Design Thinking

BUSINESS INNOVATION

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MJV PRESS

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Design thinking : business innovation [electronic resource] / [authors] Maurício Vianna ... [et al.] ; [translation: Bruno Murtinho]. - Rio de Janeiro : MJV Press, 2012.
164p., digital resource : il.

Translation of: Design thinking : inovação em negócios
Format: PDF
System Requirements: Adobe Acrobat Reader
Access Mode: World Wide Web
Includes index
ISBN 978-85-65424-01-1 (electronic resource)

1. Mudança organizacional. 2. Reengenharia (Administração). 3. Sociedades comerciais - Reorganização. 4. Criatividade nos negócios. 5. Pensamento criativo. 6. eBooks. I. Vianna, Maurício II. MJV Tecnologia e Inovação.

12-5935. CDD: 658.4063
CDU: 005.332.3

20.08.12 27.08.12 038283

1st edition: August 2012

MJV Press

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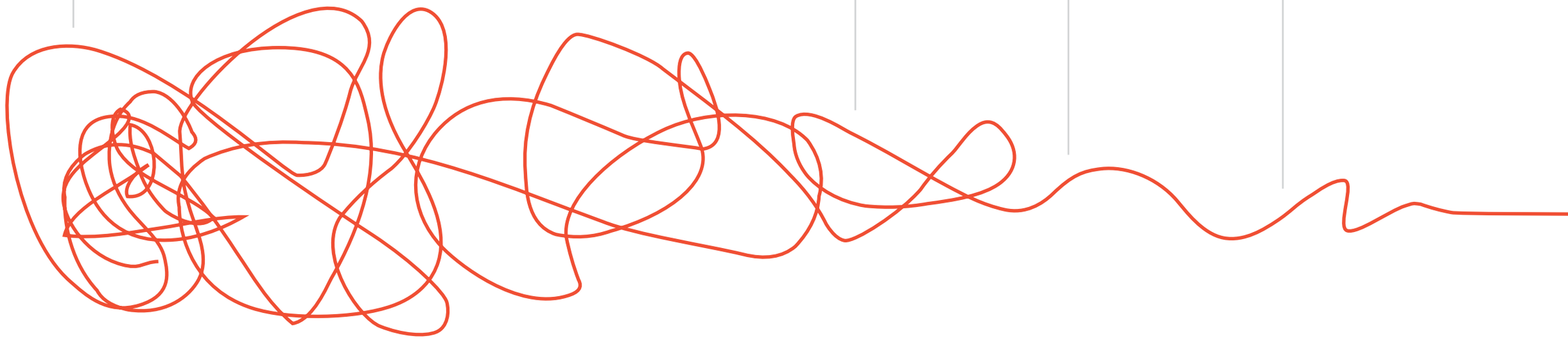


Preface

Every book has its own story, and this one is no different.

The book you are holding in your hands is a collaborative effort by MJV Tecnologia e Inovação, consultants on innovation.

MJV is a traditional IT company that, following the need to evolve and reinvent itself, has made innovation its touchstone.

In 2008, while engaged in a mobility project for electronic management that – as stipulated by the funder (FINEP / MCT[1]) – had to be innovative in nature, we settled on Design Thinking as the only structured process in the world for such an approach.

As we turned up case after case of international success, our response became one of love at first sight. Here was the way to break through the linear logic in the mindset of science, engineering and systematic management. It would be our mountain guide, or Sherpa, on an unknown path as yet untouched by the logic we all cherish so dearly.

Since then (2008), we've been learning, practicing, serving our clients and, with them, we've accumulated the experience that we're translating into this book.

Brazilian companies, like companies all over the world, feel threatened by rapid change in the field of technology with the resulting impacts on society and the market. And so most of them wait for change to become more intelligible before acting. Innovating is always risky, and it is not easy to anticipate results precisely. Change always poses a threat. Many companies, and even entire industries, fall prey to surprise attacks by newcomers, new products and business models. So innovating may be risky, but not innovating is also risky.

[1] Financiadora de Estudos e Projetos (FINEP), part of the Ministry of Science and Technology (MCT)

What can you do?

In a scene from Lawrence of Arabia, the hero and his companion are sitting on a sand dune in the desert when they see a moving black spot in the distance, unable to discern what it is. Not knowing what to do, they wait to see what this moving object could be. Gradually the spot becomes an animal in motion, then a camel, then finally, a camel with a man riding on it. They are caught completely off guard as the man takes out a gun and kills Lawrence's companion.

Their mistake was to wait and see what the threat might be. Any other move would have been better. Running away, firing a warning shot into the air, taking cover or anything else at all would have been better.

In the same way, companies cannot sit still waiting until it is time to innovate. They can't wait to get ready for unexpected competition, for the consumer to change, for new ways of organizing, for new meanings to be assigned to their services or products.

Marketing research as it is defined will not reveal these threats – though if it does identify them, the standard business solutions are of little help. Design Thinking brings a holistic vision to innovation. It works with multidisciplinary teams that follow a process, understanding consumers, employees and suppliers as they are in their own context, co-creating solutions with experts, prototyping in order to better understand their needs. A Design Thinking team will end up generating new solutions that tend to be innovative and quite unexpected.

In Design Thinking, art is combined with science and technology to find new business solutions. Video, theater, visual displays, metaphors and music combine with statistics, spreadsheets, and management models to address the most intractable business problems and spark innovation.

In other countries, Design Thinking is gradually taking hold in MBA programs at major universities, and being adopted by international companies as yet another tool for executives. Among the universities that have included Design Thinking in their curricula are Stanford, Berkeley, Northwestern, Harvard, MIT and others.

In Brazil, we are pioneers in creating a business consultancy based on Design Thinking, and although this effort is still in its infancy, we have already begun to see acceptance of this new approach among big companies. The problems to be addressed vary a great deal, ranging from translating insurance jargon to establishing a process of innovation within an IT department; from developing products and services that will enable patients with chronic diseases to take better care of themselves, to initiating change management in an ERP[2] implementation; from designing innovative services for first-time flyers, to redefining the meaning of life insurance; and so on.

In Brazil, all that is available in the way of literature on this subject adds up to a few books translated into Portuguese concerned with international cases. This book is meant to fill the gap with a text written by Brazilians who have international training in the field, and will draw upon local cases to teach its methods in detail.

Our book is addressed to professionals in all areas of business. Through it, we intend to cover both the genesis of innovation, as well methods and practices for its implementation. The latter is at least as important as the innovation itself, if not more so.

[2] Enterprise Resource Planning .

We hope this book will encourage Brazilian companies to create their own prototyping labs and business innovation departments, and to introduce Design Thinking as standard management practice.

Finally, as a vital acknowledgment, we would like to thank the financial support that FINEP – an agency of the Brazilian Ministry of Science and Technology – has granted MJV, which has enabled us to make the investments that have culminated in the writing of this book. We are indebted to FINEP for its support of our first steps on the path of innovation that have given us our impetus and direction as a company. In the past two years, our clients have granted us the opportunity to develop new solutions with them, while we have also learned a great deal from their executives about the environment of their businesses where innovation can take root. We wish to express our appreciation to all of them, and especially the following companies: Mapfre, Banco Itaú, Bradesco Seguros, Icatu Seguros, Duty Free Dufry, Mongeral Aegon, Mills Estruturas e Serviços de Engenharia, among many others.

Last but not least, we wish to thank all of our consultants and colleagues who have made this journey with us, contributing countless hours of work and, above all, their knowledge and enthusiasm. This book contains a little bit of each one of them.

And so, dear reader, we deliver this book to you, created with deep feeling and with the hope of making a significant contribution to our country.

Maurício Vianna
Ysmar Vianna
Executive board of MJV Tecnologia e Inovação

Why Innovate?

Every day, more and more companies are looking for new ways to innovate.

Why innovate?

According to the U.S. magazine Business Week, the process of innovation consists of re-creating business models and building entirely new markets to satisfy unmet human needs; above all, it aspires to select and execute the right ideas, and bring them to market in record time.

But innovating is not an easy task. According to the Doblin group (2007), only 4% of new products released in the United States succeed in the market.

Traditionally, innovation in the business world has meant seeking new technological solutions. However, in the 1990's, the dissemination of Total Quality Management (TQM) – a management philosophy created by Deming (1986) that aims at continuous improvement in the quality of products and processes – gave birth to a new approach to innovation: to innovate, it was not only necessary to find new technological solutions, but also to explore new markets. Thus, in addition to creating new forms of contact with customers, new approaches to satisfying their needs were also opened up.

In time, companies began to realize that it wasn't enough simply to offer technological superiority or performance excellence as marketing advantages, inasmuch as small and large companies all over the world had already begun to adjust to this reality. In the arena of global competition that would soon prevail,

innovation would become an arduous and often frustrating task. The difficulty of achieving market differentiation vis-à-vis the competition would grow by leaps and bounds. It was time to blaze new trails, to ensure not only companies' success, but above all, their survival.

It was in this search for new paths to innovation that what is now known as "Design Thinking" was created: an approach focused on the human being that is able to uncover through multidisciplinary, collaborative perspectives that render thoughts and processes tangible, paths that lead to innovative business solutions.

WHAT IS DESIGN THINKING?

Although the term "design" is commonly associated with products' quality and/or aesthetic appearance, the main goal of design as a discipline is to promote well being in people's lives. Nonetheless, it is the way that designers perceive things and act upon them that has attracted the attention of management, opening new paths to business innovation.

Designers look upon any experience that is harmful (whether emotionally, cognitively, or aesthetically), or otherwise disruptive of people's well being is a problem (considering all aspects of life, such as work, leisure, relationships, culture, etc.). And so their main task is to identify problems and generate solutions for them.

The designer understands that problems affecting people's well being are of many kinds, which makes it necessary to survey the individual's culture, context, personal experience and life processes in order to attain a broader view, so as to better identify obstacles and create alternatives for getting around them. By taking the trouble to conduct a thorough survey, the designer can pinpoint the causes and consequences of difficulties and be more assertive in seeking solutions.

The designer knows that to identify the real problems and solve them most effectively, it is necessary to approach them from different perspectives and angles. Therefore it makes sense to favor collaborative efforts by multidisciplinary teams affording a diverse array of viewpoints, and a variety of interpretations on the subject at hand, which will yield innovative solutions.

He works in a multiphase and non-linear process known as fuzzy front end, allowing for constant interaction and learning. This forces the designer continuously to try new paths, opening him up to alternatives: errors give rise to discovery, which helps to plot alternative courses and identify opportunities for innovation.

Moreover, as the name itself conveys, Design Thinking refers to how the designer thinks, drawing on a style of reasoning that is hardly conventional in the business world, known as abductive thinking. Abductive thinking endeavors to formulate inquiries through the apprehension or

comprehension of phenomena, that is to say, questions are posed to be answered using information gathered from observation of the context pervading the problem. In abductive reasoning, therefore, the solution does not derive from the problem: it patterns itself after the problem.

One cannot solve problems with the same kind of reasoning that created them: abducting and defying the conventions of business is the foundation of Design Thinking. It is by reasoning abductively that designers constantly challenge their standards, making and unmaking conjectures and transforming them into opportunities for innovation. It is the designer's ability to extricate herself from Cartesian logical thinking that allows her to remain "outside the box."

BUT IS IT ONLY DESIGNERS WHO THINK THIS WAY?

No. Although designers have kept this kind of thinking active in their profession – something that confers upon them a certain creative aura – human beings are Design Thinkers by nature. It was abductive thinking that allowed for the evolution of artifacts in our civilization: from primitive civilizations to vernacular design and traditional craftsmanship. Watching the world and generating new solutions abductively is a common human skill that only recently has come to be seen as something requiring exceptional talent.

WHY DESIGN THINKING?

Innovation guided by design has come to complement the market's view that, in order to innovate, one must focus on the development or integration of new technologies and on opening and/or servicing new markets: besides these technological and marketing factors, Design Thinking consultancy innovates primarily by endowing products, services or relationships with new meanings. Since "things must have a form to be seen, but must make sense to be understood and used" (Krippendorf, 1989), design is by nature a discipline that deals with meanings. By challenging patterns of thought, behavior and feeling, "Design Thinkers" produce solutions that generate new meanings and activate diverse elements – cognitive, emotional and sensory – that are involved in the human experience.

This book presents a set of methods used in the process of Design Thinking that, as applied to business situations, become tools for a different approach to innovation. Such methods can be compared to those of marketing according to John Kolko (2011). Beyond this, adding in other elements, the following tables show the contrasts and idiosyncrasies of the two approaches.

	Design Research	Market Research
Focus	People.	People.
Objective	Seeks to understand cultures, experiences, emotions, thoughts and behavior to provide inspiration for the project.	Seeks to understand behavior through what people do, or say they do, in order to predict how they would behave in a new situation, while coming up with solutions based on their answers.
Data Collecting	Primarily through semi-structured conversations between the researcher and the interviewed.	Primarily through questionnaires and structured interviews.
Sampling	Represents samples qualitatively and seeks profiles of extreme users, because unusual and obscure observations may lead to new and interesting ideas.	Statistically represents the sample, with the intention of understanding answers of the masses, commonly ignoring points off the curve. Data analysis requires an objective point of view that is critical and unbiased.
Type of information collected	Behavior, objects and words people use to express the way they interact with things and processes around them.	People's opinions and behavior regarding current situations or expectations of future contexts.

WHAT DOES THIS BOOK HAVE TO OFFER?

Through this book, it will be possible to become acquainted with the introductory phases of the Design Thinking process, as well as some of the principal methods it uses, always exemplified by practical applications taken from real market projects.

In general, the first stage of the process aims to get closer to the context of the project. This stage, called Immersion, is broken down into two parts: Preliminary Immersion and In-Depth Immersion.

Preliminary Immersion seeks an initial understanding of the problem and, if necessary, to reframe it. In-Depth Immersion aims to identify the needs of the players involved in the project, and the opportunities that are likely to arise from an understanding of their experience regarding the issue under scrutiny. This "plunge into context" frequently generates a mass of information so vast that it becomes hard to identify the opportunities and prospective challenges to be overcome. Consequently, a stage of Analysis and Synthesis ensues, which seeks to organize the data visually so as to indicate patterns that will help to provide an understanding of the whole and identify opportunities and challenges.

Actually, Analysis and Synthesis, along with the other stages described in this book, should not be seen as a step in a linear process, but rather as a part of a tangled whole, where each stage impinges on other stages. For instance, Analysis may occur during Immersion and act as a support for the next phase, Ideation.

In this third stage, it is sought to generate innovative ideas through collaborative activities to stimulate creativity. Generally, the tools for synthesis developed in the Analysis stage are used as a means for generating solutions geared towards the context of the issue under scrutiny.

The ideas generated are then selected – on the basis of business goals, technological feasibility and, naturally, the human needs that are to be met – for validation in the Prototyping stage.

This phase, the last one presented in this book, helps to make ideas tangible, so as to provide continuous learning and eventual validation of the solution.

The stages previously described can be better understood from the standpoint of the "Project Sparrow" (Projeto Andorinha), the contents of which will be disclosed in increments dispersed over the course of the narrative of this book. At the end of each chapter, readers will find representative and informative details of this project aimed at recreating the sensations of passengers on their first flight, through the prism of their needs and concerns.

It should be noted, therefore, that the Design Thinking stages touched upon here, although presented in a linear fashion, are highly versatile and non-linear. That is, such phases can be molded and configured in a way that conforms to the nature of the project and problem in question. It is possible, for instance, to start a project with the Immersion phase and conduct Prototyping cycles while studying the context, or else, over the course of the entire project. Ideation sessions don't need to be undertaken at a particular point in the process, but can permeate it from beginning to end. Likewise, a new project can start with Prototyping, the last stage presented in this book.

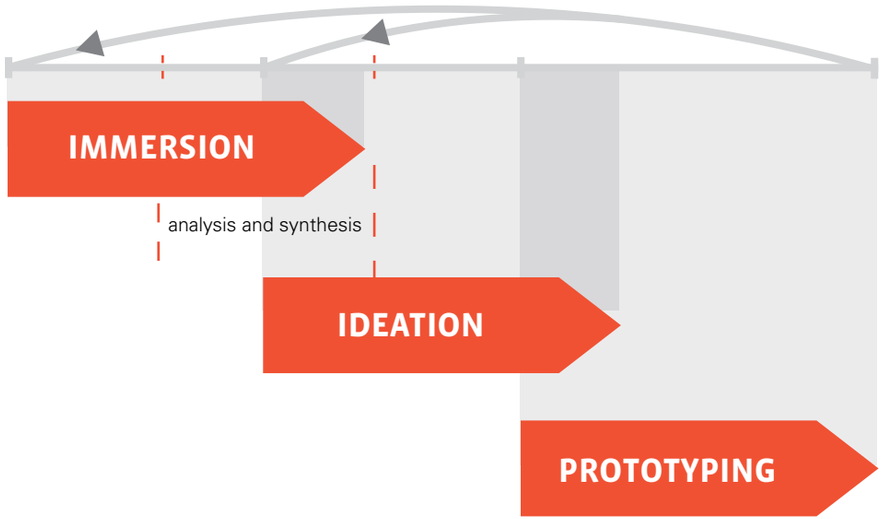


Diagram representing stages in the Design Thinking process.

Ultimately, we hope this book can become a source of constant support for using the stages, techniques and tools set forth herein, and, above all, an inspiration, based on examples of authentically Brazilian cases. But the most important thing is that this book should assist you in your own drive towards innovation.

Immersion

The first stage of the Design Thinking process is called Immersion. At this moment, the project team approaches the context of the problem from the point of view not only of the company (the client), but also that of the end user (the client's client).

Immersion

Immersion can be divided into two phases: Preliminary and In-Depth. The main objective of the first phase is to reframe the problem and arrive at an initial understanding of it, while the second phase aims at identifying the needs and opportunities that will lead to a solution in the next stage of the project, Ideation.

Preliminary Immersion consists of Reframing, Exploratory Research and Desk Research. Everything begins with strategic alignment meetings between members of the team that will lead the Design Thinking project and employees of the client company, where the reframing process is undertaken. In parallel, the project team conducts a preliminary field survey – Exploratory Research – to illuminate the context of the subject in question and identify extreme behaviors that can be examined in greater depth in a second phase of Immersion.

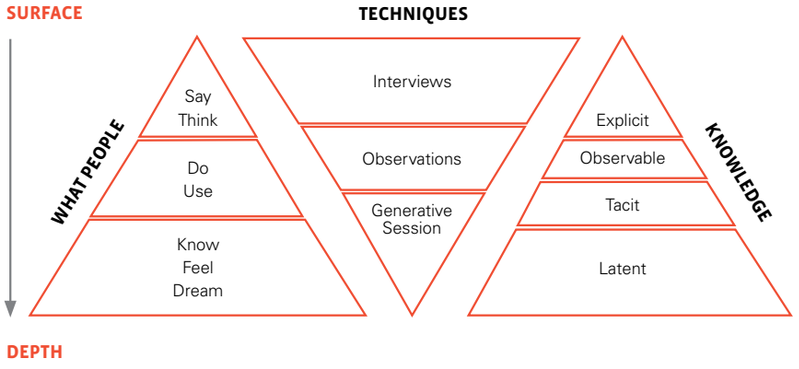
Simultaneously, Desk Research provides data on trends in the area under review in Brazil and abroad, as well as input on analogous themes that may help to elucidate the subject at hand.

Thus the aim of Preliminary Immersion is to define the scope of the project and its boundaries, and also to identify profiles for users and other key players that will have to be addressed. In this phase, it is also possible to survey areas of interest that call for exploration, so as to provide raw materials for development of the themes that are to be investigated in the In-Depth Immersion.

The In-Depth Immersion stage begins with the preparation of a Research Plan, including primary research protocols, a listing of profiles for users and key players to recruit and map out the contexts to be examined. Many techniques – some from Anthropology, such as Interviews, Generative Sessions, Cultural Probes, and so on – can be used to dive into the contexts of use interaction with products and services explored in the project.

Each technique is chosen on the basis of what the project seeks to achieve, as shown in the graphic below (Sleeswijkvisser et al., 2005). In the field, the agents engaged in these interactions are approached for a better understanding of their concerns, needs and values.

After Immersion in the universe of product/service use, and examination of trends in the market where the company operates, the data collected is analyzed, combining information to identify patterns and opportunities. At this point the data is visually synthesized to provide inputs for the Ideation phase. In other words, at the end of the Immersion phase, the data from the Preliminary and In-Depth Research is compiled, its main findings are distilled on Insight Cards, and translated into tools such as Personas, Blueprints, Conceptual Maps and so on, which will be used to generate solutions.



Immersion:

Preliminary Immersion

When a Design Thinking project begins, usually the team is not familiar with the subject. Therefore, a Preliminary Immersion is undertaken as a way of approaching the problem, often before the project kick-off.

This stage begins with a Reframing process in which the project team meets the client company staff, either in individual interviews or through group dynamics, to look at the problem from other perspectives and define project boundaries. The project team, moreover, will usually conduct an Exploratory Survey in the field to hear about the subject so it can arrive at an initial understanding of the users and stakeholders enmeshed in the context and help to define the key profiles to be looked at next, in the In-Depth Research. The team also undertakes Desk Research to discover trends on the subject in Brazil and abroad.

REFRAMING

WHAT IS IT?

It is an examination of a company's unsolved problems and issues from different perspectives and numerous angles, making it possible to deconstruct beliefs and assumptions of the players (stakeholders), and break down their thought patterns, helping them to change paradigms within the company and, in doing so, take the first step towards achieving innovative solutions.

WHEN TO USE IT?

Because a problem cannot be solved using the same kind of thinking that gave rise to it, reframing must be undertaken as a first phase in generating innovative solutions. This also serves as an initial stage to improve products, services and/or processes, since it makes it possible to approach the issue from new perspectives.

HOW TO APPLY IT?

The reframing process occurs in cycles of capture, transformation and preparation, which repeat themselves until the objective is achieved. The goal is to stimulate all parties involved to see the problem from different points of view, creating a new understanding of the context in order to lead to the identification of innovative paths. Usually, the project team acts as facilitator of a process whose duration may vary, from a single workshop to several weeks. The important thing is for the meetings to take place where participants can be questioned and assigned small tasks to encourage new thinking patterns.

Capture

This is the collection of data about the purpose of the product/service/company in terms of the beliefs and assumptions of the subject that are to be used in the transformation phase. Capture frequently occurs during encounters or meetings with the actors involved in the process, where, at the outset, they are asked questions (interviewed) about innovation, though they may also be prompted to engage in analogy exercises, staging or other dynamics to arrive at a different view of the issue.

