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School of Architecture Urban Planning Construction Engineering

MSC in Management of Built Environment

RETAIL DIGITALIZATION AND URBAN RENT

From Standard Retail to Retail 2.0

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INDEX

ABSTRACT **6**

SOMMARIO **8**

1.INTRODUCTION **10**

2. ECONOMICS BEHIND SPATIAL DISTRIBUTION **13**

2.1. LOCATION THEORY 14

2.1.1. CONCENTRATION AGAINST DISPERSION 15

2.1.2. HOTELLING MODEL: MARKET'S DYNAMIC UNDERSTANDING 19

2.1.3. BID RENT THEORY OF ALONSO 23

2.2. THE RENT CONCEPT 27

2.2.1. REASONS FOR RENTING 27

3. HOUSING MARKET IN MILAN **29**

3.1. EXPLANATION OF THE DECISION-MAKING ELEMENTS 30

3.1.1. THE CHOICE OF MILAN 30

3.1.1.1. ANALYSIS OF THE GLOBAL RETAIL MARKET 31

3.1.1.2. MOTIVATIONS FOR THE DECISION 33

3.1.2. TIME FRAME 2011-2017 35

3.1.3. URBAN FRAMEWORK 36

3.1.4. WORKING METHOD 37

3.2. PROCEDURE PUT INTO PRACTICE 39

3.3. POST-ANALYSIS CONSIDERATIONS 40

3.3.1. RESIDENTIAL 41

3.3.2. COMMERCIAL 43

3.3.3. PRODUCTIVE 45

4. EVOLUTION OF RETAIL INDUSTRY **46**

4.1. FUNDAMENTAL ASPECTS OF RETAIL 46

4.2. HISTORY OF RETAIL.....52
4.2.1. HISTORICAL EVOLUTION OF PLACES FOR SHOPPING..... 52
4.2.2. RETAIL IN THE MODERN ERA.....57
4.3. MASS-MARKET AND FAST-FASHION RETAIL.....63
4.4. CURRENT SITUATION OF RETAIL AND NEXT CHANGES..... 67
4.4.1. PHYSICAL STORES: CURRENT SITUATION..... 67
4.4.2. PHYSICAL STORES: TODAY'S MAIN TRENDS..... 68
4.4.3. THE FUTURE OF RETAIL..... 69
5. RETAIL DIGITALIZATION.....73
5.1 ZARA LONDON: THE CONCEPT STORE.....73
5.2 STORE DIGITALIZATION..... 76
6. CASE STUDY..... 78
6.1 POST INTERVIEW ANALYSIS..... 79
6.2 THE HOLDING AND ITS CHOICE..... 81
6.3 THE HOLDING DESCRIPTION.....83
6.4 INDITEX: CURRENT PRESENCE ON THE TERRITORY..... 86
6.5 FOCUS ON THE STORES AND THEIR COMPOSITION..... 88
6.5.1 ZARA, VIA TORINO 2..... 89
6.5.2 BERSHKA, CORSO VITTORIO EMANUELE II 22..... 91
6.5.3 STRADIVARIUS, VIA TORINO 44.....93
6.5.4 OYSHO, VIA TORINO 3..... 95
6.5.5 PULL&BEAR, CORSO VITTORIO EMANUELE II 28.....97
6.6 SCENARIO 0 AND SCENARIO 1.....99
6.7 SAVING IN RENT AND IMPROVED REVENUE PER SQUARE METER.....102
6.7.1 IMPROVED REVENUE PER SQUARE METER CONSIDERATIONS... 105
6.7.2 PROPOSALS FOR SAVINGS UTILIZATION.....106
CONCLUSIONS.....108

ABSTRACT

The purpose of the thesis is to analyse, evaluate and propose a real and concrete solution aimed at generating saving in terms of rental costs for commercial activities in the Retail sector, especially in the clothing ambit.

The focus of the work revolves around technological innovation and how it can be used to reduce space required for sale, allowing to use a smaller amount of surface, reducing the company's budget allocated to rents without penalising revenues.

The strategy allowing all this is called "Retail Digitalization".

In order to provide the right context to the work carried out, a section will be initially realized in which the importance of Location Theory and the concept of rent are explained, since fundamental in the economic sciences leading space distributions.
Subsequently, there will be a reference on the City of Milan, describing the reasons that led to choose of the latter as the area being studied, also providing results from an analysis of the real estate dynamics of the City over the years.

After defining the context and the area of intervention, the focus will be placed upon the Retail sector, describing its key elements and analysing its history, developments and future forecasts.

Following, the work will move to the description of a London project carried out by the Inditex group, since the latter represents the reference model that led to the creation of the Retail Digitalization project, which will be described later.
Remaining in this context, an analysis of the interview made to a Real Estate Manager of the Inditex Group is then reported, in order to understand the company dynamics and base the project proposals on concrete needs, verifying their feasibility.

Finally, the practical case is presented, referring first to a study of the company characteristics and the presence on the territory of the aforementioned Inditex, a holding company whose Milanese stores have been chosen to implement the project.

After that, the strategy of Retail Digitalization is put into practice on five carefully selected existing stores, assuming the two scenarios related to the current situation and to the one predictable with the application of the latter.

The results will confirm the possibility of considerably reducing the size of the sales spaces, allowing the reduction of the expenses necessary for the payment of the rental costs. Moreover, thanks to the positive results achieved in this phase, as a conclusion some possibilities for using the money saved are suggested.

SOMMARIO

L'obiettivo della tesi è quello di analizzare, valutare e proporre una soluzione reale e concreta volta al risparmio in termini di costi d'affitto per attività commerciali nel settore Retail, in particolare nell'ambito dell'abbigliamento.

Il fulcro del lavoro ruota attorno all'innovazione tecnologica e di come questa possa essere utilizzata per ridurre gli spazi necessari destinati alla vendita, così da utilizzare una quantità di superficie minore, riducendo il budget aziendale destinato agli affitti senza penalizzare il fatturato.

La strategia che permette tutto ciò viene chiamata "Retail Digitalization".

Con lo scopo di fornire il giusto contesto al lavoro svolto, verrà inizialmente realizzata una parte nella quale viene spiegata l'importanza della Location Theory ed il concetto di rendita, fondamentali nell'ambito delle scienze economiche guidanti le distribuzioni spaziali.
Successivamente, si farà riferimento alla Città di Milano, descrivendo le motivazioni che hanno portato a scegliere quest'ultima come area oggetto di studio, fornendo inoltre risultati derivanti da un'analisi delle dinamiche immobiliari della Città nel corso degli anni.

Dopo la definizione del contesto e del luogo di intervento, si parlerà nello specifico del settore Retail, descrivendone gli elementi chiave ed analizzandone la storia, gli sviluppi e le previsioni future.

Di seguito, si passerà alla descrizione di un progetto londinese del gruppo Inditex, poiché quest'ultimo rappresenta il modello di riferimento che ha portato alla nascita del progetto Retail Digitalization, il quale verrà descritto successivamente.
Rimanendo in questo ambito, viene poi riportata un'analisi dell'intervista effettuata ad un Real Estate Manager del Gruppo Inditex, in modo da comprendere le dinamiche aziendali e basare le proposte progettuali su necessità concrete, verificandone la fattibilità.

Infine, viene presentato il caso pratico, facendo riferimento prima ad uno studio delle caratteristiche aziendali e della presenza sul territorio della sopracitata Inditex, holding i cui stores milanesi sono stati scelti per implementare il progetto.

Dopodiché, viene messa in pratica la strategia di Retail Digitalization su cinque negozi esistenti attentamente selezionati, ipotizzando i due scenari relativi alla situazione attuale e a quella pronosticabile con l'applicazione di quest'ultima.

I risultati confermeranno la possibilità di ridurre notevolmente le dimensioni degli spazi di vendita, consentendo la diminuzione delle spese necessarie per il pagamento dei costi di affitto. Inoltre, grazie ai risultati positivi conseguiti in questa fase, come conclusione vengono suggerite alcune possibilità di utilizzo del denaro risparmiato.

Chapter 1

INTRODUCTION

Taking into consideration the current historical period, characterized by a strong impulse of technological innovation and changes in consumers' behaviours, all combined with an increasingly tight market competition, the thesis aims to reduce, in the Retail environment, the space necessary for running the stores, giving them also a new identity. The focus will be placed, in particular, on the ambit of clothing sector.

The city taken into consideration as the object of study is that of Milan. From a careful analysis of its real estate market dynamics it has been found that the competition for portions of central areas is always higher, especially for the commercial sector, pushing the residential and the productive in more and more peripheral areas. This very high demand involves a continuous increase in prices, becoming an increasingly important cost for companies in terms of reduced revenues due to the high rental costs. The current condition also represents an entry barrier for companies with lower financial resources.

The purpose is therefore to implement the "Retail Digitalization" project, a useful strategy to reduce the stores' required space by exploiting the latest generation technologies and thus making companies much more competitive.

This project has been conceived by referring to a visionary store prototype opened by the Inditex Holding in London. The distinctive elements lie in the lack of cash desks, fitting rooms and shop assistants, all replaced by interactive screens. What turns out to be particularly interesting, however, is the lack of the stock area, which represents an important surface and consequently a high cost.

This new concept of store is in this way much slimmer in size, drastically reducing the space needed and having a major impact on the costs of renting the commercial surface.

Moreover, it is important to note that the eliminated areas are the most functional ones, like the one destined to clothes' exposition, thus leaving to the customer the same space of action inside the store.
The Retail Digitalization project then takes inspiration from this London prototype, adapting it to the Italian market and working on few concrete proposals applied to some Inditex Group stores in the city of Milan.

Below are reported the steps according to which the thesis work is done.

Initially the work context is introduced, with reference to the Location Theory and the concept of rent, in order to underline the importance of the spatial location strategy in the economic activities and, above all, in this thesis project. In addition, two important models will be examined, useful to better understand the choices made during the project: The Hotelling Model and the Bid-Rent Theory of Alonso.

Afterwards, reference will be made to the City of Milan, providing first of all a series of motivations, based on researches, which justified the choice of this area as the one of intervention. Therefore, the real estate market will be taken into consideration, analysing how it has changed in recent years, including the variation in demand, availability and consequently prices. From this emerges the concept of a very high competitiveness, which requires models of space optimization in order to take advantage of the spatial arrangement.

Then, the attention will be placed on the Retail sector, initially providing information regarding the key aspects of the latter and subsequently reporting the history, describing the most important steps that have marked the evolution of the stores. After that, the focus concerns the current situation, current trends and possible future scenarios that will regard the Retail market.
Retracing its evolution is essential to understand how radically they have changed over time and consequently how much they can still evolve, adapting to current periods.

After having clarified all these topics, the thesis work moves on to the focal part of the work, that is the description of the Retail Digitalization project.

The first part refers to the aforementioned Zara store model, opened by Inditex in London, describing the most important elements. Then, the Store Digitalization model will be described in detail, speaking about both aspects of practical and architectural characteristics as well as economical and strategical setting.
An interview will then be made to a Real Estate Manager of the Inditex Group, so as to have direct contact with the company and therefore feedback on the actual possibility of implementation of the project. It is a way to understand if the latter actually meets concrete needs and is in line with the future of this sector.

The practical case is finally presented; this part begins with the description of the reasons that led the choice of Holding Inditex, then proceeding to introduce the key aspects of the company and analyse its presence in the area. Then the five prototypes realized according to the Store Digitalization model will be presented, providing the architectural structure and the current composition.

The next step is to hypothesize two different scenarios, referring to the current situation and to the predictable one, with the application of the Store Digitalization project, showing the results achievable through the implementation of the proposal.
So, to conclude, a few possibilities for the utilization of the money saved in this way are presented. Each company has to choose the solution which best fits its current situation and future strategies.

Chapter 2

ECONOMICS BEHIND SPATIAL DISTRIBUTION

The basic concept behind this study lies in the fact that settlements do not arise spontaneously, on the contrary, they are the result of continuous researches and application of strategies.

Starting from this, the chapter is aimed to deepen and explain the concept of location through the exposition of theoretical topics fundamental for this discipline, driving the reader into a reasoning that can help him understand the choice made by the various economic agents.

For this purpose, it is necessary to begin from the foundations, scilicet from classic theories and their evolution over time.

Then, the analysis of the contemporary economic situation will be carried out. This represents the context in which the thesis unfolds.

Furthermore, an analysis of the concept of rent has been developed, as it represents the main means by which economic agents can ensure their use of commercial spaces subject to location studies, particularly in the Retail sector, which is at the centre of the development of the thesis. The rental features and benefits of renting commercial spaces instead of buying them are displayed in detail.

2.1 LOCATION THEORY

It is the oldest branch of regional economics, first developed in the 1900s. The notion of space was first introduced into economic analysis by theories on industrial location.

It deals with the economic mechanisms that distribute activities in space. The main question that this theory is aimed to solve is *what economic activities are located where and why.*

Both firms and households are considered, giving a sense to the territorial disequilibria and hierarchies. The two key elements for these two categories considered are profits and its maximization for firms, while utility and its maximization for individuals.

Location theory differs from the purely macroeconomic approaches of political economy since it concerns territorial features. The concepts of externalities and agglomeration economies are used to interpret the macro-territorial phenomena, thereby laying the territorial bases for dynamic approaches.

The uneven distribution of raw materials, production factors (capital and labour) and demand (final goods markets) requires firms, and economic actors in general, to choose their location in the same way as they choose their production factors and their technologies.

According to the location theory, not all the space is the same, productive resources are distributed unevenly; they are frequently concentrated in specific places while entirely or partly non-existent in others.

Quantitative and qualitative imbalances in the geographical distribution of resources and economic activities generate sources of economic advantages or disadvantages. It seems to be obvious, however, analysts have recognized the importance of this aspect only in the recent past.

Companies that want to obtain higher profits and ensure a long stay in the market cannot therefore neglect this factor. The most proficient ones can identify and evaluate every territorial factor that could influence its performance and use it in their favour.

2.1.1 CONCENTRATION AGAINST DISPERSION

Location choices can be explained by considering two great economic forces that organize activities in space: transportation costs and agglomeration economies.

The various contexts are analysed by removing any geographical feature that might explain the territorial concentration of activities, so that location choices are interpreted considering only these forces that drive location processes.

These forces push the location process in opposite directions since they simultaneously induce both the dispersion and the spatial concentration, in fact, transportation costs diffuse activities in space while agglomeration economies cause activities to concentrate.

The term "agglomeration economies" denotes all economic advantages accruing from concentrated location close to other firms. The advantages coming from this strategy could be grouped into three broad categories:

- ***Economies of scale*** *internal to the firm*.

Instead of creating different poles scattered around, this solution of having less location but of bigger dimension allows to lower costs. Reducing the number and increasing the size, the costs grow less than proportionally because certain functions do not need to be duplicated.

Examples of this are delivery costs, infrastructure, rents, personnel, taxes, management, negotiations and contracts;

- **Localization economies** *external to the firm but internal to the sector*.

This aspect pushes the firms to locate in areas densely populated by firms operating in the same sector. For example, considering the Retailers sector, the rationale is that a high number of Retails attract in proportion more than just the simple sum of the individual ones.

Therefore, this approach allows to attract people that wants to buy a certain kind of good in a specific area, generating an increase in profit, even if in different quantities, for all the firms operating in the area;

- **Urbanization economies** *external to the firm and external to the sector*.

Here the idea is to locate only in the city area because of advantages coming from the high density and variety of productive and residential activities in this area, typical features of an urban environment. Having a very dense area allows the company to get in touch with a greater number of potential customers, thus increasing profits. This advantage increases the more the size and complexity of the city increases.

However, together with the advantages, after a certain threshold two possible disadvantages could arise, which are:

- **Increasing costs** *or* **diseconomies.**

  It arises because of a scarcity in the production factors, which are labor and land. The increasing demand and the same level of offer generate an increase in price which could be no longer sustainable in time.

- **Congestion costs.**

  The onset of large agglomeration is generally accompanied by an increase of noise, air pollution, crime and social malaise.

The second factor which plays a role in the location choice is the transportation cost, it contrasts the spatial concentration of activities; in conditions of perfect competition, perfectly movable production factors, fixed raw materials and demand perfectly distributed across the territory it obstacles the agglomeration until activities are geographically dispersed and the market becomes divided among firms, each of which supplies a local market.

Transportation costs, accordingly to the economic costs of shipping goods, can be considered as the opportunity cost represented by the time taken to cover the distance which could instead be put into different uses. Space is therefore treated in economic terms.

If transportation costs were nil, there were no reasons to concentrate activities.

The current disposition of the economic activities is the result of the balance between these two forces.

During their decision-making process, companies should take into consideration also some other aspects linked to the location choices, so to foresee and optimize each and every related aspect.
The first is a practical one; the bigger dimension of concentrated poles so to exploit the economies of scale requires company to own advanced management capacities, high organizational level and internal coordination since these sites become more complex, more people have to work into them, more goods are produced, and more relationships must be managed.

Then, must be considered that demand is uniformly distributed geographically, so, reasoning in terms of Retails, having more location places in different positions means higher accessibility and therefore a reduction of the average distance that costumers must travel to reach the store.
The price at which the consumers buy the good on the market is the sum of the production cost of the good and the opportunity cost borne on the consumer that must cover a certain distance to purchase it.

Assuming the existence of the same product at the same production price, the consumer chooses to buy the good from the firm located closer to him, because of a lower price due to a lower opportunity cost. Market area represents monopoly generated by the distance.

Space is therefore seen as a spatial friction and, according to Lösch spatial demand curve, lowering the customers' opportunity cost is also favourable for the company because this savings could be spent in order to buy a higher amount of goods, having both an advantage.

This means that being too concentrated in a single location could make the company reduce its market area and therefore lose customers.

There is another aspect against concentrated location of a company that must be considered, it considers the stores and is not an economic but a marketing one.

Even if having a higher number of Retails could increase costs, at the same time it also generates a return in advertising terms. The capillary presence on the territory allows to be more visible, improving the perception that customers have about the company and therefore the brand

reputation. However, is important to choose the location in line with the idea that the brand wants to communicate; a peripheral location could damage the prestigious image of a renowned brand. From this investigation emerges how the different allocative choices could have an impact on the companies under sever aspects; the choice of a proper location setting can allow companies to develop a competitive advantage over their competitors.

2.1.2 HOTELLING MODEL FOR MARKET'S DYNAMIC UNDERSTANDING

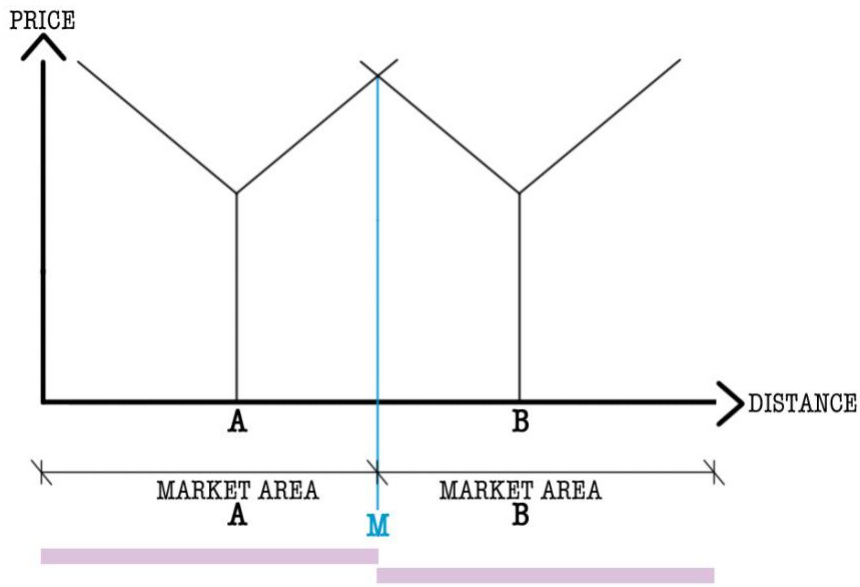
One of the limits of the first location theory models developed is, given the demand uniformly distributed, to divide the market into areas within each of which there operates just a single firm.

This model, for the first time, considers the possibility to relocate once the market has been divided up and therefore highlights the existence of interdependency mechanism operating in the location choice of firms.

To explain the model, it is necessary first to define the assumption at the base:

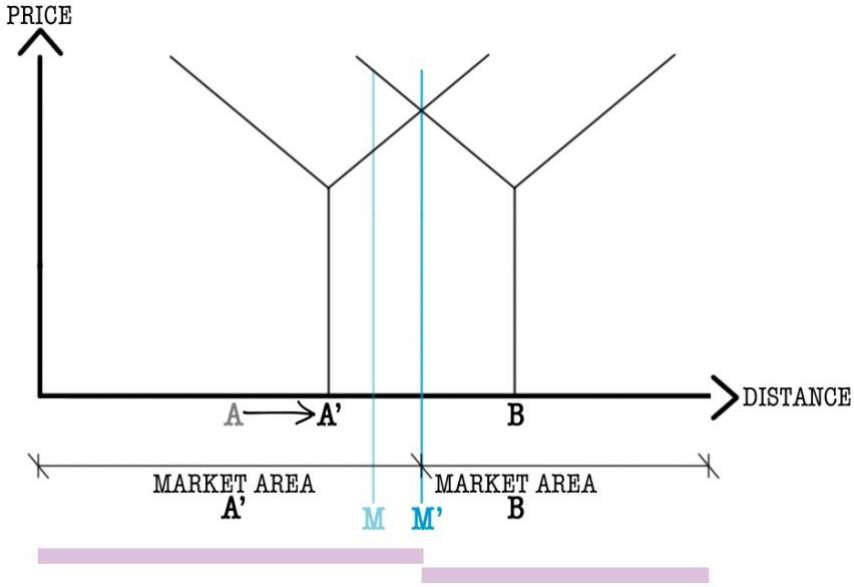
- There exist just two firms, firm A and firm B, is therefore a Duopoly condition;
- The market is linear and homogeneously distributed, along which the demand for the good produced is also homogeneous;
- The relocation cost is nil;
- The demand is entirely inelastic; it means that the quantity of good demanded by customers does not change with variations in price.

The model starts from a condition of initial equilibrium in which the firm A and the firm B are equally distributed in space and own the same market area.



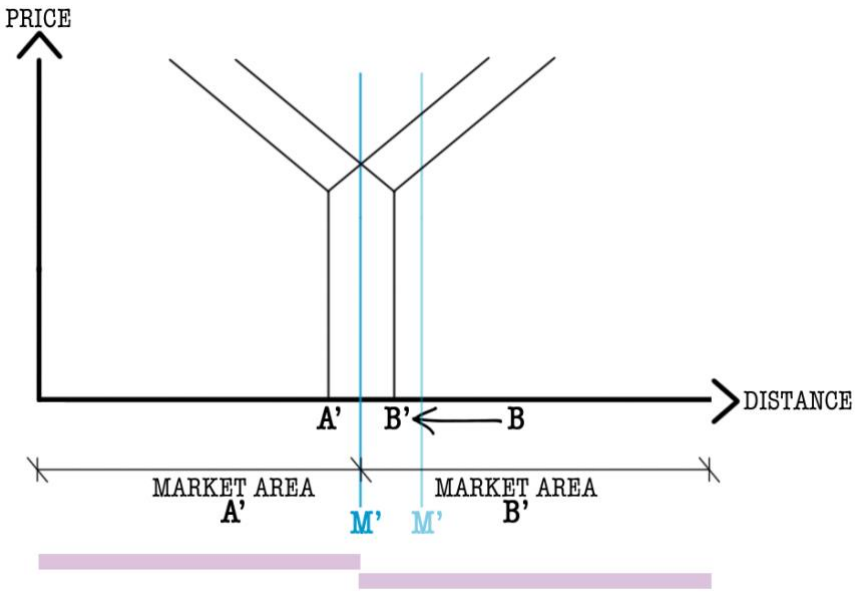
Graph.1 Division of the market between producers

Then, the firm A decides to break the equilibrium and move toward the firm B so to increase its market area.



Graph. 2 Division of the market between producers

The firm B, which now sees its previous market area reduced, decides to move toward A in order to gain back the lost part and even more.

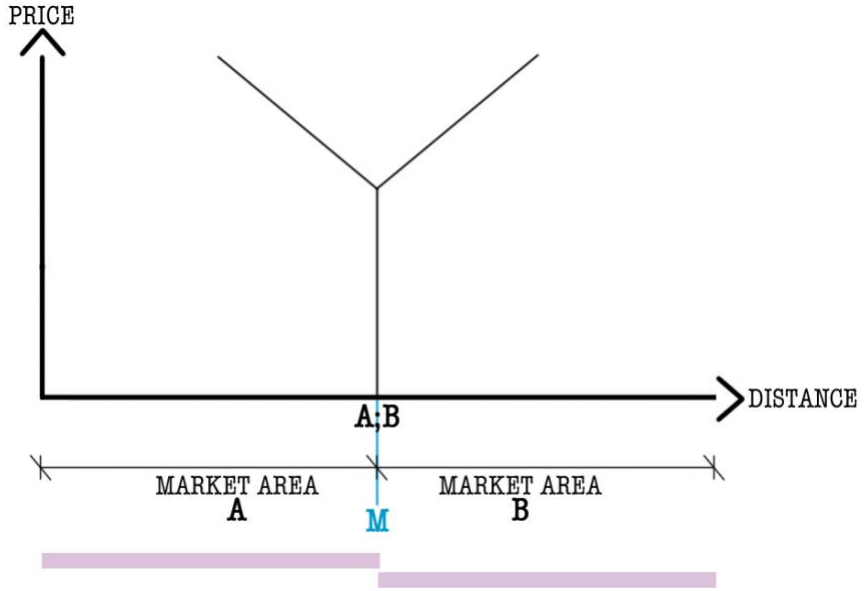


Graph.3 Division of the market between producers

At this point the firm A must relocate again so to take back the market area lost, and the same will happen for the firm B.

This situation is going to continue until the two firms will reach an equilibrium.

The only condition in which they are not willing to move again is a concentration one, it means that both firms have to occupy exactly the center on the spatial market.



Graph. 4 Division of the market between producers

Only this arrangement gives stability to a situation which otherwise, according to Hotelling, would be indeterminate under these hypotheses.

It is interesting to note that this balance achieved, which neither of the two firms is willing to change, does not coincide with the public interest because the average distance that consumers have to cover to buy the goods is greater.

The contradiction lies in the fact that, at the same time, this allocation is also counterproductive for the firms themselves. This because, if the assumption of inelastic price is discarded, the firms would reduce their profit since the quantity bought by consumers is reduced because of higher opportunity cost bone on them.

Moreover, if a new firm would enter into the market, it would be sufficient to simply locate itself more peripherally to obtain a greater market area compared to that of the two competitors.

The motivation that drives this irrational behaviour is that there is a natural tendency for firms to cluster in space; a tendency which may help explain the existence of large agglomerations.

This model is important because it helps to understand that market is a dynamic environment and therefore strategies must always be updated; there is a need to study the external context, accept changes and be ready to change, reorganize and innovate.
This becomes particularly important today, where the market is constantly changing due to the development of technology, communication and globalization.

2.1.3 BID RENT THEORY OF ALONSO

Is in the early '60s when William Alonso, an Argentinian economist graduated to Harvard, noticed that when a purchaser acquires a land he doesn't acquire just one good, but two in the same transaction: land and location.

In other words, he spotted the possibility to make a trade-off between the quantity of the land to be acquired and its location.

The basis of this model can be found in the Von Thünen's one, which was created with the aim to organize the spatial distribution of agricultural production around a medieval town, according to each willingness to pay, in order to divide the land among farmers, estimating also the relative level of unit rent.

This model has been able to demonstrate that it is simple distance from, or accessibility to the town that accounts for differences in land rent.

The model of Alonso rethought this concept by making it more specific to the urban case, at the same time there is been the abandonment of the hypothesis that only transportation costs express spatial friction and the preference for more central locations. It shows how the urban space is allocated among alternative production activities once the market cost of the land at different distances from the center is known.

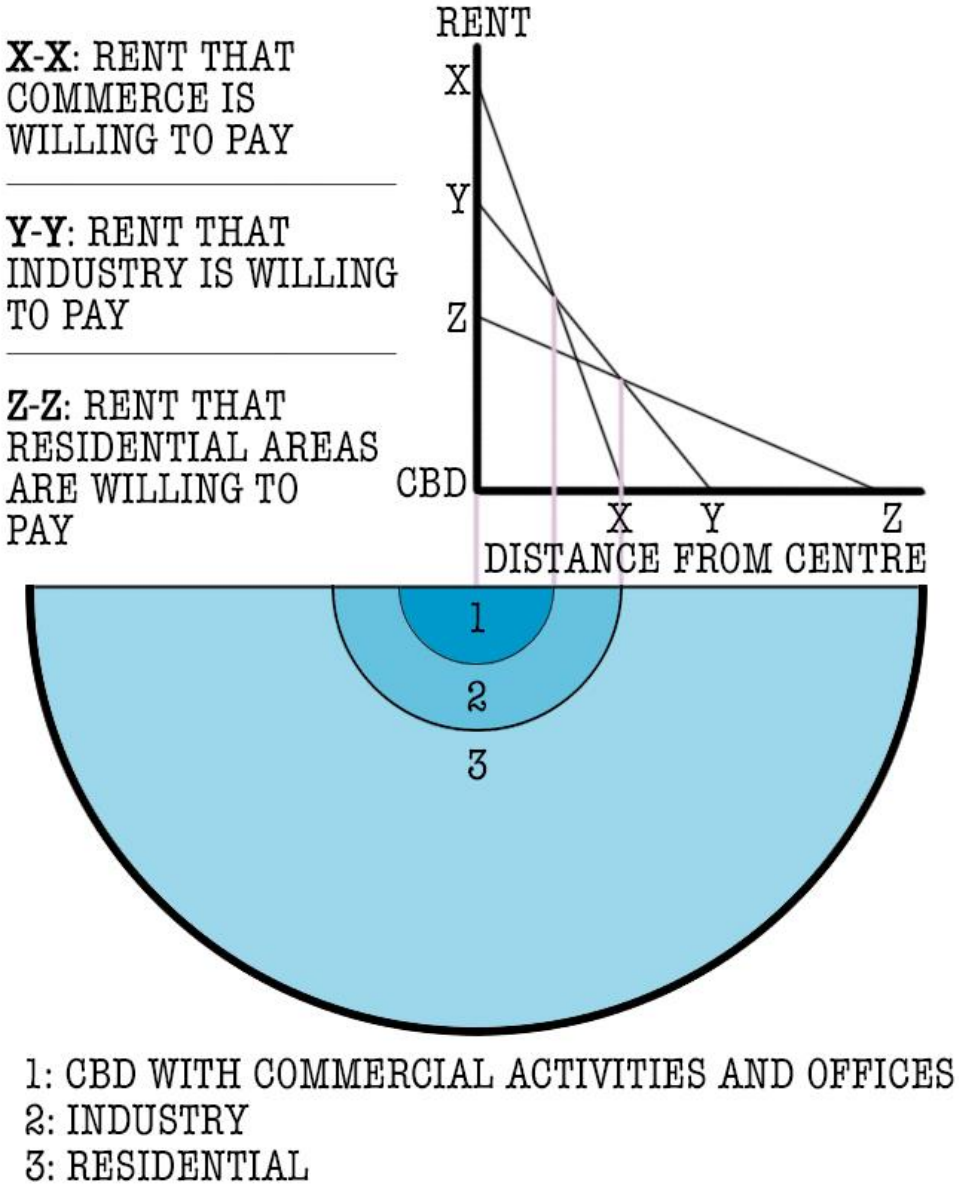
The assumptions needed to set the model define space as uniform and isotropic, it means that cities are characterized by homogeneous spatial distribution of the production factors and endowed with infrastructures that cover the entire city in all the directions. They also require cities to have a single center, corresponding to the most attractive location for firms and households.

There are 3 types of rent that compete for locating closest to the central location:

- Commercial;
- Residential;
- Industrial.

The bid rent curve uses two simple functions on a graph to explain where each of these types would be placed: the cost of rent, represented on the X-axis and the distance from the CBD, represented on the Y-axis.

These two works inversely to one other; as one increases, the other decreases.



Graph.5 Land allocation

A Central Business District (CBD) is the commercial and business center of a city. It represents the most accessible area of land with the highest concentration of people, for this reason, there is a tight competition for this portion of land.

