InnBosch
A crowdsourced platform for designers

Implementation of service system design into

design challenge platform for Bosch

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Abstract Italian

InnBosch è un servizio basato su concorsi banditi per mezzo di una piattaforma che si avvale delle competenze della design comunity, per incrementare la ricerca in ambito tecnologico e del design all'interno di Bosch.

InnBosch fornisce ai designer un sistema unico di competizione che offre la possibilità di raccogliere "punti innovazione" che permetteranno di stabilire future collaborazioni con Bosch, fornendo, sempre per mezzo di "sfide", un sistema utile ai dipartimenti interni (Bosch Business Unit e New Business Team) per trovare risposta alle loro esigenze.

Le Main Challenges hanno come obbiettivo la ricerca di nuovi prodotti, servizi, campi/aree di applicazione, tendenze di mercato e diversi tipi di soluzioni per i problemi esposti dal concorso.
Le VIP Challenges cercano soluzioni concrete attraverso la propria rete di designers e collaboratori.

Le Main Challenges hanno l'ulteriore funzione di permettere al Team InnBosch di raccogliere una determinata quantità di profili affidabili (attraverso i "punti innovazione" assegnati alla fine di ogni concorso) per poter poi creare delle collaborazioni con essi.
In questo modo le divisioni Bosch avranno accesso a un database di designers, suddiviso in modo da poter consentire la scelta del profilo più adatto al campo di competenza utile per determinate collaborazioni. Fattori determinanti di suddivisione saranno rappresentati dalle abilità, vicinanza al luogo in cui si svolgerà il progetto e i costi.

Una componente essenziale della piattaforma è costituita dall'offerta formativa generale.
Durante i vari concorsi verrà distribuito, a vari livelli, del materiale informativo sotto forma di articoli, pubblicazioni, documentazione inerente al concorso (descrizione di materiali o tecnologie), scambi di idee e feedback diretti, permettendo così al concorrente di apprendere oltre che partecipare; garantendo così una maggiore qualità degli elaborati.
Il sistema, inoltre, rafforza lo scambio di conoscenze fornendo sostegno al processo con materiale esclusivo di proprietà di Bosch.

Il sistema unisce le risorse distribuite dell'organizzazione, e segue le strategie di Bosch per il 2013. Peraltro il risultato complessivo integra una raccolta dinamica di elementi di service design all'interno del percorso costruito intorno ad una user experience qualitativa.

Abstract English

InnBosch is a service based on a platform that uses the expertise of the design communities to boost design and technology scouting within Bosch.

InnBosch gives designers a unique challenge system that offers the possibility to earn and gather innovations points while participating, and to subsequently translate the points into a close VIP partnership with Bosch . The challenges are the opportunity for internal partners (Bosch Business Units and New Business Teams) to give answer of their needs.

The 'Main Challenges' look for new products, services, opportunity field/areas, market trends and other different solutions and the 'VIP Challenges' offers very concrete solutions with a close network of designers/collaborators.

In order to launch a VIP Challenge the InnBosch team first have to collect a significant amount of trustful profiles to set down a partnership with. In this way Bosch divisions have access to a database of designers and can choose with whom to work, based on their skill, proximity and prices.

The general educational offer is also a core of the platform. Education is given in different ways and in different levels from idea exchange, feedback and guidance; to relevant papers and articles publications. The system also enhance knowledge exchange by supporting the process with Bosch exclusive material. InnBosch shows participants cutting edge technologies and production methods -available and open for Bosch- that could benefit designers intellectually and even economically. User Experience toolkits are also available for each project.

The system combines the distributed resources of the organization, and follows the Bosch strategies for 2013. Moreover, the overall result integrates a dynamic collection of service design elements within the customer journey, around a qualitative and integrated user experience.

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Preface

Between the 18th and the 19th century the substitution of the handcrafts for almost exclusive mechanical work took place. For the first time, mechanical movements (with handcrafts origins) created the possibility to ensure a time-constant result and streamline the manufacturing cycle. The industrial revolution led the path to 'Industrial Design': a particular way of planning an object and its production, characterized by the use of advanced technology and serial/mass production.[1] Thus, if an industrial designer is the person who 'plans', it is not ideal to do such an important task without following a methodology.

In 1919, Walter Gropius (1883-1969) supported that "only the several technical models of the artistic realization could be taught, not art itself... he said the Bauhaus work was to form a new type of creative artist, able to understand any kind of need; not because the person was prodigious, but because the person knew how to get closer to human needs by following a precise methodology". Later in 1971, Bruno Munari describes creativity as a productive capacity where 'fantasy'[2] and 'reason' could be linked. And because of this link, the obtained results were always right. Munari[3] also reassures that once designers have collected enough material, they would create solutions to an initial problematic with a strong and solid logic. In consequence, any time people face a problem of general matter that could be solved following a valuable methodology, they might be facing a design opportunity.

Technology and production had evolved, so had also the role of the industrial design. During the Bauhaus, design was the mediator between industrial production techniques and the morphology of goods[4]. Later on, in 1946, The Ulm school started to apply its design concept not only on products,

1   Pederbelli, Marilia. La Produzione di serie nell'artigianato e nell'industria. Branzi, Andrea. Capire il Design
2   Fantasy intended like a faculty of the soul that is able to create diverse mental images from those formed by reality
3   Munari, Bruno. Da Cosa Nasce Cosa
4   Branzi, Andrea. La Nascita dell'Industrial Design. Branzi, Andrea. Capire il Design

but also on marketing strategies, tools, transport and communication.[5] Moreover during the 50's, a micro-entrepreneurial spirit had awaken in Italy and most of the new companies were dedicated to the industrial manufacturing of new materials. The reinterpretation of everyday objects was smartly developed by designers exploring the limits and possibilities of the new materials. Designers became, strategic interlocutors of the small-medium-technological enterprises.[6]

Over the years, industrial designers continued to work closely with industries, generating products that innovatively responded to the market needs and the art technology. Nonetheless, in the past 30 years the scenery has changed. The adoption of computer technology in sectors like home appliances, surveillance systems and entertainment products, gave birth to the still developing and increasing phenomena of smart-interconnected objects.[7][8] Whereas smart objects were often managed by digital screens; new opportunities were open for aesthetics and functional experimentation. Different branches of design were created, such as Interaction Design [Royal College of Arts in 1990] and Service Design [Köln International School of Design in 1991; Politecnico di Milano in 2004], among others; and design became a 'problem solving discipline'.

Nowadays, the lines between design and other disciplines are slowly becoming more and more blurred, and as a result, its relationship with the industry had also changed: Designers are not only call to create single products but dynamic-innovative strategies (the product identity do not respond to functionality anymore rather than to the brand strategy) and to establish a direct contact with companies is really challenging, specially for new/young designer.

5   D'Alfonso, Maddalena. La Scuola di Ulm.Idem
6   Biamonti, Alessandro. La Rivoluzione delle Materie Plastiche e gli Oggetti Componibili. Idem
7   Camocini, Barbara. I Nuovi Elettrodomestici. Branzi, Idem
8   Branzi, Andrea. L'Eclissi degli Oggetti. Idem

" The third phase of globalization implies that not only countries and companies, but also individuals are under the power of global forces "

Social Silicon Valley Manifesto

Introduction
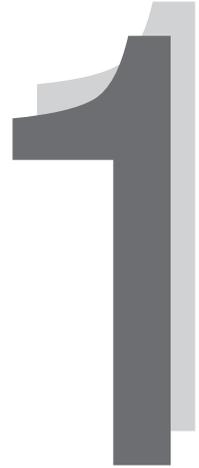
The project was initiated and developed during my one-year internship at the User Experience department (C/UX) in Robert Bosch GmbH in Leonberg, Germany. The project started as an opportunity to enhance design within the company and for doing so, attract and engage designers by creating a direct link to the company.

As most of the people know Robert Bosch GmbH is a multinational company, global leader supplier of technology and services (especially in the areas of consumer goods; building technology and automotive and industrial technology). Bosch usually out-stands in the market for its technological innovation, profound engineering expertise and product's quality; but despises these attributes the firm does not come up while referring to design. Therefore, since the beginning, the project pretended to explore new ways of implementing the concepts of Open Innovation, Crowd-sourcing and co-creation, as well as new financial models in order to reward successful participants, and increase their fellow's motivation.

Although the initial part of the project was developed completely under the firm's supervision and restrictions, the final outcome does not necessary reflect the the original design of the company. During the whole process I actively proposed and generated ideas that could respond to the original problematic, but also considering the benefits of the possible participants. Additionally, parts of the information cannot be revealed due to confidential data protection included on the collaboration agreement with Robert Bosch GmbH, C/UX department.

Lastly, in my opinion, what makes this project interesting is that it gave me the opportunities to be involved in such a big initiative and realize the internal working mechanisms of a big enterprise. It also gave me a great experience in my professional career and future goals.

Declaration of Intends
Design Process

As mentioned in the introduction, this thesis project was conceived while I was doing my internship at Bosch C/UX. During the internship, I had the opportunity to be part of the entirely design phase. My roll on the project was to focus on the service-system design ideation, and implementation.

The length of the project was about a year, during this period I was working with different C/UX team members, mostly management oriented, and occasionally having collaborations from other departments (Automotive-Aftermarket Open Innovation Platform, and Latin-America, India and Chinese New Business Teams, etc). This gave me the opportunity to get insights directly from similar-already-working initiatives, as well as the opinion of the possible internal clients.

Although the project was really narrowed at the beginning, the research held on Open Innovation practices and existing case studies allowed me to pose a wider focus of the problematic and to explore related topics like: user's motivation and technological and social background.

The project had some major changes during the entirely process, due to different company's restrictions and the several milestones for the approval stages. It was also very challenging to strategically find a solution that could attract designers, at the same time as keeping the Bosch values and reflecting the corporate image.

Currently the project's realization is in a discussion phase, which means that for a traditional company like Bosch, this could be such a breakthrough in the company's history.

Focus

The focus of the project is not just only about implementing Open Innovation practices into a service-system and creating a crowd-sourcing platform, but also about understanding the motivations that lead designers to participate in such initiatives. Simultaneously, I would like to explore ways to build a service that could make designers feel rewarded and value their professions.

However, I want like to state that although the studies of the new technologies and design practices is quite extensive, the aim is not to go into details but to understand the way that Internet and mass media influenced individuals, society and business environment, and created a design opportunity to be explored and developed. The actual goal is to produce a co-creation service in which the company not just only receive ideas from the crowd but also give knowledge, opportunities and fair treatment and payment to its users.

Influences

POLITECNICO DI MILANO
Product Service System Design

The multidisciplinary approach of Product Service System Design gave me a holistic point of view on how design in nowadays is extending beyond products, changing its emphasis from consumption oriented to service and system focused. PSSD conducted me to explore innovations from a more social-led approach and showed me how become a channel to direct people's ideas and to play an important role in how to give those ideas a good focus that can help to improve society.

Following this multidisciplinary and multicultural course I also learned to think of solutions that respond to unique and specific cases and scenarios; and to have into account that with endless connections and possibilities, systems can be more complex, but it does not mean that they require more complex technologies.

Finally, during my studies of PSSD I learned different methods and tools that support the design process and that gave me the expertise to visualize and establish how the different actors of a system work, and how they interact with different material and information flows.

BOSCH C/UX DEPARTMENT
User experience and user centered design approach

C/UX is the Bosch-internal innovation and human-centered design consultancy. It was established in 2010 to help different Bosch divisions, business units, and subsidiaries to create products and services with a human-centered approach, and to speed up the innovation and development process within the company.

C/UX taught me that User Experience helps understand better your user, extract opportunities out of user research, develop better products, services and therefore produce innovations.

As part of the firm's strategy, C/UX employees are outstanding professionals with lot of experience and different backgrounds (design, management, psychology, research, among others) and since the department is relatively new, the complete team was less than 40 people. The team was really welcoming and this gave us the chance to interact with each other, exchange knowledge and learn from different disciplines and design perspectives. Some of the senior designers had worked for companies like IDEO or Frog Design.

I learnt a lot professionally from the experience of being in such a great environment!

Products

Several Solutions

Services

Designer

Communi-cation

Systems

Interactions
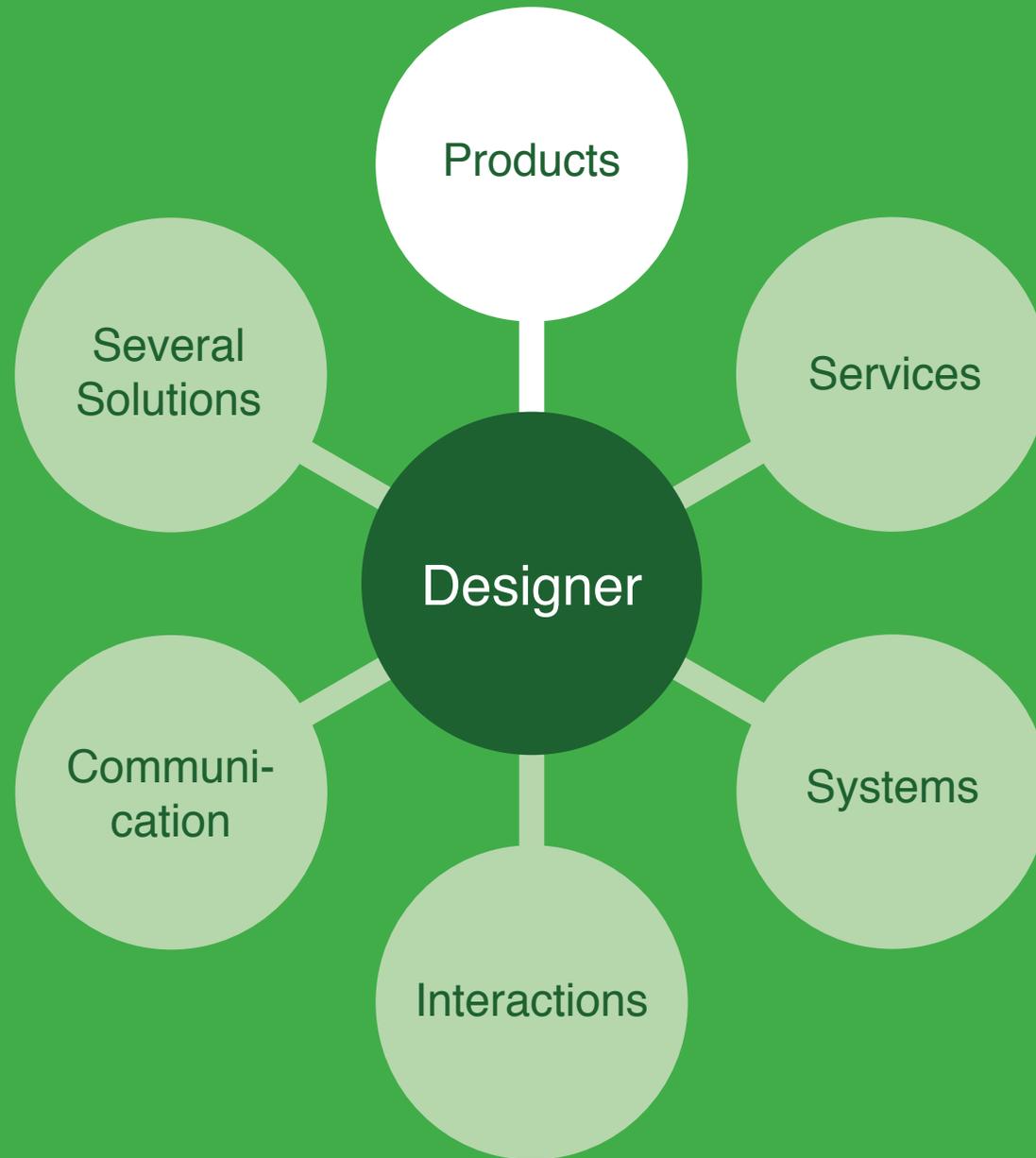
Observations

NEW ROLE OF DESIGN

Something that caught my attention -from the first moment and during the entire research- was the emerging trend on the design field which implies that designers are taking a new direction towards playing a facilitator or enabler role in the community.

It is a fact that our society in these days is constantly facing several important challenges in education, information access, health, growing population, sustainability, economic crisis, etc. Another fact is that many changes had occurred thanks to the development of new technologies that support and enhance social connections. More knowledge and technology are available for almost everyone; design is being done by amateurs -indeed everyone can be a designer nowadays.[9] These many changes have had a strong impact in the way how we perceive design and its purpose. As a result, designers started to re-discover their professions and focus not anymore only on objects, but also to engage in the design of interactions, communication, services and systems; since they somehow share the same process.

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9   For the purpose of this thesis I would consider this statement as a positive factor (like in the cases of social innovation, or product adaptations) but let's keep in mind that in the case where professional design is required this practice could turn into a really bad experience for both project's customer and final user.

SOLUTIONS RATHER THAN PRODUCTS

Another observation is based on the following problematic which demands a new type of answers from designers: design going from specifically consumer oriented to more social and service led.

Today companies have the challenge of going broad and social, to empower people and give access to those that before were impossible to reach. Radical innovation is rather done by the implementation of new technologies to re-define a traditional process, gather people together or create a new service rather than the design of a new product - although this last is still valid and very important.

Motivation

CONTEMPORANEOUS PHENOMENA

Across the project -especially the research, I realized that this topic is not saying something different from what most of us experience and see every day. It is not about creating a new statement but to observe and implement these big global trends.

The observation of the contemporaneous phenomena such as co-creation, user-led innovation, Open Innovation leads to changes in our daily life, but also in the way we think, create and design. Eventually, it is becoming more common to be part of a virtual community and be involved in one of these initiatives, not even knowing what they are about.

I think it is important to study these trends to help designers and companies to understand the direction in which society is moving towards, and to take advantage of it in order to facilitate innovation for the future.

SYNERGY

Besides just being the project for my internship I asked C/UX department weather I could use this topic for my thesis. I strongly believe that this synergy of efforts generated more and deeper knowledge and a better overall result for both parties.

CREATE OPPORTUNITIES

It is contradictory that in a world that seems to need more design thinking, currently designers are unemployed or having a hard time searching for a job. At the same time, lots of companies are producing innovation by listening to their customers-crowd. Customers design based on their own experience with the brands, and their expertise and in most cases guarantee the market success of products. Why if these people were design experts?

With this thesis I want to go a step further and create a good solution that do not just benefit one of the parties but instead offer a win-win situation for externals (designers) and the company (Robert Bosch GmbH).

Methods

The project was carried based on two similar and complementary approaches: Design Process and User Experience. While a Design Process provides a place for creative solutions of problems and generation of opportunities (especially in the earliest stages where maximum encouraged is required to have valid input), User Experience involves and listens to the user in order to explore new fields of product, services and interaction.

O.I

Crowdsourcing
Co-Creation

Motivations

Business

Technology
Society

RESEARCH & ANALYSIS

Design Process

IDEAS

DESIGN PHASE

PROTOTYE

RESULT

Prototype of
Service
Interviews

Device
Platform

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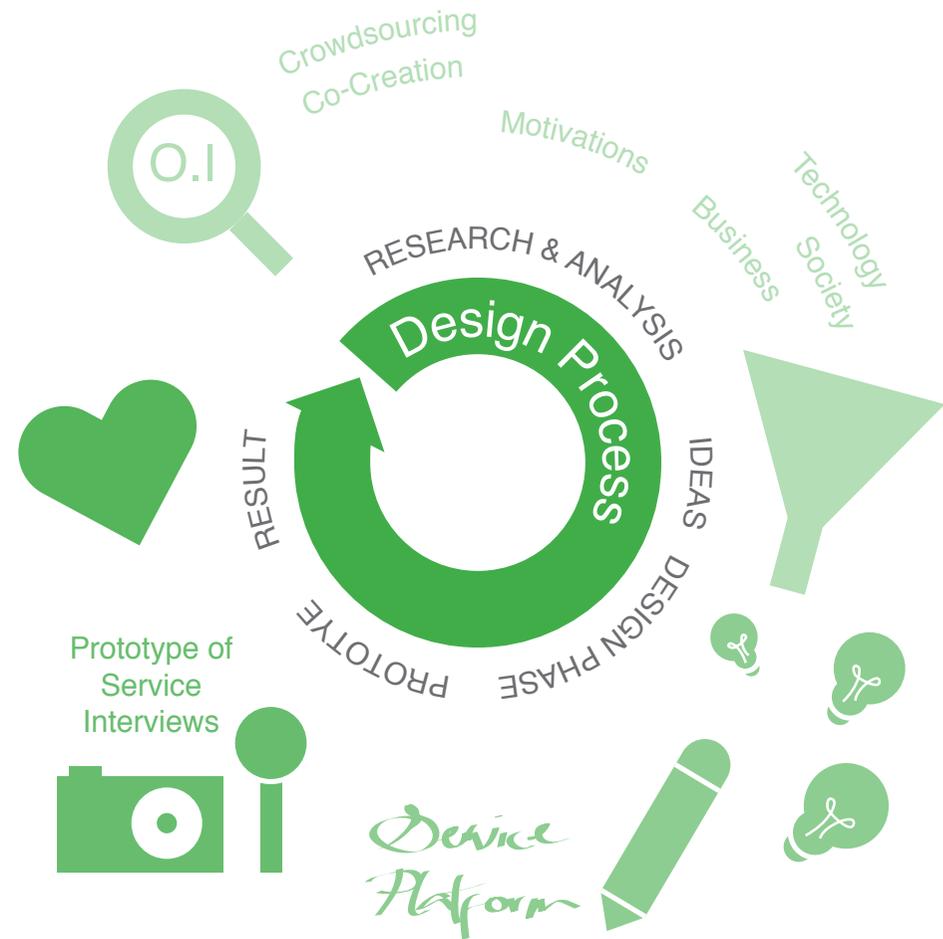
Design is not about expressing the designer's point of view, but it is very much about creation

Goodwin, Kim.

DESIGN PROCESS

Visualize concrete solutions is the core of design. Therefore following a design method means that is not just about the research but more about synthesize and understand the collected information in order to produce a concrete solution that solves a specific problem or respond to an opportunity, in this case the outcome should be a system-service.

The first part of the research was done on general Open Innovation practices in the market. The process continued with the analysis of the best practices, focused on crowd-sourcing examples and lastly on the co-creation examples in the design field. Later, the second part of the research was based on the multiple technological, social and business changes that generate and supported the Open Innovation practices. Additionally, more research was done and some interviews were held in order to understand the change on consumers, why people participates in online communities, why they generate content and which could be the possible motivations to participate in this initiative.

After the synthesis of the design research and the conclusions, I could found the design opportunities for this topic establish a direction and create a posture on the future designs. That was followed for the set up and analysis of the different requirements, creation of personas and finally the complete design of a service-system.

Creating great products involves many aspects ranging from developing advanced technology to convincing feature sets and much more. Even if these factors are – and will be – essential for a market success of a product or system, one more aspect started to be considered: user experience.

Although the term of User Experience has been associated mainly to software and information technology industries,[10] I believe that UX is the focus on the role of a product or a system plays in someone's life. The implementation of UX is really important to achieve a holistic approach when combined together with design research. UX research provides contextual awareness into user's lives, generating new design thinking and helping designers to evaluate and implement new concepts.

Due to the nature of the project, I was guided by Bosch UX approach. Next, I will explain the UX approach, as well as the principles for the Human Centered-Design process, followed throughout the project.

SPECIFY CONTEXT OF USE

ANALYSE REQUIREMENTS

DESIGN REALIZATION

TEST

ITERATE, WHERE APPROPRIATE

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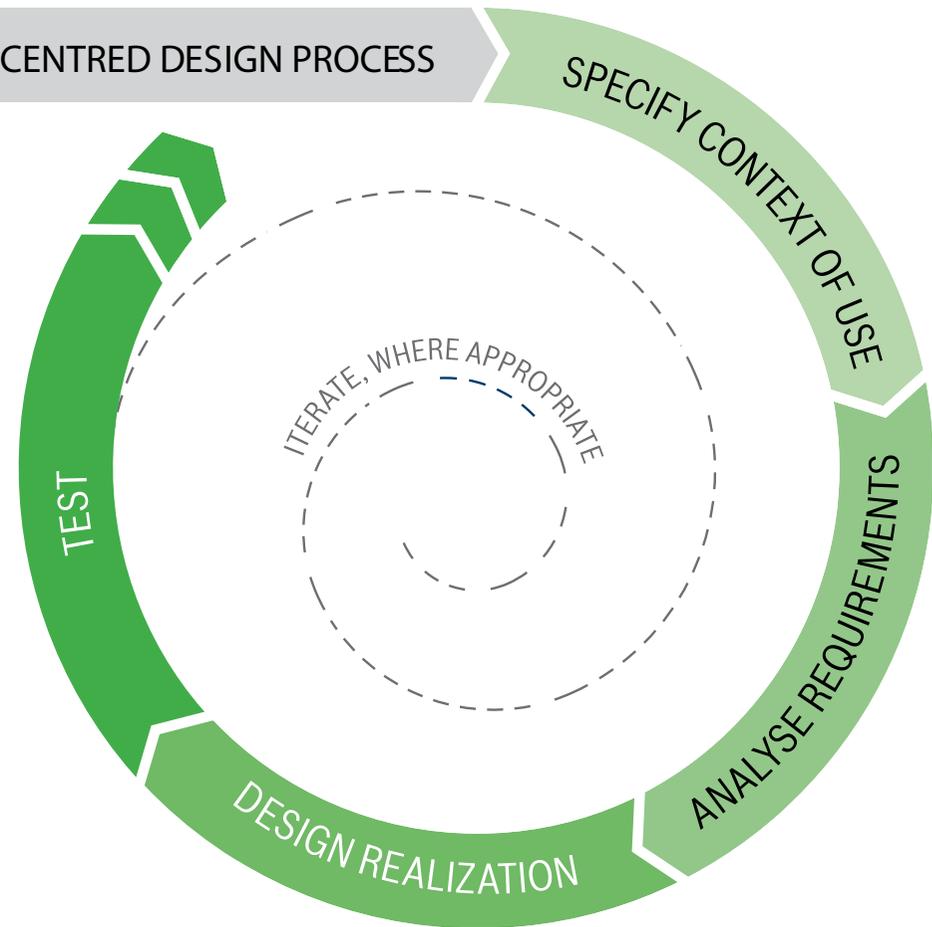
10   Kumar, Vijay. 101 Design Methods.

UX Process

The Bosch UX process is a user-centered design process customized to work within the context of other Bosch processes and its corporate culture. The UX process comprises the next phases:

1. Address the 5 UX target states

   » Usefulness

   » Ease-of-use

   » Joy-of-use

   » Aesthetics

   » Image-of-use

2. Consider the four steps of the UX reference process

   » General: Question - Problematic

   » Specify context of use
   Find out about the user groups, their needs and desires.

   » Analyze
   Identify those user requirements and opportunity areas that deliver a great user experience.

   » Design realization
   Several prototypes with different fidelities going from rough concepts to complete designs.

   » Visualization or prototyping

   » Test
   Testing the prototypes with actual users to obtain feedback on the design and additional user requirement. User Testing is an effective means to align design solutions with user requirements.

   The whole UX process is completed in iterations to refine and offering step-by-step.

3

Technological, Social and Business Background

In this chapter I will study the changes generated since the implementation of the Internet 2.0, how this technology allowed different social interactions and re-proposed business models, in order to finally observe the possibilities that such changes contribute into the project.

Internet 2.0

Internet or web 2.0 is the term used to describe the second stage in the evolution of the World Wide Web. This stage is characterized by the development of a set of new technologies that triggered different ways of interaction in the Web. These set of new technologies supported the development of more social Web activities such as online networking, user involvement, creativity and online collaboration[11], by incrementing the potential of ordinary people through vastly increasing the range of information that is freely available.

Since the implementation of the Internet 2.0, user's interaction changed from an almost passive user to a more active one. Previously, websites were simply another way to broadcast information to an audience rather than a mechanism through which audience members could talk back to the content producer and to each other[12]. It was the return of the oral tradition where people finally had the chance to express their thoughts to the world, and also, unleashed possibilities like easily share content, learn and create.

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11   ITG Research Team. Web 2.0 : Trends, Benefits and Risks.
12   Ryan, Johnny. A History of the Internet and the Digital Future.

Key Concepts and Features

USER-CREATED CONTENT AND INTERACTION

User-generated content refers to information and virtual material that is created by Internet users themselves. It describes all types of data produced and posted by users, such as messages, photos, movies or audio files thanks to technologies like wikis, blogs, video sharing and photo sharing.

Internet 2.0 supports simple and fast creation of new content which facilitates social exchange. Now people have the experience of sharing their own content and see what others have available for them. E.g. YouTube users watch more than 3 billion hours of video per month and nearly 4.5 million hours of video is uploaded.[13]

User-generated content holds many potential creative and economic benefits, like marketing research and product, services creation, among others. The picture refers to a fictional webserie produced by Francesco Capaldo, Simone Russo, Alfredo Felaco, launched in their youtube channel: The Jackal. Every episode is produced based on the best follower's comments. This is an amazing example of user-created content in which we can see the creativity generated in both sides, producers and viewers.

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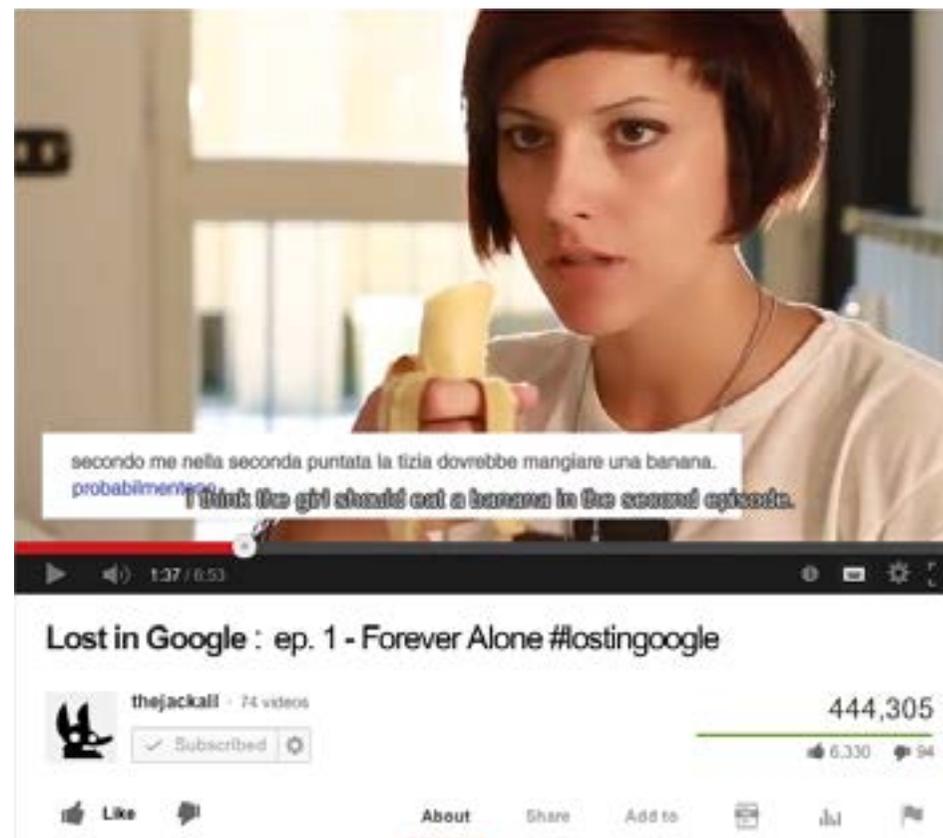
13   Social Media and Internet Statistics (September 2012) http://thesocial-
      skinny.com/216-social-media-and-internet-statistics-september-2012/

SYNCHRONOUS COMMUNICATION

The implementation of new tools provide users with the ability not only to upload content to the Web, but also to upload content to a single, shared space that can be accessed by many users. The combination of Synchronous and asynchronous communications facilitates share and manage documents, allowing team tracking and enhancing online collaboration [14].

Programs like Google docs allows people to access, individually and group modify and share documents orginated in formats of the Microsoft office suite. All this for free and available in every computer. In the other hand, Dropbox offers cloud-storage in a form of a folder which synchronizes the content and modified by a single or multiple users. Dropbox has been really successful among designers and students, specially while team-working and dealing with big files.
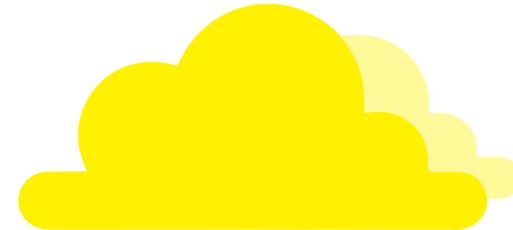
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14   ITG Research Team. Web 2.0 : Trends, Benefits and Risks.

