english

SC-Design

Course Instruction

Manual

"Social City Delft Project 2012"

Coaching:
Clemens de Lange / Coordinator / Stichting Social Cohesion Design
Tjamme Wiegers / Industrial Design Engineering (IDE)
Sjoerd Post / Student Assistant IDE

ID5029

The Ibieca Case...

During the early 1970s, running water was installed in the houses of Ibieca, a small village in northeast Spain. With pipes running directly to their homes, Ibiecans no longer had to fetch water from the village fountain. Families gradually purchased washing machines, and women stopped gathering to scrub laundry by hand at the village washbasin.
Arduous tasks were rendered technologically superfluous, but village social life unexpectedly changed. The public fountain and washbasin, once scenes of vigorous social interaction, became nearly deserted. Men began losing their sense of familiarity with the children and donkeys that once helped them haul water. Women stopped congregating at the washbasin to intermix scrubbing with politically empowering gossip about men and village life. In hindsight the installation of running water helped break down the Ibiecans' strong bonds—with one another, with their animals, and with the land--that had knitted them together as a community...

Course Information

Course Contents
A product designer according to the definition of Industrial Design Institutes is a person or a team that develops a product from initial idea to the full set of specifications needed for production. Designers are typically not educated to include social cultural values such as, property, trust, social cohesion, safety, environment awareness. The Social Cohesion Design Foundation (SCDF) in Delft,The Netherlands has initiated the 'Social Cohesion Design' course, aiming at providing designers with a robust 'step by step' methodology to include aspects of social cohesion in designer practise. The methodology is named: The 3-i Methodology, and is structured in three stages, Identification, Integration and Implantation. The course has the ambition to cope with following challenges:

- Can industrial designers actually contribute to 'Social Change'?
- Can designers be social activists?
- Can industrial designers design products/services that effectively enhance aspects of Social Cohesion?

Study Goals

- The student is capable of reflecting on design as a potential driver for aspects of Social Cohesion in a community;The student is capable of developing a specific Social Cohesion Design Mission for a design project;
- The student is capable of translating the mission into a scenario for a 'Community Integrated Product System' (C.I.P.S.).
- The student is capable of envisioning an implantation of the C.I.P.S. in the user context contributing to 'Social Change'.
- The student is capable of presenting his concept for a forum of design experts, public and media.

Education Method
The course social cohesion design consists of an abstract assignment to be executed for the Social Cohesion Design Foundation (see Case assignment 2009-2010),or a practical assignment for a production company (see Douwe Egberts Case assignment 2010-2011). In the second course pilot project application of the 'Q Methodology' has been added to the 3-i Methodology to enable students to help develop a specific Social Cohesion Mission for the assignment.

The course is structured in 3 stages:

- i-1/ Identification: students have to sample the community in which the technology has to be implemented, and have to build a 3D Scenario board of this community. In this community, called Setting X, actors, elements and events have to be identified. For this community, actors will be included laying the 'Q Sort' as tool to define a Social Cohesion Design Mission. Based on their mission students start to write subscenarios on an individual basis.
- i-2/ Integration: The diverse subscenarios of the individual students will be integrated into one main scenario. For this they involve actors as well as the company. In this stage students have developed the criteria to make a selection of the scenarios possible. Typically SC-designers use a Harris Profile as a selection / evaluation tool. They are free to apply the Q methodology in this stage as well. Based on the selection of the final concept / concept components students design the new Coffee Distribution System.
- i-3/ Implantation: For the newly developed Sc Design concept the students develop a rough outline for a business, branding and promotion plan to be presented to the actors as well as to the company. The focus in this stage is set upon the devepoment of a 'Look & Feel' of the concept to communicate the mission.

Assessment

Analytical skills

Is the student capable of constructing a logical framework
to plan, conduct, monitor, communicate and evaluate his design process
to himself, his team, the coach and the client.

Research skills

Is the student capable of conducting research necessary to collect
data for his design process.

Creative skills

Is the student capable of envisioning creative scenarios, innovative
thinking and conducting the assignent in a 'fresh' and original manner.

Presentational Skills

Is the student capable of communicating his design process in reporting,
live- presenting and coach/client meetings.

Social Cohesion mission

Did the student finally develop a concept that matches with his mission
statement and is expected to enhance social cohesion.

**Final mark is the average outcome
of the 5 marks given to the skills
as mentioned above.**

"Main learning goal
of the
Social Cohesion Design Course
is the formation
of the Social Mindset..."

Clemens de Lange

i – 1 Identification

Week 1
Mo 6 February Kick Off 14:00 hrs.
We 8 February 13:00 - 17:00 hrs.
SC-Design Introduction

Selecting Setting X Actors & Elements

Week 2
We 15 February

SC Mission

I Interviews
Team aims at improving specific aspects of SC in Setting X Interviews

Week 3
We 22 February
Philosophy lecture (e.a. Heidegger)

Scenarios + 2D Visuals (Individual)

Friday 24 February
Team presentations
Handing In Draft Report

i – 2 Integration

Week 4
We 7 March

Selecting SubScenarions + 2D Visuals (Team)

Week 5
We 14 March

Q method
H Profile
Constructing Main Scenario

Week 6
We 21 March
Feedback Lecture

Concept

Fri 23 March
Team presentations
Handing In Draft Report

i – 3 Implantation

Week 7
We 28 March
Lecture Business,Branding & Promotion

Business, Branding & Promotion (BBP)