In commercial activities, rent is considered as the remainder left when the entrepreneur has subtracted production costs (including transport cost) and a desired level of profit from the revenue obtained by selling the good.

The transport cost depends on distance like in Von Thünen's model, however, also the revenues depend on the distance to the city centre; higher is the proximity, higher are the earnings.

Profits remaining equal, a more central location implies a willingness to pay a higher rent because the entrepreneur incurs in lower transportation costs and obtains higher revenues. At one unit of distance further away from the city center, the rent offered to maintain the same profit level diminishes because of the increase in the transportation cost and the decrease in the revenue.

In economic terms, it is the most influenced by the proximity to the CBD and this is the reason why commerce tends to display the highest willingness to pay between these three categories.

Then, moving outward from the CBD, the next type found is the industrial one; factories require more open lands which are not available in the CB, so here they can expand over a large amount of land, while having the benefit of quick transportation of goods to the CBD.

This explains why there is still a quite high willingness to pay; factories will only locate so far from the CBD until transportation costs override the original cost of rent.
The possible location for factories therefore results larger than the one designated to commercial activities.

Lastly, the type found farthest to the CBD is the residential because certain factors such as economic gains of living near the city center has an impact much higher for the commercial and industrial sectors.

The main reason for householders to choose to leave further out is that in this way they have the possibility to have more lands and so to build bigger homes for a cheaper cost. The bid rent curve created from the residential, due to a low rent cost at a great distance from the CBD results in having the greatest land area.

After the analysis, what emerges from this model is that commercial activities and industries tend to rent the land closer to the CBD so to achieve the highest possible profit and the quicker transportation. Residential tends instead to move outward from the CBD so to have the possibility to buy larger homes.

However, models are just a simplification of the real word, in fact, in the reality the physical features of each location should also be considered.

Moreover, this equilibrium works just if there exists a single, attractive enough, central attraction.

2.2 THE RENT CONCEPT

The rent agreement is the contract through which a subject, defined as lessor, undertakes to grant the use of an asset (both movable and immovable) to the so-called lessee, for a fixed period of time, in exchange for a cash consideration. Usually the returns are fixed and periodical.

The amount of the rent to be paid must be proportional to the cost of the object of the negotiation, therefore it is important to first define its market value. Finally, this amount should guarantee a condition of equilibrium in which the various economic subjects are no longer willing to change.

Land is a scare resource, it can't be created or destroyed but just traded; regardless of the quantity requested, the quantity offered remains unchanged.

Its value is strictly linked with the demand affecting the whole market segment, varying from area to area.

2.2.1 REASONS FOR RENTING

Firms that want to open new Retails can choose between two different alternatives: buy the property or rent it.

There are several consequences that derive from this choice; here are reported the most significant benefits that could push the company to a rent rather than a purchase contract.

- In many jurisdictions rent used in a trade or business is tax deductible;

- Instead of paying the full price that ownership would need, a series of smaller payments is applied. This alternative is particularly relevant in times of crisis in which access to credit is more difficult. Moreover, if the purchase is made with debt capital it will be compounded by the payment of a further interest;

- The documentation and rental procedure is quicker and easier, moreover there is no possibility of incurring in unexpected expenses;

- Reduction of financial risk due to depreciation and transaction costs, especially for real estate which might be needed only for a short amount of time;

- Renting keeps off-balance-sheet the debt that would burden the balance sheet of a company in case the property would have been bought;

- There is no need to worry about lifespan and maintenance;

- Companies can remain flexible overtime, changing strategy in a faster way without repercussions. This aspect is particularly important nowadays that firms are required to be very dynamic;

- Renting is positive for the environment because generally products are used more efficiently by maximizing utility rather than being disposed, overproduced and under-utilized.

Chapter 3

HOUSING MARKET IN MILAN

The purpose of this chapter is to understand the dynamics of the real estate renting market in Milan; how it has changed in the recent years, which is the current situation, and which are the future trends. Through this, we can notice changes in demand, availability and consequently prices for rents.

This study is essential for the interpretation of the companies' behaviours and strategies in terms of location on the territory, laying the foundation for the implementation of the Retail Digitalization proposed in this thesis.

The city of Milan has been taken as a sample city on which studies and considerations were developed.

The analysis refers to a period of time that goes from 2011 to 2017, because 2011, as will be shown later through an economic report, represents the first year of rent with positive growth after the 2008 crisis. Moreover, it takes into consideration also the transformations occurred in the morphology of the city itself, so to be more specific.

At the beginning, in order to introduce the reasons about the choice of Milan, a study upon the global Retail market and its trends has been developed, as well as the analysis of the role of the Italian market into the global economic context. Then the chapter focuses on Milan, which is studied in depth, explaining also the reasons that led to this choice.

Finally, the working method used will be explained in detail, as well as the interpretation of the collected data, so to arrive at the final considerations.

3.1 EXPLANATION OF THE DECISION-MAKING ELEMENTS

3.1.1 THE CHOICE OF MILAN

This choice comes after a series of analyses and considerations, in order to be sure that Milan represents the ideal destination to promote an innovative project like this. In fact, developing a strategy in a market recognized internationally as "attractive" is an excellent launch pad, ensuring a greater resonance compared to secondary destinations.

The choice of the proper location is essential since it determines the success or failure of the project.

With these premises, the research work begins with a very general focus, observing the economic changes that have influenced the global Retail market, determining where Retailers have positioned themselves in recent years, so as to understand which the most attractive locations in the world were.

This possibility is provided by the agency Cushman & Wakefield, which publishes an annual report dealing with these issues. Specifically, the report "main street across the world 2017" (the most recent one) was taken into consideration, because it offered an annual overview of the global Retail market, reporting on the ongoing economic changes and identifying the most prestigious Retail locations.

3.1.1.1 ANALYSIS OF THE GLOBAL RETAIL MARKET

Below will be provided an overview of the main changes in the Retail sector in 2017 in the various zones of the world, analysing the influences that economic changes have generated on this market and on the attractiveness of the locations. At the end of the analysis, a classification of the most prestigious locations at world level will be reported.

In 2017, the division between macro-economic and Retail property market trends occurred in some countries is increasingly growing, being driven primarily by structural changes due to the growth of online Retailing. Indeed, the US economy that grows at a rate of 3%, registering a closure of stores at the fastest rate ever recorded can be an example of this.

Nevertheless, between the continuous growth of online sales, the closure of many stores and the downsizing of Retailers, the rents for prime Retail locations have been held up well in 2017. In fact, during this period the global Retail rental growth was 0.5%, registering 136 of the 451 considered locations growing, while only for 90 of these there was a decline in rents.

On the wave of online development, significant changes in the Retail sectors and in the type of real estate Retailers were made possible. While some Retailers have purchased fewer larger stores, others have focused on maintaining and consolidating their store portfolio, occupying less space and pushing them to refine what the store offers, trying to fulfil the customer's wishes in a more effective and direct. in fact, in 2017 consumers have had an ever-increasing desire for unique and personal experiences in Retail spaces.

2017 saw growth in storefront technology, offering Retailers the opportunity to drive sales by combining their online and offline platforms to provide a seamless Omni-channel experience for the customer. Online growth has also strengthened the importance of the flagship stores.

In general, as the analyses carried out in 2017 have shown, trends have varied widely from place to place, but the common theme is that global Retailing remains a dynamic sector, as it follows and responds to the changing technological and demographic changes in place.

Therefore, it is possible to draw up a ranking of the most expensive locations in the world in the last year for Retailers. Obviously, the more or less high cost of positioning in a given location is determined by its level of attractiveness and prestige. The 2017 ranking of the most expensive Retail locations saw the first position of the Upper Fifth Avenue in New York, followed by Causeway Bay, Hong Kong the third place is then occupied New Bond Street in London, followed by Via Montenapoleone in Milan. Avenue des Champs-Élysées, Paris closes the top 5.

RANK 2017	COUNTRY	CITY	LOCATION	RENT (€/sqm year)
1	USA	New York	Upper 5th Avenue (49th - 60th Sts)	28,262
2	Hong Kong	Hong Kong	Causeway Bay (main street shops)	25,673
3	United Kingdom	London	New Bond Street	16,200
4	Italy	Milan	Via Montenapoleone	13,500
5	France	Paris	Avenue des Champs Elysees	13,255
6	Japan	Tokyo	Ginza	11,308
7	Australia	Sydney	Pitt Street Mall	9,422
8	South Korea	Seoul	Myeongdong	8,598
9	Switzerland	Zurich	Bahnhofstrasse	8,310
10	Austria	Vienna	Kohlmarkt	4,620
11	China	Beijing	Wangfujing	4,498
12	Germany	Munich	Kaufinger/Neuhauser	4,440
13	Ireland	Dublin	Grafton Street	3,653
14	Spain	Barcelona	Portal de L'Angel	3,360
15	Russia	Moscow	Stoleshnikov	3,071
16	Netherlands	Amsterdam	Kalverstraat	3,000
17	Singapore	Singapore	Orchard Road	2,905
18	Norway	Oslo	Karl Johan	2,831
19	Greece	Athens	Ermou	2,640
20	Luxembourg	Luxembourg City	Grande Rue	2,580
21	Denmark	Copenhagen	Stroget (including Vimmelskaftet)	2,555
22	Czech Republic	Prague	Na Příkopě street	2,520
23	Turkey	Istanbul	Centre - Istiklal Street	2,311
24	India	New Delhi	Khan Market	2,191
25	Canada	Toronto	Bloor Street	2,180
26	Vietnam	Ho Chi Minh City	Best Achieved Shopping Mall (GF)	2,100
27	Malaysia	Kuala Lumpur	Pavilion KL (prime lots)	2,084
28	Belgium	Antwerp	Meir	1,950
29	Taiwan	Taipei	Zhongxiao	1,830
30	Sweden	Stockholm	Biblioteksgatan	1,609
31	Finland	Helsinki	City Centre	1,602
32	Hungary	Budapest	Vaci utca	1,440
33	Portugal	Lisbon	Chiado	1,380
34	UAE	Dubai	Prime - A	1,282
35	Israel	Tel Aviv	Kikar Hamedina	1,280
36	South Africa	Johannesburg	Sandton City	1,265
37	Thailand	Bangkok	Central Retail District (CRD) (Rajprasong/Sukhumvit street)	1,214
38	Poland	Warsaw	Nowy Swiat	1,020
39	Serbia	Belgrade	Kneza Mihaila	1,020
40	Mexico	Mexico City	Masaryk	998
41	Croatia	Zagreb	Ilica Street	840
42	Channel Islands	St Peter Port	High Street	835
43	Indonesia	Jakarta	Prime	752
44	Slovenia	Ljubljana	Čopova	720
45	Brazil	São Paulo	Oscar Freire Jardins	700
46	Saudi Arabia	Jeddah	City Centre	653
47	Argentina	Buenos Aires	Calle peatonal Florida (Av. Cordoba to Av. Corrientes)	651
48	Cyprus	Nicosia	Ledras Street	600
49	Romania	Bucharest	Calea Victoriei	564
50	Philippines	Taguig (Metro Manila)	Bonifacio High Street	559

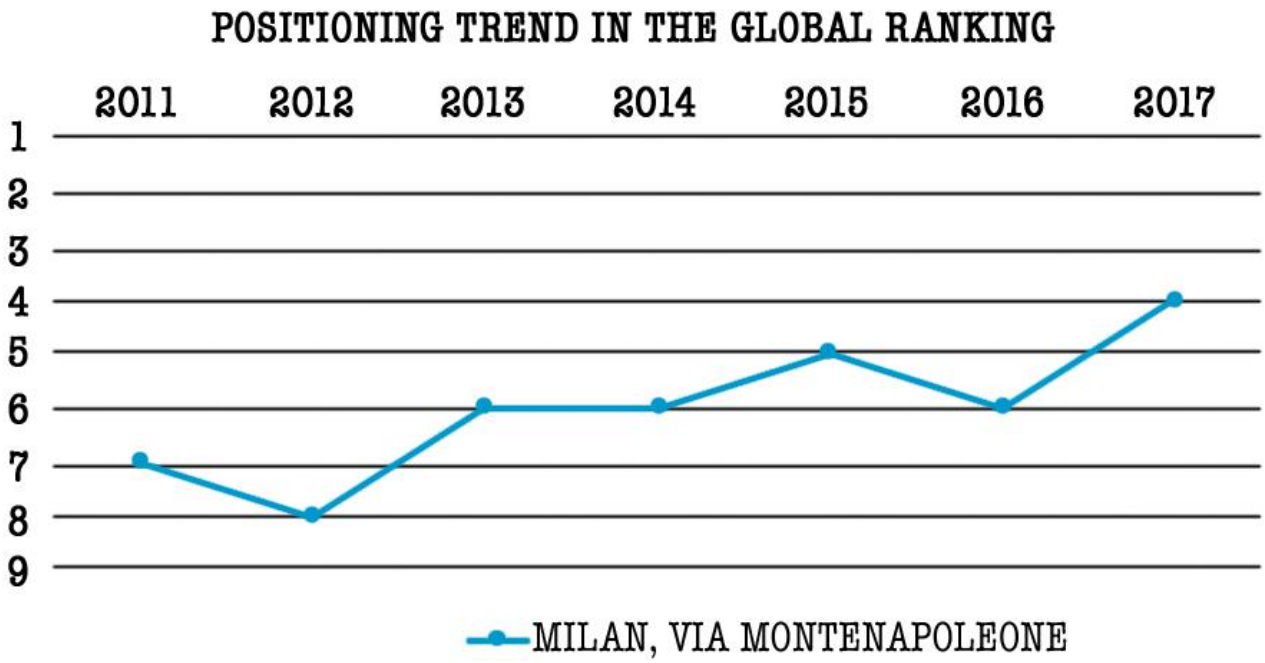
Tab.1 Global ranking of the most expensive Retail locations in 2017

3.1.1.2 MOTIVATIONS FOR THE DECISION

As we can see from the table, Italy is in 4th position among the most prestigious locations in the world in the commercial field, more specifically the city positioned in this ranking is Milan, preceded only by New York, Hong Kong and London.

Even if the considered area for the ranking is Via Montenapoleone, being Milan in the top 5 world in terms of location obviously confers prestige to all the areas adjacent to this high street.

Moreover, having also analysed all the other Cushman & Wakefield "Main street across the world" reports of the six years prior to 2017 (starting from 2011, which represents the first year of positive annual rental growth after the crisis of 2008) it is noted that Milan is climbing the rankings and future forecasts see it growing again.[1]



Graph.6 Milan positioning trend in the global ranking – Created from analysis

For these reasons, it can be said with certainty that Milan today is a very appreciated location in the international Retail scene, thus representing an ideal destination to promote innovation, as it enjoys great attention.

[1] Appendix 1

Furthermore, Milan represents the world capital of fashion and is therefore a reality in which Retail has always been developed, a city in which there are some of the most famous Retail locations in the world.

Then, the urban conformation of Milan, organized in concentric circles, is very useful for this work, as it allows to consider the city as divided into three main areas: centre, semi-centre and periphery. In this way, the variations that exist between these macro areas can be observed, but also between the different sub-areas within them.

Moreover, is the city which presents the highest rent costs in Italy, so is the one in which implement an optimization strategy for space, and therefore costs, like what will be presented later, makes more sense.

All these aspects support the choice of this city to promote the practical work, representing an analysis done in depth in order to assess the compatibility of this market with the thesis project.

3.1.2 TIME FRAME 2011-2017

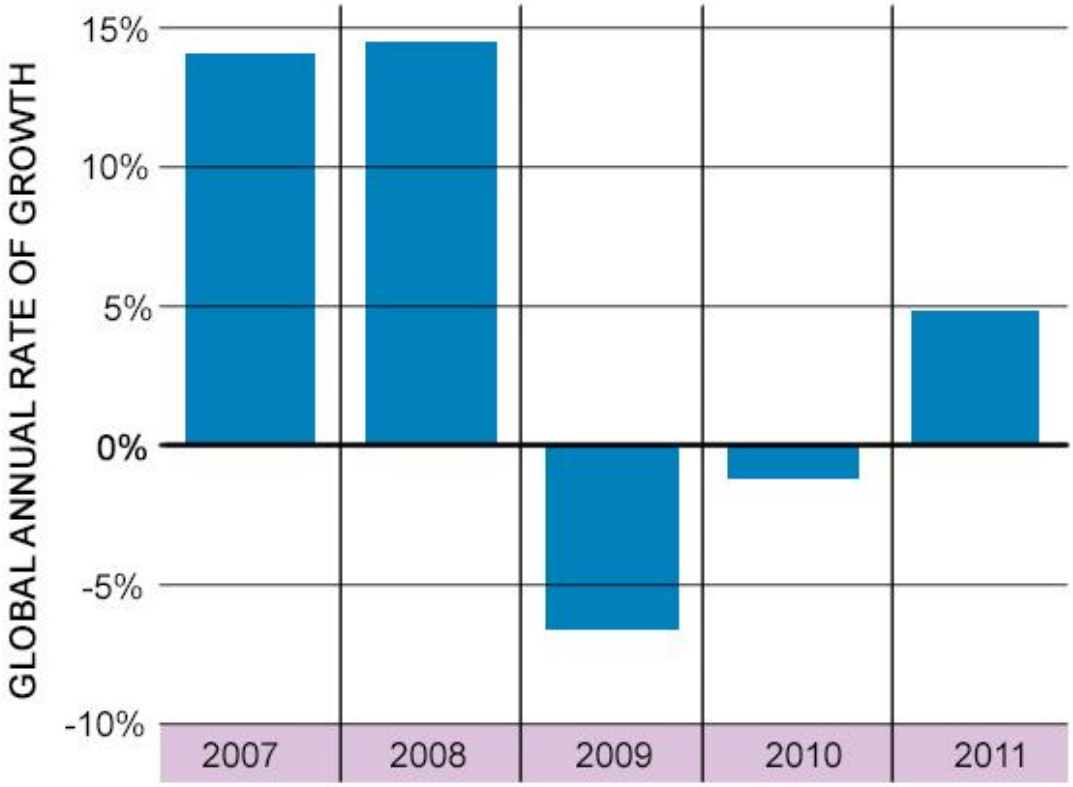
As mentioned, the first part of this work has been focused on the variation of the real estate rental quotes in the City of Milan, from 2011 to 2017.

The reason behind the choice of this time frame was guided by the trend of the global rental growth in the last years.

Summarizing, the situation in 2011 was characterized by a fragile economic recovery with prime rents rebounded strongly (4.8%), supported by a combination of growth among a series of successful brands, aggressive Retailer expansion in emerging markets and fierce competition for the best and most high-profile global shopping locations.

So, after the crisis of 2008, the global real estate economic situation was represented by a great decrease in the rental growth. The 2011 represents the first year of positive annual rental growth after the crisis, reason why this year has been chosen as starting point.

Then, the 2017 represents the last full year available.



Graph.7 Global annual rate of growth

3.1.3 URBAN FRAMEWORK

As said before, the territorial conformation of Milan, characterized by the so called “ring roads” has led to consider a division of the city in different areas according to this subdivision, in order to have the opportunity to observe the differences between each of them.

The Milan ring roads system consists of three concentric ring roads that revolve around the city's historic centre.

On the basis of the structure of the city, three macro areas have been considered:

- **CENTRAL AREA**
- **SEMICENTRAL AREA**
- **PERIPHERAL AREA**

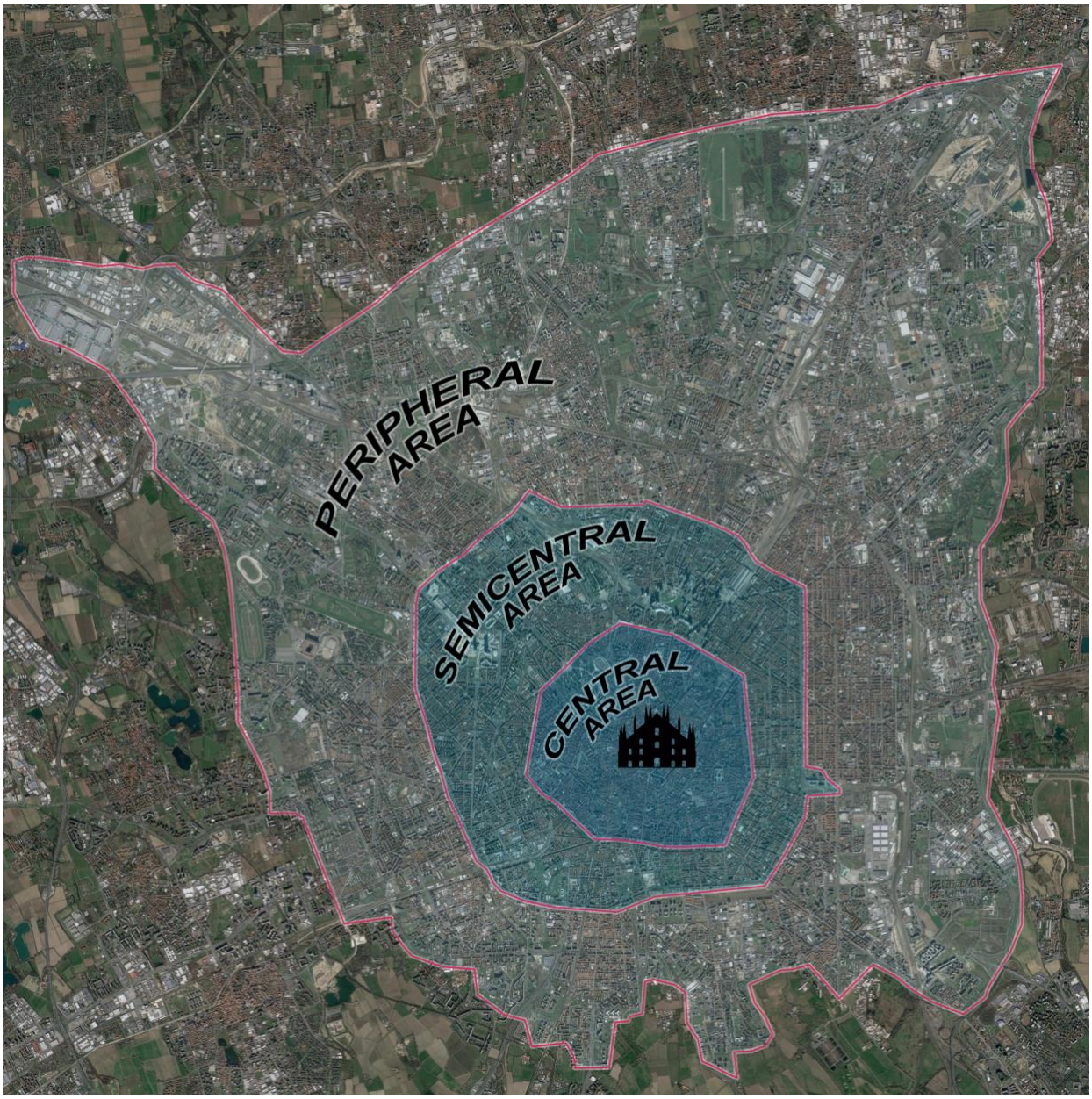


Fig.1 Conformation of Milan – Created from analysis

So, following this subdivision, all the data about the real estate quotation for each area have been collected.

Assigning the collected data to each of the three areas has allowed to conduct a more organized work and to use this subdivision to observe the differences between the various parts of the city.

3.1.4 WORKING METHOD

The working method consisted initially in the search for data corresponding to the real estate rental quotations of the municipality of Milan, from 2011 to 2017.

The source of collection of these data is the real estate quotation database of the “Agenzia delle Entrate”.

Within this database, all the real estate quotations for each area of the city of Milan, relating to the period mentioned, have been taken.

Those quotations are those relating first to the commercial destinations (Retail), after it was decided to collect also the quotations relating to residential destinations and productive destinations, in order to make a comparison between the various quotations, having a broader point of view on the market.

For each of these categories, different choices have been made, according to the various typologies:

- **Commercial destinations**: It has been decided to consider the rental values related to commercial types "shops", considering a "normal" conservative state.
- **Residential destinations**: They have been taken into considered the rental values related to “civil homes” in a “normal” conservative state.
- **Productive destinations**: It has been considered “laboratory” as productive typology, again considering a “normal” conservative state.

The real estate data related to these types of destinations have been taken for all the years, from 2011 to 2017 and for all the sub-areas belonging to the 3 macro areas (center, semicenter, periphery).

In relation to the macro-area to which they belong, the sub-areas have been classified with the following codes: B (All the sub-areas belonging to the central area), C (All the sub-areas belonging to the semi-central area) and D (All the sub-areas belonging to the peripheral area).

These sub-areas are more than fifty and have undergone changes over the years. This was very interesting, because it allowed to observe how the territory of Milan has changed, with for example the born of new neighbourhoods and the unification of others.

Once the sub-area and the year of reference have been identified, the data relative to the minimum and maximum rental values in € / sqm / month have been extrapolated.

Therefore, these values have been taken and the average between the two has been made. Then, the average was multiplied by 12, so as to obtain the value in € / sqm / year.

3.2 PROCEDURE PUT INTO PRACTICE

After the process of data collection, including each subdivision of each considered area, the processing has proceeded with the average amount of euro that has to be paid in a year in order to rent a square meter of surface.

These results are divided within the three different categories: residential, commercial and productive. The same process has been applied the throughout all timeframe considered.[2]

RESIDENTIAL 2011	
AREA	AVERAGE €/SM/YEAR
CENTRAL	222,30
SEMICENTRAL	119,75
PERIPHERAL	90,17

COMMERCIAL 2011	
AREA	AVERAGE €/SM/YEAR
CENTRAL	284,16
SEMICENTRAL	154,10
PERIPHERAL	96,64

PRODUCTIVE 2011	
AREA	AVERAGE €/SM/YEAR
CENTRAL	148,44
SEMICENTRAL	88,85
PERIPHERAL	64,12

RESIDENTIAL 2012	
AREA	AVERAGE €/SM/YEAR
CENTRAL	226,20
SEMICENTRAL	120,50
PERIPHERAL	90,17

COMMERCIAL 2012	
AREA	AVERAGE €/SM/YEAR
CENTRAL	283,38
SEMICENTRAL	157,15
PERIPHERAL	96,70

PRODUCTIVE 2012	
AREA	AVERAGE €/SM/YEAR
CENTRAL	147,36
SEMICENTRAL	88,85
PERIPHERAL	64,12

COMMERCIAL 2013	
AREA	AVERAGE €/SM/YEAR
CENTRAL	284,82
SEMICENTRAL	158,90
PERIPHERAL	96,70

RESIDENTIAL 2013	
AREA	AVERAGE €/SM/YEAR
CENTRAL	225,72
SEMICENTRAL	122,55
PERIPHERAL	90,17

PRODUCTIVE 2013	
AREA	AVERAGE €/SM/YEAR
CENTRAL	147,36
SEMICENTRAL	89,35
PERIPHERAL	64,12

COMMERCIAL 2014	
AREA	AVERAGE €/SM/YEAR
CENTRAL	278,33
SEMICENTRAL	153,43
PERIPHERAL	90,17

RESIDENTIAL 2014	
AREA	AVERAGE €/SM/YEAR
CENTRAL	217,13
SEMICENTRAL	147,60
PERIPHERAL	90,17

PRODUCTIVE 2014	
AREA	AVERAGE €/SM/YEAR
CENTRAL	143,20
SEMICENTRAL	89,31
PERIPHERAL	64,17

COMMERCIAL 2015	
AREA	AVERAGE €/SM/YEAR
CENTRAL	283,33
SEMICENTRAL	154,29
PERIPHERAL	97,33

RESIDENTIAL 2015	
AREA	AVERAGE €/SM/YEAR
CENTRAL	224,47
SEMICENTRAL	179,33
PERIPHERAL	88,97

PRODUCTIVE 2015	
AREA	AVERAGE €/SM/YEAR
CENTRAL	140,07
SEMICENTRAL	88,46
PERIPHERAL	61,57

COMMERCIAL 2016	
AREA	AVERAGE €/SM/YEAR
CENTRAL	280,80
SEMICENTRAL	152,91
PERIPHERAL	97,07

RESIDENTIAL 2016	
AREA	AVERAGE €/SM/YEAR
CENTRAL	216,53
SEMICENTRAL	179,80
PERIPHERAL	88,47

PRODUCTIVE 2016	
AREA	AVERAGE €/SM/YEAR
CENTRAL	139,60
SEMICENTRAL	87,26
PERIPHERAL	60,63

COMMERCIAL 2017	
AREA	AVERAGE €/SM/YEAR
CENTRAL	280,20
SEMICENTRAL	152,49
PERIPHERAL	95,30

RESIDENTIAL 2017	
AREA	AVERAGE €/SM/YEAR
CENTRAL	217,80
SEMICENTRAL	179,67
PERIPHERAL	88,80

PRODUCTIVE 2017	
AREA	AVERAGE €/SM/YEAR
CENTRAL	137,73
SEMICENTRAL	86,83
PERIPHERAL	59,90

Tab.2 Average rent in Milan from 2011 to 2017 – Created from analysis

[2] Appendix 2

3.3 POST-ANALYSIS CONSIDERATIONS

At this point, having all the data relative to the considered time-period, it is possible to make a comparison and therefore an analysis of the changes occurred.

On these results are based the choices made for the implementation of the strategy explained during the thesis, which starts from a concrete study of urban dynamics and ends up by proposing an innovative solution, so taking advantage of the current condition.

In fact, the analysis showed that, it has emerged that, among the three, the function most competing for central areas is the commercial one, while the residential and productive are following a trend of moving in more and more peripheral areas.

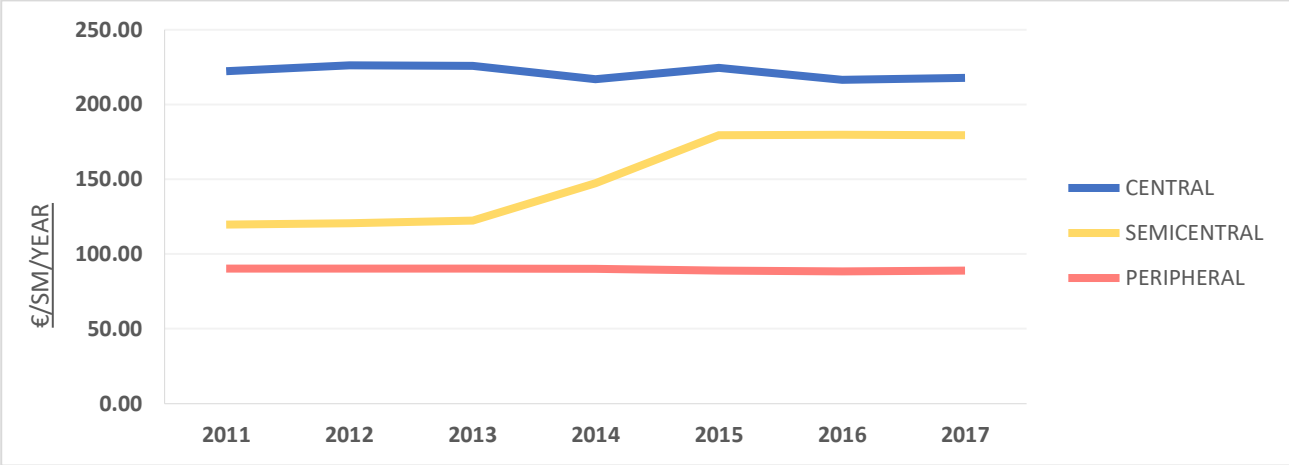
This was the key aspect that led to implement a strategy able to increase the profitability per square meter of the stores, partly remedying to the very high price of commercial rents.

These results seem to be perfectly in line with the outcomes of the Alonso's model previously shown; the division of the areas that emerged from the analysis of the city of Milan shows with the data exactly what the model expressed in a theoretical way.

3.3.1 RESIDENTIAL

RESIDENTIAL	AVERAGE €/SM/YEAR						
	2011	2012	2013	2014	2015	2016	2017
CENTRAL	222,30	226,20	225,72	217,13	224,47	216,53	217,80
SEMICENTRAL	119,75	120,50	122,55	147,60	179,33	179,80	179,67
PERIPHERAL	90,17	90,17	90,17	90,17	88,97	88,47	88,80

Tab.3 Average rent for each year from 2011 to 2017 – Residential – Created from analysis



Graph.8 Residential rent trend from 2011 to 2017 – Created from analysis

The residential is the one that shows the major changes compared to the other two elements considered.

