

THE DESIGN OF VISION CONCEPTS WITH SMALL AND MEDIUM-SIZED ENTERPRISES

Tips & Tricks for Designers and SMEs

By Ricardo Mejía

[#FutureThroughDesign](#)

Dive Log / Tagline

PROJECT NAME: _____	
Representative(s) from the SME:	NAME: _____
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DESIGNER(S):	NAME: _____
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October, 2015

Dear designers and businessmen,

Welcome to this project -journey- that will give you the opportunity to discover a design-led technique that can boost innovation in your organization.

In this notebook -diary log- the designers will find all the information needed to design Vision Concepts with businessmen who run small and medium-sized enterprises (SMEs). In this project, designers can be located within the company, as part of in-house specialized department; or outside the company, as external designers coming from independent designers up to large design agencies.

In addition, businessmen will also find all the instructions and templates that support the design technique including some examples and case studies on how this technique can benefit your organizations.

This document is divided in four parts: (1) an introduction, (2) the purpose of Vision Concepts, (3) the notion of Vision Concepts, and (4) the design of Vision Concepts with SMEs. The last section includes an overview of the design technique and the instructions of each of its steps. In addition the instructions encompass the canvas for the workshops and the worksheets for the report of each step.

Kind regards,



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This project is part of the research project #FutureThroughDesign that involves two promoters Prof. dr. P.J. Stappers (Pieter Jan) and Prof. dr. H.J. Hultink (Erik Jan); and a daily supervisor: Dr. G. Pasman (Gert).

This project is sponsored by the Administrative Department of Science, Technology and Innovation of Colombia (Colciencias).





Print instructions

This notebook is divided into three sections, the instructions, the canvas for the workshops, and the worksheets for the report.

It is designed to be printed in one of two versions:



DEFAULT version

This version is ideal for businessmen (SMEs).

The entire document can be printed in standard printer paper (A4 or letter-size), 70 gms, full color.

Tips & Tricks for businessmen: fit to page and print on both sides of paper.



FULL COLOR version

This version is ideal for designers.

The document can be printed in three rounds:

1. the introduction and the worksheets for the report can be printed in standard printer paper (A4 or letter-size), 70 gms, full color.

Tips & Tricks for designers: fit to page and print on both sides of paper.

2. the folder can be plotted in cardboard A0, 160 gms, full color.

3. the canvas for the workshops can be plotted in standard printer paper A0, 70 gms, B&W.

Tips & Tricks for designers: fit to page and print on one side of paper.



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INTRODUCTION

The purpose of this project is to explore the way to design Vision Concepts with SMEs and also to identify how this design technique benefits this kind of organisations.

01

SMEs are essential for the social and economic development in several regions. An example is the European Union, where, according to the European Commission (2005), SMEs are a major source of entrepreneurial skills, innovation and employment.

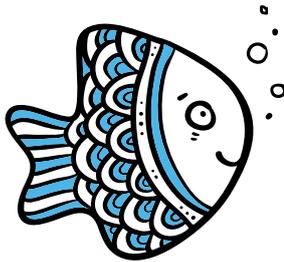
Within SMEs businessmen face a constant dilemma, they have to act according to the current situation and need to be ready for the future. Cornella (2013) claims that organizations have two main needs, exploiting old ideas to survive in the present, and exploring new ideas to have opportunities in the future. But, SMEs focus almost exclusively on short-term problems (French and Bell, 1990), and they do not have enough skills to explore the future (French and Bell, 1990; and Cornella, 2013). As a result, SMEs have less potential for innovation and competitiveness. Several studies have examined

issues related to innovation in SMEs including the role of the designer working in, for, or with SMEs (e.g. de Lille, 2014) but little is known about the way that designers can support SMEs in exploring the future to innovate.

The purpose of this project is to explore the way to design Vision Concepts with SMEs and also to identify how this design technique benefits this kind of organisations. At this stage in my research, concept visioning will be generally defined as a design-led technique used by SMEs to explore the future and thus, innovate.