OPENNESS AND TRANSPARENCY

In this context, Openness and transparency relate more to make intellectual ideas, development or creations available so they can be developed by a wider, external community. Internet enables users to connect with a very large number of people in a short period of time This concept of openness has certainly been applied in a number of industries, like: software or open source code (google docs, open office, apple and android apps); commercial design (threadless, quirky, lego mindstorms and lego cuusoo) and media -video, film and journalism- (youtube, vine, Good magazine online).

Open Source Code
Continuous development

"Open source embodies the philosophy of making software freely available to many other people so that it can be developed by anyone."[15] However, since technology driving the Internet was designed to be open to further adaptation by users; and protocols that govern the communications of machines and networks were designed to be plastic and malleable[16], the concept of open source is not related exclusively to software but also information and content on the Internet.

The concept of continuous development had also created a stage of perpetual development, in which platforms never leave the beta phase but instead they are constantly uploading new content and changing interactions according to the platform's audience and requirements. During my research I could identify that in many of the crowdsourcing pages was displayed the word "beta" even if the websites were working already for years. This strategy allows companies to incorporate people's feedback and easily change what-was-not-working for the company. It gives the feeling that the website is constantly changing and that is not something perpetual.

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15   Ibid
16   Ryan, Johnny. A History of the Internet and the Digital Future.

Commercial design

"The closed model of design works on the principle of gaining a profit from the sale of the intellectual property."[17]

The openness of the Web 2.0 generated mass collaboration, but also redefined the business model so that profit could come from the mass collaboration rather than the number of copies sold.

The concept of intellectual property and business models built based on it are being reconsidered in the new Internet era. Internet actively encouraging others to have access to a piece of work so that it can be used but also so that it can be further developed.[18]

"The Web 2.0 trend has also led to a blurring of the distinction between customers and vendor." Websites typically encourage feedback from their customers, which are used to feed into marketing and product design."[19]

Creative Commons

"The organization has created a series of model licenses that enable authors, scientist, artist, educators and other creatives clearly to identify the rights they wish their work to carry. The intention is to increase the number of creative works that are available for others legally to share, mix and reuse."[20]

Creative Commons enables authors or creators to establish different degrees of rights between full copyright and public domain.[21] It is somehow the anti-trend of the previous design model, shared knowledge is consistent with the Internet 2.0 essence. It works a charitable corporation that aims to change the aspects of the current system of copyright in order to maximize digital creativity sharing and innovation[22]. Many important projects and research are available under this license.

17   ITG Research Team. Web 2.0 : Trends, Benefits and Risks.
18   Ibid
19   Ibid

20   Ibid
21   Nesta. The New Inventors.
22   http://creativecommons.org/

Online Community

Virtual community - Cyber-society

*"In online communities, we chat and argue, engage In intellectual discourse, perform acts of commerce, exchange knowledge, share emotional support, make plans, brainstorm, gossip, feud, fall in love, find friends an lose them, play games and metagames, flirt… We do everything people do when people get together, but we do it with words on computer screens, leaving our bodies behind… our identities commingle and interact electronically, independent of local time or location".*[23]

Online community is when people interact socially as they struggle to satisfy their needs of performing special roles, such as create, lead or moderate. A shared purpose provides a reason for the community (interest, information exchange, or services) and some characteristics define its type, e.g. information exchange (same age group, interests), or buying and selling. However, most of the online communities that exist today belong to the "social" type.[24]

Online communities have policies, in the form of implicit assumptions, protocols, rules, and laws that conduct people's interactions. People benefit from the contributions of others, and from the information and support that is provided. In order to succeed and increase the number of members, online communities promote the benefits that members seek - social exchange and the possibility to present oneself; active members are the core of the community. Many companies are aware it, so they use it in their advantage by stimulating the interactions in order to increase participation and generation of ideas.

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23   Beck, Timo; Web 2.0: User-Generated Content in Online Communities.
24   Ibid

User Profile

In the majority of online communities is essential to create a user profile in order to access valuable information or even the entire website structure. The user profile is very important in all kind of initiatives because it is a key factor to transmit trustfulness among the group and express the user's identity. (See sub chaper "Identity" Pag. 37) User profiles consist of required information, such as email address, name and age, and optional information.[25]

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25   Ibid

Collaboration, Social Networking and Media

As we have being witnessing, digital media, specifically Internet is transforming our ways of gathering information and communicate with each other. The Web 2.0 tools allows easy creation and sharing of content, supports conversation and collaboration, help to connect people in disparate roles, and reduce barriers of time and geography.

Social networking sites, person-to-person media or mass self-communication are both creating and supporting the pre-existing social networks while also helping strangers to connect on the basis of shared interest, political views or activities.[26]

"The individual Internet user had become the atomic unit of creativity on the Internet. The user had been empowered and now that empowerment would be built into something broader: mass-collaboration between users." [27]

As Warnke and Luiten mention on Collaborative services (Jegou, Manizi) "the use of information and communication technologies as enablers for new forms of organization is still at the very beginning, some creative community inventions can be seen as very advanced. They are at the cutting edge of socially-led systemic innovation, where existing, normal, technologies are used to create brand new systems and organizations"[28].

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26   Curran; Fenton; Freedman. Misunderstanding the Internet.
27   Ryan, Johnny. A History of the Internet and the Digital Future
28   Warnke; Luiten. Collaborative services

SOCIAL NETWORKING

Now more than ever is easier to change the place where you live in, to work abroad or just travel around the world. As this trend is constantly increasing, it is more plausible to meet people and not seeing them again. For this reason, whether you want to keep in touch; or connect with your actual friends and family; or simply expand your job connections, probably you would add these people to one of your network list.

Social networking sites enable users to easily create, their own online page or profile and to link and display their online network of contacts, often called "friends"[29]. Users can communicate with their network by multiple tools, such voice, chat, instant message, video-conference and blog. The most visited websites (besides Google) and the majority of the apps allow networking.

Social Networking can be beneficial to an individual's career because is more likely for that person to hear of coming events, job openings and opportunities if his/her network includes a wide range of contacts from different industries or sectors. Social networking sites keep people connected and constantly up to date and beyond

the use for individual communication, social networks serve also as an indispensable tool for the work of journalists and bloggers. Research, publication, distribution, funding, collaboration, follow up and discussions – all happen on social networks and through social media. At the same time users also rely on social media and social networks to receive news reports.[30]

"These social networking sites are also claimed to break down the barriers between traditionally public and private spheres of communication, putting power into the hands of the user and thereby giving the details of private concern a public presence and enabling the public domain of the official political and institutional realm to be easily monitored by the private citizen."[31]

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29   Friends in the social networking sites are defined as contacts who agree to mutually share their information or part of it.

30   Möller; Stone. 2013 Social Media Guidebook.
31   Curran; Fenton; Freedman. Misunderstanding the Internet.
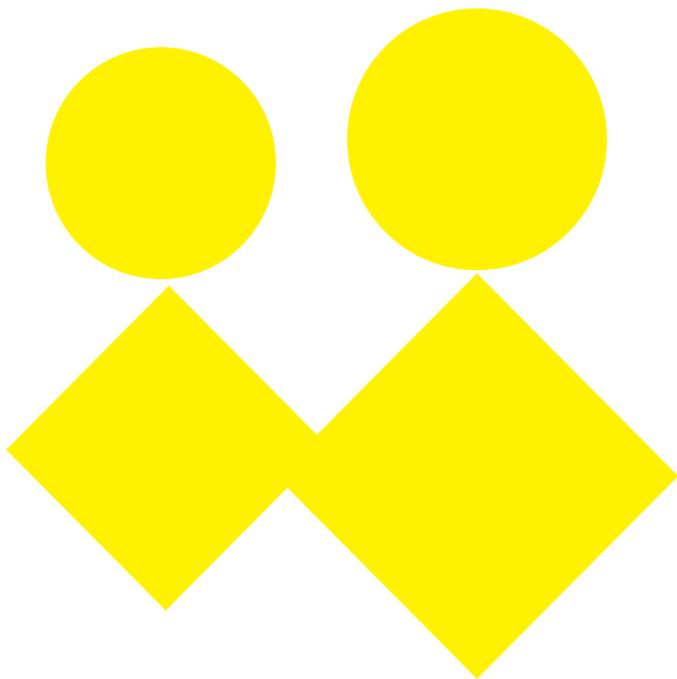
SOCIAL MEDIA

The term "social media" refers to online material (web-based and mobile technologies) produced by the public rather than content produced by professional writers, journalist, or generated by the industrial or mass media.[32] Itis basically communication let rather than information driven, and individuals can choose to communicate with whomsoever they desire. The popularity of, the time spent on these sites and other factors that encourage active production and are characterized by a high level of interactivity have triggered new rituals of communication.[33]

In the next page there are images of a guerilla advertisement done by M&C Saatchi in via dei Mercati, Milan city center, the past October 1st. People virally covered such stunning intervention via the most popular social networks like Facebook, Instagram (2.200 pictures), Youtube (1.000.000 visualizations) and twitter (1.500 tweets).[34]

32   Bozarth, Jane; Social Media for Trainers.
33   Curran; Fenton; Freedman. Misunderstanding the Internet.
34   http://youmark.it/rubriche/ (October 6, 2013)

Foto del diario

Torna all'album · Foto di UME Unidentified Marketing Events · Pagina di UME Unidentified Marketing Events   Indietro · Avanti
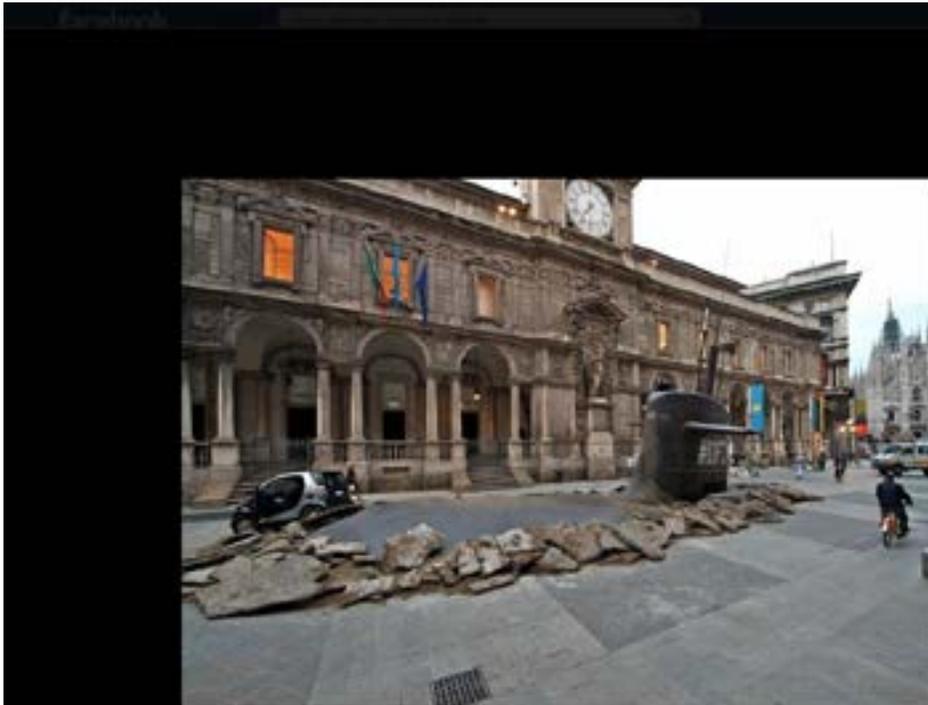
Mi piace · Commenta

This morning a submarine emerged in the center of Milan
#L1F3
Tnx Bloguerrilla

Mi piace · Commenta · Condividi

Auto con sottomarino #L1F3 a Milano

Auto con sottomarino #L1F3 a Milano

0:27 / 0:29

Social media and social networks changed the way news and information are generated and accessed. They influenced media in at least three dimensions: as a tool to create content, as a tool to distribute and impart information and as a tool to seek, receive and access information.[35] Beyond seeking information online or simply swapping stories and commenting on them, 37 percent of U.S. Internet users have also contributed to the creation, commentary, or dissemination of news by social media sites such as Facebook or Twitter. They have done at least one of the following: commenting on a news story (25 percent); posting a link on a social networking site (17 percent), tagging content (11 percent), creating original news stories or opinion pieces (9 percent), or tweeting about news (3 percent).[36]

The distinction between social media and social networks is really blurred. Microblogging services such as Twitter serve both as personal networking tools and, at the same time, as a platform to disseminate news. Social networks such as Facebook or Google+ are used for individual communication, but more and more also for institutional communication, news distribution, research through crowdsourcing and many more purposes, including many still to be developed.[37]


# 91%
of online adults use social media regularly

Internet users spend 22.5% of their online time social networking

social media use has increased 356% in the US since 2006

Almost 8 new people come onto the internet every second
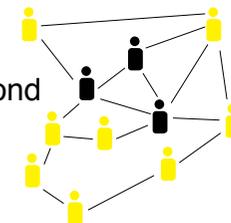
83% of people believe platforms like Twitter and Facebook help them make new friends

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35   Möller; Stone. 2013 Social
      Media Guidebook.

36   Ibid
37   Ibid

Every minute of the day:

100,000 tweets are sent

684,478 pieces of content are shared on Facebook

2 million search queries are made on google

48 hours of video are uploaded on YouTube

47,000 apps are downloaded from the App Store

3,600 photos are shared on Instagram

571 websites are created

Participatory Media

Jonas Löwgren introduces the term of "Participatory Media" in his paper "Designing for Collaborative Cross media Creation"[38], a part of the book Digital content creation. Participatory Media primary refers to the cross-media channels that allow creative production and distribution that increasingly blur the boundaries between information producers and consumers. People's engagement in these practices is fundamentally social.

"We live in a time where the means for media production are more evenly distributed than ever before. Everybody with a personal computer and an internet connection has the necessary tools to create and communicate their ideas; ideas that can also be communicated in media channels that only a decade ago were reserved for corporations and institutions."[39]
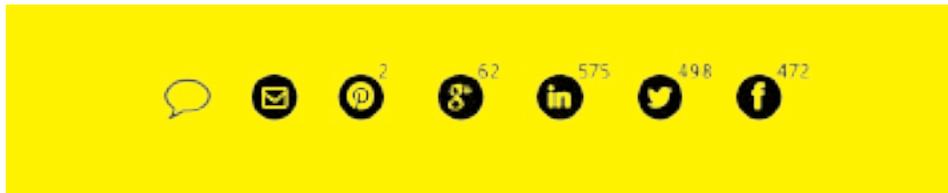
People are motivated, take part and produce for the "Participatory Media" for the next reasons: the sense of belonging, express themselves creatively, to establish Identity and status and to influence others and society.

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38   Drotner; Shroder. Digital Content Creation.
39   Ibid

Belonging

As it has been reiterative during this first part of the thesis, mass-media and specifically participatory media have a strong social driver. The Internet 2.0 technologies support and mediate social Interactions and facilitate the creation of a sense of togetherness.

Belonging in this context refers to the need of the internet users to be part of and to play a role in an online community by sharing information and values. Belonging has been considered the main driving factor of the media consumption.

Creative Expression

Creative Expression is the capacity of any individual to express, create new content or adapt the existing one. The creative expression originally has a hedonistic character, but when it is openly shared and available to everyone through the participatory media it is intrinsic that social factors are playing a role too.

Identity

In order to have access to the participatory media, in most of the cases the users need to create a profile, an online version of themselves. There are many studies (principally Turke, 1995) that suggest that due to the disembodiment and relatively anonymity of the mass-media, people could experiment versions of themselves and that the creation of a "persona" sometimes lead to a further understanding of and individual "true" self.

For many individuals mass-media opened the possibility of being judged for their ideas, rather than how they look like.

Influence Society

Having a trustful identity and competent status are essential in order to influence the opinions of the individuals within the community. (See Peer review).

The next examples of Social Media and its different 'business initiatives' were possible thank to groups of people that were willing to actively participate and engage with different causes and businesses in different Social Media platforms.
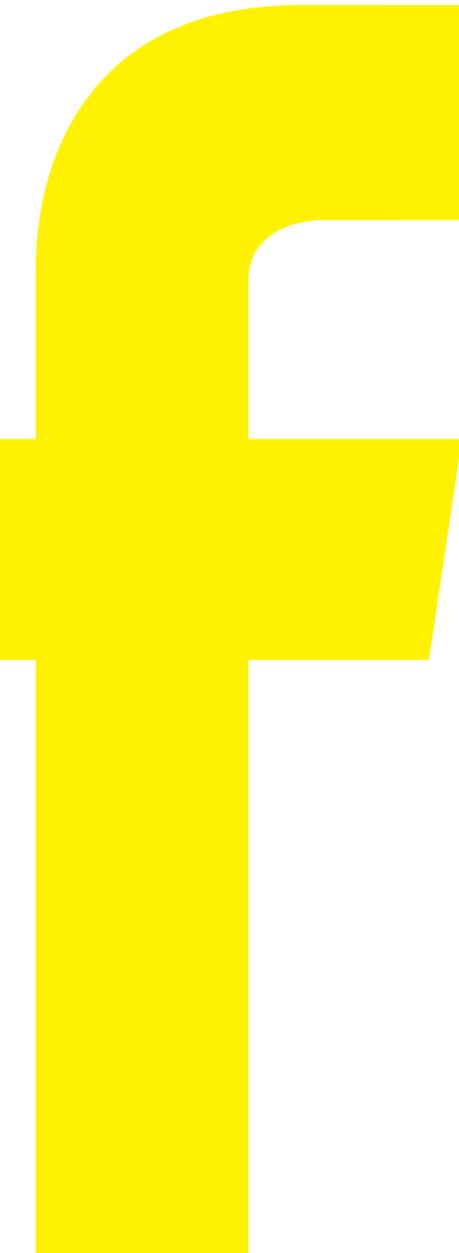
Facebook

Facebook: the social network service that "connects people" and the most visited site according to Alexa Web Information Company[40] has been and is rapidly increasing its popularity. In November 2011, Facebook had more than 800 million active users[41] reaching 1,15 billion by June 2013, -from which 819 million are active mobile users.[42]

Facebook gives a single alternative to users to have access to different media applications and manage their online social interaction needs. That is why each day Facebook users spend around 10.5 billion minutes (almost 20,000 years) online on the social network[43], and an average of 3.2 billion likes and comments are posted every day, [44] Through Facebook it is easier to gather a larger group of people rather than with other traditional approaches and in consequence, it has being used for personal, educational and commercial purposes.

Nowadays it is increasingly becoming more and more important and very common to have a Facebook profile in the every-day's life but also is giving place to lot of concerns about the use of personal information from third parties and privacy settings. Some people I know say that they were "forced" to create a profile to not be left behind. Another concern of some of the social network users is the quality of the relationships between the network of 'friends' and all the possible scenarios that the 'easiness' of meeting people generates.

40   Alexa. Top Sites. http://www.alexa.com/topsites/global (August 2, 2013)
41   Facebook. One Billion People on Facebook. http://newsroom.fb.com/download-media/4227 (October 9, 2013)
42   Facebook. http://newsroom.fb.com/Key-Facts (October 9, 2013)
43   Social Media and Internet Statistics (September 2012) http://thesocialskinny.
        com/216-social-media-and-internet-statistics-september-2012/
44   Ibid

Since Facebook was launched:

Over 1.13 trillion likes since launch in February 2009
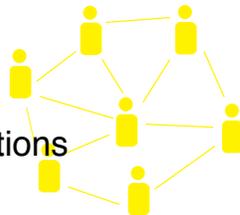
104.3 billion friends connections

219 billion photos currently on the site (an estimate of 265 billion ever uploaded, including deleted photos since autumm 2005)

17 billion location-tagged post, including check-ins since August 2010

62.6 million songs played 22 billion times (about 210.000 years of music)

Facebook for Businesses

As I wrote before, Facebook is widespread, and easy to use, for these reasons is increasingly becoming -together with other social media sites- a powerful and preferred advertisement channel for companies and a source of feedbacks, trends and brand fidelity. Every week around 0.5% of Facebook fans engage with the regular brands they are fans of, and the average increases around a point with the brands people are generally passionate about.[45]

'Engage or die' is the marketing catchphrase of the social media era, with Facebook the primary beneficiary of the shift in the marketing thinking. Marketers are concentrated on the Facebook platform based on its proclaimed ability to engage and support deep relationships with consumers.[46] It is also said that such relationships lead to greater consumer loyalty, therefore bringing economical benefits to the brand in return.

The next are some examples of successful marketing campaigns in the US, shown on the report:"Holiday Trends and Data"[47] made by Facebook on November, 2012. Some of the campaigns were:

» **Kohl's** launched a holiday campaign to donate $1 to Toys for Tots, up to $500,000. Fans will also receive exclusive offers and could help select items to go on sale.

» **FedEx** created a 'Ship to Friends' app (for desktop or mobile) that enables people to ship packages directly from the FedEx Facebook Page. People could then share the news that they've given friends a package.

» **Fab** offered discounts - via a Facebook- for new Fab members - for the Beardo bendable mustache hat. Beardo typically sells for $34, and Fab was offering it to new Fab Facebook members for only $24.

» **Gap** was using Postagram to allow fans to send their own Facebook, Instagram and mobile camera shots as real, printed postcards to friends free of charge.

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45   Nelson-Field; Taylor. Facebook Fans: A Fan for life?
46   Ibid
47   Facebook. Holiday Trends and Data https://newsroom.fb.com/
        Trends/672/Holiday-Trends-and-Data (accessed on October 9, 2013)

The percent of corporations with Facebook pages varies by industry, e.g. Companies in the Retail industry have 96% of their companies on Facebook.[48] Everyday get in touch with people is becoming easier and easier, and businesses are taking advantage of it, creating innovative campaigns and new ways to reach customers to have a direct insight.

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48   Ganim; Lescault; Wright. 2013 Fortune 500 Are Bullish on Social Media.

Twitter

The popular micro-blog site allows people to follow their stream of thought through linked communications no more than 140 characters long. It has over 200 million active users, with an average of 400 million tweets per day.[49]

Twitter users release real-time tweets, articles, and update links that they want their followers to check. Millions of people around the world use Twitter to discuss or to be up to date with news from their favorite brands, characters or businesses.

Twitter for Businesses

Twitter helps companies to engage with their costumers in an easier, funnier and simpler way than through other social media channels. According to the social media study realized by the University

of Massachusetts the 77% (387) of the 'Fortune 500' companies[50] have corporate Twitter accounts with a tweet posted in the past thirty days; an increase of the 4% since 2012.[51]

Additionally, companies have 7% more presence in Twitter than they do on Facebook; and ironically is the popular Facebook the company that has the highest number of followers on Twitter, followed by Google, Starbucks, Whole Foods Market, Walt Disney, JetBlue Airways and Southwest Airline.[52] The top reasons why people follow businesses on Twitter are:

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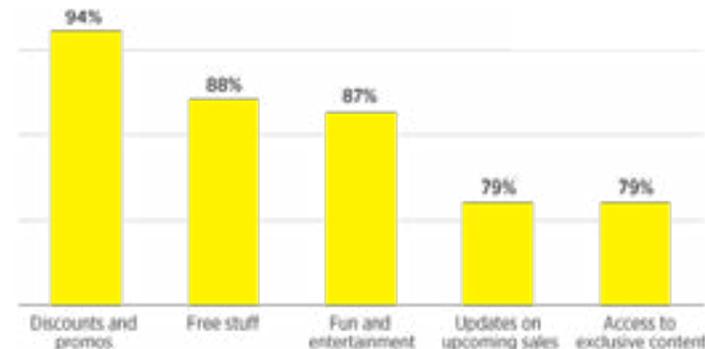
49   Twitter. Who's on Twitter? https://business.twitter.com/whos-twitter (accessed on October 12, 2013)

50   The Fortune 500 is an annual list of the most profitable corporations in the US (public and private), for which revenues are publicly available. See list: http://money.cnn.com/magazines/fortune/fortune500/2013/full_list/ (accessed on October 13, 2013)
51   Ganim; Lescault; Wright. 2013 Fortune 500 Are Bullish on Social Media.
52   Ibid

During the last seasons of holidays Twitter published in its blog,some studies about "Twitter's Influence on Holidays Shopping".[53] The information was collected from different surveys and put it together in several infographics. The most important findings are displayed in the next graphic and confirm that Twitter plays an important role in how and where people shop; influencing product consideration, discovery and purchases.

Twitter influences **product consideration, discovery, and purchases.**

55%
of our users discuss gift ideas on Twitter.

Two-thirds discovered new products via Twitter.

64%
have purchased a product because of Twitter.

Twitter affects **where people shop, what they buy in stores and how they share purchase decisions.**

57%
of shoppers use Twitter to determine what stores to visit.

45%
of shoppers would rather take Twitter shopping with them than their husband or wife!

62%
of shoppers tweet about purchases they've made.

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53   Twitter. Study: Twitter's influence on holiday shopping by Jonathan Stringfield. October 7, 2013 https://blog.twitter.com/2013/study-twitters-influence-on-holiday-shopping

BLOGS

Blogs were originally web journals, in consequence their nature is more personal and somehow less "connected" than technologies such as Twitter and Facebook. A clear different between blogs and their predecessors is that although being an individualistic praxis, bloggers can make their thoughts available to the world and be open to other individuals with shared interests.

A blog provides an online space for posting chronologically ordered comments that can include text, photo, video, audio, and links to other sites, keeping always the most recent post first. Also, blogs frequently have tags or keyboards that are used to categorize the blog and can be used by searchers looking for blogs of particular interest.[54]

Corporate Blogs

Recently corporations and different kind of businesses are creating a link to their blogs in their corporate pages in spite of displaing important news, or news regarding a specific topic. The studie of the University of Massachusets held in 2013[55] showed that 171 F500 companies (34%) had corporate blogs showing the largest increase in use of this tool since the 2008. And the 79% of the blogs are kept current with frequent posts on a range of topics, take comments, have RSS feeds and take email subscriptions.

"It appears that those companies that have made the decision to blog have utilized the tool well. There is frequent posting, on-going discussion and the ability to follow the conversation easily through RSS or email subscriptions. While there are more blogs this year, this level of engagement has been typical. Those companies that choose to blog, use the tool effectively."

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54   ITG Research Team. Web 2.0 : Trends, Benefits and Risks.

55   Ganim; Lescault; Wright. 2013 Fortune 500 Are Bullish on Social Media.

WIKIS

Wikis are Web applications that allow any individual to contribute to a common storage of knowledge. Wikis work like a content management system structured according the overall demands of the users. They enable users to collectively add, link, organize, modify and/or delete content, usually for reference material.

Although Wikis today are the most common source of information online, the degree of veracity on the submissions and the quality that the final content has, are not 100% realiable. For these reasons Wikis require constant moderation and mediation in the content in order to filter submissions that are inappropriate or irrelevant, and to resolve disputes over content. In most of the cases, the moderation and mediation is done by other users. This practice is known as "peer reviews"[56] Peers play an important role in the wiki-world given that they have the power to influence the reception of information and media content on the Internet.

Wikis are important not only for the information they contain but also because of the collaborative system that they use in order to function and reach their current state.

Wikipedia

Wikipedia, the most important collaboratively edited, multilingual, free online encyclopedia which has over 30 million articles in 286 languages, written collaboratively by worldwide volunteers.[57] Wikipedia was born as an idea to produce professional -almost encyclopedic- content with the help of the crowd. Within fifteen days of its establishment it had already 270 articles and 617 by the end first month.[58] Nonetheless, by January 2002, Wikipedia contained 19,700 articles written in English and currently it has 4,328,243 and 31,104,141 in total.[59]

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56   Peer-review is a critical evaluation done by one's equals.

57   http://en.wikipedia.org/wiki/Wikipedia
58   Ryan, Johnny. A History of the Internet and the Digital Future.
59   http://en.wikipedia.org/wiki/Wikipedia:Size_of_Wikipedia

Highlights

As we could see throughout this sub-chapter, Internet technologies influenced the way that people interact, communicate and create.

Internet supports fast creation and promote users interaction. The information access is easier and information itself can go from one side of the world to the other in just few minutes. It made a large number of intellectual ideas available, and propitiate the generation of initiatives like Creative Commons. Events that generated a turn away from the previous -and still existing- commercial model.

Thanks to Social media getting in touch with people became easier and easier. It allowed users to be part of a community and it gave voice to those that before did not have. Also, distant-synchronized team work was possible with the implementation of other Internet tools.

Businesses are already acknowledging the need to integrate their social media efforts with their content strategy, as they are seeing the impact of social media in terms of lead generation, internet traffic, and revenue. With businesses seeing real and measurable benefits, I believe we will witness a move toward more sophisticated and well studied marketing campaigns. A change that opens many opportunities for social media strategist, publicist and even professional designers interested in this matter.

The next sub-chapter is about the physical evidence that communities and individuals had changed towards collective innovation, collaboration and community building thanks to the support of Internet technologies. 'Creative communities' and 'social innovation' are referenced since these communities seem to have similar values and follow similar trends than the people who actively participate online do.

Social Transformation

" Personal economic values will be less about the act of consuming and more about the act of transformation, as people search individually and collectively for things that help them to grow, experience and transform.[60]

"

60   Green, Josephine. Democratizing the future: Toward a new era of creativity and growth.

Creating the Future

"Some individuals are starting to explore new systems to work and live together. They organize their own lives differently. They act. They show by doing that there are other ways to live a good life without at the same time threatening nature, other people or their own inner peace"[61]

The dynamic change that our society is living right now, it is a deeply structural change that comes with many radical innovations. People are gathering together to co-design their present and transform their future. Lots of new scenarios were born with new possibilities and changes such us the pursue of wellbeing and social status, together with the Internet have generated a new wave in mass participation. The concept of wellbeing in nowadays had changed, according to Anna Meroni in rich countries it refers to the growth of interpersonal relations: the capacity to gather a community and work towards a same direction[62] or like Philips suggested, wellbeing has being redesign not in material ways but in terms of health-wellness, connectedness, personal growth and personal control.[63]

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61   Meroni. Creative Communities
62   Ibid
63   Green. Democratizing the future

SOCIAL INNOVATION

The relationship between social innovation, technology and economic growth is tightly bound together. Generally, after new technologies infiltrate society, the world experience exceptionally periods of social innovation, like chenges originated after the Industrial Revolution (1760-1840) e.g. agricultural improvements, distribution of wealth (shift in economic power), grow of cities, developing of working-class movements and other cultural transformations.

I believe Social Innovation plays an important role for my project because it refers to the shift in the way individuals or communities act to solve a problem or generate new opportunities[64] and although Jégou and Manzini suggested that these innovations are driven more by changes in behavior than by changes in technology or the market, just few of the initiatives could have existed without technologies like Internet or telephone.[65] In my analysis I could found that in cases like Open IDEO, Social Innovation -or the seek to create something together with a community and for the good of the community itself- is one of the strongest motivations for individuals to participate in such co-creation initiatives.

CREATIVE COMMUNITIES

Creative Communities and Social innovation are tightly related. Creative communities are formed for creative and entrepreneurial people who manage to reorganize the existing state-of-things producing something new. These communities tell us that the value of co-creation lies above all, in the fact that results lead to emotional involvement and deeply, long-lasting sharing of aims and means.[66] These groups of people cooperatively invent, enhance and manage innovative solutions for creating new ways of living[67] recombining what already exists, without waiting for a general change in the system.[68]

Now inventors do not work alone anymore, on the contrary they belong to a world-wide collaborative community of individuals that share the same interest(s) and work for it. They use technology to organize and support themselves, and examples like Kick-starter show how people can support a cause they believe in, even financially without expecting something in return.

64   Francois; Manzini. Social Innovation and Design for Sustainability
65   Ibid

66   Ibid
67   Meroni. Creative Communities
68   Francois; Manzini. Social Innovation and Design for Sustainability

Prosumers

Until now repetely we can see how people is getting involve in causes and work together to solve the problems and create opportunities. And the information access is easier and information itself can go from one side of the world to the other in just few minutes. People is becoming more aware about the choices they make and the products they buy and use.

Consumers got tired of adopting a passive approach towards products and services. They demand quality, aesthetics, well-trade, etc. They are tired of other people deciding what they need, so they go and propose it! In other words, consumers became 'Prosumers'.

The term 'Prosumer' (proactive consumer) was conceived by the futurologist Alvin Toffler in 1980. Toffler's 'prosumer' were common consumers who became active to personally improve or design products and services of the market, completely transforming their roles as consumers. Prosumers speak their voices out loud, and they have a considerable impact in the success or failure of companies, products, and brands, principally through their involvement on the social media and blogs.