Transformation

With data in hand, transformation is accomplished by the project team, which surveys the data collected in the previous phase and adds new perspectives. In this phase, a variety of techniques may be applied, such as mind maps, journeys, denial and so on, depending on the objective, client type, and stage of the process.

Preparation

Preparation is the moment when materials for impact awareness are created based on the result of the transformation phase, and are used to stimulate the parties to reflect. Frequently, issues that need clarification are raised, and tools for the next cycle (back to capture) are developed/chosen.

CASE — Reframing the project boundaries for the 2014 World Cup.

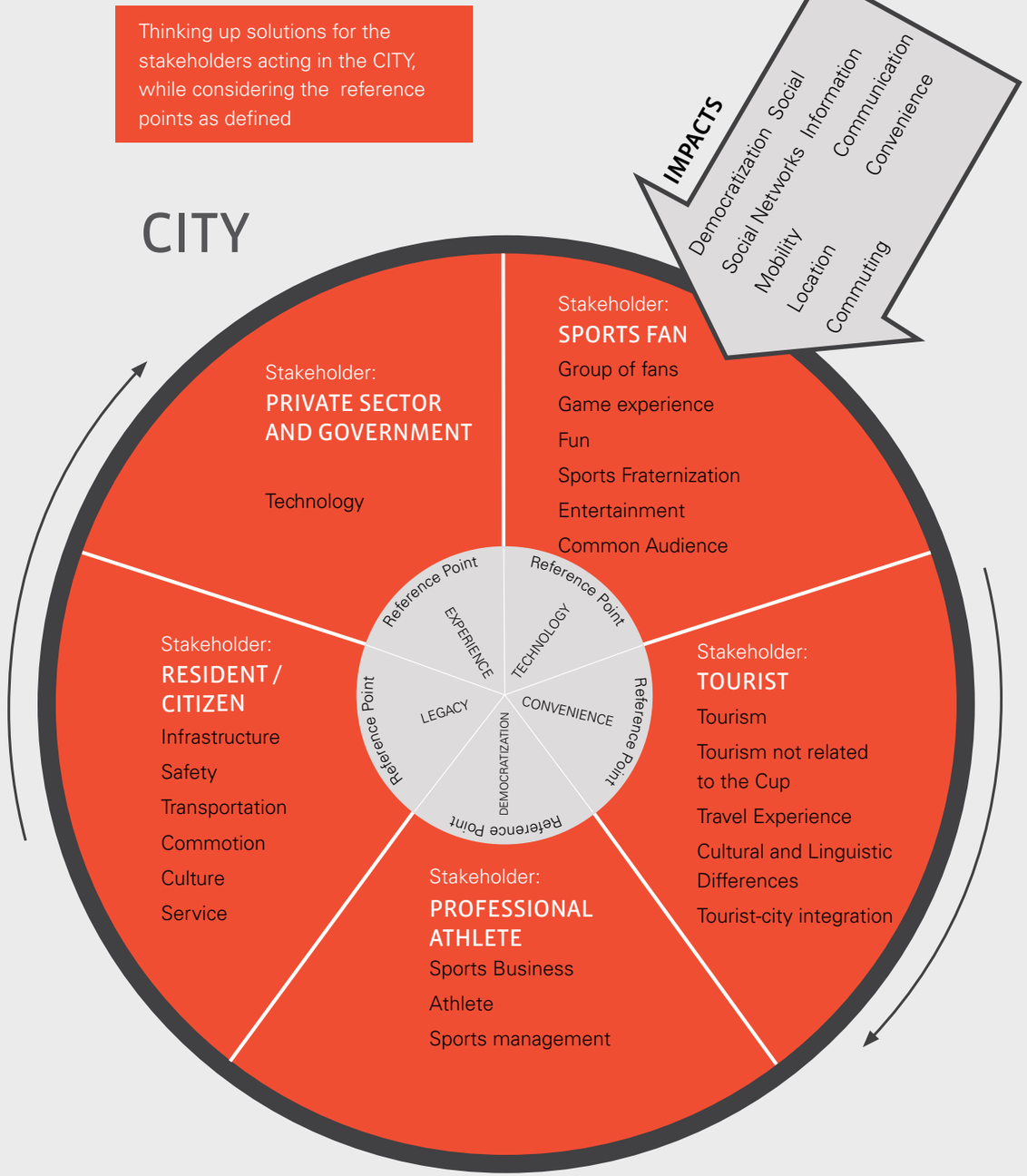
To meet the objective of creating innovative solutions that engage the technological universe and are aimed at the World Cup, the Copamobi project was launched. These solutions may be related to sports, tourism or the city of Rio de Janeiro. Nevertheless, there was a need to extend horizons in order to obtain innovative solutions that went beyond the World Cup – before and after sporting events.

The Copamobi reframing process involved eight people, among them project team members and others who did not know what the project was about, so that they could bring new perspectives. They were paired up and given Insight Cards – produced over the course of the project's two years – so they could organize the content into categories of their choosing, without being shown any other reference.

The exercise allowed for the identification of new patterns. The categories generated were sorted into macro-themes that involved at least one player – a tourist, resident, sports fan and/or professional athlete – immersed in a universe. For instance, in the sports fan universe, there was the group of fans, the game experience, the recreation and entertainment. On the other hand, the tourist universe included regular tourism, tourism not related to the Cup, the travel experience, cultural and linguistic differences and the interaction between the tourist and the destination city.

It was observed that these universes unfolded in a setting - the city of Rio de Janeiro, where transportation, security, infrastructure, culture and services are present. In addition, they were subject to the impact of other categories: mobility, location, travel*, communication, information and social networks.

The reframing indicated that it is necessary to think of solutions for the players' universes – tourist, resident, sports fan, professional athlete – unfolding in a setting – the city – that takes into account the experience, technology, convenience, democratization and legacy that will remain after the World Cup, making possible a new approach to solution development.



4 points for the success of the reframing process:

- Provide an easygoing environment, where the client is invited to relax and rethink his work.
- Hold provocative and emotional discussions full of examples of real-life stories to facilitate understanding of what is being proposed.
- At the end of each session, offer materials to enable the client to carry over – both inside and outside the company – what they have experienced and learned during the Generative Sessions.
- Select a facilitator who will be able to stimulate the client, providing new insight into the initial questions and transforming an uncertain future into something plausible.

EXPLORATORY RESEARCH

WHAT IS IT?

It is the preliminary field research that helps the team to understand the context and provides input for the definition of profiles of users, agents and environments, or phases of the life cycle of the product/service that will be explored through In-Depth Immersion. It also helps with preparation of the themes to be investigated in Desk Research.

WHEN TO USE?

To help team members to familiarize themselves with the contexts of the products and services that are to be explored throughout the project. This approach to the reality of end-users and stakeholders provides a better understanding of their demands and latent needs, and expedites the development of a more assertive research protocol so that relevant insights can be captured during the In-Depth Immersion.

HOW TO APPLY?

Through participant observation – a qualitative research technique with its origins in social anthropology. The team goes out into the street to watch and interact with the people involved in the project's context. They seek out places relevant to an understanding of the subject under review and the users of the product/service, as well as individuals involved in sales, use or support.

CASE — Understanding how to make small change

In a project on selling low-cost securities, the exploratory research began with a random stroll through the streets of downtown Rio de Janeiro, to find out about the issue of getting change from the point of view of small merchants and street vendors.

At a newsstand, it was found that the greatest difficulty is getting R$2 and R$5 bills. According to one newsstand vendor, the key is to prepare ahead of time, stockpiling R$50 in coins to start the day, or for changing larger bills, whenever they turn up. As he put it, most customers insist on getting their change in "real money" and it is common for respondents to find it off-putting if they are offered other products instead of coins. Most vendors will give clients a discount to avoid displeasing them.

For the counter attendant at a juice bar, the worst day is Friday, although he cannot explain why this is so. At lottery stands where people pay their bills, the problem is mitigated by street vendors who tend to pay with bags of coins so they can get rid of them, and because they know that in certain places, contrary to what one might expect, these coins are actually welcome.

At snack bars and post offices, companies that transport valuables (armored trucks) solve the problem by bringing them bags of coins.

The bakery cashier has a slightly different story: this guy, who might be the owner, said he goes to the mint every week to "buy" R$1,000 in coins. When the coins are used up, he does not turn to people he knows for change, nor does he alienate prospective customers by trying to substitute for coins products of lesser value. His unusual strategy is to suggest they give back the merchandise, whereupon the change suddenly appears: "90% of the problem of small change is due to people's unwillingness to dig in their pockets for it. Beyond that, lots of folks want to hang on to their coins and prefer to say they don't have any change."

The man who watches over parked cars raised a very interesting aspect of the informal economy. According to him, in the second half

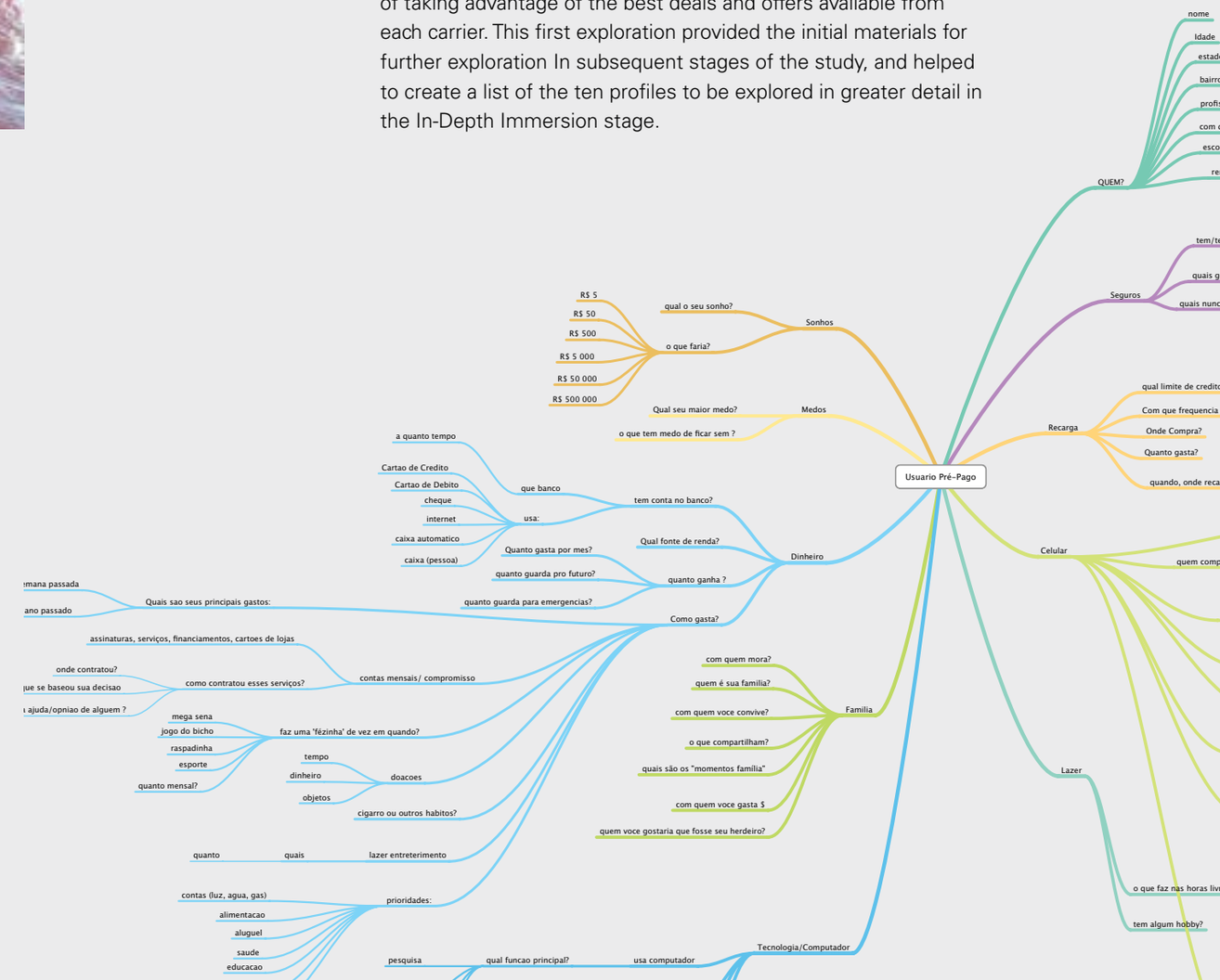
of the year, R$1 coins start to disappear as a result of many people's habit of saving them in a piggy bank, as a Christmas bonus to be "withdrawn" at the end of the year. The same story was reported by the photocopy clerk and the shoemaker.

This first contact with the project theme gave rise to some conclusions about the lack of small change that could be interesting points of departure for an innovative project:

- The problem of small change in Brazil is solved by maintaining a network of relationships. Those without friends to rely on won't make it through the working day.
- One of the villains in story of selling inexpensive products that require change appears to be the R$1 piggy bank, which is used as a Christmas bonus.

CASE — Use of cell phones by Brazil's lower classes

In another project involving the sale of micro-insurance to Brazil's lower classes via cell phone, the Exploratory Research began with a mapping of the issues that impinge on the experience of cell phone users. For two afternoons, researchers took a mind map to the streets and used it as a reference for finding inputs to afford some understanding of the issues. In this initial encounter with the subject, some unexpected situations were identified, which became key points for the project. For example, some people have three microchips for different carriers, for the sole purpose of taking advantage of the best deals and offers available from each carrier. This first exploration provided the initial materials for further exploration In subsequent stages of the study, and helped to create a list of the ten profiles to be explored in greater detail in the In-Depth Immersion stage.



DESK RESEARCH

WHAT IS IT?

It is a search for information on the project theme from various sources (websites, books, magazines, blogs, articles, etc.). The term "desk" comes from "desktop," and is used because most of the secondary research currently performed is based on reliable Internet references.

WHEN TO USE?

It is used to obtain information from sources other than the users and agents directly involved in the project, mainly by identifying trends in Brazil and abroad having to do with the topic in view, or related topics. It can take place at any point in a project when issues are identified that need to be gone into in greater depth, but it is especially useful at the outset to help the team better understand the boundaries and perspectives of the topic.

HOW TO APPLY?

Based on the project subject, a tree of related topics is created to initiate the research. These inputs are often obtained during the exploratory research and continue to grow and unfold as the researcher finds new sources and citations on subjects that may yield information relevant to the project. References are recorded on Insight Cards, noting the following: a title summarizing the information, a brief description of the information, the source and date of the research. The restricted space on the card fosters objectivity, with a view to recording only what is truly relevant in the data retrieved. The cards are generally printed and organized during the Analysis stage. The intersection of these data with those collected in the field during the In-Depth Immersion allows us to identify patterns and areas of opportunity to be explored in subsequent phases of the project.

Primary research

This is research whose data is collected directly from the information source – for example, when conducting an interview to understand what an individual thinks, feels and does.

Secondary research

This is research carried out with secondary information sources previously published by others – for example, from an interview conducted previously, appearing in a magazine, newspaper or on the Internet.

CASE — Desk Research for innovation in ATM

In undertaking a project for a major Brazilian bank on the future of ATM's, the Desk Research began with a general inquiry on ATM innovation. Three elements were then identified as relevant in this initial phase: the ATM as object, interface and space. This definition guided the search into its next phase where, in the object category, for example, analogies were sought among trends and new developments for vending machines.

More important than the protocol, the key to Desk Research is the researcher's determination to dig up new and interesting items. Moreover, it is essential to be aware of possible connections and Interrelations among themes. For this project, for example, research began with a quest for innovation in banking spaces. This led to a consideration of clients waiting in line, which in turn called to mind the Disney World amusement park in Orlando, Florida. From this vantage, success stories were sought on how this issue was addressed there, to understand what innovations had been achieved under this heading.

CASE — Low-cost insurance for Brazil's lower classes

In a survey conducted for a large insurance company interested in expanding its product line for Brazil's lower classes via cell phone, the inquiry started with the sale of micro-insurance in general. In the process, the team found that in emerging countries such as India and South Africa, people have been highly successful in marketing these products. And so the cases that turned up were examined in detail to ascertain the source of their success and the business models implemented.

However, since the aim of the project was to sell micro-insurance in Brazil, information was also sought on the consumption behavior of Brazil's lower classes and how they relate to insurance in general, as well as to the use of cell phones. Therefore, analysis focused on the duration of low-income insurance policies and how they are distributed, identifying agents working with the low-income population, and data that would help to delineate which segments of the population would be more inclined to purchase insurance via cell phone.

Statistical data on the Brazilian population were also used to support solutions that would be applicable to large groups. A variety of sources was consulted, including: SUSEP Funenseg, DataFolha, the Microinsurance Centre and FASECOLDA (Federación de Aseguradores Colombianos), among others.

Some highlights of the research:

- There are two types of insurance that meet the needs of the low-income population: micro-insurance specifically designed for this population segment, and low-income insurance, consisting of low-cost policies for the mass of the population.
- The lack of culture and knowledge on the needs of this target-public are major challenges facing micro-insurance in Brazil.
- Potential low-income insurance products in Brazil include: creditor insurance, group life with personal injury and funeral assistance.
- There are about 78.5 million micro-insured people in the world's 100 poorest countries, and 38 million lives are covered by commercial insurers.
- Because they are able to service a large number of people more expeditiously, institutions are preferred over insurance brokers.
- A Datafolha survey conducted in Rio de Janeiro and São Paulo found that the group most receptive to purchasing low-cost insurance consists of young people between the ages of 18 and 34 with lower household income (1 to 2 times the minimum wage), who live in the city of São Paulo.

Immersion:

In-Depth Immersion

This research involves diving deeply into the context of the lives of the players and the subject under study. In general, there is an attempt to focus on the human dimension with the aim of retrieving four different types of information:

1. What do people say?
2. How do they act?
3. What do they think?
4. How do they feel?

The idea is to identify extreme behaviors and map their patterns, as well as people's latent needs. The research is qualitative and does not seek to provide exhaustive knowledge on consumption and behavior segments, but by gathering opportunities to compile extreme profiles, it allows the creation of specific solutions. Often these solutions cater to other groups, but they would not have emerged if scrutiny had not been trained on the differences.

To this end, project team members meet clients or users of the product or service in question to observe or interact with them in the context of use, to get a feel for their point of view and find out not only what they have to say, but also what they are doing and how they are feeling. The time is taken to get to know their lives so as to develop empathy, better understand their points of view, and thus identify their beliefs, concerns and needs. There are a number of techniques for conducting this research, such as: Interviews, the photographic record, Participant observation, Indirect observation, Cultural probes and so on. Some of them are explained in greater detail below.

INTERVIEWS

WHAT IS IT?

Interviewing is a method that seeks through a conversation with the interviewee to obtain information from questions, context awareness cards, and other techniques. The information sought pervades the subject under examination and the central themes of the interviewees' lives.

WHEN TO USE IT?

Interviews are particularly useful to get at the story behind the interviewee's life experiences. The interviewer should prompt the participant to explain the reasons for these narratives so as to be able to understand the meaning of what is being said. Through interviews, it is possible to expand understanding of social behavior, discovering exceptions to the rule, and to map extreme cases, their origins and repercussions.

HOW TO APPLY IT?

The researcher usually meets the research subject in his or her home, workplace or any other environment related to the theme of the project and talks about relevant issues, following a predetermined protocol that can be adjusted, depending on the conversation. By delving into each person's point of view, different perspectives of the whole can be discerned, and it is possible to identify polarities that will help to develop Personas, thus providing raw materials for the generation of ideas in the Ideation phase.

CASE — Policy holders and their car insurance

In an immersion carried out for an insurance company with broad representation in the automobile sector, interviews with policyholders and insurance brokers were conducted in three large Brazilian cities. During the interviews, the following techniques were applied to explore in greater depth the meaning behind people's remarks:

- Artifact archeology: the way people use artifacts reveals a lot about what they do and think about certain services or products. In the interviews, for instance, policyholders were asked where they kept their policies, how insurance brokers organize their policy files and what tow-truck drivers keep in the glove compartment. This allows for a better understanding of how these key players perceive insurance.
- Context awareness cards: these are cards containing images likely to evoke memories and stimulate the interviewee to remember revealing stories that would otherwise never come up. When an image of a coffin or a desert island is shown to a policyholder, for instance, they are asked to describe their deepest fears or fondest dreams. Or when insurance brokers are told to arrange and explain a series of insurance company logos – in any way they see fit– it is possible to understand their opinions about their relationship to the brands, even without directly asking them about the subject.

CULTURAL PROBES

WHAT ARE THEY?

Cultural probes are a way of obtaining information about people and their universe, used to collect data about users with minimal interference in their activities, or when the issue investigated unfolds intermittently or over an extended period of time. Instead of direct, in-person observation, this technique allows users themselves to report on their own activities in the context of their day-to-day lives.

WHEN TO USE IT?

This kind of information is useful in the Immersion phase, inasmuch as it makes it possible to understand the user's universe, his dreams and expectations, without the researcher's having to go to him in person. It is generally employed when the user is physically distant or when the subject is delicate and the user feels more at ease recording the information on his own. Cultural probes can also be used to raise participants' awareness for a Generative session, enabling them to come to the meeting better prepared to talk about the problem and the ideas to be discussed.

HOW TO APPLY THEM?

To create a Cultural probe, it is important to identify the desired result of the research, and on that basis, to create exercises to be filled out by users. Activities may vary from task reports made during the course of the day, to perceptions regarding experiences, to collages, or photographic record orientations concerning a particular situation, to name a few. Ultimately, Cultural probes become additional records illuminating the universe of each participant.

CASE — Analog and digital institutional communications

For a Generative session seeking to explore individual experiences concerning institutional communication (both analog – letters, flyers, etc. – and digital – email marketing, websites, etc.), a book of activities was created to make participants aware of the subject. The booklet was set up as a diary containing five short exercises expected to take between five and ten minutes to complete:

1. Schedule: the institutional mail you receive.

For five days following receipt of the notebook, the user was instructed to fill out a table keeping track of interactions with institutional communication – via traditional mail, cell phone and the Internet. The idea was not to have them spend the whole day thinking about the task, but rather at the end of each day, to score the institutional communications received, recording them positively or negatively.