Fri 30 March : Start Mock Ups

Week 8
We 4 April

L Likert Scale Method

Final Vision

Team evaluates SC-Mission and concludes final Vision Statement

Week 9
We 11 April
Feedback lecture

Final CIPS

Fri 13 April
Team presentations
Handing In Draft Report

20 April Wise Owl Award / 27 April Evaluation
+ Handing in Final Report /30 April EXPO

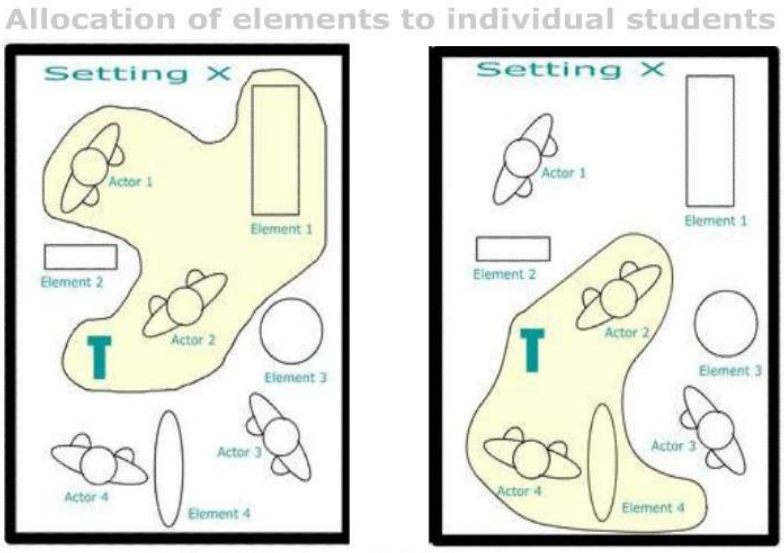
Social City Delft project

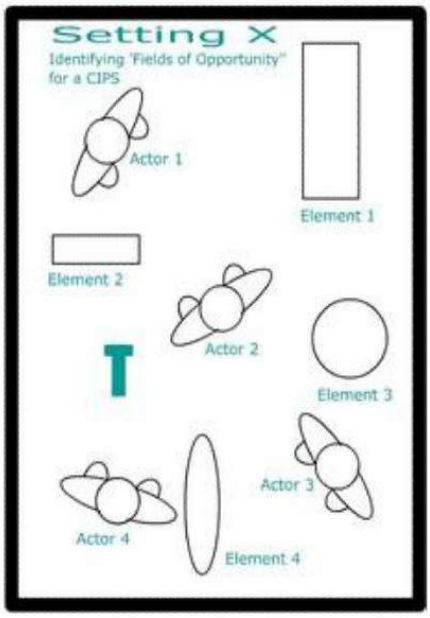
Rethink City Elements such as Public furniture, Canal hoppers, Waste containers, Panna cages, Bike parkings, Bike taxi's, etc.etc., as potential drivers for Face2Face contacts in Delft.

Step 1 Week 1

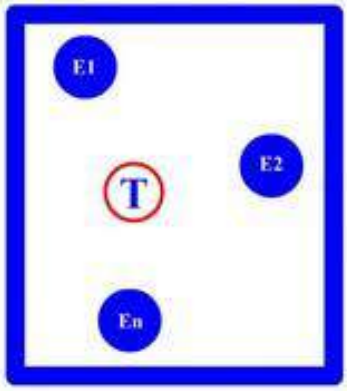
Organise SC-Design Team (dynamics, housestyle, expectations,etc.)
Analyse Assignment (see App. 1)
Select Setting X, Identify Actors, Elements & Events

Setting X is a sample taken from the community in which the technology is to be implemented. Setting X consists of elements (e.a. school, hotel, cafe, household, media, object, time, infrastructure, etc. etc. present at the setting X). Actors consist of Delft inhabitants, students, tourists, etc.





Setting X (community sample)

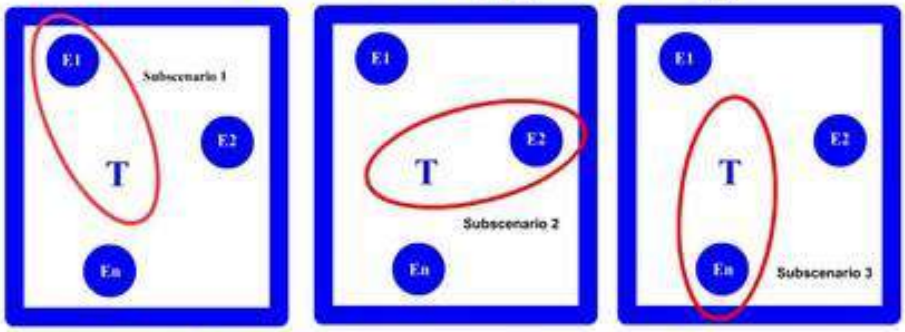


E1...-En = Community Elements
T= Technology functional

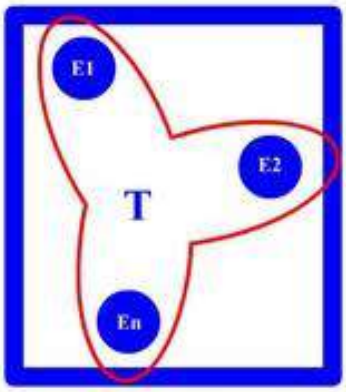
(T) = T-Scope (T+Experience)

(T) + E = 'Field of Opportunity'

'Fields of Opportunity'



Stretching T-Scope to include new Community Elements



Community Integrated Product System C.I.P.S.