TOOLS FOR CREATION

Besides the Internet, there are some other factors and technologies that are breaking down the barriers, thus increasing the consumers' participation and the quality of it. For instance the popularity of 'rapid prototyping' is growing since the prize of the machinery is-decreasing; the knowledge of CAD programs is more wide-spread and files of finished products are available online. The use of different 'rapid prototyping' tools especially 3D printers are now more easily available for experimentation and creation.
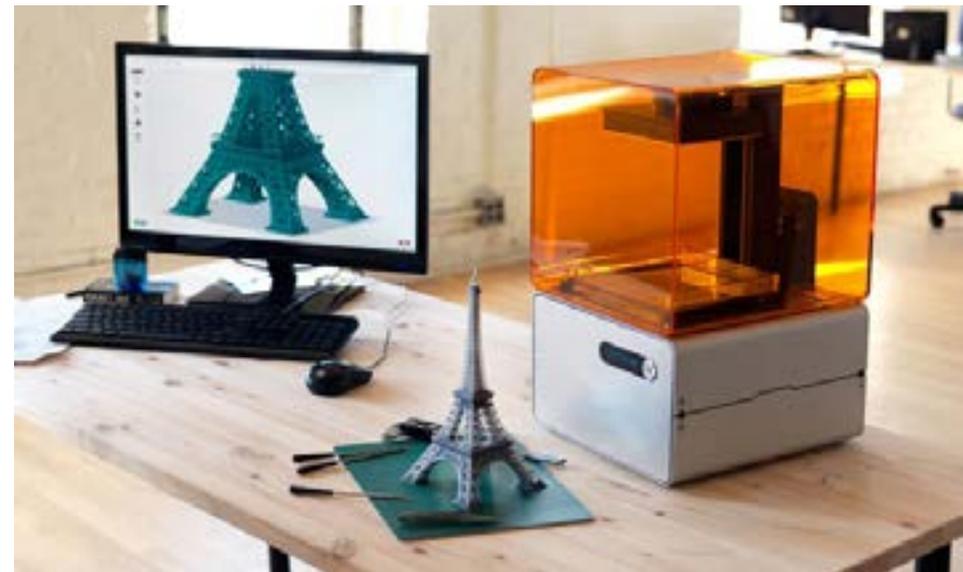
User Led-Innovation

The wave of Social innovation, combined to the leadership and creation of the creative communities support the trend of users /prosumers play an active role in the development or improvement of new products and services. In the previous Crowdsourcing examples user-led innovation often challenges the state of affairs and seeks to push the boundaries in ways that are often not possible with traditional R&D; innovating as a result.

IMPLEMENTATIONS OF USER-LED INNOVATION[69]

Now more than ever companies are out-sourcing to users tasks that before were performed internally. This based on the fact that people interact with thousands of products daily and many innovations have been born exploring how to get the best of a product or how to improve productivity and they have the tools to do so.

Users and user communities can be involved both in the initial invention of a new system, product, process or service and at all stages of the innovation process. The mos important implementation approaches are:

» Provision of feedback

Users often probe and report deffects and weaknesses in new and existing products (Starbucks).

» Production of content for existing products

The business model of some firms like YouTube, Twitter and Facebook relies on individual users generating and sharing content, but content production in some areas can be more advanced.

» Novel use of existing products

Some highly skilled users recombine existing products and services to create new products.

» Modification of existing products

The skills required to modify high technology products and services are now widespread and many users communities have developed around this activity.

» Production of novel products

The highest level of innovative user-led innovation activity occurs when individual users or user communities create their own novel systems, products or services. Some firms like Quirky and Kick-starter will even encourage entrepreneurialism amongst their user base and build a network of user start-ups around them.

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69   Nesta. The New Inventors

MOTIVATIONS FOR USERS TO PARTICIPATE

Interest-driven

"User innovators tend to be driven by their interests rather than intellectual property rights, and work within highly active communities" [70]

Crowdsourcing users often have very different motivations from those that drive commercial activity. User innovators are often passionate about their particular area of interest and are willing to dedicate a huge amount of time and energy in order to develop their ideas. This type of users usually offers a high level of skills and resources to their activities, even outside work. They do not tend to seek financial return. [71]

Importance of Online Communities

Besides the benefits that most of the mass-media participants seek (described in the Section Participatory Media), user communities facilitate innovative activity between members, and provide education for newcomers. User communities also influence the easy and rapid spread of successful innovations.

Leave Intellectual Property Aside

A consequence of being interest-driven, users often leave aside some issues concerning intellectual property (IP). IP can be seen as an impediment to creativity and innovation and restriction for further developments. These users often reveal their ideas within their community and support. [72]

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70   Nesta. The New Inventors
71   Ibid

72   Ibid

Some users and communities even prevent their work from being commercialized. There exist a series of mechanisms, designed to prevent restrictions on copying, developing and distributing original work or later modifications, thus protecting innovations from being directly appropriated by firms, such Creative Commons cited previously in this thesis.[73]

Create Toolkits

Software tools are an important resource for users who wish to innovate. Many user communities and companies create a wide range of tools, available for everyone.[74]

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73   Ibid
74   Ibid
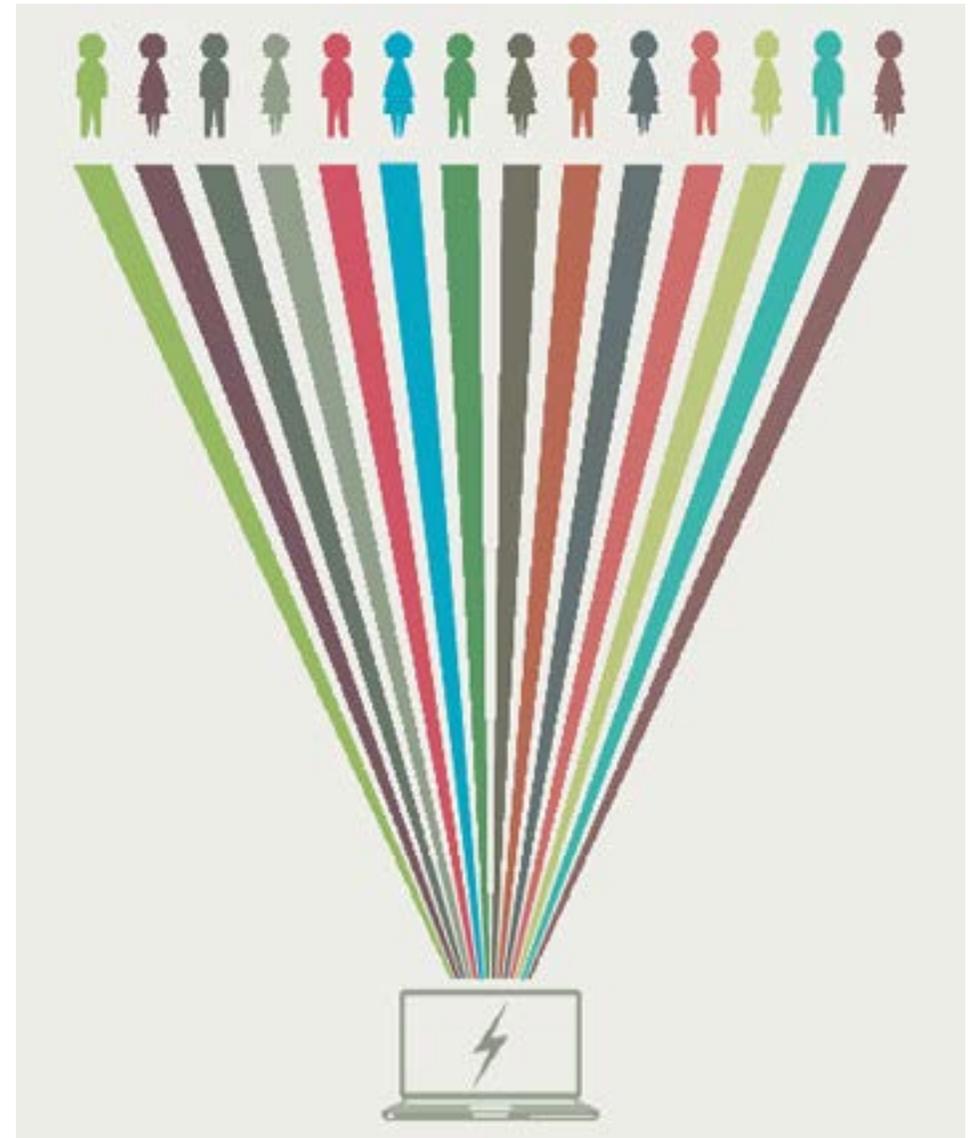
"These networking relational strategies presuppose an active way of interpreting the services, where the roles of client and producer, of user and provider merge in the co-creation of value and benefit. In this way we have solutions that are not only innovative in terms of their idea of who will and how to take charge of resolving problems, but are also innovative because based on the principle of collaborative networking between several individuals, in an economy of reciprocity."

Anna Meroni. Creative Communities

Highlights

People is following an innovative path, whether they are creating on the Internet or doing Social Innovation. People now more than ever is thinking out-side the box in order to change the things they do not agree on. Also, people are in a changing era of redefining composing aspects of their lifestyles, and coming back to build a community and share knowledge within it, both physically (groups, neighbors, city) and online.

Consumers had a change towards their previous passive behavior. Many of the **prosumers have the capability to modify and reconfigure existing products and services and to create new ones.** With the help of technologies like 'rapid prototyping', social media, online marketing channels and others, prosumers may also be able to design, build and distribute the solutions they create.

Companies are building the future together with people that are already designing it. Involving lead users in the creative process ensures that the idea generation is inspired from a fresh and external perspective, keeping in mind that those will be the future customers.

People is innovating because they are willing to work for something they believe in, so this sub-chapter confirms that money is not the first motivation, as it could be building a community and learning. Of course I can not generalize. In the next chapter of the thesis, I will study closer how these motivations work on my specific target: designers.

The next sub-chapter studies and identifies the different strategies that were generated thank to the changes the world has been through (technological, financial, social, environmental, among others), seen from a business point of view; but also taking into consideration the way how people participate and take advantage of the new models.

BUSINESS

Innovation Strategies

Developing competencies in the technologies and the markets a company operates in is key to maintain their competitive advantage. However, technologies and markets evolve, change and mature. Then to sustain their competitiveness, companies need to also maintain a balance between innovation to differentiate their existing offerings and innovating to create new business.[75]

From the innovation balance that companies constantly face, there are also two types of innovation: The most common is the innovation generated by incremental improvements in an existing product: and the disruptive which represents a major shift in the market, sometimes even changing the existing social practices (the way we work, communicate, learn, etc.). Although both forms of innovation are important for a company, disruptive innovation generates more significant challenges for the company, due to the uncertainty of the market's response. It is possible to predict the potential capabilities that a technological breakthrough have, in terms of what the product could do or/and enable, nevertheless it is substantially complex to predict the way that those breakthroughs will shape and impact the current social behaviors. Examples like iPhone and Facebook showed that it is not just technology alone which matter, but they way it is used. Successful innovation often demands innovative ways of identifying trends, assessing the technological landscape and changing in current business models.[76]

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75   Tushman; Smith. Organizational Technology.
76   Chesbrough. Open Innovation.
       Herzog. Open and Closed Innovation

Company's Research & Development	Trends
	Products
	Business Areas
Production development center	Commercial Product
Marketing & Sales department	Market Diffusion
Company's distribution channels	Commercialization
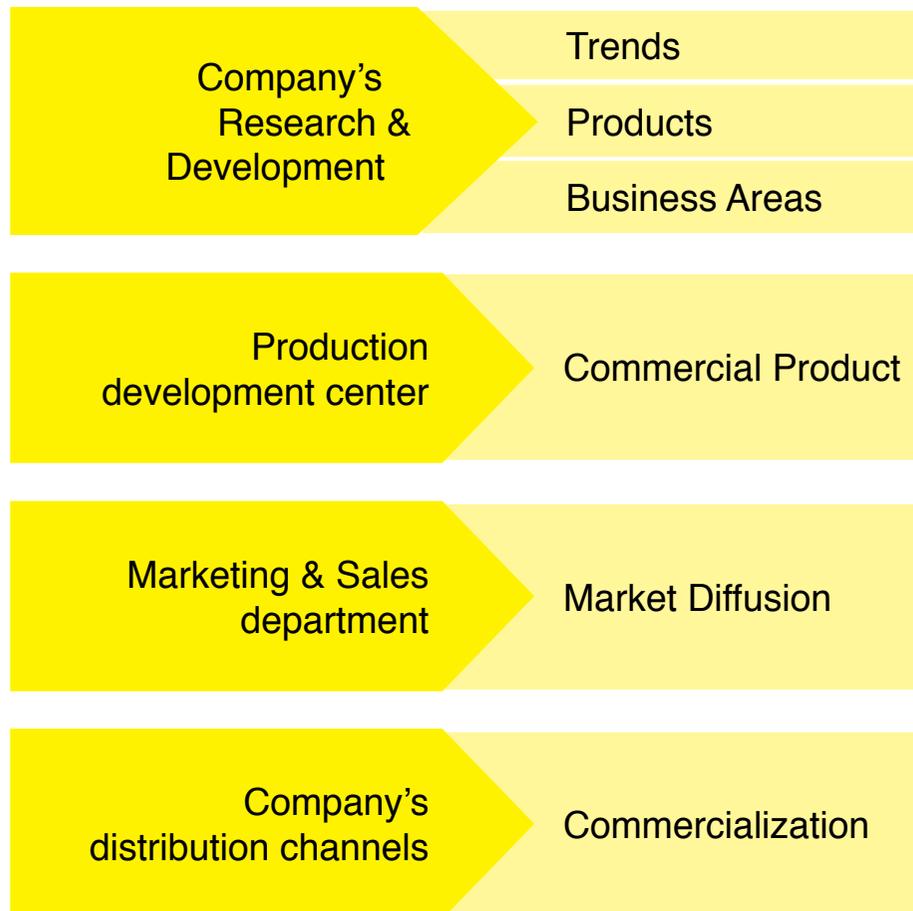
In the past century, innovation was usually associated with a company internal Research and Development (R&D).[77] R&D activities grew out of the need in many industries to maintain and improve production activities, because these activities were frequently unique for each firm.[78]

In other words, traditionally new trends, products and business areas were generated within the company by its own research organization; after products were developed into commercial products by the internal product development center, and eventually the market diffusion was in charge of its internal marketing and sales department,

and commercialized on its own channels. For this reason lot of effort was conducted to academic research focused on finding the ideal innovation process.

Although, the traditional innovation model is still applied in the majority of the companies and it led to many important achievements, it does not allow companies to work accordingly to the knowledge and environment of the 21th century because it does not take into consideration the trends generated after major technological, financial and social changes that had taken place in the last decades.

77   Ibid
78   Chesbrough; Vanhaverbeke; West. Open Innovation

TRENDS BEYOND THE SCOPE OF THE TRADITIONAL INNOVATION MODEL

Knowledge Economy

During the last three decades, thanks to an easier and widespread access of information, there is an enormous increase on the trained, knowledgeable people around the world. Companies can benefit from the knowledge available as well as from the knowledge that many individuals have.

Venture Capital

Nowadays there is also a growing pool of venture capital (VC) that can sponsor the innovations created by R&D departments. Therefore, innovations can easily go out of a company's boundaries and being produced by start-ups funded through VC.

Technological Landscape

For the past decades firms had been forced to adapt to new scenarios, including new technologies. A particular example of this change is how web-based technology allows enterprises to get insights from their customers, leading to important improvements.

In fact, in 2011 approximately 6,5 million start-ups were created in the US[79] and, on average over the past 3 years, 10% of those new businesses are in technology related sectors.[80] The currently increasing technological scenario works as a significant innovation tool for companies, giving them immediate access to the market, simplifying the process of market-trends development and identification.

Consequently, these new trends facilitate the creation of a new innovation model called "Open Innovation" referring as the use of external and internal knowledge sources in order to accelerate internal innovation.

79   Kauffman Index Report, 2012
80   GEM Report, 2010

Open Innovation

Efficiency

Knowledge

Reduce Cost

Competitiveness
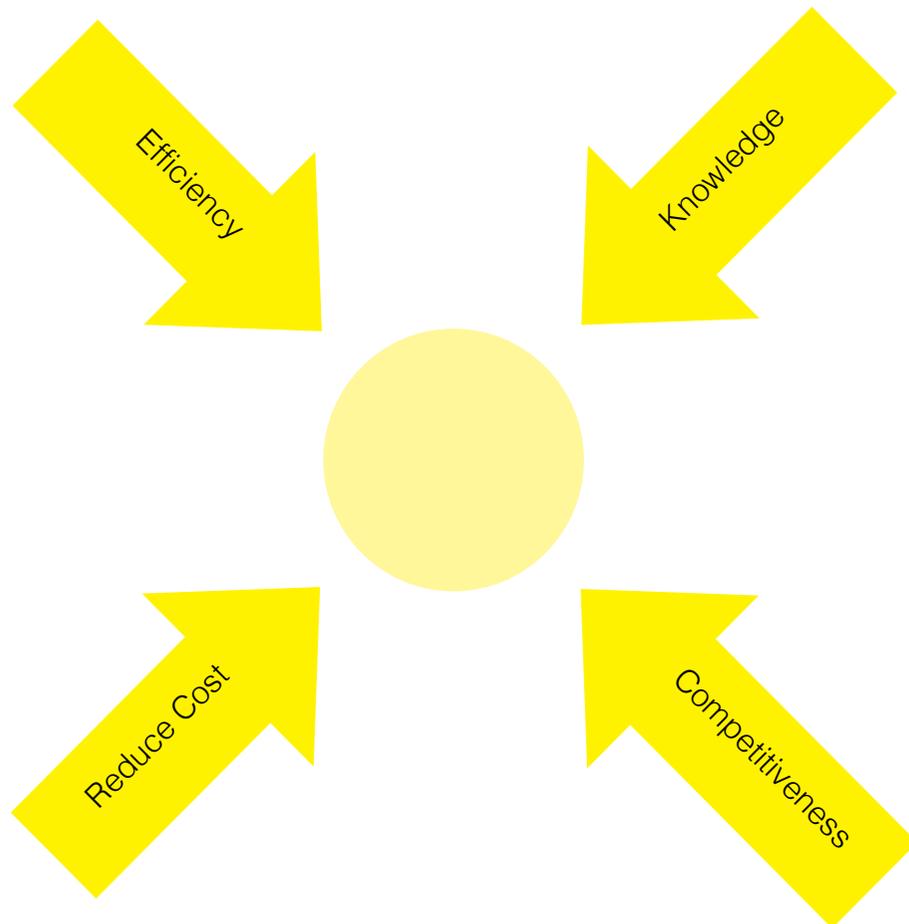
The Open Innovation model can be understood as the antithesis of the traditional innovation model. This model assumes that firms can and should use external as well as internal ideas, and internal and external paths to market, in order to advance their technology.[81]

In nowadays companies see innovation as the primary way to gain competitive advantage and to simultaneously increase revenue and reduce costs. The increasing demands for speed and efficiency push companies to become for virtual and flexible and to utilize variable resources.[82] Organizations are moving from a fortress mentality, where all work is confidential and kept inside the organization, to an integrated, global economy with an interconnected network of suppliers and distribution channels, where being the "partner of choice" in the industry is increasingly important.[83]

The Open Innovation paradigm changes the role of R&D, treating it as an open system, enhancing efficiently the innovative capabilities of a company by driven innovation. Open Innovation suggests that valuable ideas can come from inside or outside the company and can go to market from inside or outside the company as well.[84] This

81   Chesbrough; Vanhaverbeke; West. Open Innovation
82   Kelley. Harnessing the Global Talent Pool to Accelerate Innovation
83   Ibid
84   Chesbrough; Vanhaverbeke; West. Open Innovation

model also assumes that internal ideas can also be launched into the market through external channels outside the current business-es of the firm, in order to generate additional value.[85]

However, this innovation model expands the role of internal re-searchers to include not just knowledge generation, but also knowl-edge identification. There is a significantly higher emphasis on identifying and accessing external knowledge. While deep under-standing remains valuable, its utility is multiplied when linked to and built on the investigations and achievements of others, particularly, from external sources.

One key characteristic of the Open Innovation model is that work-ing with stakeholders, especially with users, there are higher prob-abilities that the resulting solutions and systems will be relevant, appropriate and therefore more useful and successful once they are launched to the market. Because of its focus on insights gen-erated from direct interaction with customers, the Open Innovation approach can also be characterized as "user-centered innovation" or "consumer-led innovation"

Accordingly to the Executive White Paper - The 2012 State of Global Open Innovation by Innocentive-[86] over the past decade the appetite for Open Innovation had clearly increased and ini-tiatives are currently emerging and expanding among the major-ity of large-organizations.

This research held by the firm Forrester in which 229 companies participated (US 58%, Germany 23% and UK 19%) the 77% of these companies believe that OI is essential in their long-term strategy.

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85   Ibid
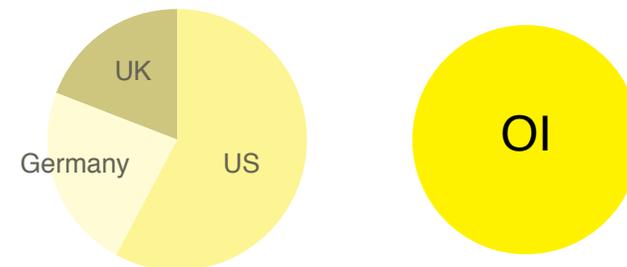
86   Schneider. Innocentive White Paper: The 2012 State of Global Open Innovation

IMPLEMENTATION OF OPEN INNOVATION

The open innovation model has been implemented in many different ways. In the guide for Open Innovation and Crowdsourcing[87] Paul Sloane identified 8 different implementation approaches used across a wide range of firms and industries, and those are:

1. Paid programs involve an organization paying external companies for ideas that they generate and the organization takes to market. Mostly consumer-oriented companies have used this approach.

2. Academic programs focus on acquiring ideas from universities and other educational and research institutions. Since this type of institutions does not, typically, take their inventions to market, they welcome corporate involvement. However, the results typically translate into new business areas in a medium to long-term periods.

3. Straddling programs are neither completely internal nor completely external to an organization, they employ a 'hybrid model'[88] e.g. an organization-owned venture capital unit that takes internally-generated ideas to market in partnership with external investors.

4. Customer partner programs use a group of customers as external innovation partners. Like the academic program, this implementation is focused on the in-flow of ideas. The customers are compensated for their contributions with free or discounted products or services, or other non-cash incentives. This model has been successfully used in consumer goods industries.

5. Supply chain partner programs involve incentiving a firm's suppliers to become external innovation partners in exchange for discounts, bonuses, preferential handling, or other incentives that do not require new contracts. This approach has a long history outside the context of the open innovation model and it has been successfully used in a wide range of industries, particularly, automotive.

6. Pathway programs with ecosystem are designed as a laboratory for developing and refining product or service offerings that can be extended by a large community of external companies or an ecosystem. A large ecosystem can allow a firm to deliver a range of product features or variety of service offerings that a company would not be able to develop on its own, and serve markets and

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87   Sloane. A Guide to Open Innovation and Crowdsourcing
88   Chesbrough. Open Innovation

niches that a company is not currently reaching. Many companies recognize that the development of a large ecosystem is strategic and lucrative (Iansiti & Levien, 2004). This implementation is certainly quite successful in the context of mobile phone devices (e.g. Apple's iOS and Google's Android).

7. Pathway program with internal ecosystem are an example of the previous implementation but solely applied inside a large-scale firm in order to build internal bridges such that the flow of ideas may be facilitated between business units. Lucent and IBM are two well-know successful implementations of this model.

8. Crowdsourcing programs have been shown to be very powerful, but also very complex. A wide range of companies have implemented crowdsourcing programs in different ways and the overall results have been quite successful.

GENERAL BENEFITS[89]

Increase Success

» Accelerate innovation and product development timelines by having a better access to and classification of disparate information

» Create value in terms of faster business processes, better access and better communication systems.

» Improve relationships with customers discovering the community's interests while interacting with them.

Increase Knowledge

» External talent network of experts expand the company's knowledge on a particular search area or market and provide constant idea flow

» Encourage information sharing from the outside-in from external talent working in different disciplines.

» Point out new business solutions that work with existent technologies not related with the company's industry or generally highlight initiatives.

» Learn new problem-solving techniques by analyzing how externals work.

Teamwork and Collaboration

» Establish temporary partnerships with adjacent companies or experts to work for or to solve a particular problem can tap expertise that were lacking previously.

» Enable more collaboration and knowledge sharing by allowing problem solvers to work together. Researches suggest that teams are more likely to have successful outcomes or create winning challenges entries.

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89   Kelley. Harnessing the Global Talent Pool to Accelerate Innovation
Beck. Web 2.0

OPEN INNOVATION - EXAMPLES

Crowd

Universities and research institutes

Employees

Adjacent businesses or smaller companies

My Starbucks Idea
http://mystarbucksidea.force.com/

My Starbucks Idea

GOT AN IDEA?   VIEW IDEAS   IDEAS IN ACTION
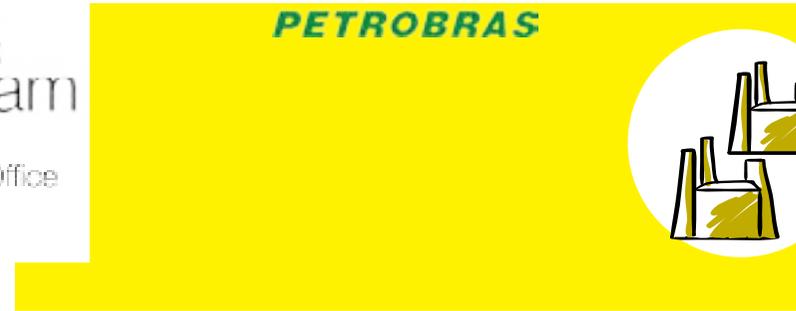
Hi there, **Sign In** to make a comment.

Share
Follow us on **Twitter**

Ideas so far

Search Ideas

PRODUCT IDEAS

33,322	Coffee & Espresso Drinks
3,486	Frappuccino® Beverages
9,761	Tea & Other Drinks
15,312	Food
8,059	Merchandise & Music
16,392	Starbucks Card
2,957	New Technology
10,763	Other Product Ideas

EXPERIENCE IDEAS

8,007	Ordering, Payment, & Pick Up
14,491	Atmosphere & Locations
11,040	Other Experience Ideas

INVOLVEMENT IDEAS

4,930	Building Community
9,060	Social Responsibility
5,540	Other Involvement Ideas
1,523	Outside USA

SHARE.
VOTE.
DISCUSS.
SEE.

Share your ideas, tell us what
you think of other people's ideas
and join the discussion.

my STARBUCKS IDEA

Most Recent Ideas

1 Min(s) Ago	Store location
1 Hour(s) Ago	have cold press juices at starbucks
1 Hour(s) Ago	please open a free standing starbucks
2 Hour(s) Ago	PLEASE Bring the Iced Peach Green Tea Lemonade back to San Diego!!
3 Hour(s) Ago	Speed up the process
7 Hour(s) Ago	Dogs- Treats, Merchandise, & Events
9 Hour(s) Ago	Peanut Butter and Banana Smooties
10 Hour(s) Ago	Suggestion About Entertainment

70

Starbucks has a simple platform to engage their customers and encourage them to propose creative ideas on how to improve the coffee chain products and services, not focused on any particular challenge.

The success of this website is highly linked to the recreation of the coffee shop feeling, its atmosphere and the relationship client - barista. Starbucks has a specialist staff to constantly check on what is happening on the website, posting comment on the user's ideas and driving the community to participate more and therefore being more engaged.

The quick and positive feedbacks, the high possibility that a client's idea become an actual product, being recognized as a Starbucks' product creator and the ongoing promotions and discounts, are some of the reasons that increase the participation and motivate millions of users of the website platform.

Website Features	Design Qualities
Divided by topics	Easy to use
Daily Question about product	Daily engagement
Brand colors and warm pictures	Recreate the coffee atmosphere
Show "account" managers	Humanize the website
User profile feature	Brings transparency into the process
Idea status	Make people feel that their ideas matter
Comment on people's post and ideas	

Unilever Open Innovation Portal

http://www.unilever.com/innovation/collaborating-with-unilever/open-innovation/

The platform gives the opportunity to present technical solutions and general ideas with and environmental approach, from who they call "innovation partner".

All the submissions go through an external portal held by yet2.com, which monitor all the ideas submitted and ensure the quality of the ideas that the Unilever team receive at the end.

There are two ways to submit ideas: either by responding Technical Challenges (our 'Wants') or by submitting unrelated technological solutions.

Unilever require only non-confidential information throughout the submission process.

The stages of the idea are described in the website, as well as the no-reward-in-the-first-stage policy (except from competitions), which gives transparency to the process. Also one can find the options on the type of partnership to be establish once Unilever pursue the submission.

Challenges are very clear, they provided a brief description about the topic, Unilever's aim, examples of the topic and the challenge requirement.

Website Features	Design Qualities
Classification of areas of interest Asking for technical solutions	Lead users understand what the company wants
User Profile with external partner	Outsourcing the idea screening process can improve the speed of the process but could be risky of IP rights

Functioning Methods	Learnings
After submitting a product idea: No rewards unless the idea is produced Contract creation with possibilities of (Product supply license, joint venture, technology acquisition, patent acquisition .	Transparency to process Several Contracts or partnership possibilities
Only no confidential information is required	IP protection
Brief challenge description	Could mislead some of the participants

IBM Jams

https://www.collaborationjam.com/
http://www.ibm.com/ibm/responsibility/minjam/overview.html

One of the best examples of the Open Innovation model is IBM's Idea Jam IBM a project to rewrite its company values initiated nearly 10 years ago .The company hosted Internet-based online conducted discussions on key business issues through brainstorming with 50,000 employees over 3 days. As a result of the 2003 Jam, the company values were updated to reflect modern business, marketplace and employee views.

After this first initiative IBM periodically invites a wide range of people to submit ideas in a number of topic areas and the company has indicated that this type of events have provided support for substantial new ways of using IBM's technology and

creating new software products. IBM also uses jams to involve its 300,000 employees around the world in reaching exploration and problem-solving.

During IBM's 2006 Innovation Jam, its largest Online brain-storming. IBM had as a result:

» 30,000 ideas submitted from individuals from all around the world.

» 10 new IBM businesses launched with seed investment totaling $100 million.

» More than 150,000 people participated, 67 companies, from 104 countries.

Website Features	Design Qualities
List of special guests	Company outstanding position
Show qualified team	Brings credibility to the program
Video Process (Hidden)	Transparency into the process
Presentation of previous Jams using graphic elements	

Functioning Methods	Learnings
Focused on strategic, business-critical issues	Overall improvement and more fields of innovation
Partnership with experts on the field and different sponsors e.g. non profit organization, corporations, academic institutions, government agencies	Guarantee the success of the online brainstormings

Nokia Research Center

http://research.nokia.com/open_innovation

Nokia Research Center is a group of the three different research Labs (Radio System Lab, Media Technology Lab and Sensor and Material Technology Lab) and several-selective-deep research collaboration with world-leading institutes.

NRC establishes laboratories worldwide and its targets are: Leading universities, research institutions and industrial partners.

Website Features	Design Qualities
Alphabetic list of Universities University Profile description Link to University website	Importance to its partners work

Functioning Methods	Learnings
Partnership with world-leading universities and research institutes	Warrant innovation in new research fields

Petrobras

Brazilian companies is that historically, they have always been very closed by nature. A new attitude and Petrobras is one of the few that was willing to incorporate Open Innovation into their research strategies. Building several type of collaborations, research and partnerships, with external partners like educational institutes and universities, adjacent companies and individuals among others.