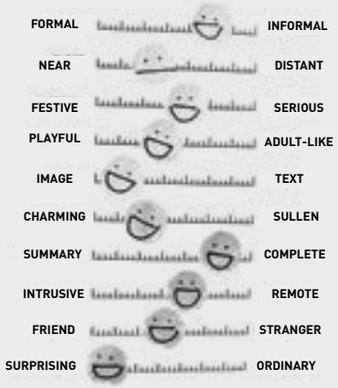
2. Matrix: how do companies communicate with you?

A stack of several company brands was included in the book folder. On the second day, participants were asked to select the companies with which they had had any sort of interaction – via mail or the Internet – and place them in the matrix. On the left side of the matrix they put companies with which they had a satisfactory interaction, and on the right side, those with which the interaction was unsatisfactory.

The top part of the form was for companies that communicated by letter, and the bottom part, for those communicating via the Internet. If a company communicated by both, it was to be placed in the middle. In addition, users were allowed to ascribe qualities to the companies, or draw pictures.

3. Emotion thermometer: how do you feel about an institutional communication?

On the third day, participants were asked to think about a service provider or utility company, e.g., a bank, phone company, Internet or cable TV provider, and give it a ranking in the thermometer to show how the company handled the communication. Then they were to indicate where the ideal communication would register on the thermometer.



4. Letter and action: which correspondence demands a follow-up action?

On the fourth day, they were asked to choose three institutional items of correspondence that required some follow-up action – for instance, a bank account requiring payment over the Internet – and three items of institutional mail that went straight into the trash.

1. Mail: Promotion
   Action: Enter website for discount
2. Mail: Phone company
   Action: Pay through online banking
3. Mail: Credit card
   Action: Pay through online banking
4. Mail: Credit card advertisement
   Action: Trash
5. Mail: Building newsletter
   Action: Trash
6. Mail: Clothes ad
   Action: Trash

5. Favorite publications: what are yours, in both analog and digital media?

On the fifth day, users were asked to choose their favorite publications. The aim was to find out which magazine or newspaper they liked most, and which websites they accessed most. Why was the communication so good? How was the information presented? Densely or concisely? With lots of text or lots of images?

An assortment of images, pens, scissors and glue was included with the activity book to help with the daily exercises. Users were advised to feel free to use the images to express what they were feeling, or use the pens to draw whatever they felt like drawing, wherever they wished.

In addition, they were asked to fill in the exercises on the days specified so tasks would not pile up at the end. They were also advised that there were no right or wrong answers, and that the important thing was for them to give their opinions on the issues presented not in a technical way, but from the point of view of someone with extensive experience, both good and bad, with analog and digital institutional communication.

The participants brought these Cultural probes to the generative session held the following week.

GENERATIVE SESSIONS

WHAT IS IT?

A generative session is an informal meeting in which users (or stakeholders involved in the project theme) are invited to share their experiences and engage in activities in which they express their views on the themes of the project. The aim is to understand what they know, and what they are feeling and dreaming, often in tacit and latent ways.

WHEN TO USE IT?

The generative session is an appropriate approach to arrive at an overview of users, including, in this case, their daily experience in all its complexity. It often allows for a better understanding of the observations made during ethnographic interviews and can also reveal the complexity and richness of personal experiences in everyday life.

HOW TO APPLY THEM?

Cultural probes are distributed ahead of time to the users selected to participate in the session. The topics covered in the exercises are used so participants will be familiar with the subject when they come to the meeting. At the meeting, generative activities are performed, that is, activities that seek to construct and express experience using creativity, and to help users to reflect on their memories, feelings and motivations. In this way, over the course of the session, participants are more comfortable addressing the issue and able to speak in greater depth, since they have been thinking about the subject in the preceding days and creating artifacts to stimulate dialogue and reflection.

CASE — Generative session for ATM users.

In a context where it was necessary to develop an innovative approach to ATM's, a generative session was held with thirteen customers from different banks, with different profiles, such as lawyers, engineers, housewives and students, among others, to share their experiences and build together their vision of the ideal self-service experience. We looked for a heterogeneous mix of people to get a varied array of opinions.

The session was organized in such a way that it would not feel like work, but rather, like an entertaining event, with playful activities to get participants to open up so they could express their feelings on the issue. As the guests arrived, they were given pizza and soda to create a relaxed atmosphere.

The first activity was designed for the people to get to know each other. They were invited to introduce the person on their left, without knowing him/her, and to describe his/her personality, occupation, neighborhood, etc. The person described would confirm or contradict the account, and then proceed to characterize the participant on his/her left. This dynamic is useful for breaking down people's resistance to meeting others, forcing them to create a stereotype of their colleagues that is then confirmed or denied.

By the end of this "icebreaker," participants were beginning to get acquainted, and feeling comfortable enough to share stories on their relationships with ATM's. Encouraged by the three themes presented to them (safety, difficulty and "my hero"), they reported a variety of situations.

When the stories ended, the participants were divided into three groups – based on their accounts - and each was responsible for assembling a panel with an image that represented one of the three topics discussed above (safety, difficulty and "my hero").

Panels or mood boards are useful to understand the meaning of each concept. The images help to understand processes for interpreting the memories, meanings and beliefs that comprise people's cognitive process, and consequently, their decision-making process.

Safety

"It's very exposed, like a storefront display window. I'm afraid I'll get mugged!"

"The ATM tells on us: if you withdraw money, it makes a specific noise."

The team that dealt with safety divided the panel into four main areas: one axis ranging from physical safety (mugging and theft) to psychological security, having to do with mistaken use of the ATM, and the other axis moving from security to insecurity.

In the security area, images were placed associated with:

1. Maternal protection, loving and hugging: images of a mother's lap, warmth and coziness, moments of total surrender.
2. Safety that cannot fail: the image of a sanitary napkin was used to convey the kind of situation in which it becomes necessary to have complete trust, because any failure will result in something extremely unpleasant.
3. Relief: Images evoking trust in certain people, such as friends and family, emphasizing personal safety. The cell phone was indicated as a strong safety element, because people are almost always within a few feet of their phones, which enables them to connect with friends.

In the insecurity area, they mentioned:

1. Muggings: physical and material violence;
2. Lack of privacy: a distrust of others, the closeness that allows people to look at what you are doing;
3. Apprehension: a hostile environment that gives rise to insecurity;
4. The unexpected: anything can happen (the ATM might not work, they could get mugged…).

Difficulty

"I"I like it when it has a touchpad, because those buttons don't match the exact numbers."

"Once I wasn't paying attention, and I put the card in the place where the receipt comes out. I ended up ruining my card."

"I always ask the attendant for help when it gets complicated."

The group worked out scenarios with difficulties due to the time of day and bank security. The feeling of insecurity pressures people to execute transactions in a hurry, which causes them to make mistakes. The number of products offered also disrupts the operation, because all the reading and options and buttons also cause them to make mistakes when they misinterpret information.

A portrait of various dissatisfactions with the technology emerged, especially having to do with network speed. Cell phones with long "loading..." times reflect impatience with how long it takes for computers to complete operations. Exasperation with codes was expressed by the phrase: "Why are there so many digits!?" with a question that raised the possibility of replacing the numeric system with an alphanumeric system, thus facilitating typing and memorization of accounts and passwords.

"My hero"

"I went to a place where credit cards were not accepted and was able to withdraw blank checks, which saved my evening."

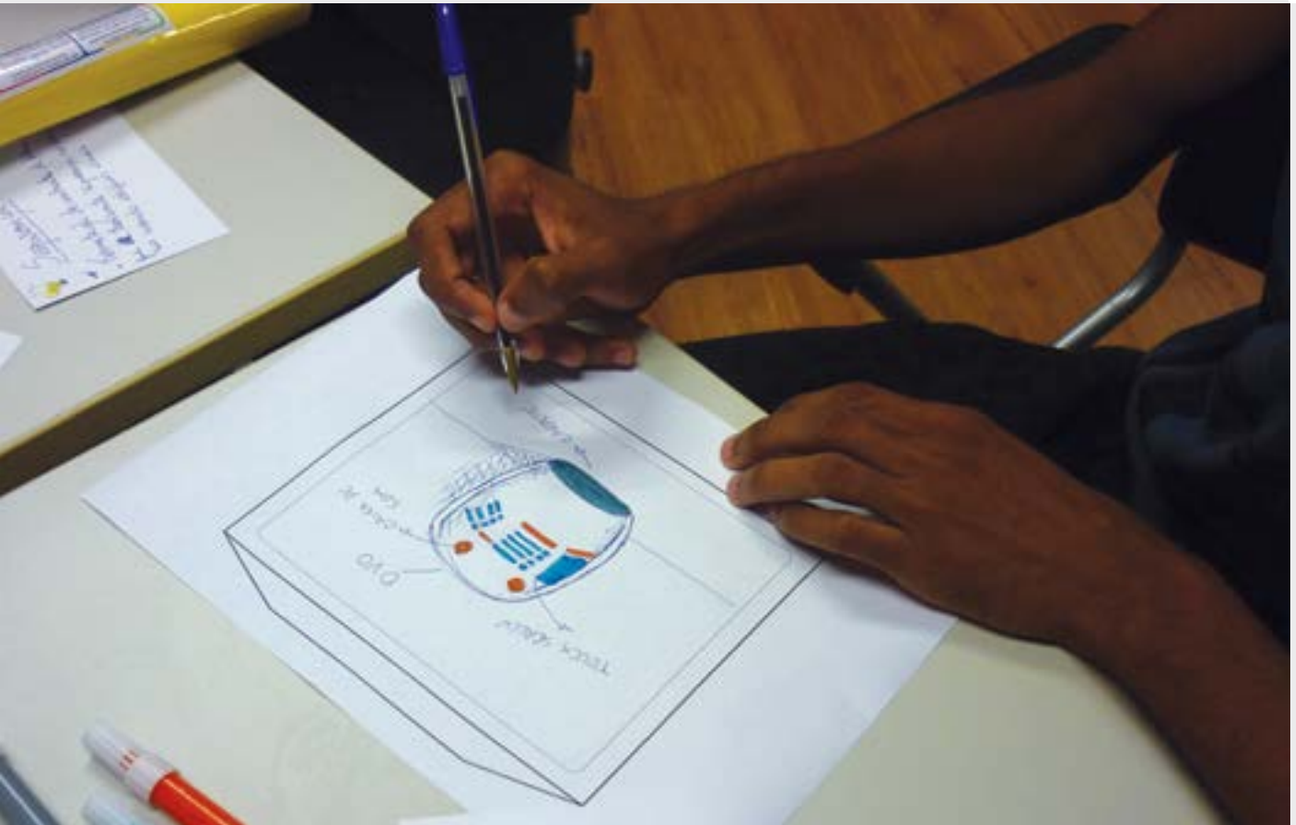
"I lost my ride and the taxi stopped in front of an ATM so I could get home."

"Anyone who travels through the interior of Brazil must have an account at Caixa or Banco do Brasil with a little money set aside for emergencies."

The participants set up a panel which highlighted two types of heroes: ordinary people ("everyday heroes"), whose own lives are an act of heroism, and invented heroes (represented in the media). The first group was represented by the Brazilian people, who have resilience, courage and determination as core values, while the second group was represented by known superheroes. Another area of the collage showed scenarios where heroes are needed: for example, in chaotic environments, where it is hard to get even the simplest things accomplished.

During the panel presentations, participants were instructed to write down ideas to solve the problems reported on the cards. At the end of the presentation, groups were reorganized to include a designer in each team, and participants were assigned to teams with a theme different from the one they started out with. At this stage, participants were instructed to build a model to summarize the ideas generated by their colleagues using various materials available, such as plasticine, cardboard, wood, etc. At the end, each group presented a model revealing their view of what an ATM, its environment and its interface should be. These models represent their wishes, and are useful both for interpreting the motivations that led to the solutions they presented and as inspiration for the solutions the project will ultimately create.

The session also afforded a satisfying dynamic for participants, who were able to continue proposing ideas based on their past experience and finding ways things could have been different.



A DAY IN THE LIFE

WHAT IS IT?

It is a simulation by the researcher of the life of a person or situation under review. For instance, members of a project team assume the role of a user and spend a period of time (which can be more than a day, depending on the nature of the subject) acting from a different point of view and interacting with the contexts and people that they would encounter on a daily basis.

WHEN TO USE IT?

This process of simulating a user's life allows researchers to "step into the shoes" of their subject, and to see life from his or her perspective. Thus, it is used to enable team members to develop empathy towards the project's key figure, and to generate pertinent insights for the ensuing phases.

HOW TO APPLY IT?

Team members who are to explore this context must study the theme so as to understand the behavior, attitudes and limitations to be simulated, in order to replicate what the user would experience.

CASE — Diabetes for a week

Following an interview with an endocrinologist during a project seeking solutions for ways to monitor chronic patients, the team asked the doctor whether there would be any restriction prohibiting people who did not have diabetes from pretending that they did for one week. Not only did the doctor say there would be no problem, she actually became very interested in this initiative of people simulating the experiences and constraints of a diabetic.

Accordingly, she recommended that the team eliminate all sugar from their diets, and also cut down on carbohydrates, confining themselves to only one source per meal. Furthermore, she prescribed regular physical exercise. In order to simulate monitoring of blood sugar levels, it was suggested that each person should prick their finger at least three times a day. (According to the doctor, her patients' chief complaint was that they were upset about having to prick their finger, which is such a sensitive spot, so many times a day). And so three members of the team spent the week

monitoring their sugar and carbohydrate intake along with their blood sugar level, while having to exercise at least three times a week.

Statement of Brenda Lucena *(author)*

On my first day as a diabetic, in order to reduce sugar intake, I started paying a lot of attention to the labels on the products I consume, and I was surprised to discover how much sugar I took in without even realizing it. Even a salt cracker has sugar in it! During that week I learned that, to cut down on my intake and properly monitor what I was eating, it wasn't enough just to refrain from putting sugar in my coffee or switch to diet chocolate; I also had to change my other eating habits.

At the beginning of the week it was hard to figure out which products I was allowed to have and adjust accordingly, but I was highly motivated by this change of status so I managed to get past these difficulties without major problems. However, by the end of the week, my new status as a diabetic became quite a challenge. As the novelty wore off, having to eat every 3 hours became increasingly hard. With the fast pace of work I forgot to eat a number of times, and there was even a point where I went for 6 hours without food. I think that if I really were diabetic, I would have presented symptoms of hypoglycemia by not eating for so long.

By coincidence, that same week that we "became diabetics," I had already decided to take up swimming again. I've never been very athletic, one of those people who really enjoys sports, and I know that in a few months I'll end up losing steam and just giving up. And yet after a few days fretting about sugar intake and all these different foods, exercising became the most pleasant and fun part of the treatment!

Statement of Isabel Adler *(autora)*

During the week in which I simulated having diabetes I discovered some important issues. First, there is a change in social relations.

At work we have a habit of buying a cake and singing happy birthday on our colleagues' birthdays. These are quick but lively events that provide a moment of relaxation in the middle of the workday. Everyone loves it! But on my very first day as a diabetic, they knocked on my door inviting me to the birthday party of a colleague across the hall. Contrary to what usually happens, no one got up and we all sat staring at our computer screens, sad that we couldn't join the party.

That was the moment when I realized how hard it is to have such limitations. If, on one hand, I felt like wearing a T-shirt that said "I'm diabetic," so no one would invite me to this sort of event or offer me a piece of candy after lunch, sparing me the temptation or the reminder that I can no longer do these little things that I enjoy so much; on the other hand, I wondered if such a label would make people stay away from me, since I could no longer join them for these pleasurable moments. So I was able to feel in my own skin the conflict between staying away from others and self-control.

The issue of self-control and motivation became extremely important to me. On one of the nights that week, I went to my grandmother's for dinner. When I got there, conscious of my new health condition, I went into the kitchen to evaluate my dinner options and chose a combination with few carbohydrates and lots of protein and vegetables. My family sat down, dinner was served and I held fast to my commitment, foregoing many dishes that I love, while the rest of my family gorged themselves. When I got up to take my plate to the kitchen, the cupboard was open and I saw two slices of my favorite cake, whose recipe is known only to the cook of my great aunt, who died two years ago. I couldn't resist. I ditched all thoughts of health and indulged myself, savoring the best cheesecake in the world! Then deeply ashamed, I went back to the table and didn't tell a soul.

The next day, I thought I should at least go out for a walk, but fatigue from too few hours of sleep prevented me. Unhappily I realized that maintaining healthy habits to control diabetes calls for much greater will power than I had ever imagined.

SHADOWING

WHAT IS IT?

It is accompanying a user (or other player in the process) over a period of time in which they are interacting with the product or service being analyzed. Like a "shadow," the researcher must not interfere with the user's actions, but only observe them.

WHEN TO USE IT?

The objective is to understand how a person relates to the context of the theme under review, what kinds of artifacts and players are involved, what are their emotions, expectations and habits. Thus latent opportunities and needs can be identified that would generally not be verbalized or made explicit in interviews or Generative sessions.

HOW TO APPLY IT?

The researcher follows the individual in a non-intrusive fashion to observe his or her interaction with the product or service under consideration. Without asking questions or disrupting the context, the "shadow" must record its observations in a notebook and discreetly film and/or photograph the process.

CASE — Towards implementing a culture of innovation

When the objective was to implement a culture of innovation in the daily life of the IT area workers at a major bank, strategies for observation and shadowing were used to shed light on the employees' relationship to their work spaces.

Initially, five actions of exploratory observation were undertaken, geared towards establishing an overview. The idea was to identify teams' general behavior and seek insights regarding their interaction with their physical space.

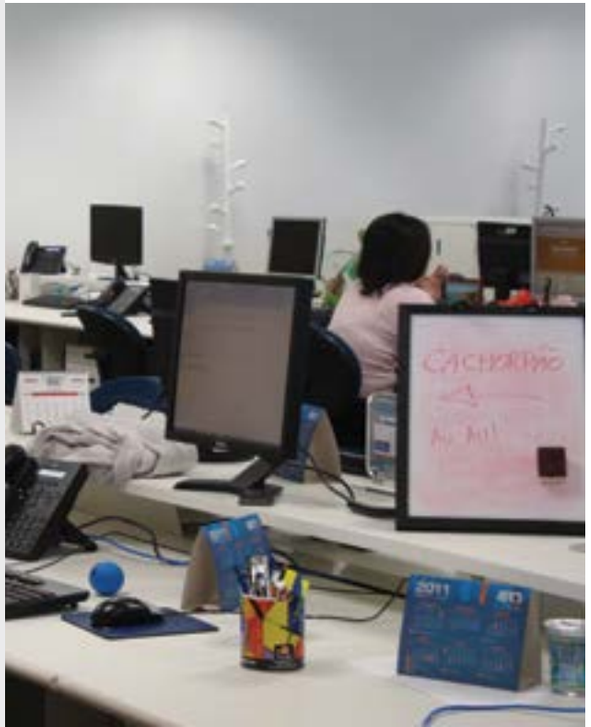
The shadowing actions, on the other hand, had a more specific focus, aimed at understanding the employee's relation to his work day on a deeper level, from the moment he arrives at the bank to the moment he says goodbye to his coworkers and leaves the building.

It was observed that the spaces for meeting were generally very formally defined and people ended up holding them in the vicinity of their desks. However, spaces close to the work area that offered support for working together and interaction in such moments were not detected. People tended to be poorly accommodated, or left standing up when they had to interact with each other during the working day.

Different types of behavior were detected in a single work area that evidently does not serve any particular purpose. Thus an opportunity was identified to propose solutions that could meet the specific needs observed, such as: privacy for quick meetings between members of the same team (next to the workstation); telephone calls that didn't bother others present in the room, and space and support for individual conversations between managers.

The fact that the spaces were all very much alike prevented employees from creating any sort of special relationship with any particular space, leaving them bereft of stimuli to think creatively or share knowledge with one another. During the prototyping phase this perception led to experimentation with interventions in the physical space, focusing on the stimulus of daily tasks, in order to create an environment that would be more accessible and conducive to inspiration – for instance, by setting up a message board to share interesting pieces of information, or a dedicated area for rest and relaxation and/or a space for reading.

By observing people's behavior, it was possible to identify the moments when problems occur, and pinpoint opportunities that people who are immersed in the context for extended periods of time often will not recognize, thus establishing a diagnosis to offer guidance in generating solutions that can be tested.



To learn more about
these tools go to:

www.livrodesignthinking.com.br/immersion

Andorinha Project

An experience way beyond an airplane

In light of the growing demand for plane tickets for the lower classes, MJV Innovation's multidisciplinary team immersed itself in the subject for two weeks, identifying the unmet needs of this niche of consumers as they face the experience of flying for the very first time.

Based on field research in similar contexts and software prototyping in places such as airports, highways, commercial establishments, public markets and travel agencies, the team developed solutions for novice passengers to enter the universe of air travel and feel safe in flight. The ideas they came up with also aspired to make the first trip a memorable moment for both travelers and their families, assimilating them into an environment that, up to that time, had never been a part of their daily lives.

IMMERSION

In order to understand the issues facing first-time passengers, the team was divided into pairs to perform Exploratory Field Research in Rio de Janeiro and São Paulo. Among the places visited were the airports Galeão (RJ), Santos Dumont (RJ) and Congonhas (SP), travel agencies (RJ) and airline-ticket points of sale in department stores in São Paulo.

In order to understand why certain members of the lower classes do not travel by plane, we went to the Novo Rio Bus Station (RJ), Norte Shopping (RJ), the São Cristóvao Market (RJ) and to downtown São Paulo, where we conducted In-Depth interviews with potential passengers.

The following is a brief description of the most representative visits of the Immersion stage: to Galeão Airport and the Novo Rio Bus Station.

NOVO RIO BUS STATION

We went to the Novo Rio Bus Station to explore the dynamics of an environment comparable to an airport, marked, however, by a pronounced presence of the lower classes.

We were able to perceive that the universe of air travel is seen as beyond the reach of these classes. Even though air fares may be more affordable than bus fares, many people do not even consider the possibility of flying. We spoke to José, who lives in the state of Maranhão but comes to Rio de Janeiro once a year to visit his brother. By bus, the trip takes three days. When asked why he preferred to go by bus rather than by plane, his immediate response was based on his fear of flying: "Better to get home late than to arrive early in the cemetery."

During the interview, however, he said he realized that the plane fare is often cheaper than the bus, and that the trip is quicker and more comfortable. We observed that he had never thought of flying, although he was aware of all the advantages. At the end of the conversation, he said that the next time he came to Rio it would be by plane.

