a certain level of segmentation is adopted to capture interest from different types of customers and to expand the impact of the disruption. The segmentation is both at the customer side both at the product side of the offering. In particular we identified four different customer types: non-beer drinkers, commercial beer drinkers, beer lovers and craft beer geeks.

<table>
<thead>
<tr>
<th>Product segment 1</th>
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<tbody>
<tr>
<td>Product segment 2</td>
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<tr>
<td>Product segment 3</td>
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<tr>
<td>Product segment 4</td>
<td></td>
</tr>
<tr>
<td>Product type 5</td>
<td></td>
</tr>
<tr>
<td>Service 1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non beer drinkers</th>
<th>Commercial beer drinkers</th>
<th>Beer lovers</th>
<th>Craft Beer geeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2C</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 8: Business model canvas, customer segments reference table*

We will complete the table above by including the product segments division implemented by companies on the website and by addressing each product segment identified with the customer segment connected.

*Value proposition* – the section describes the bundle of products and services that create value for a specific customer segment. The value proposition represents also the reason why customers decide to buy a product from a specific company over another. We will focus on this block of the canvas in a dedicated level of analysis, in order to study the products and services offered together with the values and meanings represented by the brands.

The main questions we need to answer in this section are:

- What value do we deliver to customer?
- Which one of our customer’s problems are we helping? Which customer needs are we satisfying?
• What bundles of products and services are we offering to each customer segment?

In the context we are researching, value proposition varies from company to company. For this reason, we decided not to design a specific chart for this block. In the process will start analysing the brands owned by the different companies and the values represented by them. We will follow the research listing the geographical markets served (looking at the RateBeer distributor dedicated section of each brewery), the product types produced and the owned retail. A final analysis will be dedicated to sustainable initiatives and additional services offered to business customers and final consumers.

Channels – this section describes how a company reaches its customer segments to deliver its value proposition. Channels are the customer touch points that play an important role in the customer experience and a company can cover some or all of these 5 phases: awareness, evaluation, purchase, delivery and after sales. This block plays different functions such as capturing the attention of customers about the company’s offering, making the products available and ready to be purchased, deliver and communicate properly value proposition to customers and providing support after sales.

The questions that need to be answered filling this part are:

• Through which channels do our customer segments want to be reached?
• How are we reaching them now?
• How are our channels integrated? How are we integrating them with customer routines?
• Which ones work best? Which ones are most cost efficient?

In our research we will focus on two main topics, represented by the sub-underlines we introduced in the canvas: distribution strategy and channel types. In particular we will aim to understand the off-premise and on-premise focus of each company and the downstream integration strategies implemented. The data will be collected from the RateBeer distributors section.
**Customer relationships** – this block illustrates the types of relationships established by a company with a specific segment. The relationships can range from personal to automated, depending on the level of human interaction designated. The main motivations that drive customer relationships are the acquisition of new customers, the retention of old ones and the boosting of sales.

The main questions that need to be answered at this stage are:

- What type of relationship does each of our customer segments expect us to establish and maintain with them?
- Which ones have we already established? How costly are they?
- How are they integrated with the rest of our business model?

For this section of the business model we decided not to design a dedicated chart. We think, in fact, that each company will implement specific initiatives and building a reference would be detrimental to identify all of them. In particular we will focus our attention on co-creation projects and connection with communities such as local organisations and sponsors.

**Revenue streams** – this section represents the cash a company generated from each customer segment. Each revenue stream has different pricing mechanisms, such as fixed list, bargaining, actioning, market dependent, volume dependent prices and yield management. Different companies in the last years innovate their business model by leveraging on the revenue streams, such as Netflix with its subscription fee and Google profiting from advertising through AdWords.
The main questions we would try to answer in this section are:

- For what value are our customers really willing to pay?
- For what do they currently pay? How are they currently paying?
- How would they prefer to pay?
- How much does each revenue stream contribute to overall revenues?

Given the characteristics of the industry, the revenue streams of a craft brewery are quite standard, and they could be analysed according to the two main segments they come from. For the business to customers stream, companies offer a fixed menu pricing for their products offering different price targets according to the channel of sales and the geographical market. The profits are mainly driven by volumes sold and the brand perception. Other income sources could come from additional products and services such as merchandising, brewery tours, events and other products sales.

In the business to business segment, tailored contracts and partnerships are signed and revenues are defined by their development. Distribution incentives and negotiation are fundamental instruments to capture the most strategic space in final channels.

<table>
<thead>
<tr>
<th>B2C</th>
<th>Beer Products (Fixed Menu Pricing)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Merchandising</td>
</tr>
<tr>
<td></td>
<td>Breweries’ Visits</td>
</tr>
<tr>
<td></td>
<td>Events</td>
</tr>
<tr>
<td></td>
<td>Other Products</td>
</tr>
<tr>
<td>B2B</td>
<td>Beer Products (Contracts)</td>
</tr>
<tr>
<td></td>
<td>Merchandising and Other Products</td>
</tr>
</tbody>
</table>

*Table 10: Business model canvas, revenue streams reference table*

We will fill the chart above by identifying the main sources of income of the brewery, the balance between B2B and B2C profits and the additional revenue streams introduced.

**Key resources** – the block describes the most important assets required to make a business model work. The main key resources categories possessed by a firm could be: physical, intellectual, human or financial. Physical resources include assets such as manufacturing facilities, buildings, machineries and distribution networks. In our market of reference, the most relevant physical assets are represented by brewing facilities, retail shops and warehouses. Intellectual resources include brands, knowledge, patents, copyrights and other instruments of intellectual protection. Human resources are crucial in creative and knowledge-intensive industries. In craft breweries human
resources are usually divided into 2 main macro categories: production and business teams. Financial resources include guarantees such as cash, lines of credit or stock option pool to hire employees. Given the independent nature of a craft company less than the 25% of shares could be owned by an alcohol member that it’s not a craft brewery itself. For this reason financing method are limited, but it will be interesting to study innovative methods of financing.

The main questions we will answer during this stage of the research will be:

- What key resources do our value proposition require?
- Our distribution channels?
- Our customer relationships?
- Our revenue streams

We will take advantage of the table below to fill the key resources section of the business model canvas.

<table>
<thead>
<tr>
<th>PHYSICAL</th>
<th>Breweries owned (type and location)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Retail shops owned (type and location)</td>
</tr>
<tr>
<td></td>
<td>Distribution Centers (location)</td>
</tr>
<tr>
<td></td>
<td>Self Distribution (location)</td>
</tr>
<tr>
<td>INTELLECTUAL</td>
<td>Brands (name)</td>
</tr>
<tr>
<td></td>
<td>Copyrights (types and name)</td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
</tr>
<tr>
<td>HUMAN</td>
<td>Production teams (name)</td>
</tr>
<tr>
<td></td>
<td>Business teams (name)</td>
</tr>
<tr>
<td>FINANCIAL</td>
<td>Ownership (type)</td>
</tr>
</tbody>
</table>

Table 11: Business model canvas, key resources reference table

*Key activities* – the section describes the most important things a company must do to make its business model work. These are the most important actions a firm must implement to operate successfully. The main categories identified by Osterwalder are production, problem solving and platform/network activities. Production activities dominate the business model of a manufacturing firm and they include design, prototype, creation and delivery of a product. Problem solving actions are related to coming up with new solutions to individual customer problems. These activities are mostly implemented by service and consultancy organizations. The last category is represented by platforms activities that include matchmaking platforms, software and even brands.

At this stage we have to answer the following questions:

- What key activities do our value propositions require?
- Our distribution channels?
• Customer relationships?
• Revenue streams?

Given the manufacturing nature of the company the activities we will analyse will be production and network based.

<table>
<thead>
<tr>
<th>PRODUCTION ACTIVITIES</th>
<th>Prototyping</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Production</td>
</tr>
<tr>
<td></td>
<td>Delivery</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PLATFORM NETWORK ACTIVITIES</th>
<th>B2B network activities [type]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B2C network activities [type]</td>
</tr>
</tbody>
</table>

*Table 12: Business model canvas, key activities reference table*

*Key partnerships* – the block describes the partners and network of suppliers that make the business model work. Alliances are built along the years to optimize the business model, reduce risk, or acquire unique resources. The partnerships could be divided into 4 main categories: strategic alliances between non-competitors, coopetition strategic partnerships between competitors, joint ventures to develop new business and buyer-supplier relationships.

The key questions answered inside this block of the business model canvas are:

• Who are our key partners?
• Who are our key suppliers?
• Which key resources are we acquiring from partners?
• Which key activities do partners perform?

Taking advantage of the sub-sections introduced by King in its version of the business model canvas, we will analyse 3 main partnership categories: suppliers, partners and investors. Let’s start talking about suppliers. The main suppliers supporting a brewery provide raw materials, machineries and additional services. As regards raw materials, beer is made up four main ingredients: water, malt, hops and yeast. Water represents 95% of a beer composition and, even if it gives a fundamental contribution to the final product quality, is sourced locally and it could be considered an abundant resource. Yeast is another raw material that have a low impact on the product costs. Usually different strains are cultivated internally by largest brewery and the same yeast culture could be reused to ferment around four different batches. Hops and malt are the most critical raw materials for a craft beer producer. Craft brewery could easily put 4 pounds of high quality hops (that could cost up to $7 per pound) into a barrel of a hoppy IPA. The prices of the product have increased substantially in the last

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years (we will discuss about this topic in detail in the next chapter). Some hops varieties have risen by up to 5-6 times according to industry sources\textsuperscript{52} and shortages in supply turned this raw material into a scarce and strategic resource that needs long term contracts. Malt suppliers are represented by malthouses, plants where cereals like barley and wheat are processed. The malting process requires a lot of experience and only 337 malthouses\textsuperscript{53} currently operates worldwide. The market is extremely concentrated and, for this reason, malt is considered an important raw material to be managed. Additional packaging materials, such as bottles, caps and cartoon packs, are bought in bulk and can impact about $0.25 per bottle\textsuperscript{54}.

As regards partners, companies could build different type of partnerships with suppliers, distributors, service providers and also competitors. Identifying these deals will be difficult as the terms of these partnerships are usually not disclosed online.

Investors section is limited by the independent nature of the companies analysed. Given the financial power of multinational competitors, craft breweries had to find alternative methods to stay independent.

<table>
<thead>
<tr>
<th>SUPPLIERS</th>
<th>Hops suppliers</th>
<th>Malt suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging materials suppliers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machineries suppliers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Providers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PARTNERS</td>
<td>Distributors</td>
<td>Collaboration initiatives and alliances (name of the company)</td>
</tr>
<tr>
<td>INVESTORS</td>
<td>Type and name of investors</td>
<td></td>
</tr>
</tbody>
</table>

*Table 13: Business model canvas, key partnerships reference table*

*Cost structure* – describes the costs sustained to operate a business model. Costs are connected to the left part of the business model canvas, also known as value creation section, and they could be easily calculated after defining key resources, key activities and key partnerships. Osterwalder distinguished two main classes of cost structures. Value-driven structures are identified when companies are less concerned by cost implications and they instead focus on value creation. Cost-driven structures are identified when companies focus on minimizing costs whenever possible.


\textsuperscript{53} Source: ORBIS - Bureau Van Dijk (2017). Retrieved on 2017/10/11

The costs sustained by a company could be fixed, when are independent from the volume of goods and services produced, variable, when vary proportionally with the volume of goods and services produced, and semi-variable, when there is a combination of the two effects.

The main questions we would try to answer in this block are:

- Which are the most important costs inherent in our business model?
- Which key resources are most expensive?
- Which key activities are most expensive?

Breweries have, as we will see, a quite standard value-driven cost structure. The main fixed costs we will consider in our analysis are utilities, equipment, rent, the depreciation and amortization costs connected to them and overheads. As regards variable costs we will focus our analysis on direct materials and piece rate workers.

4.4.3 Value proposition level (zoom-in)

In the value proposition framework developed by Osterwalder et al. (2014) the authors designed a framework in which the value proposition and customers blocks of the business model canvas are analysed in detail. The model is composed by two canvases, one dedicated to the value map and one dedicated to customer profile. Studying a customer segment in a more structured and detailed way, breaking it down into its jobs, pains and gains, it’s possible to adjust the value proposition accordingly, with the aim to create fit.

The main intent of our research is to observe and to study the strategies and business models implemented by the companies we selected. Our goal is different from the average users of the value proposition design framework, that use it with the aim to build a successful and profitable company through a reiterative process. For this reason we will focus our analysis on the value proposition map, studying the values and the meanings represented by the brands, the products offered and the additional services provided. We can see the modified framework in the image below.
**Value** – in this section we will describe the benefits customer can get by choosing a certain brand over the other offered in the market. In particular we will analyse, looking at the dedicated section of the company’s website, the philosophy of the brands created, the values represented by the mission and vision statements and we will try to identify the metaphor of the meanings introduced by the company if we will consider them relevant.

**Products** – in this block we will study the main types of products offered by the company. We will start analysing the main characteristics of the beers created by each brewery, assessing through the RateBeer platform the average products’ ABV (Alcohol by Volume), the main beer styles produced and the most iconic beers sold. We will also list complementary products offered to have a wide vision on the offering.

**Services** – we will also present the main services offered by the companies selected both to business to business both to business to customers segments.
Chapter 5: Research Process

This chapter represents the core part of the thesis, where the theory connects with the real-world case examples we selected in order to get insights and findings. In the previous section we presented the framework of our research and the business case studies we selected to analyse the innovation.

In particular we will start with an introduction to the market, in order to contextualize the research process and to provide a solid base to our statements. We will also assess the appropriability regime of the innovation taking advantage of the parameters introduced by Teece.

It will follow the analysis of the ten business cases selected. In the industry level (zoom-out) stage we will study the profitability of the market shaped by competition thanks to the 5 forces model by Porter. A company level stage will follow, where we will focus on the selected companies’ strategies thanks to the business model canvas. This part of the analysis will be important to identify clusters and recurring strategies among the chosen firms. We will conclude going deeper in the analysis of the business model with the value proposition (zoom-in) stage through which we will study the meanings, values and products offered by the firms.

5.1 Introduction to the market

The main goal of this chapter is to provide facts and statistics useful to support our research process. In particular we will provide key data that could support the 5 forces Porter’s analysis and the assessment of the appropriability regime of the innovation. These two models, in fact, will outline the average profits available in the segment.

5.1.1 The main industry characteristics

Analyzing the characteristics of the industry, we will define the main costs sustained by the companies, the product types offered and the differences between craft breweries and multinational firms. Our study will also outline a broad vision of the context in which the companies compete, defining similar products offered in other industries and the main upstream and downstream actors involved in the business.

The overall beer market has always been historically concentrated in the hands of few giant multinational firms. The US Concentration Ratio 11 (cumulated market share of the top 11 breweries) in 2014 was over 90% and the biggest companies operating in the market are AB InBev, MillerCoors and Pabst Brewing. It’s interesting to notice that only 5 firms among the ones considered in the CR11 could be considered craft nowadays, while craft breweries represent the 98% of the total number of breweries operating in the United

States. The craft beer segment is a deconcentrated segment with a large number of new-born companies competing for a small share of the total profits available in the market.

The overall beer market is quite stable recording an average increase of 0.15\% in sales volume in the last 3 years. As we have seen in the previous chapter craft beer could be considered a disruptive innovation in the market. In 2016 the segment recorded 12.2\% share in sales volume in 2016 recording a remarkable annual average increase of the 12.4\% in the last 3 years. The consequence is a profitability growth opportunity for every company operating in the new segment while the overall market remains stable. For this reason big multinational companies are trying to appropriate the profits introduced through the innovation and to stop with different strategies the disruption of the market.

At first glance craft breweries in US have a quite similar structure in term of human resources, competences developed and assets owned. Also the products offered by the companies are quite standard. Beer in fact is produced by process plants and it follows a quite common brewing process briefly explained in the following section of the chapter. For this reason it could be considered, historically, a commodity product. However, the craft beer movement introduced some sort of differentiation in the market offering a large variety of different styles, experimenting with ingredients and new brewing techniques.

Let’s now focus on the main costs affecting an average craft brewing firm. As regards fixed costs using the database ORBIS by Bureau van Dijk we computed the DOL (Degree of Operating Leverage) for an average craft beer company. We calculated the ratio for Boston Beer Company, the 2nd largest craft beer producer in US, as it was the one with the most complete set of information available on the website. $DOL = \frac{\Delta EBIT}{\Delta Earnings} = \frac{-11.86\%}{-5.38\%} = 2.2$.

The value is pretty high meaning that a small increase/decrease of earnings would cause an amplified effect on EBIT. For this reason, fixed costs have a relevant impact on the company.

Another important cost categories that need to be analysed are storage costs. Beer is classified as a Fast-Moving Consumer Good (FMCG) meaning that the product has a short shelf life and is characterized by a responsive and flexible supply chain. The consequence is that breweries hold limited storage in warehouses to respond efficiently to the market demand, bearing relatively medium storage costs. Other costs sustained by craft firms such as raw materials and administration will be analysed in the upstream and downstream market parts of this section.

Switching costs are the expenses that customers must bear to move from one supplier to another for a specific product. The main expenses are incurred by distributors, and are clearly written on the contracts. The costs

sustained by end customers to change beer brand are almost none and the loyalty among them is extremely low as they use to try always new products. For this reason craft breweries offer additional services to business customers in order to build long term relationships and they take advantage of marketing leverages and a flexible supply chain to create loyalty among end consumers.

Industries with a high excess capacity tend to produce an output that is greater than the demanded quantity and, for this reason, face more competition to increase market share. For breweries is fundamental to saturate the production capacity of plants to amortize the investments, leaving some excess capacity to reach a certain level of flexibility.

The craft beer disruption is going through the growth phase of innovation, with an always increasing market share and number of operating firms. Looking at the statistics 730 new craft breweries opened last year, recording an increase of the 16.2%\(^\text{60}\). The number of operating breweries has been increasing since 2009, as we can see from the chart below.

![Graph showing the number of operating breweries in the US from 2009 to 2016.](https://www.brewersassociation.org/statistics/number-of-breweries/)

**Table 14: Number of total operating breweries in US (source: Brewers Association)**

In particular the industry recorded on average 519 new breweries opened every year since 2009, with a remarkable annual mean increase of the 18.64%\(^\text{61}\). For this reason we can establish that there are low barriers for new entrants to get into the market. In particular the main obstacles are represented by economies of scale, needed to compete with bigger firms on costs, brand identity, on which most of breweries built their success, access to distribution channels, fundamental for a widespread presence of the product, and economies of learning, that lead advantages in term of innovation, time and scrap reductions in the long term. Moreover, the reactions to an incumbent entrance by the existing actors are almost none and the opening of new firms is

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\(^{60}\) Source: Brewers Association (2017). “Number of breweries”, retrieved on 2017/10/22 [at: https://www.brewersassociation.org/statistics/number-of-breweries/]

strongly encouraged. The only strong responses and reactions can be seen in case of acquisitions and mergers by market monopolists.

BROAD VIEW ON COMPETITION

As we have introduced in the previous chapter, often competition comes from outside industries that indirectly commercialize products satisfying the same needs on which the products we are creating are targeted. For this reason we need to analyse the landscape in which craft breweries are operating, moving from a restricted to a broadened and finally to an indirect competition point of view. We identified the main product categories threatening craft beer in the following image.

- In the **direct competition** section we identified the main categories in which the market is segmented. As we can see craft beer represents the high-end part of the market, requiring a higher premium price compared to the other categories.
- **Broadened competition** includes products that respond to comparable needs to our offering. The main needs on which we based our exercise are “to quench the thirst” and “to taste unique aromas and flavours”. The product categories we identified belonging to this category are soft drinks and, more in general, other alcoholic beverages.
- In the **indirect competition** section we will find companies, coming from other sectors, that are able to steal our customer’s financial resources commercializing substitute products. The types of companies identified are broad, going from energy drink producers to snacks and candies manufacturers.

Listed all the possible competitors from an extensive point of view we can now analyse the position of craft beer compared to the substitute product categories we determined. The starting point is the comparison with

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Figure 45: Craft beer competition landscape
direct competitors, analysing the price/performance ratio of the two segments. We will take advantage of the average relative price, an indicator showing the difference of prices offered by the two portions of the market. Using data coming from 2016 we had the following results: 

$$\frac{\text{% craft beer market share by value}}{\text{% commercial beer market share by value}} = \frac{21.9\%}{78.1\%} = 1.99^{62}.$$ 

There is a high risk to lose customers, being craft products on average two times more expensive than commercial ones.

As regards the price sensitivity, demand has been historically elastic to price, in fact beer has been perceived as a commodity good. With the increase in popularity of craft products in pubs and supermarkets customers started to accept paying a premium price for a high-end offering, becoming more inelastic to price. However compared to other broad competitors such as wine and spirit producers, craft breweries are facing problems to market their goods as luxury goods.

DOWNSTREAM COMPETITION AND BUYERS

The starting point to analyse the downstream competition is the three-tiered distribution system introduced after prohibition. Prohibition in the United States was a nationwide constitutional ban on the sales, production and transportation of alcohol that remained in place from 1920 to 1933. After the repeal of this decision the distribution of alcoholic beverages has been structured in a three-tier system made of importer or producers, distributors and retailers. The basic concept of the system is that producers can sell their products only to wholesale distributors who then sell to retailers, and only retailers may sell to consumers. Some states introduced some sort of exceptions to the structure allowing firms to self-distribute to retailers or final customers under certain conditions. The only state that does not require a three-tiered distribution substituting it with a privately operating retailing and distribution system is the state of Washington.

Another important issue to be discussed is the differentiation between consumption on-premise and off-premise. On-premise sales take place in pubs, restaurants and bars while off-premise sales take place in grocery stores and supermarkets. These two different distribution channels are managed by craft breweries with two dedicated marketing and sales strategies having different characteristics. According to Brewers Association off-premise consumption represents the main focus for a craft beer company, as more than the 80%\(^63\) of the overall beer volumes consumption comes from this type of channels.

It’s very difficult to assess the concentration of the buyers’ market given the small amount of data available. However we can make an esteem by getting information about the ownership types of the different beer

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distributors available in the US market. Through the database ORBIS by Bureau van Dijk we selected the US SIC 5181 category featuring Beer and Ale Wholesalers, counting 6,208 operating companies in the United States. We filtered the data according to the BvD Independence Indicator, an index that classifies the level of independence of a firm according to four categories: A, B, C and D. We chose to consider the category A collecting entities that don’t have any shareholder with 25% or more of direct or total ownership. The results show that only 553 distributors (8.91% of the total) among the operating ones have these characteristics. The consequences are that the distributor market is characterised by firms owned by third parties for a large amount of stakes and that a lot of different companies have financial interests in the sector.

As regards the offering for distributors, breweries combine together their products with additional services through contracts, in order to be competitive and build long term relationships. Given their limited financial resources when compared to big multinational companies, craft breweries face problems to offer appealing contract and they struggle to get the access on the final market. For buyers, in fact, is more convenient to choose to deal with big multinational breweries receiving exclusive discounts and additional services.

How are profits shared among the three-tier system we identified? According to a survey distributors margin represents the 21% of the total final cost while retailers margin represents the 31%. In particular both apply on average a 50% mark-up on the product costs recording an extremely high profitability compared to producers.

UPSTREAM COMPETITION AND SUPPLIERS

As we said in the research framework chapter the most crucial raw materials for a craft brewery in term of costs are malt and hops. Malt is the source of fermentable sugars in beer and it comes from the malting process of cereals, mainly barley. According to the database ORBIS only 337 malthouses are operating around the world and, for this reason, the market is extremely concentrated.

Hops are the flowers of the plant Humulus Lupulus, used primarily as a flavouring and stability agent in beer. They are also used to balance the sweetness of the malt with bitterness, contributing a variety of flavours and aromas. The hops farms are concentrated in a few geographical areas, as we can see from the map below provided by the Food and Agriculture Organization of the United States (FAO).

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The most productive regions identified are: Germany, United States, Ethiopia, China and Czech Republic. Given the agricultural nature of beer main ingredients, raw materials differentiation is low even if new hops forms and hybrids are introduced every year. Compared to commercial producers, craft breweries put a lot of attention in the selection of ingredients, increasing their impact on the final product performance.

Even if the hops harvests are available worldwide their shortage is a crucial issue that breweries have to face. In 2015 for example global hops crop dropped by 15.85% in term of production volumes. This situation has led to a relevant increase in price of the raw material as we can see from the graph below.

![Graph of US hops price ($/lb) historical data](source: US National Agriculture Statistics Service)

Table 15: US hops price ($/lb) historical data (source: US National Agriculture Statistics Service)

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Given the difficulty to source quality raw materials, long term contracts are signed with suppliers to avoid the disruption of the company's operations. Some breweries have tried to implement a backward integration strategy but the complete independence from raw materials suppliers is almost impossible after a certain dimension.

5.1.2 Conclusions

The innovation represented by craft beer introduced additional profits in the market, changing the habits of consumers. In fact, the segment experienced a continuous growth in term of sales volumes and the superior quality perception of the products allowed companies to ask for a premium price. This situation has attracted the interest of a lot of companies that are trying to be part of the innovation. Some of them creating new start-ups, others acquiring and merging with existing competitors. The consequence, in general, is an increase of the internal competition and an always increasing number of new firms operating in the industry.

From a broad point of view the most relevant substitute products are represented by wine and spirits. Beer is still represented more a commodity than a luxury good compared to these beverages, with a consequent lower mark-up. However the craft movement has changed customers perception, increasing the sophistication of their taste and making their demand more inelastic to price.

Given the three-tier distribution system craft breweries must dedicate specific strategies to reach retailers and final customers. As we will see in the research process, some of the companies selected implemented different initiatives to change their bargaining position towards buyers and to internalize the profits shared to them.

As regards the downstream market we identified hops and malt suppliers as the most critical actors that need to be considered in our research. Given the geographical concentration of the two markets and the relative small number of companies providing quality raw materials, companies need to build long term relationships with these types of suppliers.
5.2 Research on the case studies

In this section we will study the 10 case studies we selected through the framework we identified in the previous chapter. We will start with the analysis of the appropriability regime of the innovation according to the parameters presented by Teece. By this way we will contextualize craft beer as innovation and we will define the position of pioneer firms against imitators.

We will proceed to the analysis of the 10 case studies selected according to three levels. After a brief introduction to the reference firm, presenting its foundation and its history, we will start the industry level (zoom-out) analysis in which we will assess the profits available in the industry and the position of the company towards the context in which it operates. In particular, taking advantage of the 5 forces model by Porter, we will draw an extensive view on competition understanding the levels of rivalry affecting a firm’s business. The output of this first part will be the assessment of the average profits available on the market: (+) for high levels of profitability and (-) for low levels of profitability.

It will follow a company level analysis in which we will use the business model canvas by Osterwalder to study the selected firms’ value creation and value capturing activities, together with their combination to the financial structure of the company. The output of this section will be the design of each firm’s business model filled through coloured post-its. The green post-it will identify the B2B segment, the red post-it will identify the B2C one, while the yellow post-it will identify the generic one.

In the final section we will focus on the value proposition level (zoom-in) identifying the main leverages on which each company built its offering. In particular we will define the main values represented by the brands, together with the products and services offered to the different customer segments.

5.2.1 Appropriability regime of the innovation by Teece

Most of the times innovators struggle to appropriate the additional profits created by the innovation they introduced, losing the battle with incumbents. Teece (1986) in his iconic paper “Profiting from Innovation” identified the main factors shaping the appropriability regime and the levels of profits available for pioneers. In particular we will focus our attention on the nature of technology, the legal instruments of protection and the speed of technology. For each parameter we will assess its negative (↓) or positive (↑) impact on the appropriability regime and the consequent negative (-) or positive (+) effect on the average profits available in the market.
Before assessing the nature of technology, we will make a brief presentation of the brewing process. Beer production is quite standard for the different breweries around the world and it follows a process plants manufacturing process. The product, in fact, is formed by a series of chemical non-reversible transformations of raw materials mainly represented by water, barley, hops and yeast.

In order to have a clear idea about the brewing process we can summarize the main production steps as follows:

- **Mashing** – is the process of combining a mix of milled grains, also called “grain bill”, with hot water in a vessel called “mash tun”. During this stage different temperature steps are reached by the “liquor” and sugars, needed for the fermentation, are extracted from the cereals. The final product of mashing is called wort.
- **Lautering** – is the separation of the wort from the grains.
- **Boil** – after the mashing step the wort is boiled with hops in large tanks known as “coppers”. The boiling process not only extract flavours, bitterness and aroma compounds from hops but also sterilize the wort. This step usually lasts between 45 and 90 minutes.
- **Whirlpool** – at the end of the boil solid particles are separated out in a vessel called “whirlpool”. The concept behind the process is easy: by swirling the wort the centripetal force will push the solid part at the centre of the bottom of the tank where it can be removed.
- **Wort cooling** – after the whirlpool the wort must be brought at fermentation temperature, usually 68-79 °F (20-26 °C). This temperature is easily achieved through heat exchangers.
- **Fermentation** – it takes place in fermentation vessels after the adjunction of yeast. We can identify three main fermentation methods: warm, cool and wild or spontaneous fermentation. Warm fermentation beers, also called ales, generally form a foam on the surface of the fermenting beverage and they are often referred as top-fermenting. Cool fermentation beers, also called lagers, are fermented around 50 °F (10 °C) and they are stored at temperatures close to freezing before packaging, resulting in a cleaner flavour. Wild and spontaneous fermentation beers, also called sours, include a wide variety of products fermented through spontaneous fermentation or alternative bacteria such as brettanomyces and lactobacillus.
- **Conditioning** – after a primary fermentation, beer is conditioned or aged in several ways which can take from 2 weeks up to several years, depending on the brewer’s intention. Some special beers could be aged in wooden barrels previously used to store spirits or wine, to get a more complex flavour.
- **Packaging** – beer is finally put in containers in which it will leave the brewery, usually bottles, aluminium cans, kegs or casks.

Even if the production of beer requires different steps the equipment used by craft breweries are quite standard and multi-purpose. In fact firms are characterized by a large product portfolio.
The knowledge behind the creation of a beer is represented by its recipe, that provides the ingredients, the brewing procedures and the fermentation process needed. It’s common for brewers to share the recipes of their beers to homebrewers on forums and on specific books.

Craft breweries organize periodically collaborations, thanks to which they develop recipes and beer concepts together with other breweries, homebrewers or ingredients suppliers. We can conclude that the codified knowledge represents an important part of a firm know-how and it’s intentionally shared without secrecy to the public and to internal competitors.

With the increase of the output dimensions, scientific knowledge inside the company becomes crucial in order to offer a stable quality and product consistency. For this reason most successful craft breweries developed a strong quality laboratory program inside their facilities.

Tacit knowledge, represented by processes and practices built along the years, are important to sustain a company growth but they don’t modify the appropriability regime of the innovation. We can conclude that technological knowledge influence negatively the regime of appropriability (↓) with a consequent negative impact on profits (-).

LEGAL INSTRUMENTS OF PROTECTION

Intellectual property instruments are commonly used to protect brands and marks. It’s really rare to see secrecy and patents strategies adopted on a certain technology.

Brewers association introduced in 2017 the “Independent Craft Brewer Seal” a trademark created with the goal to differentiate clearly in the mind of customers independent craft products from imitations. More than 2,400 breweries have adopted the seal67 but given the recent development of the initiative is difficult to determine its impact on the appropriability regime.

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Even if it’s technically impossible to reverse-engineer a beer, the style usually specified in its name, the ingredients written on the label and the organoleptic characteristics are a good reference to reproduce a product. It’s also a common trend among homebrewers to produce recipe clones of commercial beer, following suggestions given directly by head brewers.

We can conclude that legal instruments of protection are used only in marketing field to defend marks and brands. These instruments give a low protection to the appropriation issue (↓) with a consequent negative (-) impact on average industry profits.

**SPEED OF TECHNOLOGY**

Taking as reference the framework introduced by Verganti (2008) we can say that the craft beer innovation is based mainly on the meanings side of the matrix and it’s based on a quite standard technology shared by all the actors in the industry.
The main levers on which the innovation is based are the values and meanings represented by the craft beer brands in the market and the culture represented by them. We can conclude that speed of technology is not a relevant factor in the Teece’s framework (=) and that it has no impact on the industry profitability (=).

Given the nature of the innovation speed is important in terms of flexibility. In fact companies have to deal with a fast-paced environment where customers’ needs change and evolve continuously over time.

CONCLUSIONS

We can conclude that the appropriability regime of craft beer is low, as the instruments of protection in the hands of pioneer breweries are not effective. Technology, in fact, not only is not the main source of innovation but is also easy to imitate given the open knowledge orientation of the market. Brewers, in fact, provide on purpose the knowledge on which their recipes are based in order to build a connection with the homebrewers community and with internal rivals.

Legal instruments are used only for the protection of trademarks and brands, limiting the risks of imitation. Firms in the market don’t use these instruments as strategic tools of secrecy and to appropriate directly of the innovation.

The Independent Craft Brewer Seal and, in general, Brewers Association could have a relevant role in driving customers choice, spreading the issue to a wider audience. Given the recent development of initiatives going in this direction, we cannot assess their impacts on appropriability.