SC-Design theory

Build 3D Scenario Board

Students from slum- assignment 2010 discussing impact of their technology design on social interaction in a slum settlement.

Step 2 Week 2

Visit Company and make Analysis.
Rethink company/technology as potential driver for improving F2F.
Define SC mission.
Conduct Interview Surveys.

Technology / Main Line Theory
Technology is the making, usage, and knowledge of tools, machines, techniques, crafts, systems or methods of organization in order to solve a problem or perform a specific function. It can also refer to the collection of such tools, machinery, and procedures. The word *technology* comes from Greek *τεχνολογία (technología)*; from *τέχνη (téchnē)*, meaning "art, skill, craft", and *-λογία (-logía)*, meaning "study of-".[1] The term can either be applied generally or to specific areas: examples include *construction technology*, *medical technology*, and *information technology*.

Technologies significantly affect human as well as other animal species' ability to control and adapt to their natural environments. The human species' use of technology began with the conversion of natural resources into simple tools. The prehistorical discovery of the ability to control fire increased the available sources of food and the invention of thewheel helped humans in travelling in and controlling their environment. Recent technological developments, including theprinting press, the telephone, and the Internet, have lessened physical barriers to communication and allowed humans to interact freely on a global scale. However, not all technology has been used for peaceful purposes; the development ofweapons of ever-increasing destructive power has progressed throughout history, from clubs to nuclear weapons.

Technology has affected society and its surroundings in a number of ways. In many societies, technology has helped develop more advanced economies (including today's global economy) and has allowed the rise of a leisure class. Many technological processes produce unwanted by-products, known as pollution, and deplete natural resources, to the detriment of the Earth and its environment. Various implementations of technology influence the values of a society and new technology often raises new ethical questions. Examples include the rise of the notion of efficiency in terms of human productivity, a term originally applied only to machines, and the challenge of traditional norms.

Philosophical debates have arisen over the present and future use of technology in society, with disagreements over whether technology improves the human condition or worsens it. Neo-Luddism, anarcho-primitivism, and similar movements criticise the pervasiveness of technology in the modern world, opining that it harms the environment and alienates people; proponents of ideologies such as transhumanism and techno-progressivism view continued technological progress as beneficial to society and the human condition. Indeed, until recently, it was believed that the development of technology was restricted only to human beings, but recent scientific studies indicate that other primates and certain dolphin communities have developed simple tools and learned to pass their knowledge to other generations.

References

Neil Postman, Technopoly: The Surrender of Culture to Technology, New York: Vintage, 1993.
Martin Heidegger, "The Question Concerning Technology," in The Question Concerning Technology and Other Essays, trans. W. Lovitt, New York, Harper Torchbooks, 1977, pp. 25–6.
Fromm Erich, 1955, The sane society, ISBN 978-0415605861
Fromm Erich,1968, The revolution of hope: towards a humanized technology, ISBN 978- 90561836
Fromm Erich,1976, To have or to be, ISBN 978-0805016048
Papanek Victor,1971, Design for the real world: Human ecology and social change, New York, Pantheon books, ISBN 0-394-47036-2
Papanek Victor,1983, Design for human scale, New York, Van Nostrand Reinhold, ISBN 0-442-276-16-8
Papanek Victor, 1995, The green imperative: natural design for the real world, New York, Thames and Hudson

ISBN 0-500-27846-6
Illich Ivan,1973, Tools for conviviality, ISBN 0-06-080308-8

Social Capital / Main Line Theory

1.Sense of Belonging

Belonging includes the person's fit with his/her environments and also has three sub-domains. Physical Belonging is defined as the connections the person has with his/her physical environments such as home, workplace, neighbourhood, school and community. Social Belonging includes links with social environments and includes the sense of acceptance by intimate others, family, friends, co-workers, and neighbourhood and community. Community Belonging represents access to resources normally available to community members, such as adequate income, health and social services, employment, educational and recreational programs, and community activities.

2.*Face to Face*

Researchers at McGill University found that it takes less than a day of no normal contact with the outside world for an adult to start hallucinating.

Even when it's not such drastic circumstances, talking to a live person can give us a surge of energy in the middle of the workday. "In-person contact stimulates an emotional reaction," says Lawrence Honig, a neurologist at Columbia University. Bonding hormones are higher when people are face-to-face. And some scientists think that face-to-face contact stimulates the attention and pleasure neurotransmitter dopamine, and serotonin, a neurotransmitter that reduces fear and worry.

3.*Social Capital*

Social capital is a sociological concept used in business, economics, organizational behaviour, political science, public health and the social sciences in general to refer to connections within and between social networks. Though there are a variety of related definitions, which have been described as "something of a cure-all" for the problems of modern society, they tend to share the core idea "that social networks have value. Just as a screwdriver (physical capital) or a college education (human capital) can increase productivity (both individual and collective), so do social contacts affect the productivity of individuals and groups".

References:

Sclove Richard E ,1995, Democracy and technology
New York : Guilford Press
Friedkin Noah E. – Social Cohesion
Department of Sociology, 2000, University of California, Santa Barbara,
California 93106;
Putnam Robert - Bowlin' Alone / The collapse and revival of American community
New York, Simon & Schuster 2000
Reeskens Tim , Botterman Sarah & Hooghe Marc, 2000,– Is Social Cohesion one latent concept?
Investigating the dimensionality of social cohesion on the basis of the
Kearns and Forrest typology. Center for Political Research, KULeuven

Interviews / Main Line Theory

An interview is a conversation between two people (the interviewer and the interviewee) where questions are asked by the interviewer to obtain information from the interviewee.