Another obstacle to flying is that the air travel network is less articulated than the road system. After disembarking from the plane, residents of smaller cities, have to travel by bus to their final destinations, a fact that many passengers find disagreeable.

Retirees and young children do not pay to travel by bus, which often determines what means of transportation is preferred by the elderly or for family trips. One of the interviewees who is retired and lives in Goiânia spent three days in Rio de Janeiro visiting his grandchildren. Adding up the time it took to get to Rio and the time for his return, he was going to spend more time traveling than at his destination – a fact that in his opinion posed no problem. He also said he prefers a quieter trip, with stops along the way. "Apart from the fact that I don't pay for the bus ticket, I'm not in any hurry. I'm retired and there's nothing for me to do," he said.

The price of bus fares does not vary – whether buying in advance or near boarding time, customers pay the same amount. For air travel, there is a significant increase in ticket prices at the last minute. Considering that members of the lower classes are in the habit of purchasing their tickets at short notice, air travel is often not viable. Moreover, advertising of special deals on airfare goes on almost exclusively over the internet. Since many members of these classes do not have a computer or do not use the Internet frequently, they have little access to cheap tickets.

The people we spoke to stated that the way the crew treats them has a big impact on whether they travel by bus or by plane. Even those who have never flown think that there is special treatment on planes. This perception may account for the rejection of air travel by people of the lower classes, since being singled out for "VIP treatment" could somehow embarrass them, particularly if they fear they would not know how to behave.

GALEAO AIRPORT

In order to assess the expectations and difficulties of lower class first-time passengers, we went to Rio de Janeiro International Airport.

As soon as we got there, we realized that a plane ride for them is still considered a major family event, such that many relatives accompany travelers to the airport to see them off. In the departure lounge we witnessed the farewell scene of a woman escorted to the airport by seven people. We also noticed that for these companions, they were not just saying goodbye to a relative, they were also engaged in a major event for the whole family. We saw that the woman's relatives remained at the airport for about two hours after her departure, walking between two terminals, window-shopping and taking in the scene.

Through conversations with passengers and airport employees, we also observed that the air travel environment has not yet become part of the universe of the lower classes. Since they are not familiar with standard airport procedures, they tend to act as though they were at the bus station, where they have always known their way around.

The staff at the information desk, for example, told us that it is common for people to ask if the airlines also accepted Rio Card (a smartcard system used for ground transport in the state of Rio de Janeiro) and if the elderly traveled for free, which is standard for bus travel. We also learned that many passengers arrive for boarding at the very last minute, a common habit at bus stations, where the only procedure is to deliver one's luggage to the bus driver.

According to the employees of one airline, the biggest issue for members of the lower classes has to do with check-in. Since this procedure is uniquely a feature of air travel, it is hard for them to see the point of it. Some people think it is their last moment of contact with their relatives before departure, so they say goodbye to them there. Others do not realize that they must take their luggage to the check-in counter, so they leave it with someone who is not standing on line.

We were also able to discern that another major issue for such travelers is packing their baggage. Since family visits are often the reason for traveling, "novice passengers" like to take gifts for all of their relatives, which increases the volume of their luggage considerably. Many, however, are unaware of the limits on weight allowed onto the aircraft or the types of items that can be taken in each category of luggage – such as the prohibition of sharp objects in carry-on luggage, the need to pay for excess weight, or even the fact that they may be required to leave some belongings at the airport.

Talking to passengers who fit this profile, we learned that the main stimulus for them to switch from the bus to the plane is the word of mouth among friends and relatives. When they find out what other people paid to make the journey home by plane, they see that they can do it, too. Often, they are only traveling in the first place because air travel allows them to arrive at their destination on time, as is the case with many who are first prompted to travel by plane due to some emergency. As one passenger told us, "I always went by bus, actually, but then my mother died and I had to take a plane. Since then, I've never gone by bus again..."

Although it does attract new air passengers, word of mouth also spreads fear of flying. We talked to several people who said that they were, or that they would be, apprehensive about flying because of stories told by others and, of course, by the news media. Those who had already had the experience of flying, however, said that after the flight they were no longer afraid. "On my first flight I was afraid, but now I wouldn't have it any other way," as one interviewee put it. Among those who have never set foot in a plane, the response was nearly unanimous that they would not decline an opportunity to fly out of fear.

As for the purchase of airline tickets, we noted three different types of buyers: those who buy on websites with the help of a relative or neighbor who has shopped online before; those who buy at agencies because they do not trust the Internet, and often because they do not have a credit card; and those who buy at the airport for the same reasons they buy at agencies, and also because they feel a need to become familiar with the place before traveling.

When asked about their impressions of the flight, many reported that they were disappointed. "The plane is very dull. All you see out the window is white, white, white...," as one interviewee summed it up. We realized that the bus trip is seen as the start of the holiday, where one can watch the world go by looking at the scenery, meet people and get a snack at every stop. On the plane, however, the short ride and all of the safety regulations that have to be obeyed make it impossible for passengers to interact with each other, or to become engrossed in the journey.

Details of the other phases of this project are presented at the end of each chapter of this book.

Analysis and Synthesis

After the data collecting stages of the immersion phase, the next steps are analysis and synthesis of the information compiled. To this end, insights are arranged to form patterns, posing challenges that will assist in clarifying the problem.

Analysis and synthesis

INSIGHT CARDS

WHAT ARE THEY?

Insight cards are reflections based on real data from the Exploratory, Desk and In-Depth Research, transformed into cards that facilitate quick consultation and handling. Generally they include a title that summarizes the finding and the original text collected in the research, along with the source. In addition, other codification may be relevant, such as place of collection, the moment to which it refers in the life cycle of the product/ service, and so on, to facilitate analysis.

WHEN TO USE THEM?

During meetings for the creation of the Affinities Diagram to identify data patterns and interrelationships; also useful for creating a summary map of the Immersion phase, as well as in collaborative ideation sessions to unlock the flow of ideas. Creating a solution may involve choosing more than one insight.

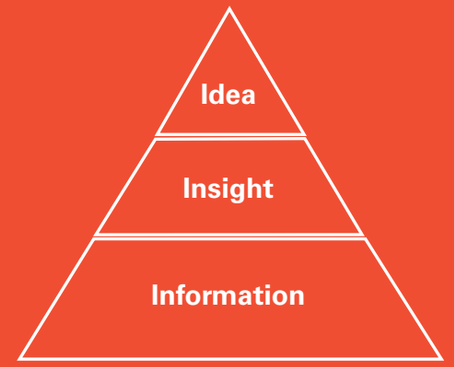
HOW TO APPLY THEM?

In the course of Desk Research, whenever an issue relevant to the Project is identified, it is noted on a card where the main finding, the source and the explanation of the issue are recorded. For field research, on the other hand, cards are usually created when researchers come back "home" and retrace what they have seen and heard by recording the most striking issues. In addition, insights may also arise in the course of Immersion during the project team's debriefing meetings where the experience of various researchers is compared, and opportunities are registered.

Debriefing: The term is used here to express the moment when what was seen in the field is shared with the Project team – that is, when a story is told recounting the main topics observed in the field. In psychology and advertising, the term can have a different meaning.

An Idea
is a solution generated in response to one or more insights.

An Insight
is a finding resulting from Immersion, the identification of an opportunity



CASE — Insight Cards for innovation in the 2014 World Cup

In the Copamobi Project, an initiative to generate innovative services for the 2014 Soccer World Cup, the team conducted its Exploratory and In-Depth Research during the previous World Cup in 2010, when trends and activities were sought through Desk Research that exhibited similarities between Brazilian practices and those in other countries. This survey prompted the creation of a large number of insight cards that, following analysis, were classified under technology, information access, sports, and behavior and tourism. The insights helped the Copamobi team to generate business opportunities for the 2014 Soccer World Cup, which are currently in the process of implementation.

Some examples of insights from the Copamobi Project:

- Tourists believe that unexpected and unscheduled events on a trip are what make it special.
SUBJECT: Tourist Experience
SOURCE: In-Depth Interviews

- Many tourists enjoy a chance to immerse themselves in the culture they are visiting, but have a hard time discovering local activities and points of encounter, so they end up stuck making traditional visits to tourist sites.
SUBJECT: Tourist Experience
SOURCE: In-Depth Interviews

- Tourists have varying levels of skill in handling technology, and do not always have state-of-the-art devices or know how to use them.
SUBJECT: Information Access
SOURCE: Exploratory Research

- Rio de Janeiro's bus system is not well understood by foreigners. Without knowing the city, and with difficulty asking for information because of the language, while also feeling insecure, they are naturally inclined to take taxis, even though it is more expensive.
"Rio's Bus station has no central website listing all the bus companies that go to a particular place. There is no way to compare prices and schedules."
SUBJECT: Information Access
SOURCE: Exploratory Research

- At game time, in places with a big screen and lots of commotion, it is impossible to talk on a cell phone. In these situations, sports fans usually use text messaging to communicate with friends and family.
SUBJECT: Sports Experience
SOURCE: Exploratory Research

- A lot of fans find themselves looking for something to do after a game is over. It is quite common to seek out activities such as samba dance sessions, gatherings in bars and so on.
SUBJECT: Sports Experience
SOURCE: Exploratory Research

- Ticket purchase before game time is often chaotic, with ticket offices all sold out, and the remaining tickets in the hands of scalpers.
SUBJECT: Sports Experience
SOURCE: Exploratory Research

Digital media foster situations of distrust and violations of privacy, chiefly due to the risk of unwanted sharing of personal information.
SUBJECT: Technology
SOURCE: In-Depth Interview

- In the case of the World Cup, the fans' desire to share the best moments of their soccer matches is forbidden by copyright law.

"FIFA has submitted a request to YouTube to remove all images of games from their site due to copyright issues."

SUBJECT: Technology

SOURCE: http://olhardigital.uol.com.br/produtos/mobilidade/celulares-verdes-sao-uma-alternativa-para-diminuicao-do-lixo-eletronico/12136

- According to their users, Facebook and Twitter present a surplus of unnecessary messages. During the World Cup in South Africa, more than 75% of the messages on Twitter were uninteresting or unnecessary.

SUBJECT: Technology

SOURCE: http://www.esquire.com/the-side/feature/worldcuptweets-062110?src=rss

- Internet users believe that information in the digital world has a credibility problem.

SUBJECT: Behavior

SOURCE: Exploratory research

AFFINITY DIAGRAM

WHAT IS IT?

It is organizing and grouping Insight Cards based on affinities, similarities, dependency or proximity, creating a chart containing the macro areas that mark the boundaries of the subject under consideration, its subdivisions and interdependencies.

WHEN TO USE IT?

When there is a large amount of data coming in from research (desk and/or field research), to identify connections among subjects, and windows of opportunity for the project.

HOW TO APPLY IT?

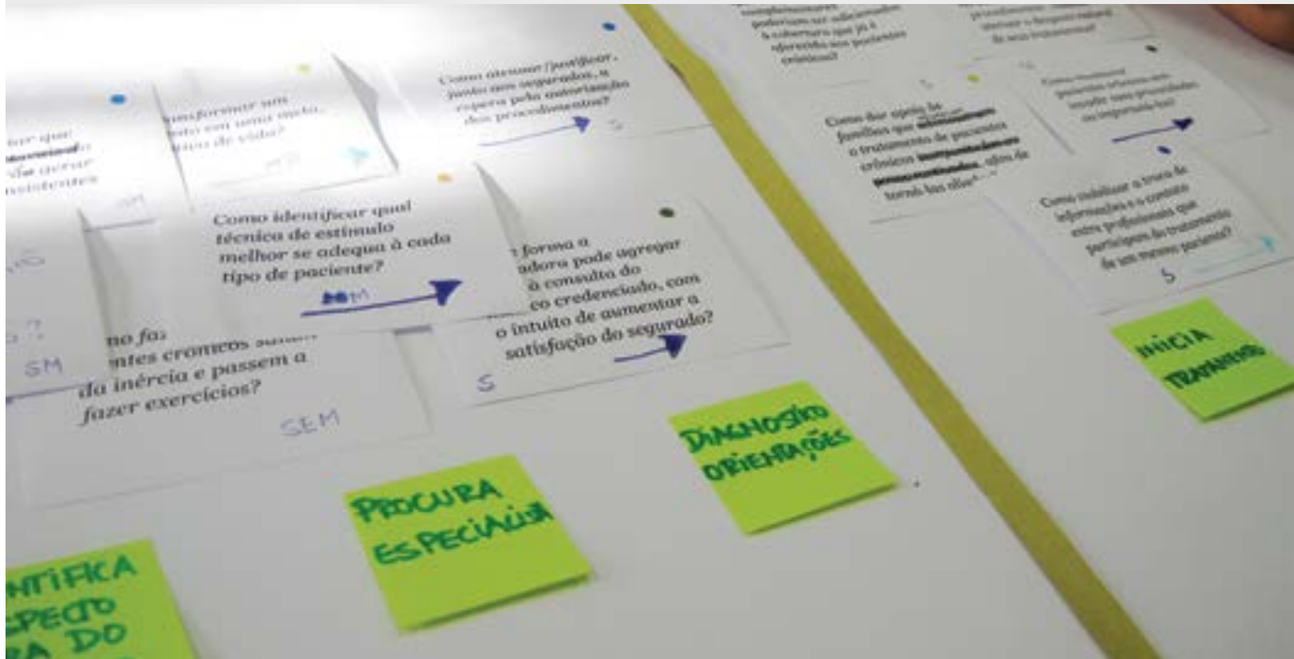
After going out into the field, and when Desk Research is finished, working without any preconceptions, you have obtained a mass of data with the most significant findings tagged on Insight Cards. They are arranged on a desk, on the floor or even posted on the wall by a multidisciplinary team working in a collaborative fashion, so that no single bias prevails in the analysis. In this process, subjects, subgroups and criteria are often identified that assist in understanding the data. The arranging can be redone a number of times by different groups, depending on the complexity of the subject and the volume of data. The important thing is for each stage to be recorded, and for the result to help with the understanding of the field data, and with the creation of tools to be used in Ideation.

CASE — Identifying areas of opportunity for monitoring chronic patients

With a view towards developing innovative alternatives for monitoring chronic patients, the Affinity Diagram was used to analyze the Insight Cards generated during the research. This process made it possible to identify connections between subjects and the listing of nine areas of opportunity for the project:

- Habits/behavior;
- Prevention;
- Doctor-patient relationship
- The healthcare system;
- The family;
- The insurance company;
- Technology;
- Treatment;
- The Insurance broker.

During the analysis process, eighteen challenges permeating the areas of opportunity were also identified and subsequently used for Ideation.



CONCEPTUAL MAP

WHAT IS IT?

It is a graphic visualization, built to simplify and organize complex field data at varying levels of depth and abstraction. Its purpose is to illustrate the links among different items of data, thus allowing new meanings to be extracted from the information gathered in the initial stages of the Immersion phase, particularly from the associations tying them together.

WHEN TO USE IT?

During the Immersion phase, to structure the field data, while the project's daily or weekly debriefing is under way, to expedite subsequent, more complex analysis, and also to facilitate the communication of the data to the team, fostering collaboration throughout the process.

The essentially graphic representation of the conceptual map makes it possible to visualize data faster and in a more holistic way, thus rendering it easier to understand complex information at different levels. Hence, it can also be used to communicate the research synthesis, enabling others to provide elaborations. In addition, the conceptual map can be used as a basis for generating ideas.

HOW TO APPLY IT?

The process begins with participants choosing words that are part of the core universe of the research. Then a mother-sentence is fashioned that synthesizes the core action and the players involved in the theme. This sentence will form the basis for ramifications and elaborations, based on the data gathered in the Immersion phase, and may be modified or improved over the course of the process.

CASE — Conceptual map for redesigning the ATM experience

In the exercise to redesign the ATM experience, the conceptual map was used as a debriefing tool, as well as for the analysis of field and Desk Research. To this end, the following sentence was fashioned: "The bank's account holders use the ATM to OBTAIN and/or CONSULT and/or PROVIDE themselves with money," which encompassed the universe of the theme being researched. The sentence was written in such a way as to include the user being researched (the bank account holder), the product under review (the ATM), and the actions performed (obtaining, consulting and/or providing), to get what is needed (the money).

The written sentence was posted on a big board throughout the entire project. Thus, whenever someone from the team came back from the field with an insight, all they had to do was write it on a Post-it note and stick it in a designated space relating it to one of the words. The same thing happened with the findings from Desk Research.

Since the display of the sentence was clear and simple, emphasizing the supporting findings and insights, it stimulated engagement on the part of the team and the client – primarily in moments of debriefing and at collaborative meetings.

This stimulus to collaborate through visualization allowed the structuring and correlation of the data, as well as a definition of the challenges to be confronted in the project.

USAGE NOTES
IN-DEPTH INTERVIEWS

BANK ACCOUNT HOLDERS

WHO USES

ATMS

TO: OBTAIN / CONSULT / PROVIDE

MONEY $

WHAT IS IT?

DRIVE-THRU BANK
CONNECTION BETWEEN ACCOUNT HOLDER AND BANK WITHOUT HUMAN CONTACT

WHAT IS IT MADE OF?

HOW TO GET?

ATM FUNCTIONALITIES

WITHDRAWAL
CREDIT
CHECK
LOAN
CREDIT CARD
BUY PRE-PAID PHONE CREDITS

WHAT IS OBTAINED?

CASH
CARD
CHECK
SERVICES

HOW TO CONSULT?

CONSULTATIONS
DEPOSIT SLIPS

WHAT IS OBTAINED?

PHYSICAL AND DIGITAL ACCOUNT STATEMENTS

HOW IS IT PROVIDED?

FUNCTIONALITIES

DEPOSITS
TRANSFERS
RETIREMENT SAVINGS
CAPITALIZATION
INVESTMENTS
UNLOCKING OPERATIONS
SPECIAL OFFERS AND PROGRAMS
PAYMENTS
CONSORTIUM
SAVINGS
INSURANCES

WHAT IS UNSATISFYING?

DIGITAL INTERFACE

What does the client consider unsatisfying when using the ATM's digital interface?

INSIGHTS

OBSERVATIONS

WHAT IS SATISFYING?

What does the client like about the ATM's digital interface?

INSIGHTS

OBSERVATIONS

OBJECT INTERFACE

WHAT IS SATISFYING?

What does the client find satisfying when using the ATM?

INSIGHTS

OBSERVATIONS

WHAT IS UNSATISFYING?

What does the client consider unsatisfying when using the ATM?

INSIGHTS

OBSERVATIONS

INSIGHTS

OBSERVATIONS

AREA FOR INTERFACE

WHAT IS SATISFYING?

What does the client find unsatisfying when in the ATM interface area?

INSIGHTS

OBSERVATIONS

WHAT IS UNSATISFYING?

What does the client consider disagreeable about the space where the ATMs are located?

INSIGHTS

OBSERVATIONS

GUIDING CRITERIA

WHAT ARE THEY?

These are the guidelines for the project that serve as demarcations, underscoring aspects that must be kept in view over the course of all phases of solution development. They arise from an analysis of the data gathered, from the predetermined scope of the project and the direction suggested by the client. They serve as a basis for determining the boundaries of the project and its true purpose.

WHEN TO USE THEM?

The guiding criteria should always be present during the development of a project because they offer parameters and guide solutions, giving evidence of its adjustment to a scope that must be respected.

HOW TO APPLY THEM?

The guiding criteria emerge from the systematic assimilation of data in the Immersion stage, during the drawing up of an Affinity Diagram or Conceptual Map, for example. It is thus assured that no relevant issues will be neglected, and that the solutions generated will not stray from the focus of the demand.

CASE — Criteria for new offers for IT Outsourcing

During work performed for a technology company seeking to identify new service offers in the outsourcing area, Desk Research and In-Depth Interviews were performed with Information Technology executives. After systematically arranging the data gathered on Insight cards, the cards were broken down into groups through the Affinity Diagram process, and during this process the criteria to guide the team emerged:

- To establish an undisputed position of prominence among competitors;
- To communicate the company's commitment to innovation;
- To vigorously apply the cost-benefit ratio;
- To pursue customer loyalty, in a bid for repeat business;
- To stress enhancement of the value of the human factor as a key element in team formation.

PERSONAS

WHAT ARE THEY?

Personas are archetypes, fictional characters conceived from a synthesis of observed behavior among consumers with extreme profiles. They represent motivations, desires, expectations and needs, bringing together the significant functionalities of a more comprehensive group.

WHEN TO USE THEM?

They can be used at several different stages of the process, since they serve the purpose of aligning user information with everyone involved, but they are especially useful for generating and validating ideas. For example, the needs of personæ can be explored in the Ideation phase for generating innovative solutions that will meet their demands. After that, the same ideas can be assessed in terms of the personæ in order to select the most promising possibilities.

They help in the design process by directing solutions towards users, shaping the view of information and thus supporting decision-making.

HOW TO APPLY THEM?

Based on data from the field, different polarities of user characteristics are identified. They may range from demographic features, such as gender, age group and social class, to behavior profiles (for instance, if the individual is independent with regard to health, or if he or she depends on family members to manage his/her illnesses). After identifying all polarities, the characters are assembled combining these features and using the profiles identified in the field as reference points. Thus, a group of personæ is created with significantly different characteristics representing extreme profiles of users of the product or service being analyzed. Finally, a name is assigned and stories and needs are created to help in the "personification of this archetype."

CASE — Extreme profiles of chronic patients

By developing innovative methods for monitoring chronic patients, the Exploratory Research and In-Depth Immersion data made it possible to identify six positive and six negative features, forming six behavioral axes:

Independent / Dependent
Is the patient dependent on other people to take medicine, schedule doctor's appointments and take care of his/her health?

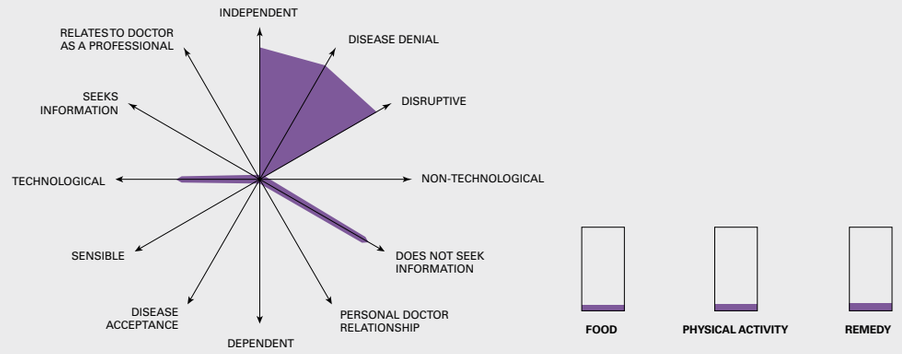
Technological / Non-technological
Does the patient use technological equipment? Does he or she accept the assistance of technology as part of treatment?