The design goal of my PhD project is to advance a technique that can help designers to design Vision Concepts with SMEs and the research question is what are the benefits of concept visioning for SMEs?

THE BENEFIT OF CONCEPT VISIONING FOR SMES



“Develops capabilities for SMEs and inspires different parties inside and outside this kind of organizations”.

Based on the benefits reported by large corporations that use Vision Concepts -or long-term Concept Cars and long-term Concept Products-, it is hypothesised that concept visioning (i) develops capabilities for SMEs and (ii) inspires different parties inside and outside this kind of organizations.

(i) Through concept visioning businessmen, who lead SMEs, develop capabilities to innovate and communicate, among others:

// Capabilities to innovate: enhancing creative problem-solving skills and gaining new knowledge about the topic that is explored and

the context factors that are studied.

// Capabilities to communicate: gaining -design- skills to communicate concepts.

(ii) The design of Vision Concepts engage different parties involved in innovation and provoke a conversation about company's future directions. Through this conversation, Vision Concepts enhance cooperation between people, aligning their agendas and increasing their motivation to face the future.

THE THREE MINDSETS BEHIND CONCEPT VISIONING

To undertake this project -journey- is essential define the core values of this speculative design-design about ideas technique. These values clarify the way in which designers and businessmen are going to work together. To be part of this journey, designers and businessmen should believe in:

THE SPECULATIVE FUTURES.

A set of futures that provide to the designers and businessmen a free space (an space with non-commercial/financial pressure) for speculating, for dreaming... "The future cannot be predicted, but futures can be invented" (Gabor, 1963).

<< 01

02 >>

THE POWER OF "MAKING".

A hands-on process of exploring and experimenting, where designers and businessmen learn by doing. "Making as a creative act which involves construction and transformation of meaning" (Sanders and Stappers, 2014).

THE IMPORTANCE OF PEOPLE.

A commitment to involve diverse people through experiential prototypes and fictional narratives to provoke conversation. A conversation that mainly make us think about the future, stimulating communal dreaming and changing our perception and actions about the present.

<< 03

The design of Vision Concepts as a way to democratize the future where small actors have the power to dream as loud as large corporations.

THE PURPOSE OF VISION CONCEPTS

***Tips & Tricks for designers and businessmen (SME):
Be aware that the core of this project is innovation and internal communication (stimulating conversation about the future) instead of external communication or branding.***



The purposes of Vision Concepts are related to innovation, as a way to cope with the complexity of the future, and communication, as a way to share and discuss the company's' future direction with a large number of parties involved in innovation.

In regards to innovation, a Vision Concept acts as a probe that explore a new territory, the future. In this exploration, designers and businessmen experiment with several ideas through sketches and prototypes. During

the exploration, they perceive, interpret, and respond to change, discovering opportunities and risks in the future, and making decisions about the present.

Additionally, in regards to communication, a Vision Concept is presented as a prototype that is the main character of a fictional narrative, which grabs people's attention, internally, stimulating conversation about the future; and externally, as a statement of intent, communicating the company's' future direction.

THE NOTION OF VISION CONCEPTS

Vision Concepts

Vision Concepts are experimental artifacts made by organizations, outside of their commercial portfolio, to explore and communicate a preferable future. These tangible -future- concepts embody several ideas, which make the ideas concrete and actionable.

Tips & Tricks for designers:

Be aware that in contrast to probable and plausible futures a preferable future is concerned with what we “want to” happen. These are more emotional than cognitive. See in the chapter “Relevant literature”: Voros (2003).

Car manufacturers already have a traditional and well known manifestation of Vision Concepts called Concept Cars, which since 1938 boost innovation in this economic sector.



Image by Mercedes-Benz, Research & Development Communications.

MERCEDES-BENZ F015 F 015 LUXURY IN MOTION, BY DAIMLER AG 2015

Mercedes-AMG, part of Daimler AG, is a brand used for luxury products. It has a specific portfolio of Research Vehicles with a total of 24 Concept Cars from 1993 to 2012, the brand launched 18 (75%) as production vehicles after one and a half year in average.