Interview as a Method for Qualitative Research

"Definition" - The qualitative research interview seeks to describe and the meanings of central themes in the life world of the subjects. The main task in interviewing is to understand the meaning of what the interviewees say. (Kvale,1996)

[edit]Aspects of Qualitative Research Interviews

Interviews are completed by the interviewer based on what the respondent says.
Interviews are a far more personal form of research than questionnaires.
In the personal interview, the interviewer works directly with the respondent.
Unlike with mail surveys, the interviewer has the opportunity to probe or ask follow up questions.
Interviews are generally easier for respondent, especially if what is sought is opinions or impressions.
Interviews are time consuming and they are resource intensive.
The interviewer is considered a part of the measurement instrument and interviewer has to well trained in how to respond to any contingency.

[edit]Types of interviews

Informal, conversational interview -no predetermined questions are asked, in order to remain as open and adaptable as possible to the interviewee's nature and priorities; during the interview the interviewer "goes with the flow".
General interview guide approach -the guide approach is intended to ensure that the same general areas of information are collected from each interviewee; this provides more focus than the conversational approach, but still allows a degree of freedom and adaptability in getting the information from the interviewee.
Standardized, open-ended interview -the same open-ended questions are asked to all interviewees; this approach facilitates faster interviews that can be more easily analyzed and compared.
Closed, fixed-response interview -where all interviewees are asked the same questions and asked to choose answers from among the same set of alternatives. This format is useful for those not practiced in interviewing.

References

Foddy, William. Constructing Questions for Interviews, Cambridge University Press, 1993
General Accounting Office. Using Structured Interviewing Techniques. Program Evaluation and Methodology Division, Washington D.C., 1991

Step 3 Week 3

Develop Sub Scenarios on Individual basis.

Contemplation

Scenarios & 'Flow' / Main Line Theory
Scenarios evoke reflection in the content of design work, helping developers coordinate design action and reflection. Scenarios are at once concrete and flexible, helping developers manage the fluidy of design situations. Scenarios afford multiple views of an interaction, diverse kinds and amounts of detailing, helping developers manage the many consequences entailed by any given design move. Scenarios can also be abstracted and categorized, helping designers to recognize, capture, and reuse generalizations, and to address the challenge that technical knowledge often lags the needs of technical design. Finally, scenarios promote work-oriented communication among stakeholders, helping to make design activities more accessible to the great variety of expertise that can contribute to design, and addressing the challenge that external constraints designers and clients often distract attention from the needs and concerns of the people who will use the technology.
Elements
Scenarios have characteristic elements. They include or presuppose a setting: Scenarios also include agents or actors: human activities to include several to many agents. Each agent or actor typically has goals or objectives. These are changes that the agent wishes to achieve in the circumstances of the setting. Every scenario involves at least one agent and at least one goal.
Actors
When more than one agent or goal is involved, they may be differentially prominent in the scenario. Often one goal is the defining goal of a scenario, the answer to the question O , why did this story happen? Similarly, one agent might be

the principal actor, the answer to the question who is this story about? Scenarios have a plot; they include sequences of actions and events, things that actors do, things that happen to them, changes in the circumstances of the setting, and so forth.

Events

Particular actions and events can facilitate, obstruct, or be irrelevant to given goals. Representing the use of a system or application with a set of user interaction scenarios makes that use explicit, and in doing so orients design and analysis toward a broader view of computers. It can help designers and analysts to focus attention on the assumptions about people and their tasks that are implicit in systems and applications. Scenario representations can be elaborated as prototypes, through the use of storyboard, video, and rapid prototyping tools. They are the minimal contexts for developing user-oriented design rationale: a given design decision can be evaluated and documented in terms of its specific consequences within particular scenarios. Scenarios and the elements of scenario-based design rationale can be generalized and abstracted using theories of human activity, enabling the cumulation and development of knowledge attained in the course of design.

Flow (contemplating and envisioning scenarios in 'Flow State')

Flow also called "Optimal experience" is a concept developed by Mihaly Csikszentmihalyi.

"the holistic experience that people feel when they act with total involvement" .

References.

Csikszentmihayli & Nakamura, Mihaly & Jeanne ,2002, The Concept of Flow, The Handbook of Positive Psychology: Oxford University Press, pp. 89–92, ISBN 9780195135336

Csikszentmihalyi, M.,Optimal experience: psychological studies of flow in consciousness, Cambridge, UK: Cambridge University Press, pp. 15–35,

Csíkszentmihályi, Mihály ,1996, Creativity: Flow and the Psychology of Discovery and Invention, New York: Harper Perennial, ISBN 0-06-092820-4

Csikszentmihalyi, M & Rathunde, K ,1993. "The measurement of flow in everyday life: Towards a theory of emergent motivation". In Jacobs, JE. Developmental perspectives on motivation. Nebraska symposium on motivation.

Motivation / Main Line Theory

Motivation is the driving force by which humans achieve their goals. Motivation is said to be intrinsic or extrinsic.The term is generally used for humans but it can also be used to describe the causes for animal behavior as well. This article refers to human motivation. According to various theories, motivation may be rooted in a basic need to minimize physical pain and maximize pleasure, or it may include specific needs such as eating and resting, or a desired object, goal, state of being, ideal, or it may be attributed to less-apparent reasons such as altruism, selfishness, morality, or avoiding mortality. Conceptually, motivation should not be confused with either volition or optimism.Motivation is related to, but distinct from, emotion.

why would people change ?