Functioning Methods	Learnings
Different collaborations or partnerships with: External companies (even competitors), research centers, supplier and independent research institutions	Receive technology from external sources but develop the know-how themselves
Workshops with contracted companies and universities	Creation of new technological solutions

New fields

New opportunities

Solutions

Short time

Fidelity

Costumer's needs

Brand recognition
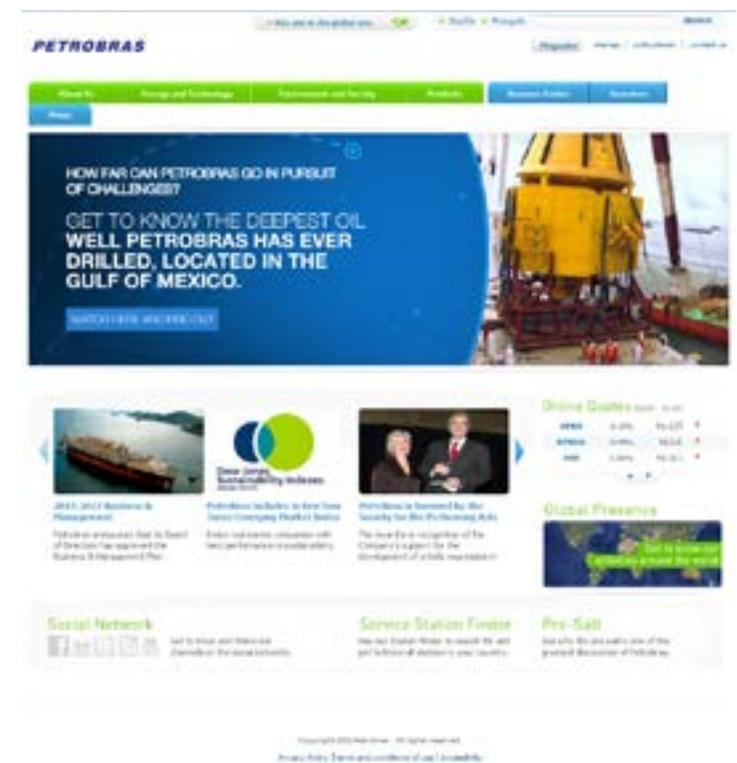
Crowdsourcing

As presented in the previous examples, Crowdsourcing is becoming the more typical approach to implement the Open Innovation model. The term "crowdsourcing" was initially formulated by Jeff Howe and it was defined initially as "the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined network of people in the form of an open call"[90]

By using crowdsourcing techniques, companies can reach a larger pool of talent; gain first-hand insight on their customers' needs; explore new solutions and discover new fields and opportunities at relatively low cost, often, in shorter time; at the same time as increasing brand recognition and fidelity.

This notion of crowdsourcing focuses specifically on the relationship between a company and its external environment. A more recent but equally important trend is the use of crowdsourcing approaches to improve innovation capabilities, knowledge capital and product development performance within organizations, particularly, in multi-national corporations with large internal work forces where huge pools of talent remain untapped due to organizational barriers.[91] Some categories of Crowdsourcing

90   Howe. Crowdsourcing
         Howe. The Rise of Crowdsourcing. Wired
91   Tapscott; Williams. Wikinomics.

a. **Crowdsourcing as competitions** consists on a collection of participants (individuals or companies) competing to provide the best outcome in a particular context. This approach has been quite successful in functions such as product design.

b. **Crowdsourcing as marketplaces** provides a platform where participants can perform tasks in exchange for some form of compensation. Successful uses of this approach tend to require well-defined and self-contained units of work (e.g. iStockPhoto)

c. **Crowdsourcing as communities** takes advantage of traditional community-based approaches to engage large collection of individuals and allow them to contribute their efforts to the generation of ideas and/or creation of some product. Successful examples include Fiat Motors Brazil's Mio concept car (http://www.fiatmio.cc/en), Procter & Gamble, Dell, Wikipedia, Flickr, and open source projects.

d. **Crowdfunding** asks people to donate a defined amount of money for a specified cause, or project within a predetermined time-frame. In case the goal is not reached all donations are refunded.

PARTICIPANT'S INCENTIVES

Two types of markets that determine relationships between effort and payment: monetary and social.[92]

Identifying the adequate incentive system is a key barrier for successful implementation of crowdsourcing-based approaches. Incentives apply to two key dimensions: attracting the right target population and creating the adequate motivation for members of that target population to engage in activities. It is worth pointing out that the incentives do not necessarily have to be financial. In fact, intrinsic motivational factors such as enjoyment and the desire to help and gain experience tend to be quite important in terms of productivity and quality outcomes[93]. Furthermore, just traditional financial compensations tend not to result in the best overall outcomes when using crowdsourcing approaches. Instead, community infrastructure enables participants to engage in open and collaborative efforts while facilitating the tracking and aggregation of contributions into valuable outcomes.

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92   Heyman; Ariely. Effort for Payment.
93   Ibid
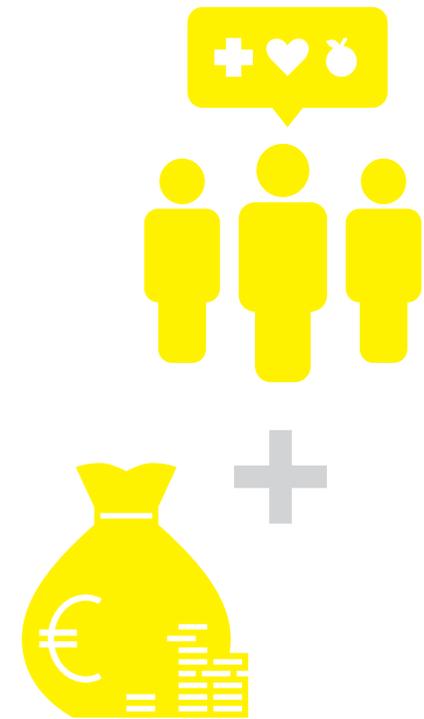
CROWDSOURCING EXAMPLES

Constant collective product ideas generation and development. Sell products in own shop

Social problem solutions

Crowd-financed projects

Collective product development - First common license automobile

Quirky decided to base its whole business on external talent and build a community of designers and customers. Quirky works as a social network for inventors that help turn vague ideas into marketable products, then manufacture and distribute them. Quirky's mission is to make invention 'accessible' while building a consumer product company.

The inventor submits the idea, the community curates it, the company evaluates it, and take care of the detail and prototyping phases, actually produces it and sells the chosen inventions online, and distribute them in famous retail stores, mainly in the US.Once a week Quirky livestreams product development sessions, wherein people online can share their feedback.

The 130 staff-company has develop 385 products developed with what they call "Social Product Development", the product's profit is shared among successful participants.

The picture on the left shows a prototype almost ready to be launched in the market called Nimbus, an smart alarm clock born from the established partnerships with General Electric. Thanks to this partnership 'inventors' have access to a deep library of technologies developed by G.E for other purposes.[94] Quirky works together also with companies like apple and it uses several different and innovative business model that has been an inspiration for many of innovation experts.

Website Features	Design Qualities
System Map (previous version) Different stages and steps in a scroll-down-page (New version) Individual timelines Broadcast selection process	Communication is the most important indicator of transparency to the process
Name, data and information of every user's project like dates and # of collaborators Reset the clock's idea every 30 days	Encourage participation Motivates and give recognition to users Improves e-commerce experience

Functioning Methods	Learnings
Track the level of involvement of every person in the community	Explores motivation through altruism and community building.
Takes expert contributors as main source of innovation. Offer perpetual royalties	Unusual and innovative business model

94   Brustein. G.E Turns to the
      Crowd for Help in Creating
      Consumer Products

Open Ideo
http://www.openideo.com/

Open Ideo is an Open Innovation platform to solve social challenges. The principal scope of this Ideo's platform is to contribute to social causes - sponsored by non profit organizations- throughout a design process.

The challenge process is divided into stages, were a community of creative people and thinkers propose questions, ideas and share inspirations to solve the challenge. Ideo encourage group brainstorming, and invites openly to universities and other institutions to participate on the challenges by offering some tools to tap design thinking to leaverage the creative process.

The community can support on and vote for each other's ideas with the "applause" button. Later on, concepts are refined and eventually a winning idea, concept or business is picked.

The most interesting part of this platform is how explore different motivations beyond money, to make people participate actively and to build a trustful community. People participates on the Open Ideo's challenges because they believe that they can help to build a better world, and learn about what others think and do.

Website Features	Design Qualities
Use of graphics and icons	Joy of use
Video content (How they work and challenges)	Easy to use
Challenge timeline	Transparency of the rules
Users' profiles	Encourage participation
Rating /feedbacks	
Tool kits	
Participants and ideas' counter	
Available printing material	

Functioning Methods	Learnings
Involvement of creative communities into the design process	Social problem solving by social innovation
Community building as motivation	Create for good not for money
Possibility to team up	Collection of ideas with a wire range of solutions
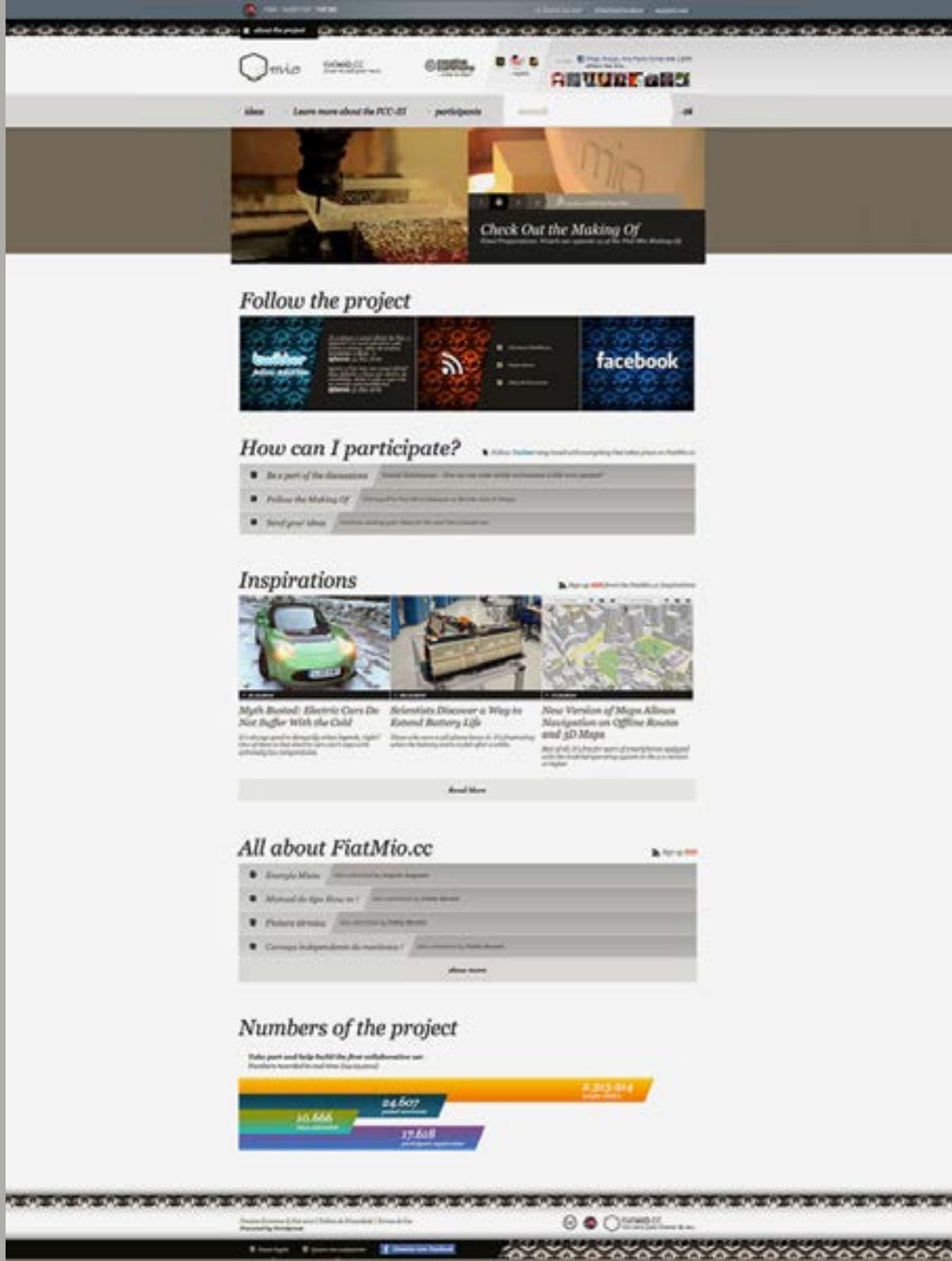
Fiat Mio

"Fiat Mio: the world's first ever crowdsourced concept car.

Fiat explored a new way to engage costumers in the Brazilian market and to attract automobile enthusiast from all around the world. Fiat Mio was an open collaboration platform to empower customers to create "the car of the future" by helping Fiat to create the wold's first open source car. This whole process is was documented and shown on the web through the "Making Of Fiat Mio blog".

As a result Fiat not just created a more transparent relationship with his actual and possible customers but also changed the history of the automobile industry, opening up the reserved industry to normal people. Involving people into the decision making process, even for car colors and doors configuration.

The outcome of the contest is a car prototype that works with futuristic technologies (FCC-III Fiat concept Car III). It won the International Design Excellence Awards (IDEA) for design strategy (Bronze) and the final specifications are available for free to everyone, included other car companies under a Creative Common License[95].

Although the outcome is not a working-salable car yet, Fiat world-wide publicity that increase its brand awareness. Fiat managed to captivate more than 2,6 millions of visitors, 11.000 ideas were posted based on user's ideals and needs, 17.000 users participated from more than 160 countries. Even after f the contest was over, people continued sending their ideas.

Website Features	Design Qualities
Broadcasting videos of the process	Involvement feeling
Participant profile Personal blog for inspiration	Engage Participants
Available in different languages	Make it accessible
Timeline of events Idea's counter	Transparency on the process

Functioning Methods	Learnings
Developing the project together with the crowd, even including them into the prototyping phase	Increase the engagement and brand fidelity
Share results under Creative Common license	Innovative use of OI in automotive industry
Worldwide platform but focused on the Brazilian market	Got people the opportunity to participate and observe global trends.

95 http://www.fiatmio.cc/en/terms-of-use/

Kick-Starter
http://www.kickstarter.com/
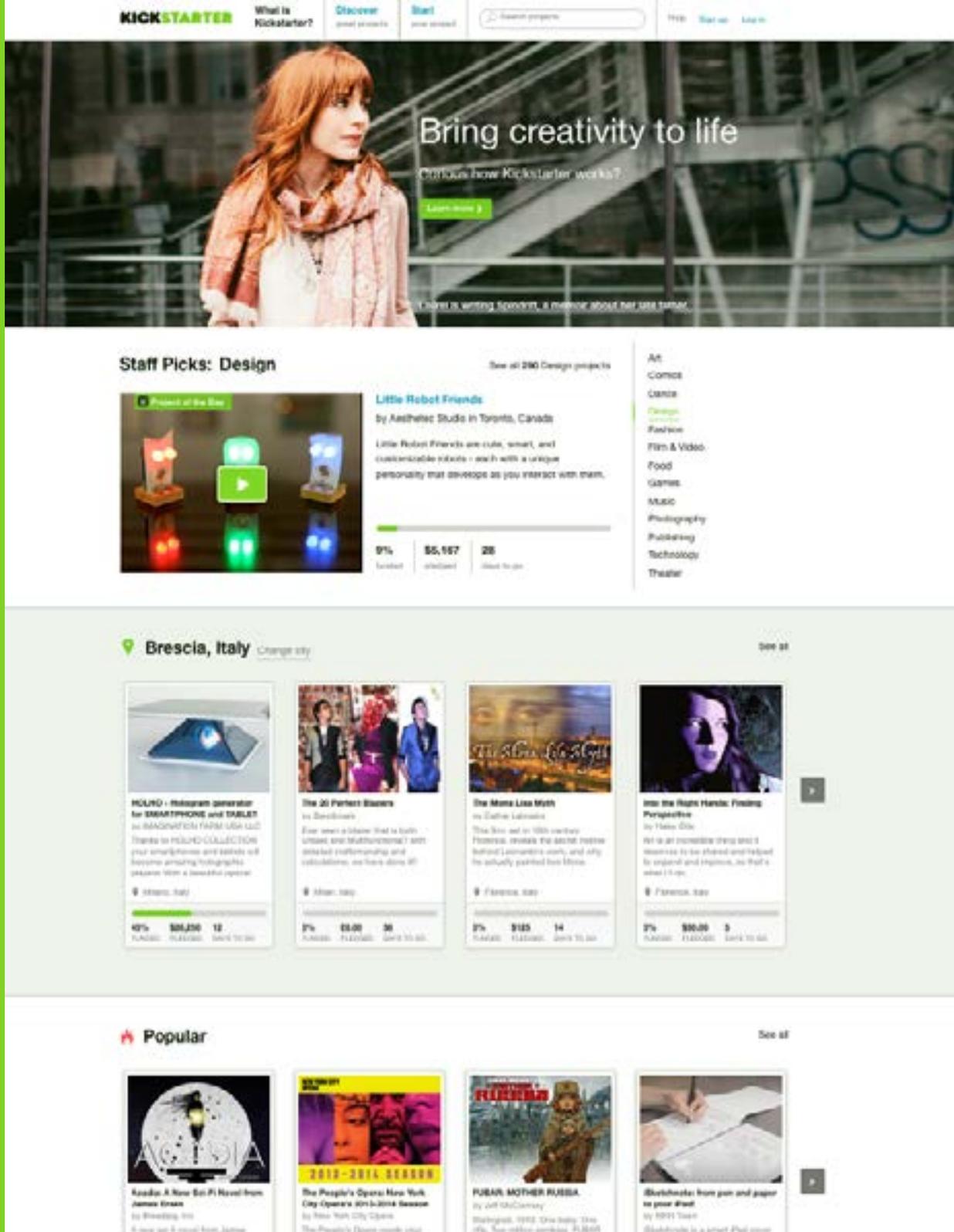
This is a slightly different example. Kickstarter is a for-profit company based in New York that supports artists to raise funds via crowdsourcing through its platform.

What makes Kickstarted different from the others crow-funding platforms is that Kickstarter is clearly directed to an specific audience, projects have to fit to one of their categories (Art, Comics, Dance, Design, Fashion, Film, Food, Games, Music, Photography, Publishing, Technology, and Theate). Therefore, Kickstarter allows its users to own the complete rights of their projects and it also works as a test to the market/audience at the same time.

Since kickstarter launched in 2009, more than 4.8 million people have pledged over $782 million, funding more than 48,000 creative projects.[96] In the case that a project is successfully funded, kickstarter applies a 5% fee to the funds collected. However, *Backers* support projects to help them come to life, not aiming financial profit.

Website Features	Design Qualities
Clearly divided by topics	Easy to use
Video supporting the project's explanation Production plan and estimated timeline	Joy of use Transparency and credibility
Rules, guidelines and content are written in an informal way	Coherent with target More welcoming

Functioning Methods	Learnings
Hardware and Product Design projects have precise specification	Selection of the projects to be sponsored IP protection
Creators have to offer a reward (done by the project or its creator) to their bankers	Motivate people that believe in their work
Projects must be clear about their state of development, and must show details along with a prototype demonstrating the current functionality	Prevent misunderstandings about the project's characteristics and scope

96   http://www.kickstarter.com/
hello

COMMON FEATURES

» Websites are in line with their brand's identity but adequate to their target's profile

» Express transparency in the Process description -how it works- with videos, graphics, pictures, when required.

» Registration / profile or account creation, or access via social media profile (Facebook being the most common).

» Engage participants establishing a dialog within the community and the business staff. Feedbacks when need it.

» Displaying the partners of the initiative.

» Accessible world-wide but usually focused on an specific market, or country-region.

» English as main language for both websites and submissions.

Highlights

Throughout the last years it became common to incorporate the combination of different technologies and take advantage of them in a private and professional environment. Radical innovation has been rather done by the **implementation of new technologies to re-define a traditional process** than the creation of complete new products, although this still happen.

As previously mentioned, one of the recognized facets of Web 2.0 technologies is their ability to exponentially **connect a large number of people in a short period of time at low cost.** Therefore, potentially customer acquisition and connections between users can occur very fast and in large numbers. Furthermore, the implementation of **Web 2.0 technologies has being used in different business fields and for different purposes.** Among the previous examples I could identify some of the uses, e.g. word of mouth advertisement, branding, referral networks, marketing, product and service ideation and funding.

Also, during the analysis I realized that the **Open Innovation approach has many similarities with the methodology of service design.** While the Open Innovation approach stresses the importance of keeping an eye open for ideas and suggestions that can be derived from outside an organization; service design in the other hand is engaging with externals in participatory design processes, but acting like a catalyst and developer of the ideas.

Conclusions

The world has been through a lot of changes: financial, social and environmental crises. Everyday get in touch with people is becoming easier and easier, as well as the creation of innovative campaigns to reach customers and have a direct insight.

Internal R&D processes tend to be successful in leveraging technical and marketing expertise within an organization, they have a limited potential in identifying 'field' opportunities, Open Innovation processes aim to identify new opportunities for Innovation from an outside-in perspective. This is usually done by actively engaging in the daily practices of customers who use the products and services currently provided by an organization or competitor organization, and by investigating the wider context of this usage to identify unmet needs, that are not covered by the existing service offerings. There is a vast range of opportunities for service designer in the moment that companies decide to start working with externals. In this case, designers can be in touch with several stakeholders and get insights from different perspectives.

Service Design is a useful framework for maintaining the perspective of the outside world of users/consumers as the leading element in selecting and elaborating ideas for potencies innovation, rather than internal focus on available technologies or company capabilities.

NEXT STEPS

» Understand the enterprise Robert Bosch GmbH, it values and strategies.

» Take a close look to co-creation practices with stakeholders, especially designers

» Combine the distributed organization and stakeholders resources in order to create an optimal service offering.
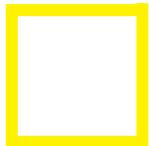
» Analyze and select between different opportunities, such us:

  » Service design within the company to canalize the ideas
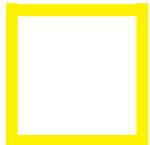
  » Designers working together through a platform that allows them to grow as well

4

Specifying the Context

Robert Bosch GmbH
Designers
Design Competitions
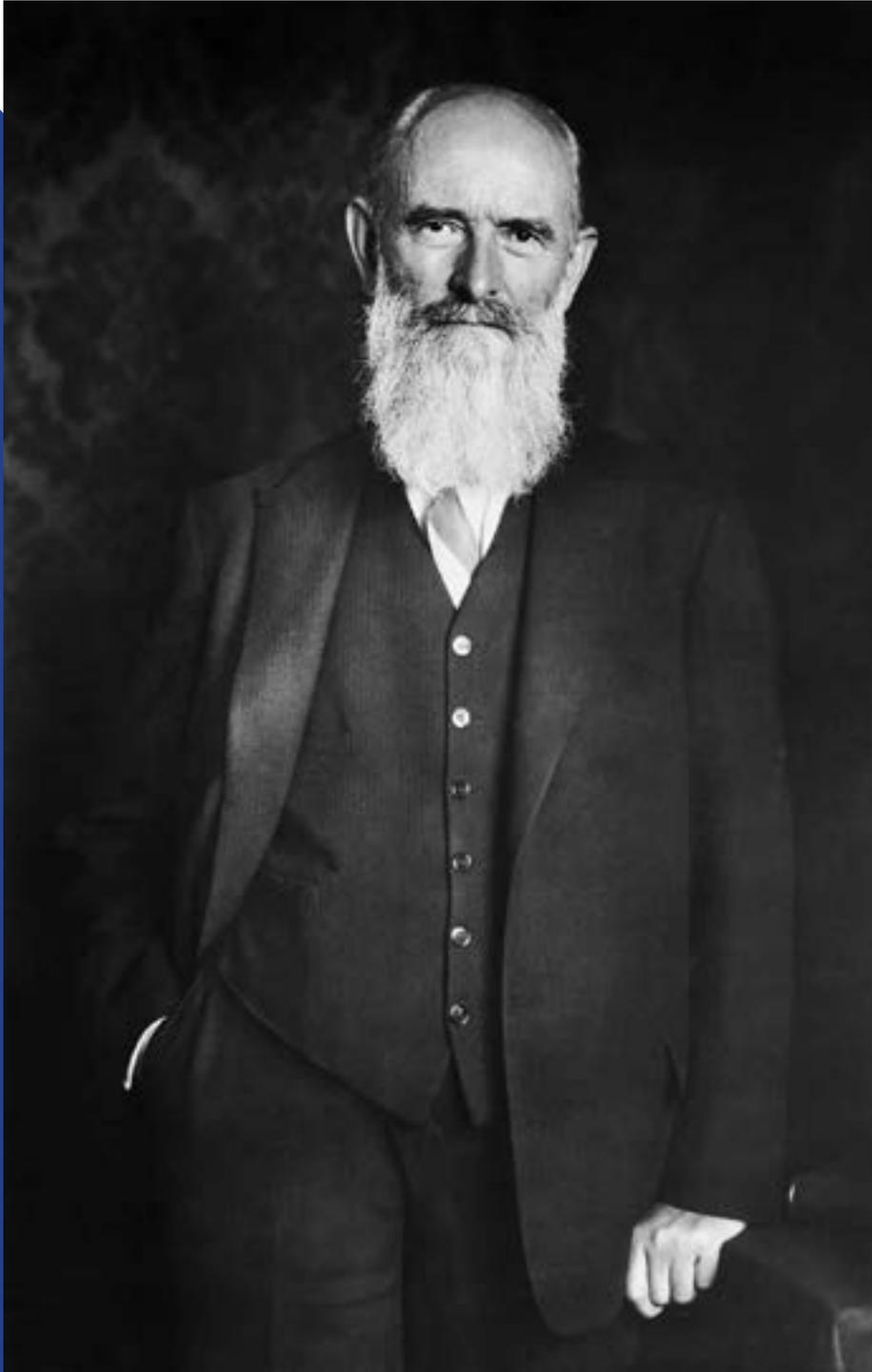
Robert Bosch GmbH

ROBERT BOSCH - THE FOUNDER

Robert Bosch was born on September 23th, 1861, in Albeck, a village northern of Ulm in Germany. As a student, Robert Bosch had always a thirst for knowledge and a wide range of interest. After finishing secondary school and following his father's advise, Bosch started an apprenticeship as a precision mechanic.[97]

During the winter semester of 1883–84 Robert Bosch enrolled at Stuttgart Polytechnic as a non-registered student. It was there where he overcomes his 'fear' of technical terminology. Afterwards, he worked in different companies fist in Germany, then having the opportunity to travel around the world, he worked in the United States (Edison Machine Works), and the United Kingdom (Siemens Brothers in England). Finally in Stuttgart, in 1885, Bosch opened his "Workshop for Precision Mechanics and Electrical Engineering"[98]

Robert Bosch self image was more an entrepreneur than an inventor, nevertheless since his company was founded in 1886 it has been known for taking good ideas and turning them into market and innovative products.[99] Thanks to Robert Bosch instinct for busi-

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97   RB GmbH, C/CC. Bosch 125 years
98   Ibid
99   RB GmbH C/CC. Technology and Innovation at Bosch an Outline of Bosch product history.

ness the company has always being remarkable for recognizing interesting inventions and ideas that have the potential of being successful products which had led the company from being a small workshop to be a major innovative technology group[100].

Robert Bosch placed great importance on thriftiness, punctuality, discipline, and quality, and strove for constant improvement in all these areas.[101] But for him, the most important thing to offer to his customers was the highest quality present in every single product. Also Bosch always treated his staff as partners and he demanded a great deal, but in return delegated responsibility, paid high wages, and ensured good working conditions.[102] Robert Bosch beliefs are still present today and they are essential in the current and future company's vision.

"It is my intention, apart from the alleviation of all kinds of hardship, to promote the moral, physical, and intellectual development of the people." RB

100   RB GmbH, C/CC. Bosch 125 years
101   Ibid
102   Ibid

1886
Establishment of the company: opening of the Workshop for Precision Mechanics and Electrical Engineering in Stuttgart on November 15th

1898
First sales office in the United Kingdom

1918
Logo "armature in a circle" designed by Gottlob Honold

1905
First manufacturing site opened in Paris

1913
Bosch Lightning System & Apprenticeships training in the main plant in Stuttgart city

1927
Production of injection pumps and nozzles for diesel engines

1912
Production plant in Springfield, US

1897
First successful installation of the low voltage magneto ignition device in a motor vehicle

1921
First Service repair shop is opened in Frankfurt

1928
Launch of the Forfex hair trimmer, Bosch's first power tool

1942
Dead of Robert Bosch

1974
Program 'safe, clean, economical'' for product development

1976
Production of lambda sensors for three-way catalytic converters

2008
Bosch Solar Energy AG
Bosch Software Innovations
Join venture with Samsung

2010
Predictive emergency brakes & Lithium-ion battery cells for automobiles

1951
Start of production for gasoline injection systems for passenger cars

1986
Production of traction control system TCS

2011
Drive components for e-bikes

1989
First independent vehicle navigation system in Europe

1933
Launch of the Bosch refrigerator

1979
Production of Motronic electronic engine management system

2012
Join venture with Polaris e-scooter machine

1978
Production of ABS, the electronically controlled anti-lock braking system

2003
Launch of Ixo -cordless drill/driver with rechargeable battery

2000
Production of Motronic gasoline direct injection system

1967
Electronically controlled gasoline injection system
Foundation of Bosch Siemens Hausgeraete

1932
- First power drill and Bosch hammer
- Market launch of the series-production car radio in Europe
- Adquisition of heating systems business

1997
Production of High-pressure diesel injection system

1963
Entry into packaging technology

1995
Production of micro-mechanical sensors & the world's first electronic stability program

Sources: Robert Bosch GmbH C/CC. Technology and Innovation at Bosch an Outline of Bosch product history.
Robert Bosch GmbH C/CC. Bosch Today 2013
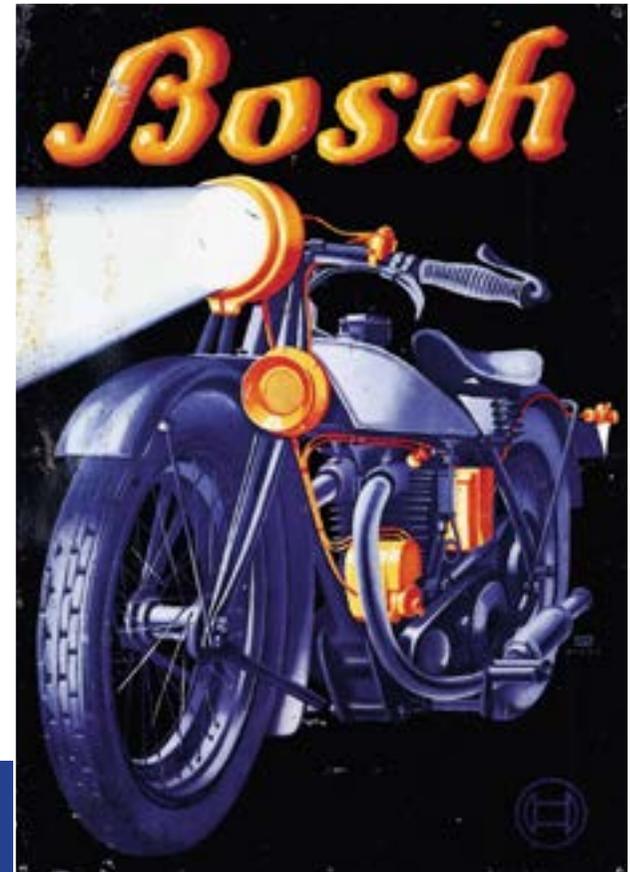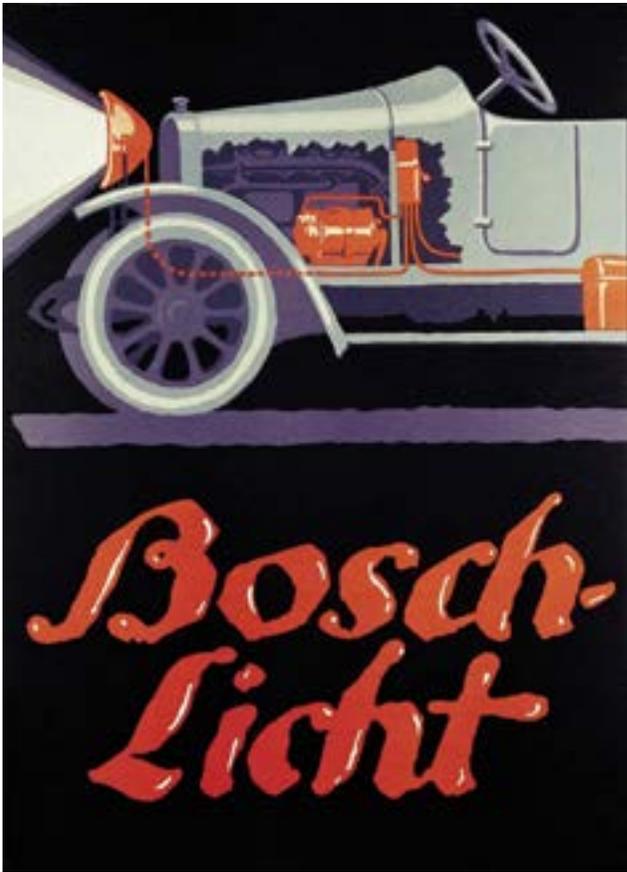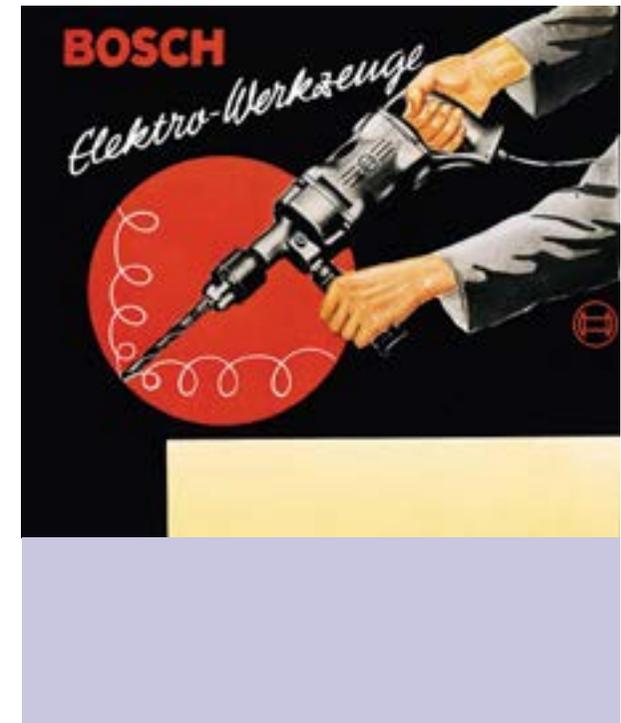
306.000 associates

150 countries

52.5 billion euros
sales revenue

4.784 patents in 2012

4.8 billion euros for R&D

The Bosch Group

No company can achieve success without having a strong brand, and of course Bosch is not the exception. Based on the principles of Robert Bosch and the company's capacity to innovate on technology and expand its portfolio. Today the Bosch Group is a leading global supplier of technology and services.