From the graph, it is observable how the value of residential rents in the central area have fluctuated from year to year, albeit always remaining within a certain range of action.

In the peripheral area, the rents have remained almost unchanged. Noteworthy are the changes in the semi-central part, in which since 2013 we can see a strong increase in values, going from 122.55 to 179.33 €/sqm/year in just two years.

The prices increase in the semi-central area is due to the creation of new prestigious residential areas such as City Life and Porta Nuova. The high value of these structures has thus generated a greater attractiveness towards these places, showing the propensity towards moving the housing function in increasingly more and more peripheral areas.

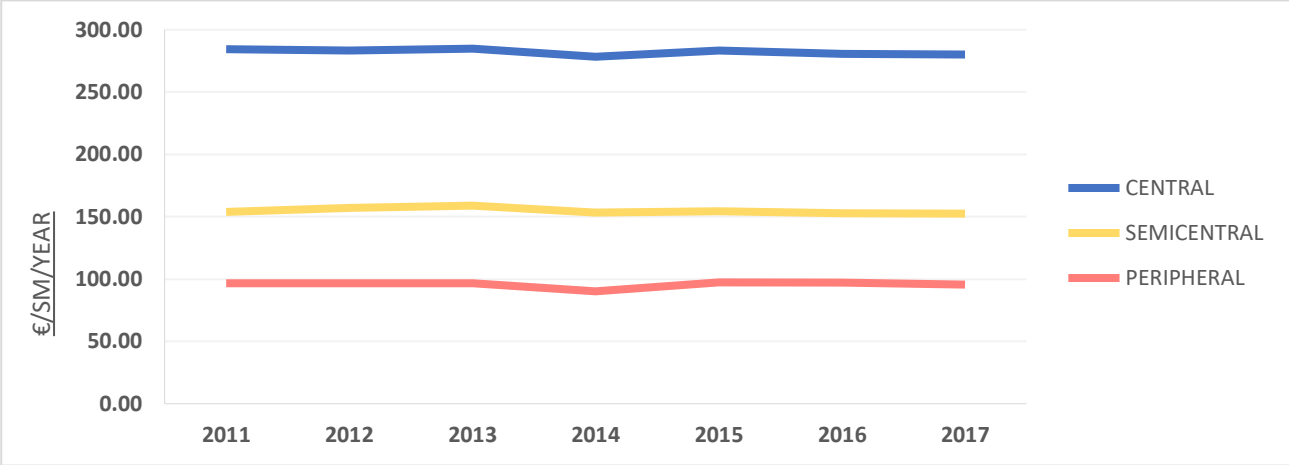
This is due to the fact that the central area has become too saturated and expensive, moving away those functions that are not willing to pay these high rental prices any longer.
The fluctuations in the central area are simply due to the performance of the real estate market; the ratio between demand and supply from year to year.

The stability of the values of the peripheral area indicates how they have remained unchanged over time and have not been subject to investments or devaluations.

3.3.2 COMMERCIAL

COMMERCIAL	AVERAGE €/SM/YEAR						
	2011	2012	2013	2014	2015	2016	2017
CENTRAL	284,16	283,38	284,82	278,33	283,33	280,80	280,20
SEMICENTRAL	154,10	157,15	158,90	153,43	154,29	152,91	152,49
PERIPHERAL	96,64	96,70	96,70	90,17	97,33	97,07	95,30

Tab.4 Average rent for each year from 2011 to 2017 – Commercial – Created from analysis



Graph.9 Commercial rent trend from 2011 to 2017 - Created from analysis

The graph shows how huge is the gap between rental prices in the central area with respect to that of the semi-central ones.

This is a clear sign of how the choice of more central locations is a common strategy among firms; in this way a close competition for these areas is generated, a competition that would not seem to diminish.
In fact, for the firms is essential to be present in the central area, since it generates many benefits that is not possible to achieve in other parts of the city.

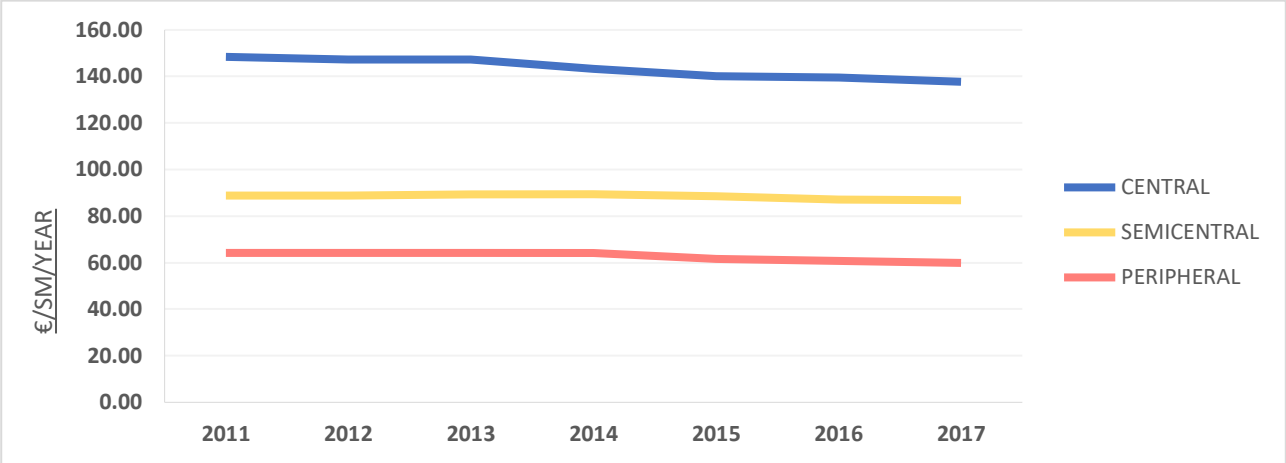
Some of the benefits coming from this location choice are due to the high presence of people, which represent a high volume of potential customers, moreover, being present in the city center is a sort of advertising for the brand, which contributes also to create and strengthen the brand's image; locate the stores in the peripheral area could be seen as a devaluation of prestige.

Prices for commercial property rentals remain in any case much higher than residential ones, hence requiring greater willingness to pay.
As a result, only the most successful companies are able to pay such high rents, while less important and prestigious firms are located in more and more peripheral areas.

3.3.3 PRODUCTIVE

PRODUCTIVE	AVERAGE €/SM/YEAR						
	2011	2012	2013	2014	2015	2016	2017
CENTRAL	148,44	147,36	147,36	143,20	140,07	139,60	137,73
SEMICENTRAL	88,85	88,85	89,35	89,31	88,46	87,26	86,83
PERIPHERAL	64,12	64,12	64,12	64,17	61,57	60,63	59,90

Tab.5 Average rent for each year from 2011 to 2017 – Productive - Created from analysis



Graph.10 Productive rent trend from 2011 to 2017 - Created from analysis

The graph shows how rental prices for production activities in the central part of the city are decreasing.

The phenomenon is due to a tendency to move these activities in more peripheral areas, consequently the demand for the central area is reduced, lowering competition and therefore the prices.

This condition is due to the desire to reduce production costs by moving more peripherally, moreover, the city center is facing increasing competition that is cutting agents unable to pay the rents ever higher.

It follows that the center of Milan is changing its configuration, becoming more and more commercial and residential and less productive.

Chapter 4

EVOLUTION OF RETAIL INDUSTRY

In this chapter, the key elements of Retail are exposed, explaining its importance and revisiting the evolution in order to give to the reader a clear awareness of its strategic nature.

Then, the fast-fashion Retail will be deepened since it will be the area of interest for the practical work.

Subsequently, an analysis will be carried out on the major trends that have characterized this market in recent years.

After that, the attention will be placed on the current situation of this sector and on the possible future scenarios to which it will be subjected.

4.1 FUNDAMENTAL ASPECTS OF RETAIL

Following is introduced the concept of Retail, exposing the main features and emphasizing its importance as a point of contact with the customers. After that, the distinctive features and the different types are introduced, in order to have a clear understanding of the composition of this sector.

The “Retail” is the process of selling consumer goods or services to customers through multiple channels of distribution in order to earn a profit. In other words, the place (store) where a good or service is sold to end users.

The importance of Retail lies in the fact that it represents the "point of contact" with customers.

Since the customer is the key player for any company, the store must meet its needs, which with the new market evolution, characterized by an increasing number of innovations, have become increasingly higher.

So, in the management of Retail, a lot of factors must be considered: the accessibility, for example, is very important because persons cannot acquire products if the store is not accessible; the opening time represents also an important factor, as the placement of products as well.

Summarizing, it is possible to identify five fundamental factors to keep in mind during the management of the Retail: accessibility, type, ownership, market and location.

- *Accessibility:* This term refers to the quantity of shops and their diffusion. It represents a key aspect and must be taken into consideration according to the product segment. Indeed, luxury brands usually choose to sell their products in few shops, so to create a condition of exclusivity around the products. On the other hand, mass products are sold in a huge number of stores, characterized by a capillary presence, to improve the accessibility.

- *Type:* Different types of stores exist and can be organized according to the products they sell, their prices or the brand images.

- *Ownership:* The ownership of the stores refers to the decision about how deep to control them. This choice is part of the brand strategy. For example, companies could decide to have franchising stores, DOS (directly operated stores), or both. Franchising means to build a "chain" of stores, giving to other people the possibility to manage the single shops of the chain. The DOS are all the shops directly managed by the brand. There's also another type of ownership method, the partnership. These strategies will be explained in detail later.

- *Market:* The reference market is a key element for each brand. This is connected to the decisions to open stores in different locations around the world and to determine which market is better than others. However, in a world characterized by globalization, the common goal of brands is to be present all over the world.

- *Location:* The location choice is connected to a lot of other factors as visibility, accessibility, revenues, and so on. Companies could choose to open their shops into malls, into smaller trophy assets in the centre of the town, etc.

The brand strategy could be different according to the different responses to these factors.
It is possible to further investigate some factors that are crucial in the composition of the strategy: property, typology and location of the store.

The property of the store is a fundamental factor from the strategic and economic point of view. There are four types of ownership in Retail: independent specialist Retailers, franchising, partnerships and DOS.

The independent specialist Retailers are independent people, totally responsible for their business and for all the decisions, from marketing to merchandising. For the brands that choose this option for sell their goods, there will be low control of the Retail channel and low contact with customers, but also lower investments and no risk for carrying inventories.

Franchising is intended as a coordination through contracts technique in which a brand gives the right to sell its products and services, using also its name. This concession is provided to the owner of the shop in exchange of a royalty on the selling amount, a fee to enter in the business, or both. This method means to have higher control with respect to the first method, but not the complete decision power.

The partnership allows to establish a collaboration between the two parties: the brand and the owner of the shop. This leads to have higher control and higher contact with the customer, but also higher investment risk.

The last method is the one that allows to have the total control on the store, the so-called DOS (Directly operated stores). It mainly used in the luxury sector, because here there's the necessity the necessity to maintain a certain level, even in the stores. This is, from the economic point of view, the riskiest method, because of the expenses due to rent and maintenance, but even for the direct investment of the brand. However, it represents the only way to have a direct and exclusive contact with customers.

Talking about the typologies of stores, two main categories can be mentioned: product driven and brand driven stores.

The product driven stores are the ones offer a variety of products of different brands, characterized by the same target of quality, functionality and fashion attitude.

The brand driven stores, instead, are focused on the brand identity and so, all the store is an extension of the brand, in all the details.

It is possible, inside these two macro categories, to define another classification: product driven stores are divided in specialist stores and department stores; instead brand driven stores include mono-brand stores, flagship stores and concept stores.

Then there are other two types of stores that can be implemented considering both strategies: factory outlet stores and travel stores. The last typology is connected to the time attitude: the temporary shops.

- *Specialist Store*: A specialist store is a shop that caters to one specific Retail market. born in the XX century, they introduce the separation between the manufacturing process and selling process; this type of store sells to the customer different types products.

- *Department Store*: A department store is a Retail establishment offering a wide range of consumer goods in different product categories known as "departments". It is a store that proposes a wide choice of brands to the customers. In fact, these stores have multiple lines at different prices and different typologies of products like apparels, cosmetics and home appliance. Usually the structure is organized inserting in the same building, different mono-brand corners directly managed and rented by the brand, even with own personnel. Two examples of Italian department stores are Coin and LaRinascente.

- *Mono-brand Store*: shops that stand out for the sale of only products of a particular brand, these stores must show in all the details the brand image. Usually directly operated by the brand in the luxury brand categories, instead more widespread, using franchising, for more accessible brands.

- *Flagship Store*: The flagship store is a particular type of mono-brand store, characterized usually by higher surface and predominant location. This store represents a sort of model for the other shops and it shows all the characteristics of the brand. It represents generally a change of the brand attitude or an attempt made to attract the attention on the label. In fact, the objective is mainly to attract the customer's attention and not to increase sales, that usually increase in the sister's stores.

- *Concept Store*: Typically focused on fashion, a concept store is a place where customers can buy other kind of merchandise, doing aperitif, have a coffee, meet other people or see art exhibitions. This typology of store is born in USA in 1986 with the first concept store of Ralph Lauren that represented the patriotic idealism. The concept store must represent a message, or an idea given by the stylist, with the aim of add value to the product itself. Another objective is to attract people in physical stores instead of e-commerce, so, the higher the number of services offered inside the store, the higher the time of visit, the attractiveness and the possibility to sell products.

- *Factory Outlet Store*: A factory outlet store is a brick and mortar or online store in which manufacturers sell their stock directly to the public, cutting out the middle-men. This type of store is characterized by different types of product sold, in fact they sell irregular productions, old-fashion collections, surplus. At the beginning, this type of shops was attached to the factory or to the warehouse, but from the beginning of the century these shops are usually grouped in a shopping center called “outlet village”.

- *Travel Stores*: The travel stores are shops belonging to the travel environment like airports, in which you need a proof of travel to access the commercial area. Usually, in this area the prices are not subject to taxes and duties.

- *Temporary / pop-up store*: shops characterized by limited duration, generally used by the brand for the launch of new products or to promote a limited-edition collection.

Regarding location, the main location strategies for these different typologies of stores are: main streets, shopping centres, Retail parks and outlet villages.

The main street is a road, inside a city that has as a focal point the business of Retail. It is usually organized with unit of 150/200 sqm of sale area and usually each unit has a showcase of 6 meters. Examples of main streets: New bond Street in London, Via Montenapoleone in Milan and Avenue Champs Elysees in Paris

In a shopping centre, one or more buildings form a complex of shops representing merchandisers with interconnecting walkways that enable customers to walk from unit to unit. This structure is planned, owned and managed usually by a single property, typically with on-site parking. Generally, shopping centres are characterized by a GLA (gross leasing area) higher than 5,000 sqm and more than 10 Retail units.

There are also Retail parks, that are different independent stores located in the same commercial neighbourhood, with variable surfaces.

Then, the outlet villages are a group of shops which architecture is in line with the urban context. They are located outside the town and have a GLA higher than 10.000 sqm.

4.2 HISTORY OF RETAIL

This paragraph deals with the history of Retail, retracing its evolution over time until today.

The structure foresee a brief introduction, followed by a schematic classification of the main events and innovations introduced in the stores.

In this way, the description proposes to be easy to read and understand, following a clear chronological pattern.

4.2.1 HISTORICAL EVOLUTION OF PLACES FOR SHOPPING

From the time of selecting goods, from those laid out on a woven trading mat in the Greek agora, to choose with a click on a screen, the evolution of shopping formats has been long and complex.

The different formats of shopping activity have progressed from the earliest civilisations in isolated kingdoms to the interconnected world of today. This journey of evolution has involved a continuous process of change and will continue during the next years.

The evolutionary process, from the earliest civilisations up to the 20th century, is summarised in the following time-line diagram.

Period	Date	Retail space	Point of difference
BC		**The Greek Agora**	-First trading in open spaces shared with other facilities
1st-5th C	110	**Roman Forums** *Forum of Trajan, Italy*	-First shop in a building, in a defined space -First covered shopping space -First multi-level shopping-tiered
13th-14th C		**Medieval markets halls and town halls**	-The shops were part of a building containing other uses
	1215	*Palazzo de Broletto, Como, Italy*	
	1240	*Bruges Halles, Belgium*	
	1275	*The Ring, Breslau, Germany*	
	1393	*Thorn Town Hall, Prussia*	
13th-17th C		**Eastern bazaars**	
	1461	*The Quissariya, Morocco, Africa*	-First covered gridded network of streets aligned both sides with boutiques
	1585-1629	*The Great Bazaar of Istanbul, Turkey*	-First masonry building providing a covered hall specifically for shops
16th-17th C		**London Exchanges**	
	1566-1568	*The Royal Exchange, London, England*	-First purpose built sole use trading building in England arranged around a 2 levels colonnaded courtyard
	1606	*The New Exchange, London, England*	-First enclosed hall with trading on two floors
	1676	*The Exeter Change, London, England*	-First combination of shops and leisure pastimes

17th-18th C		**City Streets**	
	1695	*Haarlem, Holland*	-First glazed shopfront
	1736	*Bishopsgate, England*	-First walk-in shops with internal counters
	1788	*Galerie de Bois, Paris, France*	-First London shops with glazed fronts
	1799	*Passage du Claire, Paris*	-First arcades in Paris
19th C		**New Markets**	
	1830	*Covent Garden Market, London, England*	-First Arcade in London
	1833	*Hungerford Market, London, England*	-First all glazed arcade in Paris
	1853	*Halles Centrales, Paris, France*	-The longest arcade
		Next generation of arcades	
	1846	*Galeries St Hubert, Brussels, Belgium*	-The grandest arcade
	1865	*Galleria Vittorio Emanuele, Milan, Italy*	-Largest number of publicly accessed levels
	1890	*Cleveland Arcade, Ohio, USA*	-The tallest arcade
	1891	*Galleria Umberto I, Naples, Italy*	-The largest and most complex series of arcades
	1888-1893	*New Trade Halls, Moscow, Russia*	-First network of glazed streets.

		Western bazaars	
	1772-1834	*Pantheron Bazaar, London, England*	-First variety goods store in London
	1823	*A T Steward & Co. New York, USA*	-First variety goods store in New York
	1824	*Belle Jardiniere, Paris, France*	-First fixed prices
	1829	*Gallerie de Per, Paris, France*	-First store in Paris built in cast iron
	1852	*Bon Marchè, Paris, France*	-The first department store
	1857	*Hauphwout & Co, New York, USA*	-First cast-iron facade for a store
	1858	*Macy's, New York, USA*	-First Macy's department store opens
	1872	*Bloomingdale, New York, USA*	-First Bloomingdale's department store opens
	1877	*Lewis's Manchester, England*	-First Lewis's store opens
	1879	*Woolworth's, Pennsylvania, USA*	-First store with passenger elevator in USA
	1884	*Marks & Spencer Bloomingdale's, New York, USA*	-First escalator in a department store
	1895	*Harrod's, London, England*	-First escalator installed in England
	1896	*Wertheim Store, Berlin, Germany*	-First extensive use of glass curtain walling on a store in Europe
	1898	*Hermann Tietz Store, Berlin, Germany*	-First use of a steel frame to construct a store

20th C		**The beginning of the "modern" stores**	Stores extended to their present form
	1900-1901	*L'innovation, Brussels, Belgium*	
	1901-1905	*Harrods, London, England*	
	1098-1912	*Whiteleys, London, England*	
	1908	*Selfridges, London, England*	

Tab.6 Earliest times up to the early 20th century

4.2.2 RETAIL IN THE MODERN ERA

Even if the historical evolution of Retail was, until the 1960s, a relatively gradual process, significant changes took places. In these years customers became more independent with the born of self-service stores, then the music inside the stores was introduced. Basically, the shopping activity start to become more a leisure activity than before.

The period after the Second World War was characterized by a great change in the consumption, with important abundance of choices and sizes. Stores and markets start to take on important dimension.

From the 1960s period onwards, the pace of evolution quickened and the number of different types of Retail environment significantly increased.

In the 2000s the touchscreen appears for the first time in a store and after this period, the greater evolution of the e-commerce opened the way to unprecedent changes in the Retail world.

The evolution of Retail types can clearly be seen in the following table.

1900s
▪ 1901 L'innovation Store, Brussels
▪ 1908 Selfridges, London. Selfridges redefines Retail: from a necessary errand to a form of entertainment.
▪ Department stores expand in major cities of USA and Europe
▪ Mechanical invention allows the physical size of stores to expand
▪ New stores built with steel frames allowing larger stores and greater flexibility
▪ Escalator commonly installed in department stores, for the first time allowing mass vertical movement
1910s
▪ 1919 sees the first air-conditioned department store in the Abraham and Strauss Store, New York
▪ Mechanical inventions continue to allow the expansion of shopping environments
1920s
▪ First unified planned shopping mall opens in 1922 at Country Club Plaza, Kansas City
▪ Shopping trolleys are introduced in Houston, Texas
▪ Individual company credit cards introduced
▪ Introduction of the music inside the stores
▪ 1924, Macy's New York becomes the largest store in the world
1930s
▪ Department stores branch out to the suburbs in America
▪ Self-service stores introduced, Los Angeles
▪ Fluorescent tube brings new lighting opportunities for larger stores
1940s
▪ Contrasting approaches between Post-War Europe and America
▪ Both developing new shopping environments in response to growth
▪ Both responding to circumstances generated by the expanding universal ownership of the motor car

	▪ America generally established the first collection of planned groups of shops, "The mall", planned on greenfield land near highways and interconnections
1950s	▪ Use of escalator worldwide
	▪ America builds a new generation of covered malls
	▪ First dumb-bell plan mall established at Shoppers World, Framingham, Massachusetts in 1951
	▪ First universal credit card established – Diner's Club
	▪ Electrically driven cash registers come into use
	▪ Norhtland Shopping Centre, Detroit opens in 1954
	▪ The first enclosed mall opens in 1956
	▪ Introduction of air-conditioning in the stores
1960s	
	▪ First WalMart big box value Retailing opens in America in 1962
	▪ Fibre optics allows new lighting possibilities
	▪ Open-air precincts continue
	▪ The American mall reaches the UK but it is adopted differently. In city centre with more constraints – part of mixed-use developments and integral car parks restrict possibility of light from above
	▪ The first English enclosed centre opens in in 1964 in Birmingham, UK
	▪ The new enclosed centres in UK are dependent on artificial lights
	▪ More economic versions of American centres adopted in the UK, stripped of quality finishes and with parking on top due to more constrained sites, adopting convenience of integral service but bland architecture
1970s	
	▪ Oil crisis brings temporary halt to commercial development
	▪ Owner occupation development emerges, first with hypermarkets
	▪ European first generation of covered enclosed centres in town centres: artificially lit, dark finishes and utilitarian
	▪ USA and Canada commence second generation of covered centres
	▪ ATMs start to come into use
	▪ The first enclosed two-level town centre mall opens in 1972 in Nottingham, UK

▪ The first US town centre malls opens in 1972 in Houston, US
▪ American stores start to use bar codes – 1974
▪ First optical scanner come into use – 1975
▪ The first French enclosed town centre opens in Lyon, France
▪ Cash registers allow credit checks, recording of transactions and inventory control
▪ First UK suburban mall to adopt US quality of interior finishes and planning principles, opens in London in 1976
▪ European stores start to increase in size
▪ The Eaton Centre, Toronto, Canada opens in 1979. Was one of the first to use the levels to make two ground floors and achieve integration with underground pedestrian network
1980s
▪ Speciality Retail reaches UK with opening of Covent Garden in 1980
▪ Retail parks grow up in suburban locations around town peripheries
▪ Regional shopping centres in USA increase to larger formats, stretching the standard Retail offer and establishing “super” regional centres
▪ A new Retail format emerges with the combination of major leisure and recreational elements
▪ First regional shopping and leisure centre opens in Europe – 1984
▪ 1985 – Infomercial emerges: TV and shopping come together with the very first season of the home shopping network
▪ 1986 – First concept store introduced by Ralph Lauren in New York
▪ First generation of UK out-of-towns opens, and others start to be planned
▪ Themed Retailing introduced
▪ A new format emerges with “lifestyle” centres providing upscale Retailing and fine dining in an external environment
▪ Railway stations begin to develop Retail
▪ Camera surveillance systems introduced
▪ Stores in UK use natural daylight and brighten up

1990s
▪ Retail entertainment centres emerge in America
▪ First out-of-town reginal shopping centre opens in Ireland
▪ Generation of regional out-of-town centres open in the UK
▪ Range of Retail formats exponentially expands
▪ Edge of town Retail parks spread across the Europe
▪ Airport Retailing “takes off” in Heathrow and Gatwick, London, UK
▪ Factory outlet centres introduced selectively across Europe
▪ Department stores refocus on selected product areas to reinvent themselves
▪ Showpieces stores introduced for singular brands with museum-like displays
▪ European planning legislation tightens up, preventing further suburban Retail and protecting the vitality of towns
▪ First of the new generation of town centre shopping centres completes in 1996 in Rotterdam, Netherland
▪ Public opinion turns towards a preference for “open street” Retailing
▪ Suburban malls are reconsidered, transformed as “main streets” and opened up
▪ New urban Retail format emerges in both USA and Europe
▪ Experiences into stores increase, integrating leisure and Retailing
▪ 1994 – born of the online shopping
▪ 1995 – ecommerce pioneers: Amazon is established
▪ 1997 – Coca Cola introduces mobile payments in a limited number of vending machines
▪ 1999 – Online shopping is growing: Brick and mortar brands double their online sales
2000s
▪ Reacting to the failure of standard malls format, “Hybrid Centres” emerge, combining both covered and external space to establish a new Retail format
▪ Touchscreen made its first apparition in a Retail store
▪ First Apple store – 2001, Tysons Corner Centre Mall, Virginia, USA
▪ Return of the main street shopping market - 2001
▪ Diffusion of monobrand stores

	▪ Facebook reaches 100.000 business pages – 2007, this allowed companies to attract potential customers and tell about themselves, so, a new concept called company page is planned
2010s	
	▪ Introduction of new technologies to help Retailers collect data: for example, Apple introduces iBeacon technology - 2013
	▪ Omnichannel becomes an everyday Retail term
	▪ Exponential growth of purchases with smartphones and tablet
	▪ Social media become an increasingly important channel of advertising to influence purchases
	▪ Opening of Amazon Go: the first store without boxes

Tab.7 Retail milestones 20th and 21st

4.3 MASS-MARKET AND FAST-FASHION RETAIL

Below are the concepts of mass market and fast-fashion Retail. This is done because fast-fashion represents the sector that will be the protagonist of the practical work. So, it is essential to have a clear knowledge of the sector and its characteristics, before proceeding to consider it as a framework for the project.

Within the fashion system it is possible to distinguish five different segments: *haute couture*, very prestigious garments, handmade and tailored products, *prêt-à-porter,* represented by the second lines of the designers created by the process of democratization of haute couture, the *diffusion,* related to medium-high level brands directed to a broad public; it follows the *bridge,* that includes more accessible and functional creations, acting as a link between the mass market and the second lines of the designers and finally the *mass*, relating to the most economical clothing lines for a very wide audience.

In the mass market group there are fast fashion companies that, combining the speed of the processes with a short time to market and the creation of a distinctive brand, represent one of the most interesting phenomena of the new fashion culture.

The fast fashion is a sector of the apparel industry that produces collections inspired by high fashion but sold at low prices and renewed in a very short time.

This term is used by fashion Retailers to express a design that move from catwalk quickly to capture current fashion trends. Fast fashion clothing collections are based on the most recent fashion trends presented at Fashion Week in both the spring and the autumn of every year.

The focus is on some aspects of the supply chain, which allow this method to design and manufacture products quickly and inexpensively, so as to provide the consumer with current clothing at a low price. This production strategy at an affordable price is used by major Retailers such as Zara, Bershka, H&M, Peacocks, Primark, Xcel Brands, Topshop, etc. It can be said that this philosophy has spread since the mid-2000s.

The strategy developed from a product-based concept to a production-based one, called "quick response" born in the United States in the 1980s and transferred to a model based on the "fast fashion" market between the end of the 1990s and the beginning of the 2000s, Zara was the pioneer of this fashion revolution and its brand became almost a synonym of the term.

The main goal of fast fashion is to quickly produce a product in an economically efficient way, to respond to the ever-changing tastes of consumers and produce new trends almost in real time. This efficiency is achieved through the understanding by the Retailers of the needs of the various targets on the market, that is the desire to buy something that looks like high fashion at the lower price range in the clothing industry.

So, regards the management of this method, first of all, the concept of "category management" was used to align the Retail buyer and the producer in a more collaborative relationship.

Category management is defined as "strategic management of product categories through commercial agreements, which aims to maximize sales and profits by meeting customer needs". This collaboration occurs because the resources of many companies are pooled to develop increasingly sophisticated and efficient production and distribution models to increase total market profit. The fast fashion market uses this strategy in conjunction with production in foreign countries to keep prices at a minimum.

Another key concept in this field is the “Quick Response Method” that was developed to improve manufacturing processes in the textile industry with the aim of removing time from the production system.

This concept is born in the 19080s and is now used to support "fast fashion", creating new products and encouraging consumers to visit stores more often, in order to have an experience. The rapid response also allows new technologies to increase production and efficiency.

The large Spanish chain Zara, owned by Inditex, has become the global model of time reduction between design and production of a product. This shortening of time allows Zara to produce over 30,000 units of product each year and to own nearly 1,600 stores in 58 countries.

The new items are delivered twice a week to stores, reducing the time between product sales and refuelling. As a result, time reduction increases the range of garments available to the consumer and the availability of the product, significantly increasing the number of visits per customer per year.

Marketing is the main driver of fast fashion, it creates the desire for new creations in a very short time. This is achieved by promoting fashion as something fast and low-priced.

The continuous release of new products essentially makes clothing a highly profitable marketing tool that guides consumers, increases brand recognition and then translates into increased purchases by consumers.

Fast fashion companies also enjoy higher profit margins as their price drop percentage is only 15% compared to 30% of the competition. The fast fashion business model is based on the reduction of time cycles from production to consumption, so that consumers are involved in more cycles and in any period.

For example, the traditional fashion seasons follow the annual cycle of the seasons (summer, fall, winter and spring) while the fast fashion cycles are compressed in shorter periods, 4-6 weeks, and in some cases even less. in this way Retailers create multiple buying seasons in the same time frame.

There are two main market strategies used by companies in this field: one involves an investment in advertising, the other involves the absence of advertising but a large investment in the stores.

For example, while some companies invest in advertising, Primark works without advertising. Instead, Primark invests in the structure of the store, in the preparation and visual merchandising to attract the consumer and create a pleasant shopping experience, with the consequent return of the customers.

For the fast fashion companies, the diffusion of the brand identity is very important, and it is mainly carried out by the points of sale; the distribution and promotion chain is an important phase in creating the value of their products.

The stores, through the definition of the location, layout and atmosphere, aim to attract consumers and represent the main promotional investment of the brand.

Since the distribution and sales phase of the products allow for obtain key information to identify the preferences of the customer, the store is the privileged place to acquire market knowledge. So, almost all the points of sale of Fast Fashion companies are directly managed and only a small part, about 5-10%, is franchised.

In fact, to develop a good understanding of the commercial reality in the various countries in which the company competes and therefore to implement a reactive management in towards the market, companies opt for a focus on the network of direct sales, consisting of widespread mono-brand stores.

4.4 CURRENT SITUATION OF RETAIL AND NEXT CHANGES

4.4.1 PHYSICAL STORES: CURRENT SITUATION

It is possible to say that the situation of the Retail market is now facing an increase in competitiveness, a high threat of competition and an ever-increasing level of request by the final consumer. To remedy this situation, companies should be good at understanding the threats and opportunities arising from these changes, so as to rethink how to attract, serve and retain customers.

The emergence of new technologies, changes in customer behaviour and the current economic situation represent three aspects closely linked to the Retail world.

Speaking of physical stores, it is well established that e-commerce has completely revolutionized the traditional format. In fact, it allows to cut distribution costs and have a greater assortment. In addition, customers have many more choices, so they can spend their money on the best possible option.