In general we can say that the innovation introduced by craft breweries could be easily appropriated from companies coming outside the segment. The situation outlined is even worse given the company-oriented definition of craft beer. Consumers, overwhelmed by a wide choice of brands, struggle to recognise a craft product over a commercial one only by its look and its taste. For this reason the segment has to invest relevant resources and capabilities to differentiate in the mind of customers by the culture it represents and the superior quality of its products, supporting the value of independence.
5.2.2 Analysis of the selected case studies

In this section we will analyse the 10 business cases selected among the 100 biggest craft beer companies in US.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TWO ROADS BREWING COMPANY</td>
<td>42.000</td>
<td>32.200</td>
<td>16.886</td>
<td>6.643</td>
<td>40*</td>
<td>15607.50%</td>
<td>154,19%</td>
<td>90.69%</td>
<td>30.43%</td>
<td>4195.70%</td>
</tr>
<tr>
<td>2</td>
<td>FUNKY BUDDHA BREWERY**</td>
<td>26.935</td>
<td>19.130</td>
<td>6.769</td>
<td>2.020*</td>
<td>150*</td>
<td>1246.67%</td>
<td>235.10%</td>
<td>182.61%</td>
<td>40.82%</td>
<td>426.30%</td>
</tr>
<tr>
<td>3</td>
<td>RHINEGIST BREWING</td>
<td>56.502</td>
<td>31.470</td>
<td>10.520</td>
<td>0</td>
<td>-</td>
<td>425.99%</td>
<td>199.15%</td>
<td>79.54%</td>
<td>234.89%</td>
<td>231.70%</td>
</tr>
<tr>
<td>4</td>
<td>DEEP ELLUM BREWING COMPANY</td>
<td>33.100</td>
<td>22.639</td>
<td>7.750*</td>
<td>6.091</td>
<td>800*</td>
<td>661.38%</td>
<td>27.24%</td>
<td>192.12%</td>
<td>46.21%</td>
<td>231.70%</td>
</tr>
<tr>
<td>5</td>
<td>MODERN TIMES BEER</td>
<td>40.500*</td>
<td>19.000</td>
<td>6.543</td>
<td>2.000*</td>
<td>0</td>
<td>227.15%</td>
<td>190.39%</td>
<td>113.16%</td>
<td>176.90%</td>
<td>166.52%</td>
</tr>
<tr>
<td>6</td>
<td>FAT HEAD'S BREWERY</td>
<td>28.782</td>
<td>25.480</td>
<td>15.172</td>
<td>12.759</td>
<td>1.915</td>
<td>566.27%</td>
<td>18.91%</td>
<td>67.94%</td>
<td>12.96%</td>
<td>166.52%</td>
</tr>
<tr>
<td>7</td>
<td>JACK'S ABBY BREWING</td>
<td>34.500*</td>
<td>20.000*</td>
<td>14.200</td>
<td>6.200</td>
<td>2.500</td>
<td>140.00%</td>
<td>129.03%</td>
<td>40.85%</td>
<td>72.50%</td>
<td>92.99%</td>
</tr>
<tr>
<td>8</td>
<td>REVOLUTION BREWING</td>
<td>72.774</td>
<td>64.441</td>
<td>52.045</td>
<td>25.475</td>
<td>8.098</td>
<td>214.58%</td>
<td>104.30%</td>
<td>23.82%</td>
<td>12.93%</td>
<td>88.91%</td>
</tr>
<tr>
<td>9</td>
<td>PIZZA PORT</td>
<td>34.250*</td>
<td>23.450*</td>
<td>18.955*</td>
<td>6.110</td>
<td>4.934*</td>
<td>23.83%</td>
<td>210.23%</td>
<td>23.71%</td>
<td>46.06%</td>
<td>75.96%</td>
</tr>
<tr>
<td>10</td>
<td>MOTHER EARTH BREW COMPANY</td>
<td>30.000*</td>
<td>22.000</td>
<td>15.500</td>
<td>6.400</td>
<td>4.900*</td>
<td>30.61%</td>
<td>142.19%</td>
<td>41.94%</td>
<td>36.36%</td>
<td>62.77%</td>
</tr>
</tbody>
</table>

Table 16: The 10 case studies selected for the research

For each company we will start introducing its history, the founders, the initiatives implemented and the expansion plans for the future. We will continue analysing the industry (zoom-out) through the 5 forces model by Porter identifying the strongest competition forces affecting the average profitability available on the market. The output of this section of the analysis will be the identification of each force impact on competition: (↑) for increasing levels of competition and (↓) for decreasing levels of competition. We will also define the effect of rivalry on the average profits available on the market, respectively (-) for low levels of profits and (+) for high levels of profits.

It will follow the design of the business model through the business model canvas by Osterwalder. Thanks to this tool we will identify the value capturing and value creation activities of a company together to its financial structure, analysing the 9 sections composing the model: customer segments, value proposition, channels, customer relationships, revenue streams, key resources, key activities, key partners and cost structure. The output of this level of analysis will be the draft of the reference firm business model.

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68 * Data estimated through excise tax data.
** Funky Buddha’s stakes have been acquired by Constellation Brands the 10th August 2017. For this reason the company cannot be considered craft anymore according to the Brewers Association definition.
In the last section of the analysis we will focus on the value proposition (zoom-in) assessing the values and metaphors represented by the brands and the product/service offering made to customers. The output will be the draft of a simplified version of the value proposition canvas by Osterwalder.
Two Roads Brewing Company

COMPANY OVERVIEW

Two Roads Brewing Company was founded in 2012 by four friends with different backgrounds: Brad Hittle, Phil Markowski, Clement Pellani and Peter Doering. The brewery has been built inside an old manufacturing building in Stratford, Connecticut, together with a large tasting room and a space dedicated to events and private parties. The firm fosters a “road less travelled” philosophy and it offers in its portfolio an extensive line-up that takes a unique twist on classic beer styles.

Two Roads-branded beers account about the 25% of the total production\(^9\), while the company dedicates the remaining capacity to contract partners. The firm, in fact, produces for third parties leasing its space to 12 different contract brewers. Some of the most popular contract brands are Evil Twin Brewing, Stillwater Artisanal Ales, Fire Island Beer Company and Notch Brewing Company.

The company owns a pub inside the Standford Bradley airport and it’s currently planning to expand its production facility with the construction of the “Area Two experimental brewing”. The brewery will be situated on 2.5 acres of land adjacent to the existing production facility and it will be dedicated to sour and barrel-aged offering featuring a 50-barrel brewhouse, foeders (wooden fermentation vessels), a coolship (open-top flat vessel in which wort cools) and space for 1,500 wooden barrels\(^7\). Two Roads also modified an old milk tanker truck for the fermentation of sour beers.

The proprietary brand is widely distributed around US as the company has distribution contracts in Colorado, New Hampshire, Ontario, Washington D.C., Connecticut and New York State. Contract brewing firms have an even more capillary presence, including in their distribution areas different foreign nations.

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INDUSTRY LEVEL ANALYSIS (ZOOM-OUT)

In this section of the research we will analyse the five forces shaping rivalry according to the framework introduced by Porter. In particular we will assess each force’s impact on competition and, ultimately, on the average profits available in the market.

Internal rivalry – or direct competition represents the rivalry to capture market shares in the market. Let’s analyse briefly, taking advantage of the data we introduced at the beginning of the chapter, the main elements affecting this force:

- **Concentration and balance of the market:** the overall beer market is concentrated, with 11 breweries controlling the 90% of the market shares of the industry. However the craft segment could be considered extremely deconcentrated, as it represents the 98% of the total breweries operating in US fighting for a small percentage of the profits generated by the innovation. The consequence is a strong negative effect on competition. (↑↑)
- **Diversity of competitors:** craft breweries in US have a quite similar structure, differentiating each other’s for the assets owned, the focus of distribution and customer segment orientation. (=/↓)
- **Industry growth:** the overall US beer market has been stable in the last years while the craft beer segment has recorded an impressive average increase in volumes, representing a disruption in the industry. The consequence is a profitability growth opportunity for every company competing in the new segment and an increasing interest of the leaders of the market for the innovation. (↑)
- **Product differentiation:** the craft beer innovation changed the perception of the product from a commodity, introducing some sort of differentiation. The production process we described briefly in the previous section is quite standard and openly shared to the public. The orientation to service by Two Roads differentiate its positioning on the market with a weak positive effect on competition. (📅)
- **Switching costs:** as we introduced in the industry overview, the costs sustained both by end customers and by distributors to change suppliers are low. For this reason there is a low competition to capture and retain new customers. (↓)
- **Fixed costs:** with a certain level of approximation we can compare the DOL computed for Boston Beer Company to the company we are analysing. For this reason fixed costs have an important impact on the company’s operating leverage. (↑)
- **Storage costs:** given the flexible nature of the supply chain breweries and the perishable nature of the product breweries never hold excessive stocks in warehouses incurring in medium storage costs. (📅)
- **Excess capacity:** the main leverage on which companies can rely on to build operations flexibility is excess capacity. The companies, in fact, saturate capacity with “ever-green” successful products, leaving some excess capacity to create a vast products portfolio. Two Roads, dedicating the majority of capacity to contract brewing, could easily saturate the remaining capacity with own-branded beers, facing lower costs. (↓↓)
Exit barriers: it’s difficult to assess the impact of different costs and factors we identified on exit barriers strategies. However, long-term contracts signed by the reference company with contract breweries increase the barriers to exit from the market. (=/↑)

In general, the rivalry among internal competitors identified is medium-high (=/↑) with a slightly negative impact on the average profitability available on the market (=/-). In fact, companies operating in the segment often collaborate each other’s and implement initiatives to sustain their independence from third parties. For example, Stone Brewing CEO and co-founder Greg Koch has announced in 2016 the formation of True Craft, a $100 million fund created with the goal to assist financially independent craft breweries.71

Two Roads in particular, compared to the other companies in the market, could take advantage of its business model to increase, on one side, the saturation of the plants and creating on the other side, stronger barriers to exit.

Threats of new entrants – as we have seen in the industry overview, the number of breweries operating in US recorded a remarkable increase in the last years, with a mean yearly increase of the 18.64% since 2009. The main barriers that start-ups entering in the industry must face are economies of scale, economies of learning, brand identity and the access to distribution channels. Incumbents don’t react to a new firm entrance in the market and it’s common to see initiatives implemented to sustain the creation of new companies.

We can conclude that the market is really attractive for new entrants, increasing the competition (↑↑) with a strong negative impact on the average market profitability (→).

Threats of substitutes – in the industry introduction we identified wine producers and spirits companies as the main indirect competitors of the segment. Compared to these goods, craft beer is still considered more a commodity product than a luxury one, with a consequent higher price elasticity for customers. As regards the price/performance index we noticed, taking advantage of the average price ratio, that on average a craft product is two times more expensive than a commercial one.

The conclusion is that companies operating in the segment face a medium-high risk of substitution (=/↑) with a slightly negative impact on profitability (=/-).

Bargaining power of buyers – given the particular business model implemented by Two Roads, focused on third party production, the main buyers with whom the company interacts are the so-called “gypsy breweries”.

A gypsy brewery doesn’t own any production facility but it signs contracts with other breweries for the production and the packaging of its own beers. The movement has become popular in the last decade with numerous successful examples around the world such as Mikkeller (Denmark), To Øl (Denmark), Evil Twin (New York) and Stillwater (Maryland). In the US market, different breweries host third party breweries and external brands taking advantage of this trend such as City Brewing Company, F.X. Matt Brewery, Two Roads, Brew Hub and Brew Detroit.

- **Relative concentration:** even if the number of manufacturing facilitators is always increasing we can conclude that the downstream market is less concentrated compared to the reference one, with a large number of small firms operating in it. The consequence is a high bargaining power against contract breweries. (↓)

- **Product’s features:** contract breweries could be considered mainly a service company, developing third party recipes. The different companies implementing this strategy in the segment are differentiated in term of offering, in order to build long term relationships with downstream actors. Brew Hub, for example, offers additional services to its clients such as laboratory analysis, distribution management, sales & marketing development and export expansion. Given the slightly differentiated offering of production facilitators, the competition among buyers is quite low. (=/↓)

- **Buyer’s characteristics:** given the high profitability of a contract brewery, companies like Two Roads could fix a significant premium price to the product and offer low discounts. The probability of backward integration by gypsy companies is low given the high investments needed for the equipment and the strategic decision to outsource the production. The company, for those reasons, are well positioned towards contract buyers. (↓)

We can conclude that Two Roads, changing the main downstream actors with whom it interacts, could be able to obtain bargaining power toward them and lower the competition (↓) of buyers. The final result is a positive (+) impact on the overall profitability available.

*Bargaining power of suppliers* – we identified the most crucial suppliers in hops and malt providers, being the raw materials with the highest impact in term of costs and quality. In order to understand the position of Two Roads toward the suppliers of these two main ingredients, let’s focus on the determinants influencing this force:

- **Relative concentration:** as we said in the introduction both the malthouses and the hops producers markets are extremely concentrated in few geographical areas. The situation is even worse given the almost monopolistic control that big multinational beer companies could have in some markets. In 2017 AB InBev has cut off outside access to South African hops, citing a low crop yield and taking
advantage of the ownership of the leading hops producer in the country, SAB Hop Farms\textsuperscript{72}. The company has dedicated less than the 5\% of the volumes harvested to external breweries, creating a monopolistic regime. This situation clearly shows a poor bargaining power in the hand of craft companies, with resultant increasing levels of competition. (↑↑)

- **Product’s features**: given the agricultural nature of the beer most important raw materials differentiation forms are low, even if new hops forms and hybrids are introduced every year. Craft breweries put a lot of attention in the selection of ingredients choosing high quality suppliers, increasing their impact on final product performance. (≡/↑)

- **Supplier’s characteristics**: given the hops and barley shortage problem, long term contracts are made to avoid the disruption of company’s operations. Some breweries in the market have implemented a strong backward integration strategy starting the so-called farm breweries movement. Big companies like Rogue Ales and Stone Brewing are purchasing or leasing farmlands to produce their own hops and barley. However, the volumes produced account for a limited percentage of the total raw materials and it’s almost impossible to be completely independent from suppliers after a certain output dimensions. (↑↑)

Upstream competition is the strongest force shaping the context in which Two Roads operates (↑↑), given the nature of the most relevant raw materials and the characteristics of the markets providing them. For this reason the impact is extremely negative on the profits (→).\h

We can summarize the five forces model by Porter with the following diagram, summarizing each factor’s impact on competition and the final effect on the average profits available.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{porters_five_forces_diagram.png}
\caption{Porter’s five forces model applied to the Two Roads case study}
\end{figure}

COMPANY LEVEL ANALYSIS

In the second level of the analysis our goal is to design the business model implemented by each firm through the canvas by Osterwalder. In order to make the process faster and to have a visual reference we will take advantage, for some sections, of the charts introduced in the research framework.

Customer segments – Two Roads through its business model interfaced with three different customer lines: contract breweries, distributors and end customers.

- **Contract breweries:** this segment represents the focus for the company as most of the total volumes produced are dedicated to third parties. The company, in fact, produces inside its facilities recipes designed by the so-called “gypsy breweries”, breweries that concentrate their expertise and skills on marketing and distribution, giving in outsourcing the production. The consequence for Two Roads is a service-oriented business model and the development of a new revenue stream.

- **Distributors (B2B):** the firm, in order to saturate the production capacity, developed an owned brand called “Two Roads”. Taking advantage of synergies with contract companies and of the distribution relationships built thanks to them, the company could easily enter in the market with a capillary presence. The products developed under this brand have been segmented according to their seasonality and availability: year-round, seasonal, limited release and pilot series.

- **End customers (B2C):** the segment represents a secondary target for the company as the Two Roads brand is mainly distributed thanks to business customers. The consumptions related to this segment take part in the owned retails.

<table>
<thead>
<tr>
<th>Contract Brewing</th>
<th>Consultancy service</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drafts</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cans</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Bottles</td>
<td>X</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Two Roads Brand</th>
<th>Year-round</th>
<th>X</th>
<th>X</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Seasonal</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Limited release</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Pilot series</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B2C B2B</th>
</tr>
</thead>
</table>

Table 17: Customer segments reference table for Two Roads

Value proposition – Two Roads designed a service oriented offering to contract breweries, being more than a simple manufacturing facilitator. The main contract firms that have chosen the company for the manufacturing
of their products are Evil Twin (New York State) and Stillwater (Maryland). These brands built a long-term relationship with the company, continuously collaborating to design new recipes and to improve existing ones. Because of the strategic importance of Two Roads for those gypsy breweries the connection between the firms should not be considered a simple outsourcing deal, but a sort of arrangement of common development.

On the other side, Two Roads has been able to create a brand representing the philosophy of “the road less travelled”, offering classic beer styles with a unique twist.

The production is focused in Stratford, Connecticut, in a 42,000 barrels capacity plant and in the new “Area Two experimental brewing” sour and barrel-aging facility, planned to be operative in 2018. Two small retail shops have been created by the company where owned products are served to the public: a taproom inside the brewing facility and a pub in the Stratford Bradley Airport.

The company creating manufacturing contracts with world class craft beer brands has been able to export its products worldwide, serving 24 states in US and 10 nations around the world. Given its recent foundation the company only produced around 120 different beers historically, through owned and third-party brands.

Two Roads offers also additional products and services as merchandising, an e-commerce website, events organised in the taproom and charitable contributions.

Channels – given the relationship with contract breweries Two Roads has an international presence of its products, counting more than 10 different nations worldwide. The focus is indirect distribution as only a small amount of volumes are dedicated to the taproom and the pub at the Stratford Bradley airport.

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Customer relationships – the most important customer relationships initiatives are implemented to build long term collaborations with contract breweries, the main customer segment for the company. Long term contracts are the main tools used to build fidelity towards them together with co-creation projects.

Events are the main mechanism used to increase the relationship with end customers. Two Roads organises more than 100 events in more than 12 US states in order to build a connection with both the local and the external community.

On the website is also possible to read a blog written by the company on which new expansion plans are presented and where employees tell their stories.

Revenue streams – the revenues collected by the company are diversified by the customer segment to which they relate to. Long term production contracts are the source of income coming from gypsy breweries, the main focus for Two Roads. The contracts are not a simple outsourcing deal but the construction of a long term mutual development.

Other types of contracts are developed with distributors, important to have a capillary presence of the owned brand.

End customers have a fixed menu pricing revenue model, with a price defined by the location and the channel of consumption (on-premise or off-premise). It’s interesting to notice that the firm decided to collaborate with

<table>
<thead>
<tr>
<th>DISTRIBUTION STRATEGY</th>
<th>Number of worldwide distributors off-premise (from RateBeer distributors section)</th>
<th>159</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of worldwide distributors on-premise (from RateBeer distributors section)</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>Number of worldwide e-commerce distributors (from RateBeer distributors section)</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHANNEL TYPES</th>
<th>Own</th>
<th>Direct</th>
<th>Indirect</th>
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</thead>
<tbody>
<tr>
<td>Own Retails (type)</td>
<td>Brewery taproom (CT), pub at the Bradley airport (CT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own Distributors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner Retails</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner Distributors</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supermarket Stores</td>
<td>X (Whole Foods)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 18: Channels reference table for Two Roads*
Vistaar Technologies\textsuperscript{75}, a provider of pricing and promotion software in the beverage alcohol industry, to enhance its price structure planning process.

<table>
<thead>
<tr>
<th>B2C</th>
<th>Beer products (Fixed Menu Pricing)</th>
<th>X (Vistaar Technology partnership)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Merchandising</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Brewery visits and tasting class</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Events</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B2B</th>
<th>Third party production contracts</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Merchandising and other products</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Beer products (Distribution contracts)</td>
<td>X (Vistaar Technology partnership)</td>
</tr>
</tbody>
</table>

Table 19: Revenue streams reference table for Two Roads

**Key resources** – starting from the analysis of the physical resources Two Roads owns a main production plant in Stratford, Connecticut. The facility includes a 42,000 barrels plant, a pilot brewing system and a sour/barrel aging area opening in 2018.

As regards retails the firm owns a taproom inside the breweries’ building and a pub in the Stratford Bradley airport.

The main intellectual resources are represented by the Two Roads brand and third-party recipe production knowledge. Also quality laboratory plays an important role in the company business model, to ensure consistent products and a stable quality.

<table>
<thead>
<tr>
<th>PHYSICAL</th>
<th>Beer products (name)</th>
<th>Stratford (CT): a 42,000 barrels plant with a pilot kit and «Aria Two Experimental Brewing» sour/barrel aging facility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Retail shops owned (number)</td>
<td>2: Stratford (CT) taproom and pub in Bradley Airport (CT)</td>
</tr>
<tr>
<td></td>
<td>Self distribution (location)</td>
<td></td>
</tr>
<tr>
<td>INTELLECTUAL</td>
<td>Brands</td>
<td>Two Roads</td>
</tr>
<tr>
<td></td>
<td>Copyrights (types and name)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
<td>Third party recipe production, quality control</td>
</tr>
<tr>
<td>HUMAN</td>
<td>Production teams (name)</td>
<td>Brewing, Packaging/Production, Quality control/Quality assurance</td>
</tr>
<tr>
<td></td>
<td>Business teams (name)</td>
<td>Sales/Marketing, Accounting/Logistics/Operations</td>
</tr>
<tr>
<td>FINANCIAL</td>
<td>Ownership (type)</td>
<td>4 founders</td>
</tr>
</tbody>
</table>

Table 20: Key resources reference table for Two Roads

Key activities – contract brewing and owned brand production defers, in term of activities, for the design of beer recipes. Contract brewers, in fact, develop prototype recipes for their beers, outsourcing their production for distribution. Other activities performed by Two Roads are network ones, made to build a connection with end customers and a solid base of distributors and contract breweries.

<table>
<thead>
<tr>
<th>Key partnersh</th>
<th>PRINCIPAL ACTIVITIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Brewing</td>
<td>PRODUCTION ACTIVITIES</td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Production</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Delivery</td>
</tr>
<tr>
<td>Two Roads Brewing</td>
<td>PRODUCTION ACTIVITIES</td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Production</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Delivery</td>
</tr>
<tr>
<td></td>
<td>PLATFORM/NETWORK ACTIVITIES</td>
<td>B2B network activities (type)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B2C network activities (type)</td>
</tr>
</tbody>
</table>

Table 21: Key activities reference table for Two Roads

Key partnerships – the main partners are the ones we identified in the research framework section providing key raw materials, packaging goods, machineries and additional services. Also distributors play an important role for the firm determining the availability of owned-brand products. Compared to other companies Two Roads have close partnerships with contract breweries representing the focus of its business model. It’s also important to notice the partnership with Vistaar Technologies for the optimization of pricing and promotions.

<table>
<thead>
<tr>
<th>SUPPLIERS</th>
<th>RAW MATERIALS</th>
<th>Hops suppliers</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Malt suppliers</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Packaging materials suppliers</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Machineries suppliers</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Service Providers</td>
<td>X (Vistaar Technologies)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PARTNERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distributors and Retailers</td>
</tr>
<tr>
<td>Collaboration initiatives and alliances (name of the company)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INVESTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type and name of investors</td>
</tr>
</tbody>
</table>

Table 22: Key partnerships reference table for Two Roads
Cost structure – the main costs sustained by the companies are aligned to the main ones we identified in the research framework. In particular the main fixed costs include equipment, utilities, rent, overhead and depreciation/amortization. The main variable costs are represented by direct materials and piece rate workers.
VALUE PROPOSITION LEVEL ANALYSIS (ZOOM-IN)

In this section of the analysis we will focus on the value proposition part of the business model canvas, as it represents in our opinion the core component of the framework. In particular we will focus on the values represented by the company and the brands created with the goal to analyze the meanings on which strategy has been founded. We will also study the product offering evaluating the main beer styles brewed from the Ratebeer database and the additional products offered. A final section will be dedicated to the services provided by the company.

Values – the company has been founded in 2012 by four friends who dreamed for years starting a craft brewery. They foster a “road less travelled” philosophy both in the beers produced and in general in life. From a product orientation point of view the philosophy is translated into an extensive line-up that takes a unique twist on classic and traditional beer styles. Another important value is the connection with contract breweries, considered more a source of inspiration and knowledge than simple clients.

Products – analysing the Ratebeer products database Two Roads didn’t focus on a specific beer style showcasing a wide variety of different flavours. The most iconic beers are represented by the ones produced for third-party breweries, in particular Evil Twin and Stillwater. Additional products offered are represented by the merchandising, sold online through an ecommerce platform.

Services – as we said in the business model level analysis the company is service oriented, focusing its value proposition on contract brewing. For this reason the main activities performed are the implementation of recipe prototypes developed by third-party and the quality control performed at the different stage of the brewing process to ensure a stable product consistency. Additional services for end customers are events participation, events organization and brewery tours.
The Value Proposition Canvas

**Values**

- Mission statements
  - We like to take the "Road less travelled"

- Values
  - Contract brewing production
  - Two Roads: extensive lineup that takes a unique twist on classic styles

**Services**

- Brewery tours
- Third party's beer production
- Mutual development with gypsy breweries
- Events participation
- Events organization
- Tastings

**Products**

- Merchandising
  - Products offered
    - Iconic beers: Yin (Evil Twin), Yang (Evil Twin), Cellar Door (Stillwater), Honeyspot Road (Two Roads)
    - IPA (19)
    - Saison (7)
    - Sour/Wild Ale (7)
    - Imperial Stout (12)
    - Imperial IPA (9)
    - Mean ABV 7.16%

- Beer offering
Funky Buddha Brewery
COMPANY OVERVIEW

Funky Buddha Brewery was founded in 2010 in Boca Raton, Florida in the heart of Oakland Park’s new art district. The history of the company started in 2007 when the owner Ryan Sentz turned a hookah and tea bar into one of the biggest craft beer bars in South Florida. In September 2010 Sentz expanded the location further and, taking advantage of his passion for homebrewing, decided to create the Funky Buddha Lounge and Brewery brewpub.

Along the years the demand for Funky Buddha’s beers skyrocketed, receiving invites from festivals all around the country such as Extreme Beer Fest in Boston and Brewvival in Charleston. For this reason the founder decided to get together with his brother to found what would become Funky Buddha Brewery in Oakland Park. Since its opening in 2013 the firm has grown exponentially, becoming one of the larger craft breweries in Florida.

The company follows a particular direction for its products, producing “bold craft beers that marry culinary-inspired ingredients with time-honoured technique”. The consequence is the use of natural ingredients, that gives a bold and easily recognizable smell and taste to the final product.

In 2017 the company released the Living Barrel series, launching a line of specialty beers from its barrel-aging program. Funky Buddha, in fact, owns over five hundred oak casks of all types, from Bourbon to Chardonnay, Tequila and Rum barrels, in which the most experimental products are maturing.

According to its website the company is planning to expand in 2017, allowing for regional and national distribution outside Florida. In August 2017, Funky Buddha has been acquired by Constellation Brands, the third largest beer supplier in US with more than 100 brands in its portfolio. Constellation Brands’ most famous brands include Ballast Point, ex-craft brewery acquired for $1billion dollars in 2015, and Corona, gained through a distribution deal signed with AB InBev for the Group Modelo as a result of an antitrust suit. For this reason the company cannot be considered craft anymore.

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INDUSTRY LEVEL ANALYSIS (ZOOM-OUT)

Internal rivalry – or direct competition represents the rivalry to capture market shares in the industry. Let’s analyse briefly the main elements affecting this force:

- **Concentration and balance of the market:** the craft beer segment is extremely concentrated with more than 5,200 companies controlling the 12.3% of share in sales volume in 2016\(^{30}\). (↑↑)
- **Diversity of competitors:** craft breweries in US have a quite similar structure, differentiating each other’s for the assets owned, the focus of distribution and customer segment orientation. (=/↓)
- **Industry growth:** the craft beer segment has recorded an impressive average increase in volume in the last years, representing a disruption in the industry. The consequence is a profitability growth opportunity for every company competing in the new segment. (↑)
- **Product differentiation:** craft beer innovation changed the perception of the product even if the production process is quite standard and openly shared to the public. The consequence is a weak negative impact on rivalry. (=/↓)
- **Switching costs:** the costs sustained both by end customers and by distributors to change suppliers are low. For this reason there is a low competition to capture and retain new customers. (↓)
- **Fixed costs:** fixed costs have an important impact on the company’s operating leverage, as we noticed in the introduction of the chapter. (↑)
- **Storage costs:** given the perishable nature of the product and the flexibility required by the company’s operations, breweries hold low stocks in warehouses. (=/↑)
- **Excess capacity:** Funky Buddha, in order to exploit the high investments made to acquire assets, saturates the capacity at almost the maximum level. Some excess capacity is left to ensure flexibility of the manufacturing operations. (↓)
- **Exit barriers:** it’s difficult to assess the impact of costs and factors on exit strategies, especially emotional ones. For this reason the parameter does not influence competition. (=)

Even if a relevant number of firms is competing for a small amount of market share represented by the craft beer disruption, the competition among them is quite low (=/↑) with a slightly negative impact on the profitability available on the market (=/-).

**Threats of new entrants** – like we said in the industry overview, the segment recorded a substantial increase of number of breweries operating in US in the last years, with low reactions by incumbents.

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We can conclude that the innovation is really attractive for new entrants, leading to an increasing level of competition (↑↑) and a consequent strong negative impact on the average market profitability (←-).

**Threats of substitutes** – craft beer is in a slightly disadvantaged position compared to its main substitutes wine and spirits. In fact consumers still consider the product more a commodity than a luxury good, with a consequent higher price elasticity. Compared to its direct competitor, commercial beer producers, the product is on average two times more expensive mainly because of economies of scale.

We can conclude that the risk of substitution faced by Funky Buddha is medium/high (=/↑) with a weak negative impact on profitability (=/-).

**Bargaining power of buyers** – given the three-tier distribution system set by law, the main buyers with whom Funky Buddha has to interact to sell its products are distributors. We can now analyse the factors influencing the downstream market we identified:

- **Relative concentration:** in the analysis we made in the introduction of the industry we discovered that the distribution market is characterized by a small amount of independent firms. Big multinational craft beer competitors, in fact, have financial interests in a big number of distributors and they can influence their behaviour through incentives. In 2015, for example, AB InBev has been investigated by the Justice Department for a new program dedicated to independent distributors. Under this new incentive plan, AB InBev refunds 75% of the expenditures contractually required to promote its own brands if they make up 98% of the total distributor’s sales. The greater the share of rival beers, the less money it receives. Even if the practice is not considered outright illegal, it clearly shows the high competition to capture distributors’ loyalty. (↑↑)

- **Product’s features:** to capture distribution, breweries combine together their products with services in order to have a competitive offering. Given the limited financial resources of craft breweries compared to rivals, the firms face problems to offer appealing contracts and they struggle to get the access on the final market. (↑↑)

- **Buyer’s characteristics:** given the high profitability of distributors, the impact on rivalry is positive. (↓)

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Bargaining power of buyers is extremely high and the management of distributors is crucial for the success of a craft brewery. For this reason this force has a strong negative impact on competition (↑↑) with a negative effect on profitability (--).

*Bargaining power of suppliers* – the most important suppliers we identified are hops and malt providers, as these raw materials are the most relevant in term of costs and quality impact. We can now focus on the main force determinants connected to these markets.

- *Relative concentration:* given the extremely high concentration of both the hops and the malt markets and the influence that big multinational competitors have towards them, we can conclude that the bargaining power in the hands of craft breweries is very low, with a strong negative effect on competition. (↑↑)
- *Product’s features:* craft breweries choose only worlds class high quality suppliers for their products, increasing their impact on the final good performance. (=/↑)
- *Supplier’s characteristics:* given the limited possibility to implement downward integration strategies, suppliers have a strong bargaining power towards craft beer producers. (↑↑)

Upstream competition is the strongest force shaping the industry in which Funky Buddha operates (↑↑), with an extremely negative effect on the average profits available on the market (--).

We can summarize the five forces model by Porter with the following diagram, summarizing each factor’s impact on competition and the final effect on the average profits available.

*Figure 51: Porter's five forces model applied to the Funky Buddha case study*
COMPANY LEVEL ANALYSIS

In the second level of the analysis our goal is to design the business model implemented by each firm through the canvas by Osterwalder. In order to make the process faster and to have a visual reference we will take advantage, for some sections, of the charts introduced in the research framework.

Customer segments – Funky Buddha interfaces mainly with two different customer lines: distributors and end customers.

- **Distributors (B2B):** they represent the main customers of the company, with the majority of sales volumes dedicated to them. The products are segmented according to their availability and their seasonality in the following lines: year-round, seasonal, little Buddha small batch (dedicated to experimental limited releases), the living barrel (dedicated to barrel-aged beers) and draft only.

- **End customers (B2C):** they represent a secondary customer segment for the company as a small percentage of the volumes sold are dedicated to them. The company, in fact, can sell directly to final consumers only through the brewery taproom and the original Funky Buddha Lounge and Restaurant.

<table>
<thead>
<tr>
<th></th>
<th>Year-round</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Seasonal</strong></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Little Buddha</strong></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>small batch</strong></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>The Living Barrel</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Draft only</strong></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Non beer drinkers</td>
<td>X</td>
<td></td>
<td></td>
<td>B2C</td>
</tr>
<tr>
<td></td>
<td>Commercial beer drinkers</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Beer lovers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Craft Beer geeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 23: Customer segments reference table for Funky Buddha*

Value proposition – the company centred its business model on distributors, with whom it creates long term relationships through contracts. The geographical presence is focused on a local dimension, as Funky Buddha is mainly distributed in Florida. In the future the company is planning to expand its presence outside the state.

The beers produced by Funky Buddha are bold, characterized by strong flavours made through natural ingredients. Their creation is influenced by the culinary world, experimenting with fruits, spices and dessert inspired ingredients.

The production is concentrated in Boca Raton, Florida where the company started its journey in 2007 with the opening of the Funky Buddha Lounge and Restaurant. Nowadays the company expanded exponentially
opening the main brewing facility in 2013 and still operating the original Funky Buddha Lounge and Restaurant as brewpub and prototype pilot plant.

Funky Buddha has a vast product portfolio currently offering more than 30 different beers on its website and counting more than 300 products on the RateBeer historical database.

The firm offers additional products and services to build a relationship with final customers. In particular it sells merchandising and it organise events inside and outside its facilities. The company also participates at different charitable contributions and sponsorships.

Channels – the company focuses its presence on a regional scale, distributing mainly in Florida. However, an expansion plan has been announced by Funky Buddha in 2016 for its facilities with the goal to expand outside the state.\(^2\)

<table>
<thead>
<tr>
<th>DISTRIBUTION STRATEGY</th>
<th>Number of worldwide distributors off-premise (from RateBeer distributors section)</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of worldwide distributors on-premise (from RateBeer distributors section)</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Number of worldwide e-commerce distributors (from RateBeer distributors section)</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHANNEL TYPES</th>
<th>Own</th>
<th>Direct</th>
<th>Own Retail</th>
<th>Own Distributors</th>
<th>Partner Retail</th>
<th>Partner Distributors</th>
<th>Supermarket Stores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Web Shop</td>
<td>Merchandising, events, barware and gift cards</td>
<td>Taproom (FL), Funky Buddha Lounge and Restaurant (FL)</td>
<td>Florida</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Own Distributors</td>
<td>Florida</td>
<td>Partner Distributors</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Partner Retail</td>
<td>X</td>
<td>Supermarket Stores (Publix, Supermarkets, Total Wine, Whole Foods.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 24: Channels reference table for Funky Buddha

Customer relationships – the firm implemented initiatives dedicated to the two customer segments served. Unfortunately, is difficult to find disclosed information about distributor contracts, but we can imagine that Funky Buddha offers discounts, rewards and additional services to the most loyal business customers.

For end customers the company organises events, private banquets service and concerts on site and it also participates at beer festivals and tap-takeovers around the state. It’s also interesting to notice that is possible to subscribe to a membership club in order to receive unique discounts and access to exclusive events.

**Revenue streams** – the revenues collected by the firm are diversified by the customer segment to which they relate to. Contracts are signed with distributors in order to build long term relationships and they consider additional services and discounts. End customers have a fixed menu pricing revenue model, with a target price defined by the location and the channel of consumption.

<table>
<thead>
<tr>
<th>B2C</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer products (Fixed Menu Pricing)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Merchandising</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Breweries’ visits</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Events</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Membership subscription</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B2B</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer products (Contracts)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Merchandising and other products</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

*Table 25: Revenue streams reference table for Funky Buddha*

**Key resources** – Funky Buddha owns a main production facility in Oakland Park, Florida and the original brewpub from which it started operating, the Funky Buddha Lounge and Restaurant. The brewpub is also a prototyping production plant for the company through which it can develop and fine-tune beer recipes.

The company built a taproom inside the main brewing plant in which end customers can taste fresh produced products and organize private banquets.

Like we said in the introduction, Constellation Brands purchased in August 2017 the shares of the company, providing financial and business support. However the company couldn’t be considered craft anymore according to the definition provided by Brewers association.
**Key activities** – the main activities performed by Funky Buddha are production and network ones. Production activities could be summarized with the process of product development: prototyping of the recipe in the pilot plant, production in the main facility and delivery through distributors.

Network activities include the engagement and the creation of long term relationships with distributors, but they are not disclosed online.