Disease denial / Disease acceptance
How does the patient deal with the situation? Does he or she accept it or deny it?

Seeks information / Does not seek information
Does the patient seek more information about his/her disease and its treatment?

Disruptive / Sensible
Does the patient take his/her medicine at the right time? Does the patient exercise? Does he or she go to the doctor regularly?

Relates to doctor as a professional / Relates to doctor as a person
Does the patient relate to the doctor in an emotional or rational way? Does he or she establish any kind of bond with the doctor?



Beyond these polarities, the way chronic patients deal with the three pillars of treatment – food, physical activity and medication – was observed.

From the understanding of these patterns, five Personæ were created to facilitate coming up with solutions and assessing them. One example is Rogério, a lazy and uninformed young man. He is a student of hotel management, 24 years old, and was diagnosed with hypertension when he was 18. According to his family, obesity is the cause of the disease, which has so far only manifested itself in the form of occasional headaches. His father, who also suffers from hypertension, had a heart attack at the age of 46, but not even this could get him to be concerned about his weight and diet. At home, Rogério has learned that one should only seek a doctor as a last resort: "Look, if my dad, who has a heart condition and is twice my age, doesn't go to the doctor, why should I? When symptoms appear, I take some medicine and that's that. For me, suffering from hypertension means having to take a pill when I get a headache. Apart from that, everything is normal."

Rogério seldom takes his blood pressure, but perhaps if there were a less "laborious" and more high-tech way to monitor his blood pressure and stay in touch with the doctor, it would suit his limited capacity to take care of his illness. Until then, there is no particular reason to let anything distract him from college life and the vast array of junk food he consumes on weekends while watching TV.

EMPATHY MAP

WHAT IS IT?

It is a tool for the synthesis of information on the client through visualization of what he says, does, thinks and feels. This makes it possible to organize the data of the Immersion phase in such a way as to provide an understanding of situations arising from the context, behavior, concerns and even the aspirations of the user (or other agents subject to examination).

WHEN TO USE IT?

When there is a lot of information from the field and a need to organize it to generate a better understanding of the target audience in order to develop greater empathy.

HOW TO APPLY IT?

A diagram should be created, broken down into six areas whose center provides a characterization of the client under review (name, personal characteristics, income, etc.). Each area of the diagram is filled in with the following questions about the client:

1. *"What is the client seeing?"* Description of what the client sees in his/her environment
2. *"What is the client hearing?"* Description of how the environment influences the client;
3. *"What is the client actually thinking and feeling?"* Exercise geared towards understanding how the client's mind works;
4. *"What is the client saying and doing?"* Exercise geared towards understanding how the client behaves in public and what he is thinking;
5. *"What difficulties is the client facing?"* Description of the obstacles noticed by the client during his experience.
6. *"What are the client's achievements?"* Description of positive and promising attributes of the client.

The empathy map provides a basis for identifying the needs of the client and opportunities for the project, and it can be used as raw material in the Ideation phase.

Case — Wanderley, typical electric utility customer

In a project developed for a utility company to improve the way the company offered financial products, the team visited ten cities where the company had outlets to get to know their users' different profiles.

Although they lived in separate realities, they realized that the clients from different regions had very similar values and problems as far as service delivery was concerned. On the basis of this observation, it was concluded that it would be possible to synthesize the consumers' characteristics into one persona, Wanderley. With the aim of summing up a substantial portion of findings from the field to facilitate visualization of the many features of this "standard customer," the Empathy Map was developed. Not only did it show Wanderley's way of speaking, hearing, seeing and thinking in terms of his life, but also in terms of his relationship with the utility company.

In addition to becoming a key research tool for showing the client company how its clients think and act, it was essential to understanding use behavior with respect to the company. One interesting example that actually had an impact on ideation, had to do with the perception of hierarchy: it was found that the customer showed more respect when employees were well dressed and spoke more assertively – behavior that was also identified in his work environment and interaction with his neighbors.

USER'S JOURNEY

WHAT IS IT?

It is a graphic representation of the stages of the client's relationship with a product or service that describes the key steps taken before, during and after purchase and use.

WHEN TO USE IT?

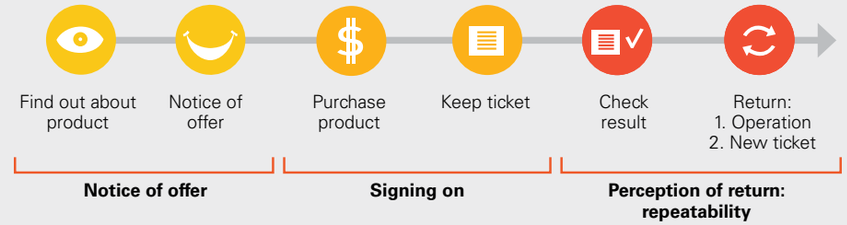
When it is necessary to understand the cycle of the client's relationship with the company, starting from the decision to buy the product or service, to its disposal or the making of a new purchase. By mapping these stages it is possible to analyze the client's expectations at all times, to create better ways to satisfy them, and surprise the client.

HOW TO APPLY IT?

The itinerary can be used together with Personæ to explore how each one relates to each moment of the life cycle of the product or service being analyzed, in order to create innovative solutions for different points of contact in relation to each different profile. An idea generated for a particular Persona and a particular point of contact may turn out to be of interest to other groups of people as well, even though it only arose in the first place because the team was focusing on the needs of a particular group at a particular moment.

CASE — Journey to purchase a savings bond

When looking into the possibility of selling railway bonds, analysis of the Insight Cards prompted us to arrange them into categories, defined by subject affinity and presented in terms of the User's Itinerary. This represented the stages inherent in the purchasing project as a whole – as seen by the user, from first contact with the product to repeat purchases.



At the end of the analysis and content synthesis generated in the Immersion phase, an Ideation process was initiated, which took up two sessions. The first was with the project team alone, and the second, with input from the staff of the client company. On both occasions, those present were stimulated to think about the journey of each one of the eight personæ created and to come up with ideas for contact points for selling the product in the context of the project. For example, participants asked how the Sympathetic Cleaning Lady would find out about the product. How would she be persuaded by the offer? How would she make the purchase, and how and where would she keep the ticket? Would she check the result? If so, what form would the return take, whether receiving a premium or buying a new ticket. These dynamics give rise to all kinds of ideas presented as an interaction of narratives, of each Persona dealing with the product.

BLUEPRINT

WHAT IS IT?

It is a matrix that visually represents in a schematic and straightforward fashion the complex system of interactions whereby services are provided. In this representation, the different service contact points are mapped, that is, the visible and/or physical elements with which the client interacts. These encompass both the client's actions, as well as all interaction with the company, from visible operations to background processes.

WHEN TO USE IT?

When you wish to observe the service from all sides, in order to pinpoint areas for improvement and new opportunities. The Blueprint describes the physical evidence, the different players, their actions and interdependencies over the course of the journey, making it possible to catch flaws and unnecessary overlap, thus facilitating strategic and tactical innovations.

HOW TO APPLY IT?

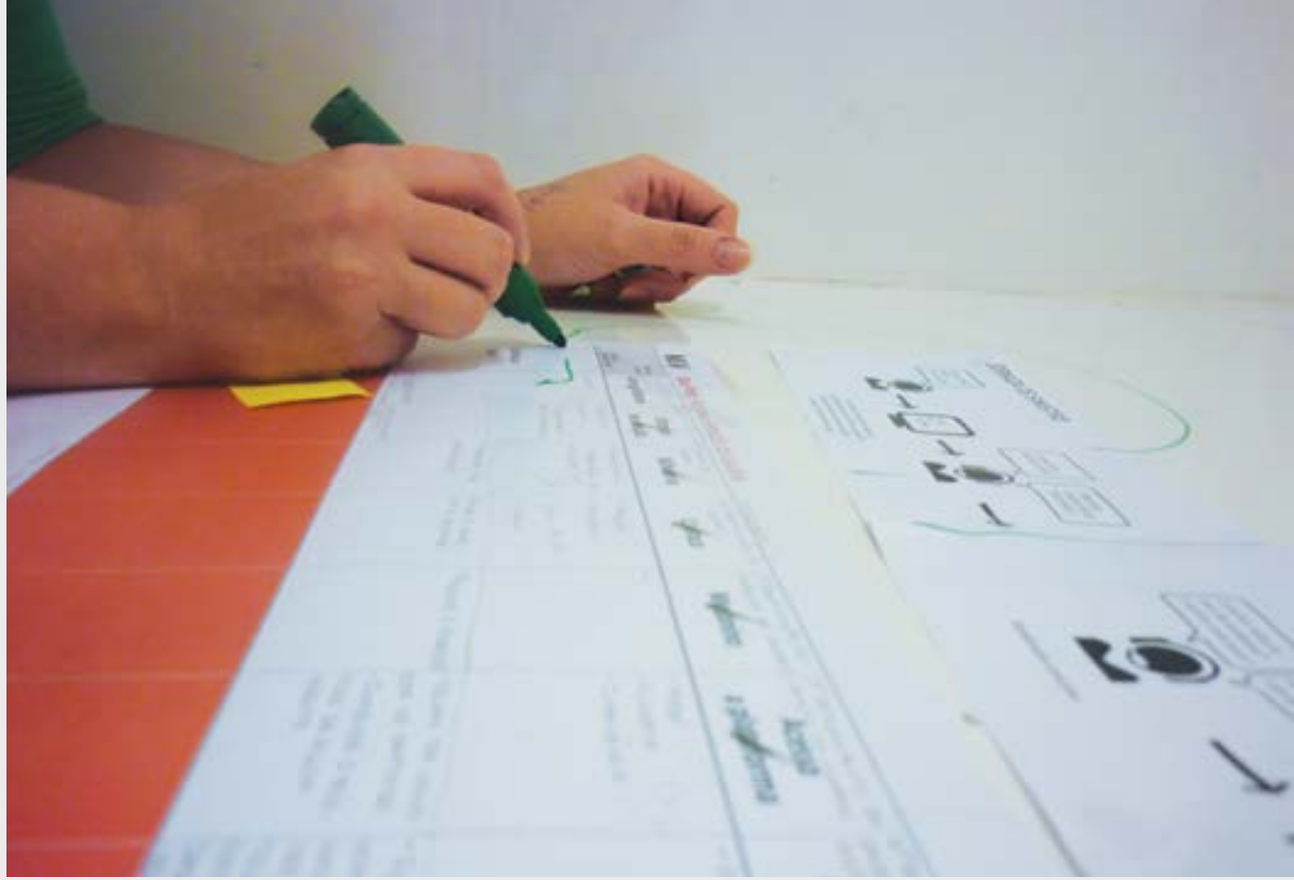
First, it is necessary to define the stages of the journey of engagement with the service to set up the columns of the matrix. Next, the lines are to be filled in by: 1) the physical evidence surrounding the client; 2) the clients' actions when using the service; 3) the visible actions of employees when providing the service; 4) the invisible actions of employees/sub-contractors, which comprise an integral part of the service but are not perceptible to the client; and 5) the line of acceptance to indicate client perception and the level of stress and satisfaction with the service provided at each stage of the journey. When analyzing matrix columns, the experience and actions of the different players become intelligible. At the same time, the horizontal reading makes it possible to understand the composition of the various elements in the service process.

CASE — Blueprint of Call Center answering service

To improve service at an insurance company's call center, research was conducted on the department's operating structures, including its interactions with other departments, operator training and work routines, among other things. In addition, shadow observations were made of service provided to clients.

For a clear analysis of the situations mapped in this last item, a Blueprint must be devised of elements ranging from service responses to claims being filed – in the present instance, a vehicle incident report. Accordingly, an itinerary was plotted representing the stages the user passes through prior to and during the use of this service. At each key step, a description was given of the physical evidence at that moment, actions of the players involved (users, employees and background team), possible barriers to interaction among them and the client's perception at each moment in the journey.

By mingling these variables it became possible to spot the exact points where the client could be negatively impacted by an employee action and/or by a possible back office malfunction. The tool also allowed for visualization of obstacles that hindered the interaction, as well as moments when the service tends to be more stressful. Mapping such points was essential to revealing opportunities for action to the insurance company, turning bottlenecks into occasions for positive intervention.



To learn more about
these tools go to:

http://www.livrodesignthinking.com.br/analysis

CLIENT X CALL CENTER INTERACTION

TOUCHPOINTS

	PROBLEM IDENTIFICATION/ MOMENT OF CALL	CONTACT WITH CALL CENTER	STANDBY TIME	ANSWERING SERVICE: 1ST IDENTIFICATION OF USER	ANSWERING SERVICE: 2ND IDENTIFICATION OF USER PROBLEM	ANSWERING SERVICE: 3RD DETAILS OF USER SITUATION	ANSWERING SERVICE: 4TH PROVIDING DATA FOR CLAIM REPORT	ANSWERING SERVICE: 5TH REPORT OF WHAT HAPPENED	CONCLUDING THE SERVICE
PHYSICAL EVIDENCE	Accident (Car crash).	Transfer number.	Observation of accident.	Tone of voice. Taxpayer ID number.	Tone of voice	Tone of voice	Tone of voice	Tone of voice	Tone of voice
USER'S ACTIONS	Seek information on what to do. Get in touch with call center.	IInteract with automated answering service (ARU). Choice of matter to be discussed. Wait.	Wait for service	State name, taxpayer ID number and phone number.	Summarize what happened	Report how user feels. Provide number of a relative.	Provide name, taxpayer ID number, date of birth, zip code, contact number, work number, marital status, car, license plate and date of insurance issue.	Report what happened in detail.	Listen to next step.
OBSTACLES FOR INTERACTION	Unable to get number. Busy signal. No access to a phone.	Call disconnection. Pressing wrong number for call transfer. Difficulty in understanding what ARU is saying.	Transferring call to wrong department.	System crash. User doesn't know taxpayer ID number. Call disconnects.	System crash. Call service assistant can't hear user. Call gets disconnected.	System crash. Call service assistant can't hear user. Call gets disconnected.	System crash. Call service assistant can't hear user. Call gets disconnected. Bureaucracy.	System crash. Call service assistant can't hear user. Call gets disconnected. User does not provide the appropriate information.	System crash. Call service assistant can't hear user. Call gets disconnected.
EMPLOYEES' ACTIONS			Answer phone	Write down information in a support system.	Write down what happened.	Write down family contact information.	Write down information	Add report to document.	Add report to document.
BACK OFFICE OPERATIONS		State reasons for call. State services. Transfer to call service assistant.	Transfer call to call service assistant (stopwatch). Duration of call.	Provide supporting documents	Provide registration document.	Provide registration document.	Provide registration document.	Provide document for data registration.	Ask if there are any questions. Thank user for calling. Forward incident for analysis.
STRESS METER	Impatience. Distress.	Impatience. Attention.	Impatience. Distress.	Impatience. Distress Attention.	Impatience. Distress. Attention.	Impatience. Distress. Attention.	Impatience. Distress. Attention.	Impatience. Distress. Attention.	Relief.

Andorinha Project

An experience way beyond an airplane

ANALYSIS AND SYNTHESIS

Over the course of the Immersion phase, we collected data of various kinds. The information was then analyzed at collaborative meetings, leading to an arrangement and synthesis of the data using certain analytical tools. As a result, we arrived at archetypes of the persons involved (Personas) – and a Traveler's Itinerary, later used in the Ideation phase.

PERSONAS

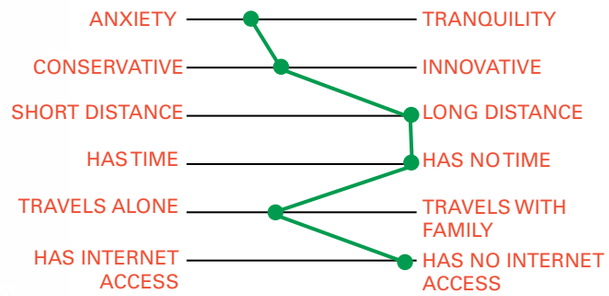
Based on Exploratory Field Research and interviews, we identified certain behavioral axes with respect to the perception and use of airlines, and examined the passenger's relationship to family, money and travel. The positioning of each interviewee along these axes allowed for the identification of behavior patterns, resulting in the creation of the following Personas:

JOÃO

62 YEARS OLD | MARRIED | DOORMAN | LIVES IN NOVA IGUAÇU

João has worked as a door man in an apartment building in Copacabana for the past 30 years, since he moved from Maranhão to Rio de Janeiro with his wife. Although his income doesn't allow him to spend much money beyond paying the bills, whenever he can, he saves up to go back to his hometown and visit his family. He likes to travel by bus because he finds it a pleasant trip, even though it uses up six of his vacation days.

Recently when his mother died, João had to get to Maranhão in a hurry. So he set aside his fear of flying and accepted help from the building manager to buy a plane ticket over the Internet.

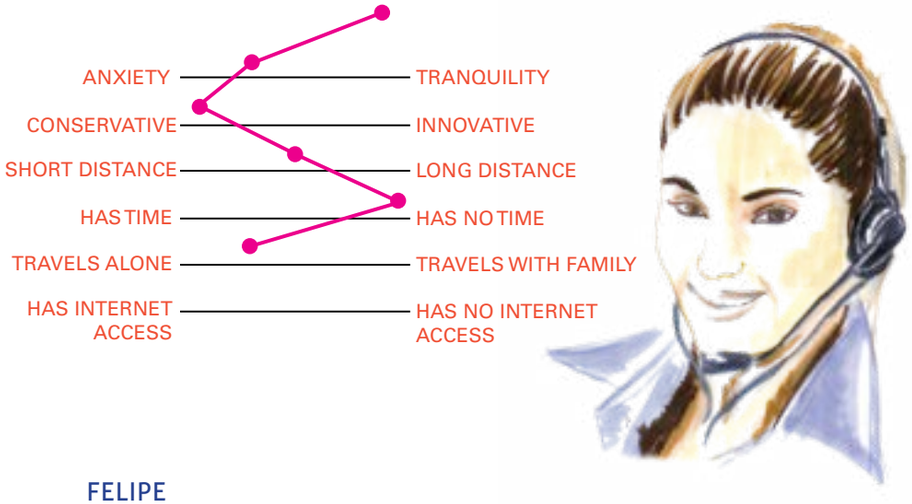


MÔNICA

35 YEARS OLD | MARRIED | SECRETARY | LIVES IN VILA DA PENHA

Mônica works as a secretary for a law firm in downtown Rio. With her long hours, she has little time with her family, so when she goes on vacation she makes a point of spending time with all of them in the Lake District north of Rio. Although she would like to get to know Maceió, she has never considered

long-distance travel, since the cost of airfares would be a big expense. For travel by bus, her mother, who is always by her side, and her youngest son, both ride for free, which adds up to substantial savings.of travelling so far as air tickets would make the trip a lot more expensive. In bus journeys, her mother – always present – and her youngest son don't pay the fare, which is a great economy.



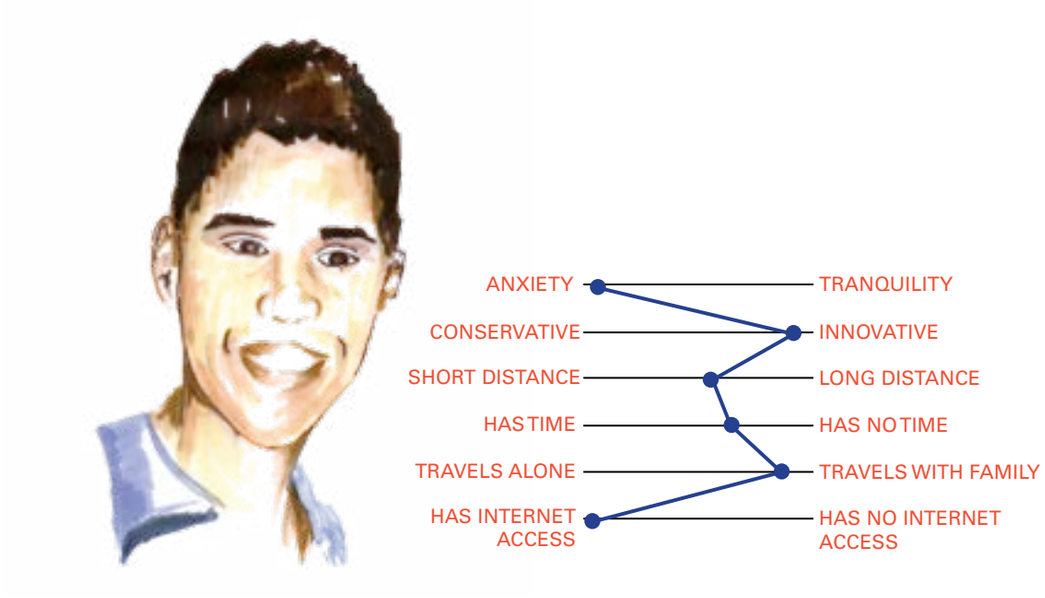
FELIPE

20 YEARS OLD | SINGLE | COMPUTER TECHNICIAN | LIVES IN PAVUNA

Felipe lives with his parents, and recently started to work as a computer technician at a security company in São Cristovão. It is his first job. Although the pay is low, it allows him to satisfy small ambitions, such as buying a Smartphone with an MP3 player, or sneakers with shock absorbers.

He has never left the state of Rio de Janeiro, and the farthest he has traveled is to Resende, where his girlfriend lives, although he is planning to go to Salvador on the holidays to visit his godmother. Because time is short, he has decided to fly.

A friend recommended a website where Felipe is planning to buy his ticket using the credit card he recently acquired, paying in ten interest-free installments.



TRAVELER'S JOURNEY

During the analysis of the information obtained by research, we have observed some key stages inherent to the process of air travel. Based on this, we have illustrated the Traveler's Itinerary using infographics, from the moment before the actual trip, in the planning stage, up until the moment of departure at the airport.

In the Itinerary, at each of its stages, we have also arranged the challenges to be considered during the Ideation phase.

PLANNING

Plane Ticket

How to answer first-time flyers' questions?

How can this be done remotely?

How can travelers find out ticket prices without using the internet?

Luggage

How to arrange transporting luggage of big families?

How to give an impression of transparency and security when transporting it?