Since the e-commerce boom of the late 90s, many people have begun to predict the end of the brick-and-mortar stores. However, these forecasts are resulted to be strongly exaggerated, since physical stores still resist and indeed, many online-born companies are investing on the opening of physical stores. In any case, it must be recognized that customers are increasingly moving from offline to e-commerce for conclude their purchases, and so, physical Retailer must pay attention to these changes.

Talking about changes in purchases, it must be considered not only the use of the internet, but also of other channels such as smartphones and tablets, which are now part of the daily life of consumers. The diffusion of these devices has profoundly changed the habits of consumers and their shopping behaviours; for example, a person, using their smartphone, is able to compare the prices of a product directly in the store, deciding to buy the same online.

Customers, through the use of mobile devices are able not only to buy anytime and anywhere, but also to gather all the desired information.

Retailers are aware that new technologies are very far from completely erasing the physical store; they offer, instead, the opportunity to improve the stores' experience exponentially.
This is the reason that pushes many brands to digitalize their sales points, so to keep in line with the times and changes in progress, facing the innovation as an opportunity and not as a threat.

4.4.2 PHYSICAL STORES: TODAY'S MAIN TRENDS

Following this, it is interesting to observe which are the main trends that describe the behaviour of Retailers in addressing these big changes, what is their relationship with technology and what is expected for the future of Retail.

The current historical period is characterized by customers owning bargaining power higher than ever before and are very demanding in terms of authenticity, novelty, convenience and creativity. In fact, what is running is the so-called customer-driven economy.

The major Retail trends of the last years are focused directly on understanding how to meet the clients. This focuses on three main directions: The first is to change preferences, following the tendency to own less and living in the economy driven by social media. The second is the change in Retail formats. The third is focused on new technologies, both in the store and outside. What was once futuristic is now a competition field for various Retailers. Retail innovators know that technology is no longer a support for the shopping experience, but it is essential.

Technology alone, however, is not enough. Customers are looking for new products and surprising experiences. Retailers are increasingly focused and encouraged to offer their customers ways to amaze them and strengthen their loyalty. It is about being able to involve the customer to the maximum, creating innovative experiences integrated perfectly with the technology.
Customers' preferences are increasingly moving towards intentional consumption, moving away from rampant consumption. Customers today define themselves less for the number of things they possess and more for the kind of experiences they have experienced.

Customers are looking for sharable experiences to define their favourite brands. Retailers who can offer these kinds of moments over time will probably grow a community of extremely loyal

customers. In the past years was much easier to identify a Retailer. In fact, he simply dealt with buying and selling goods, both in the shop and online.

Today, due to several reasons, it is increasingly difficult to define what a Retailer is and what exactly he does. In fact, market fragmentation in the Retail spaces is constantly growing. In the consolidated markets this fragmentation is less evident, but the level of blurring of the sectors is unprecedented. Low entry barriers have led to the emergence of new types of Retailers and so the traditional ones need to reinvent themselves.

The success or failure of a point of sale is also determined today by the ability to satisfy the on-demand mentality of the modern client and so, to be faster and faster. Amazon and other on-demand delivery options have forever altered customer expectations.

In 2017, Amazon entered the list of top 10 global Retailers for the first time, and its growth was significantly driven by its prime service that attracts younger, higher-income customers. However, speed alone is not enough to compete. In fact, consumers have become accustomed to expecting a high quality on-demand shopping experience.

The latest trend is the arrival of exponential living. There has been much discussion about new technologies and their potential effect on Retail, such as artificial intelligence, robotics, sensors and virtual reality.
These technologies are no longer considered futuristic, but the most innovative Retailers are already using them to improve interactions with customers and to change working methods.

It is therefore expected that the use of artificial intelligence, robotics or self-service in the stores will become ever greater.

4.4.3 THE FUTURE OF RETAIL

What is happening in these years is the opening of physical stores by many born-online companies. For example, Amazon is coming offline and opening stores, such as Alibaba, Warby Parker and Bonobos.

The reason why so many online-born companies are opening physical stores is because they recognize that it is not possible to fully realize itself as a brand without having a physical, even emotional connection to the consumer.

In all this, the idea for consumer to just simply discover something in a serendipitous way, to just have a shopping experience that maybe they didn't expect, to come across a product that they never knew existed, to connect with someone who is excited and passionate about that product is always greater. Consumers want to have more those experiences, not fewer of them, as they become more and more technologically tethered.

On the other hand, it is necessary, in this moment of great change, to recognize that it is necessary to question the purpose of a store.

In 2018 it is necessary to look back and say that the store really hasn't changed. looking back, it is possible to recognize that in the last hundred years the purpose of the stores has remained basically the same.

In over a hundred years at least, the purpose of the store is fundamentally the same, and the way to plan and build stores and stock manage them really hasn't changed. So, it is necessary to look at what the new purpose is.
What is happening in the market is not binary, is not true that as e-commerce grows physical stores must die. As e-commerce grows physical stores must change.
What's happening is something quite historic: media in all its forms and mediums is entering the store.

It means that, looking back and looking at the way stores were built initially, the purpose of a store was basically to stock a selection of products to show to consumers, to provide products, information and to fulfil transactions; but now every single one of these forms of media is a direct path to doing that: It is possible to shop through any of these means, to see greater selections of product, to get more product information and to transact much more frictionless, so media is becoming the store.

The question at this point is: why are stores necessary if the media already perform this function? What's the purpose of building a store? Just the opposite, in fact stores are becoming media. Stores are the most powerful, manageable and measurable form of media that a brand or a Retailer has as its disposal

It means that it is necessary to start thinking about Retail in a much different way with respect to the past. The purpose of a store is no longer simply to distribute products, it can't be, the purpose of a store must be distributing experiences with those products and with the people in those spaces.

As proof of all this, and of the fact that the change in the concept of Retail is underway, some opinions of leading figures in the sector are shown below.

"If we're re talking about physical Retail, we must try to be different from all the other competitors and to deserve the visit of our consumers. It's a duty of thinking about how to deserve these people, to bring them in our Retail space and to give them the possibility to enjoy their shopping. The biggest mistake is to think only about commercial approach. Instead, today is necessary something more, mixing several components, as clothing and technology. The era of classical Retailers is at the end, we cannot follow the ideas of the past because the new physical stores have to be totally different. Costumers don't want to follow the rules from the past, but they need something especially for them. The real question is how to supply those young customers, because they represent our next target".

Armand Hadida - Founder of L'Éclaireur, Paris. One of the pioneers of the Retail concept.

"When I think about the future of Retail I think about 4 things: emotion, creativity, authenticity and discovery, and I don't think these things are so easy to make impressions through just a device alone, but they require a degree of thoughtfulness and intuition. So, the store of today is not just about selling things but is how we're engaging with the public. These 4 things should lead with a unique experience for costumers, and also for us. "

Kim Bui Kollar - Director of fashion and special projects at Lane Crawford, Retailer and distributor leader in China.

"*I think physical Retail isn't dead, physical and online worlds will just coexist. There's a place for both and the multiplicity of interactions between offline and online that customers will have will just increase. In the past Retailers could survive on product alone, that was enough to attract customers, but moving forward, this rule will be no more valid, if you're just competing on product, you're competing against the Amazons of this world and you're going to be beaten. The pressure on Retailers so is that much greater compared to the past. It's really a mindset from a product driven business to a service driven experience and business, in terms of how you really connect yourself with the customers."*

Michael O'Keeffe - CEO at Aesop, Australia.

Chapter 5

RETAIL DIGITALIZATION

This chapter deals with the theme of "Retail Digitalization", a new store concept inspired by a new prototype comes from the Spanish Holding Inditex.

Initially, the prototype Zara store presented by Inditex Group in London is described, as a starting point for the development of the thesis' project.

The idea of store at the centre of the thesis' work is then explored, describing all the details that make up this new strategy and explaining all the benefits resulting from the digitalization of the points of sale.

Then, the strategies that companies can apply once adopted this new type of Retail are exposed.

5.1 ZARA LONDON: THE CONCEPT STORE

This paragraph begins with the description of the works' inspiration, then is describe the innovative Zara store recently opened in London, which represented the starting point for the development of this project.

The future of shopping according to Zara is a perfect integration between store and online, what in English is called "bricks and clicks".

The Spanish brand has just opened in London the first store in the world created specifically for online purchases. The pop-up store is in a very visible position, on a corner on the first floor of the Westfield Stratford shopping centre and claims to be a "temporary concept store".

Within 200sqm of minimalist space that houses a small but carefully selected selection of the current collection for both women and men.

Fig.2 Zara concept store, London

There are no dressing rooms to try on clothes and there are no cash desk: in the new high-tech store customers can look and touch clothes but do not try them or buy them and take them home, while payments are made via mobile and Bluetooth.

All purchases must be made online: who has already placed the order and payment on computer, tablet or mobile can go to the store to pick it up without paying shipping costs. Those who decide to buy a garment in the store can order it from the tablet of the assistants and collect it a few hours later. Behind the scenes, in fact, a robot moves quickly in the warehouse and is able to handle 2,400 simultaneous deliveries.

In the shop there are many large mirrors, which are not only used for reflection but are also interactive screens. The piece of clothing placed in front of the mirror is immediately recognized by the scanner that uses a radio frequency identification technology (RFID) and on the screen jumps out the image of the catalogue in the size chosen by the customer. The Zara app then advises how to complete the look, and which are the best accessories to match the dress.

Fig.3 Zara concept store, London

This new concept store represents an important step towards the Inditex strategy that aims, as stated by president and CEO Pablo Isla, to integrate more and more stores with the online world.

The new store is temporary, but the idea is permanent. The pop-up store will remain open until the opening, again at Westfield Stratford, of the new Zara megastore, doubled to 4,500 square meters on two floors, which will be the first in the world to have four sections.

In addition to women's, men's and children's fashion, there will in fact be a section dedicated to "click and collect", the collection in record time of orders made online.

The new technologies will also be used to make the shop more spectacular, which will not have windows and will use the windows as sensors equipped screens: as people approach, the windows will become giant screens projecting images from the latest Zara collection.

5.2 STORE DIGITALIZATION

Starting from the study of this new type of store experimented temporarily by Zara, the key points were taken and transferred into the development of the Retail Digitalization, in order to create a new format of store, that will be called “Retail 2.0", a concept made considering the technological development and the changing consumer habits. A new way of understanding Retail that can be applied to today's stores from those that want to introduce innovation and engagement in their distribution network.

The new format consists of taking advantage of the latest generation technologies to reduce the area of the store, in order to save on the monthly cost of the rent.

In practice, the Retail Digitalization aims to eliminate the store space for the stock area and the fitting rooms. It represents a considerable surface, hence an important reduction of the space necessary for the Retailer to set up his shop.

	SALES AREA	CASH DESK	STAFF AREA	TECHNICAL AREA	STOCK AREA	FITTING ROOMS
STANDARD STORES	✓	✓	✓	✓	✓	✓
RETAILS 2.0	✓	✓	✓	✓	✗	✗
AVERAGE % OCCUPIED	60-70%	3-6%	1-3%	1-3%	15-25%	5-10%

Tab.8 Differences from standard stores and Retail 2.0 - Created from analysis

Unlike Retail standards, this new type does not display all, or a large part, of the products of the various collections of the brands but only a selection, which coincides with the last collection made, which is periodically replaced with the latest release.

Clients can thus see and touch products present in stores, so to appreciate their characteristics and quality.

The order is made at the cash desk, it will be possible to pay both in cash and with the cards and purchases will be shipped directly home, or to a collection point based on customer preferences.

The cash desks will be maintained in order to have staff who working in a very dynamic way, aiding customers, in order to clearly illustrate the new purchasing methodology.

Given that the Italian tendency to pay cash is greater than in other countries, initially it is better to keep the double payment option, so as to facilitate the adoption of the innovation. This is another reason why the cash desks have been kept.

Instead of the traditional mirrors, interactive screens will be present, provided with RFID technology and webcams. Through these devices clients choose the goods they want to buy, even if they are not physically present in the stores. This is the expedient that allows the substantial reduction of the necessary space. The clothes selected from the database are worn virtually by the person's silhouette, through an avatar generated and shown on these screens. The dimensions of the avatar correspond completely to that of the customer, so as to see how the clothes fit in a real way, and to be able to choose carefully, being sure about what they are going to buy.

The interactive screens also recommend possible combinations of the selected items, so as to exploit this sales strategy to increase profits, selling a greater volume of items.

In this way it will be possible to have a precise idea of the item of clothing without wearing it, as well as having specific information on the size. In short, it will be possible to "dress" without dressing.

This type of store is therefore much slenderer in size, drastically reducing the space required to set up the store.

Therefore, the purpose of this digitization is to reduce the monthly rent and thus increase the profitability per square meter of the store. Specifically, use less space to generate revenue equal to that generated by a standard store.

Chapter 6

CASE STUDY

In this last chapter is finally put into practice what has been described up to now, in a real and concrete context, so to understand the potentialities and verify the feasibility of the Retail Digitalization.

For this process, the essential starting point has been the interview realized to a Real Estate Manager of the Inditex Group, that is the holding on which the subsequent work has been realized.

Having a direct opinion of a professional in the sector, has allowed to understand if the project faces concrete needs and if it is coherent with current market dynamics, having in this way a well-defined framework of the environment.

Then, basing on the outcomes emerged from the interview, combined with all the previously theoretical studies and market analysis carried out, the work has been shaped.

The thesis is in fact aimed at, starting from the real problems encountered during the research, to propose an innovative solution that can allow to generate savings on rental costs, improving the current condition generating interest and laying the foundations for possible future developments.

More specifically, what the work is going to do is to take into consideration the Holding company properly chosen, the Inditex, and, considering its current presence on the territory, to analyse how the latest generation technologies impact on the rental expenditures highlighting how the current space actually used can be drastically reduced lowering rental budgets.

The reference market is that of the city centre of Milan, an area in which this Holding has 8 stores between Via Torino and Corso Vittorio Emanuele II. Starting from the current situation, it has been hypothesized a Retail Digitalization of some of these stores, showing the potential of this strategy in a concrete way through quantitative numerical data.

6.1 POST INTERVIEW ANALYSIS

Having a direct response from the market is essential to understand the dynamics and set proposals on real and concrete needs.

For this reason, an interview with a Real Estate Manager at Inditex has been carried out.[3]

Through 12 carefully chosen questions, previous studies have been confirmed and problems have emerged; they have guided the drafting of the work realized.

The interview has started considering a general topic outside the specific company itself, concerning the price of the rents in the city of Milan. The manager's response confirmed the fact that the city center is currently saturated, which leads to very few available spaces, leading to an inevitable rise in prices as well as competitiveness among companies, which must be willing to pay more than the others for obtain the allocation of commercial spaces.
It also emerged that, in general, for companies, positioning in central locations is essential in order to guarantee high turnover. This drives companies to be willing to pay continuously higher rents, as marginal positions would result in large decreases in the revenue generated, as well as the devaluation of the image of the brand itself.

It has also been confirmed that rents represent one of the highest expenses for a brand, whose further increase led the Inditex holding company to opt for an internal reorganization in order to optimize the steps of its supply chain so as to reduce costs and get the necessary budgets for rent payments in strategic areas. These high prices also weighed on the policy of territorial expansion of the holding company, which has repeatedly been subject to slowdowns.

From the interview, it emerged later that for the stores of the company the biggest complication is the management of the stock area because, being a brand operating in the fast fashion sector, the stores sell a large number of products every day, which requires a lot of space constantly supplied.

With the desire to reduce the size of the stock area, thus saving on the expenses for the rent, the holding has recently applied as a strategy to reduce their size through a higher delivery frequency,

[3] Appendix 3

which allow to reduce the amount of products stored within the individual stores. This choice, however, involves problems such as the fact that delays in deliveries could generate stock-out situations, moreover the total number of deliveries represents a high cost and in addition requires personnel to manage the continuous incoming goods.

The questions then moved to the technological field. The interviewed manager explained how in a field as competitive and saturated as that of fashion, a good strategy to emerge may be to combine the sale of products to real experiences that enrich in some way the purchase. The use of technological innovations, according to the Inditex manager, could generate a higher interest stimulating the customers to purchase, especially the younger one that are faster to accept changes. That of developing and implementing new technologies to be included in their stores has always proved to be a winning choice for Inditex, which has helped the holding company to gain an advantage over its competitors, an example is the recent adoption of interactive IPad in some stores of Zara, Bershka and Pull&Bear, which were much appreciated especially by new generations.

The hardest element to be predicted remains however the reaction of consumers to the implementation of innovations. This was in fact one of the decisive questions that have been proposed, whose answer, summarized, explains how it is necessary to proceed step by step, choose the right clientele willing to accept the changes and exploit everything trying to arouse the highest possible interest.
However, these transformations seem to be inevitable; the future of Retail is described by the manager as full of upheavals, for this reason it is necessary to plan strategies immediately to be the pioneers of what will be the environment of the future.

It follows that, ultimately, the Inditex manager was particularly interested in the work described below, setting an excellent starting point.

6.2 THE HOLDING AND ITS CHOICE

Inditex is a Spanish multinational company dedicated to clothing and fashion based in Arteixo, Galicia. Founded by Amancio Ortega, former president of the company and one of the richest men in the world and his wife, Rosalía Mera, has been listed on the Madrid Stock Exchange since 2001.

Currently the company is a giant that employs over 160,000 employees and that in 2017 has a turnover of € 25.3 billion, with a net profit of € 3.3 billion.

The Inditex group manages over 7200 stores in 93 markets and is present on the Italian one with over 360 stores and a turnover of around € 1.4 billion.

There are 9 brands that compose the Holding, of which the most important, as well as present in the Italian market, are:

Fig.4 Inditex - Most important brands - Created from analysis

The decision to implement the strategy proposed on the Inditex Holding company is due to several reasons.

First, the decision to consider a Holding company and not a single brand because, unlike the latter, a Holding company has a more massive presence on the territory as it is made up of a multitude of brands. This therefore grants the possibility of having a broader field of action and developing more considerable and complex strategies.

Specifically, this Holding company has a very important business volume in the city of Milan, an area in which an in-depth study of real estate dynamics had been developed, finding a cost of rents for commercial activities that is increasingly higher and therefore aggravating for companies.

Subsequently, this Holding company has been chosen because it is characterized by a strong innovative spirit and a willingness to be the pioneers on the market from the point of view of technological innovation.

This was in fact the first reality to introduce visionary concepts such as the prototype of the first real digitalized store described above, this means that, believing in this idea, it has already laid the foundations for possible future scenarios.

This choice is arrived after analysing the main subjects operating in the sector, with the intent of choosing the Holding company that best represents our concept.

From this market analysis the following report emerged:

Graph.11 Market analysis of several Holdings - Created from analysis

The distinction between "classic" and "innovative" depends mainly on the sales and marketing methods of its products, rather than the type of products themselves. For example, in some shops of Pull and Bear, Zara and Bershka, brands of the inditex Holding, IPad and interactive screens were inserted in which you can view the entire store database, so to choose the garments of interest and ask the clerks where they are arranged inside the store, without wasting time in their random search among the shelves.

Other factors determining the propensity towards an innovative character are the use of high-volume music in stores combined with effects of light and various experiences, up to the culmination of the idea of the new digitalized Retail introduced by Zara.

The Holding companies were divided as follows in three macro-classification that have emerged: "luxury products", "technical equipment" and "fast fashion".

Among the three, the fast fashion sector is the one that best adapts to this strategy as it presents a younger clientele and therefore more inclined to change. From this it follows that time to innovation is restricted, unlike other Holdings in which the more advanced average age would require more dilated adaptation times, with all the relative disadvantages of the case.

6.3 THE HOLDING DESCRIPTION

The Holding company is described below, using the theoretical concepts explained in chapter 4, in order to analyse it in a clear and exhaustive manner.

First of all, in order to understand the strategic choices and the setting of the Holding company, it is necessary to define its reference market. In the case of Inditex, the market is that of fast fashion, which provides a series of characteristics of the Holding itself and strategies to be followed.

Taking up again the previously realized scheme, the setting is now described:

- *Accessibility:* It refers to the quantity of shops and their diffusion. Being fast fashion a mass market if foresee a capillary diffusion over the territory, with a high presence and improved accessibility. In fact, the number of stores owned by the Holding just in Italy amounts to 361. The purpose here is to reach as much people as possible, without any sort of distinction and exclusivity among customers;

- *Type:* Some brands have a further subdivision within them, it means that, the lines are divided according to their prestige, so as to reach different clientele targets and not focus only on a part of it. In fact, generally, the big fashion houses that are renowned for the quality and high cost of their products, create within them sub-lines of lower quality, which are however cheaper, in order to reach even consumers who are willing to spend less than others. This choice involves the creation different stores concepts in which the ones that sell high-end products (haute couture and prêt-à-porter) are more refined, with higher quality details offering a higher service, while the stores of lower lines are less ostentatious and of a level of quality inferior.

  However, the stores of the brands owned by the Holding Inditex, working in the fast fashion market, do not provide for an internal division of the brand itself, which means that all the

stores are organized in the same way as they do not have to differentiate themselves to sell different quality products.

The characteristics of the stores are therefore the same for each store of the same brand of the Holding, so that among them the customer can find a continuity wherever the store is located.

These stores, in generally, look for the charm of well-appointed showcases, on modern and sober furnishings and the spaces available must be large to accommodate the various sectors, men, women, kids.

The stores' type strategy Is a brand-driven one, including mono-brand stores, flagship stores and concept stores.

- *Ownership:* The Holding first used the franchising method to enter Cyprus in 1996 and, at the end of 2001, he had 31 franchised stores in 12 countries. It tends to use the franchising formula in small countries, risky in terms of business success, or subject to significant cultural differences or administrative obstacles; here are some examples: Andorra, Iceland, Poland and Middle Eastern countries. The affiliation contract lasts for five years and affiliates are generally financially solid investors who operate in complementary sectors and are usually given national exclusivity.

  In Italy, most of the stores are owned by the same Holding which hardly grants the franchised brands to new affiliates in the area.

- *Market:* The Holding is facing a continuous worldwide expansion, in general the brands nowadays have the necessity and also the possibilities, like never before, to be present all over the world, and that's exactly what Inditex is doing. In fact, it owns more than 7000 stores worldwide.

  Currently, the Holding is operating primarily in Europe, in where the highest concentration of stores is in Spain, however, also in the other European countries the presence is very high, owning stores in more than 50 nations. In Asia, the Holding owns stores in more than 26 countries, representing the second biggest market area, followed by the Americas in where it owns stores in around 20 countries. Then, In Africa there are stores in 6 countries, while in Oceania just in 2, with the highest concentration in Australia.

The majority of the stores are owned by Zara (2251), followed by Bershka (1098) and Stradivarius (1017), then Pull&Bear (979), Massimo Dutti (780) and finally Oysho (670).
Where these brands are not yet arrived with the physical store, they are trying to arrive at least with online sales, a sign of willingness to expand as much as possible.

- *Location:* The Holding, to open its stores, relates on the concept of reaching as many people as possible, being a brand for the masses. Having also a high economic availability, the privileged locations are the centres of medium and large cities, however, a good part of the incomes come from the stores located in large malls, positioned in suburban areas but frequented by a large number of people.
  As shown below, the urban areas chosen for the opening of the stores are principally main streets, in which the stores occupy the largest dimensions, however, to increase the capillary presence, once established the presence in primary streets, stores are also opened in secondary streets, even if smaller.

6.4 INDITEX: CURRENT PRESENCE ON THE TERRITORY

The Holding company, with its six brands taken into consideration, currently has eight stores, located between Via Torino and Corso Vittorio Emanuele II, two roads that are widely trafficked and considered one of the most important sales clusters of the City of Milan.

These eight stores represent the working basis for the implementation of the proposed strategy.

Currently, the disposition on the territory of Inditex is the following:

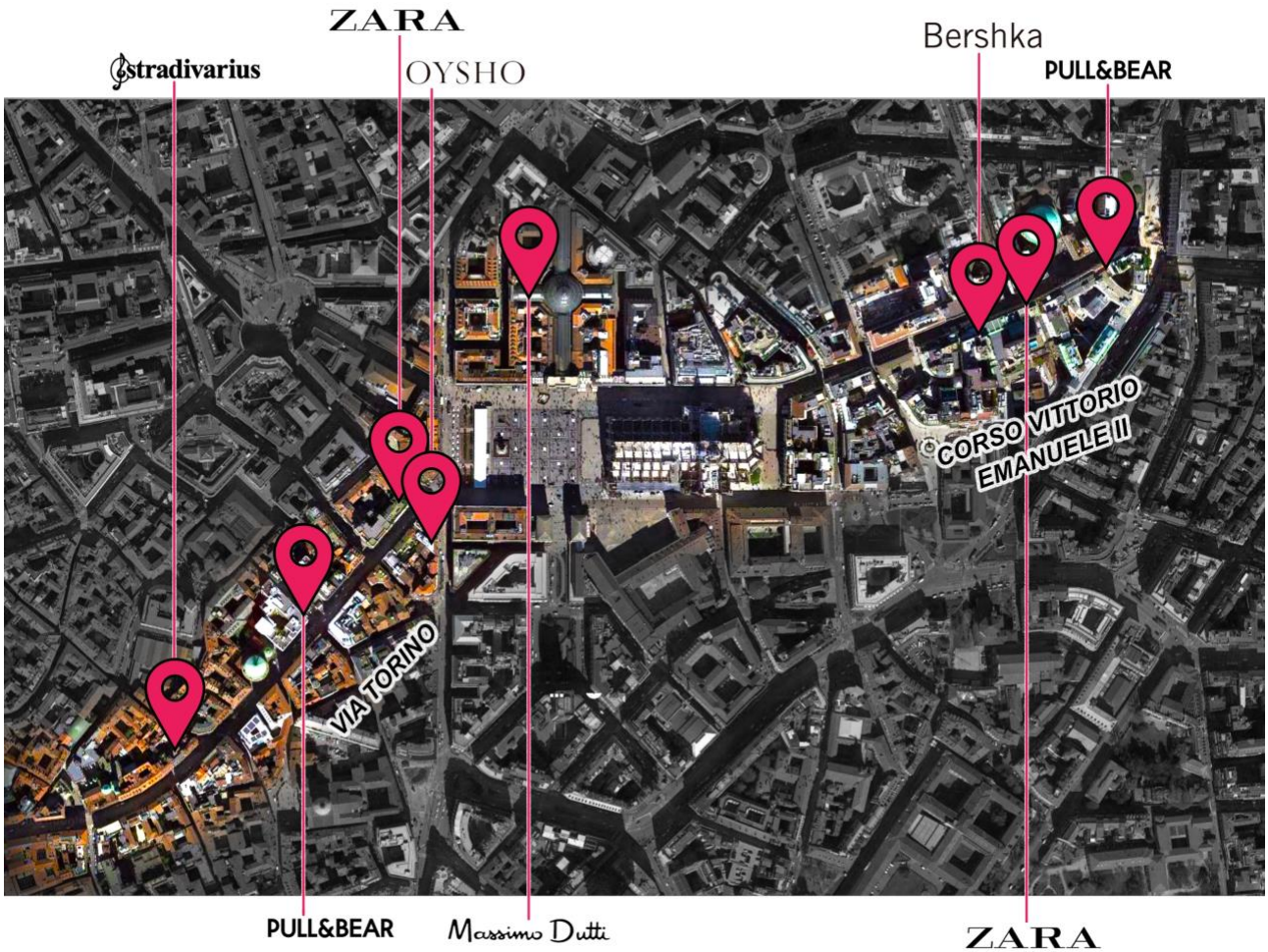


Fig.5 Inditex presence in the centre of Milan - Created from analysis

The area taken into consideration is therefore the central area of Milan, where the Holding company, in order to maximize its profits, decided to set up its stores. As it is possible to see from the map, Zara and Pull&Bear have two stores, while Oysho, Bershka, Massimo Dutti and Stradivarius one each.

Based on this current approach is therefore defined which of these stores were the most suitable to be digitalized and converted into Retail 2.0.

Therefore, the result is a selection of stores which, through their conversion, generate a saving due to the reduction of the necessary sales space. This leads to an increase in revenues per square meter which means that, in order to obtain the same revenue, a smaller amount of space will be required.

The chosen stores that are going to be converted are:

1. Zara, via Torino 2

2. Bershka, Corso Vittorio Emanuele II 22

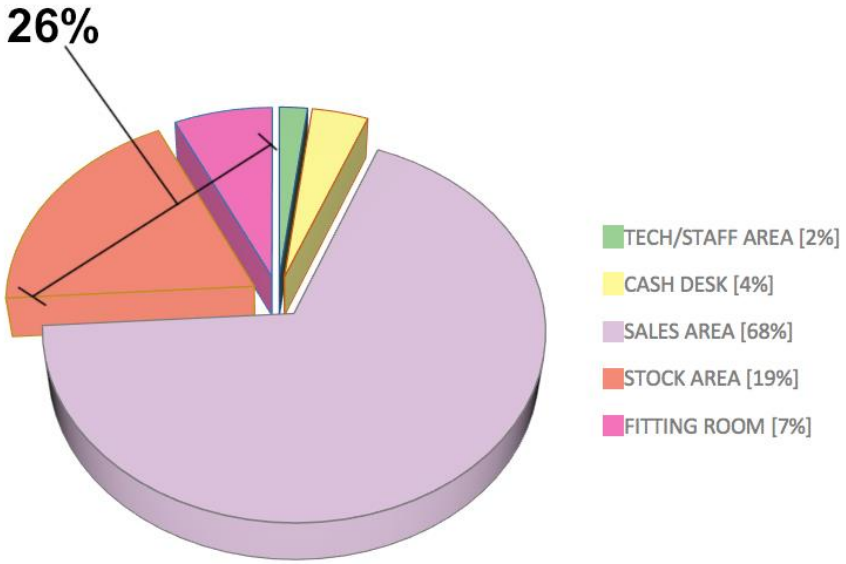
3. Stradivarius, via Torino 44

4. Oysho, via Torino 3

5. Pull&Bear, Corso Vittorio Emanuele II 28

6.5 FOCUS ON THE STORES AND THEIR COMPOSITION

Analysing the stores chosen on the basis of considerations on the balanced distribution on the territory, an analysis has been carried out and it has emerged that on average the partition of the spaces between the different functions inside the stores is as follows:



Graph.12 Average distribution of spaces - Created from analysis

From the pie chart, it can be seen that most of the space is destined for the sales area, however, the sum of the stock area and the fitting rooms is 26%, which represents a very high percentage, especially considering the high prices of the rents of Milan and that these entire areas can be eliminated from the stores through technological expedients.

This immediately gives us an idea of how much money can be saved by converting the stores.

In the next pages the 5 stores are analysed taken individually, subdividing the areas that compose them.