<table>
<thead>
<tr>
<th>PHYSICAL</th>
<th>Breweries owned (number)</th>
<th>2: Oakland Park, Florida and Funky Buddha’s original Brewpub pilot kit (FL)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Retail shops owned (number)</td>
<td>2: Brewery’s taproom, FL, Funky Buddha Lounge and Restaurant (FL)</td>
</tr>
<tr>
<td></td>
<td>Distribution Centers (location)</td>
<td>Florida</td>
</tr>
<tr>
<td></td>
<td>Self distribution (location)</td>
<td>Florida</td>
</tr>
<tr>
<td>INTELLECTUAL</td>
<td>Brands</td>
<td>Funky Buddha</td>
</tr>
<tr>
<td></td>
<td>Copyrights (types and name)</td>
<td>Knowledge</td>
</tr>
<tr>
<td>HUMAN</td>
<td>Production teams (name)</td>
<td>Production</td>
</tr>
<tr>
<td></td>
<td>Business teams (name)</td>
<td>Administration, Sales and Marketing</td>
</tr>
<tr>
<td></td>
<td>Other teams (name)</td>
<td>Banquets, Tap room, Kitchen</td>
</tr>
<tr>
<td>FINANCIAL</td>
<td>Ownership (type)</td>
<td>Owned by Constellation Brands*</td>
</tr>
</tbody>
</table>

*Table 26: Key resources reference table for Funky Buddha*

**Key partnerships** – the main suppliers for the firm are the ones we identified in the research framework section providing key raw materials, packaging goods, machineries and additional services. Distributors represents the main customer segment for Funky Buddha and, for this reason, they should be considered key partners. In the investor section we will include the parent company Constellation Brands, through which the firm will exploit new distribution channels and new raw materials suppliers.

<table>
<thead>
<tr>
<th>PRODUCTION ACTIVITIES</th>
<th>Design</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Production</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Delivery</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PLATFORM/NETWORK ACTIVITIES</th>
<th>B2B network activities (type)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B2C network activities (type)</td>
</tr>
</tbody>
</table>

*Table 27: Key activities reference table for Funky Buddha*
Table 28: Key partnership reference table for Funky Buddha

Cost structure – the main costs sustained by Funky Buddha are aligned the ones we identified in the research framework. The main fixed costs include equipment, utilities, rent, overhead and depreciation/amortization. The main variable costs are represented by direct materials and piece rate workers.
VALUE PROPOSITION LEVEL ANALYSIS (ZOOM-IN)

Values – according to the website “Funky Buddha is committed to produce bold craft beer that marry culinary-inspired ingredients”. The consequence is the production of beer made with natural ingredients whose flavour is easily recognizable in the taste and the aroma.

Products – the utilization of culinary ingredients and the concept of culinary-inspired creative recipes is clear analysing the RateBeer database. In fact the styles most produced by Funky Buddha are fruit beer, Berliner weisse and imperial stouts. Also the most iconic beers from the firm represents this trend. Pineapple Beach and Maple Bacon Coffee Porter, in fact, are brewed using non-traditional ingredients.

Additional products include merchandising and membership subscription through which it’s possible to get the access on unique events, discounts and early releases.

Services – the company organizes very different events for customers inside its spaces and tours of the brewery are organised weekly. Funky Buddha offers also banquets services in its restaurant.
The Value Proposition Canvas

**Values**
- Bold flavors
- Natural ingredients
- Culinary inspired

**Services**
- Brewery tours
- Capillary distribution in Florida
- Experimental brews
- Events organization
- Merchandising
- Membership subscription

**Products**
- Iconic beers: HOP Gun, Floridian, Maple Bacon Coffee Porter
- American Strong Ale (21)
- Brown Ale (18)
- IPA (23)
- Fruit Beer (29)
- Berliner Weisse (27)
- Imperial Stout (24)

**Beer offering**
- Mean ABV: 7.02%
Rhinegeist Brewing

COMPANY OVERVIEW

The name Rhinegeist, translates to “ghost of the Rhine” and it’s referred to the placement of the brewery in the historic Over-the-Rhine district in Cincinnati. The company has been created by four founders: Bob Bonder, creator of the Tazza Mia coffee business, Bryant Goulding, wholesaler for Dogfish Head and Anderson Vally, and two brewers Jim Watt and Luke Cole. The plant, build within the skeleton of the old Moerlein bottling plant closed after prohibition, brewed its first batch of beer in June 2013 after Cole rebuilt a 20 plus year old brewhouse they bought in Mexico for a cheap price.

Rhinegeist believes in the power of beer to bring people together and it has a unique connection with the Over-the-Rhine community of Cincinnati. The philosophy behind the products it brews is hoppy/sessionable beer where “the first sip calls for the third”.

The brewery is located in the Over-the-Rhine neighbourhood that in the 19th century hosted 38 breweries. Leading this vibrant brewing scene was Christian Moerlein Brewing Company, the city’s largest breweries, founded in 1895 and closed in the 1920’s after prohibition law has been approved. The brewery was able to brew, at the time, 300.000 barrels annually. Rhinegeist is currently operating inside the company’s old bottling plant.

The company offers self-distribution service in Columbus and Cincinnati thanks to the exception to the three-tier distribution system allowed by the state. In fact the Ohio state allows to a beer manufacturer the self-distribution of its products when it does not exceed thirty-one million gallons in a calendar year. Sixty percent of the company’s portfolio was self-distributed in 2016, showing the focus for the firm. Rhinegeist, in order to self-distribute such volumes, opened a small brewery and distribution centre in Columbus, setting up a research and development facility for experimental batches and a warehouse in which to stock fresh products for logistics.

The core product offering is packaged in cans, showing the innovativeness and superior quality of this material. The company also developed the brand Cidergeist, under which it sells craft ciders, alcoholic beverages made from the fermented juice of apples).

Firm’s co-founders Bob Bonder and Bryant Goulding announced their plan to launch a new venture, separate from Rhinegeist, of medical marijuana cultivation and dispensary.  

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**INDUSTRY LEVEL ANALYSIS (ZOOM-OUT)**

*Internal rivalry* – or direct competition represents the rivalry to capture market shares in the industry. Let’s analyse briefly the main elements affecting this force:

- **Concentration and balance of the market:** the craft beer segment is extremely concentrated with more than 5,200 companies controlling the 12.3% of share in sales volume in 2016[^1]. (↑↑)
- **Diversity of competitors:** craft breweries in US have a quite similar structure, differentiating each other’s for the assets owned, the focus of distribution and customer segment orientation. (=/↓)
- **Industry growth:** the craft beer segment has recorded an impressive average increase in volume in the last years, representing a disruption in the industry. The consequence is a profitability growth opportunity for every company competing in the new segment. (↑)
- **Product differentiation:** craft beer innovation changed the perception of the product even if the production process is quite standard and openly shared to the public. The consequence is a weak negative impact on rivalry. (=/↓)
- **Switching costs:** the costs sustained both by end customers and by distributors to change suppliers are low. For this reason there is a low competition to capture and retain new customers. (↓)
- **Fixed costs:** fixed costs have an important impact on the company’s operating leverage, as we noticed in the introduction of the chapter. (↑)
- **Storage costs:** given the perishable nature of the product and the flexibility required by the company’s operations, breweries hold low stocks in warehouses. Given the implementation of self-distribution by Rhinegeist the costs sustained for storage are higher compared to the other companies (↑)
- **Excess capacity:** Rhinegeist, in order to exploit the high investments made to acquire assets, saturates the capacity at almost the maximum level. Some excess capacity is left to ensure flexibility of the manufacturing operations. (↓)
- **Exit barriers:** it’s difficult to assess the impact of costs and factors on exit strategies, especially emotional ones. For this reason the parameter does not influence competition. (=)

Even if a relevant number of firms is competing for a small amount of market share represented by the craft beer disruption, the competition among them is quite low (=/↑) with a slightly negative impact on the profitability available on the market (=/–).

*Threats of new entrants* – like we said in the industry overview, the segment recorded a substantial increase of number of breweries operating in US in the last years, with low reactions by incumbents.

We can conclude that the innovation is really attractive for new entrants, leading to an increasing level of competition (↑↑) and a consequent strong negative impact on the average market profitability (--).

**Threats of substitutes** – craft beer is in a slightly disadvantaged position compared to its main substitutes wine and spirits. In fact consumers still consider the product more a commodity than a luxury good, with a consequent higher price elasticity. Compared to its direct competitor, commercial beer producers, the product is on average two times more expensive mainly because of economies of scale

We can conclude that the risk of substitution faced by Rhinegeist is medium/high (=/↑) with a weak negative impact on profitability (=/-).

**Bargaining power of buyers** – given the decision Rhinegeist to focus on self-distribution, the company has been able to modify this competitive force, lowering its impact on the average profits available on the market. The firm, in fact, self-distributed around 60% of the total volumes produced in 2016\(^{85}\). Let’s analysing the factor affecting downstream market competition:

- **Relative concentration**: Rhinegeist distributes its products directly to retailers, represented by bars, pubs and restaurants, in Columbus and Cincinnati. These entities are usually independent from other companies and, given their small dimensions, they locally compete for a limited number of customers. For those reasons we can conclude that the retail market is extremely deconcentrated with a high number of companies competing for a small amount of the market share. The consequence is a decreasing impact on competition. (↓↓)

- **Product’s features**: to capture the loyalty of retailers, Rhinegeist has to combine together with its products logistic services and discounts to have a competitive offering. Competing with big distributors that have more brands available and that could take advantage of important financial resources, the company struggles to get the access on the final market. (↑↑)

- **Buyer’s characteristics**: given the high profitability of retailers, the impact on rivalry is positive. (↓)

Taking advantage of three-tier distribution exceptions allowed in Ohio, Rhinegeist has been able to lower the bargaining power of distributors and to internalize the profits shared to them. For this reason this force has a decreasing impact on competition (↓) with a positive effect on profitability (+).

---

**Bargaining power of suppliers** – the most important suppliers we identified are hops and malt providers, as these raw materials are the most relevant in term of costs and quality impact. We can now focus on the main force determinants connected to these markets.

- **Relative concentration:** given the extremely high concentration of both the hops and the malt markets and the influence that big multinational competitors have towards them, we can conclude that the bargaining power in the hands of craft breweries is very low, with a strong negative effect on competition. (↑↑)
- **Product’s features:** craft breweries choose only worlds class high quality suppliers for their products, increasing their impact on the final good performance. (=/↑)
- **Supplier’s characteristics:** given the limited possibility to implement downward integration strategies, suppliers have a strong bargaining power towards craft beer producers. (↑↑)

Upstream competition is the strongest force shaping the industry in which Rhinegeist operates (↑↑), with an extremely negative effect on the average profits available on the market (←).

We can summarize the five forces model by Porter with the following diagram, summarizing each factor’s impact on competition and the final effect on the average profits available.

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**Figure 52: Porter’s five forces model applied to the Rhinegeist case study**
COMPANY LEVEL ANALYSIS

In the second level of the analysis our goal is to design the business model implemented by each firm through the canvas by Osterwalder. In order to make the process faster and to have a visual reference we will take advantage, for some sections, of the charts introduced in the research framework.

Customer segments – Rhinegeist interfaces with three main customer lines: retailers, distributors and end customers.

- **Retailers (B2B):** taking advantage of exceptions in the three-tier distribution system allowed in Ohio, the company has been able to self-distribute around 60% of the volumes produced. For this reason retailers, represented by pubs, bars and restaurants, represent the main customer segment for the company.

- **Distributors (B2B):** the represent a secondary business segment for the company as distributors are involved to enlarge the presence of Rhinegeist products outside Cincinnati and Columbus. The main geographical markets served thanks to them are Ohio, Kentucky and Massachusetts.

- **End customers (B2C):** this segment is reached through the brewery taproom, that accounts a really small percentage of the total volume produced. Rhinegeist products are segmented through a simple approach: core products are packaged in cans and represents the year-round offering of the company. Bottles are used for limited edition and barrel aged beers.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

*Table 29: Customer segments reference table for Rhinegeist*

Value proposition – the company focused its business model on retailers, implementing self-distribution in the cities of Cincinnati and Columbus. The geographical presence is focused on a multi-regional dimension, distributing in Ohio, Massachusetts and Kentucky.
The company founded Riverghost Distributing, a high-quality beer, wine and spirits distributor created to expand in the Kentucky market. Rhinegeist was forced to stop self-distribution in the market because of a new law created to get brewing giant AB InBev out of the distribution business but it’s still taking advantage of the spin-off to take wine and craft spirits on the market.

Rhinegeist has a strong connection with the Over-the-Rhine community of Cincinnati and the beers it produces are hoppy and sessionable. The core product line is packaged in aluminium cans while limited releases and barrel-aged products are sold in bottles. The company developed a concentric differentiation strategy by adding ciders to its portfolio.

The production is concentrated in the old bottling plant of Moerlein in Cincinnati inside which the company built also a taproom and an event space. Rhinegeist built also a distribution hub and nano-sized brewery in Columbus to offer a better logistics in the area and to prototype new product concepts.

The firm can count on a medium product portfolio offering more than 100 beers and 6 ciders currently on its website and counting more than 180 beers on the Ratebeer historical database.

The firm offer additional products and services to final customers selling merchandising products and organising private events inside their space. Different charitable contributions and events are organised periodically by the company.

*Channels* – the company focused its presence on a multi-state scale, distributing mainly in Ohio, Massachusetts and Kentucky. Thanks to Riverghost Distributing is also able to self-distribute its own products in Cincinnati and Columbus and to sell high-quality wine and craft spirits in Kentucky.

<table>
<thead>
<tr>
<th>DISTRIBUTION STRATEGY</th>
<th>Number of worldwide distributors off-premise (from RateBeer distributors section)</th>
<th>51</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of worldwide distributors on-premise (from RateBeer distributors section)</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Number of worldwide e-commerce distributors (from RateBeer distributors section)</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHANNEL TYPES</th>
<th>Own</th>
<th>Direct</th>
<th>Web Shop</th>
<th>Merchandising only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Own Retail (type)</td>
<td>Taproom</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Own Distributors</td>
<td>Cincinnati and Columbus</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Partner Retail</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Partner Distributors</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supermarket Stores</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 30: Channels reference table for Rhinegeist*
**Customer relationships** – business customers, mainly represented by retailers, are engaged through the services offered by Riverghost Distributing. The company aims to build a loyal relationship with the segment offering discounts, rewards and additional services.

The company takes advantage of the event space inside their facility not only to host public events but also to organise private parties. Other interesting initiatives created by Rhinegeist are the sponsorship of Cincinnati W&S Opens and the creation of a crowd-sourced beer once a year.

**Revenue streams** – the revenues collected by the firm are diversified by the customer segment to which they relate to. Contracts are signed with distributors in order to build long term relationships and they consider additional services and discounts. End customers have a fixed menu pricing revenue model, with a target price defined by the location and the channel of consumption.

<table>
<thead>
<tr>
<th>B2C</th>
<th>Beer products (Fixed Menu Pricing)</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Merchandising</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Breweries’ visits</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Events</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Membership subscription</td>
<td>X</td>
</tr>
<tr>
<td>B2B</td>
<td>Beer products (Contracts)</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Merchandising and other products</td>
<td>X</td>
</tr>
</tbody>
</table>

*Table 31: Revenue streams reference table for Rhinegeist*

**Key resources** – Rhinegeist owns a main production facility in Cincinnati inside the building of the old Moerlein bottling plant. The facilities include also a tap-room and a space dedicated to events.

The company, in order to implement self-distribution service, built in Columbus a distribution centre hub, including a micro-brewery for research and development purpose. The firm also created Riverghost Distributing, a distribution company commercializing high-quality craft beer, cider, wine and spirits. Rhinegeist, compared to normal craft brewing companies, had to invest in additional assets to implement self-distribution such as the hub we mentioned and refrigerated trucks.
**Table 32: Key resources reference table for Rhinegeist**

<table>
<thead>
<tr>
<th>PHYSICAL</th>
<th>1. Cincinnati taproom</th>
<th>2. Cincinnati and Columbus’ pilot brewhouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail shops owned (number)</td>
<td>1: Columbus</td>
<td></td>
</tr>
<tr>
<td>Distribution Centers (location)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self distribution (location)</td>
<td>Columbus and Cincinnati thorough the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>distribution company Riverghost</td>
<td></td>
</tr>
</tbody>
</table>

**INTELLECTUAL**

<table>
<thead>
<tr>
<th>Brands</th>
<th>Rhinegeist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copyrights (types and name)</td>
<td></td>
</tr>
<tr>
<td>Knowledge</td>
<td></td>
</tr>
</tbody>
</table>

**HUMAN**

<table>
<thead>
<tr>
<th>Production teams (name)</th>
<th>Production, Packaging, Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business teams (name)</td>
<td>Administration, Marketing, Sales, Private Events</td>
</tr>
</tbody>
</table>

**FINANCIAL**

| Ownership (type)                         | Private                                    |

*Key activities* - the main activities performed by Rhinegeist are production and network ones. Production activities could be summarized with the process of product development: prototyping of the recipe in the pilot plant in Columbus, production in the main facility in Cincinnati and delivery mainly through owned refrigerated trucks.

Network activities include the engagement and the creation of long term relationships with retailers, through the creation of Riverghost Distributing.

<table>
<thead>
<tr>
<th>PRODUCTION ACTIVITIES</th>
<th>Design</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Delivery</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PLATFORM/NETWORK ACTIVITIES</th>
<th>B2B network activities (type)</th>
<th>Riverghost Distributing commercialize high quality craft beer, cider, wine and spirits.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B2C network activities (type)</td>
<td></td>
</tr>
</tbody>
</table>

*Table 33: Key activities reference table for Rhinegeist*

*Key partnerships* – the main partners for the firm are the ones we identified in the research framework section providing raw materials, packaging goods, machineries and additional services. In particular, Rhinegeist signed contracts for Citra, Amarillo, Azacca and Equinox hops\(^\text{86}\). As regards machineries the company has built them on the skeleton of the old Moerlein bottling plant, refurbishing a brewhouse they bought from

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Retailers and distributors represent the main customer segment for Rhinegeist and, for this reason, they should be considered key partners.

<table>
<thead>
<tr>
<th>SUPPLIERS</th>
<th>RAW MATERIALS</th>
<th>Hops suppliers</th>
<th>Contracts for Citra, Amarillo, Azacca and Equinox*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Malt suppliers</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Packaging materials suppliers</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machineries suppliers</td>
<td>Moerlein bottling plant, rebuilt Mexican brewhouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Providers</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PARTNERS</th>
<th>Distributors</th>
<th>BrewDog (UK), Heidelberg (Ohio and Kentucky), Massachusets Beverage Alliance (Massachusetts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration initiatives and alliances</td>
<td>(name of the company)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INVESTORS</th>
<th>Type and name of investors</th>
</tr>
</thead>
</table>

Table 34: Key partnerships reference table for Rhinegeist

Cost structure - the main costs sustained by Rhinegeist are aligned to the ones we identified in the research framework. The main fixed costs include equipment, utilities, rent, overhead and depreciation/amortization. The main variable costs are represented by direct materials and piece rate workers.
The Business Model Canvas

Key Partners
- Suppliers
  - Hops suppliers
  - Malt
  - Packaging material
  - Low cost rebuilt machinery
- Partners
  - Service providers

Key Activities
- Production
  - Prototypes developed by the Columbus (OH) pilot kit
  - Production in the Cincinnati (OH) brewery
- Barrel aging program
- Distribution

Value Propositions
- Rhinegeist Brand
- Self-distribution in Cincinnati and Columbus through Riverghost Distributing
- Medium-long time to market
- More than 100 beer types produced

Customer Relationship
- Anniversary party
- Sponsorship events
- Distribution incentives
- Annual homebrewing competition

Customer Segments
- B2C (retailers)
- B2B (distributors)

Key Resources
- Retailers
- Distributors
- Cincinnati (OH) brewery
- Warehouse and events space
- Columbus (OH) distribution center and pilot kit
- Rhinegeist Brand
- Production and business teams

Channels
- Distribution strategy
  - On-premise
  - Off-premise
- Focus on Kentucky, Ohio, and Massachusetts
- Channels types
  - Self-distribution
  - Taprooms
  - Distribution partners

Cost Structure
- Fixed costs
  - Equipments and utilities
  - Rent
  - Overheads
  - Depreciation/amortization

Variable costs
- Direct materials
- Pack rate workers

Revenue Streams
- Beer sales
- Cider sales
- Merchandising
- Events organization
- Brewery visits
- Contracts
VALUE PROPOSITION LEVEL ANALYSIS (ZOOM-IN)

Values – Rhinegeist translates to “ghost of the Rhine” and refers to the location of the brewery in the historic over-the-Rhine brewery district in Cincinnati. The company produces, according to the website, hoppy/sessionable beers where “the firs sip calls for the third”. Another interesting value is represented by self-distribution, implemented in Cincinnati and Columbus to provide fresh product to end customers.

Products – the company produces mostly low alcohol beers as we can see from the average ABV (Alcohol by Volume) percentage computed from the RateBeer database. The styles most produced by Rhinegeist are American pale ale, IPA and stout.

Additional products offered are merchandising, sold online through the e-commerce, and ciders, marketed through the brand Ciderghost.

Services – the firm offers to end customers different services such as brewery tours, events and private catering inside the facilities. For retailers and distributors Rhinegeist provides additional services such as self-distribution in Cincinnati and Columbus.

The company also created Riverghost, a distribution company under which Rhinegeist takes to the market high-quality beverages such as craft beer, wines and spirits. The service is currently available in Ohio and Kentucky.
Deep Ellum Brewing Company

COMPANY OVERVIEW

Deep Ellum Brewing Company has been founded by John Reardon and other three founders in 2011 in the historic Deep Ellum area of Dallas, Texas. The district is composed largely of arts and entertainment venues and it’s located near downtown in East Dallas.

The company is born from the founders’ desire to offer to people an alternative to big corporate beers, showcasing the superior quality of craft products. For this reason the firm included the mission “to never serve a single glass of bad beer” in its manifesto.

Deep Ellum focuses its distribution presence on Dallas, building a strong connection with the neighbourhood in which it has built its facilities. The product portfolio offered by the company is limited, with around 20 beers produced currently. According to the founder, John Reardon, 80% of the brewery’s business comes from the sales of the two Deep Ellum flagship beers, Dallas Blonde and Deep Ellum IPA87.

The company announced its plan to expand its facilities into an old spirits liquor warehouse88. The 15.000 square feet location will be dedicated to barrel aging and sour beers production activities, living one-third of the space for microdistilling. Deep Ellum will also open a pub in Fort Worth, Texas in which the company will host a 7-barrel brewing system, a kitchen and a bar filling out the space’s 5.200 square feet89.

Deep Ellum sold 56% in 2016 of its stakes Storied Craft Breweris, an upstart growth capital group founded by the creators of Effen Vodka. Because of the deal the company received $8 million in growth capital and it was able to secure a new line of credit from Bank of America90.

INDUSTRY LEVEL ANALYSIS (ZOOM-OUT)

Internal rivalry – or direct competition represents the rivalry to capture market shares in the industry. Let’s analyse briefly the main elements affecting this force:

- **Concentration and balance of the market:** the craft beer segment is extremely concentrated with more than 5,200 companies controlling the 12.3% of share in sales volume in 201691. (↑↑)
- **Diversity of competitors:** craft breweries in US have a quite similar structure, differentiating each other’s for the assets owned, the focus of distribution and customer segment orientation. (=/↓)
- **Industry growth:** the craft beer segment has recorded an impressive average increase in volume in the last years, representing a disruption in the industry. The consequence is a profitability growth opportunity for every company competing in the new segment. (↑)
- **Product differentiation:** craft beer innovation changed the perception of the product even if the production process is quite standard and openly shared to the public. The consequence is a weak negative impact on rivalry. (=/↓)
- **Switching costs:** the costs sustained both by end customers and by distributors to change suppliers are low. For this reason there is a low competition to capture and retain new customers. (↓)
- **Fixed costs:** fixed costs have an important impact on the company’s operating leverage, as we noticed in the introduction of the chapter. (↑)
- **Storage costs:** given the perishable nature of the product and the flexibility required by the company’s operations, breweries hold low stocks in warehouses. (=/↑)
- **Excess capacity:** Deep Ellum, in order to exploit the high investments made to acquire assets, saturates the capacity at almost the maximum level. Some excess capacity is left to ensure flexibility of the manufacturing operations. (↓)
- **Exit barriers:** it’s difficult to assess the impact of costs and factors on exit strategies, especially emotional ones. For this reason the parameter does not influence competition. (=)

Even if a relevant number of firms is competing for a small amount of market share represented by the craft beer disruption, the competition among them is quite low (=/↑) with a slightly negative impact on the profitability available on the market (=/↓).

**Threats of new entrants** – like we said in the industry overview, the segment recorded a substantial increase of number of breweries operating in US in the last years, with low reactions by incumbents.

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We can conclude that the innovation is really attractive for new entrants, leading to an increasing level of competition (↑↑) and a consequent strong negative impact on the average market profitability (--)。

*Threats of substitutes* – craft beer is in a slightly disadvantaged position compared to its main substitutes wine and spirits. In fact consumers still consider the product more a commodity than a luxury good, with a consequent higher price elasticity. Compared to its direct competitor, commercial beer producers, the product is on average two times more expensive mainly because of economies of scale. Deep Ellum is trying to lower the impact of the force starting to produce spirits in its new facility.

We can conclude that the risk of substitution faced by Deep Ellum is medium/high (=/↑) with a weak negative impact on profitability (=/-).

*Bargaining power of buyers* – given the three-tier distribution system set by law, the main buyers with whom Deep Ellum has to interact to sell its products are distributors focusing its presence on the Dallas area. We can now analyse the factors influencing the downstream market we identified:

- *Relative concentration*: in the analysis we made in the introduction of the industry we discovered that the distribution market is characterized by a small amount of independent firms. Big multinational firms have interests in the industry and they could take advantage of their financial resources to offer superior contract offerings. For this reason Deep Ellum faces a strong rivalry to compete in the downstream market. (↑↑)
- *Product’s features*: to capture distribution, breweries combine together their products with services in order to have a competitive offering. Given the limited financial resources of craft breweries compared to rivals, the firms face problems to offer appealing contracts and they struggle to get the access on the final market. (↑↑)
- *Buyer’s characteristics*: given the high profitability of distributors, the impact on rivalry is positive. (↓)

Bargaining power of buyers is extremely high and the management of distributors is crucial for the success of a craft brewery. For this reason this force has a strong negative impact on competition (↑↑) with a negative effect on profitability (--).

*Bargaining power of suppliers* – the most important suppliers we identified are hops and malt providers, as these raw materials are the most relevant in term of costs and quality impact. We can now focus on the main force determinants connected to these markets.
• **Relative concentration:** given the extremely high concentration of both the hops and the malt markets and the influence that big multinational competitors have towards them, we can conclude that the bargaining power in the hands of craft breweries is very low, with a strong negative effect on competition. (↑↑)

• **Product’s features:** craft breweries choose only world-class high quality suppliers for their products, increasing their impact on the final good performance. (=/↑)

• **Supplier’s characteristics:** given the limited possibility to implement downward integration strategies, suppliers have a strong bargaining power towards craft beer producers. (↑↑)

Upstream competition is the strongest force shaping the industry in which Deep Ellum operates (↑↑), with an extremely negative effect on the average profits available on the market (→).

We can summarize the five forces model by Porter with the following diagram, summarizing each factor’s impact on competition and the final effect on the average profits available.

![Levels of Competition vs Profitability Diagram](image)

*Figure 53: Porter’s five forces model applied to the Deep Ellum case study*
COMPANY LEVEL ANALYSIS

In the second level of the analysis our goal is to design the business model implemented by each firm through the canvas by Osterwalder. In order to make the process faster and to have a visual reference we will take advantage, for some sections, of the charts introduced in the research framework.

**Customer segments** – Deep Ellum interfaces mainly with three different customer lines: distributors, retailers and end customers.

- **Distributors (B2B):** they represent the main customers for the firm as the majority of sales are dedicated to distribution. The products are divided into 4 main categories: year-round (representing around 80% of the total sales), semi-seasonal, special releases and sour brews.
- **Retailers (B2B):** the company, taking advantage of an exception on the three-tier distribution system allowed by the Texas state, self-distribute a limited amount of product in the local area.
- **End customers (B2C):** they represent a secondary segment for the firm as a small amount of the total volume sales are dedicated to them. Deep Ellum, in fact, can sell directly to final customers only through the brewery taproom.

<table>
<thead>
<tr>
<th></th>
<th>Year-round</th>
<th>Semi-seasonal</th>
<th>Special releases</th>
<th>Sour brews</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B2C</strong></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>B2B</strong></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Non beer drinkers</td>
<td></td>
<td>Commercial beer drinkers</td>
<td>Beer lovers</td>
<td>Craft Beer geeks</td>
</tr>
</tbody>
</table>

*Table 35: Customer segments reference table for Deep Ellum*

**Value proposition** – the business model of the company is focused on distribution, given the three-tier system defined by law. The geographical presence is focused on a hyper-local dimension, as Deep Ellum is mainly distributed in the Dallas area.

The production is concentrated in the Dallas brewing facility, where the company built also a taproom. The company announced its plan to expand, developing a space dedicated to sour and barrel aged beers together with a micro-distillery producing gin, vodka and whiskey in Dallas and opening a pub in Fort Worth, Texas in 2018.

Deep Ellum, compared to other craft breweries, has a modest product portfolio offering 20 different beers on its website and counting around 60 products on the RateBeer historical database.
The firm offers additional products and services to build relationship to final customers such as merchandising and events inside its taproom.

Channels – the company focused its presence in Dallas, developing a hyper-local distribution strategy. The recent acquisition by Stories Craft Breweries provided the firm financial resources needed to expand its distribution in the whole Texas state.

Deep Ellum self-distributes its products in the local area close to the brewery.

<table>
<thead>
<tr>
<th>DISTRIBUTION STRATEGY</th>
<th>Number of worldwide distributors off-premise (from RateBeer distributors section)</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of worldwide distributors on-premise (from RateBeer distributors section)</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Number of worldwide e-commerce distributors (from RateBeer distributors section)</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHANNEL TYPES</th>
<th>Own</th>
<th>Direct</th>
<th>Web Shop</th>
<th>Merchandising</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Own Retail (type)</td>
<td>Taproom</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Own Distributors</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Partner Retail</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Partner Retail</td>
<td></td>
<td>Partner Distributors</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Supermarket Stores</td>
<td></td>
</tr>
</tbody>
</table>

*Table 36: Customer segments reference table for Deep Ellum*

Customer relationships – Deep Ellum implemented different initiatives dedicated to the two customer segments served. To business customers, distributors, the firm offers mainly discounts, rewards and additional services provided by contract.

For end customers the company organises events such as concerts, charitable event and the annual birthday party.

Revenue streams - the revenues collected by the firm are diversified by the customer segment to which they relate to. Contracts are signed with distributors in order to build long term relationships and they consider additional services and discounts. End customers have a fixed menu pricing revenue model, with a target price defined by the location and the channel of consumption.
Table 37: Revenue Streams reference table for Deep Ellum

<table>
<thead>
<tr>
<th>B2C</th>
<th>Beer products (Fixed Menu Pricing)</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Merchandising</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Breweries’ visits</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Events</td>
<td>X</td>
</tr>
<tr>
<td>B2B</td>
<td>Beer products (Contracts)</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Merchandising and other products</td>
<td>X</td>
</tr>
</tbody>
</table>

Key resources – Deep Ellum owns a main production facility in Dallas, Texas in which the company has built a taproom. The company announce its plan to enlarge its production capacity and to acquire a new facility in which developing its sour and barrel-aged beers together with a micro-distillery.

In 2016 Storied Craft Breweries, an upstart growth capital group founded by the creators of Effen Vodka, bought 56% of the company stakes, investing $8 million in growth capital and giving the possibility to the company to secure a new line of credit from Bank of America. Thanks to this deal Deep Ellum faced an incredible growth in the first quarter of 2017 recording 80% of shipments increase.

Table 38: Key resources reference table for Deep Ellum

<table>
<thead>
<tr>
<th>PHYSICAL</th>
<th>Breweries owned (number)</th>
<th>1: Dallas, Texas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Retail shops owned (number)</td>
<td>Current: Brewery’s taproom</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Future projects: Sour, barrel aging facility and distillery (Dallas, Texas) and pub (Fort Worth, Texas)</td>
</tr>
<tr>
<td></td>
<td>Distribution Centers (location)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self distribution (location)</td>
<td></td>
</tr>
<tr>
<td>INTELLECTUAL</td>
<td>Brands</td>
<td>Deep Ellum</td>
</tr>
<tr>
<td></td>
<td>Copyrights (types and name)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
<td></td>
</tr>
<tr>
<td>HUMAN</td>
<td>Production teams (name)</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Business teams (name)</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Other teams (name)</td>
<td>-</td>
</tr>
<tr>
<td>FINANCIAL</td>
<td>Ownership (type)</td>
<td>4 founders</td>
</tr>
</tbody>
</table>

Key activities – the main activities performed by Deep Ellum are production and network ones. Production activities could be summarized with the process of product development: recipes prototyping, production and delivery.

Network activities include the engagement and the creation of long term relationships with distributors and local retailers.

<table>
<thead>
<tr>
<th>PRODUCTION ACTIVITIES</th>
<th>Design</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Production</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Delivery</td>
<td></td>
</tr>
<tr>
<td>PLATFORM/NETWORK ACTIVITIES</td>
<td>B2B network activities (type)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B2C network activities (type)</td>
<td></td>
</tr>
</tbody>
</table>

Table 39: Key activities reference table for Deep Ellum

Key partnerships - the main suppliers for the firm are the ones we identified in the research framework section providing key raw materials, packaging goods, machineries and additional services. Distributors represents the main customer segment for Deep Ellum and, for this reason, they should be considered key partners. In the investor section we will include Storied Craft Breweries that, acquiring the 56% of the company stakes, provided capital and resources for the growth of the firm.

<table>
<thead>
<tr>
<th>SUPPLIERS</th>
<th>RAW MATERIALS</th>
<th>Hops suppliers</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Malt suppliers</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Packaging materials suppliers</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Machineries suppliers</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Service Providers</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PARTNERS</th>
<th>Distributors and Retailers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Collaboration initiatives and alliances (name of the company)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INVESTORS</th>
<th>Type and name of investors</th>
<th>Storied Craft Breweries</th>
</tr>
</thead>
</table>

Table 40: Key partnerships reference table for Deep Ellum

Cost structure – the main costs sustained by Funky Buddha are aligned with the ones we identified in the research framework. The main fixed costs include equipment, utilities, rent, overhead and depreciation/amortization. The main variable costs are represented by direct materials and piece rate workers.
**The Business Model Canvas**

**Key Partners**
- Suppliers
  - Hops suppliers
  - Malt
  - Packaging material
  - Machineries
  - Service providers
- Partners
  - Distributors
  - Storied Craft Breweries ownership

**Key Activities**
- Production
  - Prototyping
  - Production in the Dallas (TX) brewery
  - Distribution in Dallas (TX)
- Operational improvements
  - Sour beers and barrel aging program

**Key Resources**
- Dallas (TX) Brewery and taproom
- Deep Ellum Brand

**Value Propositions**
- Deep Ellum Brand
- Strong connection with the Deep Ellum district community
- Distribution focus on Dallas
- Longtime to market
- Limited product portfolio
- Charitable events
- Merchandising
- Events organization

**Customer Relationships**
- Sponsored events and concerts
- Distribution incentives
- Homebrewing competition
- B2C

**Customer Segments**
- B2B

**Channels**
- Distribution strategy
  - On-premise
  - Off-premise
  - Focus on Dallas
- Channel types
  - Distributor partners
  - Taproom

**Cost Structure**
- Fixed costs
  - Equipments and utilities
  - Rent
  - Overheads
  - Depreciation/amortization
- Variable costs
  - Direct materials
  - Piece rate workers

**Revenue Streams**
- Beer sales
- Merchandising
- Contract
- Events organization
- Brewery visits
VALUES PROPOSITION ANALYSIS (ZOOM-IN)

Values – Deep Ellum, in the manifesto disclosed on its website, summarized the mission of its company. The firm pledges “to let our beer do the talking, to never live or work in a dry country, to never serve a single glass of bad beer”. The values represented by the brand created are the connection with the Deep Ellum artistic district and the opposition to big corporation products.