The main purpose of the F015 is to state, as a branding exercise, that the company is exploring and innovating about autonomous-drive cars.

The F015 is a self-driving luxury saloon car with a sleek futuristic appearance. It is a vehicle “fifteen years ahead of current developments” that “is growing beyond its

role as a mere means of transport and will ultimately become a mobile living space”. According to the head of Mercedes-Benz Cars, the F015 represents “an exclusive cocoon on wheels that enable people to do what they want to do”.

The F015 was presented and subject to a test drive, in the CES* in 2015 as a fully operational -research- car. The fully working prototype was supported by a press release, a comprehensive set of images, videos and texts.

* *International Consumer Electronics Show*

Other branches of the industry have been using Concept Products with the same purpose of Concept Cars.



Image by Communications, Philips Design.

BIO-DIGESTER KITCHEN ISLAND BY PHILIPS, 2011

Philips, a company focused in electronics, healthcare and lighting, developed the “Philips Design Probes Program” (1996 - 2012) to “create concepts based on research into emerging ‘societal signals’ and technologies” looking far into the future.

Thirteen Vision Concepts are arranged in a specialized portfolio called Design Futures. Probes projects “are intended to understand future socio-cultural and technological shifts”, culminating in “a ‘provocation’ designed to spark discussion and debate around new ideas and lifestyle concepts”. Insights gained from debate around the concepts feed into future innovation for the company, “improving the innovation hit rate”.

This Vision Concept is a repositionable kitchen island that is the central hub in the Microbial Home system. The island consists of “a methane digester that converts waste into methane gas that is used to power a series of functions in the home”.

It was exhibited at the Dutch Design Week in 2011. The concept was supported by the Philips foresight initiative, which was developed through the webpage <http://designprobes.ning.com/>. Additional to the exhibition and the webpage a comprehensive report that “captures all the concepts, though processes and intellectual property ideas”, was used as the input of several workshops within the company.



Image by Dunne and Raby.

DIGICARS BY DUNNE & RABY, 2013

Dunne, a designer, and Raby, an architect, “use design as a medium to stimulate discussion and debate amongst designers, industry and the public about the social, cultural and ethical implications of existing and emerging technologies” (Dunne and Raby, 2013)

According to them (2013) they apply design fictions, which “uses storytelling as an experimental device to question the world around [them]. Using a combination of concepts, objects and visuals, design fictions are propositions for how things could be done differently. “By working with vehicles [designers] could playfully explore new combinations of political systems and energy sources in a post-fossil-fuel England divided into four super shires, each experimenting

with different forms of energy, economics, politics, and ideology.

Digicar is an electric self-drive car, which is the main form of transport for digitarians, a -fictional- society that is organized entirely by market forces. According to Dunne and Raby (2013) “digicar has evolved from being a vehicle for navigating space and time, to being an interface for navigating tariffs and markets”. The project formulates questions about the way that products, services and systems are made and used.

The project was exhibited under the name “United Micro Kingdoms: A Design Fiction” at the Design Museum London in August 2013. In addition to the scale models, a set of pictures, texts, and videos have been set for a compelling narrative.