6.5.1 ZARA, VIA TORINO 2

Fig.6 Zara, Via Torino 2 - Created from survey

Description and composition of the store

Location: Via Torino 2, Milano

Total dimension: 2470,40 sqm

Number of floors: 3

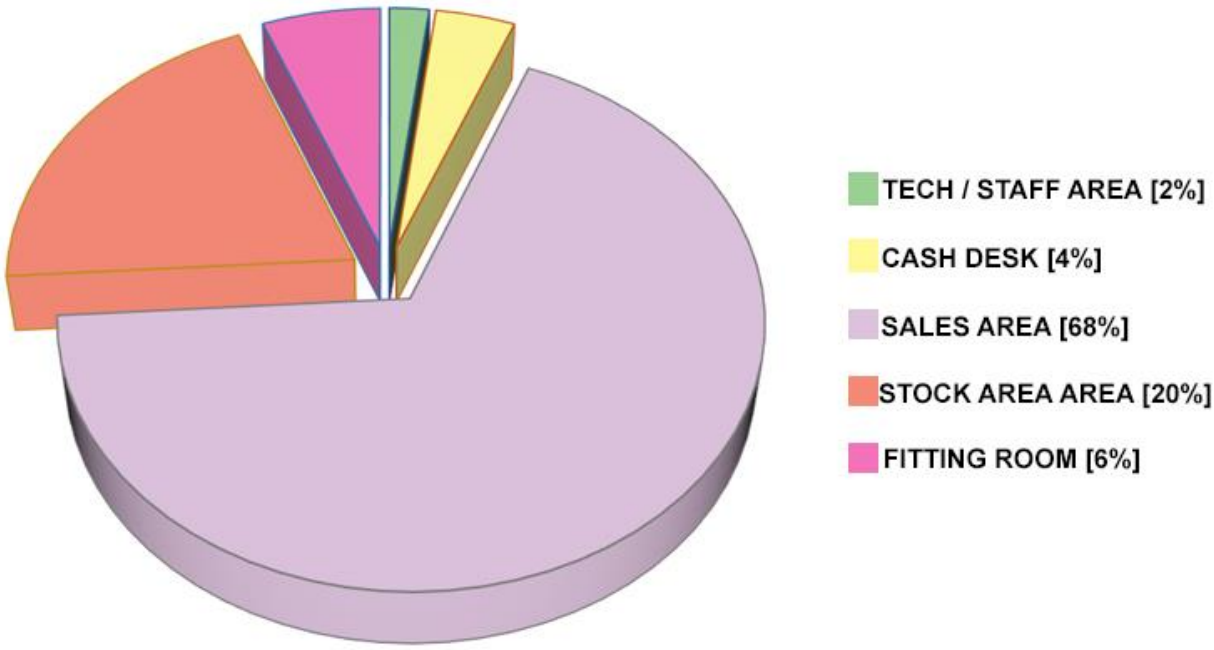
Intended use of each floor:

- Basement = sales space for man

- Ground floor = sales space for woman

- First floor = sales space for child

Composition:



Graph.13 Zara, Via Torino 2 – Spaces distribution - Created from analysis

6.5.2 BERSHKA, CORSO VITTORIO EMANUELE II 22

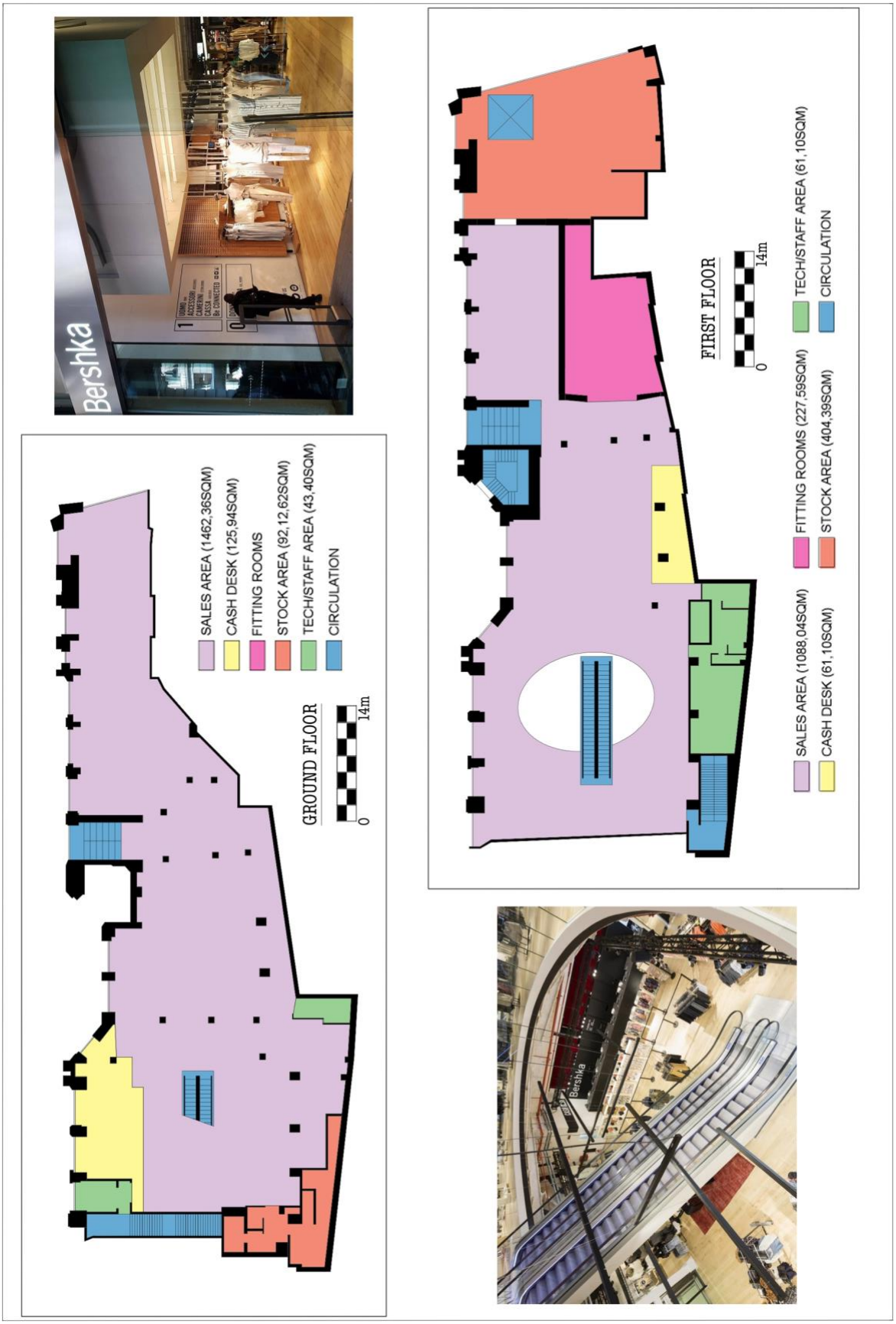


Fig.7 Bershka, Corso Vittorio Emanuele II 22 - Created from survey

Description and composition of the store

Location: Corso Vittorio Emanuele II 22, Milano

Total dimension: 3565,70 sqm

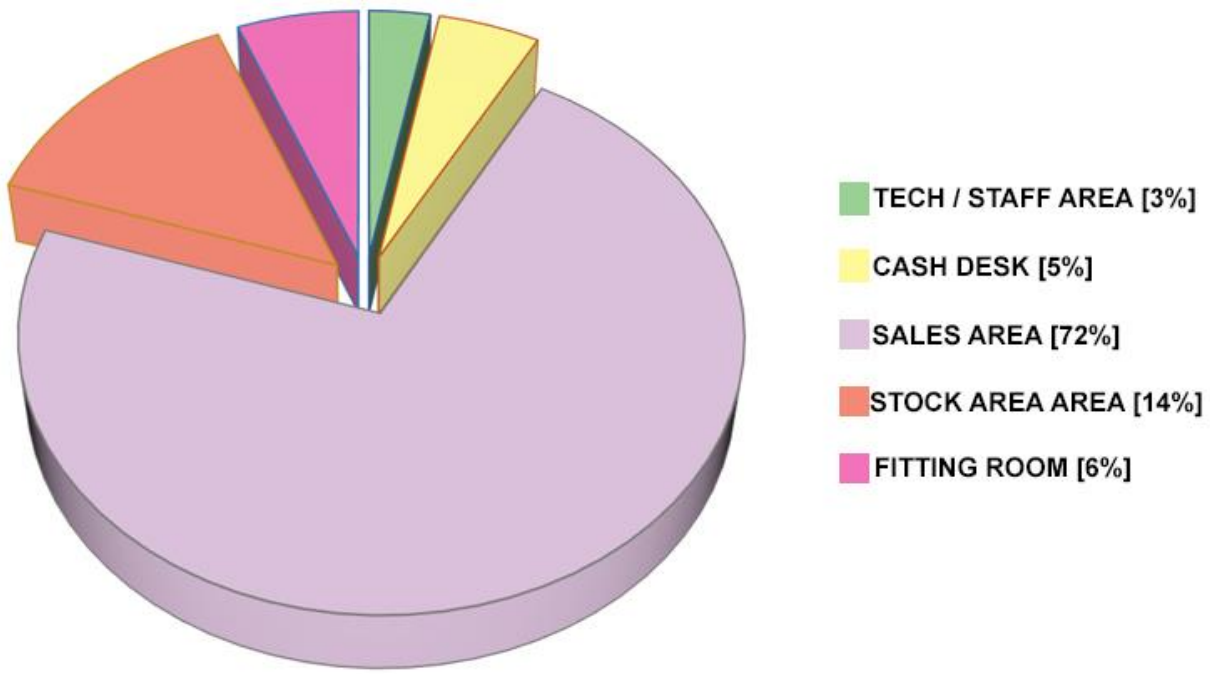
Number of floors: 2

Intended use of each floor:

- Ground floor = sales space for woman and child

- First floor = sales space for man and child

Composition:



Graph.14 Bershka, Corso Vittorio Emanuele II 22 – Spaces distribution - Created from analysis

6.5.3 STRADIVARIUS, VIA TORINO 44

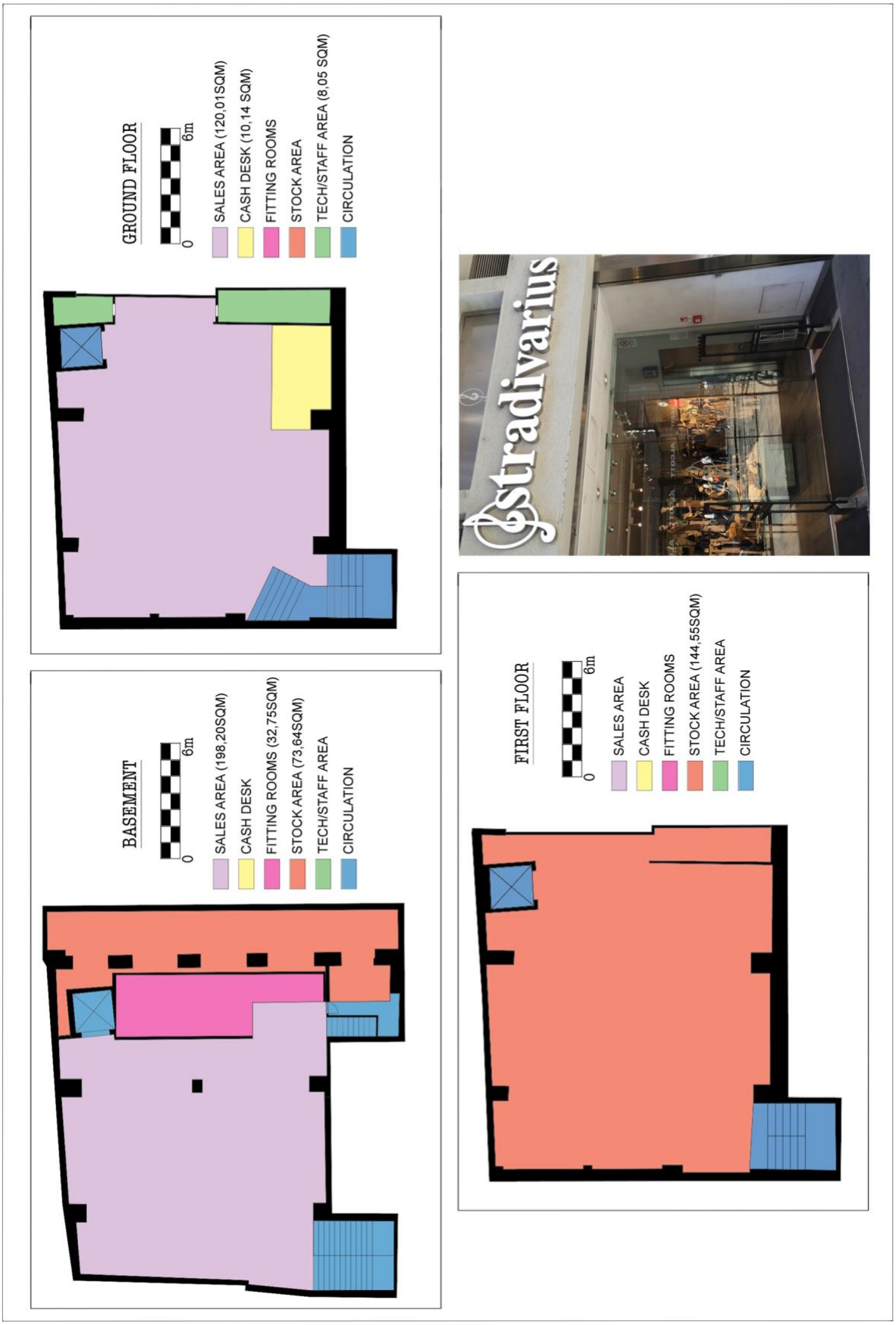


Fig.8 Stradivarius, Via Torino 44 - Created from survey

Description and composition of the store

Location: Via Torino 44, Milano

Total dimension: 587,40 sqm

Number of floors: 3

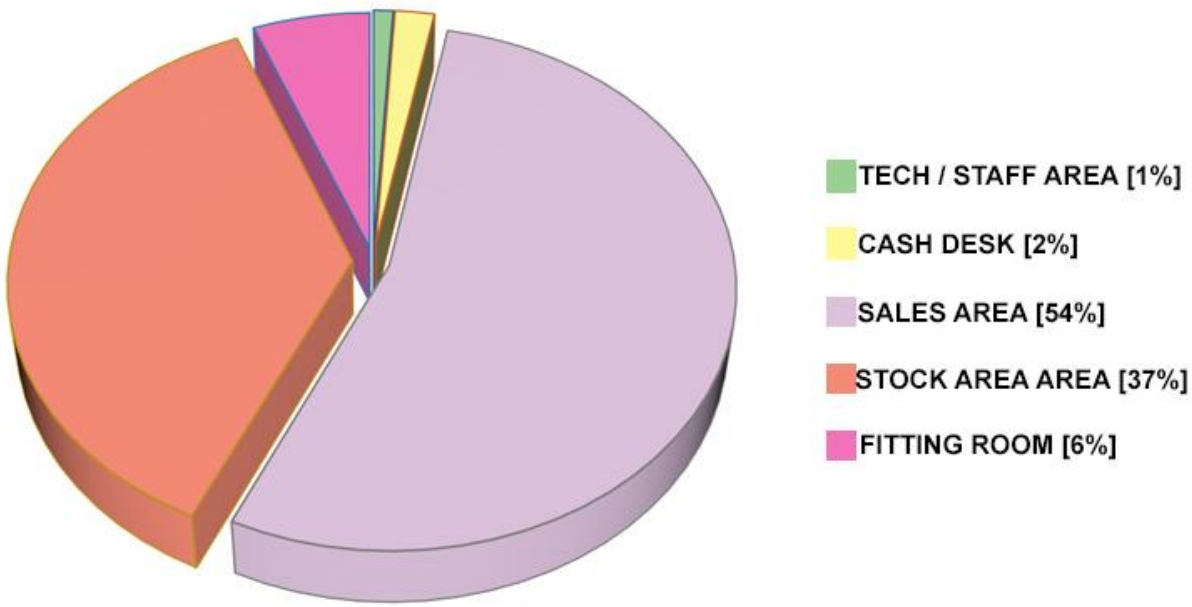
Intended use of each floor:

- Basement = sales space for man and child

- Ground floor = sales space for woman and child

- First floor = stock area only

Composition:



Graph.15 Stradivarius, Via Torino 44 – Spaces distribution - Created from analysis

6.5.4 OYSHO, VIA TORINO 3

Fig.9 Oysho, Via Torino 3 - Created from survey

Description and composition of the store

Location: Via Torino 3, Milano

Total dimension: 271,05 sqm

Number of floors: 3

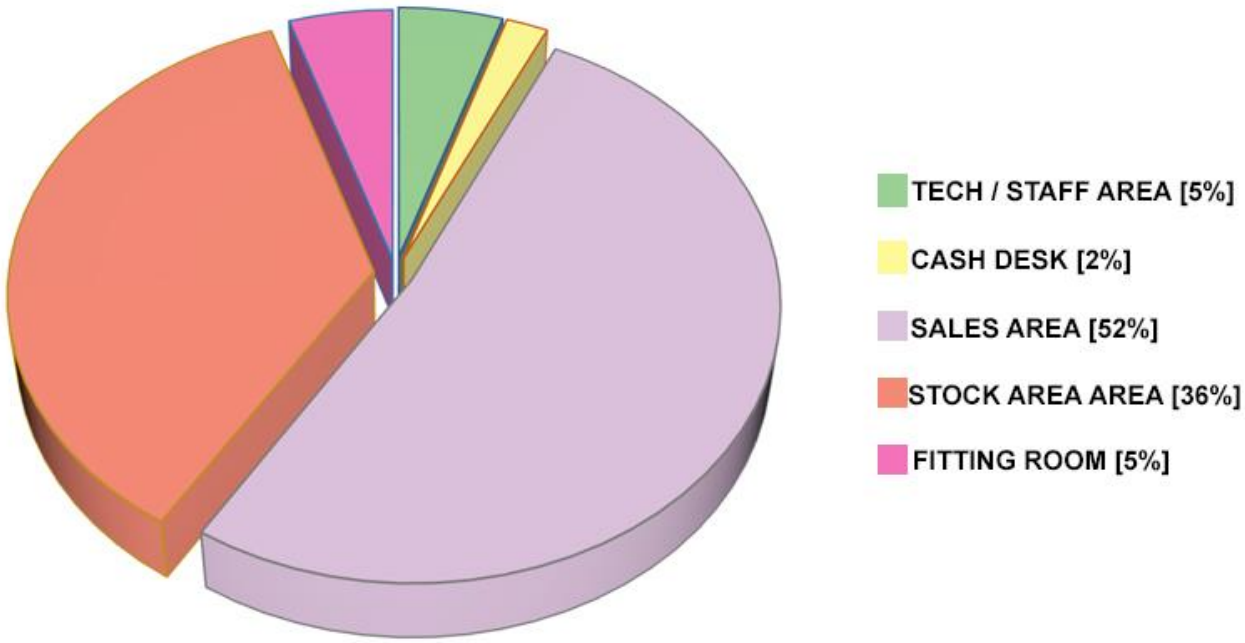
Intended use of each floor:

- Ground floor = sales space for woman

- First floor = sales space for woman

- Second floor = stock area only

Composition:



Graph.16 Oysho, Via Torino 3 – Spaces distribution - Created from analysis

6.5.5 PULL&BEAR, CORSO VITTORIO EMANUELE II 28

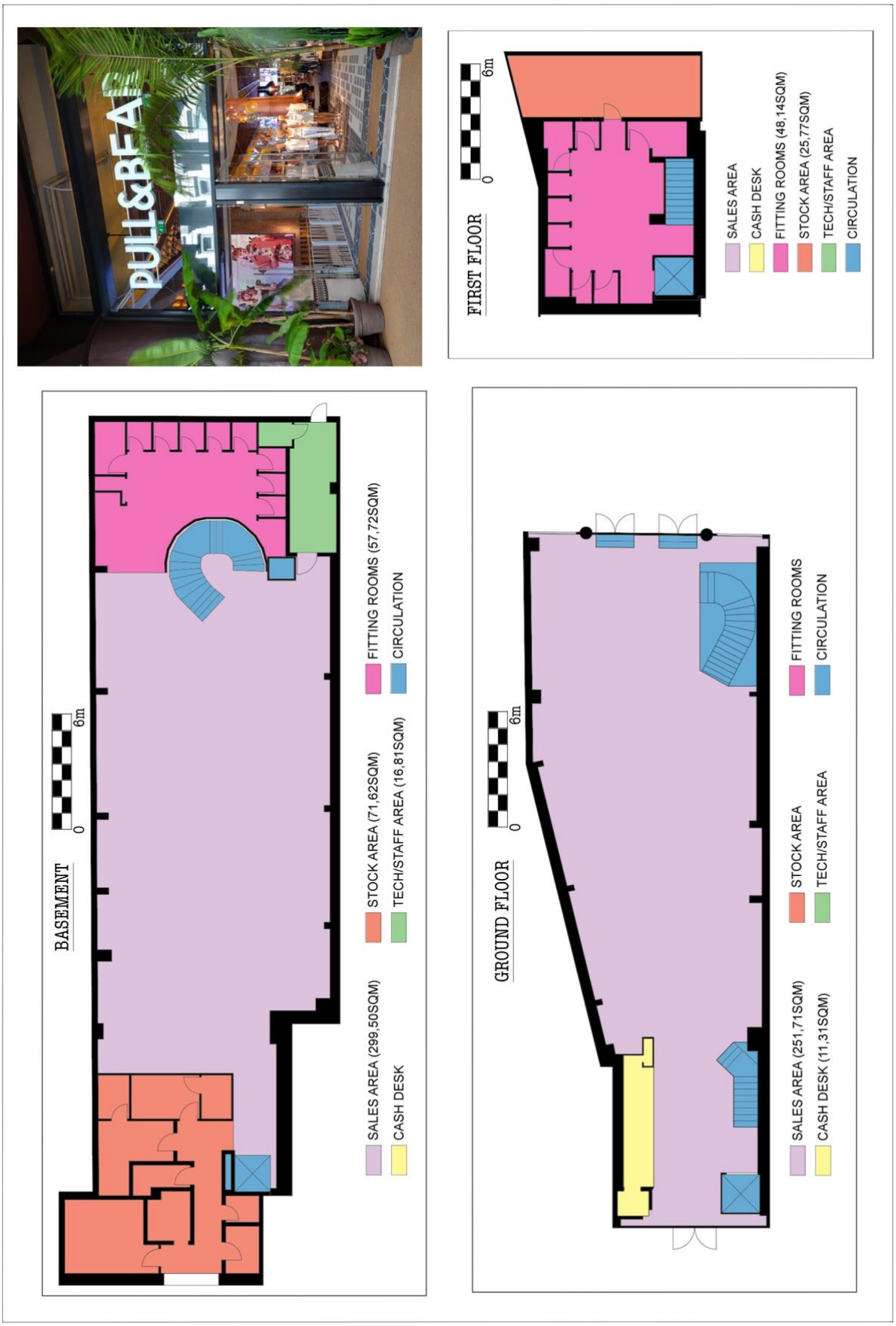


Fig.10 Pull and Bear, Corso Vittorio Emanuele II 28 - Created from survey

Description and composition of the store

Location: Corso Vittorio Emanuele II 28, Milano

Total dimension: 782,60 sqm

Number of floors: 3

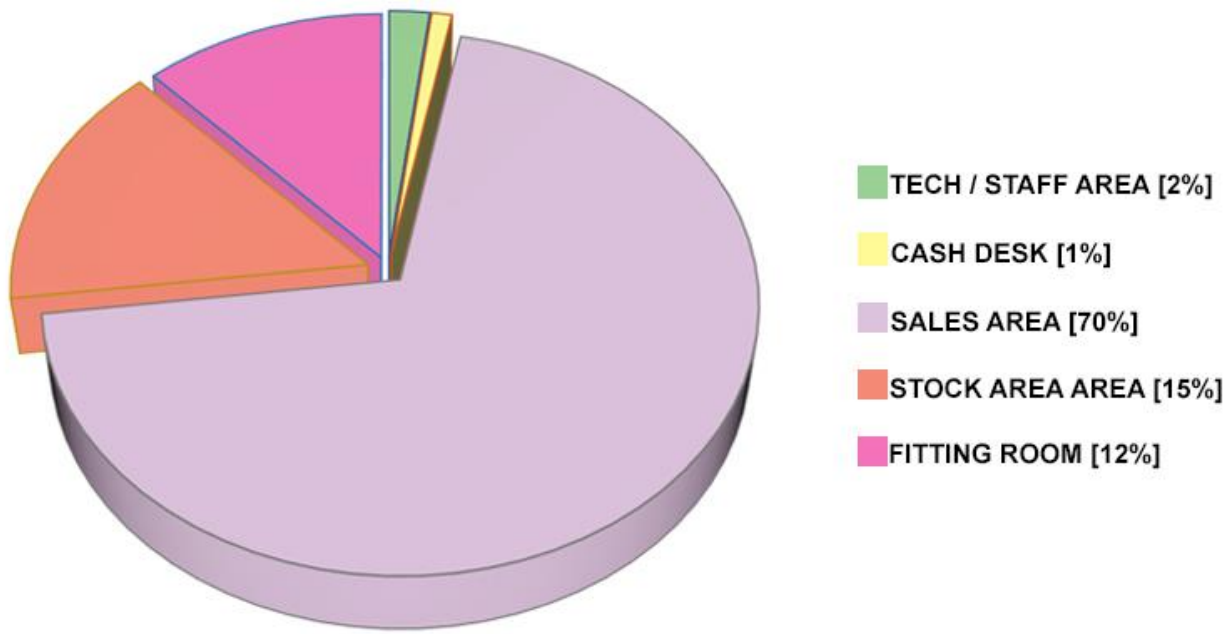
Intended use of each floor:

- Basement = sales space for man

- Ground floor = sales space for woman and child

- First floor = fitting rooms only

Composition:



Graph.17 Pull and Bear, Corso Vittorio Emanuele II 28 – Spaces distribution - Created from analysis

6.6 SCENARIO 0 AND SCENARIO 1

In this chapter a comparison has been made between two scenarios; the scenario 0 which represents the current composition of the stores and the scenario 1, which instead represents the composition of the same stores once the Retail Digitalization has been carried out.

First of all, before focusing on the savings generated by the reduction of commercial spaces in terms of rent, it is necessary to analyse the other costs and benefits deriving from the conversion. It must be considered that the Retail Digitalization requires some initial expenses such as: planning the conversion project for each store, buying and installing interactive panels and training to prepare the staff for the new commercial approach.

On the other hand, in addition to decreased rental costs, further notable savings derive from the reduction in the number of employees, as functions like that of arranging and organizing the garments inside the store are eliminated, and from the interruption of the continuous deliveries which, as reported by the Inditex manager, are becoming more and more frequent due to the desire of reducing the size necessary to store the products in the stock area.

This entails an initial expense for the implementation of the conversion, which is considered to be recovered over time through the savings generated for the reasons mentioned above, defining a payback period shorter or longer in relation to the type of intervention and the characteristics of each single case.

The most impacting aspect, however, is undoubtedly that of the reduction of rental costs, even in this case depends on the effective reduction in square meters that can be put into practice and from the rent prices in the considered area.

It follows that, considering to cover the initial costs with the savings generated in the first two cases mentioned above, the saving on rents is considered as a separate entity and is precisely the one on which the thesis is now focused.

In the two different scenarios, the stores are divided into the areas that compose them, then are indicated the total size of each. This quantity is subsequently multiplied by the cost of rent per square meter for the area in which they arise.

The cost of the rent is 48.5 € per square meter per month; this value is the same for all five stores as they arise in the same area. The rental cost has been previously obtained through researches and calculations in chapter 3 (Housing Market in Milan).

What is obtained from this process is the monthly cost of each store's rent.

In scenario 0, on average, the cost of rents is 26% higher than in scenario 1. This depends on the fact that the square meters in the second case are smaller, as the space reserved for stock and the one reserved for fitting rooms is eliminated.

		COMPOSITION						RENT EXPENSE
	STORE	SALES AREA(SQM)	CASH DESK (SQM)	FITTING ROOM (SQM)	STOCK AREA (SQM)	TECH/STAFF AREA (SQM)	TOTAL AREA (SQM)	*48,5 €/SQM/MONTH*
SCENARIO 0	**ZARA**, VIA TORINO 2	1671,90	109,00	139,90	509,50	40,10	2470,40	119.814,40 €
	BERSHKA, CORSO VITTORIO EMANUELE II 22	2550,00	187,10	227,60	496,50	104,50	3565,70	172.936,45 €
	STRADIVARIOUS, VIA TORINO 44	318,20	10,15	32,75	218,25	8,05	587,40	28.488,90 €
	OYSHO, VIA TORINO 3	142,00	6,60	14,10	95,20	13,15	271,05	13.145,93 €
	PULL AND BEAR, CORSO VITTORIO EMANUELE II 28	551,20	11,30	105,90	97,39	16,81	782,60	37.956,10 €

Tab.9 Scenario 0 - Created from analysis

		COMPOSITION						RENT EXPENSE
	STORE	SALES AREA(SQM)	CASH DESK (SQM)	FITTING ROOM (SQM)	STOCK AREA (SQM)	TECH/STAFF AREA (SQM)	TOTAL AREA (SQM)	*48,5 €/SQM/MONTH*
SCENARIO 1	**ZARA**, VIA TORINO 2	1671,90	109,00	0,00	0,00	40,10	1821,00	88.318,50 €
	BERSHKA, CORSO VITTORIO EMANUELE II 22	2550,00	187,10	0,00	0,00	104,50	2841,60	137.817,60 €
	STRADIVARIOUS, VIA TORINO 44	318,20	10,15	0,00	0,00	8,05	336,40	16.315,40 €
	OYSHO, VIA TORINO 3	142,00	6,60	0,00	0,00	13,15	161,75	7.844,88 €
	PULL AND BEAR, CORSO VITTORIO EMANUELE II 28	551,20	11,30	0,00	0,00	16,81	579,31	28.096,54 €

Tab.10 Scenario 1 - Created from analysis

The sum of the savings of the five stores becomes a very high amount, which is a source of savings that is not negligible.

Specifically, the total of this value is shown in the following table:

		RENT EXPENSE (€/MONTH)
	TOTAL AREA (SQM)	*48,5 €/SQM/MONTH*
SCENARIO 0	7677,15	372.341,78 €
SCENARIO 1	5740,06	278.392,91 €
	SAVING per month	93.948,87 €

Tab.11 Saving per month - Created from analysis

6.7 SAVING IN RENT AND IMPROVED REVENUE PER SQUARE METER

The application of Retail Digitalization, converting standard Retails into Retails 2.0, allows to increase the stores' revenues per square meter; in this specific case this means the ability to use a smaller amount of space to generate a turnover equal to that generated by the larger stores with the current setting.

In order to quantify the actual increase in revenues per square meter, it's necessary first to derive the value of current revenues per square meter.

Not having these values available, the process started by looking at the total revenues, made in Italy in 2017, for each individual brand. Subsequently, these values have been divided by the number of Italian stores owned by each individual brand so as to obtain an average value of each revenue per store.

Being that the stores taken into consideration, located in Via Torino and Corso Vittorio Emanuele II, are part of the main High Street for shopping in the city of Milan, which is also the most popular Italian city for shopping, an increase of 10% on the value previously found has been considered, so as to get closer to the real revenue generated by these stores.

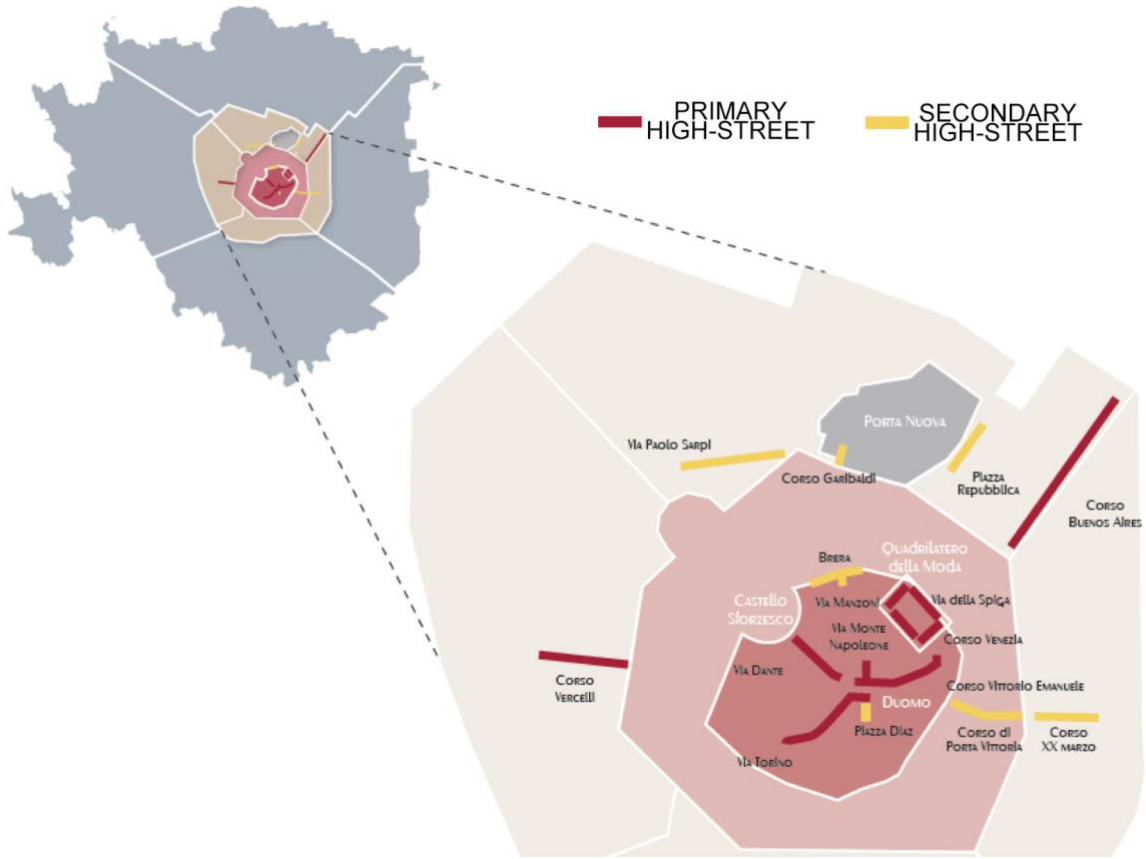


Fig.11 Main Streets of Milan

Following these steps, it thus succeeded the generation of the following table:

BRAND	Revenue 2017 (Italy)	Number of stores in Italy	Average revenue per store 2017	Increase (%)	Revenue in Milan per store
ZARA	896.355.943,00 €	104	8.618.807,14 €	10%	9.480.687,86 €
BERSHKA	161.196.925,00 €	66	2.442.377,65 €	10%	2.686.615,42 €
STRADIVARIOUS	127.952.653,00 €	81	1.579.662,38 €	10%	1.737.628,62 €
OYSHO	38.341.823,00 €	44	871.405,07 €	10%	958.545,58 €
PULL AND BEAR	111.263.597,00 €	57	1.951.992,93 €	10%	2.147.192,22 €
MASSIMO DUTTI	32.610.387,00 €	9	3.623.376,33 €	10%	3.985.713,97 €

Tab.12 Stores Revenues - Created from analysis

At this point is finally possible to calculate the increase in revenue per square meter of each single store taken into consideration. Also, in this case the two possible scenarios have been reported; scenario 0 represents the current situation, that in which the revenue of each individual store is divided by the current square footage, while scenario 1 represents the situation in which the same revenue is divided by the square footage after the conversion of the stores considered.