Products – as we said in the business canvas analysis, the company has a modest product portfolio, mostly producing IPA and Porter. Additional products are represented by merchandising and spirits, that the firm will produce in a micro-distillery space it’s currently developing.

Services – the main services provided to business customers are self-distribution in the area contiguous to the brewery and additional services stated by the contracts.

For end customers Deep Ellum organizes different events inside its facilities, including events and barbeques, and schedule brewery visits.
The Value Proposition Canvas

**Mission statements**
- To let our beer do the talking. To never lie or work in a dry country. To never serve a single glass of bad beer.

**Values**
- Deep Ellum district
- Against big corporate breweries

**Services**
- Brewery tours
- Distribution in Dallas
- Events organization

**Products offered**
- Merchandising
- Spirits (future project)

**Products**
- Iconic beers: Deep Ellum IPA, Dallas Blonde, Deep Ellum Lager
- IPA (0.0)
- Porter (7)
- Spice/Herb/Vegetable (5)

**Beer offering**
- Mean ABV: 7.57%
Modern Times Beer

COMPANY OVERVIEW

Modern Times Beer was founded in 2013 in the Point Loma neighbourhood of San Diego by Jacob McKean, a former Stone Brewing employee and long-time homebrewer. Jacob could start the business by raising $1.25 million from investors and through a crowdfunding campaign93.

The name Modern Times comes from a utopian community built on Long Island in 1850 where a group of people lived in the research of individual development refusing any imposition of purposes given by modern society. The company reflects this philosophy in its products, often creating hybrid styles in which the characteristics of different beer categories blend together. The beers produced by the Modern Times are described as “aroma-driven, complex, flavourful and sessionish non-monogamously”.

Modern Times has faced an incredible growth since its foundation, being able to rise to the top of the San Diego crowded beer scene and in 2015 was named San Diego’s Best Brewery by West Coaster magazine. In 2014 the company opened its first pub “Flavordome” in North Park district of San Diego and recently announced different expansion projects planned for the future to increase its direct sales volumes. In downtown Anaheim, the firm is planning to open a foeder (wooden fermentation barrels) brewery, restaurant and biergarten with a swimming pool called “Leisurertown”. In addition, Modern Times is currently building a brewpub and café in downtown Los Angeles called “Dankness Dojo” that will also include a research and development micro-brewery and a tasting room in Encinitas called “Far East Lounge”94.

On the other side, given the enormous growth faced in the wholesale business, the company announced the construction of a new brewery in Portland, Oregon. The founder Jacob McKean recently published in an interview that the company had signed a lease agreement through which it will start producing 7,000 barrels of initial capacity at the beginning of 2018 inside the current Commons Brewery location95.

As regards the additional initiatives implemented, the company offers a membership program called “League of Partygoers and Elegant People” through which customers could receive unique special release beers, get the access first to online sales, get invitation to exclusive events and receive dedicated merchandise. Modern Times has also announced it has become employee-owned in 2017, dedicating 30% of shares to its workers. The goal is to reach the complete ownership in the future96.

INDUSTRY LEVEL ANALYSIS (ZOOM-OUT)

Internal rivalry – represents the competition to capture market shares in the industry. Let’s analyse briefly the main elements affecting this force:

- **Concentration and balance of the market:** the craft beer segment is extremely concentrated with more than 5,200 companies controlling the 12.3% of share in sales volume in 2016\(^7\). (↑↑)

- **Diversity of competitors:** craft breweries in US have a quite similar structure, differentiating each other’s for the assets owned, the focus of distribution and customer segment orientation. (=/↓)

- **Industry growth:** the craft beer segment has recorded an impressive average increase in volume in the last years, representing a disruption in the industry. The consequence is a profitability growth opportunity for every company competing in the new segment. (↑)

- **Product differentiation:** craft beer innovation changed the perception of the product even if the production process is quite standard and openly shared to the public. The consequence is a weak negative impact on rivalry. (=/↓)

- **Switching costs:** the costs sustained both by end customers and by distributors to change suppliers are low. For this reason there is a low competition to capture and retain new customers. (↓)

- **Fixed costs:** fixed costs have an important impact on the company’s operating leverage, as we noticed in the introduction of the chapter. (↑)

- **Storage costs:** given the perishable nature of the product and the flexibility required by the company’s operations, breweries hold low stocks in warehouses. (=/↑)

- **Excess capacity:** Modern Times, in order to exploit the high investments made to acquire assets, saturates the capacity at almost the maximum level. Some excess capacity is left to ensure flexibility of the manufacturing operations. (↓)

- **Exit barriers:** it’s difficult to assess the impact of costs and factors on exit strategies, especially emotional ones. For this reason the parameter does not influence competition. (=)

Even if a relevant number of firms is competing for a small amount of market share represented by the craft beer disruption, the competition among them is quite low (=/↑) with a slightly negative impact on the profitability available on the market (=/↓).

**Threats of new entrants** – as we have seen in the industry overview, the number of breweries operating in US recorded a remarkable increase in the last years, with a mean yearly increase of the 18.64% since 2009. The main barriers that start-ups entering in the industry must face are economies of scale, economies of learning,

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brand identity and the access to distribution channels. Incumbents don’t react to an incumbent entrance and is common to see initiatives implemented to sustain the creation of new companies.

We can conclude that the market is really attractive for new entrants, increasing the competition (↑↑) with a strong negative impact on the average market profitability (→).

_Threats of substitutes_ – craft beer is in a slightly disadvantaged position compared to its main substitutes wine and spirits. In fact consumers still consider the product more a commodity than a luxury good, with a consequent higher price elasticity. Compared to its direct competitor, commercial beer producers, the product is on average two times more expensive mainly because of economies of scale.

We can conclude that the risk of substitution faced by Modern Times is medium/high (=/↑) with a weak negative impact on profitability (=/-).

_Bargaining power of buyers_ – given the three-tier distribution system set by law, the main buyers with whom Modern Times has to interact to sell its products are distributors. Given the recent retail expansion plans announced by the company to increase its presence on the final market, the bargaining power of distributors is smoothed. We can now analyse the factors influencing the downstream market we identified:

- _Relative concentration:_ the distributors’ market is very concentrated and, as we noticed in the introduction of the chapter, is characterized by a large number of firms connected to large multinational food and beverage companies. The bargaining power of distributors is lowered thanks to the decision by the company to implement a hybrid business model focusing on one side to distribution from its main production facilities and on the other side on direct retail thanks to the pubs and brewpubs planned to be opened in the future. (↑)

- _Product’s features:_ entering in the retail market Modern Times is following a “servitation” trend, offering its products in an immersive pub experience. The firm, in fact, takes advantage of its brand to be relevant in the bar and restaurant market in which it competes. The consequence is a more competitive value proposition compared to its rivals. (↑)

- _Buyer’s characteristics:_ given the high profitability of distributors, the impact on rivalry is positive. (↓)

Modern Times has been able to lower the bargaining power of buyers by planning to dedicate a part of its business model to direct retail in the future. The consequence is a lower dependence on distributors, with a positive effect on competition (↑) and a negative effect on profitability (-).
Bargaining power of suppliers – the most important suppliers we identified are hops and malt providers, as these raw materials are the most relevant in term of costs and quality impact. We can now focus on the main force determinants connected to these markets.

- **Relative concentration:** given the extremely high concentration of both the hops and the malt markets and the influence that big multinational competitors have towards them, we can conclude that the bargaining power in the hands of craft breweries is very low, with a strong negative effect on competition. (↑↑)

- **Product's features:** craft breweries choose only world class high quality suppliers for their products, increasing their impact on the final good performance. (=/↑)

- **Supplier's characteristics:** given the limited possibility to implement downward integration strategies, suppliers have a strong bargaining power towards craft beer producers. (↑↑)

Upstream competition is the strongest force shaping the industry in which Modern Times operates (↑↑), with an extremely negative effect on the average profits available on the market (--). We can summarize the five forces model by Porter with the following diagram, summarizing each factor’s impact on competition and the final effect on the average profits available.

![Figure 54: Porter's five forces model applied to the Modern Times case study](image-url)
COMPANY LEVEL ANALYSIS

In the second level of the analysis our goal is to design the business model implemented by each firm through the canvas by Osterwalder. In order to make the process faster and to have a visual reference we will take advantage, for some sections, of the charts introduced in the research framework.

Customer segments – Modern Times interfaces mainly with two different customer lines: distributors and end customers. We will analyse the impact of each segment on the company’s business model and we will connect product lines with the specific clients they are related to.

- **Distributors (B2B):** are currently the main clients for the company given the three-tier distribution system required by law. In the future the volumes dedicated to the segment will represent a lower amount of the total production given the retail orientation implemented by Modern Times for the future.

- **End customers (B2C):** the firm is implementing a retail oriented expansion for the future, as it has announced the construction of a brewpub, a tasting room and a brewery with restaurant. These channels will allow the company not only to internalize profits shared to distributors but also to create an immersive experience to consumers. End customers can also try coffee, blended and roasted in the Modern Times taproom. It’s interesting to notice that the firm develops products dedicated specifically to the members they subscribed to the “League of Partygoers and Elegant People” program

<table>
<thead>
<tr>
<th></th>
<th>Core cans</th>
<th>Seasonal cans</th>
<th>Year-round bottles</th>
<th>Monthly special release</th>
<th>Legue membership program exclusive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffee</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single origins</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blends</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barrel aged</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subscriptions</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non beer drinkers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial beer drinkers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer lovers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Craft Beer geeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>League program members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 41: Customer segments reference table for Modern Times

Value proposition – Modern Times is currently focusing its business model on distributors, but the recent expansion plans it announced shows a different direction for the future. The company, in fact, announced the construction of 3 different retails in California including a brewpub in Los Angeles, a tasting room in Encinitas
and a sour brewing facility with restaurant in Anaheim. These channels will be added to the ones currently owned by the firm in San Diego: the brewery’s taproom in Point Loma and the tasting room in North Park. The expansion will go beyond the California state, as Jacob McKean, founder of the company, recently announced his plan to open a second production facility in Portland, Oregon by the beginning of 2018. Modern Times focused its presence in California counting on 6 different official distributors in the state including Stone Distributing. However the firm is continuously expanding into new markets including Nevada, Oregon and Washington.

The beers produced by Modern Times are aroma-driven, complex and flavourful often born from the hybrid mix of different styles. The company packages its products in aluminium cans not only for core range and seasonal beers but also for barrel-aged experiments.

The production is mainly concentrated in the main facility “Fermentorium” in San Diego, where the company could create sour and barrel-aged recipes. In the next years an ambitious expansion plan will be implemented by the firm with the opening of a new foeder brewery, restaurant and biergarten in Anaheim, a brewpub and R&D microbrewery in downtown Los Angeles and a second brewing facility in Portland, Oregon.

As regards retails Modern Times currently runs a taproom in the brewery’s building and a tasting room in North Park district in San Diego. With the new expansion plan the retail channels owned by the firm will become 6 including a new tasting room in Encinitas and a taproom inside the new manufacturing plants in Portland.

Modern times has a vast product portfolio and it launches continuously new products on the market, offering an innovative product portfolio. On the RateBeer historical database are recorded more than 230 beers, suggesting a flexible supply chain orientation.

The firm developed a concentric product differentiation by offering coffee products with its brand. In particular Modern Times blended and roasted coffee is sold through the e-commerce or served to end customers in owned café. It’s possible to find merchandising online on the website.

Additional services are represented by events organised inside the firm facilities such as the “Annual festival of dankness”, monthly homebrewing competitions and “League of Partygoers and Elegant People” exclusive parties.

Channels – the company has a global presence of its products and the main market served are California, Oregon, Nevada and Washington. In California, in particular, Modern Times signed contracts with 6 different distributors in order to have a capillary presence of its beers on the territory. In the future the retail channels
will increase in importance in term of volumes and new markets will be penetrated through the opening of a new brewing facility in Oregon.

<table>
<thead>
<tr>
<th>DISTRIBUTION STRATEGY</th>
<th>Number of worldwide distributors off-premise (from RateBeer distributors section)</th>
<th>141</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of worldwide distributors on-premise (from RateBeer distributors section)</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Number of worldwide e-commerce distributors (from RateBeer distributors section)</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHANNEL TYPES</th>
<th>Own</th>
<th>Direct</th>
<th>Web Shop</th>
<th>Merchandising, Coffee, Glassware</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Own Retail (type)</td>
<td>4 Taprooms, 1 Brewpub, 1 Restaurant-beer garden</td>
<td></td>
</tr>
<tr>
<td>Partner</td>
<td></td>
<td>Partner Retail</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

|               | Partner Distributors | X long term contracts with an high num er of distributors globally |
|               | Supermarket Stores   | X |

Table 42: Channels reference table for Modern Times

**Customer relationships** – Modern Times built strong relationships with the following distributors: General Distribution, Union Beer Distributors, Hensley, Advance Beverage, Central Coast Distributing, Delta Pacific, Matagrano, Stone Distributing and Maui/Stone. We can suppose that the company has been able to build strong connections with these distributors by signing long term contracts with them.

Very different initiatives are organised to engage with customers. In particular the firm hosts very different events in its space such as the “Annual Festival of Dankness”, a monthly homebrewing competition and exclusive parties for subscription members. Collaborations beers have been produced with world-famous brands such as Cloudwater (UK), Other Half (USA) and Garage Project (NZ). Modern times offers also a membership program called “League of Partygoers and Elegant People” through which it sells its products through an innovative subscription revenue form.

**Revenue streams** – with distributors the firm collects revenues through contracts in which additional services and discounts are included. With final customers the main revenue model is a fixed menu pricing one, with a target price defined by the location and the channel of consumption. An innovative revenue model is represented by the membership subscription offered, through which final customers can receive exclusive beers and participate at unique events paying an annual fee.
Key resources – the key assets that Modern Times currently owns are a main brewing facility “Fermentorium” in San Diego, the brewery’s taproom in which fresh beers and coffee are served and a pub in the North Park district of San Diego.

The future expansion plans are ambitious and they include different assets. In particular the company will increase its presence in the end market developing a new brewpub and R&D plant in Los Angeles and a foeder brewery, restaurant and biergarten in Anaheim. Will be also created a new production facility in Portland, Oregon in order to enlarge the company geographical presence.

Another important asset developed by the company is the brand, characterized by an iconic visual identity and by strong values represented by the beers produced.

As regards the know-how developed by Modern Times coffee roasting and innovative recipes development could be considered a source of competitive advantage.

An interesting initiative is the employee-ownership announced recently created as an alternative to recent acquisitions in the market.

<table>
<thead>
<tr>
<th></th>
<th>B2C</th>
<th>B2B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer products (Fixed Menu Pricing)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Merchandising</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Events</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Coffee</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Membership subscriptions</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Kickstarter funding for Fermentorium</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Table 43: Revenue streams reference table for Modern Times
Table 44: Key resources reference table for Modern Times

**Key activities** – the main activities performed by Modern Times are production and network ones. Production activities could be summarized with the process of production development: prototyping of the recipe (R&D micro-brewery under construction in Los Angeles), production and delivery through distributors.

Network activities include the engagement and the creation of long term relationships with distributors, but they are not disclosed online.

<table>
<thead>
<tr>
<th>PHYSICAL</th>
<th>Breweries owned (number)</th>
<th>4 (Fermentorium in San Diego, Leisurertown in Anaheim under construction, Los Angeles brewpub under construction, The Belmont Fermentorium in Portland under construction)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Retail shops owned (number)</td>
<td>6 (Fermentorium taproom, North Park tasting room, Encinitas tasting room under construction, Leisurertown restaurant and biergarten, Los Angeles Brewpub, Portland brewery taproom under construction)</td>
</tr>
<tr>
<td></td>
<td>Distribution Centers (location)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self distribution (location)</td>
<td></td>
</tr>
<tr>
<td>INTELLECTUAL</td>
<td>Brands</td>
<td>Modern Times</td>
</tr>
<tr>
<td></td>
<td>Copyrights (types and name)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
<td>Coffee roasting, innovative recipes design</td>
</tr>
<tr>
<td>HUMAN</td>
<td>Production teams (name)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Business teams (name)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other teams (name)</td>
<td></td>
</tr>
<tr>
<td>FINANCIAL</td>
<td>Ownership (type)</td>
<td>30% shares employee-owned</td>
</tr>
</tbody>
</table>

Table 45: Key activities reference table for Modern Times

**Key partnerships** - the main suppliers for the firm are the ones we identified in the research framework section providing key raw materials, packaging goods, machineries and additional services. Distributors represents the main customer segment for Modern Times and, for this reason, they should be considered key partners. In the investor section we will include employees as 30% of the company shares are owned by them thanks to a
program implemented by Modern Times in 2017. The goal is to become a 100% employee owned company in the future.

<table>
<thead>
<tr>
<th>SUPPLIERS</th>
<th>RAW MATERIALS</th>
<th>Hops suppliers</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Malt suppliers</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Packaging materials suppliers</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Machineries suppliers</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Service Providers</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PARTNERS</th>
<th>Distributors and Retailers</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Collaboration initiatives and alliances (name of the company)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INVESTORS</th>
<th>Type and name of investors</th>
<th>Employee ownership program</th>
</tr>
</thead>
</table>

*Table 46: Key partnerships reference table for Modern Times*

*Cost structure* - the main costs sustained by Modern Times are aligned the ones we identified in the research framework. The main fixed costs include equipment, utilities, rent, overhead and depreciation/amortization. The main variable costs are represented by direct materials and piece rate workers.
The Business Model Canvas

**Key Partners**
- Suppliers:
  - Hops suppliers
  - Malt
  - Recycling material
  - Machinery
  - Coffee suppliers
  - Service providers
- Partners:
  - Distributors (more than 10 partner distributors)
- Retailers

**Key Activities**
- Production:
  - Prototyping in Los Angeles (CA) R&D brewpub
  - Production in Fermentorium (CA)
- Global distribution
- Coffee bean and roasting
- Sour and barrel-aging program

**Key Resources**
- Fermentorium (CA) brewery, sour and barrel-aging facility, taproom
- Leisertown (CA) restaurant, diner, and food and beer brewery
- The Belmont Fermentorium Brewery (OR)
- 3 taprooms, brewpub (CA)
- Coffee roaster
- Employees
- Modern Times Brand

**Value Propositions**
- Modern Times Brand
- Coffee
- Iconic visual identity
- Partnerships with distributors for a capillary presence
- Medium/Short time to market
- More than 200 beer produced historically
- Owned brewpub, tasting rooms, and restaurants
- Merchandising
- Events organization
- Continuous expansion

**Customer Relationships**
- Annual festival of darkness
- Long-term contracts with a large number of distributors
- Collaboration
- Membership subscriptions
- Monthly homebrew competition

**Customer Segments**
- B2C
- B2B

**Channels**
- Distribution strategy:
  - On-premise
  - Off-premise
  - Capillary global distribution
- Channel types:
  - Distributor partners
  - 3 taprooms
  - Leisertown
  - Los Angeles Brewpub

**Cost Structure**
- Fixed costs:
  - Equipments and utilities
  - Rent
  - Overheads
  - Depreciation and amortization
- Variable costs:
  - Direct materials
  - Hourly rate workers

**Revenue Streams**
- Beer and coffee sales
- Merchandising
- Membership subscriptions
- Kickstarter funding for Fermentorium
VALUE PROPOSITION LEVEL ANALYSIS (ZOOM-IN)

Values – the name Modern Times comes from a utopian community built on Long Island in 1850 where a group of people created an anarchic experimental society in the research of individual development. The company reflects this philosophy in its products, often creating hybrid styles in which the characteristics of different beer categories blend together. The beers produced by the Modern Times are described as “aroma-driven, complex, flavourful and sessionish non-monogamously”.

The company considers its employees key resources fundamental to the company’s growth and for this reason the firm has become recently employee-owned. Modern Times products and retails have an iconic visual identity that differentiated the firm from competitors.

Products – analysing the Ratebeer database we noticed that Modern Times produces, on average, high alcohol beers recording a mean 7.9% ABV (Alcohol by Volume). Most produced styles are imperial stout, saison and sour/wild ales showing the innovative and creative direction of the firm.

Additional products offered are represented by merchandising, coffee blended and roasted in the Fermentorium taproom and food served in owned retails.

Services – Modern Times offers long term distribution contracts to business customers, while it engages with end customers organising events in its space and offering an annual membership program.
The Value Proposition Canvas

**Mission statements**
“Modern Times” was a utopian community built on Long Island in 1850 by a group of people who thought they could demonstrate what a more perfect society might look like.

**Values**
- Take-overs
- Hybrid styles
- Aroma-driven, complex, sessionish beers
- Employee are key resources
- Owned retail
- Iconic visual identity
- Coffee

**Services**
- Events organization
- Membership subscriptions

**Products offered**
- Iconic products: Fortunate Islands (IPA), Blazing World (Double IPA), Homeland (Saison)
- Sour/Wild Ale (28)
- American Strong Ale (16)
- Imperial Stout (58)
- Saison (55)
- IPA (33)

**Beer offering**
Mean ABV: 7.9%
Fat Head’s Brewery

COMPANY OVERVIEW

Fat Head’s was founded in 1992 when Glenn Benigni opened Fat Head’s Saloon in Pittsburgh, Pennsylvania establishing himself as an early pioneer in bringing craft beer movement to the area. In 2009, given the amazing success of the restaurant, the founder teamed up with Matt Cole, award winning brewer, to open Fat Head’s Brewery and Saloon in Cleveland, Ohio. A full-scale production brewery opened in Middleburg Heights, Ohio in 2012 shifting the focus of the company from a local brewpub chain. The company expanded its geographical presence opening in 2014 another brewpub location in Portland, Oregon.

Fat Head’s production is decentralized as the three brewpubs run by the firm self-produce the beers served from their taps. The main brewing facility, located in Middleburg Heights Ohio, mainly sustains the volumes consumed inside its taproom and the Pittsburgh Fat Head’s Saloon, dedicating a limited amount of production to local distribution. The Middleburg Heights manufacturing plants also host a research and development micro-brewery in which recipes prototypes are developed to be shared to the different brewpubs.

The company recently announced its plan to expand its production by moving to a larger facility with double the brewing capacity. The new facility, including a 125,000-square foot brewing facility and large tap house restaurant, will be opened at the beginning of 2018 with a total investment of $11.4 million. The development plans of the company also include the development of two new brewpubs in Canton, Ohio and in Charlotte, North Carolina.

Fat Head’s earned along the years several awards for its signature beers. For example in 2016 the firm received a gold and a bronze medal in the World Beer Cup and two bronze medals, two silver medals and a gold one in the Great American Beer Festival.

Internal rivalry – represents the direct competition to capture market shares in the industry. The main factors affecting the force are:

- **Concentration and balance of the market:** the craft beer segment is extremely concentrated and, for this reason, a large number of companies compete to capture a small share of the market profits. (↑↑)
- **Diversity of competitors:** craft breweries have a quite similar structure. (=/↓)
- **Industry growth:** the craft beer innovation represented a disruption in the industry, with an impressive increase in volumes in the last years. The consequence is the growth of profits available for the company competing in the new segment. (↑)
- **Product differentiation:** craft beer innovation is based on the showcasing of the different flavours that beer can have. However, the process is quite standard and the recipes are openly shared to the public. The consequence is a weak negative impact on rivalry. (=/↓)
- **Switching costs:** the costs sustained both by end customers and by distributors to change suppliers are low. For this reason there is a low competition to capture and retain new customers. (↓)
- **Fixed costs:** fixed costs have an important impact on the company’s operating leverage. (↑)
- **Storage costs:** breweries hold low stocks in warehouses, given the perishable nature of the product. (=/↑)
- **Excess capacity:** Fat Head’s, in order to exploit the high investments made to acquire assets, saturates the capacity at almost the maximum level. (↓)
- **Exit barriers:** it’s difficult to assess the impact of costs and factors on exit strategies, especially emotional ones. For this reason the parameter does not influence competition. (=)

In the craft beer segment a relevant number of firms is competing for a small amount of market share. The competition among them is quite low (=/↑) with a slightly negative impact on the profitability available on the market (=/-).

**Threats of new entrants** – the segment recorded a relevant increase of number of breweries operating in US in the last years, with low reactions by incumbents. Sometimes companies sustain financially and with owned resources the opening of a new firm in the market.

We can conclude that the innovation is really attractive for new entrants, leading to an increasing level of competition (↑↑) and a consequent strong negative impact on the average market profitability (---).

**Threats of substitutes** – the main substitutes products for craft beer are wine and spirits, addressing the same customers’ needs. Consumers still consider the product more a commodity than a luxury good, with a
consequent higher price elasticity. Compared to its direct competitor, premium beer producers, the product is on average two times more expensive mainly because of economies of scale and the quality of ingredients.

Fat Head’s sells its products mainly through owned brewpubs, where customers could consume fresh beer produced inside the building and order food from the menu. For this reason the firm can be considered a substitute of other local restaurant chains and bars.

We can conclude that the risk of substitution faced by Fat Head’s is high (↑) with a negative impact on profitability (-).

**Bargaining power of buyers** – Fat Head’s has been able to avoid the three-tier distribution system by developing a brewpub chain business model. For this reason the company lowered the bargaining power of distributors, internalizing the profits shared to them. We can now analyse the factors influencing the downstream market we identified:

- **Relative concentration**: the company focused on a direct sales business model, distributing its products mainly through owned brewpubs. The final market is characterized by a very small concentration, where a large number of customers requires a limited quantity of products. The consequence is the possibility to require a higher price mark-up and to internalize the profits shared to distributors and retailers. (↓)

- **Product’s features**: to capture end customers, Fat Head’s developed an immersive experience in owned brewpubs, where people can assist to the brewing process and consume fresh beer. The food offering represents a secondary offering for the company but is important to differentiate from the local restaurants and bars and to have a competing offering. (↓)

- **Buyer’s characteristics**: the transaction nature of end customers is different from the one made by distributors. In fact while business segments interact with breweries in order to resell their products and make profits, end customers interact with them during their spare time as a form of entertainment. The consequence is a weak bargaining power. (≡/↑)

The creation of an immersive experience where end customer could assist to the production process give a competitive advantage to the company, when compared to local competitors such as bars and restaurant chains. For this reason final consumers have a low bargaining power (↓) with a positive effect on profitability (+).

**Bargaining power of suppliers** – the most relevant raw materials suppliers in term of costs and quality impacts are malt and hops providers. Let’s study the determinants of their bargaining power:
• **Relative concentration:** given the extremely high concentration of both the hops and the malt markets, we can conclude that the bargaining power in the hands of craft breweries is very low, with a strong negative effect on competition. (↑↑)

• **Product’s features:** craft breweries choose only world-class high quality suppliers for their products, increasing their impact on the final good performance. (=/↑)

• **Supplier’s characteristics:** given the limited possibility to implement downward integration strategies, suppliers have a strong bargaining power towards craft beer producers. (↑↑)

Upstream competition is the strongest force shaping the industry in which Fat Head’s operates (↑↑), with an extremely negative effect on the average profits available on the market (→).

We can summarize the five forces model by Porter with the following diagram, summarizing each factor’s impact on competition and the final effect on the average profits available.
COMPANY LEVEL ANALYSIS

Customer segments – Fat Head’s, taking advantage of an innovative retail form such as the brewpub, could be able to avoid the three-tier distribution system, interacting mainly with end customers. However, a part of the production volume brewed in the main facility in Middleburg Heights, is dedicated to distribution.

- **Distributors (B2B):** they represent a secondary customer segment for the company as the majority of volumes are decentralized to brewpubs and dedicated to end customers. However, given the expansion plan announced of the Middleburg Heights facilities, the company will allocate a larger quantity of volumes to business customers in the future.

- **End customer (B2C):** they represent the main customer segment for the company and their consumption occurs in the four Fat Head’s brewpubs, the brewery’s taproom and the restaurant. Given the decentralized nature of the production, recipes are developed in the main brewing facility and distributed in the different brewpubs where they are produced. There is almost no segmentation of the beers given the direct consumption nature of the model.

| Year-Round | X | X | X | X |
| Seasonal | X | X | X |
| Limited Release | X | X |

| Non beer drinkers | Commercial beer drinkers | Beer lovers | Craft Beer geeks |
| B2B (distribution) | B2C (owned brewpubs and restaurants) |

Table 47: Customer segments reference table for Fat Head’s

Value proposition – the company focused its business model on direct selling, creating a brewpub chain dislocated in different US states. The different brewpubs are independent each other’s and the production is decentralized in them. The main production facility, in Middleburg Heights, produces volumes for the Fat Head’s Restaurant and Saloon in Pittsburgh and dedicates a limited amount for distribution.

The beers produced by Fat Head’s received very different awards and recognitions in competitions and festival around the world. For example firm’s most iconic beer Head Hunter and Hop Juju received together 12 different awards.

The company started its business with the construction of the Fat Head’s Restaurant and Saloon in Ohio. Nowadays the company runs 2 brewpubs in Ohio and Portland and one main production facility in Ohio. An
expansion plan has been announced recently including 2 new brewpubs, in Ohio and North Carolina, and the construction of a new brewing facility in Middleburg Height that will double the production capacity of the existing one.

Fat Head’s has a vast product portfolio currently offering more than 30 different beers in its brewpubs and counting more than 300 products on the RateBeer historical database.

The company offers additional services and products in its retails including food preparation and table service. It’s possible also to organise parties and catering events inside Fat Head’s facilities.

Channels – the company has an almost national presence currently distributing in Ohio, Pennsylvania, Oregon, Florida and Indiana. With the future expansion project implementation by the company the products will be available also in Kentucky, Virginia, Chicago and Washington D.C.

<table>
<thead>
<tr>
<th>DISTRIBUTION STRATEGY</th>
<th>Number of worldwide distributors off-premise (from RateBeer distributors section)</th>
<th>34</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of worldwide distributors on-premise (from RateBeer distributors section)</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Number of worldwide e-commerce distributors (from RateBeer distributors section)</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHANNEL TYPES</th>
<th>Own</th>
<th>Direct</th>
<th>Web Shop</th>
<th>Apparels, collectibles, accessories, gift cards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Own Retail (type)</td>
<td>1 taproom, 4 brewpubs, 2 under construction, 1 restaurant</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Own Distributors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Partner Retail</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Partner Distributors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supermarket Stores</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 48: Channels reference table for Fat Head’s

Customer relationships – the firms implemented initiatives mainly dedicated to the engagement of end customers insider its owned retails. In particular Fat Head’s organizes different events such as beer launch, concerts and private events inside their spaces. The company also participates at different festivals and industry exhibitions such as American Craft Beer Week, American Great Beer Festival and World Beer Cup.

Different collaborations have been made by the firm with other famous American breweries such as Founders, Green Flash and New Belgium. Fat Head’s offers also a membership program called “Mug Club”.

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Revenue streams - the revenues collected by the firm are diversified by the customer segment to which they relate to. Contracts are signed with distributors in order to build long term relationships and they consider additional services and discounts. End customers have a fixed menu pricing revenue model, with a target price defined by the location and the channel of consumption. The “Mug Club” membership program it’s an innovative source of revenues for the firm.

<table>
<thead>
<tr>
<th>B2C</th>
<th>Beer products (Fixed Menu Pricing)</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Merchandising</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Food (in proprietary retailers)</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Events organisation and catering</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>The Mug Club membership program</td>
<td>X</td>
</tr>
</tbody>
</table>

| B2B                  | Beer products (Contracts)          | X |
|                      | Merchandising and other products   | X |

Table 49: Revenue streams reference table for Fat Head’s

Key resources – Fat Head’s owns a main production facility in Middleburg Heights, Ohio and started its business in the original Fat Head’s Restaurant and Saloon in Pittsburgh. The main production facility will move its old production facility inside a new building, enlarging the tasting room space, doubling the production capacity, including a micro research and development equipment and a barrel room.

The company implemented a brewpub chain strategy by decentralizing the production in different retail manufacturing hybrids in which customers can not only enjoys fresh beers but also experience their production live. Currently the firm runs 2 brewpubs: one in North Olmsted, Ohio and one in Portland, Oregon. However an expansion plan has been announced recently through which 2 new brewpubs will be opened in two new locations: Canton, Ohio and Charlotte, North Carolina.

The know-how built by the company is focused on the recipe development in the central brewery and the decentralization of the production in the different brewpubs. Additional knowledge is represented by the food preparation and the management of the different retails owned.
Table 50: Key resources reference table for Fat Head’s

<table>
<thead>
<tr>
<th>PHYSICAL</th>
<th>BREWERS OWNED (NUMBER)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Brewery facility (Middleburg Heights, Ohio to be replaced with a new one with double capacity, pilot kit and barrel aging program)</td>
</tr>
<tr>
<td></td>
<td>4 brewpubs (North Olmsted, Ohio; Portland, Oregon; Canton, Ohio under construction and Charlotte, North Carolina under construction)</td>
</tr>
<tr>
<td></td>
<td>6 (4 brewpubs, 1 brewery’s taproom, 1 restaurant: Fat Head’s Saloon in Pittsburgh, Pennsylvania)</td>
</tr>
<tr>
<td></td>
<td>DISTRIBUTION CENTERS (LOCATION)</td>
</tr>
<tr>
<td></td>
<td>SELF DISTRIBUTION (LOCATION)</td>
</tr>
<tr>
<td>INTELLECTUAL</td>
<td>BRANDS (NAME)</td>
</tr>
<tr>
<td></td>
<td>COPYRIGHTS (TYPES AND NAME)</td>
</tr>
<tr>
<td></td>
<td>KNOWLEDGE (TYPE)</td>
</tr>
<tr>
<td></td>
<td>RECIPE DESIGN</td>
</tr>
<tr>
<td>HUMAN</td>
<td>PRODUCTION TEAMS (NAME)</td>
</tr>
<tr>
<td></td>
<td>BUSINESS TEAMS (NAME)</td>
</tr>
<tr>
<td></td>
<td>OTHER TEAMS (NAME)</td>
</tr>
<tr>
<td></td>
<td>BREWPUBS EXPANSION AND MANAGEMENT</td>
</tr>
<tr>
<td>FINANCIAL</td>
<td>OWNERSHIP (TYPE)</td>
</tr>
<tr>
<td></td>
<td>OWNED BY THE 2 FOUNDERS</td>
</tr>
</tbody>
</table>

**Key activities** – the main activities performed by Fat Head’s are production and network ones. Production activities could be summarized with the product development process: prototyping of the recipes in the Middleburg Height main brewery, production in the local brewpub and direct sale to final customers in the same retail. An exception is represented by the volumes produces for Fat Head’s Restaurant and Saloon and for distributors centralized in the main manufacturing plant.

Network activities play a secondary role, being a small amount of sales volumes dedicated to the customer segment.