A reward, tangible or intangible, is presented after the occurrence of an action (i.e. behavior) with the intent to cause the behavior to occur again. This is done by associating positive meaning to the behavior. Studies show that if the person receives the reward immediately, the effect is greater, and decreases as duration lengthens. Repetitive action-reward combination can cause the action to become habit. Motivation comes from two sources: oneself, and other people. These two sources are called intrinsic motivation and extrinsic motivation, respectively.

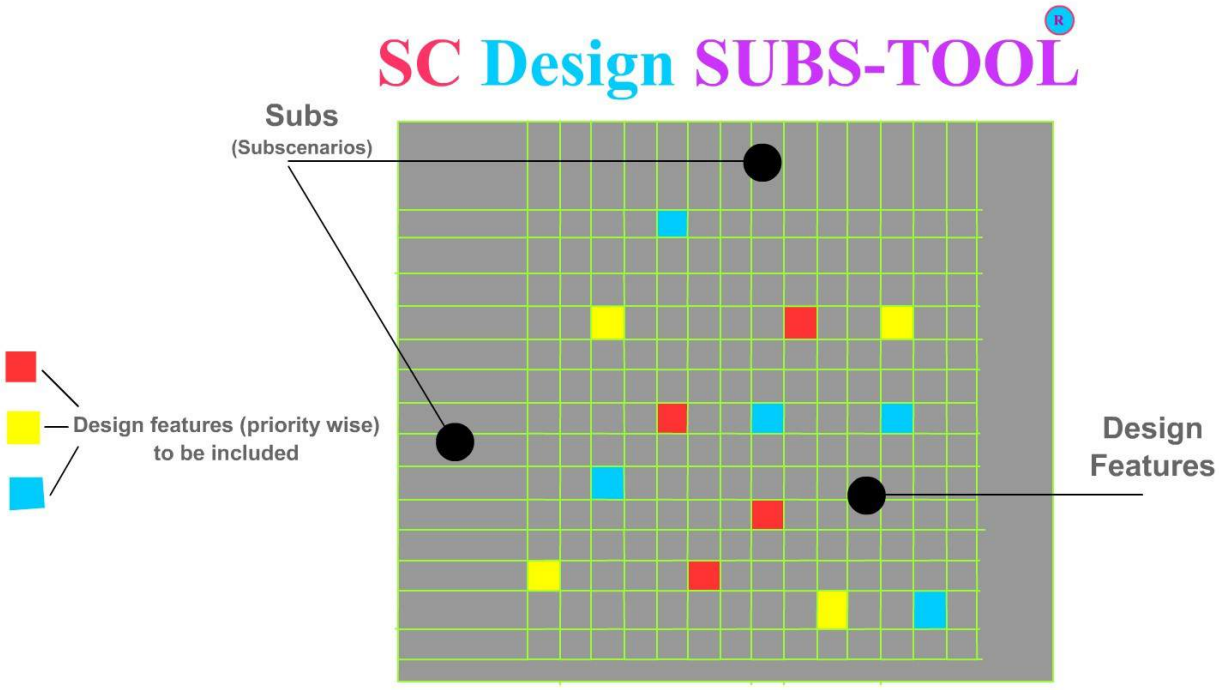
References

Cofer, Charles N; Appley, Mortimer H ,1967, Motivation: Theory and Research, New York, London, Sydney: John Wiley & Sons

Fishbein, M.; Ajzen, I. 1975, Belief, attitude, intention, and behavior: An introduction to theory and research, Reading, MA: Addison-Wesley

Step 4 Week 4

Select & Modify most promising Sub Scenarios as a Team applying SC Design Subs-Tool.



SC Design SUBS-TOOL® is a problem-solving tool to gain new and innovative insights in CIPS features-design. With the tool you can "feed" the team-mind's association power and discover unique insights in the SC- design task.

There are five simple steps to take when having a SC Design SUBS-TOOL Session.

1. Preparing the A0 format paper and colored sets of 'post-it's'.
2. Writing subscenarios (1-14) on both X-ax and Y-ax.
3. Brainstorming subscenario design- features.
4. Highlighting promising combinations of Subsenario design-features.
5. Select limited number (typically 7) of design- features to be included in CIPS constructing.

Step 5 Week 5

Apply Q Methodology and Factor Analysis with actors.
Apply Harris Methodology with client.
Construct Main Scenario.

Q methodology / Main Line Theory

Q methodology provides a foundation for the systematic study of subjectivity, a person's viewpoint, opinion, beliefs, attitude, and the like (Brown 1993). Typically, in a Q methodological study people are presented with a sample of statements about some topic, called the Q-set. Respondents, called the P-set, are asked to rank-order the statements from their individual point of view, according to some preference, judgement or feeling about them, mostly using a quasi-normal distribution. By Q sorting people give their subjective meaning to the statements, and by doing so reveal their subjective viewpoint (Smith 2001) or personal profile (Brouwer 1999).