Here it is necessary to make a further consideration; it concerns the amount of revenue.

This entity is kept unchanged, both before and after the conversion, since the adoption of an innovation, which in this case coincides with the conversion of the stores, need for a more or less long time for its acceptance, consequently this would mean that the customers of these brands, despite young age and therefore shorter "time to innovation", for the first period are more reluctant to purchase, resulting in a reduction in revenue, at least initially.

However, is necessary also to consider the fact that this innovation has, as an advantage, the possibility to create a strong focus on itself in case it is promoted in the most appropriate way, through social media and any other type of communication used by companies. This would generate a curiosity in consumers who, pushed by that, would still continue to buy even if not totally adapted to the new idea, moreover, new consumers could approach the brand due to an onset of curiosity.

For these reasons the potential scenario that could be generated has been considered to balance itself, keeping revenues almost unchanged.

Based on these assumptions, the following tables show the revenue values per square meter of the considered stores.

	STORE	TOTAL AREA (SQM)	REVENUE (2017)	REVENUE per SQM
SCENARIO 0	**ZARA**, VIA TORINO 2	2470,40	9.480.687,86 €	3.837,71 €
	BERSHKA, CORSO VITTORIO EMANUELE II 22	3565,70	2.686.615,42 €	753,46 €
	STRADIVARIOUS, VIA TORINO 44	587,40	1.737.628,62 €	2.958,17 €
	OYSHO, VIA TORINO 3	271,05	958.545,58 €	3.536,42 €
	PULL AND BEAR, CORSO VITTORIO EMANUELE II 28	782,60	2.147.192,22 €	2.743,66 €

	STORE	TOTAL AREA (SQM)	REVENUE (2017)	REVENUE per SQM
SCENARIO 1	**ZARA**, VIA TORINO 2	1821,00	9.480.687,86 €	5.206,31 €
	BERSHKA, CORSO VITTORIO EMANUELE II 22	2841,60	2.686.615,42 €	945,46 €
	STRADIVARIOUS, VIA TORINO 44	336,40	1.737.628,62 €	5.165,36 €
	OYSHO, VIA TORINO 3	161,75	958.545,58 €	5.926,09 €
	PULL AND BEAR, CORSO VITTORIO EMANUELE II 28	579,31	2.147.192,22 €	3.706,46 €

Tab.13 Stores revenues – Scenario 0 and Scenario 1 - Created from analysis

Now, making a comparison between these two, is possible to calculate the percentage increase of the revenues per square meter of each store and, subsequently, make a calculation so as to obtain an average value taking into consideration the five stores at the same time.

The values are shown in the following table:

	REVENUE per SQM		
STORE	SCENARIO 0	SCENARIO 1	INCREASE
ZARA, VIA TORINO 2	3.837,71 €	5.206,31 €	35,66%
BERSHKA, CORSO VITTORIO EMANUELE II 22	753,46 €	945,46 €	25,48%
STRADIVARIOUS, VIA TORINO 44	2.958,17 €	5.165,36 €	74,61%
OYSHO, VIA TORINO 3	3.536,42 €	5.926,09 €	67,57%
PULL AND BEAR, CORSO VITTORIO EMANUELE II 28	2.743,66 €	3.706,46 €	35,09%
		AVERAGE INCREASE	47,68%

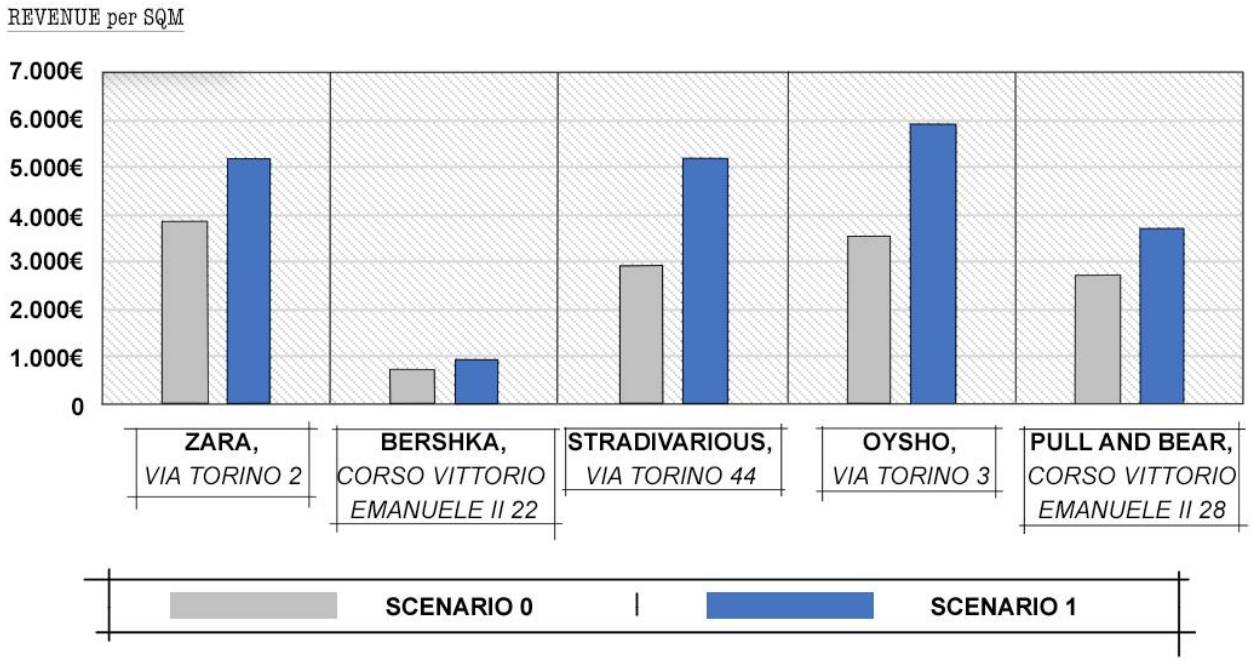
Tab.14 Average increase in revenue per sqm - Created from analysis

6.7.1 IMPROVED REVENUES PER SQUARE METER CONSIDERATIONS

Once all the calculations have been carried out, the result that is significant for the thesis's purposes, the one of the average increase in the revenues of the stores per square meter, gives a very positive signal. This value is in fact 47.68%, which means that, on average, these stores could get the same revenue by halving their consumption of space, which would result in a reduction in rental costs of almost the half.

These data show how the possible scenarios resulting from the application of this strategy are absolutely to keep an eye on, especially in areas such the city center of Milan, where rents, being very high and constantly growing, represent one of the higher costs for companies.

The following table helps the reader to understand in graphic terms how exploiting the technological trend and being pioneers of current time, therefore being early adopters and not belonging to the majority, could widely increase the achieved performance.



Graph.18 Stores revenues per sqm - Created from analysis

6.7.2 PROPOSALS FOR SAVINGS UTILIZATION

As previously shown, occupying a smaller amount of space makes possible to reduce the rent budget so that these economic resources can be used for the implementation of different strategies.

The way in which the savings are used depends on the individual company and how it is able to reap the greatest benefit by putting into practice its strategic plans.

As a conclusion, in order to give a hint on what may be the future strategies applicable by companies through the use of Retail Digitalization, three possible proposals are presented below.

The first proposal simply envisages to use the savings achieved by implementing the conversion of the stores in investing in the company's core business. This is the optimal solution in case the company has no intention to invest in order to improve its presence on the territory but instead wants to optimize its supply chain by improving internal processes.

The second proposal is instead optimal in the case in which the company taken into consideration wants to improve its presence on the territory and currently its stores are located in secondary positions. The concept is to move the stores in more privileged areas where the cost of rent is greater but, because of the amount of space needed by stores for perform their function thanks to the Retail Digitalization is lower, the result is an unchanged rent expense. In this way the companies, approaching the city center would have the possibility to increase their revenues and relaunch the image of the brand itself.

The third proposal concerns a situation such as that of the holding company considered, in which the stores are currently located in very populated central areas. in this case what is proposed is not to move their stores but to open new ones, so as to strengthen the presence in selected areas or expand in new ones. The application of an expansion strategy to a Holding like the one considered is specially indicated since, for the fast fashion companies, the diffusion of the brand identity is

mainly carried out by the capillarity of the points of sales, in which the stores are the main communication channels, representing the main promotional investment of the brand.

These solutions are supported by the study of the Hotelling model, which helps to understand that the market is a dynamic environment in which the stores have not to be seen as single entities but it's important to look at the overall picture so to understand relationships and evaluate the possibility to act as a consequence.

Conclusions

Starting with the purpose of the thesis work, which was to propose a new solution for the rental cost reduction due to lower the necessary space in clothing' stores, the execution' conclusions are finally reported, with the relative results obtained shown below.

The thesis began by analysing the concept of Location Theory and rent, also exploiting two models such as The Hotelling Model and The Bid-Rent Theory of Alonso. This has proved to be essential in order to introduce what is put into practice subsequently, laying a solid foundation for the concrete strategy developed at the center of the work.

In the subsequent chapter concerning the study of the City of Milan, it has been possible to observe a series of researches that justified the choice of the latter as an area of intervention and it was confirmed that Milan is an ideal city for the development of this project, as it enjoys of great global attention and growth prospects. In addition, a careful analysis of the Milanese real estate market has shown that the competition for parts of central areas is always higher, especially for the commercial sector, pushing the residential and production sectors in more and more peripheral, strengthening the concept to the center of the proposal.

The attention was therefore placed on Retail and on the detailed narration of the fundamental points and its history; the analysis of the current situation and possible future scenarios, strengthened by the opinions of leading figures in the sector, underlined the need for change and for the introduction of new technologies in the stores of the future, all requests that can be fully satisfied with the Retail Digitalization Project proposed.

Subsequently, the analysis carried out on the first digitized Retail prototype present in London, produced by the Inditex Holding company, showed that the characteristics presented are still absent in the Italian market, which is late from the innovative point of view.

After that, to understand whether the adoption of this innovation by the Italian market can be feasible, the interview with an Inditex Real Estate Manager has been reported. From this interview emerged key points that have guided the work carried out subsequently. Among these, the main

concerns the need to be located in central areas of the city in order to maximize profits, but this is increasingly problematic as the rental prices increase continuously given the always tighter competition. In addition, the importance of providing customer experiences and adopting technological innovations in stores has been highlighted.
It can therefore be said that the proposed project is in line with the needs and satisfies specific requests.

Once it has been established that the Milanese market and the current period are a fertile ground for the implementation of the proposed Retails digitization strategy, through an in-depth study the Inditex Holding has been chosen as the test object for the practical case. This choice will prove to be apt during the course of the execution, considering the economic and strategic results obtained.

Finally, after having clarified and explained in detail the environment in which the thesis goes to work, it is now possible to report the emergent results from the practical case carried out.

Starting from the scenario 0, which represents the current composition of the stores, through the implementation of the digitalization strategy on 5 of the 8 stores owned by the Holding company Inditex in the city center of Milan, has been possible to arrive at the scenario 1, which instead represents the composition of the same stores once the conversion has been carried out. This conversion has allowed to save 1.937 square meters of space, which, multiplied by the cost of the rents of the area that amount to 48,5 €/sqm/month, correspond to a saving of 93.948 €/month.

The monthly savings generated represent an amount not indifferent, due to the substantial increase in revenues per square meter generated, corresponding to 47.68%. This means that on average, these stores could get the same revenue by halving their consumption of space, which would result in a reduction in rental costs of almost the half.

Thanks to the positive economic results achieved, as a final step, three different proposals have been reported; the companies through the Retail Digitalization could therefore be able to exploit one of them.

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LIST OF FIGURES

Fig.1- Conformation of Milan - Created from analysis..... 36

Fig.2- Zara concept store, London..... 74

Fig.3- Zara concept store, London..... 75

Fig.4- Inditex - Most important brands - Created from analysis..... 81

Fig.5- Inditex presence in the centre of Milan - Created from analysis..... 86

Fig.6- Zara, Via Torino - Created from survey..... 89

Fig.7- Bershka, Corso Vittorio Emanuele II 22- Created from survey...... 91

Fig.8- Stradivarius, Via Torino 44- Created from survey...... 93

Fig.9- Oysho, Via Torino 3- Created from survey...... 95

Fig.10- Pull& Bear, Corso Vittorio Emanuele II 28- Created from survey...... 97

Fig.11- Main Streets of Milan..... 102

LIST OF TABLES

Tab.1- Global ranking of the most expensive Retail locations in 2017..... 32

Tab.2- Average rent in Milan from 2011 to 2017 - Created from analysis..... 39

Tab.3- Average rent for each year from 2011 to 2017 – Residential - Created from analysis..... 41

Tab.4- Average rent for each year from 2011 to 2017 – Commercial - Created from analysis..... 43

Tab.5- Average rent for each year from 2011 to 2017 – Productive - Created from analysis..... 45

Tab.6- Earliest times up to the early 20th century..... 56

Tab.7- Retail milestones 20th and 21st..... 62

Tab.8- Differences from standard stores and Retail 2.0 - Created from analysis..... 76

Tab.9- Scenario 0 - Created from analysis..... 100

Tab.10- Scenario 1 - Created from analysis..... 101

Tab.11- Saving per month - Created from analysis..... 101

Tab.12- Stores Revenues - Created from analysis..... 103

Tab.13- Stores revenues – Scenario 0 and Scenario 1 - Created from analysis..... 104

Tab.14- Average increase in revenue per sqm - Created from analysis..... 104

LIST OF CHARTS

Graph.1- Division of the market between producers..... 19

Graph.2- Division of the market between producers..... 20

Graph.3- Division of the market between producers..... 20

Graph.4- Division of the market between producers..... 21

Graph.5- Land allocation..... 24

Graph.6- Milan positioning trend in the global ranking – Created from analysis..... 33

Graph.7- Global annual rate of growth..... 35

Graph.8- Residential rent trend from 2011 to 2017 - Created from analysis..... 41

Graph.9- Commercial rent trend from 2011 to 2017 - Created from analysis..... 43

Graph.10- Productive rent trend from 2011 to 2017 - Created from analysis..... 45

Graph.11- Market analysis of several Holdings - Created from analysis..... 82

Graph.12- Average distribution of spaces - Created from analysis..... 88

Graph.13- Zara, Via Torino 2 – Spaces distribution - Created from analysis..... 90

Graph.14- Bershka, Corso Vittorio Emanuele II 22 – Spaces distribution - Created from analysis..... 92

Graph.15-Stradivarius, Via Torino 44 – Spaces distribution - Created from analysis..... 94

Graph.16- Oysho, Via Torino 3 – Spaces distribution - Created from analysis..... 96

Graph.17- Pull&Bear, Corso Vittorio Emanuele II 28 – Spaces distribution - Created from analysis..... 98

Graph.18- Stores revenues per sqm - Created from analysis..... 105

APPENDIX

1. Milan positioning trend in the global ranking – 2011 – 2016 (page 33)

RANK 2011	COUNTRY	CITY	LOCATION	RENT (€/sqm year)
1	USA	New York	5th Avenue	16,704
2	Hong Kong	Hong Kong	Causeway Bay	14,426
3	Japan	Tokyo	Ginza	7,750
4	Australia	Sydney	Pitt Street Mall	7,384
5	France	Paris	Avenue des Champs-Élysées	7,364
6	United Kingdom	London	New Bond Street	6,901
7	Italy	Milan	Via Monte Napoleone	6,800
8	Switzerland	Zurich	Bahnhofstrasse	6,553
9	South Korea	Seoul	Myeongdong	4,714
10	Germany	Munich	Kaufingerstraße	3,960
11	Brazil	São Paulo	Iguatemi Shopping	3,942
12	Austria	Vienna	Kärntnerstraße	3,300
13	Spain	Barcelona	Portal de l'Angel	3,120
14	Russia	Moscow	Tverskaya	3,104
15	Ireland	Dublin	Grafton Street	3,007
16	China	Beijing	Wangfujing	2,817
17	Singapore	Singapore	Orchard Road	2,758
18	Netherlands	Amsterdam	Kalverstraat	2,500
19	Israel	Tel Aviv	Ramat Aviv	2,433
20	Canada	Toronto	Bloor Street	2,423
21	India	New Delhi	Khan Market	2,392
22	Greece	Athens	Ermou	2,340
23	New Zealand	Auckland	CBD	2,242
24	Denmark	Copenhagen	Strøget	2,212
25	Turkey	Istanbul	Bagdat Caddesi	2,110
26	Ukraine	Kiev	Kreschatik Street	2,069
27	Norway	Oslo	Karl Johans Gate	2,057
28	Czech Republic	Prague	Na Prikope/Wenceslas Square	2,040
29	Finland	Helsinki	City Centre	1,920
30	Malaysia	Kuala Lumpur	Suria KLCC	1,918
31	Belgium	Brussels	Rue Neuve	1,800
32	Taiwan	Taipei	ZhongXiao E. Road	1,743
33	Channel Islands	St Helier	King Street	1,728
34	Sweden	Stockholm	Biblioteksgatan	1,563
35	Colombia	Bogota	Shopping Centre	1,494
36	Luxembourg	Luxembourg	Luxembourg City	1,440
37	Lebanon	Beirut	ABC Centre Achrafieh	1,379
38	Chile	Santiago	Downtown (Paseo Ahumada)	1,359
39	Vietnam	Hanoi	Shopping Centre	1,241
40	Hungary	Budapest	Váci Utca	1,200
41	Poland	Warsaw	Ul Nowy Swiat	1,020
42	Portugal	Lisbon	Chiado	960
43	Indonesia	Jakarta	CBD	917
44	Kuwait	Kuwait City	Raya Mall	905
45	Thailand	Bangkok	City Centre	781
46	Romania	Bucharest	Bulevardul Magheru	780
47	Argentina	Buenos Aires	Florida	745
48	Egypt	Cairo	City Stars	690
49	Syria	Damascus	Cham Centre	690
50	South Africa	Johannesburg	Sandton City	672

RANK 2012	COUNTRY	CITY	LOCATION	RENT (€/sqm year)
1	Hong Kong	Hong Kong	Causeway Bay	22,307
2	USA	New York	5th Avenue	21,204
3	France	Paris	Avenue des Champs-Élysées	9,573
4	Japan	Tokyo	Ginza	8,962
5	Australia	Sydney	Pitt Street Mall	8,077
6	United Kingdom	London	New Bond Street	7,942
7	Switzerland	Zurich	Bahnhofstrasse	7,243
8	Italy	Milan	Via Monte Napoleone	7,000
9	South Korea	Seoul	Myeongdong	5,822
10	Germany	Munich	Kaufingerstraße	4,200
11	Austria	Vienna	Kohlmarkt	4,080
12	Brazil	São Paulo	Iguatemi Shopping	3,603
13	Russia	Moscow	Tverskaya	3,546
14	China	Beijing	Wangfujing	3,421
15	Spain	Barcelona	Portal de l'Angel	3,180
16	Singapore	Singapore	Orchard Road	3,053
17	Ireland	Dublin	Grafton Street	2,810
18	Netherlands	Amsterdam	Kalverstraat	2,800
19	Malaysia	Kuala Lumpur	Pavilion KL	2,724
20	Canada	Toronto	Bloor Street	2,662
21	Israel	Tel Aviv	Ramat Aviv	2,541
22	Norway	Oslo	Karl Johans Gate	2,519
23	Ukraine	Kiev	Kreschatik Street	2,364
24	Colombia	Bogota	Shopping Centre	2,364
25	Denmark	Copenhagen	Strøget	2,287
26	India	New Delhi	Khan Market	2,233
27	Czech Republic	Prague	Na Prikope/Wenceslas Square	2,100
28	Greece	Athens	Ermou	2,040
29	Turkey	Istanbul	City Centre	2,033
30	Finland	Helsinki	City Centre	1,920
31	Taiwan	Taipei	ZhongXiao E. Road	1,914
32	Belgium	Brussels	Rue Neuve	1,800
33	Vietnam	Ho Chi Minh City	Shopping Centre	1,797
34	Sweden	Stockholm	Biblioteksgatan	1,667
35	New Zealand	Auckland	Queen Street	1,596
36	Lebanon	Beirut	ABC Centre Achrafieh	1,576
37	Luxembourg	Luxembourg	Grand Rue	1,440
38	Chile	Santiago	Downtown (Paseo Ahumada)	1,433
39	South Africa	Cape Town	V&A Waterfront	1,387
40	United Arab Emirates	Dubai	Shopping Centre	1,300
41	Hungary	Budapest	Váci Utca	1,080
42	Channel Islands	St Helier	King Street	1,022
43	Poland	Warsaw	Ul Nowy Swiat	1,020
44	Argentina	Buenos Aires	Florida	993
45	Portugal	Lisbon	Chiado	960
46	Kazakhstan	Almaty	High Street	946
47	Indonesia	Jakarta	Shopping Centre	926
48	Thailand	Bangkok	City Centre	893
49	Oman	Muscat	Shopping Centre	860
50	Peru	Lima	Shopping Centre	804

RANK 2013	COUNTRY	CITY	LOCATION	RENT (€/sqm year)
1	Hong Kong	Hong Kong	Causeway Bay	24,983
2	USA	New York	5th Avenue	20,702
3	France	Paris	Avenue des Champs-Élysées	13,255
4	UK	London	New Bond Street	8,666
5	Japan	Tokyo	Ginza	8,152
6	Italy	Milan	Via Monte Napoleone	7,500
7	Switzerland	Zurich	Bahnhofstrasse	7,236
8	Australia	Sydney	Pitt Street Mall	7,042
9	South Korea	Seoul	Myeongdong	6,063
10	Austria	Vienna	Kohlmarkt	4,440
11	Germany	Munich	Kaufingerstraße	4,320
12	Russia	Moscow	Stoleshnikov	3,846
13	China	Beijing	Wangfujing	3,610
14	Brazil	São Paulo	Iguatemi Shopping	3,343
15	Spain	Barcelona	Portal de l'Angel	3,180
16	Singapore	Singapore	Orchard Road	2,930
17	Netherland	Amsterdam	Kalverstraat	2,900
18	Norway	Oslo	Karl Johans Gate	2,835
19	Malaysia	Kuala Lumpur	Pavilion KL	2,673
20	Israel	Tel Aviv	Ramat Aviv	2,663
21	Colombia	Bogota	Shopping Centre	2,631
22	Canada	Toronto	Bloor Street	2,512
23	Ireland	Dublin	Grafton Street	2,389
24	Ukraine	Kiev	Kreschatik Street	2,308
25	Denmark	Copenhagen	Strøget	2,279
26	Czech Republic	Prague	Na Prikope/Wenceslas Square	2,160
27	New Zealand	Auckland	CBD	2,139
28	India	New Delhi	Khan Market	2,090
29	Turkey	Istanbul	Bagdat Caddesi (Asian side)	2,077
30	Taiwan	Taipei	ZhongXiao E Road	1,981
31	Greece	Athens	Ermou	1,980
32	Finland	Helsinki	City Centre	1,920
33	Vietnam	Ho Chi Minh	City Shopping Centre	1,846
34	Belgium	Brussels	Rue Neuve	1,800
35	Sweden	Stockholm	Biblioteksgatan	1,676
36	United Arab Emirates	Dubai	Shopping Centre	1,578
37	Lebanon	Beirut	ABC Centre Achrafieh	1,539
38	Luxembourg	Luxembourg	Grand Rue	1,500
39	Chile	Santiago	Downtown (Paseo Ahumada)	1,393
40	Kazakhstan	Almaty	Shopping Centre	1,292
41	South Africa	Johannesburg	Sandton City	1,116
42	Hungary	Budapest	Váci utca	1,080
43	Portugal	Lisbon	Chiado	1,050
44	Argentina	Buenos Aires	Florida	1,034
45	Poland	Warsaw	Ul Nowy Swiat	996
46	Thailand	Bangkok	City Centre	923
47	Indonesia	Jakarta	Shopping Centre	908
48	Channel Islands	St Helier	King Street	899
49	Oman	Muscat	Shopping Centre	839
50	Lithuania	Vilnius	Shopping Centre	804

RANK 2014	COUNTRY	CITY	LOCATION	RENT (€/sqm year)
1	USA	New York	Upper 5th Avenue	29,822
2	Hong Kong	Hong Kong	Causeway Bay	23,307
3	France	Paris	Avenue des Champs-Élysées	13,255
4	UK	London	New Bond Street	10,361
5	Australia	Sydney	Pitt Street Mall	8,658
6	Italy	Milan	Via Monte Napoleone	8,500
7	Japan	Tokyo	Ginza	8,120
8	South Korea	Seoul	Myeongdong	7,942
9	Switzerland	Zurich	Bahnhofstrasse	7,456
10	Russia	Moscow	Stoleshnikov	4,749
11	Austria	Vienna	Kohlmarkt	4,440
12	Germany	Munich	Kaufingerstraße	4,380
13	China	Beijing	Wangfujing	4,100
14	Spain	Barcelona	Portal de l'Angel	3,240
15	Colombia	Bogota	Shopping Centre	3,135
16	Singapore	Singapore	Orchard Road	3,087
17	Norway	Oslo	Karl Johans Gate	3,081
18	The Netherlands	Amsterdam	Kalverstraat	2,900
19	Brazil	São Paulo	Iguatemi Shopping	2,714
20	Turkey	Istanbul	Bagdat Caddesi and Istiklal Street	2,660
21	Malaysia	Kuala Lumpur	Pavilion KL	2,649
22	Ireland	Dublin	Grafton Street	2,529
23	Canada	Toronto	Bloor Street	2,478
24	New Zealand	Auckland	CBD	2,443
25	Denmark	Copenhagen	Strøget	2,384
26	Taiwan	Taipei	ZhongXiao E. Road	2,361
27	Czech Republic	Prague	Na Prikope/Wenceslas Square	2,220
28	United Arab Emirates	Dubai	Shopping Centre	2,204
29	Greece	Athens	Ermou	2,160
30	Israel	Tel Aviv	Ramat Aviv	2,105
31	India	New Delhi	Khan Market	2,070
32	Finland	Helsinki	City Centre	1,968
33	Ukraine	Kiev	Kreschatik Street	1,900
34	Vietnam	Ho Chi Minh	City/Hanoi Shopping Centre	1,805
35	Belgium	Brussels	Rue Neuve	1,750
36	Sweden	Stockholm	Biblioteksgatan	1,636
37	Lebanon	Beirut	ABC Centre Achrafieh	1,583
38	Luxembourg	Luxembourg	Grand Rue	1,500
39	Kazakhstan	Almaty	Shopping Centre	1,330
40	Hungary	Budapest	Váci utca	1,140
41	Portugal	Lisbon	Chiado	1,110
42	Argentina	Buenos Aires	Florida	1,064
43	Thailand	Bangkok	Central Retail District	1,025
44	Poland	Warsaw	Nowy Swiat	1,020
45	Serbia	Belgrade	Kneza Mihaila	1,020
46	South Africa	Cape Town	V&A Waterfront	1,009
47	Qatar	Doha	Shopping Centre	965
48	Peru	Lima	Shopping Centre	950
49	Channel Islands	St Helier	King Street	879
50	Mexico	Mexico City	Masaryk Avenue	874

RANK 2015	COUNTRY	CITY	LOCATION	RENT (€/sqm year)
1	USA	New York	Upper 5th Avenue (49th - 60th Sts)	33,812
2	Hong Kong	Hong Kong	Causeway Bay (main street shops)	23,178
3	France	Paris	Avenue des Champs Elysees	13,255
4	United Kingdom	London	New Bond Street	12,762
5	Italy	Milan	Via Monte Napoleone	10,000
6	Australia	Sydney	Pitt Street Mall	8,898
7	Switzerland	Zurich	Bahnhofstrasse	8,643
8	Japan	Tokyo	The Ginza	8,520
9	South Korea	Seoul	Myeongdong	8,519
10	Austria	Vienna	Kohlmarkt	4,620
11	Germany	Munich	Kaufinger/Neuhauser	4,440
12	China	Shanghai	West Nanjing Roa	4,233
13	Russia	Moscow	Stoleshnikov	3,814
14	Singapore	Singapore	Orchard Road	3,253
15	Spain	Barcelona	Portal de L'Angel	3,240
16	Ireland	Dublin	Grafton Street	3,091
17	Turkey	Istanbul	Bagdat Caddesi	3,016
18	Netherlands	Amsterdam	Kalverstraat	2,900
19	Norway	Oslo	Karl Johan	2,852
20	Taiwan	Taipei	ZhongXiao E Road	2,640
21	Canada	Toronto	Bloor Street	2,515
22	Denmark	Copenhagen	Stroget (including Vimmelskaftet)	2,413
23	Czech Republic	Prague	Wenceslas Square	2,280
24	India	New Delhi	Khan Market	2,276
25	Greece	Athens	Ermou	2,160
26	Finland	Helsinki	City Centre	1,968
27	Belgium	Antwerp	Meir	1,750
28	New Zealand	Auckland	Queen Street	1,675
29	Luxembourg	Luxembourg	Grand Rue	1,620
30	Ukraine	Kiev	Kreschatik Street	1,616
31	Sweden	Stockholm	Biblioteksgatan	1,612
32	Vietnam	Ho Chi Minh	City Prime High Street	1,454
33	UAE	Dubai	Prime - A	1,447
34	Israel	Tel Aviv	Kikar Hamedina	1,285
35	Thailand	Bangkok	Central Retail District	1,212
36	Argentina	Buenos Aires	Florida	1,206
37	Portugal	Lisbon	Chiado	1,170
38	Hungary	Budapest	Vaci utca	1,140
39	Brazil	Rio de Janeiro	Garcia D'avilla (Ipanema)	1,127
40	Malaysia	Kuala Lumpur	Bukit Bintang	1,075
41	Channel Islands	St Peter Port	High Street	1,033
42	Serbia	Belgrade	Kneza Mihaila	1,020
43	Poland	Warsaw	Nowy Swiat	1,020
44	Mexico	Mexico City	Mazaryk	991
45	Colombia	Bogota	Zona T - 82 Calle	969
46	Kazakhstan	Almaty	Gogol, Furmanov, Kabanbai Batyr	969
47	Qatar	Doha	Prime High Street	887
48	Lebanon	Beirut	Rue Verdun	853
49	Croatia	Zagreb	Ilica Street	840
50	Slovenia	Ljubljana	Čopova	720