Table 51: Key activities reference table for Fat Head’s

<table>
<thead>
<tr>
<th>PRODUCTION ACTIVITIES</th>
<th>DESIGN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X (Middleburg Heights’ brewery pilot kit)</td>
</tr>
<tr>
<td></td>
<td>X (Middleburg Height’s brewery produces for distribution and the Fat Head’s Saloon, the brewpubs for self-consumption)</td>
</tr>
<tr>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PLATFORM/NETWORK ACTIVITIES</th>
<th>B2B NETWORK ACTIVITIES (TYPE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B2C NETWORK ACTIVITIES (TYPE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Key partnerships** – Fat Head’s interacts with different suppliers. The most important are key raw materials, packaging goods, food, machineries and additional services providers. Distributors are considered key partners for the company but they have a limited impact on the business model of the firm.
<table>
<thead>
<tr>
<th>SUPPLIERS</th>
<th>RAW MATERIALS</th>
<th>Hops suppliers</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Malt suppliers</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Packaging materials suppliers</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Machineries suppliers (BrauKon, Germany)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Food suppliers</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Service Providers</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>PARTNERS</td>
<td>Distributors and Retailers</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Collaboration initiatives and alliances (name of the company)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INVESTORS</td>
<td>Type and name of investors</td>
<td>Owned by the 2 founders</td>
<td></td>
</tr>
</tbody>
</table>

*Table 52: Key partnerships reference table for Fat Head’s*

*Cost structure* – the main costs sustained by Fat Head’s are aligned to the ones identified in the research framework.
VALUE PROPOSITION LEVEL ANALYSIS (ZOOM-IN)

Values – the mission statement of the company is “creating good beer”. This simple statement is reflected in the multiple awards won by Fat Head’s along the years, reflecting the quality and the creativity of its products. The company usually produced traditional beer styles, mostly German beer and hoppy US styles. Inside owned facilities is served American food such as burgers, fries and salads.

Products – analysing the RateBeer historical database we discovered that the company focused on IPA and its different evolutions such as American Pal Ale and Imperial IPA. The most iconic products, Head Hunter (IPA) and Bumble Berry (honey blueberry ale), have won different awards along the years, clearly listed on the company’s website.

Additional products offered by the firm are merchandising, sold through the e-commerce online, and food, prepared fresh in owned brewpubs.

Services – Fat Head’s sustains its core offering with different services such as events organization, catering and food preparation. For distributors the main instrument used to build long term relationships are contracts.
The Value Proposition Canvas

**Mission statements**
- "Creating good beer. It's what we do"

**Values**
- Hard work
- Traditional beer styles
- Food preparation
- Owned brewpubs and restaurant
- American food

**Services**
- Distribution contracts
- Events and catering organization

**Products offered**
- Iconic products: Head Hunter IPA, Bumble Berry (Stone Blueberry ale), Alpenglow (Weizenbock), Bone Head (Red ale)
- Imperial Stout (19)
- Spice/Herb/Vegetable (17)
- IPA (54)
- American Pale Ale (27)
- Imperial IPA (20)

**Beer offering**
- Mean ABV: 7.03%
Jack’s Abby Craft Lagers

COMPANY OVERVIEW

Jack’s Abby was founded in 2011 by three brothers, Jack, Eric and Sam Hendler in Framingham, Massachusetts. Each of the three brothers focused on a particular area of the company: Jack Hendler is the company’s master brewer, Eric Hendler is the head of finance and Sam Hendler is the head of sales.

Jack’s Abby is specialized on a particular class of beer styles, lagers. Lagers were first created in Bavaria 200 years ago prior to the advent of refrigeration. German brewers used to cool the beer during the summer months inside cellars filled with ice from nearby lakes and rivers. This class of beer styles is characterized by a cool fermentation through a bottom fermenting yeast followed by a maturation of 4-6 weeks in cold storage known as “lagering”. The company, taking advantage of this process, could not only create a smoother and cleaner flavoured beer but also change the misperception created by commercial interpretations of the styles. The most consumed beers in US in fact, Bud Light, Budweiser and Miller Light\footnote{Source: Statista (2016). “Sales of the leading domestic beer brands of the United States in 2016 (in million U.S. dollars)”, retrieved on 2017/11/08 [at: https://www.statista.com/statistics/188723/top-domestic-beer-brands-in-the-united-states/]}, could be all classified in the lager beer category.

Jack’s Abby moved into a new facility in 2015 nearly six times larger than its original one\footnote{Source: Boston Magazine (2016). “Jack’s Abby Doubles Its Framingham Footprint”, retrieved on 2017/11/09 [at: http://www.bostonmagazine.com/restaurants/2016/09/07/jacks-abby-clinton-street-expansion/]} that allowed the company to increase production capacity and to add a couple of important assets to its resources. In particular the firm started producing experimental sour and barrel-aged beers through the brand Springdale Barrel Room, a side project launched in 2016. Springdale Barrel Room has its own dedicated facilities disconnected to the Jack’s Abby ones in order to avoid contaminations and it’s considered a separated entity with its own staff and business model\footnote{Source: Good Beer Hunting (2016). “Jack’s Abby to launch new barrel-aged and sour beer venture” retrieved on 2017/11/09 [at: http://goodbeerhunting.com/sightlines/2016/10/25/jacks-abby-to-launch-new-barrel-aged-and-sour-beer-venture?rq=springdale]}. Springdale brand, in fact, is dedicated to the production of sours and barrel-aged beers commercialized through the owned brewery’s pub.

The firm, after the expansion, could also be able to develop Beer Hall and Kitchen the taproom and restaurant of the brewery serving fresh lager and wood-fired pizza.
INDUSTRY LEVEL ANALYSIS (ZOOM-OUT)

*Internal rivalry* – represents the competition among existing craft breweries to capture market shares in the industry. Let’s analyse briefly the main factors affecting this force:

- **Concentration and balance of the market:** the craft beer segment is extremely concentrated with a strong negative impact on competition. (↑↑)
- **Diversity of competitors:** firms operating in the segment have a quite standard structure. (=/↓)
- **Industry growth:** given the amazing increase of relevance of craft beer in the market, there are new profitability growth opportunities for every company competing in the new segment. (↑)
- **Product differentiation:** beer production process is quite standard and openly shared to the public. Jack’s Abby focused the brands it developed on two defined beer styles, differentiating slightly from competitors. (↓)
- **Switching costs:** given the low costs sustained to change supplier, there is low competition inside the segment to capture and retain customers. (↓)
- **Fixed costs:** fixed costs have an important impact on the company’s balance sheet. (↑)
- **Storage costs:** breweries hold low stocks in their warehouses to provide fresh products to their customers. (=/↑)
- **Excess capacity:** Jack’s Abby, in order to exploit the high investments made to acquire assets, saturates the capacity at almost the maximum level. Some excess capacity is left to ensure flexibility of the manufacturing operations. (↓)
- **Exit barriers:** given the difficulty to assess the emotional and economic exit barriers of the industry, we can conclude that the parameter is not relevant. (=)

The competition among internal rivals is quite low (=/↑) with a slightly negative impact on the profitability available on the market (=/-).

*Threats of new entrants* – like we said in the industry overview, the segment recorded a substantial increase of number of breweries operating in US in the last years, with low reactions by incumbents.

We can conclude that the innovation is really attractive for new entrants, leading to an increasing level of competition (↑↑) and a consequent strong negative impact on the average market profitability (--).

*Threats of substitutes* – the company developed two different brands dedicated to two specific lines of products. In particular Jack’s Abby, producing lagers, could be considered a craft alternative to the offering marketed by commercial beer competitors and Springdale, producing sour and barrel-aged beers, could be considered an alternative to high-end wine and spirits.
We can conclude that the risk of substitution faced by Jack’s Abby is higher than the average experienced by competitors (↑) with a negative impact on profitability (-).

**Bargaining power of buyers** – Jack’s Abby has been able to lower the bargaining power of distributors by commercializing its products mainly in owned retails. We can now analyse the factors influencing the downstream market we identified:

- **Relative concentration:** the company focused on a mixed business model, distributing its products through owned retails and distribution. By following this strategy Jack’s Abby has been able to lower the bargaining power of distributors. (↑)
- **Product’s features:** to capture end customers, Jack’s Abby on one side an immersive experience in owned retails for their customers and on the other side convenient long-term contracts for its distributors. The consequence is an increasing impact of competition given the competitive offering of competitors. (=/↑)
- **Buyer’s characteristics:** given the mixed nature of buyers it’s difficult to assess their profitability. For this reason the factor has no impact on buyer’s bargaining power. (=)

The creation of a two-sided business model allowed the company to lower the bargaining power of distributors (=/↑) with a negative effect on profitability (=/-).

**Bargaining power of suppliers** – let’s analyse the main factors affecting hops and malt providers, the most crucial suppliers to be manage by a craft beer company:

- **Relative concentration:** given the extremely high concentration the two most important suppliers market we identified, we can conclude that the bargaining power in the hands of craft breweries is very low. (↑↑)
- **Product’s features:** craft breweries choose only world-class high quality suppliers for raw materials, increasing their impact on the final good performance. (=/↑)
- **Supplier’s characteristics:** given the limited possibility to follow a downward integration strategy, suppliers have a strong bargaining power towards craft beer producers. Jack’s Abby has launched Wet Hop Lager, a beer produced with hops from their own hops field in New England. However the volumes of raw materials produced are not enough to lower this force. (↑↑)

Upstream competition is the strongest force shaping the industry in which Jack’s Abby operates (↑↑), with an extremely negative effect on the average profits available on the market (→).
We can summarize the five forces model by Porter with the following diagram, summarizing each factor’s impact on competition and the final effect on the average profits available.

**Figure 56: Porter’s five forces model applied to Jack’s Abby case study**
COMPANY LEVEL ANALYSIS

*Customer segments* – the company developed a two-sided business model by creating two different brands with a defined business model and a specific product orientation. Jack’s Abby, in particular, has been dedicated to lagers and its products are mainly commercialized through distributors. Springdale has been dedicated to experimental sour and barrel-aged beers and its products are sold only through the branded barrel room.

The main customers with whom the company interact are:

- *Distributors (B2B):* the company sell to distributors only Jack’s Abby branded products, segmenting them through the following categories: core, seasonal, rotating and specialty beers.
- *End customers (B2C):* are reached by the company through the two brands developed, each of them sold through a dedicated retail built close to the company’s main facilities. In particular Jack’s Abby lagers are sold in the Beer Hall and Kitchen, the taproom and restaurant of the brewery, while Springdale are exclusively sold in the Springdale Barrel Room, a pub adjacent to the sour and barrel-aging plants. Springdale is the largest barrel-aging program in New England with 1,000 wine and spirits barrels and five foeders operating.¹⁰⁷

<table>
<thead>
<tr>
<th></th>
<th>Core</th>
<th>Seasonal</th>
<th>Rotating</th>
<th>Specialty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jack’s Abby</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Springdale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(side project)</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Table 53: Customer segments reference table for Jack’s Abby

*Value proposition* – Jack’s Abby branded products are taken to the market through the brewery’s tap room Beer Hall and Kitchen and distribution contracts. The beers produced under this name are lagers, traditional beer produced in Germany following a process of cold storage called “lagering”. This brewing method is made using bottom fermenting yeast that works at lower temperatures compared to the common ale yeast. The

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consequence is a smooth, clean and crisp flavour enhancing the characteristics of malt. Two-thirds of the total sales come from Massachusetts, but Jack’s Abby beers could be also found in Vermont, New York and New Hampshire108. This line of products has a limited portfolio, with around 160 different beers produced historically according to the RateBeer database.

Springdale brand has been dedicated to a more sophisticated customer niche. In fact under this product line, the firm produces experimental beers showcasing the marriage between wood and beer and the particular taste of sours produced through the work of mixed fermentations and bacteria. Springdale products are sold exclusively in the Springdale Barrel Room, a pub adjacent to the dedicated production facilities separated from the Jack’s Abby ones. Currently the firm considers the brand a side project given its recent development. In the future Springdale will have a relevant role to capture high-end customers profits and it will have a separated entity from Jack’s Abby with a dedicated staff and business model.

The firm currently owns 2 breweries in Framingham, Massachusetts one dedicated to the production of lagers and one dedicated to the production of sour and barrel aged products. The plan is to expand the facility in 2018, doubling the brewery’s footprint.

Two different retails are currently run by the firm. The Beer Hall and Kitchen serves Jack’s Abby lagers together with wooden-fire pizza, while Springdale Barrel Room serves sour and barrel aged beers.

The company organise events inside their space and brewery tours weekly.

*Channels* – the firm focuses its presence on a regional scale, selling two-thirds of the total production volumes in Massachusetts. However, recently different distribution contracts have been signed to expand the geographical presence in Vermont, New York and New Hampshire.

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Customer relationships – the firm developed customer relationship initiatives to build a connection with the two segments identified. For end customers, in particular, the company organised events inside its space such as beer dinners, new beer launches and tastings. Different collaborations with other companies have been implemented with Evil Twin, Lawson’s Fines Liquids and Sole. Jack’s Abby counts on different awards and prizes won along the years in world famous competitions such as World Beer Cup and Great American Beer Festival.

For distributors the firm offers discounts, rewards and additional services by contract.

Revenue Streams – contracts are signed with distributors in order to build long term relationships with them while end customers have a fixed menu pricing model, where target price is defined by the location and the channel of consumption.

<table>
<thead>
<tr>
<th>B2C</th>
<th>Beer products (Fixed Menu Pricing)</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Merchandising</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Events organisation</td>
<td>X</td>
</tr>
<tr>
<td>B2B</td>
<td>Beer products (Contracts)</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Merchandising and other products</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 54: Channels reference table for Jack’s Abby

Table 55: Revenue streams reference table for Jack’s Abby
**Key resources** – Jack’s Abby owns two main production facilities in Framingham, Massachusetts, one dedicated to the production and packaging of lagers and one dedicated to the production of experimental barrel-aged and sour beers.

The two brands created by the company have their own dedicated retail shop adjacent to the manufacturing plants: Springdale Barrel Room and Beer Hall and Kitchen.

The company created a hop farm in Vermont providing raw materials for the production of the limited release beer Wet Hop Lager.

| PHYSICAL | Breweries owned (number) | 1. brewery (Framingham, Massachusetts. The plan is to double its footprint by 2018)  
|          | 2. barrel room and sour facility (connected to the main brewery facility, it hosts the Sprinwood project) |
|          | Retail shops owned (number) | 2. Beer Hall and Kitchen (brewery’s taproom), Springdale barrel room |
|          | Distribution Centers (location) |  |
|          | Hops farm | Vermont owned hops farm (limited production) |
|          | Self distribution (location) |  |

| INTELLECTUAL | Brands | Jack’s Abby, Springdale |
|             | Copyrights (types and name) |  |
|             | Knowledge | Lager beer production, sour fermentation, barrel aging |

| HUMAN | Production teams (name) |  |
|       | Business teams (name) |  |
|       | Other teams (name) |  |

| FINANCIAL | Ownership (type) | Owned by the 3 founders |

*Table 56: Key resources reference table for Jack’s Abby*

**Key activities** – Jack’s Abby performs two main types of activities: production and network. Production activities include the different stage of product development from prototype design, to production and delivery. In particular the two product lines created by the company follow a distinct manufacturing process in two separated facilities to avoid contamination.

Network activities include the engagement and the creation of long term relationships with distributors, but they are not disclosed online.
Table 57: Key activities reference table for Jack’s Abby

**Key partnerships** – the main partners for the company are hops and malt providers, packaging goods and machineries suppliers. The company developed the largest barrel-aging program in New England hosting 5 foeder fermenter and more than 1,000 oak barrels previously used to store wine and spirits.

Distributors are key partners to expand the geographical presence of the company and, for this reason, they should be considered key partners in the company business model.

Table 58: Key partnerships reference table for Jack’s Abby

**Cost structure** - the main costs sustained by Jack’s Abby are aligned to the ones we identified in the research framework. The main fixed costs include equipment, utilities, rent, overhead and depreciation/amortization. The main variable costs are represented by direct materials and piece rate workers.
VALUE PROPOSITION LEVEL ANALYSIS (ZOOM-IN)

Values – the values and product orientations followed by the two brands created by the company are very different. Jack’s Abby is dedicated to the production of German inspired lagers, produced through a cold fermentation process called “lagering”, while Springdale is dedicated to experimentation with ales beer styles, refined through barrel aging techniques and the utilization of mixed yeasts and bacteria.

Products – the vast majority of products offered by the company are sour/wild ales, smoked and pilsner reflecting the product orientation of the two brands. The most iconic Jack’s Abby products are Hoponius Union (India Pale Lager), Excess (India Pale Lager) and Smoke & Dagger (Black Lager).

Additional products offered are merchandising, sold online through the e-commerce.

Services – the company organizes very different events for customers inside its spaces and tours of the brewery are organised weekly.
The Value Proposition Canvas

**Mission statements**
- Jack’s Abby: Drink Lager

**Values**
- Hard work
- Traditional German beer styles
- Springdale: experimentation with barrel-aging ales and sour fermentations

**Services**
- Brewery tours
- Events organization and participation
- Merchandising

**Products offered**
- Iconic products: Hoponius Union (India Pale Lager), Excess (India Pale Lager), Smoke & Dagger (Black Lager)
- Smoked (18)
- Pilsner (9)
- Berliner Weisse (9)
- Sour/Wild Ale (50)
- India Pale Lager (26)
- Baltic Porter (19)
- Mean ABV: 6.46%

**Beer offering**
Revolution Brewing

COMPANY OVERVIEW

Josh Deth, founder of Revolution Brewing, started his career in the craft beer industry in 1995 when he landed a job at Golden Prairie Brewing. A few years later Josh started working at Goose Island as a cellarman and brewpub brewer and there he began to think about the idea to open its own brewery. After few failed attempts, he opened Handlebar in 2003, a vegetarian restaurant in Chicago, and he also held the role of Executive Director of Logan Square Chamber of Commerce. Thanks to this position Josh found a cool old building in the Logan Square neighbourhood inside which Revolution Brewing was founded in 2010 as a brewpub. The pub has been expanded in 2011 adding a 2nd floor Brewers’ Lounge.

A separate production brewery, with canning and bottling lines and a taproom, opened in 2012 about a mile from the original brewpub. The production capacity of the main plants has been continuously growing since then. In fact the facilities have been expanded 3 times since its foundation, reaching 180,000 barrels of yearly production capacity\(^ {109}\).

Revolution Brewing now employs more than 160 people\(^ {110}\) and sells most of its beer in the Chicago area\(^ {111}\). The company, however, can rely on 44 official distributor partnerships signed around US with a relevant presence in Illinois, Indiana, Ohio, Massachusetts, Michigan, New Jersey, New York City and Wisconsin. It’s interesting to notice that the firm’s most iconic beer, Anti-Hero IPA, accounts for about the 50% of the total brewery’s sales\(^ {112}\).

The beers produced by Revolution Brewing reflect the evolving taste of consumers asking for bigger flavours, more variety and better beer. The firm produces dozens of different beer styles IPAs, porters, pilsners, Belgian ales and barrel aged beers.

INDUSTRY LEVEL ANALYSIS (ZOOM-OUT)

Internal rivalry – or direct competition represents the rivalry to capture market shares in the industry. Let’s analyse briefly the main elements affecting this force:

- **Concentration and balance of the market:** the craft beer segment is extremely concentrated with more than 5,200 companies competing for a small section of the market. (↑↑)
- **Diversity of competitors:** craft breweries in US have a quite similar structure. (=/↓)
- **Industry growth:** the impressive average increase in volume in the last years leads to profitability growth opportunity for every company competing in the new segment. (↑)
- **Product differentiation:** beer production process for craft breweries is on average quite standard and openly shared to the public. The consequence is a weak negative impact on rivalry. (=/↓)
- **Switching costs:** there is a low competition to capture and retain new customers given the low substitution costs sustained by them to change supplier. (↓)
- **Fixed costs:** fixed costs play an important role in the company’s balance sheet. (↑)
- **Storage costs:** given the perishable nature of the product and the flexibility required by the company’s operations, breweries hold low stocks in warehouses. (=/↑)
- **Excess capacity:** Revolution Brewing, in order to exploit the high investments made to acquire manufacturing equipment, saturates the capacity at almost the maximum level. (↓)
- **Exit barriers:** it’s difficult to assess the impact of costs and additional factors on exit strategies, and for this reason we couldn’t assess the impact of exit barriers on direct rivalry. (=)

The competition among direct competitors is quite low (=/↑) with a slightly negative impact on the profitability available on the market (=/-).

Threats of new entrants – like we said in the industry overview, a relevant number of new craft breweries start business every year, facing low reactions by incumbents.

We can conclude that the innovation is really attractive for new entrants, leading to an increasing level of competition (↑↑) and a consequent strong negative impact on the average market profitability (--).

Threats of substitutes – craft beer is in a slightly disadvantaged position compared to its main substitutes wine and spirits. For this reason the risk of substitution faced by Revolution Brewing is medium/high (=/↑) with a weak negative impact on profitability (=/-).
Bargaining power of buyers – given the three-tier distribution system set by law, the main downstream actors with whom Revolution Brewing has to interact to sell its products are distributors focusing its presence on the Chicago area. We can now analyse the factors influencing the downstream market we identified:

- **Relative concentration:** in the analysis we made in the introduction of the industry we discovered that the distribution market is characterized by a small amount of independent firms. For this reason the company faces a strong competition to reach the retail market. (↑↑)
- **Product’s features:** to capture distribution, breweries combine together their products with services in order to have a competitive offering. Given the limited financial resources owned by craft breweries compared to rivals, the firms struggle to get the access on the final market. (↑↑)
- **Buyer’s characteristics:** given the high profitability of distributors, the impact on rivalry is positive. (↓)

Bargaining power of buyers is extremely high and the management of distributors is crucial for the success of a craft brewery. For this reason this force has a strong negative impact on competition (↑↑) with a negative effect on profitability (--).

Bargaining power of suppliers – the most important suppliers we identified are hops and malt providers, as these raw materials are the most relevant in term of costs and quality impact. We can now focus on the main force determinants connected to these markets.

- **Relative concentration:** given the extremely high concentration of both the hops and the malt markets and the influence that big multinational competitors have towards them, we can conclude that the bargaining power in the hands of craft breweries is very low, with a strong negative effect on competition. (↑↑)
- **Product’s features:** craft breweries choose only world-class high quality suppliers for their products, increasing their impact on the final good performance. (=/↑)
- **Supplier’s characteristics:** given the limited possibility to implement downward integration strategies, suppliers have a strong bargaining power towards craft beer producers. (↑↑)

Upstream competition is the strongest force shaping the industry in which Revolution Brewing operates (↑↑), with an extremely negative effect on the average profits available on the market (--).

We can summarize the five forces model by Porter with the following diagram, summarizing each factor’s impact on competition and the final effect on the average profits available.
Figure 57: Porter’s five forces model applied to the Revolution Brewing case study
COMPANY LEVEL ANALYSIS

Customer segments – Revolution Brewing interfaces with two main customer lines: distributors and end customers.

- **Distributors (B2B):** they represent the main customer with whom the company interact to take its products to the market, mainly focusing in the Chicago area. It’s interesting to notice that Revolution Brewing beers are available only in cans or kegs.
- **End customers (B2C):** they play a secondary role in the company business model as end customers consumption volumes mainly occurs in the German inspired brewery’s taproom and in the original brewpub in Chicago.

| Core Cans | X | X | X |
| Seasonals (cans) | X | X | X |
| League of Heroes (cans) | | X | X |
| High Gravity (cans) | X | X | |
| Deep Wood Series | X | X | |
| Non beer drinkers | | | |
| Commercial beer drinkers | | | |
| Beer lovers | | | |
| Craft Beer geeks | | | |

**Table 59: Customer segments reference table for Revolution Brewing**

Value proposition – Revolution Brewing focused its business model on distribution, limited by the three-tier distribution system set by law. The geographical presence is focused in the Chicago area that represents the main market for the company. However, building long-term relationship with 44 different distributors\(^\text{113}\), the firm could be able to expand its presence in other geographical markets such as Illinois, Indiana, Ohio, Massachusetts, Michigan, New Jersey, New York City and Wisconsin.

The main values represented by the brand are the distinction of company’s quality from the commercial offering available and the accessibility of the products for everyday people. The consequences are the production of a large number of different styles, at a reasonable price, commercialized mainly in cans.

Revolution Brewing production is concentrated in the Chicago main brewing facility, where the company built also a German inspired taproom. The facility has been expanded three different times reaching a 180,000 barrels yearly production capacity. The firm owns also a brewpub in Chicago, the original asset from which Revolution Brewing started.

The company has a big product portfolio offering about 30 different beer on its website and counting around 300 products on the RateBeer historical database

The firm offers additional products and services to build relationship with final customers such as merchandising, private events and brewery tours.

Channels – Revolution Brewing focused its presence in the Chicago area but it can rely on 44 different distributors that serve the following states: Illinois, Indiana, Ohio, Massachusetts, Michigan, New Jersey, New York City and Wisconsin.

<table>
<thead>
<tr>
<th>DISTRIBUTION STRATEGY</th>
<th>Number of worldwide distributors off-premise (from RateBeer distributors section)</th>
<th>68</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of worldwide distributors on-premise (from RateBeer distributors section)</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Number of worldwide e-commerce distributors (from RateBeer distributors section)</td>
<td>9</td>
</tr>
</tbody>
</table>

**CHANNEL TYPES**

<table>
<thead>
<tr>
<th>Own</th>
<th>Direct</th>
<th>Web Shop</th>
<th>Apparel, drinkware, gift cards, ticket events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own</td>
<td>Own Retail (type)</td>
<td>1 taproom, 1 brewpub</td>
<td></td>
</tr>
<tr>
<td>Own</td>
<td>Own Distributors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner</td>
<td>Partner Retail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner</td>
<td>Partner Distributors</td>
<td>X (44 official distributors from the website)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supermarket Stores</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 60: Channels reference table for Revolution Brewing*

Customer relationships – the initiatives implemented by the brewery could be divided according to the customers to which are appointed. For end customers the firm organizes events inside its facilities such as Oktoberfest, beer yoga lessons, beer dinners and tastings and it signed a partnership with Chicago White Sox.

Revolution Brewing presents on its official website 44 official distributors coming from different US states. We can assume that different services and discounts are offered to them in order to build a long-term relationship but these informations are not disclosed to the public.
Revenue streams - the revenues collected by the firm are diversified by the customer segment to which they related to. Contracts are signed with distributors in order to build long term relationships and they consider additional services and discounts. End customers have a fixed menu pricing revenue model, with a target price defined by the location and the channel of consumption.

<table>
<thead>
<tr>
<th>B2C</th>
<th>Beer products (Fixed Menu Pricing)</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Merchandising</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Events organisation</td>
<td>X</td>
</tr>
<tr>
<td>B2B</td>
<td>Beer products (Contracts)</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Merchandising and other products</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 61: Revenue streams reference table for Revolution Brewing

Key resources – Revolution Brewing has its main production facility in Chicago, Illinois in which the company has built a German inspired taproom. The company owns also a brewpub in downtown Chicago where it started its operations in 2010.

| PHYSICAL  | Breweries owned (number) | 1 brewery in Chicago |
|           |                         | 1 brewpub in Chicago  |
|           | Retail shops owned (number) | 1 brewery's taproom |
|           | Distribution Centers (location) | 1 brewpub in Chicago |
|           | Self distribution (location) | |
| INTELLECTUAL | Brands (number) | Revolution Brewing |
|             | Copyrights (types and name) | |
|             | Knowledge | |
| HUMAN       | Production teams (name) | Administration, operations, sales, marketing |
|             | Business teams (name) | Brewing, quality control |
|             | Other teams (name) | Brewpub managers, party planning, tap room |
| FINANCIAL   | Ownership (type) | Private and independent |

Table 62: Key resources reference table for Revolution Brewing

Key activities – the main activities performed by Revolution Brewing are production and network ones. Production activities could be summarized with the process of product development: recipes prototyping, production and delivery. The brewpub in Chicago is considered by the company a small batch facility and it helps the company to refine and design new recipes.

Network activities include the engagement and the creation of long term relationships with distributor partners.
Table 63: Key activities reference table for Revolution Brewing

Key partnerships – the main suppliers for the firm are the ones we identified in the research framework section providing key raw materials, packaging goods, machineries and additional services. Distributors represents the main customer segment for Revolution Brewing and, for this reason, they should be included in this section.

Table 64: Key partnerships reference table for Revolution Brewing

Cost structure – the costs sustained by Revolution Brewing are aligned with the ones we identified in the research framework.
VALUE PROPOSITION ANALYSIS (ZOOM-IN)

Values – Revolution Brewing main mission is to “work hard to provide great, accessible craft beer for everyday people”. The values represented by this statement is the accessibility of products, the aim to target the mainstream market and to substitute the lower quality offering made by commercial breweries. The consequence on product orientation is the variety of beer styles produced mainly in cans form.

Products – the most iconic product by the company is Anti-Hero IPA that represents about 50% of the total brewery’s sales. The variety of products offered is reflected on the historical RateBeer database as IPA, Imperial Stout and American Strong Ale result the most produced styles by the firm. Additional products are represented by merchandising and gift cards.

Services – for end customers Revolution Brewing organizes different events inside its spaces including dinners, beer tastings and lessons. The company offers also weekly tours of its brewery.
The Value Proposition Canvas

**Values**
- Craft Beer revolution
- Independence
- Accessibility
- Bigger flavors, more variety and better beer

**Services**
- Brewery tours
- Events organization and participation
- Merchandising
- Gift Cards

**Products offered**
- Iconic products: Anti-Hero (IPA), Fist City Pale Ale, Eugene Porter, Bottom Up Wit, Witbier
- American Strong Ale (15)
- Barley Wine (12)
- IPA (28)
- Imperial Stout (17)
- American Pale Ale (16)

**Beer offering**
- Mean ABV: 7.53%
Pizza Port

COMPANY OVERVIEW

Pizza Port history started in 1987 when a pair of siblings Gina and Vince Marsaglia bought a struggling pizza restaurant in Solana Beach, California. Early on, Vince took advantage of the free space available in the restaurant to start home brewing as a hobby. Given the success of the recipes created, they decided to turn the restaurant into a brewpub, serving the first craft beer to their clients in 1992.

Pizza Port brewpub quickly gained a reputation in the San Diego’s craft beer scene and following this success they decided to add a new location in Carlsbad, California in 1997 and to hire as a new head brewer for the original brewpub Tomme Arthur, former employee at White Labs yeast bank and supplier. With Arthur as head brewer, the Solana Beach location won 13 Great American Beer Festival medals along the years[^114]. A third location has been open in San Clemente in 2003 and Pizza Port was named Small Brewpub of the Year at the Great American Beer Festival in 2003 and 2004. In 2008 a premium bottle shop has been added to the Carlsbad location and a fourth brewpub has been opened in 2010 in Ocean Beach. Each of the Pizza Port brewpubs has an independent crew of brewer who develops their own recipes and signature styles. Recipes could be shared between the location but the pubs are free to produce the beers they want[^115].

Pizza Port opened in 2013 its first production facility in the Bressi Ranch region of Carlsbad, California where the firm cans a line of signature Pizza Port beer for distribution. The facilities include a 37,000 square foot brewery, a pub, a retail space and even on onsite ice cream making facility[^116].

The two founders and the Solana location’s master brewer Arthur Tomme saw an opportunity when Stone Brewing decided to move production in Escondido and in 2006 launched a side-project into the Stone original brewery in San Marcos. Port Brewing Company has been founded to bring their beers to a wider audience and different brands has been developed under the company umbrella: Port Brewing producing aggressive hopped west-coast styles, Lost Abbey producing Belgian inspired creations and recently The Hop Concept producing experimental IPAs produced with old and new hop varieties. Pizza Port and Port Brewing should be considered two separate business entities given their different business model and strategy.


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INDUSTRY LEVEL ANALYSIS (ZOOM-IN)

Internal rivalry – represents the direct competition to capture market shares in the industry. The main factors affecting the force are:

- **Concentration and balance of the market**: the craft beer segment is extremely concentrated and, for this reason, a large number of companies compete to capture a small share of the market profits. (↑↑)
- **Diversity of competitors**: craft breweries have a quite similar structure and they differentiate in terms of assets owned, geographical expansion and retail strategy. (=/↓)
- **Industry growth**: the craft beer innovation represented a disruptive innovation in the industry, with a consequent impressive increase in volumes in the last years. The consequence is the growth of profits available for the company competing in the new segment. (↑)
- **Product differentiation**: the brewing process is quite standard and the beer recipes developed by craft breweries are openly shared to the public. The consequence is a weak negative impact on rivalry. (=/↓)
- **Switching costs**: end customers and distributors sustain low costs to change suppliers in the market. For this reason there is a low competition to capture and retain new customers. (↓)
- **Fixed costs**: fixed costs have a relevant impact on the company’s operating leverage. (↑)
- **Storage costs**: given the perishable nature of the product breweries hold low stocks in warehouses. (=/↑)
- **Excess capacity**: Pizza Port, in order to exploit the high investments made to acquire assets, saturates the capacity of its brewpubs at almost the maximum level. (↓)
- **Exit barriers**: it’s difficult to assess the impact of costs and factors on exit strategies, especially emotional ones. For this reason the parameter does not influence competition. (=)

In the craft beer segment a relevant number of firms is competing for a small amount of market share. The competition among them is quite low (=/↑) with a slightly negative impact on the profitability available on the market (=/-).

**Threats of new entrants** – the craft beer segment recorded a relevant increase of number of breweries operating in US in the last years, with low reactions by incumbents. We can conclude that the innovation is really attractive for new entrants, leading to an increasing level of competition (↑↑) and a consequent strong negative impact on the average market profitability (--).

**Threats of substitutes** – the main substitutes products for craft beer are wine and spirits, addressing similar customers’ needs. Consumers still consider the product more a commodity than a luxury good, with a consequent higher price elasticity.
The company implemented a brewpub chain strategy selling its products mainly through owned retails, where customers could consume fresh beer produced inside the building and order food from the menu. For this reason the firm can be considered a substitute of other local restaurant chains and bars in the area.

We can conclude that the risk of substitution faced by Pizza Port is high (↑) with a negative impact on profitability (−).

*Bargaining power of buyers* – Pizza Port took advantage of exceptions allowed by the California state to avoid the three-tier distribution system developing a brewpub chain business model. The company, by this way, lowered the bargaining power of distributors, internalizing the profits shared to them. We can now analyse the factors influencing the downstream market we identified:

- **Relative concentration**: the company focused on a direct sales business model, distributing its products mainly through owned brewpubs. The final market is characterized by a very small concentration, with a large number of customers requiring a limited quantity of products. The consequence is the possibility to require a higher price mark-up and to internalize the profits shared to distributors and retailers. (↓)
- **Product’s features**: to capture end customers, Pizza Port developed an immersive experience in owned brewpubs, where people can assist to the brewing process and consume fresh beer. The food offering represents a secondary focus for the company but is important to differentiate from the local restaurants and bars and to have a competing offering. (↓)
- **Buyer’s characteristics**: the transaction nature of end customers is different from the one made by distributors. In fact while business segments interact with breweries in order to resell their products and make profits, end customers interact with them during their spare time as a form of entertainment. The consequence is a weak bargaining power. (≈/↑)

The creation of an immersive experience where end customer could buy fresh beer produced in the same location of its consumption allowed the company to interact directly to final consumers, internalizing the profits shared to distributors and retailers. For this reason final consumers have a low bargaining power (↓) with a positive effect on profitability (+).