Preparing documents

How to explain which important documents passengers should take with them?

How can documents be organized in a practical way?

Going to the airport

How to facilitate access to neighborhoods and cities far from the airport?

AT THE AIRPORT

Location

How to indicate the order of steps prior to boarding, facilitating passenger orientation at the airport?

Check-in

How to explain the check-in concept to first-time flyers?

How to speed up and simplify luggage check-in?

Waiting

How to entertain passengers and their families while they wait for the flight?

How can saying good-bye be more private?

Boarding

How to keep first-time flyers from losing their boarding pass?

IN THE PLANE

Boarding the plane

How to make it easier to find one's seat?

How to make passengers feel welcome on board?

In-flight

How to make passengers feel welcome when on board?

How to make in-flight meal choices flexible?

How to entertain and inform a passenger who might at some point feel intimidated by the plane's formal atmosphere?

DEPLANING

Luggage

How to arrange transport for luggage of big families?

How to easily identify bags on baggage claim conveyor belt?

Ground Transportation

How to facilitate access to neighborhoods and cities far from the airport?

Ideation

The purpose of this phase is to generate innovative ideas for the project theme. To do this, the tools for synthesis created in the analysis phase are used to stimulate creativity and generate solutions that are in tune with the context of the subject in question.

Ideation

In addition to tools, it is important to have different kinds of people involved in the process of generating ideas, and accordingly, this usually includes the people who will be "served" by the solutions in their capacity as experts on their own experience. Thus, in addition to the multidisciplinary project team, other members are selected, such as users and professionals in fields that are pertinent to the subject under study, usually through Co-creation Workshops. The purpose of bringing together such varied expertise is to contribute varied perspectives to make the final result richer and more compelling.

The ideation phase usually starts with the project team conducting brainstorming sessions (one of the most common techniques for generating ideas) regarding the theme to be explored, using the tools as a foundation. Then, at least one co-creation sessions is set up with users or the staff of the client company, depending on the needs of the project. The ideas generated during this process are captured in Idea Menus, which are constantly validated at meetings with the client, using, for example, a Decision Matrix or Prototyping Matrix (see the next phase).

BRAINSTORMING

WHAT IS IT?

Brainstorming is a technique to stimulate the generation of a large number of ideas in a short time. Usually done in groups, it is a creative process driven by a moderator, who is responsible for putting the participants at ease and encouraging creativity without allowing the group to lose its focus.

WHEN TO USE IT?

When a large volume of ideas is required. In the process of Ideation, Brainstorming provides a rich approach to generating ideas about important issues that have emerged during the Immersion and Analysis phases.

HOW TO APPLY IT?

Because it is a technique widely used for a variety of purposes and activities, many meetings are erroneously characterized as "Brainstorming," simply because their final goal is to generate ideas.

However, in order for Brainstorming to be directed and focused on creative solutions for identified opportunities, raw field data and/ Personæ can be used to stimulate the team. Moreover, for a Brainstorming session to be successful, some precepts must be observed:

Quality through quantity

The quality and vigor of the ideas generated are attained through quantity. The greater the amount of ideas generated by the team, the greater the chance of producing an innovative and functional solution.

Refrain from judging ideas

Criticism should not hinder the creative process and the generation of bold ideas. The focus should be on producing and embellishing ideas, postponing evaluation to a later time.

Bold ideas are welcomed

New ideas and different angles on the same idea can generate innovative solutions. Therefore, it is best to contribute bold perspectives, without letting one's critical sense derail the discussion and the development of the idea.

Combining and embellishing ideas

Brainstorming should be a 100% collaborative process. Ideas can be combined, adapted, transformed and split into many others by any member of the team.

CASE — Ideas for a charming Help Desk

IIn order to enhance the quality of the Help Desk at a retail company, the aim was to create a delightful experience for employees using the service. To this end, two researchers spent a day in shadowing activities, capturing insights about opportunities for process improvement. A few days later, they returned to the Help Desk room and divided the employees into two groups of five to take part in a brainstorming session. Each team received six of the insights created previously on a related challenge, and was instructed to generate as many ideas as possible for solutions.

The insights had to do with matters such as:

The relationship between company employees and the sub-contracted Help Desk staff, the appreciation of a team at another company, the quality and responsiveness of Help Desk staff and the red tape involved in the process.

And the ideas generated had to do with:

Creating an "E-mail Day": in a contest, the company's employees would be encouraged to clean out their inboxes, reducing the volume of messages stored on the server.

Offering lectures on security, awareness and the need to save e-mails.

Developing a field on the intranet for tips and video tutorials with solutions to the most simple and common problems.

CASE — Brainstorming index

Brainstorming sessions can be more productive when sparked by pictures, objects or inspiring videos. Based on these inputs, which can be toys, photos culled at random from magazines or any other item that triggers creative associations, a multidisciplinary trained team can generate associations relevant to the question posed, giving birth to unconventional ideas.

During a project on making innovative changes in ATMs, the team established during the Immersion that self-service banking terminals are objects with which people do not make emotional connections. Therefore, for a brainstorming session, pictures, videos and objects belonging to the user's emotional universe were selected as stimuli. In this way, the team was able to generate ideas for an ATM that would evoke an emotional response from users.

CO-CREATION WORKSHOP

WHAT IS IT?

It is a meeting organized in the form of a series of group activities aimed at stimulating creativity and collaboration, fostering the creation of innovative solutions. Usually the people invited to take part have a direct or indirect involvement with the solutions being developed. For instance: the end user, the company staff members requesting the project, and the team that acts as a facilitator of the dynamic.

WHEN TO USE IT?

When there is a large amount of data that can best be dealt with by an extended team, or when it is necessary to add knowledge from different specialists involved in a project. It is very useful for moments of gridlock when new insights about ideas are needed. It can also be used to validate the ideas of a team that is not necessarily involved in the project on a day-to-day basis, but can contribute significantly to its progress on that particular occasion.

HOW TO APPLY IT?

In a creative work session where participants are invited to interact by generating ideas collaboratively. It seeks to develop dynamic activities of short duration for small groups, interspersed with presentations of the ideas generated and snack breaks. Generally, sessions are started with a simple and fast task, not necessarily related to the project, whose goal is to help break the ice and dispel shyness among participants, who are often meeting for the first time. Since each project has its own intrinsic nature and particular needs, it is up to the organizers to think of stimulating activities that will help to expedite collaboration.

Co-creation refers to any act of collective creativity (shared by two or more people).

Creativity: All people are creative. Yet this gift is generally not cultivated in everyday life, with the result that many people do not consider themselves creative at all. People generally have an innate source of creativity, especially in connection with their hobbies, work and children. When properly sensitized, everyone can help develop innovative solutions!

CASE — Workshop in game format

In seeking to develop innovative solutions for making sales of insurance via SMS, the co-creation session was transformed into a game to stir up ideas. Before starting, however, we were invited to an introductory activity to get us to reflect on our values and notions of life. Each of us received a short form with sentences on it (such as, "when I need help I turn to ..." or "what I value in life is...") to be filled in according to our personal experience, within a given time limit. This exercise allowed us to reflect on the values that came up during the Immersion, and became food for thought to help us work out innovative solutions for the project under consideration.

Next, there was an introduction to the main findings of the Immersion to provide fuel for the ideation exercises. Fully immersed by now in the user contexts, we were taught to play the game developed for the occasion: using the raw materials from the Immersion phase, we mapped out the game's five different stages, each representing one part of the customer's journey to purchase insurance (advertising, offering, acquisition, duration, customer loyalty).

A large board was then set up in the room and the players - divided into groups - received a new letter as we entered each new phase. Each letter presented a description of a challenge and a player associated with the context, and we were supposed to use them as guidelines for the projected solutions. The goal of each group was to generate as many solutions as possible for each challenge. Whoever came up with the most ideas would be the winner.

The idea of including a game in the co-creation workshop awakened a lively interest in the activity, which resulted in a higher yield of ideas for each stage. No matter how tired we became as time wore on, our output did not falter, as the competition grew increasingly intense. By the time the game was over, more than 40 ideas from the insurance experts were selected to serve as a starting point for the next phase of the project.

MENU OF IDEAS

WHAT IS IT?

A catalog displaying a synthesis of all the ideas generated for the project. It may include comments on the ideas, possible elaborations and business opportunities.

WHEN TO USE IT?

At collaborative meetings, project presentations and co-creation workshops when it is necessary to make tangible the volume of ideas generated, thus allowing better visualization for the decision-making process. It also serves to document the partial results of the project.

HOW TO APPLY IT?

The idea is to list the ideas generated during the project and organize them in the form of a restaurant menu, or a deck of cards. The end result can be digital or hard copy. Remember that each element may contain blank spaces to allow for comments, and also blank sections for writing down any new ideas or solutions that may arise.

CASE — Menu of ideas for monitoring chronic patients

In this project, from the Analysis phase to Ideation, we came up with a great many ideas to provide a basis for working out concrete solutions for chronic patients, doctors, policyholders (the companies contracting the insurance) and the insurer (the project contractor). These were used to create a Menu with a total of 66 ideas broken down into separate cards.

In the Menu of Ideas, each card was created taking into account the stage of the chronic patient and the actors involved in the proposed solution. The stage can be thought of as the moment at which the insured party finds himself in the progress of his illness, that is, prevention, diagnosis or treatment. On the other hand, the actors involved are the policyholder, who contracts coverage

from the insurer, the insurer, and the physician participating in the treatment of the chronic patient.

Over the course of the project, it was possible to combine one or more idea cards to come up with solutions or complex services that could settle matters in a more robust fashion.

The material could also be used by the insurer to help solve a variety of problems inherent to the project of monitoring chronic patients, and could also provide inspiration for future projects to create new products and services.

DECISION MATRIX

WHAT IS IT?

It is a tool for strategic analysis of the ideas generated, used to validate them in terms of the Guiding Criteria and the needs of the personas created for the project. The purpose of this feature is to support the decision making process, based on effective communication of the benefits and challenges of each solution, so that the most strategic ideas are selected for prototyping.

WHEN TO USE IT?

At meetings of the project team with clients, to serve as support material for the evaluation of ideas and determining next steps.

HOW TO APPLY IT?

The ideas generated in the project are listed and may be grouped by similarity or, with very large volumes, an arrangement may be worked out in advance. Then, the Guiding Criteria and/or the Personas created over the course of the project are combined to form a matrix that is filled collaboratively, with an evaluation of how each idea meets each requirement.

CASE — Selecting ideas for selling insurance via cell phone

In the context of creating ways to sell micro-insurance via cell phone, the six final ideas, refined after the co-creation workshop with the client's staff members, were combined with the Guiding Criteria, creating a score for adherence to scope and Personæ. It was then possible to evaluate the acceptance of the client by the target audience for the service, which in turn helped with decision making on the most appropriate ideas to be implemented.

GUIDING CRITERIA	IDEA 1	IDEA 2	IDEA 3	IDEA 4	IDEA 5	IDEA 6
CRITERION 1	✓	✗	✓	✓	✗	✗
CRITERION 2	✓	✓	✓	✓	✗	✗✓
CRITERION 3	✗	✓	✗	✓	✗	✓
CRITERION 4	✓	✗✓	✓	✓	✗	✗
CRITERION 5	✓	✗	✓	✓	✗	✗
CRITERION 6	✓	✗✓	✓	✓	✓	✓
CRITERION 7	✗	✗	✗	✓	✗	✗
	8,0	8,0	9,5	11	4,0	7,5

CASE — Analyzing ideas for ATM innovation

Over the course of a project to innovate ATM's based on the analysis of the Desk Research, as well as In-Depth Research, extensive opportunities were found to incite the generation of ideas. Accordingly, the need arose to perform an analysis to identify certain criteria for evaluation, which are as follows:

1. The area of opportunity to which the idea belonged, for instance: education, gamerization and customization, to name a few;
2. The type of interface (spatial, object or digital) through which the idea is introduced;
3. The incidence level of the subject idea in stories collected from field surveys, in other words, its adherence to the context of the user.
4. At what level of innovation should the idea be classified, in terms of the market.

These criteria were placed in the rows of a matrix and combined with ideas so they could be evaluated. The result was used as the basis for formulation of recommendations to guide their implementation. Among the ideas recommended, moreover, some were classified as candidates for prioritized implementation, because the potential return they would yield for the bank was clearly discerned in various respects, particularly that of achieving major market exposure due to their level of innovation.

Return x Innovation Matrix

Based on an analysis of all the ideas generated, the ones that were most highly recommended were inserted into a second matrix, constructed along the following axes: level of innovation and level of return.

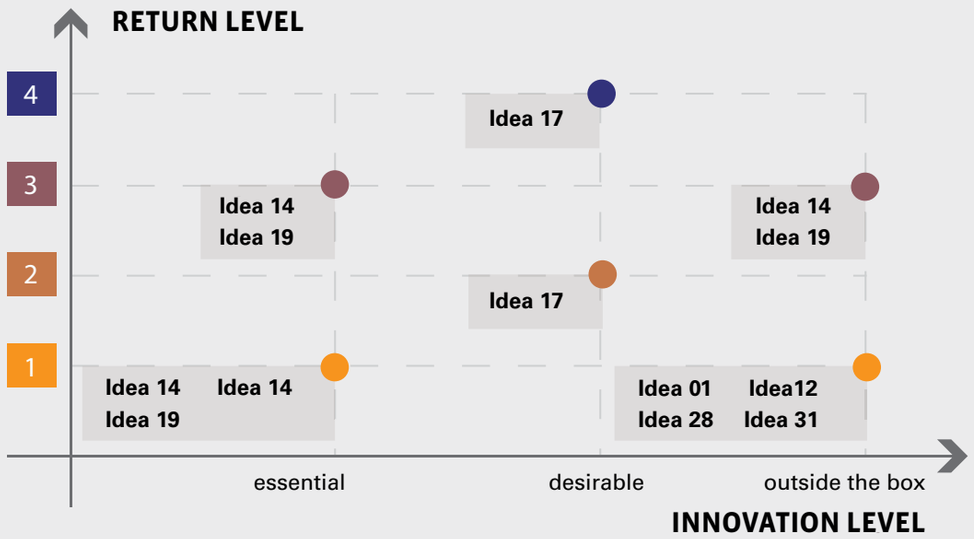
The horizontal axis, 'level of innovation,' was created from indicators identified over the course of the project:

- The "essentials" were the functionalities that are already offered by competitors, or that fit in closely with trends that are very much in evidence according to market analysis.

- The rating "desirable," in turn, was applied to ideas that had a high level of demand expressed by users in the field research.
- Ideas that follow new trends, from other segments, and that the market has not yet assimilated were considered "outside the box" because they are genuine innovations, with great potential to generate an impact on the bank brand when they are implemented.

In the return level axis, measurements were taken based on the incidence level of the following return criteria for each idea: "reduces waiting on line at ATM," "reduces waiting on line for bank teller," "delights the customer" "facilitates use of ATM," "reduces feelings of insecurity," "adds value to the brand," "reduces complaints," "reduces de-bugging costs" and "reduces operating costs."

The purpose of the matrix, then, was to facilitate visualization of the recommended ideas, based on the level of return and level of innovation for each one, to help select ideas for implementation.



To learn more about these tools go to:

www.livrodesignthinking.com.br/ideation

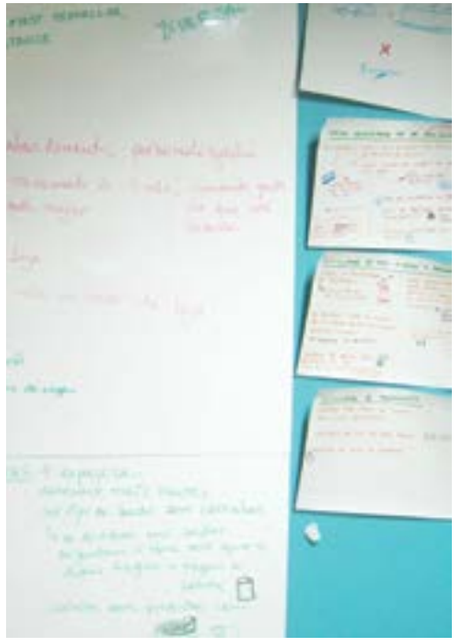
Andorinha Project

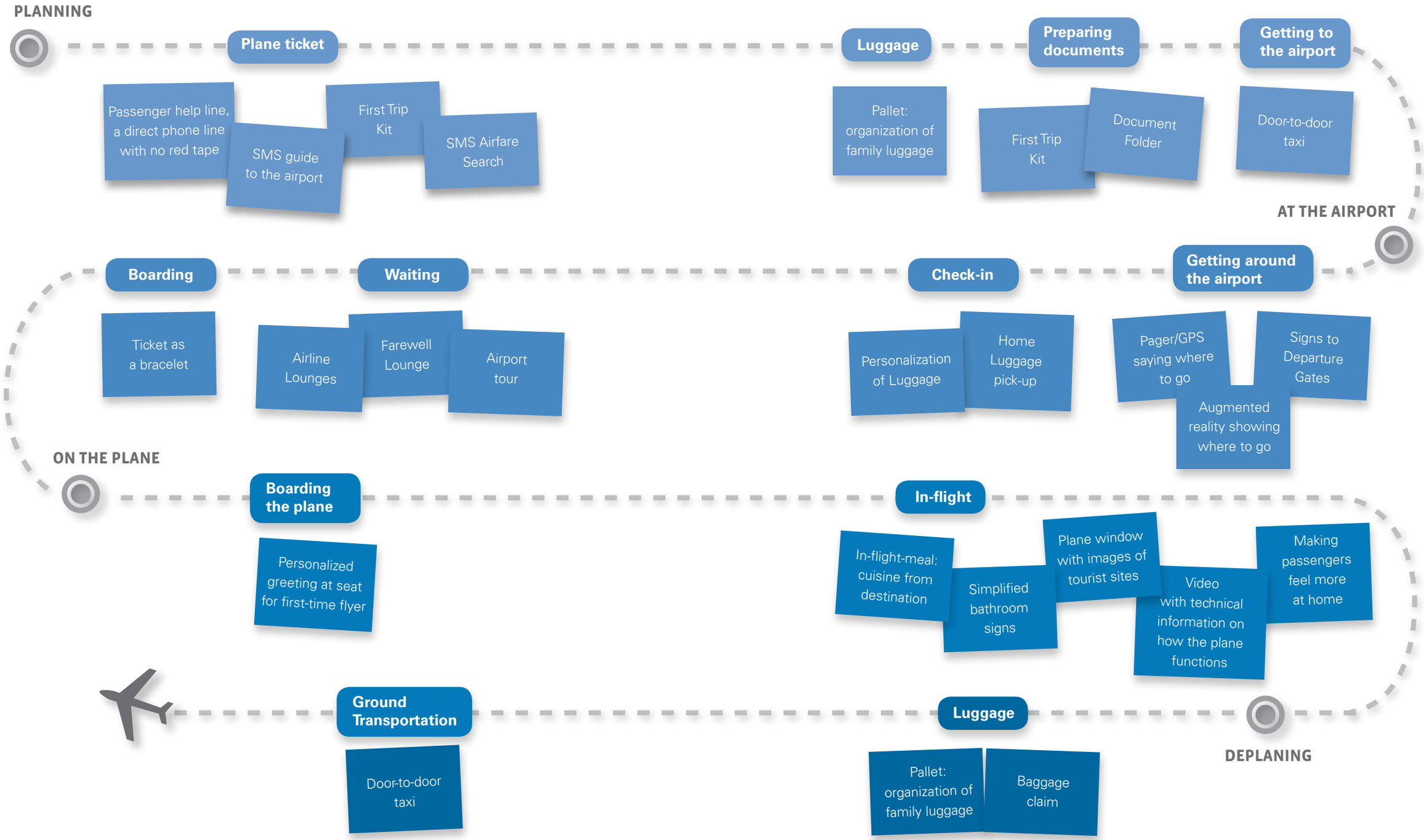
An experience way beyond an airplane

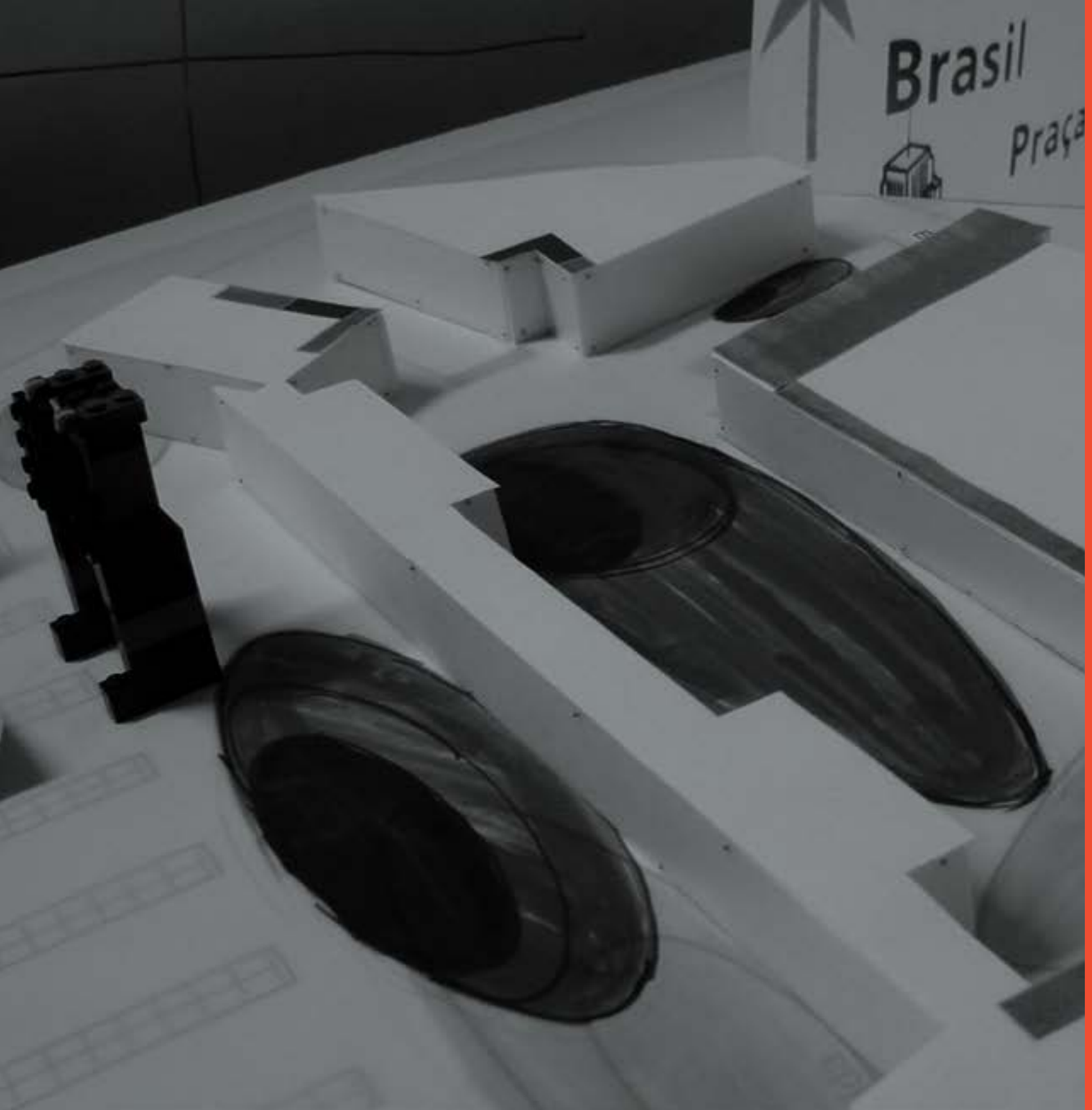
IDEATION

At the end of the Analysis and Synthesis of the content compiled in the Immersion phase, we held Brainstorming meetings to create possible paths for the project. At three meetings, we generated an array of alternatives chiefly based on the characteristics of the personæ, and on the major issues that prevent some travelers from opting for air travel.