RANK 2016	COUNTRY	CITY	LOCATION	RENT (€/sqm year)
1	USA	New York	Upper 5th Avenue (49th – 60th Sts)	29,065
2	Hong Kong	Hong Kong	Causeway Bay	27,884
3	France	Paris	Avenue des Champs Élysées	13,255
4	United Kingdom	London	New Bond Street	12,433
5	Japan	Tokyo	Ginza	12,102
6	Italy	Milan	Via Monte Napoleone	12,000
7	Australia	Sydney	Pitt Street Mall	9,383
8	South Korea	Seoul	Myeongdong	8,793
9	Switzerland	Zurich	Bahnhofstrasse	8,408
10	Austria	Vienna	Kohlmarkt	4,620
11	Germany	Munich	Kaufinger/Neuhauser	4,440
12	China	Shanghai	West Nanjing Road	3,977
13	Ireland	Dublin	Grafton Street	3,327
14	Spain	Barcelona	Portal de L'Angel	3,300
15	Singapore	Singapore	Orchard Road	3,180
16	Turkey	Istanbul	Centre – Istiklal Street	3,024
17	Netherlands	Amsterdam	Kalverstraat	3,000
18	Norway	Oslo	Karl Johan	2,904
19	Russia	Moscow	Stoleshnikov	2,818
20	Luxembourg	Luxembourg City	Grande Rue	2,520
21	Denmark	Copenhagen	Stroget (including Vimmelskaftet)	2,486
22	Canada	Toronto	Bloor Street	2,424
23	Czech Republic	Prague	Na Příkopě street	2,4
24	Malaysia	Kuala Lumpur	Pavilion KL (prime lots)	2,364
25	Greece	Athens	Ermou	2,34
26	Taiwan	Taipei	Zhongxiao	2,177
27	Vietnam	Ho Chi Minh City	Best Achieved Shopping Mall (GF)	2,160
28	India	New Delhi	Khan Market	2,153
29	Belgium	Antwerp	Meir	1,850
30	New Zealand	Auckland	Queen Street	1,807
31	Sweden	Stockholm	Biblioteksgatan	1,583
32	Finland	Helsinki	City Centre	1,560
33	UAE	Dubai	Prime – A	1,450
34	Portugal	Lisbon	Chiado	1,200
35	Hungary	Budapest	Vaci utca	1,200
36	Israel	Tel Aviv	Kikar Hamedina	1,192
37	Thailand	Bangkok	Central Retail District (CRD)	1,180
38	South Africa	Johannesburg	Sandton City	1,106
39	Brazil	Rio de Janeiro	Garcia D'avilla (Ipanema)	1,095
40	Poland	Warsaw	Nowy Swiat	1,080
41	Serbia	Belgrade	Kneza Mihaila	1,020
42	Colombia	Bogota	Zona T – 82 Calle	972,000
43	Mexico	Mexico City	Masaryk	972,000
44	Lebanon	Beirut	Rue Hamra	900,000
45	Qatar	Doha	Prime	889,000
46	Channel Islands	St Peter Port	High Street	880
47	Croatia	Zagreb	Ilica Street	840
48	Indonesia	Jakarta	Prime	771
49	Slovenia	Ljubljana	Čopova	720
50	Jordan	Amman	City Centre (CBD)	630

2. Rent analysis in Milan - Created from analysis (page 39)

RESIDENTIAL 2011		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B01	13	14,8	13,9	**166,8**
CENTRAL	B02	13,5	18	15,75	**189**
CENTRAL	B03	16	19,5	17,75	**213**
CENTRAL	B04	16	18,7	17,35	**208,2**
CENTRAL	B05	14	17,5	15,75	**189**
CENTRAL	B06	11	16	13,5	**162**
CENTRAL	B11	28,5	35,1	31,8	**381,6**
CENTRAL	B12	20,6	23,1	21,85	**262,2**
CENTRAL	B13	17,6	19,6	18,6	**223,2**
CENTRAL	B14	17,5	20,5	19	**228**
SEMICENTRAL	C01	6,5	8,5	7,5	**90**
SEMICENTRAL	C02	9,5	11,5	10,5	**126**
SEMICENTRAL	C03	10	12,5	11,25	**135**
SEMICENTRAL	C04	13,5	15,5	14,5	**174**
SEMICENTRAL	C05	8,5	10	9,25	**111**
SEMICENTRAL	C06	7,5	10	8,75	**105**
SEMICENTRAL	C07	7	10,5	8,75	**105**
SEMICENTRAL	C08	7,3	8,9	8,1	**97,2**
SEMICENTRAL	C09	9,5	12	10,75	**129**
SEMICENTRAL	C10	10	13	11,5	**138**
SEMICENTRAL	C11	8,5	9,8	9,15	**109,8**
SEMICENTRAL	C12	8,5	11	9,75	**117**
PERIPHERAL	D01	6	7,8	6,9	**82,8**
PERIPHERAL	D02	6	7	6,5	**78**
PERIPHERAL	D03	6,5	8	7,25	**87**
PERIPHERAL	D04	6	7	6,5	**78**
PERIPHERAL	D05	5,5	7,5	6,5	**78**
PERIPHERAL	D06	6	7,5	6,75	**81**
PERIPHERAL	D07	6,5	7,5	7	**84**
PERIPHERAL	D08	5	6	5,5	**66**
PERIPHERAL	D09	7	9	8	**96**
PERIPHERAL	D10	7	8,5	7,75	**93**
PERIPHERAL	D11	7	9	8	**96**
PERIPHERAL	D12	7,5	10,5	9	**108**
PERIPHERAL	D13	4,5	6	5,25	**63**
PERIPHERAL	D14	6,5	8	7,25	**87**
PERIPHERAL	D15	6	7	6,5	**78**
PERIPHERAL	D16	5,5	7	6,25	**75**
PERIPHERAL	D17	6	7,5	6,75	**81**
PERIPHERAL	D18	5	6,5	5,75	**69**
PERIPHERAL	D19	6	8	7	**84**
PERIPHERAL	D20	7	9	8	**96**
PERIPHERAL	D21	8,5	10,5	9,5	**114**
PERIPHERAL	D22	6	8	7	**84**
PERIPHERAL	D23	8,5	11	9,75	**117**
PERIPHERAL	D24	9,5	11,5	10,5	**126**
PERIPHERAL	D25	7,5	9	8,25	**99**
PERIPHERAL	D26	7,5	9	8,25	**99**
PERIPHERAL	D27	8	10,5	9,25	**111**
PERIPHERAL	D28	8,5	10,5	9,5	**114**
PERIPHERAL	D29	6,5	8,5	7,5	**90**

COMMERCIAL 2011		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B01	16,5	23,8	20,15	**241,8**
CENTRAL	B02	13,2	20	16,6	**199,2**
CENTRAL	B03	16	23	19,5	**234**
CENTRAL	B04	16	21	18,5	**222**
CENTRAL	B05	16	23,5	19,75	**237**
CENTRAL	B06	12,5	18,3	15,4	**184,8**
CENTRAL	B11	42,5	62	52,25	**627**
CENTRAL	B12	22,5	31,5	27	**324**
CENTRAL	B13	18,6	27,1	22,85	**274,2**
CENTRAL	B14	19,8	29,8	24,8	**297,6**
SEMICENTRAL	C01	8,9	13,1	11	**132**
SEMICENTRAL	C02	12	16,5	14,25	**171**
SEMICENTRAL	C03	10,2	14,7	12,45	**149,4**
SEMICENTRAL	C04	13,5	19,5	16,5	**198**
SEMICENTRAL	C05	10,2	15,2	12,7	**152,4**
SEMICENTRAL	C06	8,2	12,2	10,2	**122,4**
SEMICENTRAL	C07	10,2	15,8	13	**156**
SEMICENTRAL	C08	9,8	14,2	12	**144**
SEMICENTRAL	C09	10,5	16	13,25	**159**
SEMICENTRAL	C10	11,5	17	14,25	**171**
SEMICENTRAL	C11	10	15	12,5	**150**
SEMICENTRAL	C12	10	14	12	**144**
PERIPHERAL	D01	5,4	7,6	6,5	**78**
PERIPHERAL	D02	5,9	8,8	7,35	**88,2**
PERIPHERAL	D03	3,8	5,8	4,8	**57,6**
PERIPHERAL	D04	6,5	8,3	7,4	**88,8**
PERIPHERAL	D05	6,2	9,1	7,65	**91,8**
PERIPHERAL	D06	7,8	10,2	9	**108**
PERIPHERAL	D07	7,5	11	9,25	**111**
PERIPHERAL	D08	6	8,5	7,25	**87**
PERIPHERAL	D09	8,5	12,5	10,5	**126**
PERIPHERAL	D10	7	10	8,5	**102**
PERIPHERAL	D11	6,8	10,2	8,5	**102**
PERIPHERAL	D12	6,5	9,3	7,9	**94,8**
PERIPHERAL	D13	6	7,8	6,9	**82,8**
PERIPHERAL	D14	8	10,8	9,4	**112,8**
PERIPHERAL	D15	6,8	9,8	8,3	**99,6**
PERIPHERAL	D16	7	10,8	8,9	**106,8**
PERIPHERAL	D17	5,9	8,3	7,1	**85,2**
PERIPHERAL	D18	6	8,5	7,25	**87**
PERIPHERAL	D19	5	7,3	6,15	**73,8**
PERIPHERAL	D20	7	10,5	8,75	**105**
PERIPHERAL	D21	8,5	12	10,25	**123**
PERIPHERAL	D22	8	11,7	9,85	**118,2**
PERIPHERAL	D23	7,2	10,8	9	**108**
PERIPHERAL	D24	7,8	11,2	9,5	**114**
PERIPHERAL	D25	7,2	10,2	8,7	**104,4**
PERIPHERAL	D26	5,3	7,1	6,2	**74,4**
PERIPHERAL	D27	7,5	11	9,25	**111**
PERIPHERAL	D28	6	8,3	7,15	**85,8**
PERIPHERAL	D29	5,3	7,3	6,3	**75,6**

PRODUCTIVE 2011		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B01	10,8	13,2	12	**144**
CENTRAL	B02	8,2	10	9,1	**109,2**
CENTRAL	B03	10,2	12	11,1	**133,2**
CENTRAL	B04	10,3	12,5	11,4	**136,8**
CENTRAL	B05	8,6	10,8	9,7	**116,4**
CENTRAL	B06	6,6	9	7,8	**93,6**
CENTRAL	B11	15,6	21	18,3	**219,6**
CENTRAL	B12	13,7	15,7	14,7	**176,4**
CENTRAL	B13	12,4	15,4	13,9	**166,8**
CENTRAL	B14	14,2	17,2	15,7	**188,4**
SEMICENTRAL	C01	5,2	7	6,1	**73,2**
SEMICENTRAL	C02	5,8	8	6,9	**82,8**
SEMICENTRAL	C03	5,5	8	6,75	**81**
SEMICENTRAL	C04	7,2	9,7	8,45	**101,4**
SEMICENTRAL	C05	6,8	9,3	8,05	**96,6**
SEMICENTRAL	C06	6,2	8,6	7,4	**88,8**
SEMICENTRAL	C07	6,2	9,2	7,7	**92,4**
SEMICENTRAL	C08	6,8	8,6	7,7	**92,4**
SEMICENTRAL	C09	6,2	8,4	7,3	**87,6**
SEMICENTRAL	C10	6,2	8,6	7,4	**88,8**
SEMICENTRAL	C11	6,2	8	7,1	**85,2**
SEMICENTRAL	C12	6,8	9,2	8	**96**
PERIPHERAL	D01	5	6,5	5,75	**69**
PERIPHERAL	D02	4,6	6,4	5,5	**66**
PERIPHERAL	D03	4,5	5,8	5,15	**61,8**
PERIPHERAL	D04	4,4	5,6	5	**60**
PERIPHERAL	D05	5	6,8	5,9	**70,8**
PERIPHERAL	D06	4,8	6,6	5,7	**68,4**
PERIPHERAL	D07	5,4	7,2	6,3	**75,6**
PERIPHERAL	D08	4,8	6,8	5,8	**69,6**
PERIPHERAL	D09	5	7,5	6,25	**75**
PERIPHERAL	D10	4,7	6,2	5,45	**65,4**
PERIPHERAL	D11	4	6	5	**60**
PERIPHERAL	D12	4	6	5	**60**
PERIPHERAL	D13	3,7	4,8	4,25	**51**
PERIPHERAL	D14	4,7	6,5	5,6	**67,2**
PERIPHERAL	D15	3,8	5,3	4,55	**54,6**
PERIPHERAL	D16	3,6	4,8	4,2	**50,4**
PERIPHERAL	D17	5	6,6	5,8	**69,6**
PERIPHERAL	D18	5,3	6,8	6,05	**72,6**
PERIPHERAL	D19	4,3	6	5,15	**61,8**
PERIPHERAL	D20	4,8	7,2	6	**72**
PERIPHERAL	D21	4,2	6	5,1	**61,2**
PERIPHERAL	D22	4	5,8	4,9	**58,8**
PERIPHERAL	D23	4,8	6,5	5,65	**67,8**
PERIPHERAL	D24	4,5	6	5,25	**63**
PERIPHERAL	D25	3,8	5,6	4,7	**56,4**
PERIPHERAL	D26	4,2	5,6	4,9	**58,8**
PERIPHERAL	D27	4,6	6,8	5,7	**68,4**
PERIPHERAL	D28	4,4	6,2	5,3	**63,6**
PERIPHERAL	D29	4,3	5,8	5,05	**60,6**

RESIDENTIAL 2012		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B01	13,5	15	14,25	**171**
CENTRAL	B02	14	18,5	16,25	**195**
CENTRAL	B03	16	20	18	**216**
CENTRAL	B04	17	19	18	**216**
CENTRAL	B05	15	18	16,5	**198**
CENTRAL	B06	11	16	13,5	**162**
CENTRAL	B11	28,5	35,5	32	**384**
CENTRAL	B12	20	24	22	**264**
CENTRAL	B13	17	21	19	**228**
CENTRAL	B14	17,5	20,5	19	**228**
SEMICENTRAL	C01	6,5	8,5	7,5	**90**
SEMICENTRAL	C02	9,5	11,5	10,5	**126**
SEMICENTRAL	C03	10	13	11,5	**138**
SEMICENTRAL	C04	13,5	15,5	14,5	**174**
SEMICENTRAL	C05	9	10,5	9,75	**117**
SEMICENTRAL	C06	7,5	10	8,75	**105**
SEMICENTRAL	C07	7	10,5	8,75	**105**
SEMICENTRAL	C08	7,3	8,9	8,1	**97,2**
SEMICENTRAL	C09	9,5	12	10,75	**129**
SEMICENTRAL	C10	10	13	11,5	**138**
SEMICENTRAL	C11	8,5	9,8	9,15	**109,8**
SEMICENTRAL	C12	8,5	11	9,75	**117**
PERIPHERAL	D01	6	7,8	6,9	**82,8**
PERIPHERAL	D02	6	7	6,5	**78**
PERIPHERAL	D03	6,5	8	7,25	**87**
PERIPHERAL	D04	6	7	6,5	**78**
PERIPHERAL	D05	5,5	7,5	6,5	**78**
PERIPHERAL	D06	6	7,5	6,75	**81**
PERIPHERAL	D07	6,5	7,5	7	**84**
PERIPHERAL	D08	5	6	5,5	**66**
PERIPHERAL	D09	7	9	8	**96**
PERIPHERAL	D10	7	8,5	7,75	**93**
PERIPHERAL	D11	7	9	8	**96**
PERIPHERAL	D12	7,5	10,5	9	**108**
PERIPHERAL	D13	4,5	6	5,25	**63**
PERIPHERAL	D14	6,5	8	7,25	**87**
PERIPHERAL	D15	6	7	6,5	**78**
PERIPHERAL	D16	5,5	7	6,25	**75**
PERIPHERAL	D17	6	7,5	6,75	**81**
PERIPHERAL	D18	5	6,5	5,75	**69**
PERIPHERAL	D19	6	8	7	**84**
PERIPHERAL	D20	7	9	8	**96**
PERIPHERAL	D21	8,5	10,5	9,5	**114**
PERIPHERAL	D22	6	8	7	**84**
PERIPHERAL	D23	8,5	11	9,75	**117**
PERIPHERAL	D24	9,5	11,5	10,5	**126**
PERIPHERAL	D25	7,5	9	8,25	**99**
PERIPHERAL	D26	7,5	9	8,25	**99**
PERIPHERAL	D27	8	10,5	9,25	**111**
PERIPHERAL	D28	8,5	10,5	9,5	**114**
PERIPHERAL	D29	6,5	8,5	7,5	**90**

COMMERCIAL 2012		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B01	16,5	23,8	20,15	**241,8**
CENTRAL	B02	14,2	21	17,6	**211,2**
CENTRAL	B03	16	23	19,5	**234**
CENTRAL	B04	16	21	18,5	**222**
CENTRAL	B05	17	24	20,5	**246**
CENTRAL	B06	12,5	18,3	15,4	**184,8**
CENTRAL	B11	40	60	50	**600**
CENTRAL	B12	22	32	27	**324**
CENTRAL	B13	18	27	22,5	**270**
CENTRAL	B14	20	30	25	**300**
SEMICENTRAL	C01	9,9	14,1	12	**144**
SEMICENTRAL	C02	13	17,5	15,25	**183**
SEMICENTRAL	C03	10,2	14,7	12,45	**149,4**
SEMICENTRAL	C04	13,5	19,5	16,5	**198**
SEMICENTRAL	C05	10,2	15,2	12,7	**152,4**
SEMICENTRAL	C06	8,5	13	10,75	**129**
SEMICENTRAL	C07	10,2	15,8	13	**156**
SEMICENTRAL	C08	9,8	14,2	12	**144**
SEMICENTRAL	C09	10,5	16	13,25	**159**
SEMICENTRAL	C10	11,5	17	14,25	**171**
SEMICENTRAL	C11	10	15	12,5	**150**
SEMICENTRAL	C12	10,5	14,5	12,5	**150**
PERIPHERAL	D01	5,4	7,6	6,5	**78**
PERIPHERAL	D02	6	9	7,5	**90**
PERIPHERAL	D03	3,8	5,8	4,8	**57,6**
PERIPHERAL	D04	6,5	8,3	7,4	**88,8**
PERIPHERAL	D05	6,2	9,1	7,65	**91,8**
PERIPHERAL	D06	7,8	10,2	9	**108**
PERIPHERAL	D07	7,5	11	9,25	**111**
PERIPHERAL	D08	6	8,5	7,25	**87**
PERIPHERAL	D09	8,5	12,5	10,5	**126**
PERIPHERAL	D10	7	10	8,5	**102**
PERIPHERAL	D11	6,8	10,2	8,5	**102**
PERIPHERAL	D12	6,5	9,3	7,9	**94,8**
PERIPHERAL	D13	6	7,8	6,9	**82,8**
PERIPHERAL	D14	8	10,8	9,4	**112,8**
PERIPHERAL	D15	6,8	9,8	8,3	**99,6**
PERIPHERAL	D16	7	10,8	8,9	**106,8**
PERIPHERAL	D17	5,9	8,3	7,1	**85,2**
PERIPHERAL	D18	6	8,5	7,25	**87**
PERIPHERAL	D19	5	7,3	6,15	**73,8**
PERIPHERAL	D20	7	10,5	8,75	**105**
PERIPHERAL	D21	8,5	12	10,25	**123**
PERIPHERAL	D22	8	11,7	9,85	**118,2**
PERIPHERAL	D23	7,2	10,8	9	**108**
PERIPHERAL	D24	7,8	11,2	9,5	**114**
PERIPHERAL	D25	7,2	10,2	8,7	**104,4**
PERIPHERAL	D26	5,3	7,1	6,2	**74,4**
PERIPHERAL	D27	7,5	11	9,25	**111**
PERIPHERAL	D28	6	8,3	7,15	**85,8**
PERIPHERAL	D29	5,3	7,3	6,3	**75,6**

PRODUCTIVE 2012		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B01	10,8	13,2	12	**144**
CENTRAL	B02	8,2	10	9,1	**109,2**
CENTRAL	B03	10,2	12	11,1	**133,2**
CENTRAL	B04	10,3	12,5	11,4	**136,8**
CENTRAL	B05	8,6	10,8	9,7	**116,4**
CENTRAL	B06	7	9	8	**96**
CENTRAL	B11	15	21	18	**216**
CENTRAL	B12	13	16	14,5	**174**
CENTRAL	B13	12	15	13,5	**162**
CENTRAL	B14	14	17	15,5	**186**
SEMICENTRAL	C01	5,2	7	6,1	**73,2**
SEMICENTRAL	C02	5,8	8	6,9	**82,8**
SEMICENTRAL	C03	5,5	8	6,75	**81**
SEMICENTRAL	C04	7,2	9,7	8,45	**101,4**
SEMICENTRAL	C05	6,8	9,3	8,05	**96,6**
SEMICENTRAL	C06	6,2	8,6	7,4	**88,8**
SEMICENTRAL	C07	6,2	9,2	7,7	**92,4**
SEMICENTRAL	C08	6,8	8,6	7,7	**92,4**
SEMICENTRAL	C09	6,2	8,4	7,3	**87,6**
SEMICENTRAL	C10	6,2	8,6	7,4	**88,8**
SEMICENTRAL	C11	6,2	8	7,1	**85,2**
SEMICENTRAL	C12	6,8	9,2	8	**96**
PERIPHERAL	D01	5	6,5	5,75	**69**
PERIPHERAL	D02	4,6	6,4	5,5	**66**
PERIPHERAL	D03	4,5	5,8	5,15	**61,8**
PERIPHERAL	D04	4,4	5,6	5	**60**
PERIPHERAL	D05	5	6,8	5,9	**70,8**
PERIPHERAL	D06	4,8	6,6	5,7	**68,4**
PERIPHERAL	D07	5,4	7,2	6,3	**75,6**
PERIPHERAL	D08	4,8	6,8	5,8	**69,6**
PERIPHERAL	D09	5	7,5	6,25	**75**
PERIPHERAL	D10	4,7	6,2	5,45	**65,4**
PERIPHERAL	D11	4	6	5	**60**
PERIPHERAL	D12	4	6	5	**60**
PERIPHERAL	D13	3,7	4,8	4,25	**51**
PERIPHERAL	D14	4,7	6,5	5,6	**67,2**
PERIPHERAL	D15	3,8	5,3	4,55	**54,6**
PERIPHERAL	D16	3,6	4,8	4,2	**50,4**
PERIPHERAL	D17	5	6,6	5,8	**69,6**
PERIPHERAL	D18	5,3	6,8	6,05	**72,6**
PERIPHERAL	D19	4,3	6	5,15	**61,8**
PERIPHERAL	D20	4,8	7,2	6	**72**
PERIPHERAL	D21	4,2	6	5,1	**61,2**
PERIPHERAL	D22	4	5,8	4,9	**58,8**
PERIPHERAL	D23	4,8	6,5	5,65	**67,8**
PERIPHERAL	D24	4,5	6	5,25	**63**
PERIPHERAL	D25	3,8	5,6	4,7	**56,4**
PERIPHERAL	D26	4,2	5,6	4,9	**58,8**
PERIPHERAL	D27	4,6	6,8	5,7	**68,4**
PERIPHERAL	D28	4,4	6,2	5,3	**63,6**
PERIPHERAL	D29	4,3	5,8	5,05	**60,6**

RESIDENTIAL 2013		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B01	13,5	15	14,25	**171**
CENTRAL	B02	14,2	18,2	16,2	**194,4**
CENTRAL	B03	16	20	18	**216**
CENTRAL	B04	17	19	18	**216**
CENTRAL	B05	15	18	16,5	**198**
CENTRAL	B06	11,5	15,5	13,5	**162**
CENTRAL	B11	28	35	31,5	**378**
CENTRAL	B12	21	23	22	**264**
CENTRAL	B13	17,2	20,8	19	**228**
CENTRAL	B14	17,5	20,8	19,15	**229,8**
SEMICENTRAL	C01	6,5	8,5	7,5	**90**
SEMICENTRAL	C02	9,2	11,6	10,4	**124,8**
SEMICENTRAL	C03	10	13	11,5	**138**
SEMICENTRAL	C04	13,5	14,7	14,1	**169,2**
SEMICENTRAL	C05	9	10,3	9,65	**115,8**
SEMICENTRAL	C06	7,5	10	8,75	**105**
SEMICENTRAL	C07	10,2	12,8	11,5	**138**
SEMICENTRAL	C08	7,3	9	8,15	**97,8**
SEMICENTRAL	C09	10	11	10,5	**126**
SEMICENTRAL	C10	10,5	13	11,75	**141**
SEMICENTRAL	C11	8,5	9,8	9,15	**109,8**
SEMICENTRAL	C12	8,7	10,5	9,6	**115,2**
PERIPHERAL	D01	6	7,8	6,9	**82,8**
PERIPHERAL	D02	6	7	6,5	**78**
PERIPHERAL	D03	6,5	8	7,25	**87**
PERIPHERAL	D04	6	7	6,5	**78**
PERIPHERAL	D05	5,5	7,5	6,5	**78**
PERIPHERAL	D06	6	7,5	6,75	**81**
PERIPHERAL	D07	6,5	7,5	7	**84**
PERIPHERAL	D08	5	6	5,5	**66**
PERIPHERAL	D09	7	9	8	**96**
PERIPHERAL	D10	7,2	8,2	7,7	**92,4**
PERIPHERAL	D11	7	9	8	**96**
PERIPHERAL	D12	7,5	10,2	8,85	**106,2**
PERIPHERAL	D13	4,5	6	5,25	**63**
PERIPHERAL	D14	6,5	8	7,25	**87**
PERIPHERAL	D15	6	7	6,5	**78**
PERIPHERAL	D16	5,5	7	6,25	**75**
PERIPHERAL	D17	6	7,5	6,75	**81**
PERIPHERAL	D18	5	6,5	5,75	**69**
PERIPHERAL	D19	6	8	7	**84**
PERIPHERAL	D20	7,2	9,2	8,2	**98,4**
PERIPHERAL	D21	8,7	10,7	9,7	**116,4**
PERIPHERAL	D22	6	8	7	**84**
PERIPHERAL	D23	8,5	10,8	9,65	**115,8**
PERIPHERAL	D24	9,5	11,5	10,5	**126**
PERIPHERAL	D25	7,5	8,8	8,15	**97,8**
PERIPHERAL	D26	7,5	9	8,25	**99**
PERIPHERAL	D27	8	10,5	9,25	**111**
PERIPHERAL	D28	8,5	10,5	9,5	**114**
PERIPHERAL	D29	6,5	8,5	7,5	**90**

COMMERCIAL 2013		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B01	16,5	23,8	20,15	**241,8**
CENTRAL	B02	14,2	21	17,6	**211,2**
CENTRAL	B03	16	23	19,5	**234**
CENTRAL	B04	16	21	18,5	**222**
CENTRAL	B05	17,2	24,2	20,7	**248,4**
CENTRAL	B06	12,5	18,3	15,4	**184,8**
CENTRAL	B11	40	60	50	**600**
CENTRAL	B12	22	32	27	**324**
CENTRAL	B13	18,5	27,5	23	**276**
CENTRAL	B14	20,5	30,5	25,5	**306**
SEMICENTRAL	C01	9,9	14,1	12	**144**
SEMICENTRAL	C02	13	17,2	15,1	**181,2**
SEMICENTRAL	C03	10,2	14,5	12,35	**148,2**
SEMICENTRAL	C04	13,5	19,5	16,5	**198**
SEMICENTRAL	C05	10,2	15,2	12,7	**152,4**
SEMICENTRAL	C06	10	15	12,5	**150**
SEMICENTRAL	C07	10,2	15,8	13	**156**
SEMICENTRAL	C08	9,8	14,2	12	**144**
SEMICENTRAL	C09	10,5	16	13,25	**159**
SEMICENTRAL	C10	11	18	14,5	**174**
SEMICENTRAL	C11	10,2	14,8	12,5	**150**
SEMICENTRAL	C12	10,8	14,2	12,5	**150**
PERIPHERAL	D01	5,4	7,6	6,5	**78**
PERIPHERAL	D02	6	9	7,5	**90**
PERIPHERAL	D03	3,8	5,8	4,8	**57,6**
PERIPHERAL	D04	6,5	8,3	7,4	**88,8**
PERIPHERAL	D05	6,2	9,1	7,65	**91,8**
PERIPHERAL	D06	7,8	10,2	9	**108**
PERIPHERAL	D07	7,5	11	9,25	**111**
PERIPHERAL	D08	6	8,5	7,25	**87**
PERIPHERAL	D09	8,5	12,5	10,5	**126**
PERIPHERAL	D10	7	10	8,5	**102**
PERIPHERAL	D11	6,8	10,2	8,5	**102**
PERIPHERAL	D12	6,5	9,3	7,9	**94,8**
PERIPHERAL	D13	6	7,8	6,9	**82,8**
PERIPHERAL	D14	8	10,8	9,4	**112,8**
PERIPHERAL	D15	6,8	9,8	8,3	**99,6**
PERIPHERAL	D16	7	10,8	8,9	**106,8**
PERIPHERAL	D17	5,9	8,3	7,1	**85,2**
PERIPHERAL	D18	6	8,5	7,25	**87**
PERIPHERAL	D19	5	7,3	6,15	**73,8**
PERIPHERAL	D20	7	10,5	8,75	**105**
PERIPHERAL	D21	8,5	12	10,25	**123**
PERIPHERAL	D22	8	11,7	9,85	**118,2**
PERIPHERAL	D23	7,2	10,8	9	**108**
PERIPHERAL	D24	7,8	11,2	9,5	**114**
PERIPHERAL	D25	7,2	10,2	8,7	**104,4**
PERIPHERAL	D26	5,3	7,1	6,2	**74,4**
PERIPHERAL	D27	7,5	11	9,25	**111**
PERIPHERAL	D28	6	8,3	7,15	**85,8**
PERIPHERAL	D29	5,3	7,3	6,3	**75,6**

PRODUCTIVE 2013		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B01	10,8	13,2	12	**144**
CENTRAL	B02	8,2	10	9,1	**109,2**
CENTRAL	B03	10,2	12	11,1	**133,2**
CENTRAL	B04	10,3	12,5	11,4	**136,8**
CENTRAL	B05	8,6	10,8	9,7	**116,4**
CENTRAL	B06	7	9	8	**96**
CENTRAL	B11	15	21	18	**216**
CENTRAL	B12	13	16	14,5	**174**
CENTRAL	B13	12	15	13,5	**162**
CENTRAL	B14	14	17	15,5	**186**
SEMICENTRAL	C01	5,2	7	6,1	**73,2**
SEMICENTRAL	C02	5,8	8	6,9	**82,8**
SEMICENTRAL	C03	5,5	8	6,75	**81**
SEMICENTRAL	C04	7,2	9,7	8,45	**101,4**
SEMICENTRAL	C05	6,8	9,3	8,05	**96,6**
SEMICENTRAL	C06	6,2	8,6	7,4	**88,8**
SEMICENTRAL	C07	6,2	9,2	7,7	**92,4**
SEMICENTRAL	C08	6,8	8,6	7,7	**92,4**
SEMICENTRAL	C09	6,2	8,4	7,3	**87,6**
SEMICENTRAL	C10	6,2	8,6	7,4	**88,8**
SEMICENTRAL	C11	6,2	8	7,1	**85,2**
SEMICENTRAL	C12	7	10	8,5	**102**
PERIPHERAL	D01	5	6,5	5,75	**69**
PERIPHERAL	D02	4,6	6,4	5,5	**66**
PERIPHERAL	D03	4,5	5,8	5,15	**61,8**
PERIPHERAL	D04	4,4	5,6	5	**60**
PERIPHERAL	D05	5	6,8	5,9	**70,8**
PERIPHERAL	D06	4,8	6,6	5,7	**68,4**
PERIPHERAL	D07	5,4	7,2	6,3	**75,6**
PERIPHERAL	D08	4,8	6,8	5,8	**69,6**
PERIPHERAL	D09	5	7,5	6,25	**75**
PERIPHERAL	D10	4,7	6,2	5,45	**65,4**
PERIPHERAL	D11	4	6	5	**60**
PERIPHERAL	D12	4	6	5	**60**
PERIPHERAL	D13	3,7	4,8	4,25	**51**
PERIPHERAL	D14	4,7	6,5	5,6	**67,2**
PERIPHERAL	D15	3,8	5,3	4,55	**54,6**
PERIPHERAL	D16	3,6	4,8	4,2	**50,4**
PERIPHERAL	D17	5	6,6	5,8	**69,6**
PERIPHERAL	D18	5,3	6,8	6,05	**72,6**
PERIPHERAL	D19	4,3	6	5,15	**61,8**
PERIPHERAL	D20	4,8	7,2	6	**72**
PERIPHERAL	D21	4,2	6	5,1	**61,2**
PERIPHERAL	D22	4	5,8	4,9	**58,8**
PERIPHERAL	D23	4,8	6,5	5,65	**67,8**
PERIPHERAL	D24	4,5	6	5,25	**63**
PERIPHERAL	D25	3,8	5,6	4,7	**56,4**
PERIPHERAL	D26	4,2	5,6	4,9	**58,8**
PERIPHERAL	D27	4,6	6,8	5,7	**68,4**
PERIPHERAL	D28	4,4	6,2	5,3	**63,6**
PERIPHERAL	D29	4,3	5,8	5,05	**60,6**