*Bargaining power of suppliers* – the most relevant raw materials suppliers in term of costs and quality impacts are malt and hops providers. Let’s study the determinants of their bargaining power:

- **Relative concentration**: given the extremely high concentration of both the hops and the malt markets, we can conclude that the bargaining power in the hands of craft breweries is very low, with a strong negative effect on competition. (↑↑)
- **Product’s features**: craft breweries choose only worlds class high quality suppliers for their products, increasing their impact on the final good performance. (=↑)

- **Supplier’s characteristics**: given the limited possibility to implement downward integration strategies, suppliers have a strong bargaining power towards craft beer producers. (↑↑)

Upstream competition is the strongest force shaping the industry in which Pizza Port operates (↑↑), with an extremely negative effect on the average profits available on the market (––).

We can summarize the five forces model by Porter with the following diagram, summarizing each factor’s impact on competition and the final effect on the average profits available.

![Levels of Competition and Profitability](image)

*Figure 58: Porter’s five forces model applied to the Pizza Port case study*
COMPANY LEVEL ANALYSIS

Customer segments – Pizza Port decentralizing the production in the different brewpubs built in California, could be able to build a strong direct connection with final customers and to limit the interaction with distributors set by the three-tier distribution system. However a limited amount of product is directed to distribution after the development of the first production and can packaging facility at Bressi Ranch.

- **Distributors (B2B):** they represent a secondary segment for the company given its focus on decentralized brewpub production. A limited amount of volumes is produced for distribution in the Bressi Ranch facility.
- **End customers (B2C):** the segment is served through a chain of brewpubs opened all around California. This innovative retail form allows the company to decentralize the production in different self-sustainable locations. The different brewpubs run by Pizza Port are independent and, for this reason, they develop the recipes of the beers they serve. No segmentation is applied to the products by the company.

<table>
<thead>
<tr>
<th></th>
<th>Kegs</th>
<th>Cans</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td>B2C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B2B</td>
</tr>
</tbody>
</table>

*Table 65: Customer segments reference table for Pizza Port*

Value proposition – the firm focused its business model on direct selling, creating a brewpub chain dislocated in different cities of California. The different brewpubs are independent from each other’s, developing their own recipes, and the production is decentralized in them. Pizza Port built a main canning and manufacturing facility in Bressi Ranch in 2013 producing cans and kegs for distribution and for the bottle shop owned in Carlsbad. The geographical focus of distribution is San Diego area followed by California and Nevada states.

The beer styles produced by the company are mainly west-coast IPAs and session IPAs and received very different awards along the years during the Great American Beer Festival and the World Beer Cup.

Pizza Port owns 4 brewpubs in Solana Beach, Carlsbad, San Clemente and Ocean Beach a bottle shop, built just beside the Carlsbad brewpub and a main production facility at the Bressi Ranch. The two founders of the firm launched a side-project in 2006, Port Brewing, that represents a separated entity from the branded brewpubs chain.
Pizza Port, thanks to the independence given to the different brewpubs, has a huge product portfolio counting more than 800 beers created in the different locations according to the RateBeer historical database.

The firm includes private events organization service at the Carlsbad patio, a free membership program and online food delivery in its additional offering.

**Channels** – the company focuses its presence in California, with the majority of sales coming from its owned brewpubs. As regards distribution the main partners operate in the San Diego area but recent deals allowed the company to expand in the whole California State and in Nevada.

<table>
<thead>
<tr>
<th>DISTRIBUTION STRATEGY</th>
<th>Number of worldwide distributors off-premise (from RateBeer distributors section)</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of worldwide distributors on-premise (from RateBeer distributors section)</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>Number of worldwide e-commerce distributors (from RateBeer distributors section)</td>
<td>11</td>
</tr>
</tbody>
</table>

**Table 66: Channels reference table for Pizza Port**

*Customer relationships* – the main initiatives implemented by the company are aimed to build a strong connection with final customers. In particular different events are organized by the brewpub chain inside its locations such as collaboration nights, the anniversary party, tastings, beer dinners and the party bus. Pizza Port released different beers produced in collaboration with famous US craft breweries such as Maui Brewing, 3 Floyds and Alesmith.

*Revenue streams* - the revenues collected by the firm are diversified by the customer segment to which they relate to. Contracts are signed with distributors in order to build long term relationships and they consider additional services and discounts. End customers have a fixed menu pricing revenue model, with a target price defined by the location and the channel of consumption.
Key resources – Pizza Port currently runs four brewpubs dislocated in different locations around the California State. The original one built in Solana Beach, one in Carlsbad together with a bottleshop, one in San Clemente and one in Ocean Beach. The company also developed a main production facility with a canning line at the Bressi Ranch where it produces for distribution.

The founders of the company, acquiring the old Stone Brewing facilities of San Marcos in 2006, developed the side project Port Brewing. Under this umbrella the company developed three brands dedicated to distribution. Each brand is specific to a particular product type: under Port Brewing the firm produces aggressively hopped west-coast style beers, under Lost Abbey it produces Belgian-inspired beers and under The Hop Concept it produces experimental IPAs created with the use of new and old hops varieties. Port Brewing has to be considered a separated entity from Pizza Port, developing its own strategy and employing its own staff\footnote{Source: Port Brewing official website (2016). “Company overview”, retrieved on 2017/11/12 [at: http://www.portbrewing.com/company/]}. However, the brewpubs chain could count on synergies with the spin-off created.

\begin{table}
\centering
\begin{tabular}{|l|c|c|}
\hline
 & B2C & B2B \\
\hline
\text{Beer products (Fixed Menu Pricing)} & X & X \\
\text{Merchandising} & X & X \\
\text{Events organisation} & X & X \\
\text{Food (in brewpubs)} & X & X \\
\hline
\end{tabular}
\caption{Revenue streams reference table for Pizza Port}
\end{table}
Table 68: Key resources reference table for Pizza Port

**Key activities** – production activities could be summarized with the product development process. The process is completely decentralized in the different brewpubs owned by Pizza Port where the products are prototypes, produced and finally served to customers. In the Bressi Ranch main facility the company packages cans and kegs for the distribution.

Network activities dedicated to distributors have a secondary role for the firm, as the majority of volumes are dedicated to the consumption in ownedretails.

<table>
<thead>
<tr>
<th>PHYSICAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breweries owned (number)</strong></td>
<td>4 brewpubs (Solana Beach, Carlsbad, San Clemente, Ocean Beach) 1 brewery with canning line (Bressi Ranch)</td>
</tr>
<tr>
<td><strong>Retail shops owned (number)</strong></td>
<td>4 brewpubs (Solana Beach, Carlsbad, San Clemente, Ocean Beach) 1 brewery’s taproom (Bressi Ranch) 1 bottle shop (Carlsbad)</td>
</tr>
<tr>
<td><strong>Distribution Centers (location)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Self distribution (location)</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INTELLECTUAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brands</strong></td>
<td>Pizza Port, Port Brewing, Lost Abbey, The Hop Concept</td>
</tr>
<tr>
<td><strong>Copyrights (types and name)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
<td>Food preparation, recipe creation (every brewpub create its own recipes)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HUMAN</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production teams (name)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Business teams (name)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Other teams (name)</strong></td>
<td>Brewpub and bottleshop managers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FINANCIAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ownership (type)</strong></td>
<td>Family owned by Gina and Vince Mangia</td>
</tr>
</tbody>
</table>

Table 69: Key activities reference table for Pizza Port

**Key partnerships** – Pizza Port interacts with different suppliers that play an important role in the company’s business model. In particular the most strategic are raw material, packaging goods, food, machineries and additional services providers. Distributors are considered key partners for the company even if they have a limited impact on the business model of the firm.
Table 70: Key partnerships reference table for Pizza Port

**Cost structure** – the main costs sustained by Pizza Port are aligned with the ones identified in the research framework.
VALUES – the mission of the company is “good food and good beer bring good cheer”. This simple statement is reflected in the aim for the company to create a unique drinking and dining experience inside its brewpubs. The brand Pizza Port is created reflecting the Californian atmosphere in the graphic design of the labels, in the interior design of the retail, and in the product orientation of the beers produced.

**Products** – analysing the RateBeer historical database we discovered that the companies produced mostly west-coast beer styles, focusing on IPA, imperial IPA and American pale ale. The most iconic products created in brewpubs and offered to distribution are Ponto (IPA), Chronic Ale (amber ale), Swami (IPA) and Kook (double IPA).

Pizza Port offers also additional products to its customers such as merchandising, free membership program, gift cards and food in its facilities.

**Services** – Pizza Port aligns its core product offering with services in order to build fidelity among customers. In particular the company organizes private events, beer tastings and public parties inside their facilities. The firm also offers kegs pick-up service to final customers.
The Value Proposition Canvas

**Mission statements**
- Good food and good beer bring good cheer!

**Values**
- Californian atmosphere
- West-coast style beers
- Unique drinking and dining experience

**Services**
- Private events
- Food
- Kegs pick-up
- Events organization in pubs

**Products offered**
- Iconic products: Ponto IPA, Chronic Ale (Amber Ale), Swami IPA, Kook (Double IPA)
- Imperial Stout (32)
- American Strong Ale (15)
- IPA (64)
- Imperial IPA (41)
- American Pale Ale (34)
- Mean ABV: 7.51%

**Beer offering (from Carlsbad brewpub)**
Mother Earth Brew Company

COMPANY OVERVIEW

Mother Earth was born in a garage in San Diego County in 2008 where Daniel Love and his stepson Kamron Khannakhjavan started homebrewing. In 2010 the hobby became officially a family business thanks to the consultancy and the support of Lee Chase, former Stone head brewer. The company, in fact, opened its first production location in Vista, California, where it could be found a small taproom and a homebrewing shop.

Thanks to the amazing growth faced by the firm, Mother Earth has transferred the production in a new and bigger location in Vista of 2,600 square metres, in which actually are working 55 employees producing an annual capacity of 35,000 hectolitres\textsuperscript{118}. The old location is still used by the firm as a pub and as a small prototyping facility.

In 2016 Mother Earth announced its expansion in the Idaho market, opening a second production facility in Nampa. The company will open a 40,000 square foot brewery and tasting room that will be able to produce around 100,000 barrel annually\textsuperscript{119} in order to grow organically to the Midwest.

Recently the firm announced the opening of a new venue in Vista, California: Mother’s Provision. The venue will be located in substitution to the original homebrewing shop created by the company and inside the restaurant it will be served beer, wine, cider and a menu of tapas-style small plates\textsuperscript{120}.

\textsuperscript{118} Source: Mother Earth Brew Company official website (2016). “Mother Earth Brew Co. about us”, retrieved on 2017/11/13 [at: https://www.motherearthbrewco.com/who/]


\textsuperscript{120} Source: San Diegoville (2017). “Mother Earth Brew Co. to open Vista brewpub. Mother’s Provision coming soon to North County San Diego”, retrieved on 2017/11/13
Internal rivalry – or direct competition represents the rivalry to capture market shares in the industry. Let’s analyse briefly the main elements affecting this force:

- **Concentration and balance of the market:** the craft beer segment is extremely concentrated with more than 5,200 companies controlling a small amount of market share. (↑↑)
- **Diversity of competitors:** craft breweries in US have a quite similar structure. (=/↓)
- **Industry growth:** the craft beer segment has recorded an impressive average increase in volume in the last years and, for this reason, there is a profitability growth opportunity for every company competing in the new segment. (↑)
- **Product differentiation:** craft beer innovation is based on a production process that is quite standard and openly shared to the public. The consequence is a weak negative impact on rivalry. (=/↓)
- **Switching costs:** there is a low competition to capture and retain new customers, given the low costs they sustain to change suppliers. (↓)
- **Fixed costs:** fixed costs play an important role on the company’s operating leverage, as we noticed in the introduction of the chapter. (↑)
- **Storage costs:** breweries hold low stocks in warehouses given the perishable nature of the product and the flexibility required by the company’s operations. (=/↑)
- **Excess capacity:** Mother Earth, in order to exploit the high investments made to acquire assets, saturates the capacity at almost the maximum level. (↓)
- **Exit barriers:** it’s difficult to assess the impact of costs and factors on exit strategies, especially emotional ones. (=)

The direct competition experienced by craft breweries is quite low (≡/↑) with a slightly negative impact on the average profitability of the market (≡/-).

**Threats of new entrants** – the segment recorded a substantial increase of number of breweries operating in US in the last years, with low reactions by incumbents.

We can conclude that the innovation is really attractive for new entrants, leading to an increasing level of competition (↑↑) and a consequent strong negative impact on the average market profitability (---).

**Threats of substitutes** – the main substitute products, wine and spirits, have a favourable position when compared to craft beer, as they are considered more luxury goods than commodities with a consequent lower price elasticity.
The risk of substitution faced by Mother Earth is medium/high (=/↑) with a weak negative impact on profitability (=/-).

*Bargaining power of buyers* – Mother Earth, in order to reach end customers, has to interact mainly with distributors, given the three-tier distribution system set by law. Let’s analyse the factors influencing the downstream market we identified:

- **Relative concentration:** given the higher concentration of the downstream market compared to the reference one, Mother Earth faces a strong competition when it interacts in the distribution market. (↑↑)
- **Product’s features:** Mother Earth offers additional services and discounts to distributors in order to have a competitive offering. Given the limited financial resources the firm struggles to compete with multinational companies to reach final consumers. (↑↑)
- **Buyer’s characteristics:** given the high profitability of distributors, the impact on rivalry is positive. (↓)

Bargaining power of buyers is extremely high and the management of distributors is crucial for the success of the company. For this reason this force has a strong negative impact on competition (↑↑) with a negative effect on profitability (--).

*Bargaining power of suppliers* – the most important suppliers we identified are hops and malt providers, as these raw materials are the most relevant in term of costs and quality impact. We can now focus on the main force determinants connected to these markets.

- **Relative concentration:** given the extremely high concentration of both the hops and the malt markets and the influence that big multinational competitors have towards them, we can conclude that the bargaining power in the hands of craft breweries is very low, with a strong negative effect on competition. (↑↑)
- **Product’s features:** craft breweries choose only worlds class high quality suppliers for their products, increasing their impact on the final good performance. (=/↑)
- **Supplier’s characteristics:** given the limited possibility to implement downward integration strategies, suppliers have a strong bargaining power towards craft beer producers. (↑↑)

Upstream competition is the strongest force shaping the industry in which Mother Earth operates (↑↑), with an extremely negative effect on the average profits available on the market (--).
We can summarize the five forces model by Porter with the following diagram, summarizing each factor’s impact on competition and the final effect on the average profits available.

![Diagram of Porter's five forces model applied to the Mother Earth case study](image)

*Figure 59: Porter's five forces model applied to the Mother Earth case study*
COMPANY LEVEL ANALYSIS

*Customer segments* – Mother Earth interacts mainly with two different customer lines: distributors and customers.

- **Distributors (B2B):** they represent the main customer line for the company as the majority of sales comes from distribution. Products are segmented in three main categories: year-round cans, resonator hop series and the four seasons.
- **End customers (B2C):** they represent a secondary segment for the firm as a small amount of sales is dedicated to direct consumption in owned retails. Mother Earth, in fact, can sell directly its products to final customers through the two breweries’ taprooms, the Vista pub and Mother’s Provision restaurant in Vista.

| Year-round | X | X | | X |
| Resinator hop series | X | X | | |
| The four seasons | X | | | |
| Non beer drinkers | Commercial beer drinkers | Beer lovers | Craft beer geeks | |

*B2B*

| B2C |

*Table 71: Customer segments reference table for Mother Earth*

*Value proposition* – the business model of Mother Earth is focused on distribution contracts, given the three-tier system set by law after prohibition. The geographical presence is focused on a multi-regional dimension, as the company is mainly distributed in California, Idaho and Nevada.

The production is dislocated in the two main brewing facilities: one in Vista, California and another one in Nampa, Idaho. A small prototyping brewing plant is located in the original brewpub founded by the firm in Vista. As regards owned retails Mother Earth can count on the two breweries’ taprooms, the Vista original pub and the new restaurant Mother’s Provision that will be opened by the end of the year.

The company, compared to the other craft breweries analysed, has a modest product portfolio offering 13 beers on its website and counting around 160 products on the RateBeer historical database.

The firm offers additional products and services to build relationship to final customers such as merchandising and events inside its taproom.
Channels – the company focused its presence in California, in particular in the San Diego area, and currently expanded organically in Idaho through the construction of a second production facility in Nampa. The partnership with Stone Distributing allowed the company to have a capillary presence in the geographical markets served by the company, in particular the California state.

<table>
<thead>
<tr>
<th>DISTRIBUTION STRATEGY</th>
<th>Number of worldwide distributors off-premise (from RateBeer distributors section)</th>
<th>44</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of worldwide distributors on-premise (from RateBeer distributors section)</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Number of worldwide e-commerce distributors (from RateBeer distributors section)</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHANNEL TYPES</th>
<th>Own</th>
<th>Direct</th>
<th>Web Shop</th>
<th>Merchandising, clothes, accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Own Retail (type)</td>
<td>2 taprooms</td>
<td>1 taproom 1 restaurant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Own Distributors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Partner Retail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner</td>
<td></td>
<td>Indirect</td>
<td>Partner Distributor</td>
<td>X (partnership with Stone distribution)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Supermarket Stores</td>
<td>X</td>
</tr>
</tbody>
</table>

*Table 72: Channels reference table for Mother Earth*

Customer relationships – Mother Earth implemented different initiative to build loyalty among the two segments served. To business customers, distributors, the firm offers mainly discounts, rewards and additional services provided by contracts.

To end customers the company organises events and parties in owned retails.

Revenue streams – the revenues collected by the company could be diversified by the customer segment from which the come from. Contracts are signed with distributors in order to build a long term relationship and they include additional services and discounts. End customers have a fixed menu pricing revenue mode, with a target price defined by the location and the channel of consumption.
Table 73: Revenue streams reference table for Mother Earth

<table>
<thead>
<tr>
<th>B2C</th>
<th>Beer products (Fixed Menu Pricing)</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Merchandising</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Food</td>
<td>X</td>
</tr>
<tr>
<td>B2B</td>
<td>Beer products (Contracts)</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Merchandising and other products</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 74: Key resources reference table for Mother Earth

**Key resources** – Mother Earth owns two main production facilities, the original one in Vista, California and another one recently built in Nampa, Idaho. In the two manufacturing plants the company included a taproom, in order to serve fresh produced beer to its customers. The firm can also serve its products directly to customers through the original pub in Vista from which it started its business and Mother’s Provision, a restaurant that will be launched at the end of 2017.

<table>
<thead>
<tr>
<th><strong>PHYSICAL</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Breweries owned (number)</td>
<td>2 breweries (Vista, California and Nampa, Idaho)</td>
</tr>
<tr>
<td>Retail shops owned (number)</td>
<td>2 taprooms (Vista, California and Nampa, Idaho)</td>
</tr>
<tr>
<td>Distribution Centers (location)</td>
<td></td>
</tr>
<tr>
<td>Self distribution (location)</td>
<td></td>
</tr>
<tr>
<td><strong>INTELLECTUAL</strong></td>
<td></td>
</tr>
<tr>
<td>Brands</td>
<td>Mother’s Earth</td>
</tr>
<tr>
<td>Copyrights (types and name)</td>
<td></td>
</tr>
<tr>
<td>Knowledge</td>
<td></td>
</tr>
<tr>
<td><strong>HUMAN</strong></td>
<td></td>
</tr>
<tr>
<td>Production teams (name)</td>
<td></td>
</tr>
<tr>
<td>Business teams (name)</td>
<td></td>
</tr>
<tr>
<td>Other teams (name)</td>
<td></td>
</tr>
<tr>
<td><strong>FINANCIAL</strong></td>
<td></td>
</tr>
<tr>
<td>Ownership (type)</td>
<td>Family owned</td>
</tr>
</tbody>
</table>

Table 74: Key resources reference table for Mother Earth

**Key activities** – the main activities performed by Mother Earth are production and network ones. Production activities could be summarized with the process of product development: recipes prototyping in the Vista (CA) pilot brewery, production in Vista (CA) and Nampa (ID) according to the target market and delivery.

Network activities include the engagement and the creation of long term relationships with distributors and local retailers.
Table 75: Key activities reference table for Mother Earth

Key partnerships – the main suppliers of the firm are the ones we identified in the research framework section providing key raw materials, packaging goods, machineries and additional services. Stone Distributing represents a key partner to have a capillary presence in the California State.

Table 76: Key partnerships reference table for Mother Earth

Cost structure – the cost structure sustained by Mother Earth is aligned with the average one we identified in the research framework. In particular the company have several fixed costs such as equipment, utilities, rent and depreciation/amortization. The main variable costs are represented by direct materials and piece rate workers.
VALUE PROPOSITION ANALYSIS (ZOOM-IN)

**Values** – the mission of Mother Earth is “to create distinguished, hand crafted beers that stimulate sensory conversation and a desire for the next sip”. The consequence is the creation of complex, palate-pleasing beers created through a hand-crafted process.

The company expanded its geographical distribution by adding a new connected production facility reproducing the products created by the main brewery.

**Products** – the company has a modest product portfolio and the beers brewed in the two facilities are the same. Product development activities are concentrated in the Vista (CA) brewery.

The most iconic beers produced are Cali Creamin’ (vanilla cream ale), Boo Koo (mosaic IPA) and Honcho (hefeweizen).

Additional products offered are merchandising and accessories, sold online on the owned e-commerce website.

**Services** – the company organise different events in its retails to drive traffic inside its facilities. In particular Mother Earth organizes periodically beer and food pairing dinners, tap take-overs and beer tastings.
The Value Proposition Canvas

Values
- Great craft beer from Mother Earth
- Complex beers
- Independent, family owned
- American dream
- US markets expansion by adding production facilities

Services
- Events organization in retail
- Beer tastings
- Take-overs
- Imperial IPA (10)
- Porter (7)
- IPA (34)
- Imperial Stout (14)
- American Pale Ale (11)
- Mean ABV: 6.7%

Products
- Iconic products: CaliCreamin' (Vanilla Cream Ale), Boo Koo (Mosaic IPA), Honcho (Hefeweizen), Born Blonde (Blonde Ale)

Beer offering (from Carlsbad brewpub)
Chapter 6: Findings

In this chapter our goal is to extrapolate strategies and decisions implemented by the analysed companies in order to find similarities and differences among them. At the end we will present the different business model archetypes followed by the most growing craft breweries in US, as they represent successful strategies to capture the profits introduced by the craft beer innovation.

The process followed to analyse the different business models will require two different steps. In the first step we will compare the case studies selected according to each business model canvas’ section. In particular we will print the different canvas and we will stick them on a wall in order to have a visual reference. We will underline the features that, in our opinion, had a crucial role in defining the companies’ growth and we will compare every single section of the model with the aim to find differences and common features among the 10 business models we designed. We will take advantage of images, maps and tables in order to have an overview of the different case studies with a coherent point of view.

In the second step we will identify, thanks to the business models cross-analysis, the strategic archetypes implemented by the companies selected. In the specific we will explain the main strategic decisions determined by the archetype, we will connect them to the 5 forces identified by Porter and we will identify the main business model features on which the companies could build their success. Finally, we will determine the historical development of the strategies highlighted and, in order to make the models clear to a wider audience, we will compare them to companies coming from industry in order to have reference metaphors of meanings.

6.1 First step: business model canvas cross-analysis

In the first step we will make a cross-case analysis of the different business model we designed, in order to find similarities and differences among the different case studies we selected. To make a connection with the Teece’s theories we introduced in the literature and to better understand the logic behind the business model canvas, we will divide the different components of the framework in three main sections.
6.1.1 Value capturing business model section (customer interface)

In the value capturing section of the business model canvas we identified all the activities aimed to deliver the value created by the company to the customer lines we identified, the channels used to interact with them and the initiatives implemented to build loyalty in the long term.

Let’s focus on the four different components grouped under the value capturing section.

Customer segments

All the companies analysed developed a multi-sided business model, dedicating specific features of the model to B2B (Business to Business) and to B2C (Business to Consumers) customer segments. Given the three-tier distribution system set by law and the off-premise consumption relevance in the industry underlined in the introduction, B2B segment plays an important role in the strategy design of a craft brewery.

However, some companies could take advantage of exceptions to the law allowed in some states to directly interact with retailers, through self-distribution, or with final consumers, through the creation of owned retail.

As we can see from the table below, some of the craft breweries selected stressed the differences among these two segments to such an extent that they created a two-sided business model canvas. For each segment, in fact, those firms implemented a specific and dedicated strategy. We will identify the orientation of each feature of the canvas to the specific customer segment to which is related, using different colours. In particular we will
use the red colour for the B2B segment, the green colour for the B2C segment and the yellow colour for the generic segment.

<table>
<thead>
<tr>
<th>COMPANY NAME</th>
<th>TWO-SIDE BUSINESS MODEL?</th>
<th>BUSINESS SEGMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Two Roads Brewing Company</td>
<td>X</td>
<td>Contract Brewing Two Roads brand</td>
</tr>
<tr>
<td>2) Funky Buddha Brewery</td>
<td></td>
<td>B2C and B2B</td>
</tr>
<tr>
<td>3) Rhinegeist Brewing</td>
<td></td>
<td>B2C and B2B</td>
</tr>
<tr>
<td>4) Deep Ellum Brewing Company</td>
<td></td>
<td>B2C and B2B</td>
</tr>
<tr>
<td>5) Modern Times Beer</td>
<td>X</td>
<td>Modern Times taprooms, restaurant and brewpub Production for distribution</td>
</tr>
<tr>
<td>6) Fat Head’s Brewery</td>
<td>X</td>
<td>Fat Head’s brewpubs and restaurant Production for distribution</td>
</tr>
<tr>
<td>7) Jack’s Abby Brewing</td>
<td>X</td>
<td>Jack’s Abby brand Springdale brand</td>
</tr>
<tr>
<td>8) Revolution Brewing</td>
<td></td>
<td>B2C and B2B</td>
</tr>
<tr>
<td>9) Pizza Port</td>
<td>X</td>
<td>Pizza Port brewpubs Production for distribution</td>
</tr>
<tr>
<td>10) Mother Earth Brew Company</td>
<td></td>
<td>B2C and B2B</td>
</tr>
</tbody>
</table>

Table 77: Customer segments cross-case analysis

As we can see from the table above, half of the companies implemented a two-sided business model strategy, dedicating specific strategic decisions and assets to a defined customer segment.

In particular:

- **Two Roads** focused its business model on contract brewing taking advantage of the recent «gypsy» brewing movement. The company produces recipes created by other brands that don’t own a production facility but they focus their know-how on marketing, sales and prototyping. On the other side Two Roads has developed its own brand to take advantage of the excess capacity available in the brewery.

- **Modern Times, Fat Head’s** and **Pizza Port** diversified their business models by dedicating two separated and specific strategies for business and final consumers. On one side, they expanded by building owned retails such as restaurants, brewpubs, pubs and taprooms. Through these channels they can internalize the profits that would be shared to distributors and retailers and they could build their own brand experience. On the other side, they could grow their geographical presence on-premise and off-premise by signing contracts with distributors.

- **Jack’s Abby** created two different brands dedicated to two different production processes and product types. Jack’s Abby is dedicated to lagers, a beer category created through a process of cold-bottom fermentation. Under the Springdale brand the company produces experimental products taking
advantage of barrel aging techniques and using different types of yeasts and bacteria for the fermentation. While the Jack’s Abby brand is available for the distribution the Springdale one is sold exclusively in the owned barrel room.

Value proposition

In the value proposition section of the canvas we identified three main strategic features on which companies build their business models: product portfolio, supply chain strategy and service offering.

PRODUCT PORTFOLIO

In this section we will analyse the different products offered by companies to business and end customers. we will focus, in particular, on the different beer styles produced, the possible portfolio diversifications implemented and the additional products offered.

<table>
<thead>
<tr>
<th>COMPANY NAME</th>
<th>CORE PRODUCTS</th>
<th>PRODUCT DIVERSIFICATION</th>
<th>ADDITIONAL PRODUCTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Two Roads Brewing Company</td>
<td>X X X X</td>
<td>X (culinary inspired beers)</td>
<td>Merchandising</td>
</tr>
<tr>
<td>2) Funky Buddha Brewery</td>
<td>X X X X</td>
<td></td>
<td>Merchandising, membership subscription</td>
</tr>
<tr>
<td>3) Rhinegeist Brewing</td>
<td>X X X X</td>
<td>Cider</td>
<td>Merchandising</td>
</tr>
<tr>
<td>4) Deep Ellum Brewing Company</td>
<td>X X X X</td>
<td>X (herb/vegetable/fruit beers)</td>
<td>Spirits (future project)</td>
</tr>
<tr>
<td>5) Modern Times Beer</td>
<td>X X X X</td>
<td>X (new foodier and amphora facility)</td>
<td>Coffee</td>
</tr>
<tr>
<td>6) Fat Head’s Brewery</td>
<td>X X X X</td>
<td></td>
<td>Merchandising, food</td>
</tr>
<tr>
<td>7) Jack’s Abby Brewing</td>
<td>Jack’s Abby</td>
<td></td>
<td>Merchandising</td>
</tr>
<tr>
<td></td>
<td>Springdale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8) Revolution Brewing</td>
<td>X X X X</td>
<td></td>
<td>Merchandising, gift cards</td>
</tr>
<tr>
<td>9) Pizza Port</td>
<td>X X X X</td>
<td></td>
<td>Merchandising, food, gift cards</td>
</tr>
<tr>
<td>10) Mother Earth Brew Company</td>
<td>X X X X</td>
<td></td>
<td>Merchandising</td>
</tr>
</tbody>
</table>

Table 78: Product portfolio cross-case analysis

In general, the craft breweries analysed offered a wide variety of different beer styles showcasing the different flavours and aromas of the beverage. The vast majority of the companies segmented the products in three main categories: year-round, seasonal and special releases.

- An exception is represented by Two Roads and Pizza Port that, given their particular business models, offered a non-segmented product portfolio.
- Another exception is represented by Jack’s Abby that segmented its portfolio creating two different brands dedicated to two different beer styles: Jack’s Abby for lagers, bottom fermented beers and Springdale for sour, barrel aged beers.
Talking about product differentiation, *Modern Times, Deep Ellum* and *Rhinegeist* followed a concentric strategy by offering related beverages, such as coffee, spirits and cider, to existing customers.

As regards the additional product offering, all the breweries took advantage of the brand they created to sell merchandising and accessories. Some companies had also the possibility to catch additional profits through the sale of food in owned retails and through the creation of membership programs.

**SUPPLY CHAIN STRATEGY**

Taking as reference the model introduced by Fisher (1997) we will classify the product configuration of each brewery and we will define the supply chain strategy connected. In particular we will analyse the characteristics of the demand and we will define the levels of innovation represented by the products offered. With a high level of demand unpredictability, a short development lead time and an extended offering variety, it will be defined an *innovative product type*. The opposite situation will identify a *functional product type*.

According to the product characteristics introduced, Fisher defined the most suitable supply chain strategy to be implemented. Functional products require a physically efficient supply chain that supplies predictable demand at the lowest costs possible. Innovative products, on the other hands, require a market responsive supply chain that minimize stock-out through flexibility and quick responses to an unpredictable demand.

<table>
<thead>
<tr>
<th>COMPANY NAME</th>
<th>FUNCTIONAL PRODUCTS</th>
<th>INNOVATIVE PRODUCTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PHYSICALLY EFFICIENT SUPPLY CHAIN</td>
<td>MARKET RESPONSIVE SUPPLY CHAIN</td>
</tr>
<tr>
<td>1) Two Roads Brewing Company</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2) Funky Buddha Brewery</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3) Rhinegeist Brewing</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4) Deep Ellum Brewing Company</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5) Modern Times Beer</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>6) Fat Head’s Brewery</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>7) Jack’s Abby Brewing</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8) Revolution Brewing</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>9) Pizza Port</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>10) Mother Earth Brew Company</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

*Table 79: Supply chain strategy cross-case analysis*

From a supply chain strategy point of view the craft segment is moving toward a market responsive configuration, working on the flexibility of the infrastructure and on new product development lead time.
However the nature of the production process doesn’t allow modular design and, as a consequence, a full demand-pull approach to new product development.

SERVICE PORTFOLIO

With the following chart we will analyse the additional services offered by companies to both business and final customers.

<table>
<thead>
<tr>
<th>COMPANY NAME</th>
<th>ADDITIONAL SERVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self distribution</td>
</tr>
<tr>
<td>1) Two Roads Brewing Company</td>
<td>Contract brewing                                         X</td>
</tr>
<tr>
<td>Two Roads</td>
<td>X</td>
</tr>
<tr>
<td>2) Funky Buddha Brewery</td>
<td>X</td>
</tr>
<tr>
<td>3) Rhinegeist Brewing</td>
<td>X (Cincinnati and Columbus)</td>
</tr>
<tr>
<td>4) Deep Ellum Brewing Company</td>
<td>X (local area)</td>
</tr>
<tr>
<td>5) Modern Times Beer</td>
<td>Owned retail</td>
</tr>
<tr>
<td>6) Fat Head’s Brewery</td>
<td>Owned retail</td>
</tr>
<tr>
<td>7) Jack’s Abby Brewing</td>
<td>Jack’s Abby</td>
</tr>
<tr>
<td>Springdale</td>
<td>X</td>
</tr>
<tr>
<td>8) Revolution Brewing</td>
<td>X</td>
</tr>
<tr>
<td>9) Pizza Port</td>
<td>Distribution</td>
</tr>
<tr>
<td>Owned retail</td>
<td>X</td>
</tr>
<tr>
<td>10) Mother Earth Beer Company</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 80: Additional service portfolio cross-case analysis

The main services offered by the companies we studied were brewery tours, events organization in owned facilities and events participation in external locations.

Some companies could take advantage of state specific exceptions to the three-tier distribution system to self-distribute their products. Rhinegeist self-distributes in the Columbus and Cincinnati areas. In fact, under a determined production capacity and with the agreement of distributors, breweries can deliver their products directly to retails in Ohio. Deep Ellum followed the same strategy, self-distributing in the local area close to the brewery’s buildings.

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Given the selection of the 100 biggest craft breweries for sale volumes in 2016, most of them do not have the right to build self-distribution because of their dimensions. We can assume that for smaller companies such as microbreweries self-distribution and hyper localization are common successful strategies.

Channels

In this component of the business model canvas we will focus on the decisions made by the companies analysed regarding the distribution strategies implemented.

In particular we will study the localization of the distribution and the levels of downstream integration.

LOCALIZATION OF DISTRIBUTION

To assess the distribution localization of the different case studies, we will take advantage of the companies official websites and, if needed, of the RateBeer platform. Every brewery, in fact, has a dedicated section on the platform on which a distribution map shows where the beers produced by each company have been consumed by users.

We will cluster every brewery’s distribution into five main categories: hyper local when it’s focused on a single city, local when it’s focused on a single state, regional when the company distributes in different US states, national when the company has a capillary presence in US and Global when the firm has a distribution presence worldwide.