THE DESIGN OF VISION CONCEPTS WITH SMES

A quick dive into a fictional future

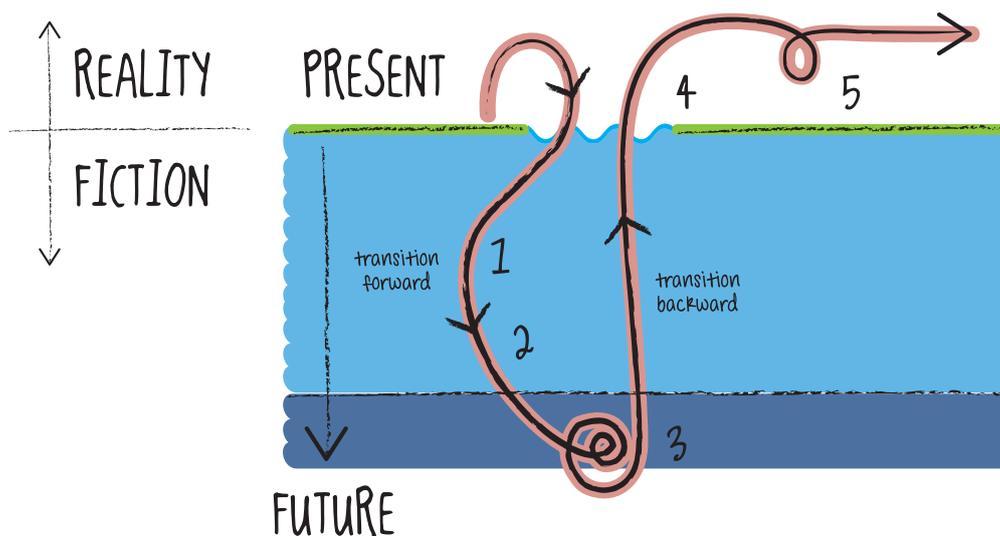
In this journey, the guides (the designers) and the scuba divers (the businessmen) explore the depths of a fictional future. During this underwater exploration, the company is seen as a living being, a fish. A fish that swim through calm and rough waters to fulfill its purpose in life.

Through the dive, the guides accompany the fish and the scuba divers envisioning future waters and creating a Vision Concept. Then, on the surface of the water, the guides make prototypes and a fictional narrative. The prototypes and the fictional narrative help

the divers in the transition backward from the fictional future to the real present.

At the end, on land (the reality-present), the guides facilitate a conversation where the prototypes and the narrative are used to spark discussions between diverse people about the future and the present.

During the dive and the conversation the scuba divers perceive, interpret, and respond to change, discovering opportunities and risks in a fictional future, which help them to make decisions about the -real- present.