RESIDENTIAL 2014		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B02	14	18	16	**192**
CENTRAL	B03	16	20	18	**216**
CENTRAL	B04	15	19	17	**204**
CENTRAL	B05	15	18	16,5	**198**
CENTRAL	B06	10	13	11,5	**138**
CENTRAL	B12	22,7	30	26,35	**316,2**
CENTRAL	B13	15	19	17	**204**
CENTRAL	B15	18	23	20,5	**246**
CENTRAL	B16	18	22	20	**240**
SEMICENTRAL	C01	6,5	9	7,75	**93**
SEMICENTRAL	C02	11	13	12	**144**
SEMICENTRAL	C06	7,5	10	8,75	**105**
SEMICENTRAL	C08	7,3	10	8,65	**103,8**
SEMICENTRAL	C09	10,5	12	11,25	**135**
SEMICENTRAL	C12	12	17	14,5	**174**
SEMICENTRAL	C13	23	34	28,5	**342**
SEMICENTRAL	C15	6	8	7	**84**
PERIPHERAL	D01	6	7,8	6,9	**82,8**
PERIPHERAL	D02	6	7	6,5	**78**
PERIPHERAL	D04	6	7	6,5	**78**
PERIPHERAL	D05	5,5	7,5	6,5	**78**
PERIPHERAL	D06	6	7,5	6,75	**81**
PERIPHERAL	D07	6,7	7,8	7,25	**87**
PERIPHERAL	D09	7	9	8	**96**
PERIPHERAL	D10	7,2	8,2	7,7	**92,4**
PERIPHERAL	D12	7,5	10,2	8,85	**106,2**
PERIPHERAL	D13	4,7	6,2	5,45	**65,4**
PERIPHERAL	D15	6	7	6,5	**78**
PERIPHERAL	D16	5,5	7	6,25	**75**
PERIPHERAL	D18	6	7	6,5	**78**
PERIPHERAL	D20	7	9	8	**96**
PERIPHERAL	D21	8,5	10,5	9,5	**114**
PERIPHERAL	D24	9,5	11,5	10,5	**126**
PERIPHERAL	D25	7,4	8,8	8,1	**97,2**
PERIPHERAL	D28	8,5	10,5	9,5	**114**

COMMERCIAL 2014		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B02	14,2	21	17,6	**211,2**
CENTRAL	B03	16	23	19,5	**234**
CENTRAL	B04	16	21	18,5	**222**
CENTRAL	B05	10	14,8	12,4	**148,8**
CENTRAL	B06	12,5	18	15,25	**183**
CENTRAL	B12	40	60	50	**600**
CENTRAL	B13	19	26	22,5	**270**
CENTRAL	B15	22	32	27	**324**
CENTRAL	B16	20	32	26	**312**
SEMICENTRAL	C01	11	15	13	**156**
SEMICENTRAL	C02	13,5	18	15,75	**189**
SEMICENTRAL	C06	10	14,5	12,25	**147**
SEMICENTRAL	C08	10	14,5	12,25	**147**
SEMICENTRAL	C09	10,5	15,5	13	**156**
SEMICENTRAL	C12	10,5	14	12,25	**147**
SEMICENTRAL	C15	9	13	11	**132**
PERIPHERAL	D01	6	7,8	6,9	**82,8**
PERIPHERAL	D02	6	7	6,5	**78**
PERIPHERAL	D04	6	7	6,5	**78**
PERIPHERAL	D05	5,5	7,5	6,5	**78**
PERIPHERAL	D06	6	7,5	6,75	**81**
PERIPHERAL	D07	6,7	7,8	7,25	**87**
PERIPHERAL	D09	7	9	8	**96**
PERIPHERAL	D10	7,2	8,2	7,7	**92,4**
PERIPHERAL	D12	7,5	10,2	8,85	**106,2**
PERIPHERAL	D13	4,7	6,2	5,45	**65,4**
PERIPHERAL	D15	6	7	6,5	**78**
PERIPHERAL	D16	5,5	7	6,25	**75**
PERIPHERAL	D18	6	7	6,5	**78**
PERIPHERAL	D20	7	9	8	**96**
PERIPHERAL	D21	8,5	10,5	9,5	**114**
PERIPHERAL	D24	9,5	11,5	10,5	**126**
PERIPHERAL	D25	7,4	8,8	8,1	**97,2**
PERIPHERAL	D28	8,5	10,5	9,5	**114**

PRODUCTIVE 2014		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B02	8	9,8	8,9	**106,8**
CENTRAL	B03	10,2	12	11,1	**133,2**
CENTRAL	B04	10,3	12,5	11,4	**136,8**
CENTRAL	B05	7	10	8,5	**102**
CENTRAL	B06	7	9	8	**96**
CENTRAL	B12	16	21	18,5	**222**
CENTRAL	B13	12	15	13,5	**162**
CENTRAL	B15	12,5	15	13,75	**165**
CENTRAL	B16	12,5	15	13,75	**165**
SEMICENTRAL	C01	5,5	7,5	6,5	**78**
SEMICENTRAL	C02	5,8	8	6,9	**82,8**
SEMICENTRAL	C06	6,2	8,6	7,4	**88,8**
SEMICENTRAL	C08	6	8	7	**84**
SEMICENTRAL	C09	6,2	8,4	7,3	**87,6**
SEMICENTRAL	C12	7	10	8,5	**102**
SEMICENTRAL	C15	7	10	8,5	**102**
PERIPHERAL	D01	5	6,5	5,75	**69**
PERIPHERAL	D02	4,6	6,4	5,5	**66**
PERIPHERAL	D04	4,4	5,6	5	**60**
PERIPHERAL	D05	5	6,8	5,9	**70,8**
PERIPHERAL	D06	4,8	6,6	5,7	**68,4**
PERIPHERAL	D07	5,4	7,2	6,3	**75,6**
PERIPHERAL	D09	5	7,5	6,25	**75**
PERIPHERAL	D10	4,7	6,2	5,45	**65,4**
PERIPHERAL	D12	4	6	5	**60**
PERIPHERAL	D13	3,7	4,8	4,25	**51**
PERIPHERAL	D15	3,8	5,3	4,55	**54,6**
PERIPHERAL	D16	3,6	4,8	4,2	**50,4**
PERIPHERAL	D18	5,3	6,8	6,05	**72,6**
PERIPHERAL	D20	4,8	7,2	6	**72**
PERIPHERAL	D21	4,2	6	5,1	**61,2**
PERIPHERAL	D24	4,5	6	5,25	**63**
PERIPHERAL	D25	3,8	5,6	4,7	**56,4**
PERIPHERAL	D28	4,4	6,2	5,3	**63,6**

RESIDENTIAL 2015		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B12	22,7	29	25,85	**310,2**
CENTRAL	B13	15,5	17,5	16,5	**198**
CENTRAL	B15	19	22	20,5	**246**
CENTRAL	B16	19	22	20,5	**246**
CENTRAL	B17	13	17	15	**180**
CENTRAL	B18	21	25	23	**276**
CENTRAL	B19	15	19	17	**204**
CENTRAL	B20	15,5	18,5	17	**204**
CENTRAL	B21	12	14	13	**156**
SEMICENTRAL	C12	13	17	15	**180**
SEMICENTRAL	C13	21	32	26,5	**318**
SEMICENTRAL	C14	29	43	36	**432**
SEMICENTRAL	C15	6,5	8,5	7,5	**90**
SEMICENTRAL	C16	6,5	9,5	8	**96**
SEMICENTRAL	C17	11	12,5	11,75	**141**
SEMICENTRAL	C18	8	10,5	9,25	**111**
SEMICENTRAL	C19	8	10,5	9,25	**111**
SEMICENTRAL	C20	10,5	12	11,25	**135**
PERIPHERAL	D10	7,2	8,2	7,7	**92,4**
PERIPHERAL	D12	7,5	10	8,75	**105**
PERIPHERAL	D13	5,2	6,5	5,85	**70,2**
PERIPHERAL	D15	6	7	6,5	**78**
PERIPHERAL	D16	5,5	7,3	6,4	**76,8**
PERIPHERAL	D18	6	7	6,5	**78**
PERIPHERAL	D20	7	9	8	**96**
PERIPHERAL	D21	8,2	10,3	9,25	**111**
PERIPHERAL	D24	7,5	10	8,75	**105**
PERIPHERAL	D25	7,4	8,6	8	**96**
PERIPHERAL	D28	8,5	10,5	9,5	**114**
PERIPHERAL	D30	6	7,8	6,9	**82,8**
PERIPHERAL	D31	5,5	7,3	6,4	**76,8**
PERIPHERAL	D32	5,5	7	6,25	**75**
PERIPHERAL	D33	6,1	7,5	6,8	**81,6**
PERIPHERAL	D34	6	7,5	6,75	**81**
PERIPHERAL	D35	6,5	7,8	7,15	**85,8**
PERIPHERAL	D36	7	9	8	**96**

COMMERCIAL 2015		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B12	41,5	60,5	51	**612**
CENTRAL	B13	19	27,5	23,25	**279**
CENTRAL	B15	21,5	29,5	25,5	**306**
CENTRAL	B16	20	28	24	**288**
CENTRAL	B17	15	22	18,5	**222**
CENTRAL	B18	17	23,5	20,25	**243**
CENTRAL	B19	16	22	19	**228**
CENTRAL	B20	13,5	17	15,25	**183**
CENTRAL	B21	13	18,5	15,75	**189**
SEMICENTRAL	C12	9,5	14	11,75	**141**
SEMICENTRAL	C15	10	13,5	11,75	**141**
SEMICENTRAL	C16	11,5	14,5	13	**156**
SEMICENTRAL	C17	13,5	18	15,75	**189**
SEMICENTRAL	C18	8	17	12,5	**150**
SEMICENTRAL	C19	10	14,5	12,25	**147**
SEMICENTRAL	C20	10,5	15,5	13	**156**
PERIPHERAL	D10	6	9,8	7,9	**94,8**
PERIPHERAL	D12	6,8	9,8	8,3	**99,6**
PERIPHERAL	D13	6,3	8,3	7,3	**87,6**
PERIPHERAL	D15	6,8	9,8	8,3	**99,6**
PERIPHERAL	D16	7	10,8	8,9	**106,8**
PERIPHERAL	D18	6,3	8,2	7,25	**87**
PERIPHERAL	D20	6	8	7	**84**
PERIPHERAL	D21	8	11	9,5	**114**
PERIPHERAL	D24	7	11,2	9,1	**109,2**
PERIPHERAL	D25	6,5	10	8,25	**99**
PERIPHERAL	D28	6	8	7	**84**
PERIPHERAL	D30	5,4	7,6	6,5	**78**
PERIPHERAL	D31	7,3	10	8,65	**103,8**
PERIPHERAL	D32	7	8,5	7,75	**93**
PERIPHERAL	D33	6,5	9,1	7,8	**93,6**
PERIPHERAL	D34	7,5	10	8,75	**105**
PERIPHERAL	D35	7	10	8,5	**102**
PERIPHERAL	D36	7,5	11	9,25	**111**

PRODUCTIVE 2015		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B12	15	20,5	17,75	**213**
CENTRAL	B13	12	15	13,5	**162**
CENTRAL	B15	12	15	13,5	**162**
CENTRAL	B16	12	15	13,5	**162**
CENTRAL	B17	8	9,8	8,9	**106,8**
CENTRAL	B18	10	12	11	**132**
CENTRAL	B19	10,3	12,5	11,4	**136,8**
CENTRAL	B20	6	9	7,5	**90**
CENTRAL	B21	7	9	8	**96**
SEMICENTRAL	C12	7	10	8,5	**102**
SEMICENTRAL	C15	7	10	8,5	**102**
SEMICENTRAL	C16	5,5	8	6,75	**81**
SEMICENTRAL	C17	5,5	7,5	6,5	**78**
SEMICENTRAL	C18	6,2	8,3	7,25	**87**
SEMICENTRAL	C19	5,8	7,8	6,8	**81,6**
SEMICENTRAL	C20	6,2	8,4	7,3	**87,6**
PERIPHERAL	D10	4,5	5,2	4,85	**58,2**
PERIPHERAL	D12	4	5,8	4,9	**58,8**
PERIPHERAL	D13	3,7	4,8	4,25	**51**
PERIPHERAL	D15	3,8	5,3	4,55	**54,6**
PERIPHERAL	D16	3,6	4,8	4,2	**50,4**
PERIPHERAL	D18	5,2	6	5,6	**67,2**
PERIPHERAL	D20	4,5	6,5	5,5	**66**
PERIPHERAL	D21	4,2	6	5,1	**61,2**
PERIPHERAL	D24	4	5,5	4,75	**57**
PERIPHERAL	D25	3,8	5,6	4,7	**56,4**
PERIPHERAL	D28	3,5	5,5	4,5	**54**
PERIPHERAL	D30	4,8	6	5,4	**64,8**
PERIPHERAL	D31	4,6	6,4	5,5	**66**
PERIPHERAL	D32	4,4	5,6	5	**60**
PERIPHERAL	D33	5	6,3	5,65	**67,8**
PERIPHERAL	D34	4,8	6,6	5,7	**68,4**
PERIPHERAL	D35	5	7,2	6,1	**73,2**
PERIPHERAL	D36	5	7,2	6,1	**73,2**

RESIDENTIAL 2016		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B12	22,7	29	25,85	**310,2**
CENTRAL	B13	15,5	17,5	16,5	**198**
CENTRAL	B15	18,5	21,5	20	**240**
CENTRAL	B16	19,5	22,3	20,9	**250,8**
CENTRAL	B17	12,9	16,2	14,55	**174,6**
CENTRAL	B18	15,5	21	18,25	**219**
CENTRAL	B19	15	18	16,5	**198**
CENTRAL	B20	15	18,2	16,6	**199,2**
CENTRAL	B21	12,3	14,2	13,25	**159**
SEMICENTRAL	C12	13	17	15	**180**
SEMICENTRAL	C13	21	32	26,5	**318**
SEMICENTRAL	C14	29	42	35,5	**426**
SEMICENTRAL	C15	7,2	8,3	7,75	**93**
SEMICENTRAL	C16	7,2	9,7	8,45	**101,4**
SEMICENTRAL	C17	11,3	12,3	11,8	**141,6**
SEMICENTRAL	C18	8,2	11	9,6	**115,2**
SEMICENTRAL	C19	8	10,5	9,25	**111**
SEMICENTRAL	C20	10	12	11	**132**
PERIPHERAL	D10	6,8	8,2	7,5	**90**
PERIPHERAL	D12	7,8	10,2	9	**108**
PERIPHERAL	D13	5,2	6,7	5,95	**71,4**
PERIPHERAL	D15	6	7	6,5	**78**
PERIPHERAL	D16	5,5	7,5	6,5	**78**
PERIPHERAL	D18	6	6,8	6,4	**76,8**
PERIPHERAL	D20	7	9	8	**96**
PERIPHERAL	D21	8,2	10,3	9,25	**111**
PERIPHERAL	D24	7,1	9,6	8,35	**100,2**
PERIPHERAL	D25	7	8,3	7,65	**91,8**
PERIPHERAL	D28	8,5	10,5	9,5	**114**
PERIPHERAL	D30	6	7,8	6,9	**82,8**
PERIPHERAL	D31	5,2	7,3	6,25	**75**
PERIPHERAL	D32	5,5	7	6,25	**75**
PERIPHERAL	D33	6,1	7,5	6,8	**81,6**
PERIPHERAL	D34	6	7,5	6,75	**81**
PERIPHERAL	D35	6,5	7,8	7,15	**85,8**
PERIPHERAL	D36	7	9	8	**96**

COMMERCIAL 2016		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B12	41,8	58,2	50	**600**
CENTRAL	B13	19,2	27,8	23,5	**282**
CENTRAL	B15	21,5	29	25,25	**303**
CENTRAL	B16	19,2	27,2	23,2	**278,4**
CENTRAL	B17	15	21,8	18,4	**220,8**
CENTRAL	B18	17	24	20,5	**246**
CENTRAL	B19	16	21,8	18,9	**226,8**
CENTRAL	B20	13,5	17,2	15,35	**184,2**
CENTRAL	B21	13,8	17,2	15,5	**186**
SEMICENTRAL	C12	9,5	14	11,75	**141**
SEMICENTRAL	C15	11,2	13,5	12,35	**148,2**
SEMICENTRAL	C16	11,3	14,3	12,8	**153,6**
SEMICENTRAL	C17	13,3	17,8	15,55	**186,6**
SEMICENTRAL	C18	8	15	11,5	**138**
SEMICENTRAL	C19	10	14,5	12,25	**147**
SEMICENTRAL	C20	10,5	15,5	13	**156**
PERIPHERAL	D10	6	9,8	7,9	**94,8**
PERIPHERAL	D12	6,8	9,8	8,3	**99,6**
PERIPHERAL	D13	6,3	8,3	7,3	**87,6**
PERIPHERAL	D15	6,5	9,5	8	**96**
PERIPHERAL	D16	7	10,8	8,9	**106,8**
PERIPHERAL	D18	6,3	8,2	7,25	**87**
PERIPHERAL	D20	6	8	7	**84**
PERIPHERAL	D21	7,8	10,7	9,25	**111**
PERIPHERAL	D24	6,8	11	8,9	**106,8**
PERIPHERAL	D25	6,5	10	8,25	**99**
PERIPHERAL	D28	6	8	7	**84**
PERIPHERAL	D30	5,4	7,6	6,5	**78**
PERIPHERAL	D31	7,5	10,5	9	**108**
PERIPHERAL	D32	7	8,5	7,75	**93**
PERIPHERAL	D33	6,5	9,1	7,8	**93,6**
PERIPHERAL	D34	7,5	10	8,75	**105**
PERIPHERAL	D35	7	10	8,5	**102**
PERIPHERAL	D36	7,5	11	9,25	**111**

PRODUCTIVE 2016		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B12	15	20,5	17,75	**213**
CENTRAL	B13	12	15	13,5	**162**
CENTRAL	B15	12	15	13,5	**162**
CENTRAL	B16	12	15	13,5	**162**
CENTRAL	B17	8	9,8	8,9	**106,8**
CENTRAL	B18	10	12	11	**132**
CENTRAL	B19	10	12,5	11,25	**135**
CENTRAL	B20	5,8	9	7,4	**88,8**
CENTRAL	B21	6,8	9	7,9	**94,8**
SEMICENTRAL	C12	7	9,8	8,4	**100,8**
SEMICENTRAL	C15	7	9	8	**96**
SEMICENTRAL	C16	5,5	8	6,75	**81**
SEMICENTRAL	C17	5,5	7,5	6,5	**78**
SEMICENTRAL	C18	6,2	8,1	7,15	**85,8**
SEMICENTRAL	C19	5,8	7,8	6,8	**81,6**
SEMICENTRAL	C20	6,2	8,4	7,3	**87,6**
PERIPHERAL	D10	4,5	5,2	4,85	**58,2**
PERIPHERAL	D12	4	5,8	4,9	**58,8**
PERIPHERAL	D13	3,7	4,8	4,25	**51**
PERIPHERAL	D15	3,8	5,3	4,55	**54,6**
PERIPHERAL	D16	3,6	4,8	4,2	**50,4**
PERIPHERAL	D18	5,2	6	5,6	**67,2**
PERIPHERAL	D20	4,5	6,5	5,5	**66**
PERIPHERAL	D21	4,5	6	5,25	**63**
PERIPHERAL	D24	4	5	4,5	**54**
PERIPHERAL	D25	3,2	4,5	3,85	**46,2**
PERIPHERAL	D28	3,5	5,5	4,5	**54**
PERIPHERAL	D30	4,8	6	5,4	**64,8**
PERIPHERAL	D31	4,6	6,4	5,5	**66**
PERIPHERAL	D32	4,4	5,6	5	**60**
PERIPHERAL	D33	5	6,3	5,65	**67,8**
PERIPHERAL	D34	4,5	6	5,25	**63**
PERIPHERAL	D35	5	7,2	6,1	**73,2**
PERIPHERAL	D36	5	7,2	6,1	**73,2**

RESIDENTIAL 2017		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B12	24	30	27	**324**
CENTRAL	B13	16,5	18	17,25	**207**
CENTRAL	B15	18,5	21,5	20	**240**
CENTRAL	B16	19,3	22	20,65	**247,8**
CENTRAL	B17	12,9	16,2	14,55	**174,6**
CENTRAL	B18	15,5	20,5	18	**216**
CENTRAL	B19	15	19	17	**204**
CENTRAL	B20	15	17,5	16,25	**195**
CENTRAL	B21	11,8	13,5	12,65	**151,8**
SEMICENTRAL	C12	13	17	15	**180**
SEMICENTRAL	C13	20	32	26	**312**
SEMICENTRAL	C14	28	42	35	**420**
SEMICENTRAL	C15	7,3	8,5	7,9	**94,8**
SEMICENTRAL	C16	7,2	10	8,6	**103,2**
SEMICENTRAL	C17	11,3	12,3	11,8	**141,6**
SEMICENTRAL	C18	8,5	11,2	9,85	**118,2**
SEMICENTRAL	C19	8	10,7	9,35	**112,2**
SEMICENTRAL	C20	10	12,5	11,25	**135**
PERIPHERAL	D10	6,8	8,2	7,5	**90**
PERIPHERAL	D12	8	10,2	9,1	**109,2**
PERIPHERAL	D13	5,2	6,7	5,95	**71,4**
PERIPHERAL	D15	6	7	6,5	**78**
PERIPHERAL	D16	5,5	8	6,75	**81**
PERIPHERAL	D18	5,6	7	6,3	**75,6**
PERIPHERAL	D20	7,4	9	8,2	**98,4**
PERIPHERAL	D21	8	10	9	**108**
PERIPHERAL	D24	7,1	9,6	8,35	**100,2**
PERIPHERAL	D25	6,5	8	7,25	**87**
PERIPHERAL	D28	8,5	10,5	9,5	**114**
PERIPHERAL	D30	6	8	7	**84**
PERIPHERAL	D31	5,2	7,5	6,35	**76,2**
PERIPHERAL	D32	5,5	7,5	6,5	**78**
PERIPHERAL	D33	6,1	7,7	6,9	**82,8**
PERIPHERAL	D34	6	7,8	6,9	**82,8**
PERIPHERAL	D35	6,5	7,8	7,15	**85,8**
PERIPHERAL	D36	7	9	8	**96**

COMMERCIAL 2017		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B12	41	56	48,5	**582**
CENTRAL	B13	18,2	28,5	23,35	**280,2**
CENTRAL	B15	21,8	29,5	25,65	**307,8**
CENTRAL	B16	19	27	23	**276**
CENTRAL	B17	16	21	18,5	**222**
CENTRAL	B18	17,2	24	20,6	**247,2**
CENTRAL	B19	16,2	22	19,1	**229,2**
CENTRAL	B20	14	18	16	**192**
CENTRAL	B21	13,7	17,2	15,45	**185,4**
SEMICENTRAL	C12	10	15	12,5	**150**
SEMICENTRAL	C15	10,3	14	12,15	**145,8**
SEMICENTRAL	C16	11,3	14,3	12,8	**153,6**
SEMICENTRAL	C17	12	17,8	14,9	**178,8**
SEMICENTRAL	C18	8,5	15	11,75	**141**
SEMICENTRAL	C19	9,2	14,5	11,85	**142,2**
SEMICENTRAL	C20	10,5	15,5	13	**156**
PERIPHERAL	D10	6	9,8	7,9	**94,8**
PERIPHERAL	D12	6,5	9,8	8,15	**97,8**
PERIPHERAL	D13	6	8,3	7,15	**85,8**
PERIPHERAL	D15	6,5	9,5	8	**96**
PERIPHERAL	D16	7	10,8	8,9	**106,8**
PERIPHERAL	D18	6	8	7	**84**
PERIPHERAL	D20	6	7,6	6,8	**81,6**
PERIPHERAL	D21	7	10,2	8,6	**103,2**
PERIPHERAL	D24	6,8	11	8,9	**106,8**
PERIPHERAL	D25	6	9	7,5	**90**
PERIPHERAL	D28	5,5	7,5	6,5	**78**
PERIPHERAL	D30	5,4	7,6	6,5	**78**
PERIPHERAL	D31	7,5	10,5	9	**108**
PERIPHERAL	D32	7	8,5	7,75	**93**
PERIPHERAL	D33	6,5	9,1	7,8	**93,6**
PERIPHERAL	D34	7,5	10	8,75	**105**
PERIPHERAL	D35	7	10	8,5	**102**
PERIPHERAL	D36	7,5	11	9,25	**111**

PRODUCTIVE 2017		€/SM/MONTH			€/SM/YEAR
AREA	CODE	MIN	MAX	AVERAGE	
CENTRAL	B12	15	20,5	17,75	**213**
CENTRAL	B13	12	15	13,5	**162**
CENTRAL	B15	11	14	12,5	**150**
CENTRAL	B16	12	15	13,5	**162**
CENTRAL	B17	8	9,8	8,9	**106,8**
CENTRAL	B18	10	12	11	**132**
CENTRAL	B19	9,2	12,5	10,85	**130,2**
CENTRAL	B20	5,8	9	7,4	**88,8**
CENTRAL	B21	6,8	9	7,9	**94,8**
SEMICENTRAL	C12	7	9,8	8,4	**100,8**
SEMICENTRAL	C15	7	9	8	**96**
SEMICENTRAL	C16	5,5	8	6,75	**81**
SEMICENTRAL	C17	5,5	7,5	6,5	**78**
SEMICENTRAL	C18	5,8	8	6,9	**82,8**
SEMICENTRAL	C19	5,8	7,8	6,8	**81,6**
SEMICENTRAL	C20	6,2	8,4	7,3	**87,6**
PERIPHERAL	D10	4,5	5,2	4,85	**58,2**
PERIPHERAL	D12	4	5,8	4,9	**58,8**
PERIPHERAL	D13	3,7	4,8	4,25	**51**
PERIPHERAL	D15	3,8	5,3	4,55	**54,6**
PERIPHERAL	D16	3,6	4,8	4,2	**50,4**
PERIPHERAL	D18	4,5	6	5,25	**63**
PERIPHERAL	D20	4,5	5,8	5,15	**61,8**
PERIPHERAL	D21	4,5	6	5,25	**63**
PERIPHERAL	D24	4	5	4,5	**54**
PERIPHERAL	D25	3,2	4,5	3,85	**46,2**
PERIPHERAL	D28	3,5	5,5	4,5	**54**
PERIPHERAL	D30	4,5	5,5	5	**60**
PERIPHERAL	D31	4,6	6,4	5,5	**66**
PERIPHERAL	D32	4,4	5,6	5	**60**
PERIPHERAL	D33	5	6,3	5,65	**67,8**
PERIPHERAL	D34	4,5	6	5,25	**63**
PERIPHERAL	D35	5	7,2	6,1	**73,2**
PERIPHERAL	D36	5	7,2	6,1	**73,2**

3. Interview to a Real Estate Manager of the holding Inditex, realized by the students *(page 79)*

Question 1:

Through a market research on the rental of real estate in Milan, is it possible to note that the competition is increasingly tight and, as a result, the rents are always higher. Given your practical experience, do you think it represents the real situation?

- *"Yes, in the last few years the budget allocated to expenses for commercial space rentals has increased considerably; rents represent one of the biggest expenses for a brand. However, the need to locate in strategic areas forces us to pay these figures. It is the law of the market".*

Question 2:

How did you react to this price increase?

- *"We opted for internal reorganizations, we tried to optimize every step of the supply chain, so to reduce costs and obtain the necessary budgets for strategic locations. Of course, our Retail expansion strategy has also suffered, having to adapt to these cost increases".*

Question 3:

How important is for you to maintain your stores in central and high-density areas?

- *"Essential, all the Inditex stores are located in important commercial areas, this allows us to maximize revenues. In addition to this, the care of the store itself is also of primary importance; each of the Inditex brands has a distinctive character, both in the physical stores and on the online platforms".*

Question 4:

Which is the biggest complication in a store? Both in terms of management and cost.

- *"In a sector like ours, the one of fast fashion, the most complicated area is without any doubt represented by the warehouse. Our stores daily sell a very high quantity of products, which requires a constant reload of products in the sales area and consequently the need to have a very large and organized warehouse. It therefore represents a high cost also in terms of rents".*

Question 5:

Basing on what you said before, which solutions have you implemented for warehouse management and optimization? What were the results?

- *"We have reduced the size of the warehouse through a greater frequency of planned shipments, so to reduce the level of stock in the individual stores. However, this solution presents some cons; eventual problems in the shipments have generated stock-out situations, in addition to the fact that the total amount of the deliveries represents a huge sum. Furthermore, the organization is more complicated because a worker must concentrate on managing the orders received more frequently".*

Question 6:

In a field so competitive and saturated as that of fashion, what can be a strategy to emerge?

- *"A good way to emerge is to not just sell products to customers, but real experiences. The aim must be to arouse interest, stimulating the customer's willingness to buy".*

Question 7:

Converting the stores in more dynamic and innovative environments could arouse this interest?

- *"Of course, distorting what is the collective imagination of store can generate excellent results, especially for a Holding like Inditex because the brands it is made up of have a young and dynamic clientele, which is more inclined to accept changes.*

Young people represent an important and lasting market, staying in touch with them is essential, the H&M case shows exactly it; this brand is facing a negative trend caused by the inability to manage generational turnover".

Question 8:

What is your relationship with new technologies?

- *"For us, technology is a fundamental point for our development; it is one of the elements that allows us to have a competitive advantage over our competitors.*

We always try to adopt innovations in advance with respect to the other market players, which often results very positive, an example is the recent adoption of interactive IPad in some stores of Zara, Bershka and Pull&Bear, which were much appreciated especially by new generations".

Question 9:

What is instead the consumer's reaction to the new technologies you have implemented?

- *"Surely there is to be considered a period of adaptation that leads to acting step by step, but we have found over the years that our clientele, being young, is having a time of adaptation to new technologies quite fast.*

Furthermore, we must consider that changes can lead to curiosity and therefore also be a way to advertise and make people talk about themselves".

Question 10:

What is the importance that you attribute to the online store and how does the brands manage their relationship with physical stores?

- *"The online market, especially in recent years, represents an important volume of sales, from a marginal window has become a real strategic weapon, for this reason we invest a lot on its development.*

For us it is essential that the customer recognizes the link between the online store and the physical store; our model provides for an integration between these two aspects, which must collaborate while maintaining the same line".

Question 11:

What will the future of the stores be like?

- *"Surely they will undergo enormous changes. Stores will be optimized in many ways, as well as in terms of space; they will be providers of experiences more than mere Retailers.*

It will be important to anticipate the needs of the client and be prepared".

Question 12:

If it were proposed a new model of store, digitalised, as an alternative to the classic ones, able to reduce the size lowering the rental costs for the used necessary surface, arousing both interest and a return of image for the company in terms of innovation, would you be interested?

- *"The experimentation of new models is one of the driving aspects of the company, the example of Zara in London shows it to us. We want to be the most innovative on the market and we have the means to do it. So, I would certainly say yes".*

RINGRAZIAMENTI