<table>
<thead>
<tr>
<th>COMPANY NAME</th>
<th>Hyper local distribution (city focused)</th>
<th>Local distribution (single state focused)</th>
<th>Regional distribution (multiple states focused)</th>
<th>National distribution (capillary US presence)</th>
<th>Global distribution (global presence)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Two Roads Brewing Company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2) Funky Buddha Brewery</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>(thanks to contract brewing)</td>
</tr>
<tr>
<td>3) Rhinegeist Brewing</td>
<td></td>
<td></td>
<td>X</td>
<td>Kentucky, Ohio, Massachusetts</td>
<td></td>
</tr>
<tr>
<td>4) Deep Ellum Brewing Company</td>
<td>X</td>
<td></td>
<td></td>
<td>(Dallas, TX)</td>
<td></td>
</tr>
<tr>
<td>5) Modern Times Beer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>6) Fat Head’s Brewery</td>
<td></td>
<td></td>
<td>X</td>
<td>Ohio, Pennsylvania, Oregon, Florida and Indiana</td>
<td></td>
</tr>
<tr>
<td>7) Jack’s Abby Brewing</td>
<td></td>
<td></td>
<td>X</td>
<td>(two-thirds of sales in Massachusetts)</td>
<td></td>
</tr>
<tr>
<td>8) Revolution Brewing</td>
<td></td>
<td></td>
<td>X</td>
<td>Illinois, Wisconsin, Michigan</td>
<td></td>
</tr>
<tr>
<td>9) Pizza Port</td>
<td></td>
<td></td>
<td>X</td>
<td>California, Nevada, Arizona</td>
<td></td>
</tr>
<tr>
<td>10) Mother Earth Brew Company</td>
<td></td>
<td></td>
<td></td>
<td>California, Idaho, Nevada</td>
<td></td>
</tr>
</tbody>
</table>

Table 81: Localization of distribution cross-case analysis
The majority of the companies analysed followed a regional distribution strategy, expanding their distribution presence in 3-4 states. Some companies, however, followed a different strategy.

- **Funky Buddha** and **Deep Ellum** decided to focus the distribution of their products in a single state or city. In particular, Funky Buddha focused its presence in Florida following a local distribution strategy while Deep Ellum focused its presence in Dallas, Texas following a hyper local distribution strategy. Thanks to this decision the companies have been able to have a strong presence in the area selected and to build a strong connection with the community living in the area.

- On the other side **Two Roads** and **Modern Times** followed a Global distribution strategy. Their products, in fact, could be found around the world in different nations, taking advantage of international distributors. Two Roads, in particular, could take advantage of the global brand awareness built along the years by contract breweries. Given the perishable nature of beer this strategy is not common. However, with increasing levels of volumes and more refrigerated containers available to ship overseas, this situation could be more popular in the future.

### DOWNSTREAM INTEGRATION

To evaluate the levels of downstream integration we need to estimate the percentage of sales volumes coming from owned retails and from distribution. In the majority of the case studies this information has not been disclosed to the public and, for this reason, we had to evaluate the levels of downstream integration from the consideration of different parameters: number of owned retails, dimensions of owned retails, distribution extension, number of distributors and decentralization of production.

<table>
<thead>
<tr>
<th>COMPANY NAME</th>
<th>FOCUS ON DISTRIBUTION</th>
<th>FOCUS ON OWNED RETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Two Roads Brewing Company</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2) Funky Buddha Brewery</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3) Rhinegeist Brewing</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4) Deep Ellum Brewing Company</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5) Modern Times Beer</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>6) Fat Head’s Brewery</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>7) Jack’s Abby Brewing</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8) Revolution Brewing</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>9) Pizza Port</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>10) Mother Earth Brew Company</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

*Table 82: Downstream integration levels cross-case analysis*
We can divide downstream integration strategies into three main clusters.

- In the first cluster we grouped together companies that focused their business model on distribution and, for this reason, they haven’t adopted a downstream integration strategy. The firms belonging to this group, Two Roads, Funky Buddha, Rhinegeist and Revolution Brewing, self-distribute their products only through their breweries’ taprooms, for a small percentage of their total sales volumes.

- In the second cluster, represented by Deep Ellum, Modern Times and Mother Earth, we grouped together companies that developed a weak downstream integration. Deep Ellum, in fact, sells a relevant percentage of its production volumes through its brewery’s taproom, given it focus on the city of Dallas and on the community of the Deep Ellum district. Mother Earth and Modern Times, instead, can have a direct connection with final customers through the development of different types of owned retails such as restaurants, beer gardens, pubs, brewpubs and taprooms.

- The last cluster is represented by companies that followed a strong downstream integration strategies, focusing their distribution in owned retails. In particular, Fat Head’s and Pizza Port are expanding their geographical presence by building owned retails such as brewpubs. Jack’s Abby dedicated a small percentage of its production to distribution, focusing on consumption in its taprooms for both the brands he developed. Springdale products could be found only in the company’s branded barrel room following an “owned-premise” strategy. We will discuss about this approach further in the following paragraph.

Customer relationships

Looking at the different customer relationship oriented initiatives implemented by the breweries we can say that this component has not been a source of competitive advantage for none of them. The main actions taken in this direction could be divided according to the customers segments to which they were targeted.

Actions targeted to **final customers** were mainly represented by events, organized in owned retails or in external locations, membership clubs and charitable contributions.

Companies also implemented initiatives targeted to **business customers** in order to build loyalty. These initiatives are not disclosed to the public but we can imagine that firms offer additional services and price discounts through contracts with the aim to build long term relationships. An exception is represented by Two Roads that, given its particular business model, has to build long term agreements with contract breweries.

6.1.2 Value creation business model section (value network)

In the value creation section of the business model canvas we identified the activities, the internal resources and the external partnerships developed to support the value proposition of our offering. The network identified in this section determines the costs sustained by a firm.
Let’s focus on the three different components grouped under the value creation section.

**Key resources**

Analysing the resources developed by the different case studies analysed, we noticed that the most relevant for the design of the business models were production and retail resources. For this reason we will analyse in depth these two features classifying the different production facilities owned by the companies, identifying their location, assessing the production strategy implemented and listing the retail facilities locations run by the firms.

**PRODUCTION FACILITIES**

With the following table we will identify the production facilities owned by the different companies we analysed and we will connect them to the customer segment to which are dedicated. We will also classify the manufacturing plants according to the type of production they are dedicated to, determining in particular breweries, brewpubs (small breweries in which the beer is produced and consumed under the same roof), pilot plants (small plants dedicated to prototypes development) and sour/barrel aging facilities (spaces dedicated to the production of sours or to the aging of beer in wood barrels).

<table>
<thead>
<tr>
<th>COMPANY NAME</th>
<th>LOCATION</th>
<th>BREWERY</th>
<th>BREWPUB</th>
<th>PILOT PLANT</th>
<th>SOUR/BARREL AGING FACILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Two Roads Brewing Company</td>
<td>Stratford (CT)</td>
<td>X</td>
<td></td>
<td></td>
<td>X (sour and barrel aging facility under construction)</td>
</tr>
<tr>
<td></td>
<td>Stratford (CT)</td>
<td>X</td>
<td></td>
<td></td>
<td>X (sour and barrel aging facility under construction)</td>
</tr>
<tr>
<td>2) Funky Buddha Brewery</td>
<td>Oakland Parks (FL)</td>
<td>X</td>
<td></td>
<td></td>
<td>X (barrels cellar)</td>
</tr>
<tr>
<td></td>
<td>Funky Buddha's Lounge and Restaurant original plant (FL)</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Rhinegeist Brewing</td>
<td>Cincinnati (OH)</td>
<td>X</td>
<td></td>
<td></td>
<td>X (barrels cellar)</td>
</tr>
<tr>
<td></td>
<td>Columbus (OH)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>4) Deep Ellum Brewing Company</td>
<td>Dallas (TX) new brewery and micro-distillery under construction</td>
<td>X</td>
<td></td>
<td></td>
<td>X (sour and barrel aging facility)</td>
</tr>
<tr>
<td>5) Modern Times Beer</td>
<td>«Fermentorium» in San Diego (CA)</td>
<td>X</td>
<td></td>
<td></td>
<td>X (sour and barrel aging facility)</td>
</tr>
<tr>
<td></td>
<td>«Leisuretown» under construction in Anaheim (CA)</td>
<td>X</td>
<td></td>
<td></td>
<td>X (Foeder, amphorae sour facility)</td>
</tr>
<tr>
<td></td>
<td>«Danlabes Dojo» brewpub under construction in Los Angeles</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>«The Belmont Fermentorium» brewery under construction in Portland (OR)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Fat Head's Brewery</td>
<td>Middleburg Heights under expansion (OH)</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X (barrels cellar)</td>
</tr>
<tr>
<td></td>
<td>North Olmsted (OH)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Portland (OR)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Canton under construction (OH)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Charlotte under construction (NC)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
### PRODUCTION STRATEGY

The strategy implemented by the companies defined the levels of production decentralization in small capacity facilities and the geographical expansion models implemented by the breweries. In order to have a visual reference of the different assets owned by the case studies selected, we put the different production locations on a map.

![Analysed companies’ production facilities map](image)

**Figure 61: Analysed companies’ production facilities map**

**Table 83: Production facilities cross-case analysis**

<table>
<thead>
<tr>
<th>Company</th>
<th>Facility 1</th>
<th>Facility 2</th>
<th>Facility 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>7) Jack’s Abby Brewing</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Framingham Sprindgale’s</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>barrel room (MA)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8) Revolution Brewing</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chicago brewery (IL)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9) Pizza Port</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Bressi Ranch brewery (CA)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solana Beach brewpub (CA)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carlsbad brewpub (CA)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Clemente brewpub (CA)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ocean Beach San Diego</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>brewpub (CA)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10) Mother Earth Brew</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Company</td>
<td>Vista brew</td>
<td>Vista brew</td>
<td>Vista brew</td>
</tr>
<tr>
<td>Vista brewery (CA)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nampa brewery (ID)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 83: Production facilities cross-case analysis*
Having described the production facilities and identified their location on a map, we can now assess the levels of centralization implemented by the different craft breweries selected. In particular, centralized production companies consolidated manufacturing in a main single facility while decentralized production companies distributed manufacturing in different small facilities. The main advantages to implement a centralized strategy are economies of scale, costs reduction and economies of learning while the main strengths to follow a decentralized strategy are flexibility, saturation of the capacity and easier forecasting of the demand.

Table 84: Production strategy cross-case analysis

<table>
<thead>
<tr>
<th>COMPANY NAME</th>
<th>CENTRALIZED PRODUCTION</th>
<th>DECENTRALIZED PRODUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Two Roads Brewing Company</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2) Funky Buddha Brewery</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3) Rhinegeist Brewing</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>4) Deep Ellum Brewing Company</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5) Modern Times Beer</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>6) Fat Head's Brewery</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>7) Jack’s Abby Brewing</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8) Revolution Brewing</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>9) Pizza Port</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>10) Mother Earth Brew Company</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

The vast majority of the analysed breweries follow a centralized production strategy, concentrating the manufacturing in a single facility and taking advantage of economies of scale. Rhinegeist Brewing follows a
slightly different direction by locating its pilot brewhouse in a different location from its main plants, next to its distribution centre.

A different strategy has been implemented by the following firms.

- *Mother Earth* and *Modern Times* have chosen a particular expansion strategy by locating different brewing facilities in different states, in order to expand their distribution geography. Both companies started their business in California and expanded respectively in Idaho and Oregon. We can notice that Modern Times decentralized slightly its production through the development of particular production-retail hybrids such as a brewpub in Los Angeles and Leisuretown brewing restaurant in Anaheim.

- *Fat Head’s* and *Pizza Port* implemented a decentralized strategy producing for distribution in a main facility and expanding their end customers sales through the construction of owned brewpubs and retails. Pizza Port focused its presence locally in California while Fat Head’s Brewery has expanded in different states, in particular Ohio, Oregon and North Carolina.

**RETAIL FACILITIES**

After we analysed, in the channels component of the canvas, the downstream integration strategies implemented by the craft selected breweries, we can go further studying the geographical locations and the types of retails owned by them. We will put the different retail assets on a map and we will identify their identity. In particular, we will classify them as brewpubs, restaurants, brewery’s taprooms, pubs or distribution centres.

<table>
<thead>
<tr>
<th>COMPANY NAME</th>
<th>LOCATION</th>
<th>TAPROOM</th>
<th>BREWPUB</th>
<th>RESTAURANT</th>
<th>PUB</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Two Roads Brewing Company</td>
<td>Stratford Brewery (CT)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bradley Airport (CT)</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Funky Buddha Brewery</td>
<td>Oakland Parks Brewery (FL)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Funky Buddha's Lounge and Restaurant original plant (FL)</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Rhinegeist Brewing</td>
<td>Cincinnati Brewery (OH)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Columbus (OH)</td>
<td></td>
<td></td>
<td></td>
<td>X (distribution centre)</td>
<td></td>
</tr>
<tr>
<td>4) Deep Ellum Brewing Company</td>
<td>Dallas Brewery (TX)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dallas (TX) new brewery and micro-distillery under construction</td>
<td></td>
<td>X</td>
<td></td>
<td>X ( sour and barrel aging facility)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fort Worth (TX) pub under construction</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
In order to have a visual reference of the different retail locations owned by the firms and to compare them with the production facilities position, we decided to pin them on a map.

<table>
<thead>
<tr>
<th>5) Modern Times Beer</th>
<th>«Fermentorium» in San Diego (CA)</th>
<th>X</th>
<th>X (bottled, amphora facility)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>«Leisuretown» under construction in Anaheim (CA)</td>
<td>X</td>
<td>X (amphora facility)</td>
</tr>
<tr>
<td></td>
<td>«Dankness Dojo» brewpub under construction in Los Angeles (CA)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>«The Belmont Fermentorium» in Portland (OR)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>North Park (CA)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Encinitas (CA)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>6) Fat Head’s Brewery</td>
<td>Middleburg Heights under expansion (OH)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>North Olmsted brewpub (OH)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Portland brewpub (OR)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Canton brewpub under construction (OH)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Charlotte brewpub under construction (NC)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Fat Head’s Saloon in Pittsburgh (PA)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>7) Jack’s Abby Brewing</td>
<td>Framingham Jack’s Abby brewery under expansion (MA)</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
|                      | Framingham Springdale’s barrel room (MA) | X | (bottled)
| 8) Revolution Brewing | Chicago brewery (IL) | X | |
|                      | Chicago brewpub (IL) | X | |
| 9) Pizza Port | Bessi Ranch brewery (CA) | X | |
|                      | Solana Beach brewpub (CA) | X | X |
|                      | Carlsbad brewpub and bottle shop (CA) | X | X (bottleshop) |
|                      | San Clemente brewpub (CA) | X | X |
|                      | Ocean Beach San Diego brewpub (CA) | X | X |
| 10) Mother Earth Brew Company | Vista brewery (CA) | X | |
|                      | Nampa brewery (ID) | X | |
|                      | Vista taphouse (CA) | X | |
|                      | Mother’s Provision in Vista (CA) | X | |

*Table 85: Retail assets cross-case analysis*
The first insight we get observing the retails owned by the selected companies is that each of them built a taproom inside every brewery they possessed. Taprooms are key channels to sell fresh products directly to customers, avoiding the three-tier distribution system, and could be exploited to design an immersive experience inside production facilities. It’s common, in fact, to see brewery tours offered to visitors.

As regards expansion through retails we can divide companies in two main groups:

- Some companies exploited owned retails to expand their presence on the local territory and to shorten the distance from customers. *Two Roads, Funky Buddha, Revolution Brewing* and *Mother Earth* simply built a single pub or restaurant inside the city in which they operate in order to build a stronger connection with the local community.

- *Modern Times, Pizza Port* and *Fat Head’s*, instead, took advantage of owned retails to expand their presence in new markets. Fat Head’s and Pizza Port, in particular, took advantage of an innovative
form of retailing that has been developed by craft beer companies: brewpubs. The brewpub is a hybrid between a small production facility and a pub, in which the products consumed by end customers are produced under the same roof. Modern Times followed a slightly different direction by developing a variegated portfolio of retails to engage with end customers: restaurants, pubs, café, a beer garden and a brewpub.

Key activities
Looking at the different business model canvas, the main activities performed by the companies are: prototyping, production and delivery of the products, materials sourcing, management of distribution relationships, sales and marketing.

Two Roads represents an exception in this generalization as it focused its model on producing beer recipes designed by third parties. Rhinegeist and Deep Ellum offers self-distribution services to local retails dedicating specific resources and assets to this activity.

Let’s focus now on the beer styles produced by the different companies. All the companies developed experimental products by building a barrel aging cellar inside the brewing facility. Some of them went further in the experimentation by creating sour-fermented beers and dedicating a specific facility to their production: Modern Times, Two Roads and Jack’s Abby under the brand Springdale. Jack’s Abby decided to differentiate its offering by dedicating completely to the production of cool, bottom yeast fermented beers, also known as lagers.

It’s also interesting to notice that, in term of additional products, Modern Times, Deep Ellum and Rhinegeist developed additional skills and diversified with a concentric strategy respectively through the roasting, blending and brewing of coffee, through the distillation of spirits and through the production of apple cider.

In companies where owned retails play an important role such as Modern Times, Fat Head’s and Pizza Port the food offering should be considered an important decision. The retails owned by those breweries, in fact, could be exploited to build a strong brand perception among their customers.

Key partnerships
Craft breweries have to interact with the following downstream key partners, in order to create value to their customers: raw materials, packaging goods, machineries and service providers. In the Porter analysis, we identified malt and hops suppliers as the most crucial downstream relationships for a craft brewery. In fact, both the supply markets are extremely concentrated and it’s very difficult for a craft brewery to develop these ingredients in-house. For this reason downstream vertical integration strategies are uncommon and if
implemented they represent a small part of the total purchasing volumes, like we’ve noticed in the *Jack’s Abby* case study.

In the future a downstream integration trend could be created following the recent “farm brewery” movement. The notion is still fuzzy in US as is generally fluid in most states. However, in the state of New York a law passed in 2012\(^{122}\) set four specific parameters for the designation of New York Farm Brewery. Companies such as Rogue Ales and Spirits in Oregon and Almanac Brewing in San Francisco is following this movement by growing an important part of their ingredients on site or sourcing them from local farms. It’s interesting to notice that in Italy COBI (Consorzio Italiano di Produttori dell’Orzo e dell Birra) union created through the ministerial decree 212/1010 a first legal definition of agricultural brewery\(^{123}\), in order to align the product to the terroir nature of wine. According to the definition a company must use at least 51% of self-produced cereals in its products to be defined a farm brewery. Currently 81 Italian craft breweries could be considered “farm breweries” by law, with consequent tax cuts\(^{124}\).

The most important partners are represented by distributors, given the three-tier distribution system set by law. Craft breweries have to interact with them creating long term relationships in order to have a capillary presence of their products on the market.

An interesting observation needs to be done regarding ownership and financing methods, given the independent nature of the companies set by the Brewers Association definition. Most of the companies analysed are private, with the majority of shares owned by the founders. Some firms have chosen an alternative path.

In particular *Funky Buddha*’s shares have been acquired by Constellation Brands during the period of analysis, that added the company to its portfolio composed famous brands like Corona and Ballast Point. Because of this decision the company cannot be considered a craft brewery anymore.

In order to avoid the acquisition by multinational beer companies and the consequent loss of the title of craft breweries, *Deep Ellum* and *Modern Times* have found alternative methods of financing. Deep Ellum sold 56% of its stakes to the investment group Stories Craft Breweries, getting the access to $10 million in growth capital. Modern Times has chosen a different path, becoming in July 2017 employee owned. In fact, the company through a repurchase of shares held by outside investors, gave 30% if its stock to its employees. This is an

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example of an alternative and meaningful form of financing that provides to a company’s workforce an ownership interest in the company.

6.1.3 Financial structure business model section (economic model)

Revenue streams

The revenue streams observed in the business models we designed could be divided in two main categories: revenue streams coming from end customers and coming from distributors.

The main source of revenues from the first segment are beer sales, brewery tours, events, merchandising and food sales for some companies. Three breweries could take advantage of a slightly differentiated offering selling products different from beer. Modern Times sells coffee roasted and blended inside its facilities. Rhinegeist produces cider, an alcoholic beverage produced from the fermentation of apple juice. Deep Ellum will produce, in the future, small-batch spirits inside its new micro-distillery in Dallas.

Revenue streams coming from business customers are mainly represented by contracts, usually long term oriented, that define the terms and the agreements of the deal. An exception is represented by Two Roads that gets most of its revenues from contract brewing.

The main difference distinguishing the chosen companies’ business models is the balance between business to business and business to customers revenues. Some companies targeted their activities mainly to distributors, with a focus on long term contracts. Other companies targeted their activities to end customers, trying to find alternative channels to prevent the three-tier distribution system.

Cost structure

The cost structure sustained by the breweries analysed has been standard for all of them. The companies had fixed costs, represented by equipment and utilities, rent, overheads and depreciation/amortization, and variable costs, represented by direct materials and piece rate workers. The structure is aligned to the one we forecasted in the industry overview.
6.2 Second step: business model archetypes

Analysing the components of the canvas and the strategic decisions made by the companies selected we identified four main business model archetypes. These archetypes identify different approaches to interact in the market through which craft breweries successfully profited from the innovation.

As we can see from the image below the strategies we identified are: single brand brewery, gypsy brewing, brewpubs and multi brand brewery.

![Archetypes Diagram](image)

*Figure 65: The four business model archetypes identified by the analysis of the selected companies' business models*

In order to give a comprehensive overview on the strategies we will start describing them in depth, connecting their characteristics with the 5 forces faced by firms, analysing their main business model features and presenting the main differences among the companies grouped in them.

We will analyse the strategic development of the market by developing a timeline of the business model archetypes determined, describing the most important events defining the innovation. In order to have an historical reference of the American craft beer segment we will take as reference the book “The Audacity of Hops: The History of America's Craft Beer Revolution” by Tom Acitelli (2017).

In the final section we will exploit the metaphor exercise introduced by Roberto Verganti (2009) in order to present the findings to a wider audience and to define the meanings represented by the strategies implemented. Metaphors, in fact, are powerful tools that can help us extend concepts defining one thing in terms of another.
Taking advantage of this imaginative form of rationality we will be able to communicate easily the meanings and values adopted by companies that profited most from the craft beer innovation.

6.2.1 Business model archetypes overview

Archetype #1: Single Brand Brewery

The first cluster we identified is the most common among the companies we analysed and the most traditional in the industry. The breweries implementing a “single brand brewery” model are: Funky Buddha Brewery, Rhinegeist Brewing, Deep Ellum Brewing Company, Revolution Brewing and Mother Earth Brew Company.

Modern Times adopted a hybrid business model approach mixing features from the “single brand brewery” and from the “brewpubs” archetypes. We will analyse the case study in the “brewpubs” archetype section.

DESCRIPTION OF THE MODEL

This cluster represents the typical strategy implemented by craft breweries, as it has been chosen by more than half of the business cases we analysed. The companies belonging to this cluster focused their business model on distribution. For this reason, the majority of the volumes have been sold through contracts to B2B customers or through self-distribution. Most of the production is centralized in 1-2 production facilities. As regard the B2C segment companies dedicated limited asset to its development, usually dedicating a taproom adjacent to the plants and an additional restaurant or pub in the city in which it operates.

The companies that adopted this business model archetype have been able to profit from the innovation by developing long term relationships with distributors and retailers. They could compete with multinational companies with important financial resources by leveraging on the superior quality of their products and on an amplified variety of beer styles. The most successful companies in the industry focused their efforts to develop a flexible supply chain, launching always new products on the market, in order to be competitive with the mainstream market products. The consequence is a fast and lean new product development process.

CONNECTION WITH THE 5 FORCES MODEL BY PORTER

Bargaining power of buyers is one of the strongest force we identified in the industry analysis of the companies we made. The three-tier distribution system restricted alternative methods of direct selling and concentrated the power in the hand of distributors. The distribution market is characterized by a high concentration, an important profitability and, ultimately, extreme levels of competition. For this reason craft breweries, to have a strong presence both on-premise (in pubs, bars and restaurants) and off-premise (in grocery stores and supermarkets), need to concentrate their resources on the development of long term contracts or develop, if possible, self-distribution forms.
MAIN BUSINESS MODEL FEATURES

The main leverage on which this cluster is based is the revenue streams section of the canvas. The breweries adopting a single brand brewery strategy, in fact, get most of their profits from business customers through contracts.

The main consequences of this choice are the concentration of the production in 1-2 big facilities, the development of a sales team dedicated to the construction of relationships with distributors, the offering of distribution incentives or additional services and the creation of assets for self-distribution.

*Rhinegeist* added in its assets a distribution centre in Columbus including a research and development micro-brewery. This decision has been made to build a stronger connection with the community and to expand the presence in the Ohio state at lower costs. The company also developed a concentric product differentiation strategy by producing cider, an alcoholic beverage made from the fermented juice of apples.

*Deep Ellum*, through the announcement of the creation of a new micro-distillery in Dallas, will follow the same concentric strategy offering craft spirits to their customers.

DIFFERENCES AMONG THE COMPANIES IN THE CLUSTER

The main drivers differentiating the companies implementing a single brand brewery strategy are the implementation of self-distribution and the geographical presence of the products. In particular *Rhinegeist* could be able to take advantage of exceptions in the three-tier distribution system allowed by law in Ohio\(^\text{125}\) to distribute directly to retailers in the city of Columbus and Cincinnati. *Deep Ellum* made the same decision being able to self-distribute in the area adjacent to the brewery in Dallas, given its hyper-local focus. The firms that followed this sub-strategy had to acquire assets dedicated to transportation such as trucks and to develop dedicated services to retailers. For example Rhinegeist created a separated company, Riverghost Distributing, dedicated to the distribution of wine, spirits and craft beer.

As regards the localization of distribution the majority of the breweries followed a regional focus, distributing mainly in 3 or more US states. An exception is represented by *Funky Buddha* and *Deep Ellum* that followed a local focus, building a strong relationship with the community. In particular Funky Buddha focused on the Florida market while Deep Ellum focused on the city of Dallas (TX). The company has planned to expand its presence in the state after the acquisition by Storied Craft Breweries, planning the opening of a new pub in Fort Worth (TX).

*Mother Earth* opted for a slightly different approach regarding its geographical expansion, defining a second sub-strategy in the archetype. The company, in fact, decided to build two main production facilities in two

states, California and Idaho, in order to expand its presence in different geographical areas. The same approach has been adopted by *Modern Times* that announced the opening of a new production facility in Portland, Oregon, supporting the original plants located in San Diego, California.

**Archetype #2: Gypsy Brewing**

The gypsy brewing business model archetype has been implemented by *Two Roads* and it’s a form of de-verticalization. Gypsy brewers do not own any manufacturing facility but they operate by outsourcing production to a contract brewery. By this way those companies could focus their resources on recipes prototyping, marketing activities and sales to expand their presence globally with a low initial investment and limited fixed costs.

**DESCRIPTION OF THE MODEL**

The company produces white label products for third parties that outsource the manufacturing of their products, focusing its business on production and quality control activities. The recipes followed by Two Roads are usually developed by contract breweries or in collaboration with them. The profits earned from this customer line are reinvested in the development of the owned brand Two Roads.

Two Roads was the most growing company in the last 5 years among the 100 biggest craft breweries in US, with an annual compound growth rate of 4195,70%. The model adopted was successful for different reasons. First of all, the firm has been able to lower risk by financing through long-term contracts with third parties. The owned brand Two Roads is partially financed by profits gained from contract brewing and it represents a secondary source of income. Another key success factor is represented by the unique know-how and the core capabilities developed focused on third parties’ recipes production and quality assurance.

The most traditional contract relationship available for craft breweries is defined alternating relationship, in which a host brewery lends its facilities on a regular basis to a third party that legally owns the facilities during the production process. The production is performed usually by host breweries that take the recipes developed by contract brewers and produce it inside their plants.

Another possible arrangement available for a business or a brewery is to solicit the services for a contract brewery to produce an entire beer for them, from recipe development to brewing to distribution. This outsourcing trend created a new opportunity in the market identified by The Brew Hub. The company is a business facilitator that existing craft brewery could exploit to expand their presence in new markets without important investments, offering not only production but also sales and distribution services.
The strategy implemented by Two Roads could be considered an example of white label production, a common form of outsourcing adopted in different industries such as automotive, semiconductor and hardware. For example Foxconn, one of the world’s largest electronics manufacturer, implemented a similar approach on the market manufacturing components for Apple, Hewlett-Packard, Nintendo and Sony. The main advantages to adopt an outsourcing facilitation strategy is on one hand the reduction of development, marketing and distribution costs and on the other hand a better focus on core activities such as sourcing, marketing and packaging.

In our reference case the main consequence on the five forces by Porter is a reduction of the bargaining power of buyers, as distributors have been substituted by contract breweries. The model has also an impact on the upstream market power, as the company has developed specific resources to management of suppliers lowering their bargaining power.

**MAIN BUSINESS MODEL FEATURES**

The gypsy brewing business model archetype is based on an innovative value proposition, addressed to a new customer segment: contract breweries. The main source of revenues is represented by long term contracts with contract breweries, while distribution contracts and direct sales for branded products play a secondary role.

This innovative approach generated different effects on the value generation side of the canvas, affecting the key resource and key activities developed by the firm. In particular, most of the human resources are dedicated to the new core activities represented by production, sourcing and management of brewing contracts.

It’s interesting to notice that the cost structure of Two Roads has remained unchanged while gypsy breweries, taking advantage of contract production, could be able to disrupt the costs usually sustained to run the business, lowering considerably the initial investments and the fixed costs incidence.

As regards additional initiatives implemented the company’s production facilities are divided in two main sections separated. One part is dedicated to traditional beer production of lagers and ales, while “Area 2” is dedicated to experimental brewing techniques such as sours and barrel-aged beers. The two parts are separated because of the risk of contamination that particular yeast strains could cause.

**Archetype #3: Brewpubs**

The brewpubs strategy has been adopted by three companies among the ones selected: *Modern Times*, *Fat Head’s* and *Pizza Port*. This model could be considered an alternative to the distribution focused one, as it’s based on catching business to customers’ profits, trying to disrupt the three-tier distribution system set by law after prohibition.
The companies belonging to this group are not all similar, but they implemented distinctive decisions in term of branding, product orientation, retail and distribution. In particular Modern Times implemented a hybrid model dedicating specific initiatives to end customers and others to distributors.

DESCRIPTION OF THE MODEL

The companies belonging to this archetype tried to bypass the three-tiered distribution system in order to find an alternative to the traditional distribution focused strategy. The firms following this business model made different choices to compete in the market, but substantially they dedicated a main production facility to distribution and they expanded their presence through the creations of owned retails. They took advantage, in particular, of an innovative form of retailing, brewpubs, in which production and consumption occur in the same building. In fact in some US states such as California, Ohio, North Carolina and Pennsylvania126 breweries are allowed to self-distribute a limited quantity of beer produced inside small capacity brewpubs.

The companies adopting a brewpubs business model, have been able to design two different strategies inside the canvas, each of them dedicated to a specific customer segment. In particular, they created a centralized production facility dedicated to distribution contracts and they expanded geographically through different decentralized small brewing-retails dedicated to end customers. Taking advantage of self-sustainable and locally focused manufacturing plants, firms have been able to offer to their consumers a larger variety of products and to design a more responsive supply chain structure.

CONNECTION WITH THE 5 FORCES MODEL BY PORTER

The decision to vertically integrate in the downstream market has been made with one main purpose: lowering the bargaining power of distributors, internalizing the additional profits shared to them. The creation of an innovative production-retail hybrid also allowed the companies to differentiate from competitors and from substitute products manufacturers.

MAIN BUSINESS MODEL FEATURES

The different elements of the canvas could be divided in two main groups according to the segment to which are dedicated: some elements are dedicated to the distribution segment and to contracts while others are dedicated to end customers and on-premise consumption. While the first group of elements is quite standard and could be associated to the first cluster we identified (single brand brewery), the second group represents the innovation introduced by the companies on the market and must be analysed further.

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The main sections affected by the segment are key activities and key resources. Breweries, in fact, expanded their presence on the end market through the development of owned retails that are also manufacturing facilities. This particular form of channels is self-sustainable, producing the volumes needed on-the-spot and it contributes to create a more flexible and market responsive supply chain. It’s also interesting to notice the additional activities needed to run a retail focused business model: retails management, raw materials sourcing and food preparation.

DIFFERENCES AMONG THE COMPANIES IN THE CLUSTER

The first difference among the case studies identified in the cluster is the geographical market of reference. Pizza Port and Modern Times focused their retail presence in California, taking advantage of the development of the market, while Fat Head’s decided to expand from Oregon to Ohio, North Carolina and Pennsylvania. It’s interesting to notice that Modern Times is expanding its distribution presence thanks to the development of a new brewing facility in Portland, Oregon.

Another dimension distinguishing the companies is the type of retails owned. Pizza Port and Fat Head’s opened a chain of brewpubs while Modern Times opened a variegated form of retails, in particular a restaurant with a foeder brewery, a brewpub and it has three different pubs under construction. Modern Times, compared to the other firms in the cluster, is currently dedicating more volumes to distribution but it’s clear a strong brewpubs and retails expansion plan. The end customers and distributors volumes will continue to be balanced through the construction of the new facility in Oregon. We can conclude that the company is implementing a hybrid business model archetype, mixing a distribution focus with owned-retail expansion.

Another important difference is represented by the level of freedom and managerial centralization assigned to the different assets. Fat Head’s managed the brewpubs owned in a centralized approach, converging the product development in the company’s main facility. Modern Times and Pizza Port adopted a decentralized approach, leaving freedom to the different retails in term of product development activities.

Another interesting initiative is the concentric differentiation implemented by Modern Times, thanks to the blending, roasting and brewing activities performed inside its café.

Archetype #4: Multi Brand Brewery

The multi-brand brewery business model has been implemented by Jack’s Abby. The company developed two different brands, Jack’s Abby and Springdale, targeted to two distinctive customer segments and following a specific growth strategy. Springdale could be considered a side project for the company currently, as the brand has been launched one year ago. However, we can consider the project strategic for the future development of the firm because of its focus on the high-end customers and because of the similar strategy implemented by other companies operating in the industry.
DESCRIPTION OF THE MODEL

Jack’s Abby Brewing created two distinctive brands, producing different beer styles and dedicated to two different customer segments. Jack’s Abby produces lagers, beers produced with a bottom fermentation yeast and matured through a cold storage process called «lagering». These beer styles, born in Czech Republic and developed historically in Germany, are represented by the biggest selling products in the market such as Budweiser, Coors Light and Heineken. The company decided to offer a craft version of lagers, showcasing the different styles produced historically and the superior taste of high quality ingredients. We can say that the brand, dedicated mainly to distribution, has been targeted to average beer drinkers to compete with the commercial product offering.

Springdale is a barrel room adjacent to the company’s brewery. Under this brand the firm sells experimental beers produced through the fermentations of different strains of yeast and bacteria and consumed after an aging period in wood barrels. Given the premium nature of the products the brand is dedicated to high end beer connoisseurs. The company dedicated to the brand a «own-premise» business model, making its products available only in the owned tasting room. This term, introduced by Bryan Roth in its article for Good Beer Hunting¹², has been implemented by different craft beer brands successfully such as Trillium in Boston and The Rare Barrel in Berkeley. These firms have decided to make available the majority of their production volumes only in the brewery’s taproom, to provide a fresher and higher quality product and also to build an exclusive experience for customers. According to Brewers Association own-premise companies accounted the 1% of the total beer market in 2016 but the trend is about to increase.