Laying the Q sort

These individual rankings (or viewpoints) are then subject to factor analysis. Stephenson (1935) presented Q methodology as an inversion of conventional factor analysis in the sense that Q correlates persons instead of tests; "[w]hereas previously a large number of people were given a small number of tests, now we give a small number of people a large number of test-items". Correlation between personal profiles then indicates similar viewpoints, or segments of subjectivity which exist (Brown 1993). By correlating people, Q factor analysis gives information about similarities and differences in viewpoint on a particular subject. If each individual would have her/his own specific likes and dislikes, Stephenson (1935) argued, their profiles will not correlate; if, however, significant clusters of correlations exist, they could be factorised, described as common viewpoints (or tastes, preferences, dominant accounts, typologies, et cetera), and individuals could be measured with respect to them.

Factor Analysis / Main Line Theory

The factors resulting from Q analysis thus represent clusters of subjectivity that are operant, i.e., that represent functional rather than merely logical distinctions (Brown 1993; 2002[b]). "Studies using surveys and questionnaires often use categories that the investigator imposes on the responses. Q, on the other hand, determines categories that are operant" (Smith 2001). A crucial premise of Q is that subjectivity is communicable, because only when subjectivity is communicated, when it is expressed operantly, it can be systematically analysed, just as any other behaviour (Stephenson 1953; 1968).

The results of a Q methodological study can be used to describe a population of viewpoints and not, like in R, a population of people (Risdon et al. 2003). In this way, Q can be very helpful in exploring tastes, preferences, sentiments, motives and goals, the part of personality that is of great influence on behaviour but that often remains largely unexplored. Another considerable difference between Q and R is that "Q does not need large numbers of subjects as does R, for it can reveal a characteristic independently of the distribution of that characteristic relative to other characteristics.

References.

Exel Job van ,Graaf Gjalt de, 2005 , - Q Methodology/ A sneak PreviewErasmus MC, Institute for Medical Technology Assessment (iMTA),Vrije Universiteit, Dept. of Public Administration & Organisation Science, Faculty of Social Sciences.

Brown Robert, 1996, - Q Methodology and Qualitative ResearchQualitative Health Research,

Campbell, T.C.1995, – Investigating structures underlying relationships when variables are not thefocus: Q – technique and other techniques, paper presented at the Annual Meeting of theAmerican Educational Research Association, San Francisco,

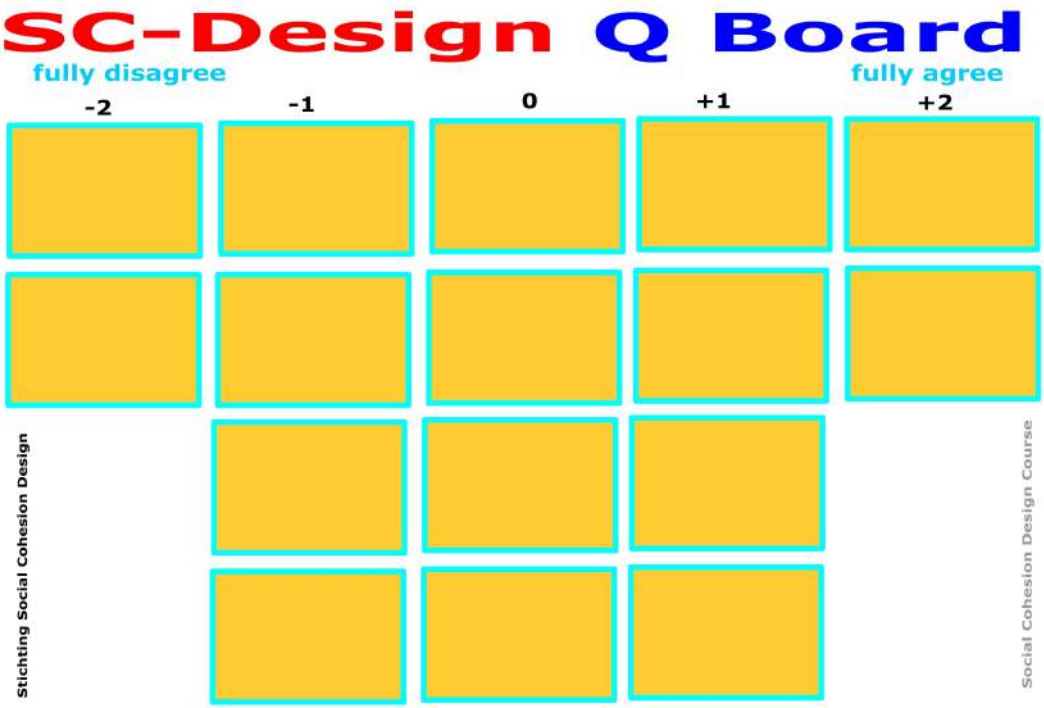
Kramer, B., Hegedus, P., Gravina, V. 2003- Evaluating a Dairy Herd Improvement Project in Uruguayto Test and Explain Q Methodology, Proceedings of the 19th Annual Conference Raleigh, NorthCarolina, USA, , p. 347

Kufeld, C. – A Q –methodological study investigating the identity self – descriptions of a group ofex- smokers, Dissertation Research Project, University of Luton, p. 19