Since the beginning of 2013, the companies operations have been divided into four business sectors: Automotive Technology, Industrial Technology, Consumer Goods, and Energy and Building Technology.[103] In 2012, Bosch counted approximately 306.000 associates and generated sales of 52.5 billion euro.[104]

The Bosch Group comprises Robert Bosch GmbH (Bosch in Germany) and its roughly 360 subsidiaries and regional companies in some 50 countries. If its sales and service partners are included, Bosch is represented in 150 countries. Its worldwide development, manufacturing, and sales network are the foundation for further growth.[105]

In 2012 Bosch spent 4.8 billion euro for research and development, and applied for nearly 4.800 patents worldwide, 650 more than in the previous year. The Bosch Group's products and services are designed to fascinate, and to improve the quality of life by providing solutions which are both innovative and beneficial.[106]

Automotive Technology

Gasoline System
Diesel System
Chassis Systems Control
Electrical Drives
Starter Motors and Generators
Car Multimedia
Automotive Electronics
Automotive Aftermarket
Steering Systems

Industrial Technology

Drive and Control Technology
Packaging Technology

Energy and Building Technology

Thermotechnology
Security Systems
Solar Energy

Consumer Goods

Power Tools
Household Appliances

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103   RB GmbH, C/CC. Bosch Today 2013
104   Ibid

105   Ibid
106   Ibid
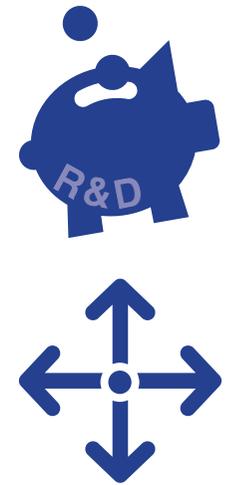
STRATEGIES FOR 2013[107]

For Bosch, 2012 was a year of dynamic development linked to adjustment to its strategic alignment. The slowdown in the global economy braked sales growth in the Bosch Group over the course of a year, resulting in an unsatisfactory development of results. Nonetheless, the company continued to extend its international footprint and once again invented a high amount on research an development activities. Furthermore, a large number of divisions were also working on products and services which make use of increasing connectivity.

Bosch will continue along this path in 2013 and its corporate strategy will remain focused on the areas of energy efficiency, resource conservation, environmental protection, safety and comfort. Bosch is pointing towards the creation of user-oriented product, services and technologies.

In 2013, Bosch alings its strategies to the biggest world's mega-trends, such as globalization, aging population in several countries, and the growing demand for resource conservation and environmental protection. And additionally for Bosch, the growing connectivity of people and products as a result of the internet are both a challenge and an opportunity. Bosch is now integrating its products and services into networked systems, e.g. the drive unit and display of an e-bike (Red Dot Award for product design).

The group is continuing with further increasing its innovative strengths. For instance, in 2012 Bosch reached a record level of investment on research and development, spending 4.8 billion euro and hiring an additional 4.300 R&D associates. Currently employing 42.800 researchers and engineers.

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107   RB GmbH, C/CC. Bosch Today 2013

OPEN INNOVATION AT BOSCH

As we observed before, innovation is a major driver of Bosch growth and strength. During the recent financial crisis. Bosch continues to explore technology areas to diversify its existing product offerings and to find new ways of improving its current ones. Customers demand both reliable products and competitive prices, generating the need to lower time and cost for the release of new products.

Corporate research and the different Bosch business units have well-established innovation processes but this does not always guarantee innovation. As explained in the previous chapter, companies now need not just leverage their internal knowledge resources but also to explore external ones, and Bosch is doing it as well.

In the case of product development for an external party, Bosch sets different kind of contracts and organizational models of collaboration according to the importance of the project, usually preferring a co-development agreement, more especifically joint ventures. Among the most successful joint ventures, Bosch had a 5 years collaboration with Samsung for the development of SB LiMotive lithium-ion batteries system (picture above), and a recent partnership

Smart home
How intelligently connected household appliances communicate with each other

Heating, ventilation, and air-conditioning are automatically adjusted to changing weather conditions

The charge spot for the electric car checks with the utility company for the best electricity price

A central home gateway takes care of data reception and transmission between appliances and the internet

Recording your favorite TV program, starting the washing machine – all this can be done remotely

Partners: ABB BOSCH CISCO LG

of ABB, Bosch, Cisco, and LG that aim to set up a consortium to provide a software platform for smart homes, intending to develop an open architecture for data exchange (previous page, picture bellow).[108]

Bosch also maintains active contacts with universities and institutions and it is involved in about 100 cooperative research partnerships. One outstanding example is the outcome of the work with TRUMPF, the University of Jena, and the Fraunhofer Institute to refine the use of ultrashort laser pulses in materials processing.[109]

Moreover, the majority of projects are develop by multinational team-members in order to stimulate creativity and to respond efficiently to important cultural differences and international requirements. and a topic to consider is the high risk of imitation.

Lastly, Bosch has some crowdsourcing-based implementations with promising results and I would say that for Bosch, the open innovation model is a valuable complement to the traditional innovation model.

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108   Bosch Media Service. Open standard for the smart homes of the future http://www.bosch-presse.de/presseforum/details.htm?txtID=6536&tk_id=107 (accessed on November 4, 2013)
109   Bosch Media Service. "Manufacturing technology is a driver of product innovation" http://www.bosch-presse.de/presseforum/details.htm?txtID=6475&tk_id=166 (accessed on November 4, 2013)   s

CROWDSOURCING PRACTICES AT BOSCH

Over the past few years, Bosch has done a number of different initiatives that combined elements of crowdsourcing. These practices have involved external parties via open innovation portals in few cases as well as internal crowdsourcing or idea generation platforms within Bosch. During my internship I had the opportunity to get in contact with two of these initiatives (Automotive Aftermarket and Bosch Innovation Thai). In this section, I briefly describe some of initiatives, but the focus will remain on the ones I have more knowledge of.

Open Innovation Portal

http://www.bosch.com/en/com/innovation/open_innovation/open_innovation.html

Bosch Open Innovation Portal is the landpage for the crowdsourcing initiaves from the different Bosch business units. The current initiates inside the innovation portal are:

Purchasing Innovation Portal

A channel where external individuals or entities can submit ideas, designs or products for consideration of Bosch. The submitted ideas are evaluated in a preliminary form by the Corporate Purchasing organization and then the ideas that passed the initial evaluation

Power Tools Innovation Portal

continue through the process. After the ideas are incorporated into a system that distributes the information to a number of Bosch associates across the business units and central departments. The innovation portal has received about 1000 ideas over the past 5 years and 9% of them have move forward through the acquisition process.

The Power Tools portal allows external individuals to submitted ideas, designs and even product for consideration of the business unit. It is in essence the same approach as the previous example. Nonetheless, the information related to is not distributed to a broader audience.

Automotive Aftermarket Innovation Plattform

The Innovation portal works as a forum of experts and allows users to post ideas and gather opinions from the community. This particular approach enables Automotive Aftermarket to get deep user insights in the forum conversations; to have a clear view of what is happening on the market and to engage with its customers. The platform explores the concepts of community and allow information sharing and support.

In my internship I had the opportunity to meet Mrs. Amelie Kummler, the responsible person for the communication of this platform. During our interview she explained how useful the platform is to gather ideas from the discussions, in order to improve existing products, but she also affirm that the platform needed a 24/7 mediator to maintain Bosch image and to guide the discussions.

» Start 2010, pilot in 2011, go-live beginning 2012

» Submitted ideas: 150

» Increased Bosch AA awareness

» Main effort Hosting, posting, tracking

» Advertisement Face-2-face (recommended), RB advertisement channels, public media (not recommended), print media

Open innovation contest Bosch Thailand

It is an annual innovation contest to promote green technology innovation for Bosch Thailand. The target group of participants are students of vocational and universities level from the faculties of Engineering, Architecture, Computer design or Industrial design. The main goal of contest is to promote Bosch brand awareness in the region, but also to demonstrate Bosch products to young people in order to increase brand loyalty by providing participants the opportunity to associate with new technology and to enhance their knowledge and perspective. The contest had a positive feedback from the participants. The winner project of 2009 was a solar-paper cut machine.

» Start 2008 followed by campaigns in 2009, 2012

» Submitted ideas >300

» 12,370 views from 43 relevant youtube clips, > 270 website / posts founded on the internet talking about the campaign

» Awareness of Bosch brand increased from 21% to 60%, Bosch products 14% to 60% (age < 20)

» Advertisement TV, University roadshows, youtube videos, print

About the submission criteria:

» Drawing sketched of the idea on A1-sized paper with concept description, applicant's information and estimated cost.

» The proposal must be equipped with at least one of Bosch's products.

General aspects of the contest

» Prize: Intensive technical training and scholarship fund support

» Finalist are selected by an honorable jury and Bosch provides funds for prototyping experiment and training with experts.

Learnings

The crowdsoursing approaches explored within Bosch have been of two distinct types: idea management (with a few elements of communities) and design competitions. Although it is not shown several of Bosch business units had also used existing platforms for idea management on specific topics, while others had developed their own systems as seen before. In general, these experiences have produced positive results, but there are some challenges that remain to be addressed. The positives and challenges are summarized next:

Initiative	Positive Aspects	Negative Aspects
Purchasing Power Tools	Possibility to directly present an idea Development of around 9% of ideas	The 'crowd' is mostly homogeneous, engineering type
Automotive Aftermarket	Community aspects Deep insights from experts Bosch feedbacks of the discussion Leverage customers base knowledge as well as Bosch internal knowledge Local advertisement, possibility of live group discussions in fairs and events.	Achieved only incremental-small innovation from discussion. Initiative closed to German market Huge hosting effort on mediation, posting and idea tracking (24/7 person in charge for only German community).
Innovation Contest Thai	Expanded Bosch niche Besides just idea generation, finalists could build a prototype under Bosch supervision Apropiate product outcome for local market	Local initiative almost unknown for Bosch people out Thailand
All		Platforms are managed by different people, each of them have a different character and language.

Additionally, another topic to have in mind is the high risk of imitation, thus the IP protection. Bosch manages its intellectual property (IP) extremely careful, and all its associates and partners are subjected to sign detailed confidentiality agreements.

In conclusion, having taken into account the examples of the Open Innovation initiatives within Bosch, its positive and negative aspects and the character of the firm, I strongly believe that Bosch efforts could be improved by a platform that integrates existing and future initiatives, as well as reach a broader and more heterogeneous audience. For instance, change the focus from exclusively engineers to a variated crowd that includes also designer and similar fields, as observed on the successful example of the innovation contest in Thailand; but also having in mind possible academic partners.

Regarding to the functionality of the system I can envision the involvement of the crowd to be articulated in different ways, from concept development to idea refinement. Besides the positive aspects found on the existing practices Bosch would have to improve and consider to :

» Support the collaboration among the participants and the development of the idea

» Provide the right incentive mechanisms to motive participants

» Express transparency on the process. E.g. once a collection of ideas have been selected to be developed further, Bosch need to let know the crowd, show successful ideas, etc.

The next sub-chapter aims to analyze the OI strategies of Bosch competitors and the existing similar open design practices.

Case Study Analysis

BOSCH COMPETITORS

This is a brief analysis of the Bosch main competitors to understand if they are using Open Innovation although most of them did not have public announcement of their practices (in case they do). The aim is to observe and learn from the practices found.
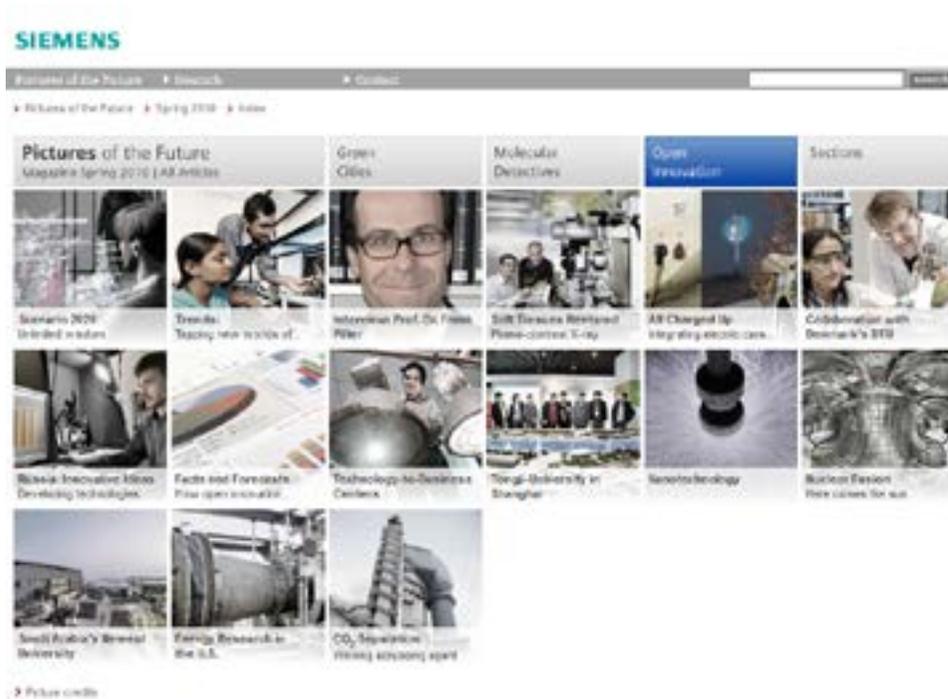
Siemens

Siemens implements a holistic approach. Siemens applies different strategies depending on their scope and they adapt they initiatives depending on the targeted location. The firm seems to have lot of experience working with Open Innovation with some of the following initiatives:

» Universities and research institution collaboration

» Adjacent business collaboration

» General contests

» Permanent monthly software/render contest

» Student competitions in different countries

Continental

Annually they are the main sponsor on the international race-car design competition: Formula Student held in Germany. Financing of prototype and technical support are part of the deal.

They do so to:

» Evaluate the students technical skills for future recruitment

» Explore new application fields for their products

Besides Siemens, many of Bosch competitors does not seem to have a clear strategy of Open Innovation. In most of the companies' websites was impossible to find any relevant information of OI practices.

Best Practices

As said before, most of the companies are using Open Innovation, and some have Open Design initiatives that can work as case studies. I found the Electrolux 'Design Lab' and Lego Cuusoo to be the best Open Design practices (from the service-system and graphic point of view). Next, for the website analysis I would include again pages such as Open Ideo (pag.73) and Quirky (pag. 71), since their platform and working system are really interesting and inspiring. Many other contest websites were also analyzed.

As done in the previous chapter, the idea is to understand how the websites work, at the same time as analyze their website features and interface, in order to know what are the companies offering in this moment in terms of open design platforms and the ways how this platforms are attracting and motivating the right target group.

The Electrolux professionals

Meet the Electrolux professionals who will evaluate your work and give you feedback during the competition.

Design   R&D   Innovation

The submissions

Electrolux design Lab is an annual design competition open to design students and recent graduates from all around the world. With this contest Electrolux invites designers to create a product, accessory, consumable or service for the future of urban living.

From my point of view the Design Lab is a design friendly approach that is worth to take in to consideration. The way this competition works is a good example of a system, the rules and briefings are very clear (although the briefings are quite open) and the process is established in 4 classification rounds allowing the improvement of the project from the part of the designer. Participants and viewers could vote for the solution they prefer and once

the best submissions are selected for further development, their creators receive an special recognition together with the people's choice. The contest was mainly advertised in the website and other online channels. e.g. twitter, youtube, google plus. Electrolux Design Lab 2013 had 1700 concept submissions that reflect Scandivian design values and were intuitive and sensitive to the environment, among other qualities. Each of the 3 Jury's member was specialized in a different field that supports product realization (Design, R&D and Innovation).

Another particularity was the use of the blog layout which is quite trendy among designers. And previous to Design Lab, Electrolux held a competition for the logo design.

Website Features	Design Qualities
Clearly separated by topics	User Friendly
Header video showing relevant facts (changes depending on the stage)	Easy to use
Participant's blog	Encourage participation and trust
Official Feedbacks Competition's map (simplify user journey)	Motivate designers Transparency of the rules Easy to use

Functioning Methods	Learnings
Mainly online and social media publications	Explore new efective channels of advertisement
5000 euros and 6 months internship for 1st prize Finalist trip to Stockholm People's choice recognition	Giving recognition to best designers Motivate and reward designers
Additional jury of experts for the 8 finalist	Evaluate better the concepts and understand the world of design

Lego Cuusoo
http://lego.cuusoo.com/
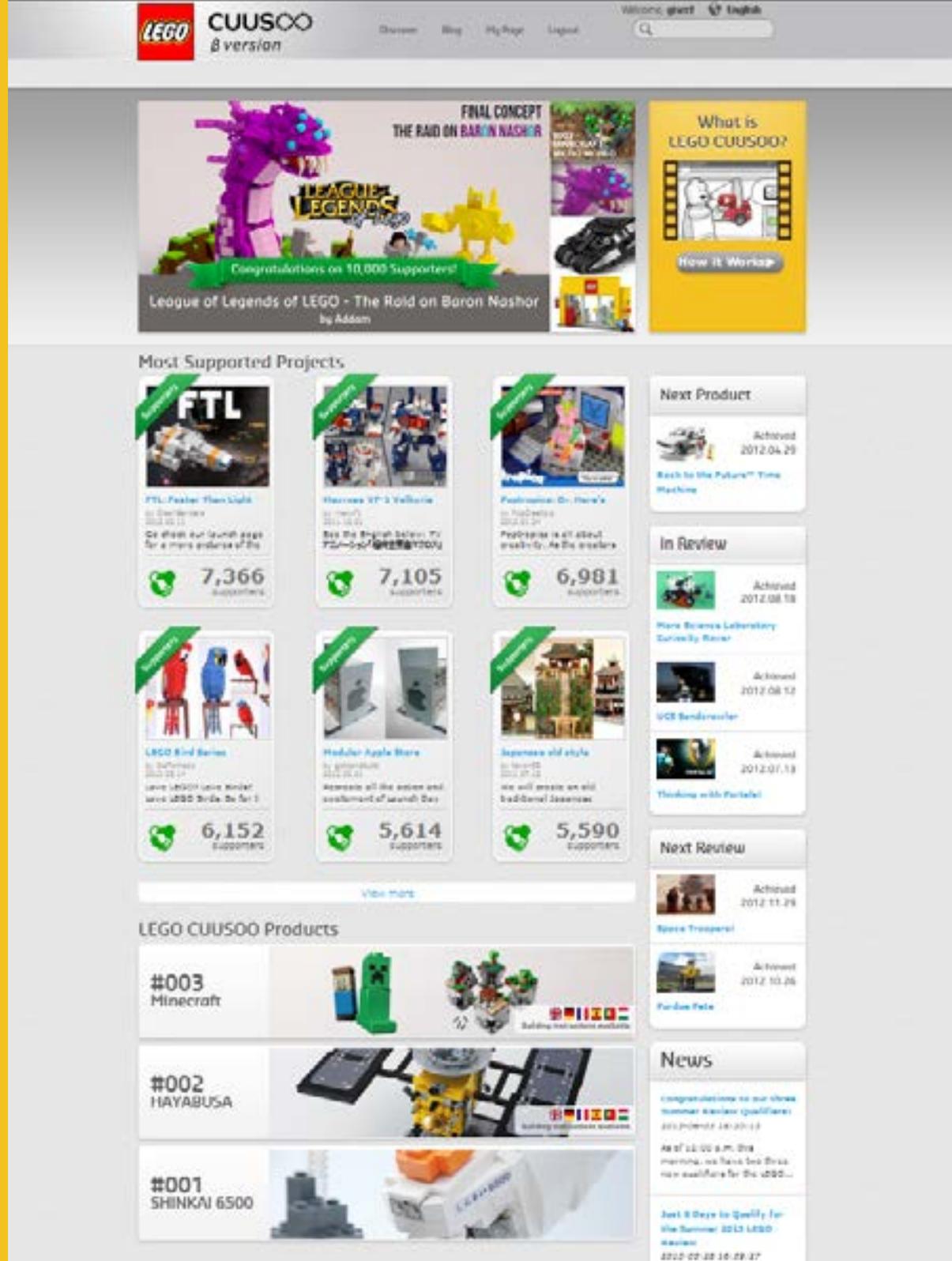
Lego Cuusoo is an initiative initiated in Japan in 2008, and launched worldwide in 2011. The initiative is born from the partnership between the LEGO Group's New Business Group and Cuusoo System, a subsidiary of Japanese company Elephant Design. These companies teamed up in order to create a platform to produce community supported sets, where anyone up 18 years could upload an original set. In the case a set gains 10,000 supporters (originally 1000) it would be reviewed by the Lego Group (revisions occurs 4 times a year) for the chance to be produced as an official Lego product. The website is still in open beta.

I took Lego Cuusoo as an example because although it is a

simple platform with a very standardized product it has being the only firm so far that implemented a different payment system. Lego offers 1% royalties (of net sales) to projects launched into the market. Also if a participant designed an original part idea, he/she will receive a one-time flat fee determined by the Lego Group, as remuneration for every part idea that is produced. Lego supports collaboration, but team members have to follow a protocole and to agree to perform a role, due to the royalties agreement. Lego also implemented a really easy system to vote and profiles are linked to a Facebook accounts.

Lego has also a create & share-website and other different OI initiatives only for the US.

Website Features	Design Qualities
Simple website	Easy to use
Display new releases, approved, most voted, and on production sets	Transparency of the rules
Video of the process	
Vote/Like button visible	Encourage participation

Functioning Methods	Learnings
Use of royalties	Fair ways to reward and motivate participants
Pay also for original parts	

Exploring a New Target Group: Designers

Design Employeed

Design Graduates per year

Denmark	
Korea	
Sweden	
UK	
USA	

0   500   1000   1500   2000   2500   3000   3500

*The data of designers is per country million population
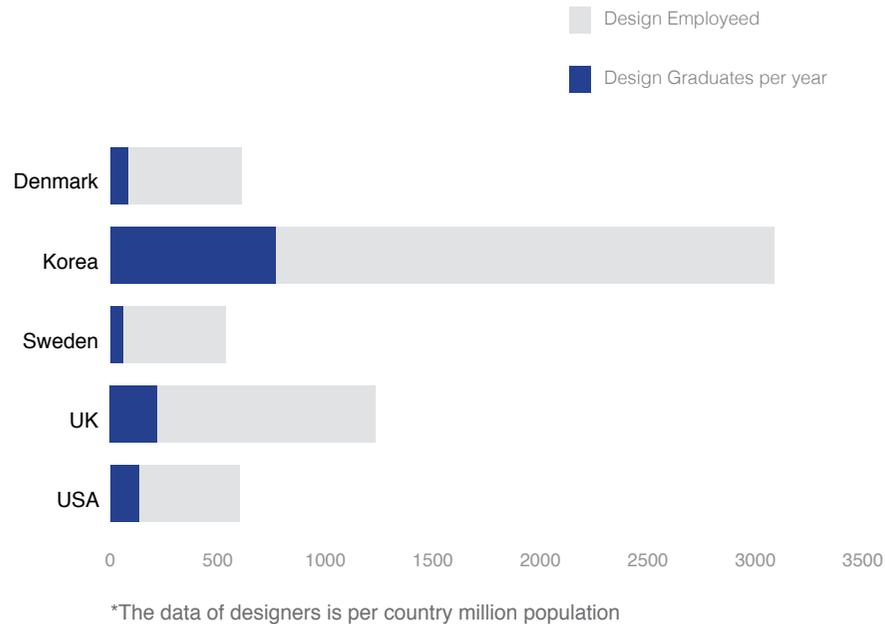
Source: Moultrie, James. International Design Scoreboard: Initial indicators. of international design capabilities. Design Management Group, Institute for Manufacturing, University of Cambridge. http://www.designcouncil.org.uk/Documents/Documents/Publications/Research/InternationalDesignScoreboard.pdf (accessed on March 25, 2013)

In one hand, Bosch innovation core is on the field of advanced technology and product quality but not much on design. Although it has improved in the last years -even owing some Red Dot Awards, still is not perceived as good design company. In other words, Bosch has already the technology and the know-how, but the firm struggles to find diverse paradigm-breaker products for its different application fields and to use a the same high design language on

its products. For this reason I think that to incorporate designers could be a good strategy to help Bosch to open up its portfolio and to elevate its design standard.

In the other hand, right now, the general economy is characterized by high unemployment – especially young people, and of course designers are not an exception. For those who have jobs, many are underemployed, or many others are doing more work but feeling less engaged. Also, the evolving business world is a world in which individuals need to out-stand with their skills, performance and team-working. Excellent portfolios, personal branding, and project-based work are commonly required in the design field.

When the macro and micro pictures are combined, Internet competitions or contest are in themselves an opportunity to acquire experience, build a resume and work on interesting challenges and projects. Clearly this alone is not enough motivation for participants, and as explained in the sub-chapter 'Crowdsourcing- Participant's Incentives' there are also another factors that can trigger participation.

Interviews with Designers

PARTICIPANTS' OVERVIEW

Enis - Interaction Design Student
"I like to follow other people's work to know what is happening in terms of design"

Nicolas - Design Student
"Open brief could mislead designers, they might have no idea about what the client really wants"

Simone - Design & Engineering Student
"Bosch know-how might intimidate some of the participants"

Markus - Media Designer
"I do not need a prize if the project helps society"

Akos - MSc. Integrative Designer
"It is a fair-new way of designing and producing"

Julia - Information Designer
"The production of my idea would be the best reward"

Urlike - Industrial Designer
"Before my son, I was always subscribing to design contest to get the maximum of my projects"

Bernd - Project Manager
"Well define brief prevents submission of useless ideas"

Kevin - Design Student
"I have never participated in a design contest, but I would be motivated by money"

Matteo - Design & Engineering Student
"I participate in contests because I would like to be known as designer"

METHODOLOGY OF INTERVIEW

The interviews were held mostly at the beginning of the project. I did a series of interviews to different type of designers (interaction, industrial, Interactive/graphic, information), in the ages of 24 up to 32 from students to graduates.

The interview was divided into four sections:

1. Find out about their knowledge of existing crowdsourcing initiatives.

2. Know their opinion about design contests.

3. Explore their possible motivations to participate in a Bosch open design platform.

4. Ask experienced designers about wether the model could work with agencies

Aim: Use the insights collected to identify challenges and opportunities on the design of a service-system that fits to Bosch needs.

Next I describe the interviewees' profile, the highlights of the interview and the participant's possible motivations.

Enis
Interaction Design Student

Enis is a 25 years old bachelor student, currently doing his internship. He is highly aware of crowdsourcing and open design websites and checks out Kirk-Started and Quirky daily to follow other people's work and know what is happening in terms of design. He has participated in design contest and prefers team work.

He would participate in a Bosch initiative and thinks that the challenge brief is important.

Motivation to participate:

» Show his ideas

» Get feedbacks from others

» Community aspect

» Financial aspect as the most important

» Getting ideas realized

Simone
MSc Design and Engineering – Industrial Designer

Akos
MSc. Integrative Designer

Simone is 25 years old Master's student. Simone is not an active user of crowdsourcing platforms or of design contest. He thinks that although they are a good opportunity to build portfolio, they are also a way that companies use for neither pay or hire designers. Companies pay cheep prizes while the contests demand lot of time and resources with no granted success.

Simone would participate in a Bosch initiative depending on the project's complexity and if he would have the possibility to work together with the company to preserve the 'soul' of his project. He thinks the brief should be not related to Bosch existing product fields since the Bosch know-how might intimidate some participants.

Motivation to participate:

» Work for a fixed period If selected

» Patents or/and royalties

Akos is 34 years old senior graphic and interactive designer. He thinks these new models are a nice solution for designers to show their ideas and make them real. Nevertheless he has some doubts about the transparency on the process in these platforms, specifically regarding the distribution of resources.

He would participate if it is fair for both sides, since contest require lot of work without knowing if it worth it and he demands Transparency of the idea's management in case ideas won't be published. He sees the ideas' submission as the weakest point. He thinks the model is more open for companies than for individuals.

Motivation to participate:

» Status for the company

» A new way of designing and producing

Ulrike
Industrial Designer

Ulrike is 34 years old industrial, graphic and interface designer. Before her son, she was an active seeker of design contest, since she wanted to get the maximum of her projects. Some years ago she participated in a contest rewarded with royalties, but the company never produced her idea.

She would definitely participate but she would give more information to designers and involve them in the process. She thinks it would be a good idea for start-ups.

Motivation to participate:

» Technical support from the company

» Possibility to get a patent

» Product sold in the market

Kevin
Design Student

Kevin is neither aware of these initiatives nor has ever participated in a design contest although he would be motivated by money. If the company pays him enough in advance he would be willing to let the company do all the decisions in the development part.

He would participate in case he has the time.

Motivation to participate:

» Money, job offer or a car

» Being recognized as the designer of the product

Nicolas
Design Student

Nicolas is a 28 years old bachelor student who has general knowledge about websites like kick-start. He has participate in several contest at university, and his driven by the motivation to design "something" that changes the world.

He would participate if he is interested in one brief but he thinks that an open brief could be confusing and he would do add a second round to the proposal. If selected he would like to be involved in the decision making together with company to make sure that company keep the soul of the project.

He thinks this model go against small start-ups because it requires too much upfront money and work for nothing sure, and that it is nothing special compare to design pitches. Agencies should evaluate the risk and know who they are competing against

Motivation to participate

» Design something that people likes and be recognized for it

Julia
Information Design Student

Julia is 25 years old student. She modestly sees the content of Tchibo Ideas but she has never participated. Additionally, she likes to search on the web for some design solutions/innovation like "Ikea hackers".

Although she thinks is a good opportunity to show her ideas, She does not like the fact of making ideas compete or judging them

Motivation to participate:

» See new points of view.

» The production of the project would be the best reward

» Get a feedback from the company

Markus
Media Designer

He likes to observe what is happening in Open Ideo and read the projects. Also knows about Quirky, but he has not used it yet. He would participate depending on the topic and if he has the opportunity to be part of the whole process.

Motivations to participate:

» Money or even for free if product helps society

» Upfront payment for design iteration

Bernd
Project Manager

Bernd is a 35 years old project manager. He knows how open design and crowdsourcing platform work and he sees them as a way to optimize design ideas within a designer's community, but he has never participated (although his brother is thinking of posting one of his projects).

He would participate if he has time but he would never let the company completely decide for his project idea since they might change the design. He thinks a well defined brief prevents useless submission and he also thinks the model is a good way to help artist and an useful alternative for start-ups.