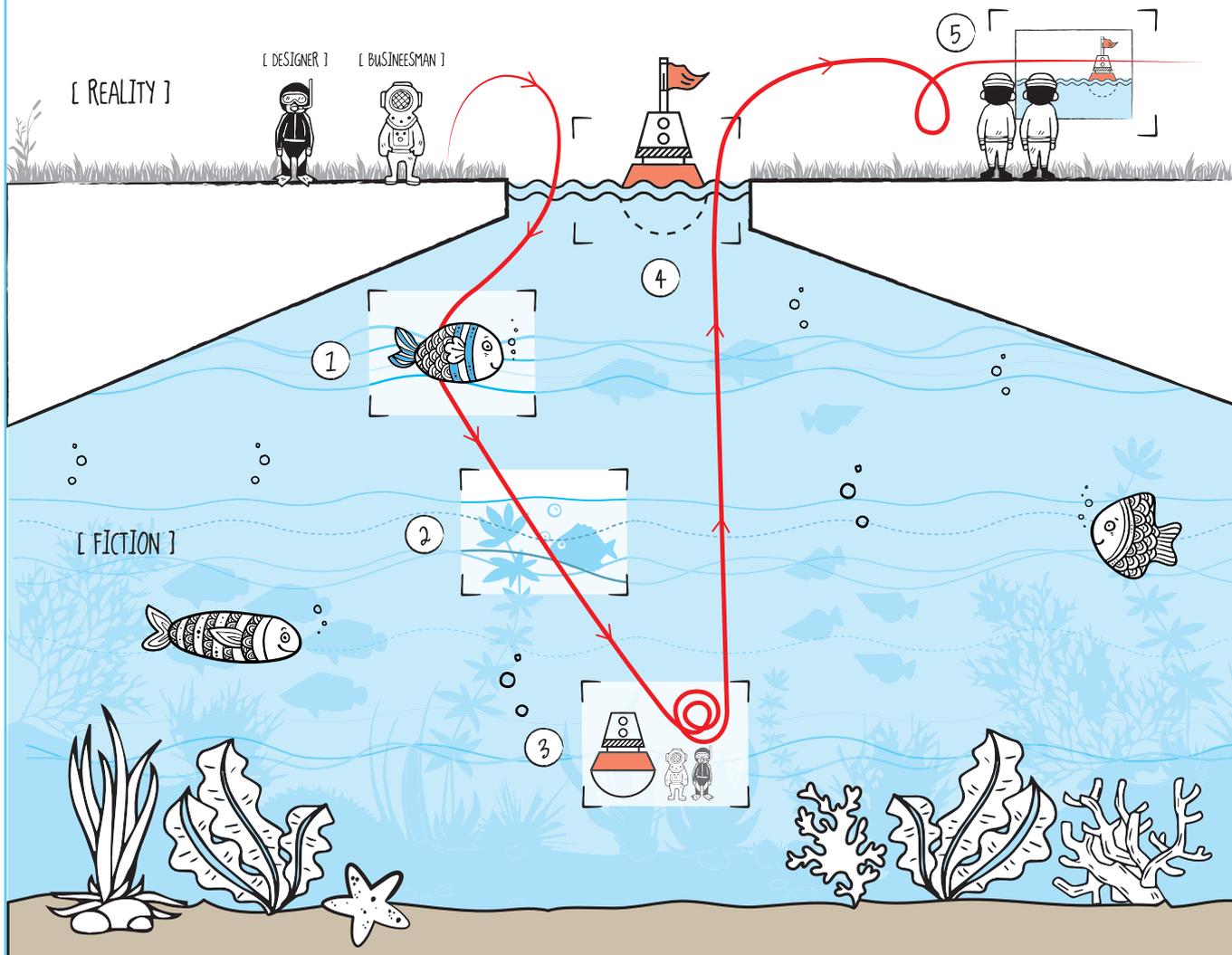


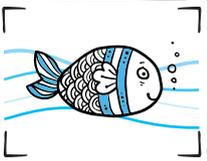
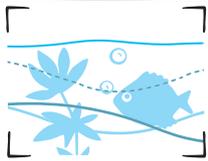
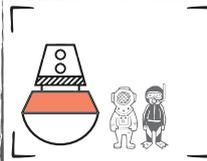
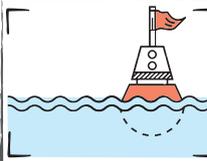
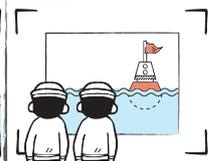
It is a hands-on process that includes two moments and two transitions, the present, the transition -going forward- from the present to the future, the future, and the transition -coming backward- from the future to the present. During the whole process, the designer and the SME learn by doing.

OVERVIEW OF THE CONCEPT VISIONING

This design-led technique has been developed specifically for designers to support SMEs designing Vision Concepts. The diagram below presents the distribution of the five steps of the concept visioning.

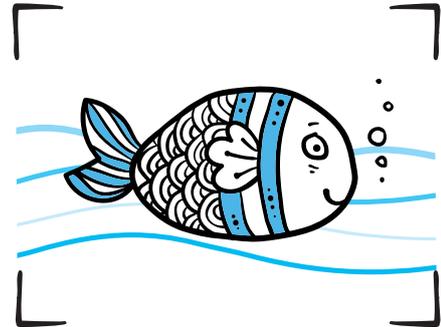
1. Understanding the present |
2. Approaching the future |
3. Exploring the future |
4. Communicating the future |
5. Looking back into the future



	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
					
	UNDERSTANDING THE PRESENT	APPROACHING THE FUTURE	EXPLORING THE FUTURE	COMMUNICATING THE FUTURE	LOOKING BACK INTO THE FUTURE
PURPOSE	Define a domain	Define a vision	Create the concept	Communicate the concept	Sketch a roadmap
METHODS	Strategic PES	Observation, research and cluster analysis	Prototyping	Storytelling	Conversing
ACTIVITIES	Workshop	Research Workshop	Workshop	Make the refined prototype, create a narrative & make the other visualizations	Workshop
TIME (DESIGNERS)	6 hours	8 hours 2 hours	4 hours	40 hours	10 hours
TIME (SME)	2 hours		2 hours	4 hours	2 hours
TIME (OTHERS)			2 hours		2 hours
RESOURCES	< 50 Euros	< 100 Euros	< 100 Euros	< 1000 Euros	< 500 Euros
INPUTS	Instructions, canvas and worksheets	Canvas and worksheets	Worksheets	Worksheets	Prototype and other visualizations
PARTICIPANTS	Designers	Designers	Designers	Designers	Designers
	Manager, designer, marketer and engineer		Manager, designer, marketer & engineer		Manager, designer, marketer and engineer
			Expert of the domain		Other stakeholders
DELIVERABLES	Time- frame and the domain	The image of the future	Rough prototype(s)	Refined prototype(s)	Roadmap
	-Design-question	The vision		Other visualizations	Final report