The Company, in general, opted for a particular strategy in its brand architecture strategy. In fact Jack’s Abby decided to build a product related individual branding portfolio, dedicating a single mark for a specific product type. This strategy is widely used by different consumer goods companies in order to have a balance between the different brands developed and serve distinct target customers at the same time. The most famous examples are Procter & Gamble, with famous product brands such as Gillette, Head & Shoulders, Tampax and Pantene, and Unilever, with famous product brands such as Algida, Lipton, Axe and Dove.

CONNECTION WITH THE 5 FORCES MODEL BY PORTER

The company focused its strategy on customer’s segmentation, dedicating a specific brand with a specific business model to each of them. Jack’s Abby has been developed to offer to average customers a craft alternative to cheap, low-end products offered by multinational companies. This decision it’s aimed to defeat internal rivalry developing a craft alternative to the beer produced by the leaders of the market.

Springdale, on the other side, has been developed to serve the high-end segment of the market through experimental, mixed fermentation beers. We can say that Jack’s Abby is for the company the main source of revenues, being dedicated to distribution, and it’s exploited to drive the consumption of premium products under the Springdale brand.

**MAIN BUSINESS MODEL FEATURES**

The main leverage on which the company built innovation is the value proposition, developing two lines of business with a different product offering and targeted to a dedicated customer segment. The consequences on the overall business model are limited to the revenue streams and the value capturing sections of the canvas. Jack’s Abby aimed to expand craft beer as innovation to a larger audience, developing on one side a craft and higher quality version of the most consumed brands in the market, and exploiting on the other side high-end customers with a high willingness to pay with the brand Springdale.

From a key resources and activities point of view the company followed a strategy common to the traditional single brand brewery archetype.

### 6.2.2 Timeline of development of the business model archetypes

In order to understand the evolution of the market and the development of the strategic archetypes that captured most from the innovation, we will define briefly the history of craft beer innovation and we will contextualise the creation of the business models we identified. For the historical data we will take as reference the book “The Audacity of Hops: The History of America's Craft Beer Revolution” by Tom Acitelli.

The output will be a timeline in which we will represent the origin of the different strategies identified: single-brand brewery, gypsy brewing, brewpubs and multi-brand brewery.

**SETTLEMENT OF THE CRAFT BEER REVOLUTION**

During the period that goes from the end of the Civil War to the beginning of the First World War, America’s domestic beer production increased significantly, from 3.7 million barrels to 59.8 million, turning the product into de-facto national drink. Beer consumption was local, and the brewing trend was delineated by geography.

The oldest operating craft brewing company in US is Anchor Brewing, an historic brewery operating in San Francisco since 1896. The firm has been founded in 1896 when Ernst F. Baruth and his son-in-law Otto Schinkel bought an old brewery and named it Anchor. The company had a difficult and troubled history since it experienced different closings and changes of location along the years. In 1906 the brewery plants burned down in the fires that followed an earthquake, and it was rebuilt 1 year later on a different location.

On January 1919, the Eighteenth Amendment has been put into action starting the Prohibition era. The production of any commercial beverage with over 0.5% of alcohol became illegal. During this period there is
no record of any Anchor activity. In 1933, after the repeal of the law at the federal level, American brewing industry remerged into a new environment defined more by size rather than geography.

In the spring of 1933 Joseph Kraus, a German immigrant, reopened Anchor few blocks away only to have the brewery burnt down the following February. Kraus and a partner brewmaster, Joe Allen, reopened yet again in another spot but the new homogenised American tastes in beer and the consolidation of the market in the hands of few monopolistic firms, Schlitz, Anheuser-Bush and Pabst, forced the owners to close the brewery in 1959. The plants have been reopened the next year but the company was doing so poorly that it nearly closed again in 1965. In fact, Anchor experiencing a period of lack of expertise, equipment and attention to cleanliness gained the reputation for producing bad, sour beer.

In 1965 Fritz Maytag bought control of the 51% of the firm for what he described as «less than the price of a used car». Investing heavily in improvements to the equipment and developing the iconic Anchor Steam in 1971, he started the so-called craft beer revolution. The first craft brewery created following the movement settled by Anchor Steam has been New Albion Brewing, founded by Jack McAuliffe in 1976 after visiting the San Francisco brewery.

The business model of Anchor Steam, a distribution focused single-brand brewery, could be considered the reference for the historic development of the innovation.

The firm, has been sold in 2010 to The Griffin Group128, an investment and consulting company from former Skyy Vodka executives, and in 2017 to the Japanese giant Sapporo Holding for $85 million129, losing the definition of craft brewery.

THE GYPSY BREWING MOVEMENT

The birth of the contract brewing movement occurred in the summer of the 1982 when Matthew Reich and the successful brewing consultant Joseph Owades closed a contract with F.X. Matt Brewing Company for the production of their New Amsterdam amber lager recipe. This innovative start-up decision has been made to start commercializing quality craft beer in New York city without investing the great capital needed for the equipment.

Different famous breweries took advantage of this form of agreement to commercialize their products. Brooklyn Brewery, founded in 1987 by Tom Potter and Steve Hindy, started his business by contracting out

the production to F.X. Matt Brewing in Utica, following the same decision made by Matthew Reich. The firm could be able to open its own facility in 1996 in Williamsburg.

Boston Beer Company, currently the second biggest craft brewery in US producing the iconic beer Samuel Adams, took this strategy to a next level. The firm, launched in 1985, has initially built a partnership with the Pittsburgh Brewing Company and experienced an explosive growth contracting with other brewing facilities in Pennsylvania, Oregon and also Germany. The firm started reducing its reliance on contract brewing by purchasing Hudpohl-Schoenling Brewery in Cincinnati but its business model still strongly relies on production outsourcing.

The outsourcing strategy implemented by the companies we presented has been widely criticized by different actors in the industry, considering it a shortcut to start a business. This strategy is having success nowadays through the development of the «gypsy brewing» trend in Scandinavia. Mikkeller, most prominent example of this movement, has been able to produce more than 1000 different beers around the world thanks to contract brewing partnerships.

Contract brewing, however, represents a secondary business strategy for craft breweries and it’s often used in the start-up phase of a company to avoid the high investments needed to run a brewing facility. According to Brewers Association, only 1.7% of the beer sold in 2012 in US was contract-brewed.

HISTORY OF BREWPUBS AND BREWPUB CHAINS

The brewpub concept is born in 1981 when Bert Grant filed incorporation papers with the state of Washington to open the nation’s first brewpub since prohibition. This innovative retail, in which beer production and consumption happen under the same roof, is born after the president Carter’s signature on HR 1337 in 1978 through which homebrewing (the activity of making beer as hobby) became legal for personal or family use. This bill, in fact, not only legitimized the hobby from which most of the craft beer entrepreneurs started their companies but also opened new possibilities of brewing on a small scale. In fact, in the following years several legislations have been signed in some state to allow on-premise sales of beer up to certain amounts.

In 1982 Grant’s Brewery Pub, also called Yakima Brewing and Malting Company, opened in a former opera house in Yakima, Washington.

Just a year after Yakima, California’s first brewpubs opened in Hopland followed by the foundation of Buffalo Bill’s Brewpub in Hayward. The success of the new business model was instant and the popularity of brewpubs grew nationally. In 1993, just a decade after the opening of this first innovative retail, 70 new brewpubs opened

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and in 1995 more than 360 were in operation thanks to the help of legal changes in some big states such as Texas and Florida.

The phenomenon of brewpub chain was the consequent evolution of this innovative production-retail hybrid. Frank Day saw an opportunity and, after acquiring the struggling Boulder Brewing Company in 1990 opened the Rock Bottom Restaurant and Brewery in Denver in 1991. The formula was successful and Day soon expanded in Houston (Texas), Portland (Oregon) and Minneapolis. Rock Bottom was at the vanguard of the brewpub-chain trend, followed by some of the major companies in the industry such as BJ’s Restaurant and Brewery, Gordon Biersch Brewery and McMenamins Breweries.

The development of the brewpub chain business model trend has been criticized by people from the industry. In particular Larry Baush, publisher of the Pint Post on the Seattle newspaper, describes the strategy as a “McDonaldization of the original concept of brewpub”.

ORIGINS OF THE UMBRELLA BRANDING STRATEGY

It’s very difficult to assess the development of the multi-brand brewery business model archetype because of different reasons. The strategy is the most adopted by multinational beer companies that developed a wide brands portfolio through mergers and acquisitions. AB InBev has a widely developed architecture and, after the acquisition of SAB Miller, ended up owning 224 brands worldwide. The company developed a craft-related division in its portfolio, High End, under which 10 ex-craft companies are positioned.

Another example is represented by Craft Brew Alliance, a company founded in 2008 composed by 5 beer and cider brands. The firm is the 9th largest brewery in US according to Brewers Association and AB InBev bought in 2010 32.2% of the business stocks.

Our reference company, Jack’s Abby, differs a lot from the examples we presented not only in term of brand portfolio expansion but also in terms of volumes and geographical expansion. In summary is difficult to assess the foundation of the individual branding portfolio strategy as it has been a widely used marketing approach by a large number of consumer goods multinational companies.

Among the companies selected in our analysis, Pizza Port followed the same business model archetype through the creation of the side project Port Brewing in 2006. The firm, in fact, created three different brands dedicated to a specific product type: Port Brewing dedicated to west-coast inspired beers, Lost Abbey dedicated to Belgian inspired sour and barrel aged beers and The Hop Concept dedicated to IPAs created through the utilization of experimental hops. It’s difficult to say whether Port Brewing could be considered a pioneer of

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131 Source: Quartz (2015). “These are the 224 beer brands that will soon be owned by just one company”, retrieved on 2017/11/16 [at: https://qz.com/522694/these-are-the-224-beer-brands-now-owned-by-just-one-company/]

this strategy in the craft beer movement and, for this reason, we cannot assess the historical birth of this business model archetype.
6.2.3 Metaphors of meanings for the business model archetypes

Taking advantage of the model introduced by Verganti (2008) we defined craft beer as an innovation based on meanings, shifting the reason why people love to buy the product. The scholar introduced metaphors as imaginative form of rationality to create new meanings and, ultimately, disruptive innovations in markets.

In order to give a clearer idea of the strategies followed by the different companies selected and in particular to the meanings they provided to customers, we will compare the firms to the ones competing in another industry. In particular we will compare the craft beer market with the coffee producer ones.

The comparison is not meant to be a correlation of the two markets but it needs to be taken as a strategic exercise to catch the meanings represented by the companies that profited most from the craft beer revolution.

Archetype #1: Single Brand Brewery and the Lavazza metaphor

![Lavazza logo](image)

*Figure 66: Single brand brewery archetype’s metaphor of meanings*

We took Lavazza as metaphor for this strategic archetype as the company, compared to other firms in the market, focused its business model on distribution. The Italian Company has developed different additional products and services along to its core offering but it could count on a global presence worldwide in over 90 countries thanks to the direct subsidiaries and an extensive network of distributors. The production is concentrated in 6 plants: 3 in Italy, one in France and two hubs in Brazil and India.

The main meanings represented by the metaphor are a solid quality perception given by the brand and a ubiquitous presence of the products given by distribution partnerships.

MAIN BUSINESS MODEL SECTIONS

The business model identified is based on the business to business customer segment, with a consequent relevant revenue stream represented by contracts. In order to build a strong perception of the products companies have to build a meaningful brand, telling a powerful story to their customers.

Key partnerships, represented by distributors, play a fundamental role in the geographical presence of the product on the final market and for this reason have a strategical consideration for the companies.
STRENGTHS AND WEAKNESSES

The main strengths to implement this business model archetype are:

- Long term relationships with distributors ensure a capillary presence of the products.
- Contracts signed with them lower the risks faced by companies.
- Focus on brand development and marketing.
- Possibility to build strong alliances and expansion plans with distributors.
- Higher volumes of sales decrease the production volumes fluctuation.
- Development of economies of scale.

The weaknesses faced by companies choosing this strategy are:

- Distance from end customers cause uncertainty because of the bullwhip effect.
- Profits sharing with distributors decrease products’ mark-up.
- Bargaining power is a crucial issue during negotiations.
- High investments needed to communicate the brand to final customers.
- Geographical expansion can happen only through contracts.
- Risk given by the concentration of production in big manufacturing facilities.

Archetype #2: Gypsy Brewing and the Ublend service metaphor

Ublend is a custom roasting, blend and packaging service provided by the Australian Group Kaffeina. The company offers contract roasting and private white label services to contract companies, providing coffee products under third party brands and labels. Ublend proposes these services mainly to café bars, online coffee merchants and wholesalers that want to differentiate from competitors creating branded products.
The meanings represented by the service are the focus on manufacturing activities for third parties and «marketing company» effect by contract firms.

Comparing the gypsy brewing archetype we identified with the business model implemented by Ublend some clarifications need to be made. While Ublend offers simple white label services to brands that wants to differentiate on the market, Two Roads offer co-development contracts on which gypsy brewers found their business. In fact contract breweries consider the partnership with manufacturing facilitator strategic to their success, leaving to them the production of internal designed recipes. By this way those companies can focus on branding, marketing and sales activities.

MAIN BUSINESS MODEL SECTIONS

The innovation of the model is mainly based on the introduction of a new customer segment: contract companies. By offering white label production services the firm not only could change its orientation moving toward a servitization direction but could also specialize on core capabilities such as manufacturing, consultancy and quality management.

The consequences on the business model are multiple. The most important change is in the value proposition section where consulting becomes a primary focus for the company. To offer this innovative offering companies need to specialize on production-oriented activities, leaving marketing, branding and sales to external companies. The result is a source of revenues mainly coming from service contracts. Another relevant section is represented by key relationships, in which contract companies play a crucial role.

STRENGTHS AND WEAKNESSES

The main strengths to implement this business model archetype are:

- Saturation of the capacity through third party production.
- Possibility to leave excess capacity to owned brand production.
- Focus on manufacturing, sourcing and quality assurance activities to develop distinctive core capabilities.
- Servitization of the offering with a consequent premium price.
- Long term contracts lower risks and the bargaining power owned by distributors.
- Outsourcing of marketing, sales and distribution reduce administrative costs considerably.

The main weaknesses are:

- Distance from end customers and consequent loss of opportunities.
- Less competences compared to the normal business model focused on distribution.
- Bargaining power of contract breweries.
- Need to develop resources and capabilities to move from a white label business model to a normal distribution focused archetype.
- A competitor with better services or lower costs could beat the competition and disrupt the service offering.

Archetype #3: Brewpubs and the Starbucks Reserve Roastery metaphor

![Figure 68: Brewpubs archetype's metaphor of meanings](image)

Starbucks developed an upscale brand called Reserve in order to fight off competition coming from super-premium coffee rivals. The project, born after the acquisition of the Italian bakery Princi, is dedicated to the high-end side of the market and it will have a global impact. Reserve products, in fact, will be served in more than 1,000 bars by the end of 2017 where baristas will prepare coffee using a variety of methods such as siphon brewing, pour over and coffee press.

The Starbucks Reserve Roastery in particular, opened in December 2016 in Seattle and it has been described by the Company as the future of Starbucks. The concept store will be opened soon in other cities around the globe such as New York and Shanghai in 2017 as well as Tokio and Milan in 2018. The concept retail includes in its facilities operating machineries in which raw coffee beans are blended and roasted together. By this way customers could observe the process of coffee production in the same location in which they consume it, having a more authentic experience.

The meanings represented by the creation of this innovative form of retailing are a reduction of distance between the production and the consumption of products and the creation of an immersive experience where customer could assist to the manufacturing process in first person.

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The business model of Starbucks compared to the one implemented by brewpub oriented companies is more complex. The company, in fact, developed an additional brand to come up beside the existing one, in order to catch profits from the high-end segment of the market. Reserve products will be served in traditional existing stores but, in order to build an interactive experience for customers and to promote as a luxury coffee brand, Starbucks decided to develop Roastery concept stores. In 2018 this innovative form of stores will be around the globe and they will be the symbol of the future direction of the company.

To conclude brewpub firms used this innovative retail-production hybrid concept to expand their presence on the market through the decentralization of the production, while Starbucks is taking advantage of this concept to promote its new high-end coffee brand.

MAIN BUSINESS MODEL SECTIONS

The main innovation of the model is represented by the creation of a new type of retail stores. Brewpubs, just like Reserve Roasteries designed by Starbucks, not only are a place of consumption but also a place of production changing the discontinuity between these two activities.

The impact on the business model canvas is mainly on the channels section. In fact companies, by expanding through production retails, could decentralize production closing the distance from customers and having a direct contact with them. Another important section to be considered is the customer segment one, as companies are more focused on business to customer segment and they are skipping the three-tier distribution system. The results are revenue sources coming mainly from owned retails through a fixed menu pricing model.

STRENGTHS AND WEAKNESSES

The strengths of this business model archetype are:

- Close relationship with final customers.
- Innovative retail-production store creates an interactive experience for customers.
- Decentralization of the production reduces the volumes fluctuation and lowers uncertainty.
- Possibility to internalize profits shared to distributors.
- More flexibility of operations and production.
- Possibility to offer additional products such as food.

The main weaknesses of this business model are:

- Inefficiencies in sourcing raw materials.
- Lack of important economies of scale.
• Difficulty to have standardization of processes and procedures.
• Possibility to have problems to saturate the facilities.
• Duplication of resources increases costs.

Archetype #4: Multi Brand Brewery and the Nestlé coffee division metaphor

Figure 69: Multi brand brewery archetype's metaphor of meanings

Nestlé is the largest food company in the world by revenues since 2014\textsuperscript{135}. The company owns over 8,500 brands in 80 countries including Kit Kat, Nesquik, Smarties and Cheerios. Taking as reference the coffee division the firm developed an individual branding portfolio structure, with three main marks: Blue Bottle Coffee, Nescafé and Nespresso. Each brand created in the coffee subdivision is dedicated to a specific product type and targeted to a distinct customer segment.

Blue Bottle Coffee is a coffee roaster and retailer headquartered in Oakland (California) focused on high quality single-origin beans. The company is considered the major player in third wave coffee, a movement that consider coffee a high-quality artisanal product.

Nestlé produces under the brand Nescafé soluble blends, mainly distributed through big supermarket chains to the mainstream market.

Nespresso operating unit is dedicated to the production of coffee machines and capsules, an innovative product architecture system. The products are mainly targeted to consumption at home or at the office and they are sold only through owned channels such as the website and the boutiques.

The meanings proposed to customers by this archetype are the diversity of choice, given by the different product types and brands created, and the customization of offering targeted to a specific customer segment.

If we focus our analysis on the own-premise sub-strategy implemented through the brand Springdale, we can compare it with Nespresso. Both the brands, in fact, represent an exclusive and elitarian experience being available in limited owned channels.

Nestlè, compared to Jack’s Abby, has a very different dimension and a global presence, ranking nº 64 on the Fortune Global 500 ranking in 2017\textsuperscript{136}. For this reason the top strategy implemented by the firm is very different from the one of our interest.

But if we focus on a single product category subdivision, like the coffee one, the company followed a multi-brand business model, creating specific product types for certain market segments through dedicated channels.

MAIN BUSINESS MODEL SECTIONS

Multi-brand strategies are a form of business model segmentation. The brands created, in fact, not only differentiate each other’s for the values they stand for and the customers they serve, but also for the revenue streams and the channels types used. We can conclude that a company following this direction creates, at some level, an independent and different business model for each brand, taking advantage of synergies with other customer segments. For this reason marketing is the main source of data and information and it plays a fundamental role in strategic decision making.

In addition we can observe that, in general, is common for multi-brand companies to create a mainstream product category, distributed capillary through mass retail channels, and a niche product category, distributed to high-end customers through an exclusive retail experience (own-premise archetype). The more a company focus on segmentation in its business model, the more products are tailored to a distinct and well-defined segment of consumers.

STRENGTHS AND WEAKNESSES

The main strengths of a multi-brand archetype are:

- Creation of products targeted to a specific market segment.
- Possibility to explore high-end market and to position brands differently.
- Diversification of risk by targeting different customers.
- Marketing-based strategic decision making could be a source of competitive advantage.
- Possibility to innovate the product, channels and revenue streams without subverting the business model but developing new brands.
- Synergies between the brands cause economies of scale and of learnings.

The main weaknesses of a multi-brand strategy are:

- Difficulty to engage high-end customers.
- Instability inside the company with the increase of the number of brands.
- Marketing costs increase due to the creation of different brands.
- Diversification of channels.
- Risk given by the concentration of the production.
- Risk of market cannibalization.
- Investments needed to launch a new brand and to communicate it.
- Creation of internal competition between brands.
Chapter 7: Discussion and conclusions

Craft beer is a movement, started in US, that is disrupting a traditional oligopolistic market historically concentrated in the hands of few big multinational firms. Companies representing this innovation could be able to differentiate themselves from the mainstream offering by leveraging on the values of variety of taste and local diversity. However, craft breweries are fighting to appropriate the innovation they introduced and they are struggling to compete in the market, threatened by second-movers represented by multinational companies.

In the previous chapter we focused our attention on the appropriability regime of the market and we concentrated on the study of the business models implemented by the most successful companies in the segment. Specifically, we identified four main business model archetypes that companies implemented to appropriate from the innovation represented by craft beer: single brand brewery, gypsy brewing, brewpubs and multi brand brewery.

The chapter is structured as follows: the first section summarizes research questions, the second one shows the main findings, the third owns refers to the managerial implications and the last one is about limits and follow-ups of this study.

7.1 Research objectives

Before outlining the main findings of this study, it is beneficial to summarize the objectives of the research introduced in the Research Methodology chapter. These objectives, in fact, were useful in conducting the study and they have been the reference for our analysis.

As already expressed in the Research Methodology chapter, the main objectives we have set were:

- To assess the appropriability regime of the industry and contextualize the levels of competition connected to it.
- To identify the most innovative and successful companies in the segment in order to understand how they have disrupted such a concentrated market.
- To understand similarities and differences among the cases selected to find insights for existing companies operating in the segment.
- To suggest real-world case examples of the problem of profiting from innovation to the scholastic literature.
- To connect with other craftsmanship related markets and movements that are opposing against the standardization of taste trend and the monopolization phenomenon.

These five main goals oriented our research throughout the systematic analysis of the industry and of the different companies we selected. Particular attention was put on the structure of the market and on the forces
shaping it, with the goal to understand the appropriability regime of the innovation. Moreover, the selected case studies allowed us to have as reference the most successful firms profiting from the disruption and to extrapolate the effective strategic archetypes that have been implemented. Our intention was to communicate these clusters to a wide audience and, for this reason, we compared them to a different market through the use of metaphors.
7.2 Main findings

After we summarized the research objectives that guided this dissertation, we are going to express the main findings of the analysis. In particular, we will start briefly presenting the methodology of our research and the selection process of the case studies. In addition, we will report the general findings we deduced and that resulted from the cross-case business model analysis.

In order to select the breweries that profited the most from the innovation and that contributed to the disruption of the industry, we selected the 10 most growing craft breweries in the last 5 years among the 100 biggest ones in US. The selection has been made thanks to the annual production data provided by Brewers Association. The 10 case studies have been analysed according to the framework we designed in the Research Methodology chapter and that could be summarized with the following visual reference.

![Figure 70: Case studies analysis visual reference](image)

1) INDUSTRY LEVEL
   - Porter’s 5 Forces model
   - Appropriability regime by Teece

2) COMPANY LEVEL
   - Osterwalder’s Business Model Canvas with sub-underlines sections

3) VALUE PROPOSITION LEVEL
   - Company’s vision and mission
   - Values and meanings
   - Products and services

On chapter 5 we implemented the framework, assessing the appropriability regime of the innovation, analysing the competitive forces shaping the industry, designing the selected case studies’ business models and defining their value propositions.

Given the weak instruments of protection that brewers could exploit to defend from second-movers and the open knowledge nature of the segment, we can conclude that the appropriability regime is low. For this reason companies are in an adverse position competing against big multinational companies and they don’t have any barrier to acquisitions and other strategic moves implemented by them. However, if they would be able to communicate effectively the meanings they introduced in the market to customers delineating a clear
distinction of their products from the big firms’ offering, they could disrupt the industry changing the rules of the game.

Finally, on chapter 6 we compared the different sections of the business model canvas in order to find similarities and differences among the strategies adopted. The result was the identification of 4 archetypes adopted by the most growing craft breweries.

Figure 71: The four business model archetypes identified

7.2.1 Single brand brewery archetype

This cluster represents the typical strategy adopted by craft breweries and it has been chosen by most of the selected case studies. The companies belonging to this archetype focused their business model on distribution dedicating the majority of volumes to Business to Business customers. Long term contracts are the main source of revenues for these firms and end customers are considered a secondary segment as they are served through taprooms or self-distribution. Most of the production is centralized into one main production facility.

The companies belonging to this cluster have been strongly affected by the three-tier distribution system set by law after prohibition. According to this structure, producers cannot sell their products directly to consumers but they must follow three steps in the process. The products must be sold to distributors, that must commercialize them to retailers before reaching end customers. Some forms of direct distribution are allowed
in certain states for a limited amount of volume. In particular, all the firms took advantage of taprooms to commercialize fresh products coming directly from their plants. The two breweries Rhinegeist and Deep Ellum, moreover, could take advantage of self-distribution to sell their beers directly to retailers.

As regards the geographical focus, the majority of companies followed a regional localization distributing in about 3 US states from a central brewery. An exception is represented by Funky Buddha and Deep Ellum that followed a regional focus, building a strong relationship with the community. Mother Earth and Modern Times opted for a different approach, expanding their presence through the construction of a second production facility in a different state. In particular Mother Earth expanded from California to Idaho and Modern Times from California to Oregon.

We identified the origin of this archetype with the foundation of the oldest operating craft brewing company, Anchor Brewing, in 1965. The strategy has been the most adopted by the majority of craft firms given the structure of the market and it could be considered the standard archetype for the segment.

In order to define the meanings represented by the business model and to communicate the findings to a wider audience we took advantage of the metaphor exercise introduced by Verganti (2008). In particular, we compared the craft beer industry with the coffee producer one. For the Single Brand Brewery archetype, we presented the Italian company Lavazza as metaphor given its focus on distribution. The main meaning represented are solid quality perception given by the brand and a ubiquitous presence of the products thanks to distribution contracts.

### 7.2.2 Gypsy brewing archetype

Gypsy brewing business model has been implemented only by one firm among the ones analysed, Two Roads, and it’s a form of de-verticalization. Gypsy brewers do not own any manufacturing facility but they outsource the production to a contract brewery that focus its know-how on production and quality control activities. By this way gypsy companies could focus their resources on network and product development activities such as marketing, sales and recipes prototyping. The firm, in particular, dedicated most of its production capacity to contract production, brewing white label products developed by companies such as Evil Twin Brewing, Stillwater Artisanal Ales and Fire Island Beer Company and it allocates a limited amount of production to Two Roads branded beers.

The strategy adopted by the company is a common form of outsourcing implemented in different industries such as automotive, semiconductor and hardware. The main advantages of companies dedicated to contract production are, on one side, the focus on production, sourcing and quality activities and, on the other side, the reduction of development, marketing and distribution costs. Taking advantage of the archetype Two Roads
has been able to reduce the bargaining power of buyers affecting competition and to lower the competition coming from substitute products.

The birth of contract brewing movement in US could be set in the summer of 1982 when the production of the amber lager New Amsterdam has been contracted to F.X. Matt Brewing Company. The decision has been made to reduce the start-up costs connected to the opening of a brewery in New York city and it has been replicated by other famous firms in their launch phase such as Brooklyn Brewery and it’s still widely adopted by companies such as Boston Beer Company, currently the second biggest craft brewery in US.

For this business model archetype, we identified as metaphor Ublend, a custom roasting, blend and packaging service provided by the Australian group Kaffeina. The unit offers contract roasting and private white label products to third party brands and labels. The service is mainly targeted to café bars, online coffee merchants and wholesalers that want to offer self-branded coffee. The main meanings represented by this trend are focus on manufacturing activities for contract producers and “marketing company” effect by gypsy firms.

7.2.3 Brewpubs archetype

_Brewpubs_ – according to Brewers Association a brewpub is a restaurant-brewery that sells 25% or more of its beer on site. The beer is primarily brewed for sale in the retail. The model could be considered an alternative to the distribution focused one and it’s based on business to customers’ revenues. The firms belonging to this archetype, Modern Times, Fat Head’s and Pizza Port, could be able to disrupt the three-tier distribution system taking advantage of this particular form of self-distribution and to expand their presence through a chain of retail channels.

This innovative hybrid form between a production facility and a bar allowed breweries to produce the volume needed on the spot, creating a more flexible and market responsive supply chain. Brewpubs, in fact, are an alternative form to the three-distribution system allowing companies to self-distribute to end customers and to avoid the competitive wholesalers market. Moreover, companies could internalize additional profits shared to business customers and catch additional revenues by offering food.

The firms adopting this strategy are not all similar, but they implemented specific decisions in terms of distribution geography, type of retails owned and production concentration. Pizza Port and Modern Times focused their presence in California taking advantage of the development of the market. Modern Times recently announced its intention to enlarge its presence thanks to the development of a new brewing facility in Portland, Oregon. Fat Head’s, instead, adopted a multi-regional strategy, opening bubs in Oregon, Ohio, North Carolina and Pennsylvania. As regards the level of centralization, Fat Head’s converged product development
activities in the main production facilities owned in Ohio, while Pizza Port and Modern Times gave freedom to the different retails owned, decentralizing production and giving a certain level of independence to them.

According to Tom Acitelli (2017) the brewpub concept was born in 1981 with the opening of Grant’s Brewery Pub in Yakima, Washington. The success of this innovative retail was instant and the popularity of brewpubs grew nationally. In 1991 Frank Day saw an opportunity in this model and founded the first brewpubs chain in 1991, Rock Bottom. The company was at the vanguard of the trend, followed by some of the major companies in the industry such as BJ’s, Gordon Biersch and McMenamins.

For the brewpubs business model archetype, we identified the concept store Starbucks Reserve Roaster as metaphor. This innovative retail, developed by the company to promote the upscale brand Reserve, includes in its facilities operating machineries in which raw coffee beans are blended and roasted together. The meanings represented by this innovative concept store are the creation of an immersive experience for customers and the reduction of distance between production and consumption of products.

7.2.4 Multi brand brewery archetype

The multi brand brewery business archetype has been implemented by Jack’s Abby. The firm developed two distinct brands targeted to two different customer segments and following a specific distribution strategy. Jack’s Abby is dedicated to the production of craft lagers, German-inspired beers produced with a bottom fermentation yeast that could be associated to the biggest selling products in the market such as Budweiser, Coors Light and Heineken. The brand is mainly dedicated to distribution and targeted to average beer drinkers to compete with the mainstream product offering.

Springdale is dedicated to experimental beers produced through the fermentation of different strains of yeast and bacteria and aged in wood barrels. The brand is dedicated to high end beer connoisseurs and it’s distributed through an “own-premise” strategy. The Springdale products, in fact, are available to consumers only in the owned barrel room.

It’s difficult to assess the development of the multi brand brewery archetype. In fact, the business model is the most adopted by multinational beer companies and, in general, in the mass consumers goods industry. Companies such as Nestlé, Unilever and Kellogg’s developed along the years dozens of brands that dominate certain product categories.
Nestlé coffee division seems the perfect metaphor for the archetype. For this product category, in fact, the organization developed an individual branding portfolio structure, developing three main marks: Blue Bottle Coffee, Nescafé and Nespresso. Blue Bottle coffee is a major player in the third wave coffee movement, focusing on high quality single-origin beans, Nescafé is dedicated to soluble blends distributed through large scale retails and Nespresso is targeted to consumption at home and at the office offering a coffee machine-capsule product architecture system.

What this dissertation outlined is the fact that craft breweries have been able to disrupt a consolidated market by representing different meanings compared to big multinational competitors. In particular, they offered a wide product offering leveraging on the different flavours that beer can have and they connected with end customers building a loyal community of enthusiast. In order to communicate these meanings effectively firms focused their attention on the local market or expanded their presence by contrasting the three-tier distribution system through owned brewpubs or contract production. A company in particular, Jack’s Abby, replicated the strategy adopted by organizations in the mass consumer goods industry by developing two different brands, dedicated to a distinctive customer segment through a specific product orientation.
7.3 Managerial implications

In this section, we are going to present the managerial implications of this research. In the specific, we will outline some insights which could be beneficial for managers in order to foster innovation in the craft beer market analysed and in a similar industry.

The managerial implications of this research can be divided into two groups. The first group we will address are craft beer entrepreneurs, managers, professionals in the industry and, in general, enthusiast. This group of people represents the main audience of the dissertation. The paper will offer them a broad view on the market conditions and on the development of the innovation, through which they could contextualize their decisions and strategic moves aimed to boost the disruption. Appropriability moves by big multinational organizations, such as acquisitions in the segment, are a daily occurrence and craft firms must respond both at company both at industry level. The dissertation could be a useful tool also for entrepreneurs that want to enter in the craft beer market to understand the most successful business models and strategies they could implement to profit from the innovation.

A second group that will benefit from this study are professionals facing similar innovation appropriability issues in similar markets. Managers and entrepreneurs operating in quality food and beverage industries could adapt the model designed to their situation and they could take inspiration from the business model archetypes defined to implement innovative business models.

In conclusion, managers in the craft segment should consider the weak position they have towards big multinational companies and choose smart alternative strategies to communicate and take to the market the meanings represented by the disruption they are promoting.
7.4 Limits and follow-ups

After the analysis of the main findings and the managerial implications of this research, limits and follow-ups of the research are going to be discussed. First, limits of the study are going to be presented. Then some additional suggestions for further research about the topic will be given.

While there are many advantages to develop a research about the appropriability regime of the craft beer disruption and the most successful business models in the segment, there are also limitations. In particular, the analysis is relied on mentioned literature and articles published by scholars about three main topics: innovation management, appropriability of innovation and business model strategy. This may not reflect the practical situation in practice, since craft beer is a recent trend. There is the possibility that other factors, not considered in the Porter’s model, and other issues, not considered in the business model canvas, can influence the development of the disruption. The study, in fact, has not paid enough attention to elements such as marketing leverages, company’s culture, financing methods and other secondary sources of competitive advantage. The influence of other intangible aspects needs to be further researched.

Another limit is represented by the time lapse chosen for the selection of case studies. With a more extensive interval we would include in the research pioneer companies, analysing the disruptive strategies that introduced the innovation in the mainstream market.

Another limit of the research is the limited amount of data available about the selected companies. Without additional financial data and additional information coming from the firms, some of the parameters we used have been estimated through assumptions.

After expressing the limits of this dissertation, we will present some of the potential follow-ups and future works that could be developed. Of course, the first ones are directly connected to the limitations of the study we’ve just presented. Extending the research to other literature fields such as marketing, legislation, company’s culture and financing methods could help us to have a broader view on the topic. Moreover, we can apply the framework we identified to different time lapses, in order to analyse successful strategies adopted along the different stages of the disruption. It would be also interesting to repeat the study to different types of craft breweries, focusing for example on microbreweries, brewpubs and regional companies.

Second, a study of the international geographical landscape and a focus on the most relevant American craft beer states could give a different point of view on the issue. The different legislations and competitive forces faced by firms could influence the implementation of specific business models.

Third, through interviews and questionnaires made to managers and entrepreneurs coming from the analysed companies we could get insights and information not openly disclosed to the public. This could be fundamental to understand the future strategic intents of the different case studies that have been selected.
References


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