Motivation to participate:

» Reputation of wining and the fact of wining (recognition)

» Receive money for development

» Unexpected prize

Matteo
MSc Design and Engineering – Industrial Designer

Matteo is a 25 years old designer finishing his master and working as a design-engineer. He likes crowdsoucing platform such as kickstarter and before he used to often participate in design competitions launched at 99designs. Although Matteo thinks this kind of initiatives help designers to build their portfolios and give status as designers -if winning, he stopped participating because he was not sure that companies abroad were using his designs without paying, and there was not an effective way to check it.

Matteo thinks is a good idea if Bosch does something similar. He would participate and collaborate to develop his design but for him is important to know the productive process behind the request.

Motivation to participate:

» Visibility as a designer

» Production of his idea

» Royalties or financial compensation

Findings

Principal Motivations to Participate

» Seeing their product realized and launched in to the market

» Recognition as the designer of the product

» Receiving technical support from Bosch

» Getting a financial reward

» Helping/changing society

» Have the opportunity to participate in a project within Bosch

Challenges

For the competition:

» Prevent submission of useless ideas

» Right compensation for the time and resources spent for the project

» Preserve the 'soul' of the project

» Young designers/students are mostly the main source of ideas in this kind of initiatives and there is a risk for them of waiting too long for the payment of the royalties or no payment at all.

For Bosch team:

» Ensure quality results

» Express a 'design' reputation enough to make people participate

» Proportionate feedback for all the participants

» Interpret all the information and classify it

» Handle the database in case that in the future Bosch produces something similar to a project that was submitted.

Opportunities

» Involve participants into the decision making process

» Preliminary rounds in order to develop best ideas and have better results

» Encourage interdisciplinary or team work

» Involvement of Universtities and Institutions

» Explore different ways of recognition. e.g. upfront payment for design iteration, display the designer of the product in the final packaging, job/internship offer.

» Use new channels of advertisement

Possible Touch Points

» Design blogs (ask well known bloggers to give an opinion about our platform)

» Design communities

» Design magazines

» Bosch official website

Trends

QUANTIFIED

People want to track, know and understand themselves. They measure common activities for self improvement and usually rely on different devices and online platforms. Successful brands will empower customers to track broad metrics around their interactions with a product or a service to monitor its impact and value.

GAMEPROVEMENT

More consumers turn to the power of games to unlock new mindsets, drive new behaviors and overcome challenges. That doesn't mean fierce competitiveness will appeal to all –or even most- consumers.

Gamification is the application of the game dynamics to the "real life" that conveged to self-tracking becomes a more powerful tool for self-transformation.

SOCI-ALL

The Increasing overlap of the online and offline worlds is creating new ways to encounter, connect with and meet others. If your customers aren't talking to one another on your platforms, they'll find ways to connect elsewhere.

ED-YOU

Real-time video-casting, social platforms allow not only sharing and blogging but also –class real-time conversation. Opportunities for brands to create or sponsor learning platforms.

TRUSTONOMICS

In a collaborative economy, trust is capital. That's why products and services that allow consumers to gain, measure, and display trust will become truly indispensable in 2013.

A new kind of status will emerge for some consumers: a status derived not from being the richest or most influential, but from being the most trusted. As the collaborative economy grows, building and displaying trust becomes increasingly important.

Design Opportunity

The analysis of the current scenario (Bosch strategies, the learnings from its OI practices and the findings from the analysis of best existing practices and interviews) led me to the concept of a 'continuously ongoing design challenge system integrated into the Bosch Open Innovation Portal'.

However, tramped in the dilemma in which Bosch cannot pay to all participants just for presenting a proposal and participants should not feel used, but at the same time crowdsourcing-based approaches offer low prices innovation to firms and my aim was to develop a fair system for participants. I came up with a system that offers other different kinds of compensations such as visibility, financial and educational rewarding, based on the research, interviews and trends.

Service–System Implementation

The entire chapter is focused on the implementation of the service-system design into a continuously ongoing design challenge platform. Although I will suggest how to incorporate the design platform into the Bosch reality and integrate the platform into the Open Innovation Portal, this will not be my main scope.

The overall result would need to integrate a dynamic collection of service elements within the customer journey, around a qualitative and integrated user experience.
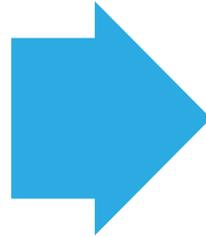
Integrate a Design Platform into the Bosch OI

STRATEGY

The idea is that the system combines the distributed resources of the organization. in order to create an optimal service offering. Following Bosch strategies for 2013, the challenges would be submitted by all Business Units, and New Business Teams but the results would have a clear **Human Center Approach**. For this reason the 'continuously ongoing design challenge system' would be managed by the User Experience department.

C/UX TEAM

C/UX department is the internal Bosch design agency focused on User Experience. The UX department would be in charge of the scouting team, which would be responsible of the idea selection, media advertisement and other different activities regarding the platform's realization.

FEASIBILITY

As written before, during my internship I was working on the design of a platform. In this period I had the opportunity to work directly with the stakeholders (NBTs China, Latin-America and India) and get their insights. The different NBTs were really enthusiastic and willing to invest in such initiative but unfortunately -especially in a traditional, conservative company like Bosch- because of the several protocols it was not easy to pass through all the approval stages.

In the other hand, in the case of, the initiative would be approved, the success of a continuously ongoing platform would strictly depend on the level of the participants' engagement and the process transparency. Bosch would face a permanent challenge motivating people and designers would participate just if they are motivated enough -if they receive in status, learning, money or social exchange the same amount of effort they are investing on.

STARTING POINT

In order to address both designers and Bosch needs and expectations the system must produce important and significant products, developed enough to easily be produced by Bosch, at the same time as giving enough visibility, financial and emotional rewarding to winners and offering social and educational compensations to all participants.
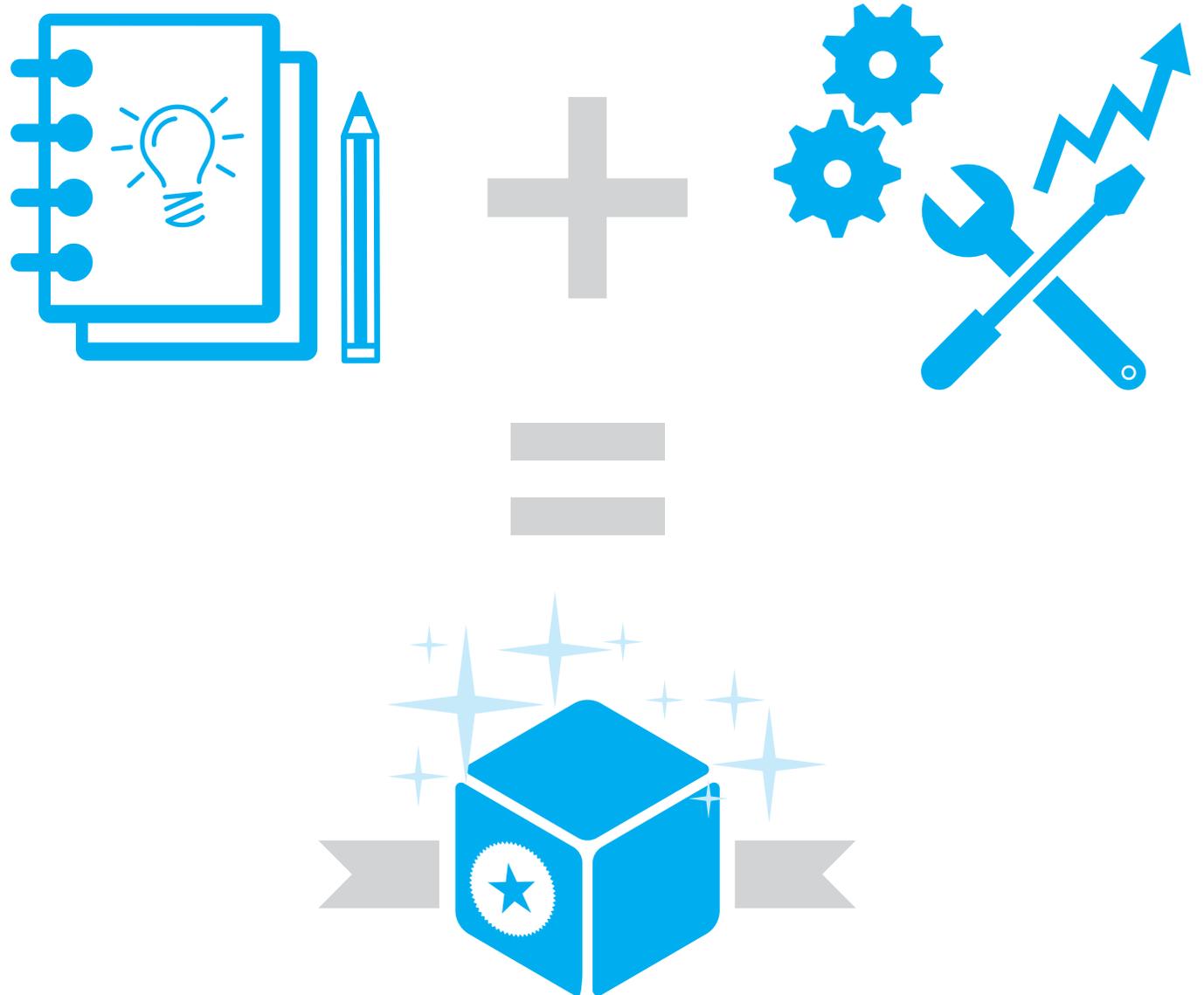
InnBosch

Design it Yourself

INTRODUCTION

InnBosch is a system unique in its kind. It is based on a platform that uses the expertise of communities to accelerate design and technology scouting within Bosch, while offers designers a different experience and a eventual partnership. The system also enhance knowledge exchange by supporting the process with Bosch exclusive material (tutorial, papers, catalogs and video conference).

InnBosch focused on individual design students and recently graduated. asking them to design innovative solutions that answer the Bosch challenges. Challenges have a length of maximum 8 months.

What makes this platform different from other design contests and competitions is that InnBosch shows participants cutting edge technologies and production methods -available and open for Bosch- that could benefit designers intellectually and someday even economically. InnBosch also offers the possibility to earn and gather innovations points while participating and to translate the points into a close partnership with Bosch.

Once the designer reaches the VIP level, he/she will be part of a closer Bosch network for special and more condifential challenges. The VIP designer will have the chance to work together with the closest Bosch headquarter that opens an InnBosch challenge.

The platform would benefit external and internal corporate communication by increasing Bosch design image. InnBosch also would multiply UX and Bosch brand awareness among young people and eventually facilitate talent recruitment.

The service in its first stage is offered internally to all Bosch departments that are looking for community input to accelerate their internal innovation and efficiency. The opinions and suggest from the internal partners are seriously taken into account, and will be applied into the design implementation.

Actors of the System

PARTICIPANTS

These Designers are engaged in the platform and they are willing to present their ideas, support the community and to learn from it. They share Bosch values and are involved enough in the projects to provide excellent products and services ideas.

Benefits

» Have the chance to see their design become reality

» Benefit from the economical rewards

» Develop a prototype

» Gather innovations points and have to opportunity to be part of the Bosch network

» Learn the latest Bosch technological material release

» Be part of a worldwide community of designers

» Build on viral marketing effects created by the approach of InnBosch.

Description

Registered undergraduate and recently graduate design students that are seeking for opportunities to show their talent and build their portfolio. They have enough free time (after lessons, vacations or while searching jobs) to work in projects that interest them.

INTERNAL PARTNERS

These internal partners need low cost and fast quality results, as well as a vast number of ideas and trends in order to tap their internal innovation and efficiency, thus enhance internal competitiveness and in the market.

Benefits

» Challenge support

» Guided access to the platform

» Screening of submitted ideas with the adequate IP protection

» Leverage product field awareness

» Accelerate innovation speed and efficiency

» Add extra value to products

» Improve division image and product design

» Increase the internal and external communication of the partner division.

Description

The network of internal partners is composed of Bosch business unit that want to develop new product, interface or service ideas designed for a specific field or produced with an certain technology. Specially in the big sector of Consumer Goods and Building Technology, Industrial Technology (Packaging).

INNBOSCH TEAM

The team of InnBosch is a subdivision inside the User Experience department entirely responsible for the platform management.

The InnBosch team is the soul of the platform, this team acts like a mediator between the internal partners and participants. They offer support before, during and after the challenges, for both parties.

The team is formed by 5 people in charge of advertisement and promotion; research, design and edition of the platform content and kits; mediate community and launch and manage challenges.

Some of their main responsibilities are:

» Platform implementation

» Selection of Challenge and guidance

» Developing educational material and adequate UX kit

» Promotion campaign

» Screening of submitted ideas

» Tap the creative skills of designers around the world

» Transform ideas into practical solutions

» Motivate communities

» Contact partners for prototyping phase

» Manage VIP network

Partnerships

UNIVERSITIES

Since companies began to apply OI, universities became a partner for excellence. Universities are the perfect stakeholder to find knowledgeable people, specially in the case where design students are the focus target.

As the focus of the challenges can variate from one to the other, also the partnerships with different universities would move from country to country in order to satisfy the request and the aims of the Internal Partner.

For each country of interest a partnership of maximum 5 universities would be established. These agreements would allow face-to-face advertisement, email convocations and printed advertisement within the several campuses.

PROFESSORS

Students will have the possibility to work and subscribe to the challenge together with a professor. In the case such a team wins, the professor would receive a percentage of the money.

PROTOTYPE PLACES

In order to ensure the quality on the results, InnBosch team establishes a temporary partnership with several prototype places located close to selected participants. Participants will work together with the prototypers, the InnBosch team and the Internal Partner.

PUBLICITY AGENCIES

The InnBosch team contact several publicity agencies which are strategically located, every time a challenge is launched. This is done in order to print the advertisement material, distribute it and supervise the marketing strategy locally.

InnBosch Offering

CHALLENGES

Main Challenges

ELIMINARY STAGE
(Best 5 projects)
- Direct feedback from experts
- Prototype up to 1000 euro

AWARDING
- First Award: 5000 euro, innovation points.
- Second Award: 3000 euro and Innovation points
- Third Award: 2000 euro and Innovation points

InnBOSCH

VIP Challenges

Special Partnership Conditions and Payment variates depending on the project.

Idea Exchange, Feeback and guidance

Special Papers, articles and other learning material

Special UX tool kit for projects

Video tutorials and conference

EDUCATION

INTERNAL OFFER

- New products and services ideas generated for a specific topic, field or technology with and UX approach.

- Trends and insights directly form possible costumers

The system has two main components: the challenges and the educations offer. The challenges are directed to both designers and internal partners in different ways. For designers the challenges are the opportunity to participate and eventually become a VIP InnBosch designer. While for internal partners there are different package solutions for their needs.

Challenges are presented in two main different approaches and for different results. For instance the 'Main Challenges' are challenges that look for new products and services ideas projected for an specific field, topic or technology. These challenges also seek for opportunity field/areas, market trends and other different solutions. Additionally, for the last phase of the competition there will be resources available for prototyping (the prototyping will be done only in partner places and the amount will be fix depending on the project's requirements) and a prize in money would be given among the 3 finalist. In the other hand, the 'VIP Challenges' offers very concrete solutions with a close network of designers/collaborators. Nonetheless this type of challenge should be established once the platform has being on air for a while (at least two years ca.).

In order to launch a VIP Challenge the InnBosch team have to collect a significant amount of trustful profiles to set down a partnership with. In this way Bosch divisions can have access to a database of designers and have the chance to choose with whom to work, based on their skill, proximity and prices.

Once the internal partners decide the type of challenge that fits better to their needs, the InnBosch team guides them throughout the process.

The general educational offer is a core of the platfom. Education is given in different ways and in different levels from idea exchange, feedback and guidance; to relevant papers and articles publications. During challenges the educational material would be only available for registered participants. The offer varies from technology or material descriptive articles, tutorials, videoconference lectures to support kits. UX tool kits are available for each project. As designers progress in the competence, challenges give them more privilege and more specific and relevant material to work with.

The Platform System

Designers

InnBOSCH

InnBosch Team

Bosch Partner

Prototype place

Judges (partners)

When designer becomes VIP

Idea Flow
Info Flow
Info Flow
Money Flow
Material Flow
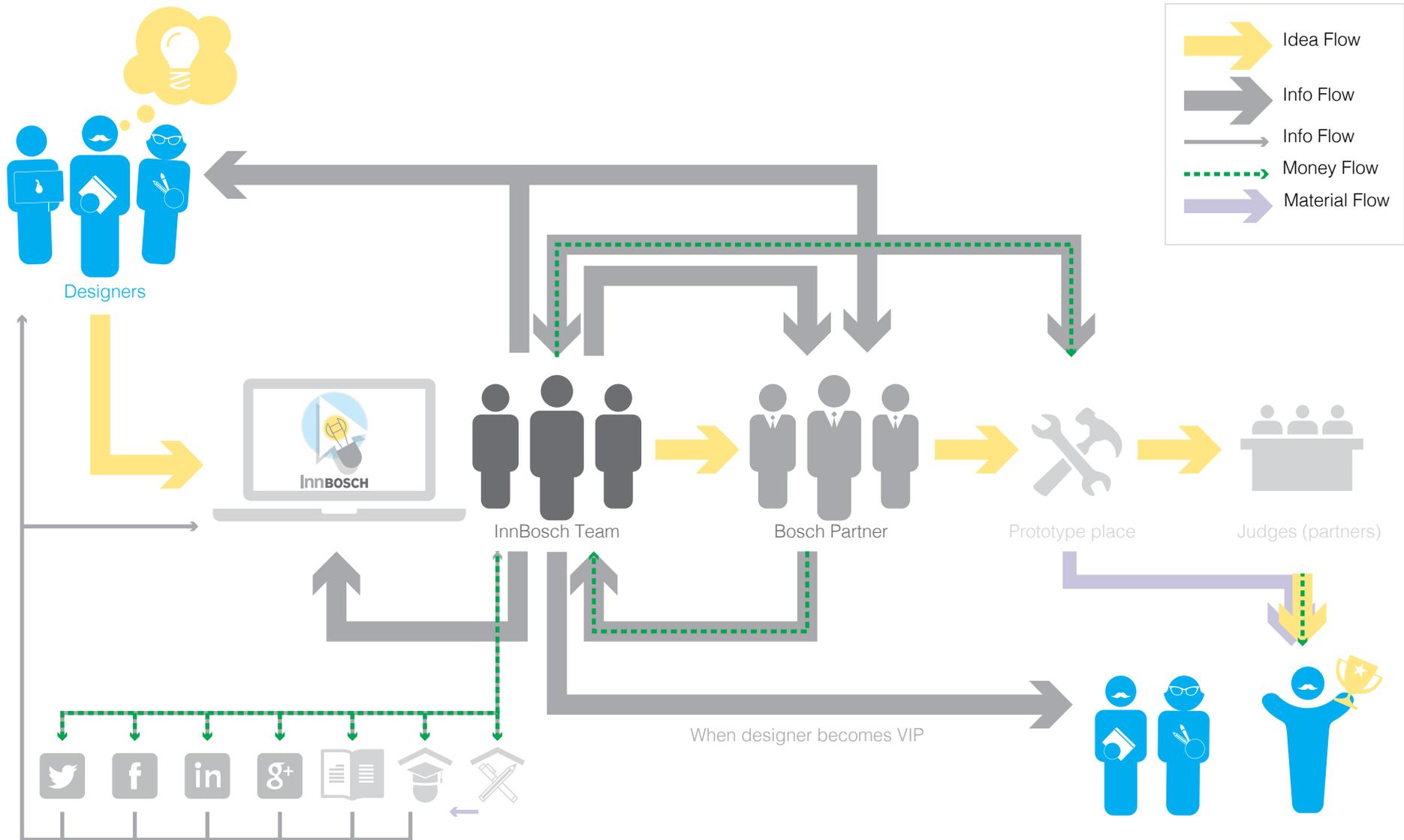
The InnBosch system map is a schematic visual description of the service technical organization. The aim of this map is to display the different actors involved (main actors: designers, InnBoch team, Bosch partners and judges, prototyping places; and secondary stakeholders: social media, design magazines, universities and design studios), their mutual links and the flows of ideas (concepts), material, information and money through the system.

The system map confirms once more that the InnBosch team is the core of the system. They are the people who run the platform and build a bridge between Bosch and designers. InnBosch team acts like an information channel at the same time as being the filter and manager of the ideas and the designers database.

Publicity agency are contacted to print the posters and brochures locally and stakeholders like universities and design magazines are contacted to advertise and explain design students and designers how InnBosch works. InnBosch wants to motivate designers to actively participate, the idea is that designers would not just use the platform as a normal site for competitions, but instead be actively engaged in the community, discuss trends and post their latest jobs. They will have the opportunity to grow together with Bosch as well as learning while presenting their ideas.

In the next page, the blueprint explains the service step by step. It shows the actors involved and details of the touchpoints required in every single interaction. Also the blueprint gives an idea of the critical moments during the service, where the process could have fails, when are the emotional picks and the idea flow and quality across the service.

BluePrint

SETTING UP THE CHALLENGE

RUNNING CHALLENGE

IDEA SCREENING

Designer

| Notice platform | Select Brief | Register to the platform for info | Agree on Bosch terms & IP rights conditions | Download brief information | Upload/submit idea concept | Receive confirmation | Wait for results, watch & comment | Vote for prefered projects | in case of submit invalid material | Get notification | Receive points for every phase |

InnBosch

| Set a meeting for discussion | Show examples & explain service | Prepare challenge proposal | Sign Contract | Prepare challenge material | Launch of the challenge | Advertisement | Classify submitted ideas, find data | Selection ideas that fit criteria | Discuss entries with partner | Select new ideas with partner | Produce a new report | Eliminate ideas do not fit criteria | Prepare new material | Announce selected ideas for next round | Inform selected participants | Assign points to participants |

Partner

| Contact InnBosch for a Challenge | Express ideas & requirements | Agree on terms & Evaluation system | Sign contract & Pay | | | | Opinion of report & selected ideas | Partner does not agree with selected ideas | OK to continue | Provide more specific/relevant info |

Support

| | HR Prepare contract | | | Programation of website | | Advertisement campaing | Data verification (institutional email) | Legal support and IP protection | Database | Platform automatic response | Close entries (Deadline data) | | Website programation | General ADV |

Fail Line

Emotions

Ideas

CLASSIFICATION

PROTOTYPING

PREMIATION

REACH VIP LEVEL

CLASSIFICATION
- Access to more detailed info
- Upload improvements

PROTOTYPING
- Get notification
- Start working on the final round
- Contact partner prototype place
- Finalize testing of project
- Propose changes
- Submit final design
- Give bank account information
- Get prize and points

REACH VIP LEVEL
- Get recognized as designer of Bosch product
- Reach VIP level
- Accept agreement
- Sign & send contract

Every Classification Round

- Inform selected participants
- Parnertships with prototyping places
- Arrange payment or refund
- Proportionate Feedbacks
- Analyse & pre-select submissions
- Contact winners
- Assign points to finalist
- Announce winners & advertisement
- Create a report of the contest
- Give data findings
- Offer a partnership agreement
- Officiallly include de-signer in database
- Create different challenges or partnerships
- Contact VIP desig-ners in the zone

- Proportionate Feedbacks
- Select winners
- Continue with pro-ject development
- Launch project into the market
- Have an special confidential project in other location

Designed by ...you

- Data storage
- Set up collabora-tion agreement
- Assist project/prototyping
- Prototype concept and send bill
- Contable support
- Contable support
- Send notification
- Create confidentia-lity contract & certificate

Main Challenge

As we can noticed in the system map and the offering map, the nature of the project offers a vast number of possible solutions as well as a vast numbers of processes to implement within the system. Due to the complexity of developing the process and material, I selected to mature a proposal for a 'Main Challenge'. In the other hand, the process of how designers become VIP it is shown in the previous map and the VIP phase is thought to be develop after the platform has being on air for around years.

There are two type of main challenges. One type is designed for departments that produce technology or search for new business areas and ideas that could fit to one of Bosch existing division. And the second type of challenges is product oriented divisions that want to extend their portfolio, need adjustments (restyling) and new product concept/solution ideas.

SETTING UP THE CHALLENGE
(Pre-Challenge)

During the pre-challenge phase, the innBosch team meets the internal partner to first select the direction of the challenge (redesign, new idea-concept generation, technical solution) and then agree on the terms, conditions, IP treatment and other several matters that could affect or specifically interest the partner.

In this preliminary phase the parties fix the material required on the submissions (3d model, renders, description, etc) and structure the evaluation criteria for all submission, with the aim of categorize all the submitted ideas during the contest and to facilitate the screening.

RUNNING CHALLENGE

One of the project's requirements is to ensure the quality of the ideas. Inspired by the user's insights and some of the best practices, the system works in different stages. The graphic on the next page represents the proposed solution to an evaluation filter system for the InnBosch idea challenge. The process consists of five steps. The filtration system is presented in the next page and subsequently, the five steps are described.
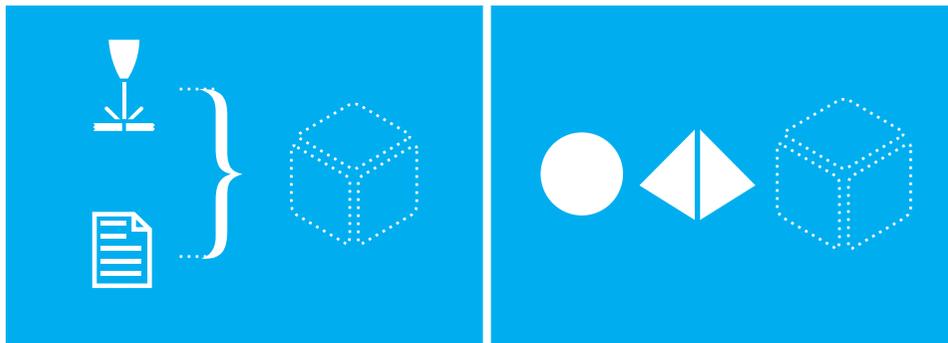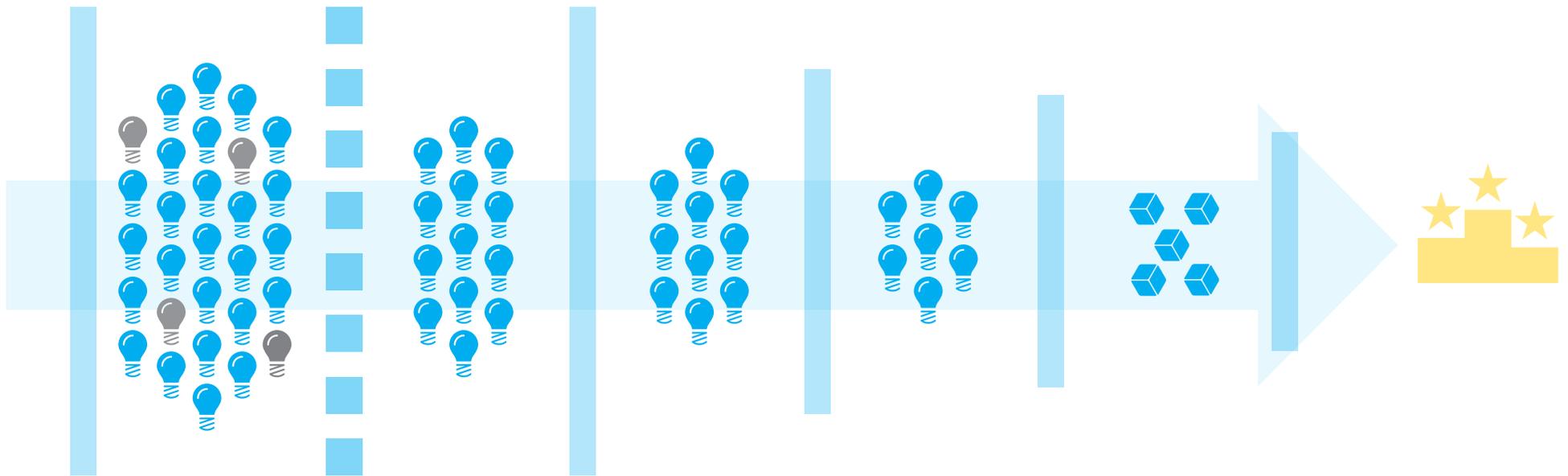
1. Idea
submission
(4 months)

Idea classification

2. Concept
development
(1 months)

3. Usability
development
(1 months)

4. Technical
development
(2 months)

5. Final

IDEA SUBMISSION

Participation and Registration

The participation for all challenges is open for applicants worldwide. Participants need to warrant that the submitted work is original and that it does not infringe any third party intellectual property rights.

For every challenge the participation is open to all the ideas, designers first have to create their profile and to include their personal data (Name, nationality, university/institution, type of education and a short description). The data provided by the applicants is validated in the system (confirmation with institutional emails) and subsequently, the participant must agree on InnBosch terms and conditions (legal aspects, IP protection, use of information, among others). Now, the participant can submit an idea before the challenge deadline (4 months).

Idea description

The idea must include a title, an abstract description (maximum 200 characters) and a detailed concept description (up to 1500 characters). In the case the challenge is to produce a new idea-concept, the participants should select one or several categories (product, service, packaging, interface, accessory) in order to facilitate treatment and classification.

The concept must also include information regarding its possible market and explain why this idea could be appealing to the customers.

For the submission designers can upload maximum 5 pictures in JPG format with a maximum size of 6mb.

IDEA CLASSIFICATION

After designers submit their ideas the InnBosch team will review all submissions and they will evaluate whether the ideas fit the brief requirements for that specific stage or not.

The general filters applied during the idea evaluation are:

» Does it truly answer the brief?

» Is it innovative?

» Does it respond to Bosch language?

» Is it technically/financially/environmentally feasible?

» Does it encompass the UX approach? / Is it user friendly? or based on consumer insights?

After the idea classification and evaluation from the UX part, the internal partner will also review the relevant submissions and select together the concepts that will continue to the next round.

CONCEPT DEVELOPMENT

Selected participants: 100/5 points

The selected participants will continue into the concept development round. They will be notified by email and the new brief will be displayed in the participant's profile. In every round more specific material will be also displayed.

In case a participant does not make it to the next stage, the designer cannot upload more information to the challenge. The entry will be blocked but the person can keep participating in a different challenge.

USABILITY DEVELOPMENT

Selected participants: 50/15 points

This phase is thought to focus the User Experience approach. In this stage the user insights must be more profound and participants will enjoy of UX material produced for the challenge.

TECHNICAL DEVELOPMENT

Selected participants: 5/40 points

The best 5 ideas in the last round will have an sponsored idea re-finement/prototyping. InnBosch team will establish partnerships with prototyping places located close to where selected partici-pants live. The aim is to understand whether the concept is viable and functional. The participant must test what he/she considers is a relevant part or the project and should suggest changes after the testing. UX and the internal partner will follow closely the projects and together will establish the maximum budget for the prototyping stage.

During the user research (pag. 123-129), one of the strongest motivations that designers have to participate on such platform, was the opportunity to develop their project as much as they could. Designers want to preserve the 'soul' of their projects, and they felt pleased of the idea that the company would work together in order to produce something real. Therefore, the prototyping phase is an important part of this system, because it does not only ensures the quality of the project idea, but also gives a strong motivation to participate.

FINAL

Selected participants: 3

The final jury will be composed of one UX person and two Internal Partners. The jury will choose first, second and third places based on whether the final concept meet satisfactory the judging criteria mentioned in the brief.

InnBosch have to push internal parters to keep developing and subsequently produce the finalist ideas. This will enhance the trans-parency on the InnBosch process and to 'see their project realized' was the most common motivation among possible participants.

The awards will be the following:

» 1st place: 5.000 euro + 100 InnBosch points

» 2nd place: 3000 euro + 90 InnBosch points

» 3rd place: 2000 euro + 80 InnBosch points

VIP phase

POINT SYSTEM

CHALLENGE PHASE	POINTS	TOTAL*
Concept Development	5	5
Usability Development	15	20
Technological Development	40	60
Third Place	80	140
Second Place	90	150
First Place	100	160

*Points are also accumulated from different challenges

The VIP phase will be the next step into the InnBosch platform. Once the platform is running several challenges and established among designers, InnBosch team will offers special partnerships to designers who reach 200 points.

InnBosch aim is to build a trustful partnership with the best entrepreneur designers around the world and to collaborate with them in future projects (internal and external of the platform). This means that Bosch will build a safe and skilled network beyond its locations.