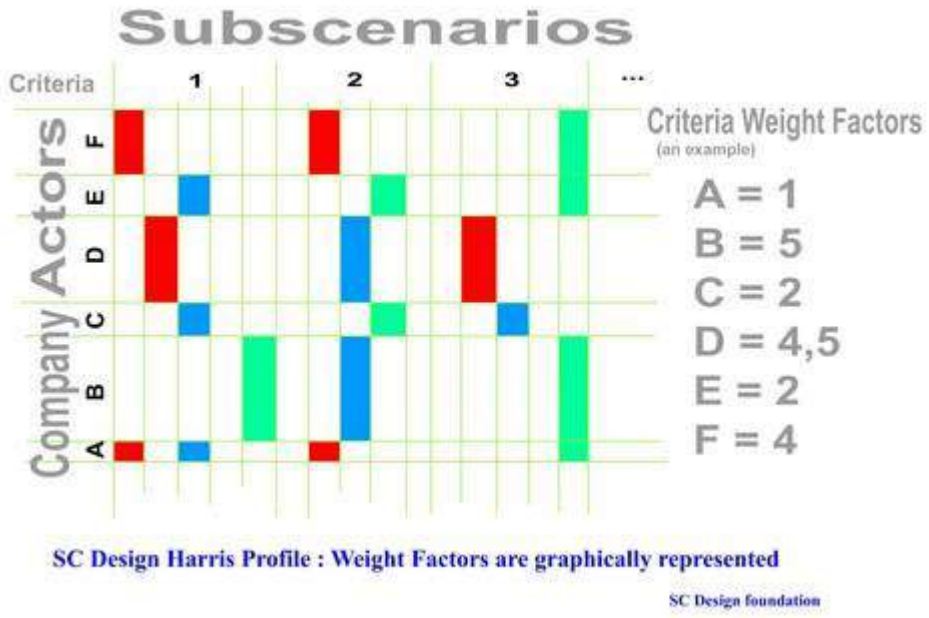
Condition of Instruction: How do you (respondent) perceive the impact of our (design team) SubScenarios on Face2 Face contacts?

Statementsprovided by staff:

Statements to be developed by Design Team:



Harris Profile / Theory Main Line
A New Product Profile (or Harris Profile) is a graphic representation of the strenghts and weaknesses of design concepts. Originally, a New Product Profile is applied as a useful tool to evaluate and select development projects (ideas for new business activities).Per design alternative a Harris Profile is created. A number of criteria are used to evaluate the design alternatives. A fourscale scoring is used for all criteria.
Criteria should ne selected according to which the design alternatives should be compared (be sure to cover all important aspects of the product development project with the selected criteria).
List the criteria and create a four-point scale matrix next to it. The scale is coded-2, -1, +1, and +2.
Create a Harris profile for the design alternatives you want to compare. Draw the profile by marking the scores in the four-point scale matrix for all the criteria.
When the Harris Progfiles of the design alternatives are completed, the progfiles can be compared and a judgment can be made as to which alternative has the best overall score.



SC-Design Harris Profile.

Step 6 Week 6

Construct Community Integrated Product System (C.I.P.S.) Build Mockup.

Mockups

In manufacturing and design, a mockup, or mock-up, is a scale or full-size model of a design or device, used for teaching, demonstration, design evaluation, promotion, and other purposes. A mockup is called a prototype if it provides at least part of the functionality of a system and enables testing of a design.

Applications

Mockups are used virtually everywhere a new product is designed. A few specific examples are the following:
Automotive devices:
Mockups are used in the automotive device industry as part of the product development process, where dimensions, overall impression, and shapes are tested in a wind tunnel experiment. They can also be used to test consumer reaction.
Systems engineering:
Mockups, wireframes and prototypes are not so cleanly distinguished in software and systems engineering, where mockups are a way of designing user interfaces on paper or in computer images. A software mockup will thus look like the real thing, but will not do useful work beyond what the user sees. A software prototype, on the other hand, will look and work just like the real thing. In many cases it is best to design or prototype the user interface before source code is written or hardware is built, to avoid having to go back and make expensive changes.
Early layouts of a World Wide Web site or pages are often called mockups. A large selection of proprietary or open-source software tools are available for this purpose.

Consumer goods

Mockups are used in the consumer goods industry as part of the product development process, where dimensions, human factors, overall impression, and commercial art are tested in marketing research.
Furniture and cabinetry
Mockups are commonly required by designers, architects, and end users for custom furniture and cabinetry. The intention is often to produce a full-sized replica, using inexpensive materials in order to verify a design. Mockups are often used to determine the proportions of the piece, relating to various dimensions of the piece itself, or to fit the piece into a specific space or room. The ability to see how the design of the piece relates to the rest of the space is also an important factor in determining size and design.
When designing a functional piece of furniture, such as a desk or table, mockups can be used to test whether they suit

typical human shapes and sizes. Designs that fail to consider these issues may not be practical to use. Mockups can also be used to test color, finish, and design details which cannot be visualized from the initial drawings and sketches. Mockups used for this purpose can be on a reduced scale.
The cost of making mockups is often more than repaid by the savings made by avoiding going into production with a design which needs improvement.

Software Engineering

The most common use of Mockups in software development is to create user interfaces that shows the end user what the software will look like without having to build the software or the underlying functionality. Software UI mockups can range from very simple hand drawn screen layouts, through realistic bitmaps, to semi functional user interfaces developed in a software development tool.
Mockups are often used to create Unit tests - there they are usually called Mock objects. The main reasons to create such mockups is to be able to test one part of a software system (a unit) without having to use dependent modules. The function of these dependencies is then "faked" using mock objects.
This is especially important if the functions that are simulated like this are difficult to obtain (for example because it involves complex computation) or if the result is non-deterministic, such as the readout of a sensor.
Mockup Software can also be used for micro level evaluation, for example to check a single function, and derive results from the tests to enhance the products power and usability on the whole.