During Ideation, we also relied on the Itinerary of the first-time traveler, and on the airline's contact points with the customer. On the basis of these inputs, we developed the following ideas:




PLANNING
Plane ticket
Passenger help line, a direct phone line with no red tape
SMS guide to the airport
First Trip Kit
SMS Airfare Search
Luggage
Pallet: organization of family luggage
Preparing documents
First Trip Kit
Document Folder
Getting to the airport
Door-to-door taxi
AT THE AIRPORT
Getting around the airport
Pager/GPS saying where to go
Signs to Departure Gates
Augmented reality showing where to go
Check-in
Personalization of Luggage
Home Luggage pick-up
Waiting
Airline Lounges
Farewell Lounge
Airport tour
Boarding
Ticket as a bracelet
ON THE PLANE
Boarding the plane
Personalized greeting at seat for first-time flyer
In-flight
In-flight-meal: cuisine from destination
Simplified bathroom signs
Plane window with images of tourist sites
Video with technical information on how the plane functions
Making passengers feel more at home
DEPLANING
Luggage
Pallet: organization of family luggage
Baggage claim
Ground Transportation
Door-to-door taxi



Prototyping

The function of Prototyping is to aid in the validation of the ideas generated, and although it is presented as one of the last phases of Design Thinking, it can occur throughout the project simultaneously with Immersion and Ideation.

Prototyping

Prototyping is the act of making an idea more tangible; the passage from abstraction to physicality to represent reality – even if in a simplified fashion - and provide validations. It is an instrument of learning in two respects:

1. **From the point of view of the team project**

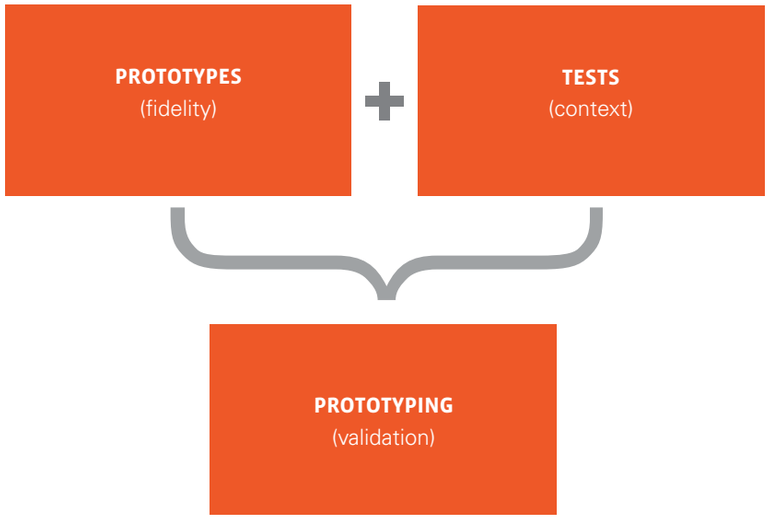
   As you shape an idea, you need to elaborate its details, increasing the levels of fidelity of the solution throughout the process;

   We learn by doing

2. **From the user's point of view**

   By interacting at different contextual levels with the model created, the user can evaluate it to offer feedback for its evolution and improvement.

   We learn from the user



Levels of fidelity

A prototype can be anything ranging from a conceptual or analogous representation of the solution (low fidelity), to assimilating aspects of the idea, to the construction of something as close to the final idea as possible (high fidelity).

Fidelity

Low	**Middle**	**High**
Conceptual representation analogous to the idea	Representation of aspects of the idea	"Mock-up" of the idea: representations as close as possible to the idea

Contextual levels

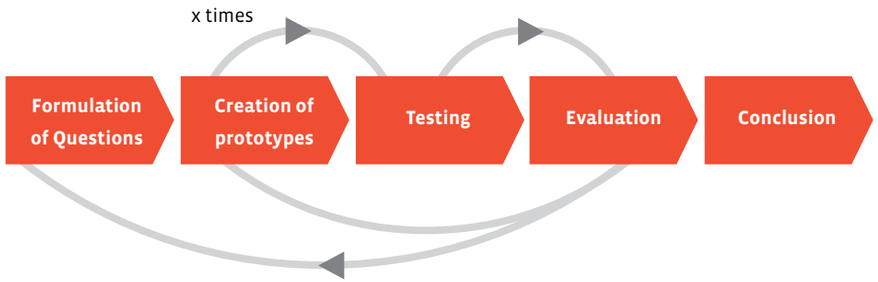
The test of a prototype may or may not involve users, and may be conducted in a laboratory, or in the environment where the product or service will be used. The different combinations of these elements represent the levels of context.

Context

Restricted	**General**	**Partial**	**Total**
In a controlled environment	Any user, any environment	Final user or environment	Final user and final environment

1. Why prototype?

Prototyping reduces the uncertainties of a project, as an expeditious way of abandoning alternatives that would not be well received, thus showing the way to a more definitive final arrangement. The process of Prototyping begins by asking questions that must be answered regarding idealized solutions. Moving forward, models are created representing the aspect in the open, which makes testing possible. The results are analyzed and the cycle can be repeated innumerable times, until the project team can reach a definitive solution in line with the user needs and the interest of the client company. Therefore, the more tests conducted and the earlier the process is initiated, the more that is learned and the greater the chances for success of a definitive solution.



The nature of a prototype, properly speaking, will vary a great deal depending on a company's segment of activity and the type of solution that is to be evaluated. It could be either a prototype of a graphic interface, such as cell phone app screens, or a product, such as an ATM machine, or else a service to simulate the experience of a traveler of the lower classes buying a plane ticket.

Prototyping, then, is nothing more than a series of simulations to anticipate problems, test hypotheses and illustrate ideas in order to make them real and start discussions.

The development of prototypes makes it possible to:

- Select and refine ideas in a decisive fashion;
- Render ideas more tangible and evaluate them interactively;
- Validate solutions with a sample of the public;
- Anticipate possible bottlenecks and problems, reducing risks and optimizing costs.

PAPER PROTOTYPING

WHAT ARE THEY?

They are representations of graphic interfaces with different levels of fidelity, from hand-drawn wireframes on scraps of paper to schematic representations of cell phone screen apps, to a package for soap with final text and color detailing. A paper prototype can start simply, becoming more complex as it goes through successive iterations with users or the team.

WHEN TO USE THEM?

When it is necessary to evaluate the flow of information and the navigability of a system in order to explore possibilities of publicizing a product, or simply to present an idea to users, the company, or the project team itself. These tests may take place in a variety of contexts, from controlled environments, such as usability labs, to group sessions with end users and potential consumers.

HOW TO APPLY THEM?

As the name implies, the end result of this prototype will be on paper. It can be executed by hand, as nothing more than a rough draft of a solution; or with the aid of a computer, in order to evaluate the details of an interface, product or to give notice of services.

CASE — Using a Paper Prototype for new functionalities and to make a site go viral

When the assignment was to redesign the site of the Cupom Mania contest seeking ways to make the product go viral, we carried field research and a survey of the complaints logged at the site's Customer Service channel, as well as Desk Research.

One of the hypotheses raised during the Immersion phase was that the contest also needed to reach a younger audience. To this end, new functionalities were thought up, necessitating a makeover of the site. The new screens were taken to interviews to see if users accepted them.

Participants were called upon to perform certain tasks involving these new functionalities. Their reactions to two of the new areas on the site and the prototyping were recorded, as follows:

1. Send Sales Coupons every day!

It became apparent from telephone ethnography and mapping of Customer Service feedback that contest participants are interested in winning any sort of prize. To get people to send in more coupons and try to turn the procedure into a "game," following the analogy of competition, daily mailing quotas would be established, and the user who sent in 5 coupons in one day would get one free shipment.

Currently, 63% of Coupon Mania participants who mail in sales coupons on a daily basis send from 1 to 3 coupons. Among the participants who send sales coupons weekly, 49% send from 1 to 3 coupons, and of those who send coupons monthly, 40% send from 1 to 3 coupons. The expectation is that, by prompting daily mailings of 5 coupons, the volume of sales coupons for the contest should increase by 40%.

When this idea was taken to the field and presented as a screen shot on paper, interviewees felt comfortable criticizing it, since the fact that it was on paper gave it an experimental feel. The user responses compiled led the team to conclude the following:

- Feedback to the prototype test was positive.
- The functionality was well received by those tested and seen as a real incentive to sending more daily coupons.
- Some users were confused by the way the tally of daily coupons sent was represented by a star. One suggestion was to represent the tally with an image of a sales coupon.

2. Share!

In order to stimulate broader dissemination of the contest via the web, tools for sharing were inserted into some sections of the Coupon Mania site. Initially, such sharing would be done by publishing comments on social networks, starting with Facebook and Twitter.

The idea was developed based on the perception that there are referrals, partnerships and collaboration among relatives and friends of Coupon Mania participants. It was ascertained that many people recommend the contest in order to get their relatives and friends involved. Some quotes collected in the field were: "If you win, don't forget your friends" or, "Sweetheart, let's play so we can renovate our house." However, this time, the feedback was not as expected, and the conclusions were as follows:

- Negative feedback on prototype test.
- No users were willing to share the site.
- Most people do not have Twitter or Facebook, and when asked if they would share it in Orkut, they did not seem willing to do so.

CASE — Wireframes for iPhone software version

In order to create an iPhone software for the creation of composite sketches, many prototyping iterations were executed to arrive at a new version of the product through "learning by doing." To this end, many slips of paper were cut to the size and shape of an iPhone screen.

The papers were distributed to the team – which was made up of designers and developers – along with pencils, erasers and marker pens. After an initial stage of reviewing the mechanics of the software and the constraints/features of the graphic interface for a native iPhone app, each individual member of the team began to draw the screen wireframes, as well as the navigation flow.

With a large number of alternatives generated, members showed their proposals to the team, explaining their ideas and the solutions they came up with. In this way they were able to combine the best solutions, incorporating different ideas into two distinct approaches to the interface and the navigational flow.

With this, a protocol with different questions and tasks in relation to the two prototypes on paper was prepared. A number of meetings with iPhone users of multiple profiles was scheduled; the team tested the prototypes at these meetings.

After some test rounds to tweak the wireframes and the first iteration of the navigation, a definitive solution was reached so designers could proceed to work out the details of the graphic interface, for subsequent implementation by the developers.

The involvement of designers and developers in creating and testing a new product in its initial phase helps to raise the team's awareness, fostering a sense of empathy to bring to bear on user needs. In this way it is possible to create, develop and implement more robust solutions.

VOLUMETRIC MODEL

WHAT IS IT?

A volumetric model is a representation of a product that can vary in levels of fidelity, ranging from low – with few details – to high, with the appearance of the final product, possibly also presenting texture and detail (such as sliding buttons), although they are not yet functional.

WHEN TO USE IT?

When it is sought to make an idea tangible, one approach is to extract it from the conceptual plane, transforming it into something concrete that can be validated. A volumetric model allows for 3-D visualization of a concept, evoking criticism from users to refine the concept. Moreover, it helps to "sell" the project to upper echelons at the company, to expedite production.

HOW TO APPLY IT?

It can be constructed out of simple materials (such as paper, cardboard, modeling clay, etc.), or be more elaborate, consisting of several different materials, and painted to simulate the color and finishing of the product to be manufactured.

CASE — Analog iPad

In an attempt to introduce a culture of innovation into the daily routine of employees at a major bank, one of the elements touched upon was interference in physical spaces. During the Immersion phase it was observed that employees had difficulty communicating ideas to each other at both formal and informal meetings, and so they often resorted to a linear approach that did not allow for developing things collaboratively with coworkers. In order to test a way of tackling this problem, one of the prototypes created was an Analog iPad – small white spaces adapted to the workspace in question – intended to facilitate the visualization of ideas and interaction among staff members. The analog iPads had a support tripod and a hook so that they could be attached to tables or office partitions, and a handle so that they could be carried to meetings away from the desk.

Although they were created to stimulate visualization and construction of ideas, it was observed that many prototypes were used as "bulletin boards" in the work environment, exhibiting content not directly related to work. The effect was to allow for informal interactions among colleagues, encouraging more relaxed communication.

The test showed that, in addition to needing a tool for collaboration, staff members felt the lack of some kind of relaxation in their daily work routine, and the Analog iPad was able to fill both needs. Furthermore, users commented on the size of the item, and the possibility of capturing and recording content generated during meetings to help in moving towards a solution.

CASE — Product for intake of small change

Upon investigating the possibility of selling financial products in railway station ticket booths, a peculiar behavior not reported during interviews was noted.

Upon observing the purchase of tickets in the booth, it was noticed that, because of the shape of the counter, many coins fell on the floor and, because of passengers' haste to board the train, they didn't bother to pick them up.

Based on this observation, a device for automatic coin intake was designed to be installed at ticket booths. Using it, a person could deposit coins and collect the ticket for the financial instrument. Since the cost of production would be high, it was decided that its acceptance should be tested prior to execution. Accordingly, a volumetric model was developed to simulate the final product.

On only two days, the product was installed at the location planned for the test. At the end of the prototyping period, the decision was made not to proceed, since the product did not accomplish its original purpose.

Validating the model before producing it helped test the proposal in a short time at low cost, while also providing guidance towards a definitive solution based on the knowledge acquired.

STAGING SCENARIOS

WHAT IS IT?

It is the improvised simulation of a situation, which can represent everything from an interaction between a person and a machine, to a simple dialogue between individuals for the purpose of acting out the components of a service transaction.

WHEN TO USE IT?

When one wishes to test an interaction in order to devise the components, refining the details and improving the experience.

HOW TO APPLY IT?

Two or more people are chosen to act out the procedure. The important thing is for there to be a dialogue, and for each participant to allow himself or herself to improvise and behave as naturally as possible. A role is assigned to each one of the "actors" chosen, for example, to play the part of a call center attendant registering a complaint from an unsatisfied costumer. Or else objects can be used to map out a scenario, so that the actors not only relate to each other but also to the objects. Just as in the theater, there are no boundaries, and you must use your imagination!

CASE — Staging a scenario for the ATM machine of tomorrow

In a project seeking to generate innovations in ATM machines, a co-creation workshop was held for 23 bank employees. Moving through the dynamics of a 3-hour session, participants had a chance to learn about the content prepared in earlier user workshops, and to share their own expectations on the project that was just beginning.

After the exhibition of a video to raise awareness, with a number of questions on the functions that ATM's perform nowadays, along with some warm-up and ice-breaking exercises, the collaborative dynamics began.

For the first activity, participants were split into four groups and given a series of cards, each one related to a video clip containing an idea, a need or a situation that someone had raised in an earlier workshop. The groups then watched the videos, analyzing them and jotting down perceptions and insights on the cards. With this material in hand, they created categories and discovered relationships between the various notes written on each card, seeking to identify challenges, problems, opportunities and needs for the ATM of tomorrow. This analysis was then shared with the other groups.

Next, participants were shown the three pillars of a loving relationship proposed by researcher Robert Sternberg (Sternberg, 2006). It was then suggested that these should be used to create solutions for the ATM, seeking to delight the client.

The solutions were presented in the form of skits and acted out by the participants. Each group chose one person to play the part of the ATM, another to play the part of the client, and a third person to represent an alternative point of contact for the solution.

The other participants directed the skit, and thought of solutions (services and functionalities) to transform the experience of contemporary clients vis-à-vis the ATM machine.

STORYBOARD

WHAT IS IT?

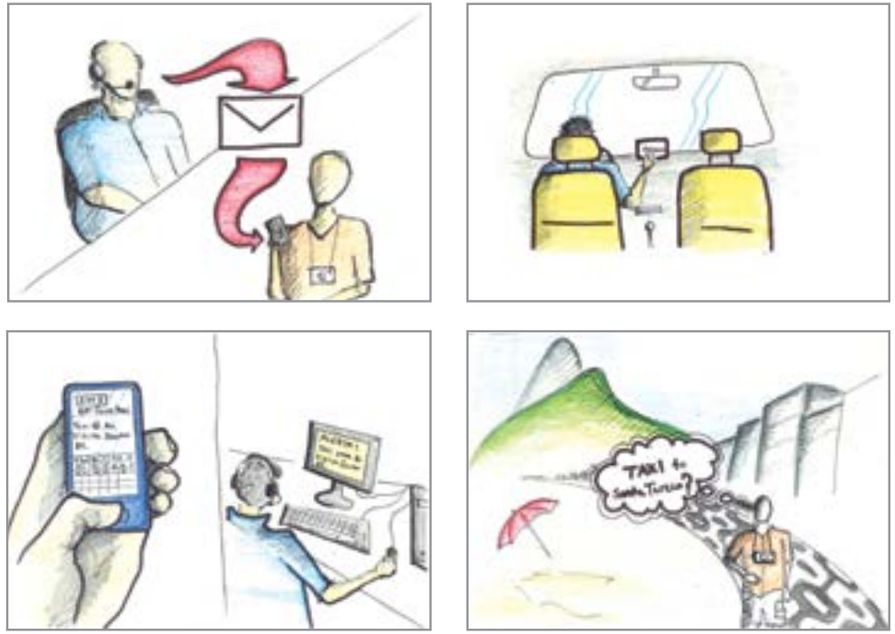
A visual representation of a story through static frames composed of drawings, collages, photos or any other available technique.

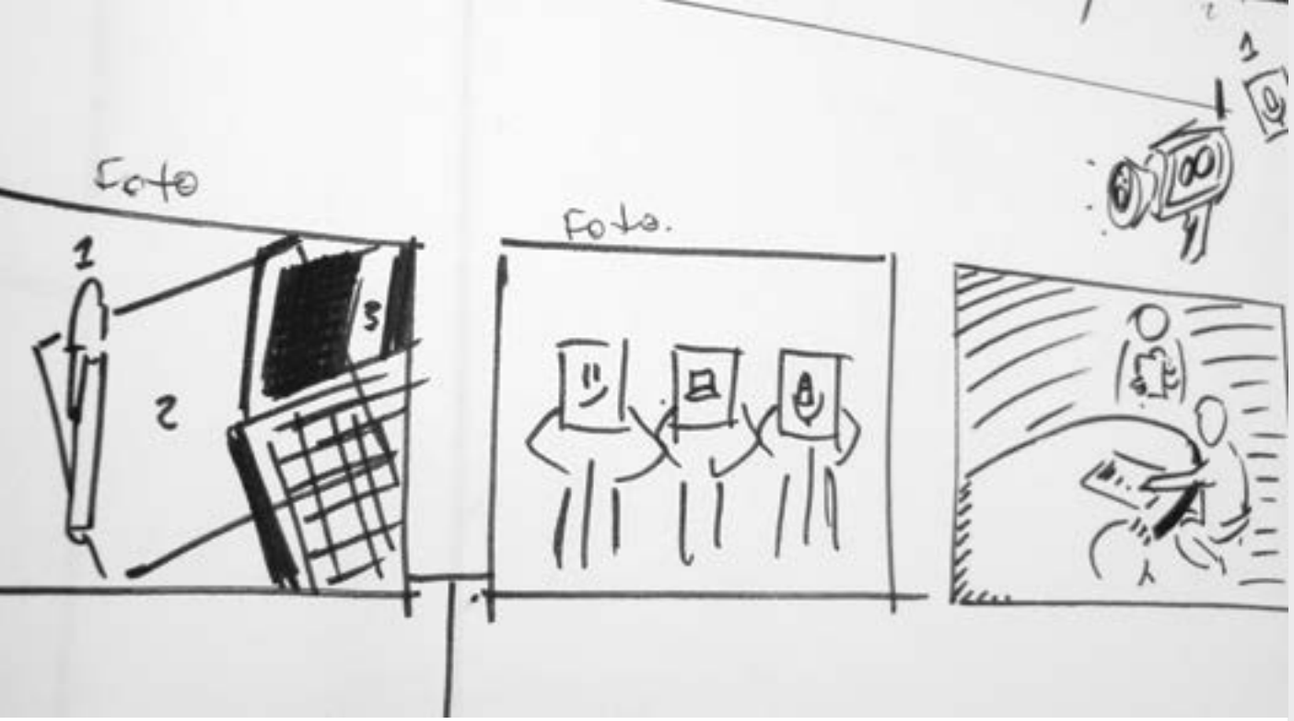
WHEN TO USE IT?

To communicate an idea to third parties or to visualize the sequencing of a solution, with the aim of detecting aspects that are still unresolved in the product, or to refine a final service.

HOW TO APPLY IT?

First, it is important to have a well defined idea of what is to be communicated and tested. Based on this, a screenplay is written, and then the story is broken down into sections, taking into consideration the sets, actors and framing that will be used to represent what is desired. Finally, the technique of graphic representation that is best suited or most convenient is chosen, and the final result may be printed or digital. The important thing is to provide a visual representation of what one wishes to communicate.





CASE — Communication of new functionalities of a site

The initiative for redesign of the site of a contest to stimulate improved tax collection required the creation of new functionalities geared towards meeting the needs of a younger audience. The solutions reached by the team were, first, prototyped on paper and tested with users. After a few rounds of paper prototyping, it was concluded that certain aspects of the new concepts created could be communicated more effectively in a more playful manner.