InnBosch team will first contact designers and ask if they agree to be part of the VIP InnBosch network. In case they do, InnBosch team will create and send a Partner's certificate and a confidentiality contract for future collaborations. The VIP network does not warranty a job for designers but it is an alternative to be part of a successful company as Bosch, and an opportunity to be contact anytime Bosch needs people that meet the criteria.

Personas

Matteo
MSc Design and Engineering – Industrial Designer

Matteo is a young designer working as a freelancer. He uses his free time to work on different projects to improve his skills and portfolio.

Martin
Senior Strategic Designer at the InnBosch Team

After working for some years with the UX deparment, Martin now coordinates the InnBosch team. He facilitates challenges and manage the team.

Mr. Horran
President and CEO - Bosch Tool Corporation, North America

Mr. Horran looks for new ideas. He wants to give a 'second' life to and to improve the 'Human Factor' of one the division-best-seller products.

Piero
Prototyper

Pietro is an experienced prototyper in the Milan area. He is specialized on the prototyping of tools and engineering products.

Touchpoints

ATTRACT ATTENTION

Social Media   Magazines   Portal   email   Printed media

INFORM

Brochures   Universities   Website

USE

Information   Videos   Pubblications   Tool kit

SUPPORT

InnBosch team   Website   Prototyping places

MAINTAIN

Prizes   Points   Visibility   Experience   Partnership

SUPPORT

database   HR d/ment   Finance

MAINTAIN

Programmation

ATTRACT ATTENTION

Internal communication   UX academy

INFORM
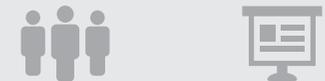
InnBosch team   Presentations

USE

Project's ideas / concept / material

SUPPORT

Screening   Data analysis   meetings

MAINTAIN

Excellent quality projects   Data finding report

StoryBoard

Mr. Horran from Power Tools finds out about the challenge via the Bosch Zünder (internal communication).

Mr. Horran is very interested on promoting a challenge for the redesign of a Tacker. Thus, he contacts the InnBosch team to have more information about the service.

Mr. Horran and the InnBosch team have a meeting and agree on the conditions to start a challenge.

After the InnBosch team prepares the material (e.g. description, technical information, case studies, support files) the challenges is launched on the platform.

Meanwhile in Milan...

After sending the improvements of the design during the last phase, the InnBosch team contacts Matteo to develop a prototype.

The InnBosch team looks for a prototyper close to Matteo. Then, the team contacts the prototyper and establish a partnership to develop Matteo's concept.

After the partnership is established, Matteo gets in contact with Piero the prototyper. Piero guides him during the production of the piece.

Matteo keeps a constant communication with the prototyper, the InnBosch team and Power Tools -specially, in order to develop the best possible project with a high feasibility degree.

After Matteo improves his design, Piero 'the prototyper' starts working on the realization of the piece.

Matteo sees a poster of the InnBosch platform and he got curios to see which kind of challenge Bosch offers to designers like him.

Matteo checks out the platform, and got interested on the 'Nail the Tacker' challenge.

Matteo starts the research phase looking at the challenge material, e.g. users interviews. At the same time Matteo does his own research.

Matteo develops a concept and submits it before the project deadline.
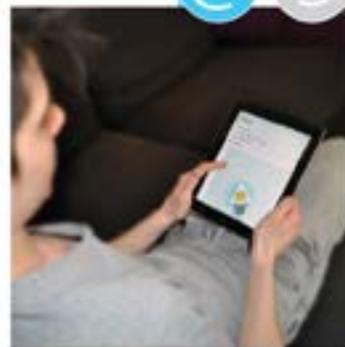
Some weeks after the InnBosch team sends an email to announce Matteo that he had been selected for the next round. (The selection process repeats 2 times more).

Once the prototype is ready, Piero hands it in to Matteo.

Matteo tests the prototype and suggests the last few changes to make his design perfect.

Afterwards, Matteo delivers the prototype to the InnBosch team.

Matteo gets selected as the winner of the challenge. He receives a prize in money *5000€ and 100 Innovation points for redesign.

Some competitions after, the InnBosch team contacts Matteo to invites him to participates into the VIP section.

Matteo is very glad to be a Bosch VIP designer.
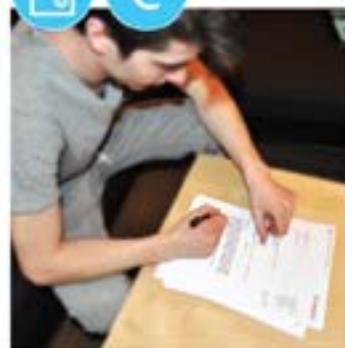
Once the InnBosch team have the perfect project for Matteo (based on topic and location), the parties sign a contract to start working on a project.
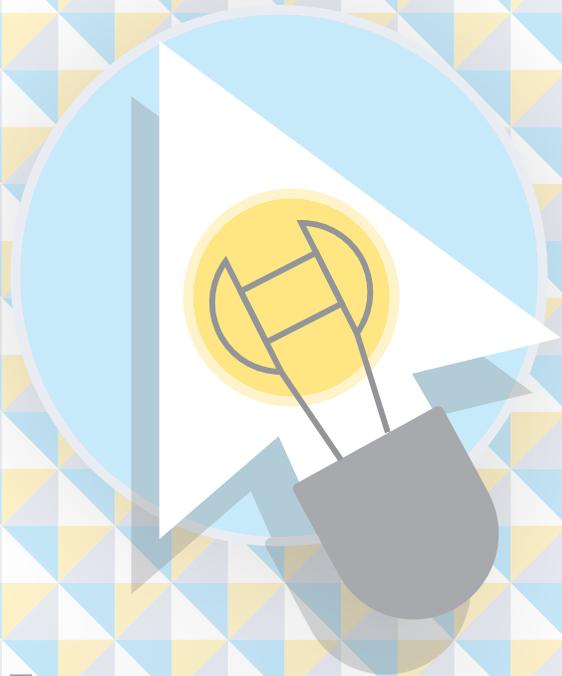
InnBOSCH

Development of Touchpoints

Touch Points \ Service Periods	ATTRACT ATTENTION	INFORM	USE	SUPPORT	MAINTAIN
Internal communication	●	●	●	●	●
OI portal	●		●	●	●
Website		●	●	●	
Tool Kit			●	●	
Printed media	●	●			
Universities	●	●			

Inspirations

BOSCH STYLE

The design of the platform should adapt to Bosch guidelines but at the same time be creative, attractive and dynamic enough for designers. Therefore, I would take some graphics elements (some colors, materiasl, pictures) as inspiration but giving a more refreshed look.

FLAT DESIGN

Flat design is a simple, minimalist approach focused on five characteristics – minimalist approach, focus on color, no effects, simple design elements and typography. Flat design uses simple elements and shapes combined with predominantly bright colors to emphasize simplicity and clarity.

Design is recently going towards this direction and people seems to in tune with the approach. First it was Google that initiates the trend, following by Microsoft with the its new operative system and recently Apple ,redesigning and flattening its interface.

Graphic experts suggest that Flat design most importantly has improved user experience since it puts more emphasis on the content

Website Features Analysis

LEGO

Logo

Most Supported Project

Next Product

in Review

Next Review

Product Examples

News

OPEN IDEO

OI

Logo

Title of Challengee

Details — Timeline — Details

Counters

Activity Feed

Active challengee — Inspiration

Challenges in Realization

Completed Challenge

QUIRKY (OLD LAYOUT)

Logo

Retail Partners

Products

New releases

Press/Partners

KICKSTARTER

Logo

Project name — Categories

Progress bar

Popular project

Social Media

Partners

Legend
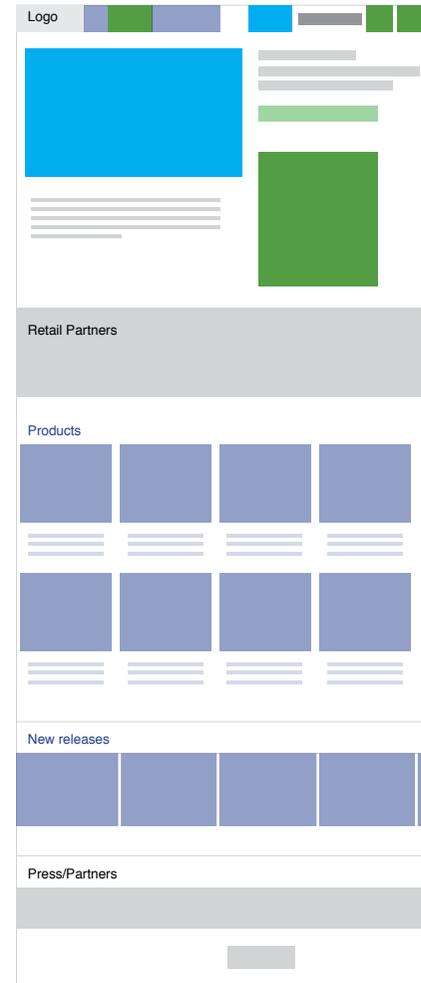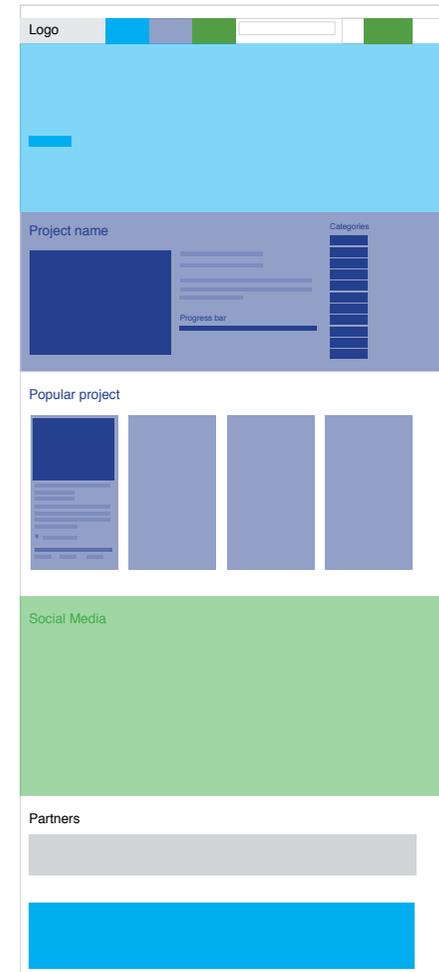
- ■ Challenges, Projects, Products
- ■ Sing up, participate, Social Media
- ■ Inspiration, blog, community
- ■ How the company works
- ■ Design Tool kit

Best Working System Examples:

» Establish partnerships for organizing and developing challenges with entities such as design agencies, universities and Institutions, Venture Capitals, retail partners, non-profit organizations.

» Ensure quality results by having selection rounds

» Use a worldwide approach but focus on a market when needed.

Common Strates to Build Trust:

» Clearly explain participants the working system preferably with video or process map placed it in a visible spot (usually above-right)

» Clarify IP rights and protection, e.g. IP own by participant but can be used only by the company

» Use of graphic Timelines that descibe different project phases

Best Strategies to Tap Participation:

» Build a verified community of experts

» Offer interesting and useful information, e.g: brainstorming tool kit

Strategies to Give Recognition:

» Intellectual payment such as: Prizes (starting from 5.000 euro) and royalty agreements.

» Actual production and commercialization of the innovation

» Winners' storytelling and media advertisement

» Community points and status

» Trips to the company's headquarter or different selected places

» Possibility of Internship

Visual Identity

LOGO PROPORTIONS
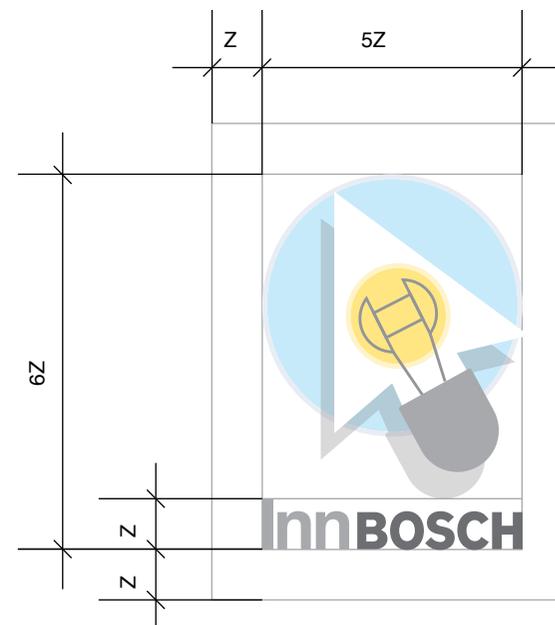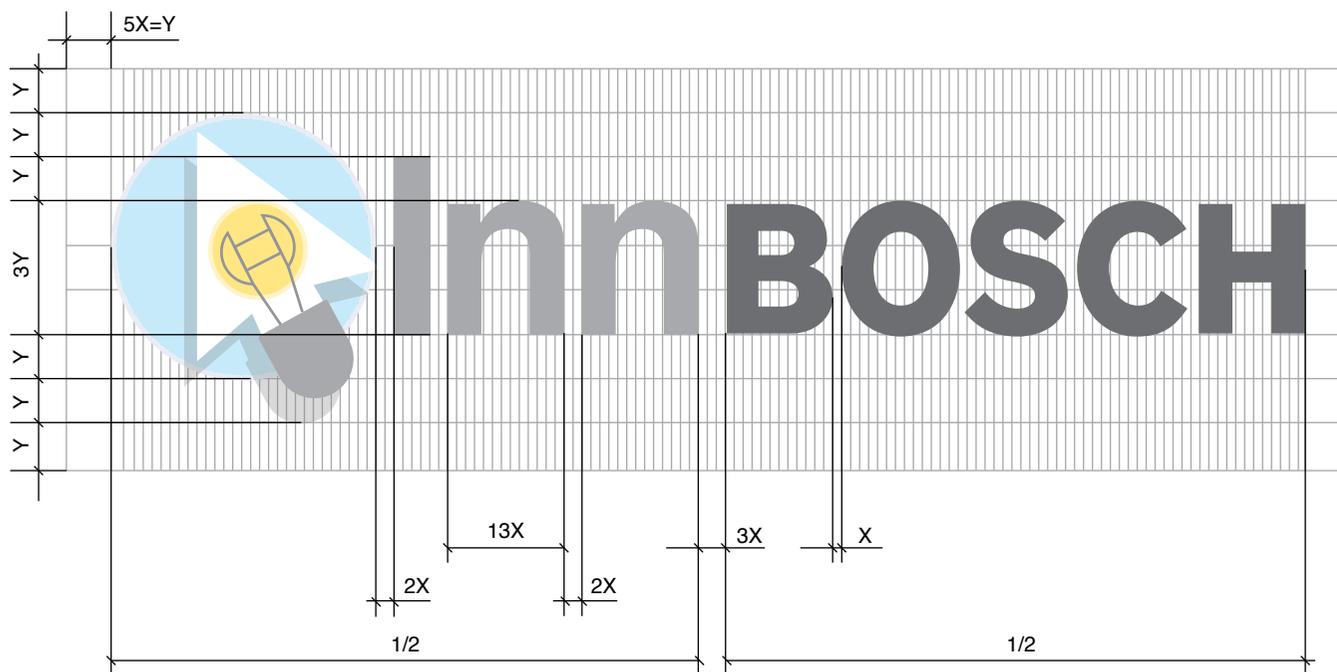
BLACK AND WHILE LOGO VERSIONS
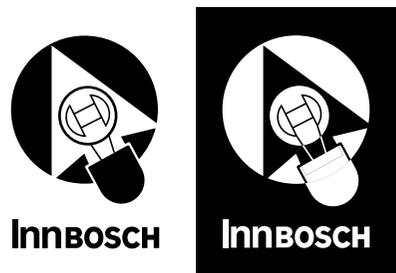
COLORS

C: 20% M: 0% Y: 0% K: 0%	C: 7% M: 4% Y: 2% K: 0%
C: 0% M: 0% Y: 0% K: 40%	
C: 0% M: 3% Y: 24% K: 0%	C: 1% M: 6% Y: 59% K: 0%
C: 0% M: 0% Y: 0% K: 70%	

Bosch Zünder (Internal)

Bosch has many internal communication channels, but the most widespread is the Bosch Zünder in its paper and website versions.

The Bosch Zünder online shows daily to all Bosch employees around the world the best and new internal Bosch practices, new locations, services and in general all relevant and important news regarding the Bosch Group.

The Bosch Zünder and direct communication are the most effective internal channels, for both attracting new internal clients and secondly, to display the successful cases.

‣EN ‣DE

BOSCH
Technik fürs Leben

Bosch_Zünder_Online

Ein offener und konstruktiver Dialog ○
Geschäftsführung und europäische Betriebsräte im Gespräch

Was können die europäischen Standorte für ihre Wettbewerbsfähigkeit tun? Das Thema beschäftigte Geschäftsführung und die europäischen Betriebsräte auf der gemeinsamen Sitzung des Europa-Committees in Feuerbach. Personal-Geschäftsführer Christoph Kübel (links), Volkmar Denner, der Vorsitzende der Geschäftsführung Mitte, und Alfred Löckle, der Vorsitzend des EC, rechts, sowie 30 Betriebsräte aus 20 Ländern tauschten sich in einem offenen und konstruktiven Dialog aus. Welche Chancen es für die Standorte gibt und welche Fragen die Arbeitnehmervertreter besonders beschäftigten, das lesen Sie ‣ hier...

Freundschaftspreis? Nein, danke!
Compliance: Was ist erlaubt? | Sie sind verantwortlich für die Gebäudereinigung

Bosch Connect: 100.000 Nutzer
Seit mehr als einem halben Jahr ist die Social-Business-Plattform Bosch Connect für alle Mitarbeiter geöffnet. Wo steht Bosch heute auf dem Weg zu einem hochvernetzten Unternehmen? Geschäftsführer Wolf-Henning Scheider zieht ein _Zwischenfazit_ – natürlich in einem ‣ Blogbeitrag...

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Inside Bosch OI portal

InBosch inside the Bosch Open Innovation portal, together with the other initiatives.

As explained before, currently the Bosch Open Innovation portal works as a hub for the different OI activities carried by Bosch. The InnBosch platform is also included in this landing page as an official Bosch initiative.

InnBosch does not compete with the already existing initiatives and on the contrary, it reinforces the OI vision of the Bosch group.

Furthermore, the Bosch OI portal gives the original Bosch trademark that works as a guarantee for users.

Website

The website is the main touchpoint for all participants, and a very important part of this service. Information on the website is categorized in 5 sections: how it works, challenges, solutions, profiles, and projects.

One recurrent issue during my the users interviews was the fact that people was not sure that their ideas would not be used by Bosch without their consent. Transparency was the key for both the process and the challenge information. Therefore, a part of the **HOW IT WORKS** section is actually displayed on the header of the land page. The header is composed by 5 sliders that show the main steps followed during the process. This section is complemented by other three internal pages -learn more about InnBosch, meet the InnBosch Team and the link to Bosch Global.

The **CHALLENGES** section allows participants to browse throughout all challenges uploaded into the platform -ongoing and finished. Participants have the possibility to check, subscribe, rate and share an ongoing challenge. After registration, participants can check at the available material for each challenge depending on the classification stage of the participant, e.g: on phase 1, material is available for everyone registered for the challenge, on phase 2, new material would be available only for the owners of the selected concepts.

The **SOLUTIONS** section is a window of projects presented by all participants in all kind of challenges. In order to give inspiration to participants, users can navigate through the available solutions of the challenges that had ended already *with a certain limit of time.

The **PROFILE** section is the personal blog where people upload their projects and display their personal information. The profile shows a project at a time and the list of all submitted projects. The **PROJECT** section creates a page for every submission and is divided for entries and selection phases -similar to a personal blog.

The website is presented in the next pages and the interaction would be specified by the following icons:

Click

Scroll-down

Scroll-over
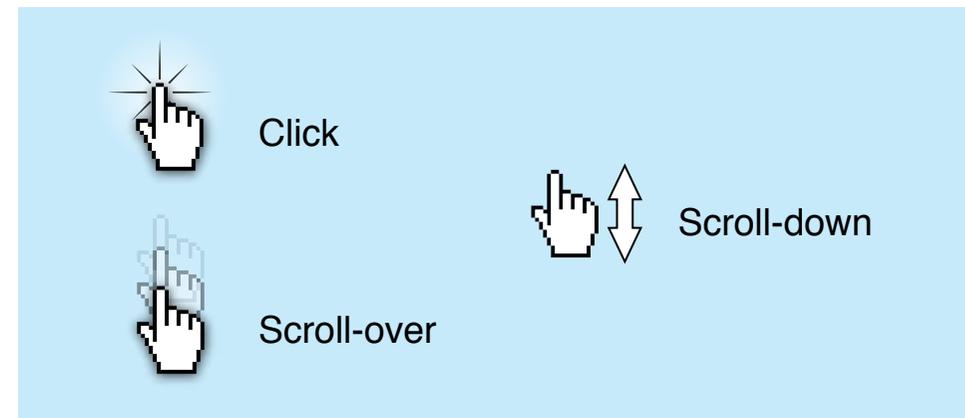
Information Architecture

HOW IT WORKS	CHALLENGES	SOLUTIONS	PROFILE

HOW IT WORKS
- Learn more about InnBosch
- Meet InnBosch Team
- *Bosch Global*

CHALLENGES
- Pictures / Videos
- Description
- Timeliness
- Review
- Jury
- Technical info (download)

SOLUTIONS
- Project image
- Project Name
- Designer

PROFILE
- Sing in
- Information verified
- Picture
- Points
- Description - Links

PROJECT
- Material submitted on every phase
- Photos
- Desciption
- Detailed description
- Comments

InnBOSCH
Design-it yourself

HOME   HOW IT WORKS   SIGN IN/LOGIN   search

IDEA HAPPENS
FIND OUT HOW IT WORKS →

By clicking the header, people can check how the platform works, with the help of few sliders

CHALLENGES   SOLUTIONS

PARTICIPATE
MEMS Sensors

PARTICIPATE
Nail the Tacker

SEE SELECTED
Barbecue Experience

SEE ALL

f t g in

Link to the most popular social media platform

170

1

IDEA
HAPPENS
FIND OUT HOW IT WORKS →

2

NAME
SURNAME
1°CREATE YOUR ACCOUNT

3

2°SELECT YOUR CHALLENGE

4

3°
SUBMIT
PROJECT

5

4° WIN CONTEST PRIZE &
BOSCH
VIP POINTS
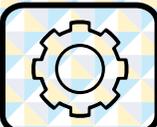
6

5° BECOME
BOSCH VIP
DESIGNER

InnBOSCH
Design-it yourself

HOME   HOW IT WORKS   SIGN IN/LOGIN   search

IDEA HAPPENS
FIND OUT HOW IT WORKS →

CHALLENGES   SOLUTIONS

PARTICIPATE

MEMS Sensors

Nail the Gun

Re-Design an existing Bosch Nail Gun using surprising forms and materials!

These powerful machines launch nails at high speed, fully embedding them in a piece of wood in a fraction of a second. Obviously, performance and ergonomics are key factors. Take the chance, design a truly different Bosch nail gun!

IDEA SUBMISSION   105

SEE SELECTED

Barbecue Experience

SEE ALL

Bellow the header there is the CHALLENGE section. This section is a showcase of all the platform challenges.

Challenges have a flag indicating the stage they are in - active, closed or already running.

Stars on the up-right corner indicate the rating of the challenges.

If the user scrolls over, a brief explanation, the time line and number of comments would show up, allowing people to take a quick look and see if they would be interested on participating or check he submitted material.

In this section, the three most recent challenges are displayed on the top. The rest of the challenge can be visualized by clicking on see all

MEMS Sensors

PARTICIPATE

Nail the Tacker

SEE SELECTED

Barbecue Experience

SEE ALL

InnBOSCH
Design-it yourself

search
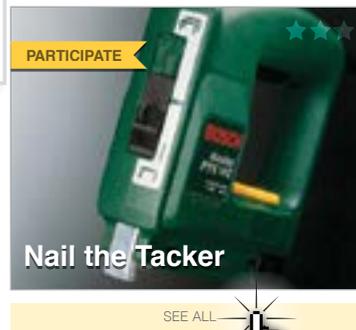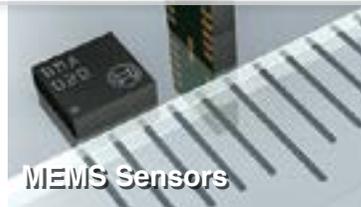
IDEA
HAPPENS
FIND OUT HOW IT WORKS →

This tabs allow the possibility to
display also the submissions only

CHALLENGES | SOLUTIONS

PARTICIPATE

MEMS Sensors

PARTICIPATE

Nail the Tacker

SEE SELECTED

Barbecue Experience

WINNER ANNOUCEMENT!

Green Solutions

SEE SELECTED

Guiding machine

WINNER ANNOUCEMENT!

The hole contest

SEE ALL

f   t   g   in

InnBOSCH

HOME   HOW IT WORKS   Matteo Buffoli

CHALLENGES   SOLUTIONS

Previous solution
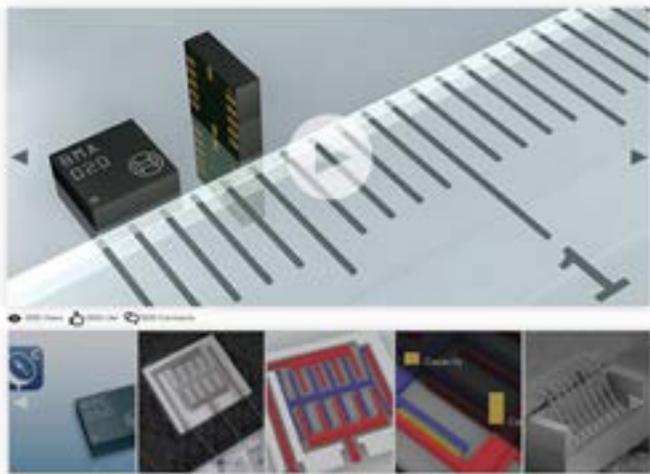
MEMS Sensor

Description

How do MEMS sensors work?

Engineers create sensors containing the finest silicon structures. As the casing moves, these structures shift a fraction of a thousandth of a millimeter – and their electrical properties change in the process. These properties can be measured and converted into a data stream that is capable of showing, say, a cell phone what position it is in. Bosch engineers work with incredibly small dimensions, while a human hair has a diameter of 70 thousandths of a millimeter (70 micrometers), some components measure only 4 micrometers – that is 17 times smaller than the diameter of a single human hair.

Since the micromechanical sensor produces only weak electrical signals, the developers built in another electronic component - sometimes in the casing beside the sensor, sometimes even directly on the same chip. This second component processes, amplifies, and converts the weak signal into digital data. In this way, MEMS (micro-electro-mechanical systems) sensors can supply control units directly with readings. Soon these tiny sensors will be able to do much more: they can be embedded in clothes in order to monitor heartbeat, serve as mobile weather stations measuring CO2 levels in the air, or register the typical movements people make when they put their phone in their pocket – so that the display is turned off automatically.

Possible wireless connections

There are several international standards, such as Wi-Fi, which devices use to exchange data via wireless technologies. This is how PCs send and receive data through the router next to the phone or cable outlet, for example, or how smartphones and MP3 players establish connections with PCs and routers. Bluetooth is another wireless standard, though it bridges only short distances, for instance from headphones to a cell phone or from an MP3 player to the car radio. ZigBee is an industry standard used to control maintenance-free sensors in hard-to-reach areas. Depending on the desired application, MEMS sensors can be equipped with different wireless connections.

Energy supply

Recent Solutions

Halo
Phase 1

Urban Sensor
Phase 1

Pro-runner
Phase 1

Light Meter
Phase 1

SEE ALL

Activity Feed

Scrolling-over the submitted concepts, allows users to see the profile picture of the designer of the concept, and creates a link to his/her profile.

Recent Solutions

Halo
Phase 1

...lle Chajin
... Designer

Pro-runner
Phase 1

Light Meter
Phase 1

SEE ALL

Challenge 1: MEMS Sensor is a challenge example on the category of new idea-concept generation.
In this case Bosch automotive developed a technology that could have many uses. In order to take advantage of this fact, Bosch automotive generates a contest to ask designers innovative applications for this brand new technology.,

174

How do MEMS sensors work?

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Energy supply

Bosch strives to build MEMS sensors that are as small as possible. Internet-enabled sensors need to be able to operate on the minimum amount of power if they are not to throw this size advantage away. Since the sensors themselves require little energy, they can function with very small batteries. More power, however, is required for the transmission of data via wireless technologies. That's why clever mechanisms ensure that data is only sent if it is absolutely necessary. Moreover, the technology is advancing: in future, new batteries will last for months or even years.

The goal is to achieve a long-lasting, maintenance-free wireless sensor; for this reason, engineers are also focusing on what is called energy harvesting, which sees energy gathered from the environment. There are several possible ways of doing this. Antennas can draw energy from radio waves present in the area. Acoustic noise also supplies energy that can be converted into electricity – as do vibrations, pressure, shock, and heat. While the quantity of energy recovered in each case is tiny, taken together they provide enough power for many applications.

Technical Information

Jury

Klaus Meder

President of Automotive Electronics

Frank Schfer

Senior Manager Product Management Automotive MEMS

HOME   HOW IT WORKS   Matteo Buffoli   search

CHALLENGES   SOLUTIONS

Videos and pictures of the technology are displayed in order to explain to clarify the information given

Details   Submit

Next solution →

Previous solution

Nail the Tacker

0000 Views   0000 Like   0000 Comments

Recent Solutions

Halo
Prototyping

Urban Sensor
Prototyping

Graff-style
Prototyping

HPNailgun
Prototyping

SEE ALL

Description

It is very advantageous for DIY enthusiasts when they do not have to bother about the huge effort waisted on tacking upholstered furniture, insulation materials or the decoration for a garden party. For this reason, Power tool gives you the opportunity to bring your idea of an innovative, safe and easy to use tacker, special for the DIY market!

Participate in the challenge of redesigning the Bosch Tacker PTK 14 E. A handy tool that offers DIY enthusiasts the classical tacker applications such as fastening thin materials onto wood, upholstering furniture or attaching decorations for different occasion.

Design requirements:

- The machine is intended for tacking of cardboard, insulating material, fabric, foils, leather and similar materials on surfaces of wood or materials similar to wood.

- The DIY enthusiast should select the mechanically adjustable impact force to suit the hardness of the workpiece. Different types of finishing and decorating materials can require widely differing stapling impacts. For example thin, light materials such as foils and fabrics require only a light impact, while thicker wooden or composite panels require a heavier impact.

- The machine should not be suitable for the attachment of wall and ceiling paneling.

- The design have to ensure that tacking only takes place when the tool is placed on the work-piece.

Activity Feed

29/04/2014
Giselle Chajin has commented on **Matteo Buffoli**'s concept on the **#NailtheTacker** competition

29/04/2014
Matteo Buffoli has been selected as the winner of the **#NailtheTacker**competition

29/04/2014
InnBosch team has announced the winner of the **#NailtheTacker** competition. Check him out!

28/04/2014
Mileris Vicioso has upload a new concept for the project **#MEMsSensors**

27/04/2014
Simone Bosatelli has commented in a project of **Damaris Höfler.** See the comment

26/04/2014
Monica Pisciotti has upload a new concept for the project **#MEMsSensors**

25/04/2014
Lina Castillo's concept has been selected for the developing phase of the contest **#GreenSolutions**

24/04/2014

Nail the Tacker

Recent Solutions

Halo — Prototyping
Urban Sensor — Prototyping
Graff-style — Prototyping
HPNailgun — Prototyping

SEE ALL

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- The machine should not be suitable for the attachment of wall and ceiling paneling.
- The design have to ensure that tacking only takes place when the tool is placed on the work-piece.
- The design must be ergonomically built, as well as suitable for both right-handers and left-handers.

Relevant Information about Bosch Tacker PTK 14 E

Main Product Features

- Bosch Electronic: adjustable impact force at the setting wheel to suit the hardness of the workplace
- Bosch duotac automatic: optional processing of two brackets at the same time to prevent tearing in material such as fine fabrics or films.
- Trigger an impact either using the trigger switch or pressing the devices tab on the workplace

Other Product Advantages

- Handle material preselection - Fast Folder can be changed without magazine or panel replacement
- Frontal assemble of the staples next to the security lock
- Continuous or single trigger an impact
- Quantity level indicator
- Easy refill of the magazine with staples or nails
- Tacking of nails and staples up to 14 mm in length (11.4 staples 6 - 14 mm)
- Machine weight 1.2 kg

Range of Applications

Easy — Universal — Expert

The Universal tools from Bosch
Reliable performance for universal use

Tacking
Attach

Technical key data

Beating	30 min-1
11.4 Parentheses	6-14 mm
Nails	14 mm
Weight of machine	1.1 kg

Supply

1000 Brackets (type 53, length 10 mm) (1 609 200 366)

For more specific technical information download the PDF in the link below, check out the tool kit section and find out more about the specifications available for the challenge.