STEP 01

UNDERSTANDING THE PRESENT

**Purpose:**

The aim of this step is to define a domain (see Tips & Tricks) based on the understanding of the current situation of the organization in its context.

Method:

The “strategic PES (product, experience, and service)”, a tool to conduct visual -internal & external- analysis of SMEs.

Activities:

The designers organize, facilitate and report a workshop with the manager and three other members of the SME. The workshop is divided into two sections:

- // Internal & external analysis.
- // Definition of the time-frame and the domain.

Time:

4 hours to prepare & report and a 2 hours-long workshop.

Resources: <50 Euros.

Inputs:

The instructions, the canvas (strategic PES) and the worksheets for the report.

Participants from the SME:

The manager, one person with experience in design, one in marketing and one in production.

Deliverable:

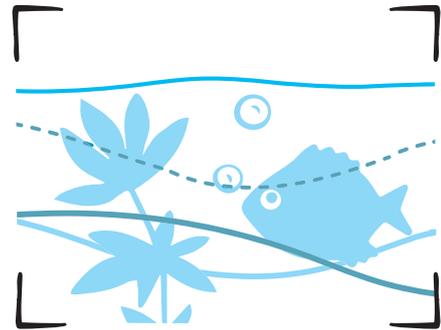
The canvas, the time-frame, the domain and the design question.

Tips & Tricks for designers and businessmen (SME):

- // A domain is a relevant area of people’s life that the company impact. You will define context factors and explore possibilities for the company based on the domain.
- // Be aware that the domain is not a product category.
- // It is recommended to formulate a -design- question when defining the domain.
- // Push boundaries! be open when defining the domain.
- // More details in the chapter “Relevant literature”: Mejia & Parra (2014) and Hekkert, Van Dijk, & Lloyd (2011).

STEP 02

APPROACHING THE FUTURE

**Purpose:**

The goal of this step is to define a vision based on future context factors (see Tips & Tricks).

Methods:

An observation and a secondary research to build an image of the future, and a cluster analysis to choose a strategic direction and define a vision.

Activities:

This step is divided in two parts:

Part 1. Research.

The designers observe people in their daily life. The designers research about the domain through several sources (e.g. internet, specialized journals, experts, etc.). They identify context factors based on the previous activities.

With these context factors they create a preliminary image of the future.

Part 2. Workshop.

The designers organize, facilitate, and report a workshop with the SME. The workshop is divided into three sections:

- // Refinement of the image of the future.
- // Definition and selection of the concerns.
- // Definition of the vision.

Time:

8 hours to observe, research & report and a 2 hours-long workshop.

Resources: <100 Euros.

Inputs:

The canvas (image of the future) and the worksheets for the report.

Participants:

The manager, three other members of the SME (see step 1) and an external expert in the domain (optional).

Deliverable:

The image of the future (canvas) and the vision in a form of a short text.

Tips & Tricks for designers and businessmen (SME):

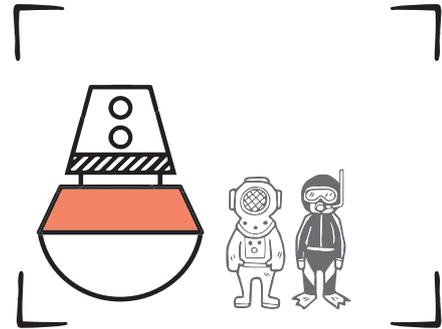
// All the concepts used during this step (trends, developments, states, and principles) are ways to cope with the complexity of the future and find new strategic directions for the company.