One of the new concepts was the creation of a "game within the contest." In order to stimulate users to register more sales coupons per day, the image of a star was exhibited for each new coupon registered on the site. Users who accumulated 5 stars by the end of a day would get a free coupon as a bonus.

The Storyboard was used to communicate the concept to users, to the client and, subsequently, it was also turned into a short animation to illustrate the functionality to be announced on the site of the contest.

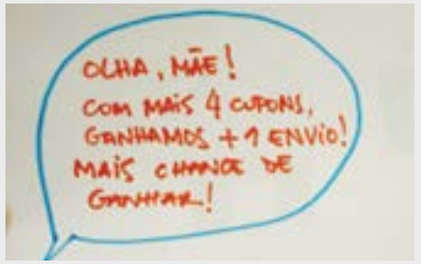
To communicate the concept, the following storyboard was created:

1. A woman goes to the supermarket.

2. When paying for her groceries, she sees the poster explaining the contest.

3. When she gets home, she asks her teenage son to register the data from her sales coupon on the site of the contest.

4. As her son registers the data for his mother…



5. …he notices that for every 5 coupons registered, his mother gets another one free as a bonus. "Look, Ma! 4 more coupons and we get a free one! We get a better chance of winning!"

SERVICE PROTOTYPING

WHAT IS IT?

It is the simulation of material artifacts, environments or interpersonal relations that represent one or more aspects of a service, to involve the user and simulate the provision of the proposed solution.

WHEN TO USE IT?

When one wishes to simulate the abstract aspects of services in order to validate understanding and sensations at each point of contact. Services are fluid and dynamic experiences played out over a period of time through a sequence of events, and therefore, each element must be planned, and users' interactions must be managed to design a solution that conveys a feeling of delight to the user.

HOW TO APPLY IT?

By seeking out a suitable environment and building up small elements that make these interactions workable so that the service can be implemented. Once the context is established, people can interact with the few projected physical elements, co-producing the experience in real time.

CASE — Scavenger Hunt for Health

Among the ideas selected from a Menu created for the Prototyping phase of a project to monitor chronic patients, several were chosen that were likely to offer solutions for the insured party (a company providing health coverage for its employees). Accordingly, a service called the Scavenger Hunt for Health was developed.

Comprising an assortment of activities, the Scavenger Hunt was conceived to be enacted by the insured party to engage company employees competing in teams. The aim was to reward the employees who could achieve the most meaningful changes in their health habits and adopt a healthier routine.

To encourage this transformation of habits, the competition was keyed to certain metrics of behavioral change. In the prototyping mode, the parameter used to measure the extent of a "change in habits" was weight, since it is a variable that is easy to monitor and check. Under this plan, the team that lost the highest percentage of weight by the end of the Scavenger Hunt would win a mystery prize. In order to control the pace of the competition and inspire commitment, every day during the competition, participants were weighed at a time agreed upon by all of the teams.

For each day of the game, a different, fast-moving activity was thought up to hold the players' interest by continually presenting something new. To this end, a variety of eye-catching graphic items were produced, such as: posters, a large, magnetized scoreboard, and leaflets with tips and instructions on how to improve the habits of their work routine. An e-mail group was created to encourage interaction among employees and stimulate competition.

When it was over, Prototyping had yielded new perceptions leading to a variety of improvements in the solution, such as: the duration of the Scavenger Hunt; the profile and number of employees; and which departments of the insured company should be involved, to name a few. This allowed for a more effective and robust implementation of the service.

CASE — Different points of sale at a transportation dealer

To develop innovative approaches to the sale of financial products at a transportation dealer, several concepts were selected – based on the User Itinerary and the adoption of Personæ – to be prototyped with great fidelity attuned to the context.

To this end, tickets for the securities were issued in the amounts that were to be tested, and presented for sale in the user environment, with the simulation of a variety of times and places where the products were to be introduced.

The prototyping was implemented over the course of three days of intense work, with the various prototypes presented simultaneously, and with oversight by the team of the client firm.

The results were highly significant, affording useful learning on the places best suited for publicizing and selling the product, as well as the communication strategy. In this context, the presence of company employees as observers was essential in order for them to grapple with each one of the concepts and assimilate recommendations in a constructive fashion.

To learn more about these tools go to:

www.livrodesignthinking.com.br/prototyping

Andorinha Project

An experience that goes beyond an airplane

PROTOTYPING

After the Ideation phase, we selected certain concepts to be prototyped in high fidelity, that is, tested in a real environment, simulating as thoroughly as possible the context in which the product/service was to be introduced.

Once these ideas were made tangible and anchored in reality, discussions began to plot a course for the implementation of future solutions.

Among the many ideas brought forth, we selected for prototyping those that held the greatest appeal to the Personæ, such as the first trip kit, price searching via SMS, and the offer of door-to-door taxi service.

Once these ideas were tested, what we learned from them was incorporated so, that, in a further prototyping cycle, the definitive solution would be proposed, reducing the risks to their implementation.

FIRST TRIP KIT

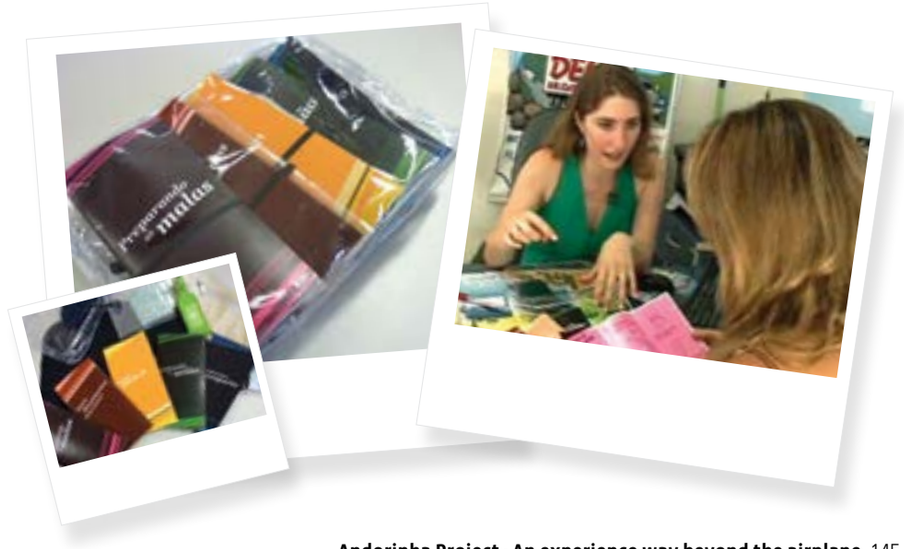
To teach first-time travelers about important issues in air travel, we developed a kit to be handed out to these clients as soon as they purchase their plane tickets.

The information was divided into 5 stages that went from packing to getting off the plane at the final destination. With this breakdown, the aim was to facilitate communication in order to make things more practical and easy to visualize.

The language adopted for the folders was full of illustrations and objective in tone. The vocabulary used in the text was intended to harmonize with the vernacular of the lower classes.

In addition to the folder, for each stage we prepared a gift associated with the information presented, to draw the passenger into the universe of air travel. For packing, we attached a small kit with a toothbrush and toothpaste; to go with the folder explaining the inside of the aircraft, we placed gifts to help the passenger relax, such as an eye-mask and an inflatable neck pillow.

The receptiveness of the prospective travelers was distinctly positive. Because they had no knowledge of the processes explained in the material, they said they felt safer after reading it. Those involved in prototyping also declared that handing out this material is particularly important because it is so hard to find this kind of information about air travel. As one woman put it in an interview, "No one is going to explain it to you, know what I mean? You have to ask around."



AIRFARE RESEARCH VIA SMS

Efforts to promote discount airfares are generally confined to the Internet. In an attempt to simulate these promotions for people who seldom access the Internet, while at the same time gauging their willingness to do price research by cell phone, we decided to prototype an airfare search service via SMS: within a few minutes after sending a text message stating intended destination and travel date, users receive a reply with the name of the airline and the lowest fare.

We produced cards explaining in a straightforward manner how the service worked, then hit the streets to publicize it. Because the support infrastructure had not yet been implemented, a member of the MJV team was stationed at the office standing by to receive text messages, track down the lowest fare online and forward the information back to the user.

We started the prototyping process near the Cinelândia subway station. However, the location proved unsuitable because people went by in such a hurry that they were not receptive to our approach. We then moved on to Floriano Peixoto Square, where we observed small groups of people talking, some of them sitting and others strolling along at an easy pace – a favorable setting for prototyping.

The results were astonishing. People were impressed at the convenience of having the lowest airfares available so quickly, and not only members of the lower classes, but others as well – such as two young ladies who at first seemed uncomfortable at our approach, but soon showed an interest in our service.

We noticed that people of more modest means seemed uncomfortable at the words “airfare,” making it plain that air travel was not a common event for them. But their discomfort faded away when we told them that flying was often cheaper than going by bus – a point many of them said they had not been aware of.

As we approached people sitting on benches, those seated beside them also became interested and ended up asking for information about the service. Some were receptive because they were already thinking of taking a trip. “Great! I’m dying to go to Salvador for my July vacation and I still haven’t got a ticket,” said one.

It should be noted that no one had any questions about how to text, which allows us to conclude that this practice comprises part of the routine of members of all social classes.

DOOR-TO-DOOR TAXI

Throughout the Immersion phase we noticed that relatives and neighbors often had to take travelers to the airport or pick them up there, both for reasons of safety and expense. On the other hand, some travelers preferred to take a cab because there are no relatives to give them a ride, or they simply would rather not impose on the people they know.

To ensure safe transportation at an affordable price and, above all, to avoid inconveniencing third parties, we created a service called "Door-to-Door Taxi," which allows travelers to take a cab with a registered agency to get them from their home to the airport; then when their flight arrives, another cab takes them to their final destination.

To test if the service would be well received by the public, we got in touch with a travel agency and worked out an agreement to the effect that, before closing the deal on a ticket sale, the travel agent would offer our "door-to-door taxi" service to prospective customers. The prototype was implemented for two days, with very positive results – by far the majority of travelers accosted ordered the taxi service.

According to the agent, it is common for travelers to be apprehensive regarding taxi service at airports, especially at the final destination. This service offered travelers security and peace of mind.

THE PROPOSED SOLUTION

After analyzing the Prototyping outcomes, we decided to develop a service that combined all the ideas we tested whose results were positive. In addition, other solutions were also included that met the specific demands noted in the Immersion phase, such as the importance ascribed to having the family present at the airport, to the moment of saying goodbye and to concerns about luggage.

As a result, we proposed having a service to engage passengers from the moment of their decision to travel by plane to arrival at their destination, including landing and transport to their place of accommodation. The main idea of the service would be to allow the traveler and his/her entire family to have an unforgettable emotional experience, trading the stress of waiting around at the airport for several hours of fun at an Entertainment Center.

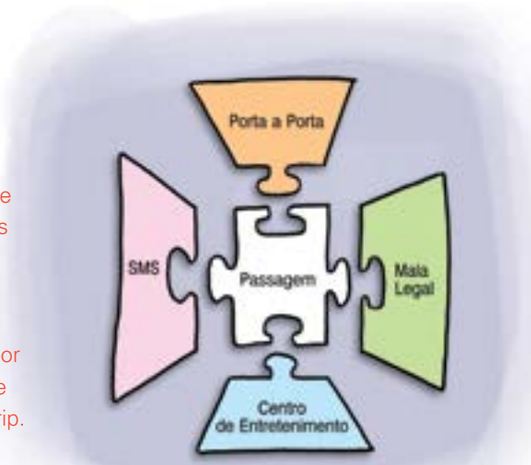
Below is a brief description of each one of the steps in the proposed solution:

1. An airline employee hands out brochures advertising the service of airfare price checking via SMS. On the back of the card there is a step-by-step explanation of how it works.

2. Within moments, the customer gets a message stating the lowest fare on the date in question.

3. If he so desires, the client can ask an airline employee to call and help him plan his trip, or actually issue the ticket. The customer service does not adhere to a rigidly formal procedure, and uses informal language to put the traveler at ease as much as possible..

During the call, the airline employee offers services in addition to the ticket purchase. Each service consists of a module, allowing the client to tailor his/her experience to the specific needs of each trip.



4. When the offer is put through, the customer receives a kit including tips addressing common concerns among travelers on their "maiden voyage." If necessary, additional information is available by phone.

In addition, travelers are also offered special discounts on clothes and luggage at a popular chain store.

5. For customers who have chosen the door-to-door taxi, a driver will pick them up at home, along with any companions, and take them to the airport on the date of the flight. Later, when the plane lands, another car will be waiting to take them to their final destination.

6. For passengers who have opted to visit the Entertainment Center, the taxi will take them there. At the entrance, it is possible to check in early for the flight, and even to publish a picture of the moment on Facebook or Orkut! Meanwhile, luggage is sent on to the airport, and travelers don't have to think about it until they reach their destination.

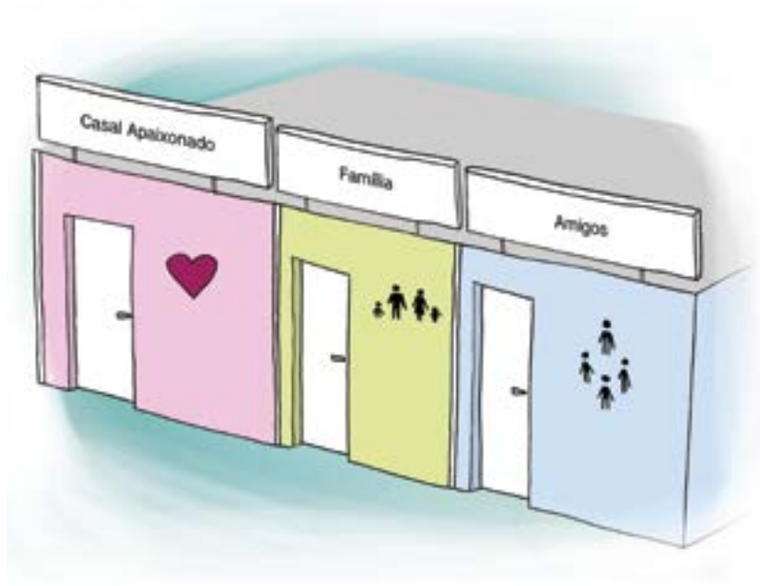
7. After a simplified check-in, the passenger receives his/her boarding pass and baggage claim in the form of a bracelet. This way, a traveler can be easily identified at the Entertainment Center, and the possibility of ticket loss is practically eliminated.

8. The passenger's companions can also acquire bracelets granting access to the Entertainment center, and this way the whole family can have fun!

9. At the Entertainment Center, the individual experience of air travel is transformed into a pleasant day of leisure with the family far from any worries. Here they can find flight simulators, amusement park rides, videogames, exhibits about subjects related to aviation, lectures, shows, shopping, fast food and much more!

10. Then, after having a great time, the passenger says goodbye to his/her loved ones. There is a special place at the Entertainment Center reserved for this purpose. Each farewell lounge has a different décor, selected to fit the occasion – for example, the Lovebirds' Farewell Lounge, the Family Farewell Lounge and the Farewell Lounge for a Crowd of Friends.

Before heading off to the airport, travelers can go through a pre-scan that spares them the uncomfortable ordeal of being searched when the X-Ray light turns on.



11. As the passenger proceeds to the airport in a special bus, with all arrangements taken care of, his/her family and friends can stay on to enjoy the Entertainment Center for as long as they like!

12. Upon arrival at the airport, passengers are guided by an airline attendant through security procedures all the way to the plane.

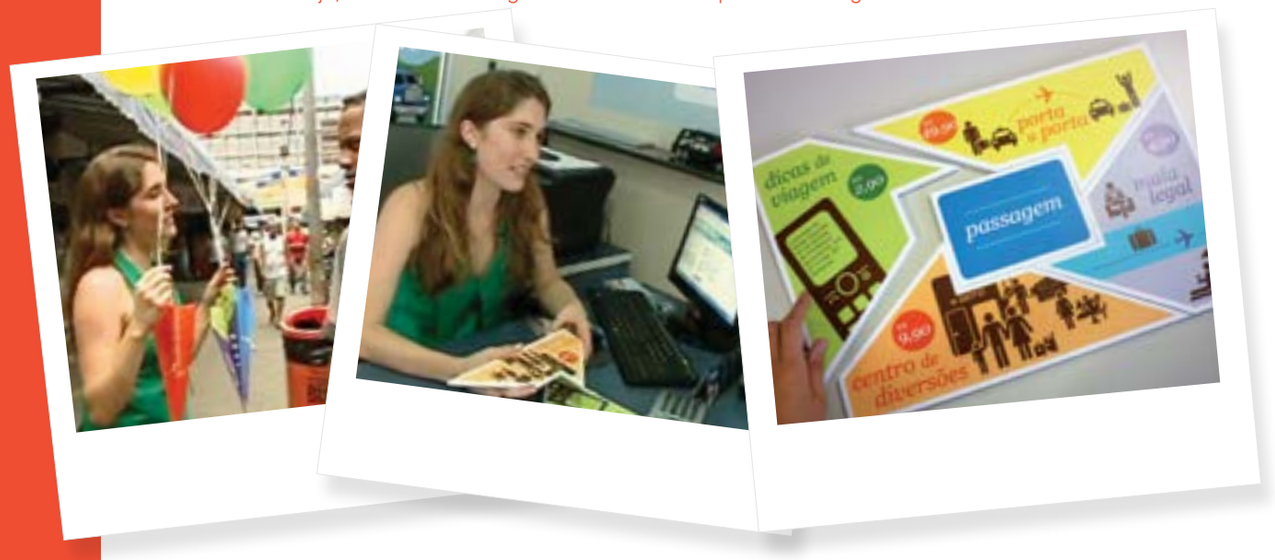
13. As soon as the traveler gets off the plane, he or she receives the pictures of the enjoyable moments spent with loved ones at the Entertainment Center. These pictures are souvenirs of pleasant hours spent far from any kind of stress!

PROTOTYPING AT SÃO CRISTÓVÃO SHOPPING CENTER

In order to evaluate yet again how well this service is received, we went to a travel agency located inside the São Cristóvão Shopping Center, in Rio de Janeiro. After reaching an agreement on the use of the space, we assumed the role of sales clerks and began to offer the product to clients coming into the agency.

To make the proposal tangible, we produced a modular jigsaw puzzle containing a visual representation of four services chosen to represent the "travel combo": the door-to-door Taxi, in which the passenger arranges transportation to the airport in the city of origin and from the airport at the destination; the "Luggage Special," in which the traveler's luggage is picked up at his/her house and checked by an airline agent; the "Travel Tips," in which the traveler can get tourism information on the region visited; and the "Amusement Center," where the traveler spends the day with his/her family, as described above.

The response to the product was very positive, particularly the Entertainment Center option. One of the clients interviewed, for example, found that it would help when it came time to say goodbye to her family since, whenever she goes to her hometown of Aracaju, her children and grandchildren make a point of seeing her off. In her view, it would make more sense to have a day of leisure with her family than to have them all waiting around at the airport for her plane to depart.



In order to publicize the service, at the shopping center the team handed out balloons attached to paper airplanes with information on the products being offered. Many people approached the team, attracted by the mood of an "event," and asked for a paper airplane. Soon there were balloons all over the shopping center, accomplishing the desired aim of publicizing the service.

BENEFITS OF AN EXPERIENCE WAY BEYOND AN AIRPLANE:

- To train future travelers;
- To provide a social occasion that includes the whole family;
- To turn the experience of air travel into something people long to do;
- To add value to air travel;
- To generate revenue through partnerships;
- To speed up and facilitate the check-in process;
- To reduce the number of people at the airport, avoiding terminals filled with passengers at the busiest times;
- To alleviate the stress of waiting for the flight;
- To mitigate the effects of "air travel chaos."

Now that I have innovative solutions, how can I transform them into business?

If you've made it this far, it's because you're interested in understanding how to innovate at your company. Probably, through the description of the states of Design Thinking', you could see how it is possible to place human beings at the center of the process, both to understand the end user and to engage specialists as permanent collaborators. This review of the experience from different perspectives makes it possible to find innovative solutions that are in synergy with company strategy. However, after identifying these new approaches, a new challenge arises: how to bring these co-created solutions to market?

The success of Design Thinking does not depend solely on creative thinking. This practice entails implementation and assurance of the fact that ideas will retain their essential character throughout the entire development process up until their market implementation.

Recently, the emphasis on Design Thinking has powerfully demonstrated the value of applying creative thinking in the business context. Nevertheless, this structured process for generating ideas is not by itself sufficient for the market. New practices are being discussed and they combine innovative solutions with the development of new business models through visualization, tangible artifacts and staging of scenarios intended to bring people together from different areas of activity and skill in devising amazing results. These participatory practices for developing new business extend the boundaries of how we think, and help us to choose the most innovative solutions. The process of implementing solutions involves transforming innovative ideas into new business. To this end, Design Thinking can be allied to other practices such as Rapid Development, Lean Start-up and Gamification, swiftly bringing the most robust solutions to market.

Drawing on Design Thinking, this book presents a participatory and creative approach to moving towards strategic innovation. But you cannot do this alone. Mobilize and engage all the players identified in this book to find out what is already well known, or to conceive something new. Besides giving visibility to latent needs, when you engage people you can transform insights into concrete actions. To guarantee the synergy of the process of innovation, all different perspectives must be collaboratively constructed. If players bring nothing more than their own point of view, it is nowhere near enough. User needs, new ideas and business opportunities must therefore be mutually worked out.

Insist on a process of innovation that is open and collaborative.
Acknowledge that innovation involves discovery and unexpected learning.

Discover, collaborate, innovate!

The MJV Team

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On the basis of the concept of this book, prospective readers are offered an initial vision of stages implicit to the Design Thinking approach, as applied in projects for innovation. The purpose of this material is to propagate in our country the culture of design as a strategic tool for companies, as well as the perception that the possibility of a financial return is often tied up with the ability to approach these issues from new angles.

The proposition of involving both clients as well as users in the stages of the solution development process is highly advisable to achieve results that are actually efficient; from the definition of direction to Immersion; from repositioning to Ideation; from Prototyping to Implementation. It is believed that the best solutions are those that are constructed in a collaborative fashion, through a combination of different perspectives experienced in a variety of ways.

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ISBN 978-85-65424-01-1