Technical Information

Jury

Terry Horan
President and CEO
Robert Bosch Tool Corporation
North America

Henning von Boxberg
President of Bosch Power Tools
Responsible for marketing, sales, strategy, business development, communication, development, professional, DIY and garden tools, and service at Power Tools.

Activity Feed

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President and CEO
Robert Bosch Tool Corporation
North America

Henning von Boxberg

President of Bosch Power Tools
Responsible for marketing, sales, strategy, business development, communication, development, professional, DIY and garden tools, and service at Power Tools.

Inside the ToolKit button there is all the important and technical information given from the internal clients and relevant content developed by the InnBosch team for the challenge. e.g. usability testing videos and toolkit guide.

Information in this window will be displayed accordingly to the stage the participant is in.

Available Technology - Videos

Ultrashort pulse laser
How they work in the manufacturing process

Corporate Sector Research and Advance Engineering

MEMS (micro - electro - mechanical systems)

InnBOSCH

HOME   HOW IT WORKS   Matteo Buffoli

CHALLENGES   SOLUTIONS

← Previous solution   Next solution →

Details   Tool Kit   Submit

Usability Testing Videos

Recent Solutions

Halo
Prototyping

Urban Sensor
Prototyping

Graff-style
Prototyping

HPNailgun
Prototyping

SEE ALL

Tool Kit

The Toolkit includes:

1. Product manual
2. Product components
3. Interview guidelines

Bosch product style-guide

Important components CAD

Activity Feed

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27/04/2014
Simona Bosatelli has commented in a project of Osmaria Hofler. See the comment

26/04/2014
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- Profile -

> In order to classify the profile of participants later on, the innovation points would be sort out on stages and challenge typology.

4   TECHNICAL DEVELOPMENT

In the beginning of this phase, all the necessary components were examined.

This procedure was done to understand what the function of each part was, and to check if there were any parts that were redundant, as well as to generate a proposal for the manufacturing process.

1. An optimization module was executed to determine the optimal weight.
2. A FEM analysis was done on the bottom part to determine if it could withstand the load, when made of plastic.

After all this study, the results were integrated and the final form and functions of the product was obtained.

Other Technologies
1. Aluminium die casting
   – Possibility to obtain complicated forms.
   – Properties of metals
   – Easy assembling

29/50/9014
InnBosch Team: This project is a great example of the design process. Right from the collection of background literature.

5   USABILITY DEVELOPMENT

The most important part of the design process was executed during this phase. Three users (an expert, an inexperienced and an occasional user) were interviewed and their needs were noted. I got valuable understanding about the problems that are usually faced by gun-tacker users.
I tabulated and prioritized the data in order of the most important needs to the last important and all the needs were rated based on the emphasis that each user placed on the need.

My concept idea was drawn to get a better feel for the product and to improve the position of the hand while using the tacker.

5   USABILITY DEVELOPMENT

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My concept idea was drawn to get a better feel for the product and to improve the position of the hand while using the tacker.

29/01/2014
InnBosch Team: Congratulations, you understand very well the users needs. Get ready for the next phase!
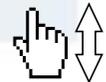
6   CONCEPT DEVELOPMENT

During the concept development phase more functions were introduced into the concept. The obtained changes made the product more user friendly by pointing the shooting area.

The changes for the regular/expert user are:
- Improvement of the handle
- Changes into the opening system for the loading of staples and nails.

The improvement of the inexperienced user are:
- To evidence the function of the adjustment ring
- To highlight the interaction area of the object.

29/12/2013
InnBosch Team: This idea is really simple and easy to use. Good proposals and amazing Job!

The project entries are displayed as a blog (newest entry at the top) and divided into stages. Participant must upload at least one entry that includes pictures, description and optional details of the concept, for every stage they are selected in. Participants can also upload additional material for support, such as videos, images and text. In case that the participant is not selected for the next round he/she is block for uploading more content.

The Graff-style projects was develop by Matteo Buffoli for the product studio 1 of Design and Engineering, Politecnico di Milano.

Tool Kit
User Centered Design Toolkit (Annex 1)

This toolkit was developed as an example of the material that the InnBosch team must elaborate with the collaboration of the UX department.
Some of the information of this Toolkit is based on the Ideo HCD tool kit and the Frog collective action tool -both under creative common license.

In this tool kit you would find:
• Identify the right Users to talk to
• Develop and Interview Approach
• Find Patterns
• Develop a New Product-Idea

InnBOSCH

UCD ToolKit

User Centered Design Basics

User-Centered Design (UCD) is a process and a set of methods focused on designing for and involving end users in application development to achieve high-quality User Experiences (UX) and products. The UCD methodology could be use to design solutions that include products, services, environments and modes of interactions.

The UCD process is based on tested, essential design processes and accountability across the entire design lifecycle that usually results in more usable and satisfying systems, more pleasant to use. In essence, a high-quality User Experience produces high-quality products.

The process begins by and understanding the needs, dreams, and behaviors of the people we want to affect with our solutions. The activities are organized around understanding end users' needs, scoping and defining interactions based on that understanding, and designing products from the interaction definitions.

Why a Toolkit?

In 2013, the Bosch group includes the Human Center Approach within its strategy. Aiming to offer their clients a high-quality product that really fulfill the client's need.

UX best practices promote improving the quality of the user's interaction with, and perceptions of your product and related services.

Why Should I use UCD?

UCD will help you hear the needs of constituents in new ways, create innovative solutions to meet these needs, and deliver solutions with financial sustainability in mind.

UCD and User Experience (UX) research provide contextual awareness into user's lives, generating new design thinking and helping designers to evaluate and implement new concepts.

UNDERSTAND USERS · **DEFINE INTERACTION** · **DESIGN PRODUCT** · **PROTOTYPING PHASE** · ITERATE WHERE APPROPRIATE
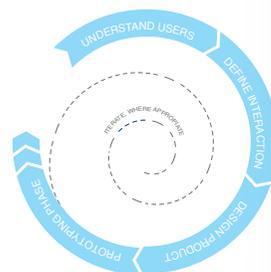
WHAT IS IT NEXT?

This tool kit focuses on the "Underand Users" phase and in order to do so, there is some material that Bosch has prepared for you to help you doing a human-centered research. In this tool kit you would find some steps that follow the HCD methodology. Those are:

+ Identify the right Users to talk to
+ Develop and Interview Approach
+ Find Patterns
+ Develop a New Product-Idea

2

Identifying the Users to Talk to

Asking the appropriate and inspirational participants is critical. For research meant to inspire new opportunities, it is useful to find people who represent "extremes." Extreme participants help to unearth unarticulated behaviors, desires, and needs of the rest of the population, but are easier to observe and identify because they feel the effects more powerfully than others.

+ The Newbie
+ The Do-It-Yourself User
+ The Expert or Professional User

By including both ends of your spectrum as well as some people in the middle, the full range of behaviors, beliefs, and perspectives will be heard even with a small number of participants. Including this full range will be important in the later phases, especially in constructing good frameworks and providing inspiration for brainstorming.

Learning Track card

Once that you identify the people you would interview, record all the discoverys and map your ideas as you go through the process.

Interview #

+ Person name
  (in the order of interview)

+ Finding
  (what did I learn?)

3

Develop an Interview Approach

In-context Immersion

Meeting people where they live or work, and immersing yourself in their context reveals new insights and unexpected opportunities.

Human-Centered Design works best when the designers understand the people they are designing for not just on an intellectual level, but also on an experiential level. Try to do what your users do and talk to them about their experience of life in the moment.

Being in-context means gaining true empathy through being with people in their real settings and doing the things they normally do. This kind of deep immersion gives us informed intuition that we take back with us to design solutions. We begin to take on the perspective of the interview participant which enables us to make design decision with their perspective in mind.

+ work alongside

Spend a few hours to a few days working with someone. By experiencing the activity firsthand, you may gain better understanding of their needs, barriers, and constraints.

+ look for difficulties or obstacles

There could be problems you can solve and implement to your design. Note what little things you could help with, or big issues that haven't been addressed.

+ watch what people do

It's great to listen to what people say when you talk with them, but it adds so much more to watch what they do in real life. What people say (and think) they do and what they actually do are not always the same thing. The goal is not to correct or point out the misperception, but rather to understand the difference.

+ pretend you don't know

Ask open-ended questions, even if you think you may already know how they'll answer. You might be surprised.

+ capture your thoughts

Take notes about what you talk about, so you can reflect on what happened. Words, drawings, photographs, and video can come in handy.

4

Individual Interviews

Individual interviews are critical to most design research, since they enable a deep and rich view into the behaviors, reasoning, and lives of people. If possible, arrange to meet the participant at his/her home or workplace, so you can see them in context. In-context interviews give the participant greater ease and allow you to see the objects, and spaces, that they talk about during the interview.

1.   Clarify the goal of the interview

Define your focus and what goals you want to achieve by doing the interviews.

Write down:

+ Why you would want to talk with them

+ What you would learn by talking to them

+ Where you would want to meet them

2.   Interviewing

Interviewing is an art that balances the dual needs of getting relevant information from the customer and engaging with them as a curious and empathetic friend. Intentionally developing your strategy for interviewing is key to managing this balance.

Plan an interview from start to finish, then go and talk to users about issues that matter to them.

+ Look for relevant information

Write out the three most interesting answers from the interviews

+ Look for patterns

Once you talk to several people, you may see and hear some of the same things come up. Note these patterns, as they can help you identify issues and possible solutions.

5

Find Patterns

Dive deeper into what you discovered in the interviews, identifying the deeper reasons behind issues people struggle with the tool.

1.   Take out the notes you took while interviewing people. Plus any reflection you had on those notes. Post your notes around a room. Spend about ten minutes reading through all notes.

2.   Reflect about what people think are the most important issues with the machine and the topics that you learned.

3.   Ask yourself:

+ Is there something you learned from your interviews that should be added to the project?

+ Is there something you captured that should help you improve the existing product?
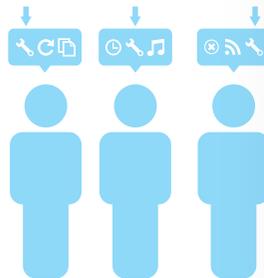
6

Develop a New Product Idea

Create new ideas and solutions for the problems you want to solve.

+ aim for quantity to reach quality

Don't stop until you have fully exhausted the possibilities. More ideas means more opportunities for a great solution to emerge.

+ generate unusual ideas

Bring in random influences to help spark new thinking. Even if some of your ideas seem silly or impossible, this is the time w hen you can let your imagination run wild.

7

PTK 14 E
Manual and Components

Robert Bosch GmbH
Power Tools Division
70745 Leinfelden-Echterdingen
Germany

www.bosch-pt.com

1 609 92A 093 (2013.03) PS / 62 WEU

1 609 92A 093

BOSCH


Intended Use

The machine is intended for tacking of cardboard, insulating material, fabric, foils, leather and similar materials on surfaces of wood or materials similar to wood. The machine is not suitable for the attachment of wall and ceiling panelling.

Product Features

The numbering of the product features refers to the illustration of the machine on the graphics page.

1. Trigger
2. Thumb-wheel for hammer-force pre-selection
3. Magazine slider
4. Latching aperture for support foot
5. Latching aperture for spacer clamp
6. Latching aperture for stapler plate
7. Tacker head
8. Selector switch for DuoTac-Auto-matic
9. Nail strip*
10. Staple strip*
11. Magazine
12. Support foot*
13. Stapler plate*
14. Spacer clamp*

* Accessories shown or described are not part of the standard delivery scope of the product. A complete overview accessories can be found in the Bosch accessories program.

Technical Data

Tacker		PTK 14 E
Article number		0 603 265 2.
Impact rate	min⁻¹	30
Intermittent operation	min	5
Staple width	mm	11.4
Staple length	mm	6 - 14
Nails	mm	14
Magazine capacity max.		100
Weight according to EP-TA-Procedure 01/2003	kg	1.1
Protection class		/II

The values given are valid for a nominal voltage [U] Of 203 V. For different voltages and models for specific countries, these values can vary.

PTK 14 E

The 'Manual and Component' book belongs to the tool kit given to participants.

The information on this book regards:
- The intended use
- Product features
- Technical data regarding the operation, e.g. dimension of the staples and nails and material specification'
- Technical drawings. Parts and explosion
- Types of staples

- Noise vibration information
- Requirements for the redesign
- Extra component: Lithium-ion Battery
- About Power Tools Division

* The information provided in the 'Manual and Component' book contains real information and is based on the original Bosch manual of the PTK 14 E and available information on the Bosch website.

A

9
11
3
10

B

BOSCH

12
13

C

14
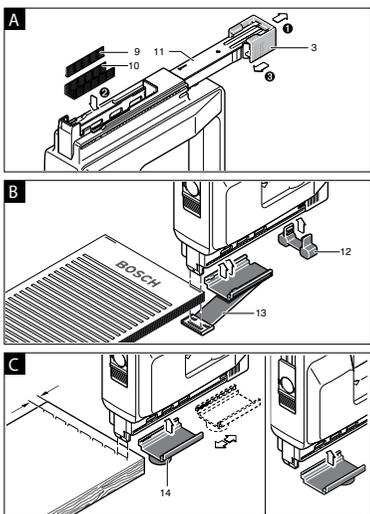
Operation

Switching On and Off

– At first, firmly place the tacker head **7** against the workpiece until it is pushed in a few millimeters. Afterwards, briefly press the trigger **1** and then release again.

The trigger lock, which is connected with the movable tacker head **7**, prevents unintentional shot actuation when the trigger **1** is inadvertently pressed.

– For rapid working, keep the trigger **1** pressed. Position the machine and press the tacker head **7** firmly against the workpiece until the shot is actuated. After the shot, move the tacker to the next location and press the tacker head **7** firmly onto the workpiece again. To save energy, only switch the power tool on when using it.

Hammer-force Preselection

With the thumbwheel for hammer-force preselection **2**, it is possible to preselect the required hammer force in steps.

The required hammer force depends on the length of the staples or nails, and on the strength of the material. The optimal hammer-force setting is best determined through practical testing.

The data in the following table are recommended values.

When processing 2 staples (**Duo**Tac function), the hammerforce preselection must be selected approx. one step higher with thumbwheel **2**.

DuoTac-Automatic

In **Duo**Tac-Automatic mode, 2 staples are fastened at the same time. The double staple thickness increases the tear strength of thin materials, such as fabrics or foils.

The **Duo**Tac function is not possible for processing nails.

– To process 2 staples at the same time, push the **Duo**Tac-Automatic selector switch **8** up. To process a single staple or one nail, push the DuoTac-Automatic selector switch **8** down.

Structural Material		mm	mm	Position of Thumbwheel 2
Hardwood (Beech)		6	–	3	4
		8	–	3–4	4
		10	–	4	5
		12	–	4	5
		14	–	4–5	5–6
		–	14	6	–
Softwood (Pine)		6	–	1	2
		8	–	2	2–3
		10	–	2–3	3
		12	–	3	3–4
		14	–	3	4
		–	14	3	–
Particle Board		6	–	2–3	4
		8	–	3–4	4
		10	–	3–4	4
		12	–	4	5
		14	–	4	5–6
		–	14	4	–
Wood core plywood		6	–	2–3	4
		8	–	3	4
		10	–	3	4–5
		12	–	3–4	5
		14	–	3–4	5
		–	14	4	–

Types of Staples

› Fine wire staple type 53   › Fine wire staple type 53   › Clamp type 53

› Clamp type 55   › Clamp type 53   › Fine wire staple type 8

› Clamp type 53   › Fine wire staple type 53   › Clamp type 53
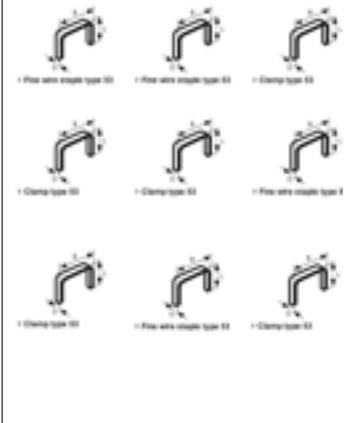
Stapler Plate (see figure B)

With the stapler plate **13**, materials with a thickness of up to 8 mm, such as notepads, seminary paperwork, thin-walled pressboard or fabrics, can be stapled. Depending on the click-on position of the stapler plate **13**, the stapler tips are bent toward the inside or outside.

The data in the following table are recommended values. Determine the settings for double-staple application (**Duo**Tac) through practical testing. The staples used must be 3–4 mm longer than the thickness of the material.

Staple length (mm)	6	8	10	12
Material thickness (mm)	3	4	4	8
Position of Thumbwheel 2				
– Stapling paper	3	3–4	5	6
– Stapling fabric	1	2	2–3	3

Support Foot (see figure B)

The support foot 12 enables exact vertical placement of the machine.

Spacer Clamp (see figure C)

The spacer clamp 14 enables tacking of staples/nails with consistent clearance to the workpiece edges. The variable possibilities for clicking on allows for many clearance levels.

Noise/Vibration Information

Measured sound values determined according to EN 60745.

Typically the A-weighted noise levels of the product are:

Sound pressure level 87 dB(A); Sound power level 98 dB(A).

Uncertainty K =3 dB.

Vibration total values ah and uncertainty K determined according to EN 60745:

a_h = 6.6m/s², K= 1.5 m/s².

The vibration emission level given in this information sheet has been measured in accordance with a standardized test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure.

The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period.

An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period.

Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep hands warm, organize work patterns.
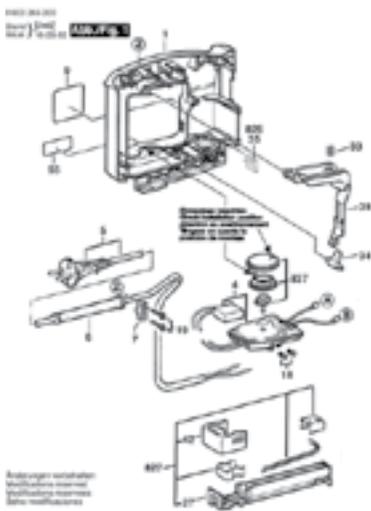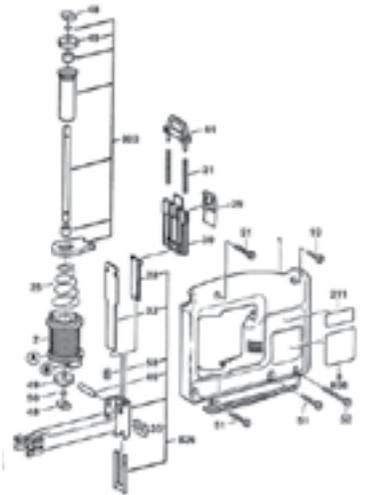
Requirements for redesign

The outcome of this redesign challenge should be a handy tacker of only about 15 x 16 x 5 centimeters in size, that weighs just less than 800 grams, so people can take it anywhere with them. The machine is intended for tacking of cardboard, insulating material, fabric, foils, leather and similar materials on surfaces of wood or materials similar to wood. Additionally, he features of the new tacker include:

• securely and comfortably in the hand
• a reload indicator to show users how full the staple magazine is.

Extra Component: Lithium-ion Battery

Bosch counts with a lithium-ion battery that has hardly any self-discharge. For this reason, the new-improved tacker would be ready to use at all times – even when not used for a lengthy period of time between individual applications. This battery also has no memory effect, so it can be recharged at any time without the user having to accept a deterioration in battery performance. When the battery is fully charged, it has enough power to drive at least 400 staples into softwood. The charging state of the battery should be indicated by a LED.

Benefits

• Maximum Run Time - Minimum 50% More Run Time (Compared to Bosch 1.3Ah)
• Best in Class Size & Weight
• Cold Weather Operation - Battery will work down to -4°F
• Durable Housing - Survives 3 meter drop
• 100% Compatibility - Works with all Bosch 12V tools

Specificacions

Battery Chemistry	Lithium Ion
Battery Voltage	12
Height	7.17"
Length	2"
Width	4.74"

About Power Tool Division

The Power Tools Division of the Bosch Group is the world market leader for power tools and power tool accessories. In 2012, its workforce generated sales of 4.0 billion euros, 90 percent of which outside of Germany. With brands such as Bosch, Skil and Dremel, the division stands for customer focus and great engineering progress. The core success factors are innovative strength and pace of innovation. Each year, Bosch Power Tools launches more than 100 new products onto the market. The division generated about 40 percent of its sales in 2012 with products that have been on the market for less than two years. The business segments electric power tools, accessories, measuring tools and garden tools of Bosch Power Tools outperformed the market.

The Bosch Power Tools Division grew considerably over the past year. With a sales increase of six percent, the manufacturer of power tools reached the four billion euros mark for the first time. "Our growth of six percent clearly shows that we have again succeeded in winning market shares", explained Henning von Boxberg, president of Bosch Power Tools. The division wants to continue this trend in 2014: "We expect to increase sales at a similar rate again this year", said Mr. von Boxberg during the annual Bosch Power Tools press conference. The success of Bosch Power Tools is based on innovative products. About 40 percent of sales are generated with products that were launched within the last two years. Bosch Power Tools will again launch more than 100 new products this year – including everything from power tools, to garden and measuring tools, through to accessories.

Bosch Corporate Design (Annex 3)

Main Identification

Symbol/logotype in silver/red
Example handheld mixer

Symbol/logotype in gray/red
Example washing machine

Symbol/logotype in silver/red
Example test device

Symbol/logotype in silver/red
Example garden tool

Combined trademark
(symbol/logotype) on
large gardening tools

Exception for limited space
small products:
Individual symbol and logotype

The symbol/logotype is applied to the display side in highquality presentation as the main identification of products.
Exceptions
In case of limited space (small products), symbol and logotype are applied separately on the product (see the illustration of spark plug).

For large gardening tools, the combination trademark (symbol/logotype) will be used in accordance with the adopted division-wide regulation starting immediately.
The identification of all power tools is carried out by using the logotype in isolation (without symbol) until an adequate way of attaching the combination trademark (symbol/logotype) to small devices has been established. This exception is temporary and applies exclusively to power tools (green and blue) and small gardening tools that feature insufficient space.

Symbol/Logotype Positioning

1 H of the logotype top

1 H of the logotype bottom

1 H of the logotype lateral

1 H of the logotype lateral

Medium
from 48 mm

48 mm

Small
up to 43.2 mm

43.2 mm
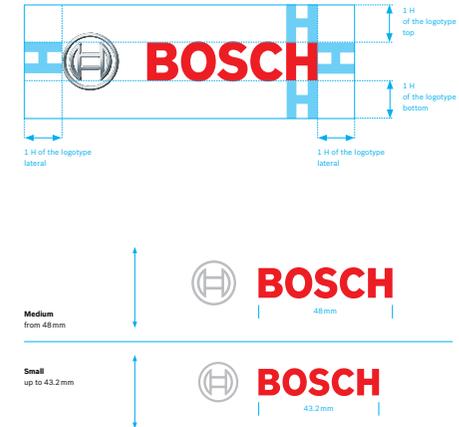
The symbol/logotype as main identification should be positioned so that it fits smoothly but concisely into the product design.

Minimum spacing

The minimum spacing of the symbol/logotype to product edges and design elements is one H to the top, a horizontal H at the bottom and the side. As far as possible, it should be exceeded to provide sufficient free space for the symbol/logotype.

186

Symbol/Logotype Colors

Silver/red
For a high-quality representation, the symbol/
logotype can also be embossed.

Ⓗ **BOSCH**

Gray/red
(Symbol in different shades of gray
– dependent upon background – is possible)

Ⓗ **BOSCH**

Ⓗ **BOSCH**

Ⓗ **BOSCH**

Black/red

Ⓗ **BOSCH**

Color/red

Ⓗ **BOSCH**

Silver
For a high-quality representation, the symbol/logotype
can also be embossed.

Ⓗ BOSCH

Gray
(Symbol in different shades of gray – dependent upon
background – is possible)

Ⓗ BOSCH

Ⓗ BOSCH

Ⓗ BOSCH

Black

Ⓗ BOSCH

Negative
(also: tone-in-tone embossed/impressed)

Ⓗ BOSCH

Ⓗ BOSCH

Red/color X

Ⓗ BOSCH

Ⓗ BOSCH

Symbol/Logotype Colors Examples

Symbol/logotype
Embossed in silver
Example: gas heater

Ⓗ BOSCH

Symbol/logotype in silver
or gray
Example: windshield wiper

Symbol/logotype
in silver/red
Example: dishwasher panel

Symbol/logotype
in gray or silver
Example: dishwasher panel
(stainless steel)

Bosch Blue *

Bosch Green*

Bosch Turquoise *

Black: Pantone, NCS 9000N
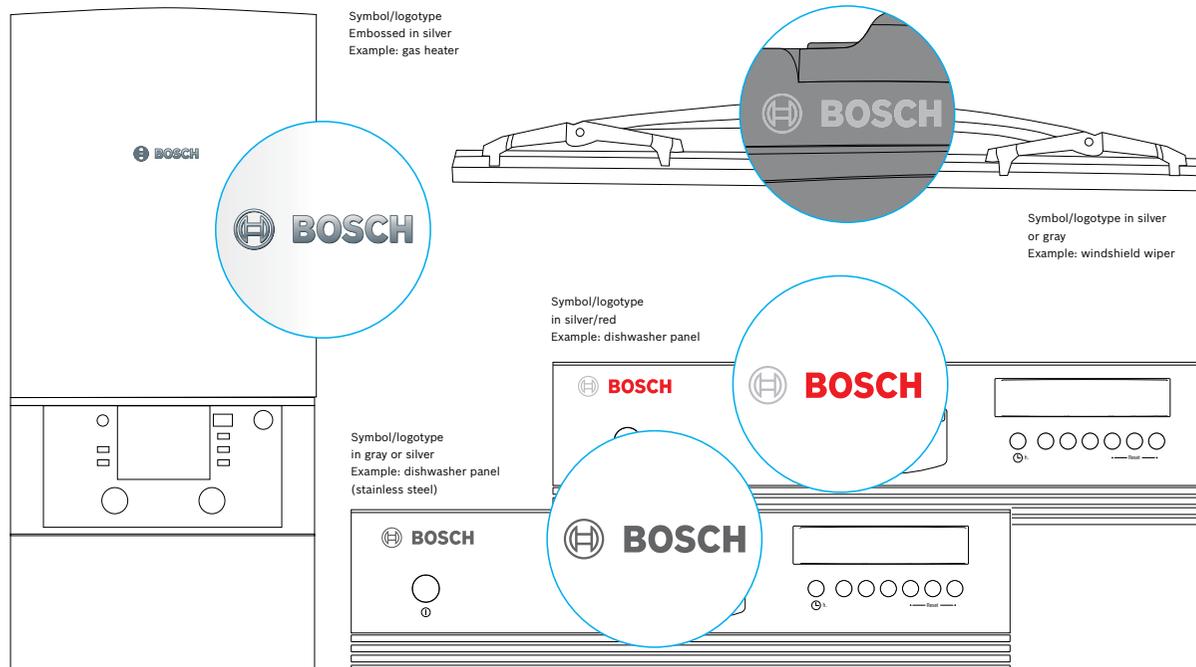
Graphics

Red: Pantone 485 C, NCS 1090Y90R

Grey: Pantone 427 C, NCS 1502G

Yellow: Pantone 110 C, NCS 1070Y

Black: Pantone 3 C, NCS 9000N

Silver Pantone 877 U

Universities

Politecnico di Milano

- Advertisement Posters on Campus -

- Events with Students -

- Information day on Campus -

Business Overview
Business Model Canvas

Key Partners

Bosch Business Units & New Business Teams (Challenges briefings and sponsorship, internal agreements, IP protection)

Participants - Platform Users (solutions for new product and services; present and develop ideas)

Prototyping Places (professional technical advise, prototype)

Universities (design students, professors, advertisement, talks)

- Increase Bosch product pipeline
- Brand awareness and communication
- Consumer, product trends and Market analysis

Key Activities

- Implementation of briefings and guidance
- Platform implementation
- Development of educational UX material
- Promotion campaign

Key Resources

- Bosch structure
- InnBosch team and UX team
- Website platform
- Challenge commissions

Value Propositions

Create an international network of designers, specialized in different design fields.

Accelerate innovation speed and the production of brand new products based on users insights

- Bosch network
- Design portfolio and visibility
- Adequate IP protection
- Add UX value to new products
- Leverage product field awareness

Customer Relationships

Bosch design network

Follow up for contest and prototyping

Online feedbacks and comments

Challenge support

Channels

- Social media and web
- Universities
- Word of Mouth
- Bosch internal communication

Cost Structure

Fixed costs
- Team salary
- Platform maintenance

Variable cost (challenge)
- Challenge Implementation
- Online and printed advertisement
- Partnerships/advertisement universities
- Prototyping

- Challenge prize (€10000 suggested, negotiable)

Revenue Streams

- Launch of challenge and challenge support
- The use of the platform is for free

Swot Analisys

Customer Segments

Registered undergraduate and recently graduated students of design, such as:

- Product design

- Industrial design

- Design and engineering

- Service design

- Interface design

- Other related Fields

Internal Bosch Partners:

- Bosch business units

- Bosch New Business Teams

€

> negotiable

> asset sale

STRENGTHS
Internal Factors that contribute to create Value

The strong values that Bosch Brand transmit

The User Experience and Human Centered design knowledge

Worldwide subsidiaries

Huge communication wave

The possibility to reach designers worldwide

WEAKNESSES
Internal Factors that contribute to decreate Value

The low perception of design with the Bosch brand

Bureaucracy of big corporations

Complicated and sometimes slow time to market

The strict measures for IP protection

Worldwide pool of passioned and capable young designers

Create an alternative network for project development

Involvement of external parties, such as universities, agencies and prototyping places

Inclusion of academy knowledge

Brand awareness

The competitors can follow the challenges and steal some ideas

The network of designers can be created once the platform has being on air for some time

Participants unhappy with results

Production of a similar idea submitted on the platform, by a different unit

OPPORTUNITIES
External Factors that (can) affect the service **positively**

THREATS
External Factors that (can) affect the service **negatively**

Conclusions

At the beginning of the project, the objective from the Bosch side was really narrowed, the aim was to create a platform open mainly to designers, and to evaluate different payments for collaborations, e.g. royalties. The project initially was carried paying particular attention to the excitment of the different Bosch divisions -in which the project should be approved, rather than satisfying the needs of the possible users. However after my internship finished, I went deeper into the research and continued doing the project by following an User Experience methodology, I decided to changed the focus of the project and to start the experimentation on what could really motivate participants to use a Bosch design platform, leaving aside the Bosch corporate restrictions.

The business background analysis helped me to support that there is a need from the companies to integrate customers and Internet technologies into their main course of business and promotion. And from a social scale, I could see many opportunites born thanks to the phenomena of prosumers and the Do It Yoursefl, as well as the increasing trend of not-related-individuals grouping and working for a cause they believe in.

After I encompassed the design of a co-creation platform, the overall resut proposes a service design that is both vantageus for Bosch but that also improve the current situation of young designers -situation that is lived by myself and my most of my fellow colleagues,

found on the literacy and told by the interviewed designers. It is impossible to pay for every designer that participates in such a platform, it would be also contrary to the Open Innovation bases, but a service like this gives a new mening to the way how companies ask for collaboration, and it can also influence the way of how future partnership are settle.

Another side efferct of the InnBosch service is given by the prototyping phase. This phase enhances the technical knowledge of the designers; and ensures the the quality on the results for Bosch - later translate into shorter time to market, and creates temporary valuable partnership with the different prototype places.

Acknowledges

First of all I would like to thank my family. My mom and dad for believe in me and always help me to make my dreams come true. To my sister that has being always present for me.

To the professor Alessandro Confalonieri who guided and listed to me through the project. I really appreciate his suggestions and his trust on my work.

To Bosch, specially to Dr. Peter Schnaebele and Martin Kroeger for giving me the opportunity to work with them and for allowing me to develop my thesis based on my one year research and design work.

To Matteo for the strengths and support. Also for being the number one interviewee and 'first' user of the platform. To his family for the inconditional help in the uncertain moments.

And to my dearest friends, Maria Monica and Lina, and my friends in Milan, Stuttgart and Brescia.

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Table of Graphics

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