// A vision is a statement that explains the desired relationship between people and products/services in a defined image of the future.

// More details in the chapter "Relevant literature": Hekkert, Van Dijk, & Lloyd (2011).

STEP 03

EXPLORING THE FUTURE

**Purpose:**

The aim of this step is to create the concept through the exploration of different ideas.

Method:

Prototyping. The initial ideas are probed through a series of low-fi prototypes and then iterated till a final concept.

Activities:

The designers arrange and facilitate a workshop with the SME to explore ideas and design the concept.

Time:

A 4 hours-long workshop to iterate the ideas.

Resources: <100 Euros.

Inputs:

The worksheets for the report.

Participants:

The manager and three other members of the SME (see step 1).

Deliverable:

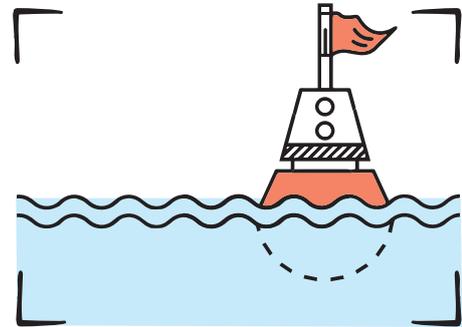
Rough prototype(s) and other information that define the concept (texts, sketches, diagrams, etc.).

Tips & Tricks for designers and businessmen (SME):

Prototypes are used to understand, explore and communicate the ideas and concepts.

STEP 04

COMMUNICATING THE FUTURE

**Purpose:**

The aim of this step is to make the refined prototype(s) and other type of visualizations (see Tips & Tricks) to communicate the concept.

Methods:

Any method to make the refined prototype(s) and storytelling to create the other visualizations.

Activities:

- // The designers make the refined prototype.
- // The designers create a narrative that present the image of the future, including people, the concept, the context, and their relationships.
- // The designers make the other visualizations based on the narrative.

Time:

40 hours to develop and make the final prototype and the other visualizations.

Resources: <1000 Euros.

Inputs:

The worksheets for the report.

Participants:

The designers.

Deliverable:

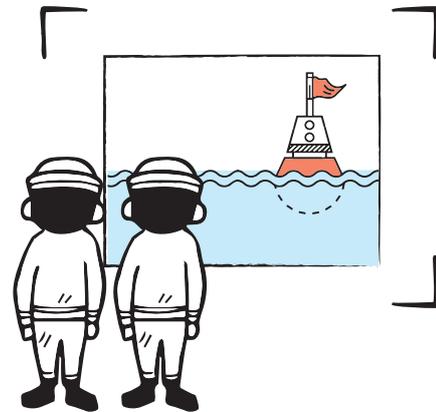
Refined prototypes of the concept and the other visualizations.

Tips & Tricks for designers and businessmen (SME):

The other visualizations are any kind of media (e.g. texts, images, diagrams, videos, stages, etc.) that contributes to communicate the concept in an efficient way. They are made depending on the facilities and resources of the designers and the SME.

STEP 05

LOOKING BACK INTO THE FUTURE

**Purpose:**

Purpose: the goal of this step is to converse in regards to the future and the present of the SME.

Method:

Conversing techniques. Through a conversation the businessmen and other relevant stakeholders can discuss the domain, the future and the present of the SME.

Activities:

// The designers arrange and moderate a workshop with the businessmen and other relevant stakeholders.

// The designers document the workshop to produce a comprehensive report.

Time:

8 hours to prepare and report and a 2 hours-long workshop.

Resources: <500 Euros.

Inputs:

The prototype(s) and the other visualizations.

Participants:

The manager, the three other members of the SME (see step 1), and the other relevant stakeholders.

Deliverable:

The exhibition within the workshop, which includes the prototype(s) and the other visualizations, and the report of the workshop compiled with the other reports in the folder.



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