Step 7 Week 7

Develop Business, Branding & Promotion (BBP) Plan.

Estimate costs for pilot project.

BBP / Theory Main Line

A **business plan** is a formal statement of a set of business goals, the reasons why they are believed attainable, and the plan for reaching those goals. It may also contain background information about the organization or team attempting to reach those goals.Business plans may also target changes in perception and branding by the customer, client, or larger community. When the existing business is to assume a major change or when planning a new venture - a 3 to 5 year business plan is essential.

A branding plan

Branding describes the process by which entrepreneurs differentiate themselves and stand out from othersby identifying and articulating their unique value proposition, and then leveraging it across platforms with a consistent message and image to achieve a specific goal. In this way, enterprises can enhance their recognition as experts in their field, and establish reputation and credibility.
Branding consists of three elements:
. Value Proposition: What do it stand for?
. Differentiation: What makes it stand out?
. Marketability: What makes it compelling?

Promotion plan

Promotion is one of the four elements of marketing mix (product, price, promotion, distribution). It is the communication link between sellers and buyers for the purpose of influencing, informing, or persuading a potential buyer's purchasing decision. The following are two types of Promotion:
Above The Line Promotion: Promotion in the media (e.g. TV , Radio, Newspapers , Internet, Mobile Phones, and, historically, Illustrated songs) in which the advertiser pays an advertising agency to place the ad.
Below The Line Promotion: All other promotion. Much of this is intended to be subtle enough for the consumer to be unaware that promotion is taking place. E.g. sponsorship, product placement, endorsements, sales promotion, merchandising, direct mail, personal selling, public relations,trade shows.

Step 8 Week 8

Evaluate final concept with actors, applying Likert.
Propose strategic partners.
Estimate costs for pilot project.

Likert Scale Methodology / Theory Main Line

A likert Scale is a psychometric scale commonly used in questionaires, and is the most widely used scale in survey research, such thatvthe term is often used intercangeably with rating scle even though the two are not synonymous. When responding to a Likert questionaire item, respondents specify their level of agreement to a statement. The scale is named after its inventor, psychologist Rensis Likert.

An important distinction must be made between a Likert Scale and a Likert Item. The Likert scale is the sum of responses on several Likert items. Because Likert items are often accompanied by a visual analog scale, the items are called sometimes scales themselves. A Likert item is simply a statement which the respondent is asked to evaluate according to any kind of subjective criteria; generally the level of agreement or disagreement is measured. Often five ordered response levels are used, although many psychometricians advocate using seven or nine levels; The format of typical five-level Likert item is:

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

After the questionaire is completed, each item yam be analyzed separately or in some cases item responses yam be summed to create a score for a group of items. Hence, Likert csales are often called summative scales.

Fig. 7 Likert Scale. Evaluating SC aspects with actors.

Actors Opinion	Likert Scale Items
Strongly disagree -2 Disagree -1 Neutral 0 Agree +1 Strongly Agree +2	Our Final Concept improves SC-Aspect X
Strongly disagree -2 Disagree -1 Neutral 0 Agree +1 Strongly Agree +2	Our Final Concept improves SC-Aspect Y
Strongly disagree -2 Disagree -1 Neutral 0 Agree +1 Strongly Agree +2	Our Final Concept improves SC-Aspect Z

Step 9 Week 9

Present Final Concept

Fig.8 Presenting final results in 5 Minute Pitch.

Appendix 1

Social Cohesion Design EXPO

ASSIGNMENTS 2012

Canal Hopper
Company: Jelle Talsma / Franeker

Bike Taxi
Company: Van Raam / Varsseveld

Cone Soccer
Company: Info Stop / Amersfoort

Street Game
Company: Struyk / Tiel

Fitness Seats
Company: VelopA / Leiderdorp

Droogloop
Company: FibroCap / Weert

PoopScoop
Company: Dekker / Schoonoord

Bike Parking
Company: Bcycle / Moordrecht

Company: Falco / Vriezenveen
Street Furniture

Panna Plaza
Company: Urbania / Lochem

Appendix 2

The Wise Owl Award

Final results are presented in a public venue in front of jury, media and press.
Winner receives the Wise Owl Award.

Winning team Pamoja of SC Design Course/Competition 2010.

SC Design EXPO Markt Delft Koninginnedag.

4 Best Teams Present their Designs in front of a Mass Audience.

Design Studio location: Delft centre

Hypolytus buurt 14 Delft

Back Yard of The Studio Hypolitus buurt 14

City Plan Delft

Reference

OCW Site / Social Cohesion Design

http://ocw.tudelft.nl/courses/bachelor-industrial-design-engineering/social-cohesion-design/course-home/

Report

Index

Introduction
Team (3 pages)
House Style (3)
Expectations (1)

Company analysis
Assignment (2)
Technology (5)
Mission & Vision (1)

i-1 Identification
Selecting Setting X, actors, events (5)
Defining SC Mission, Surveys (10)
Subscenarios (10)

i-2 Integration
Selecting most promising scenarios / Subs-Tool (5)
Q methodology / Harris profile (10)
Construct mainscenario / Concept (10)

i-3 Implantation
Develop 'Look and Feel', propose Strategic Partners (10)
Evaluate SC Mission, applying Likert (5)
Propose Test Pilot /Start Up, estimate costs (5)

Conclusion (5)

Total: approx. 90 pages A4 (ex. Appendix)

Mixed Design Teams:

Team Organisation / Planning

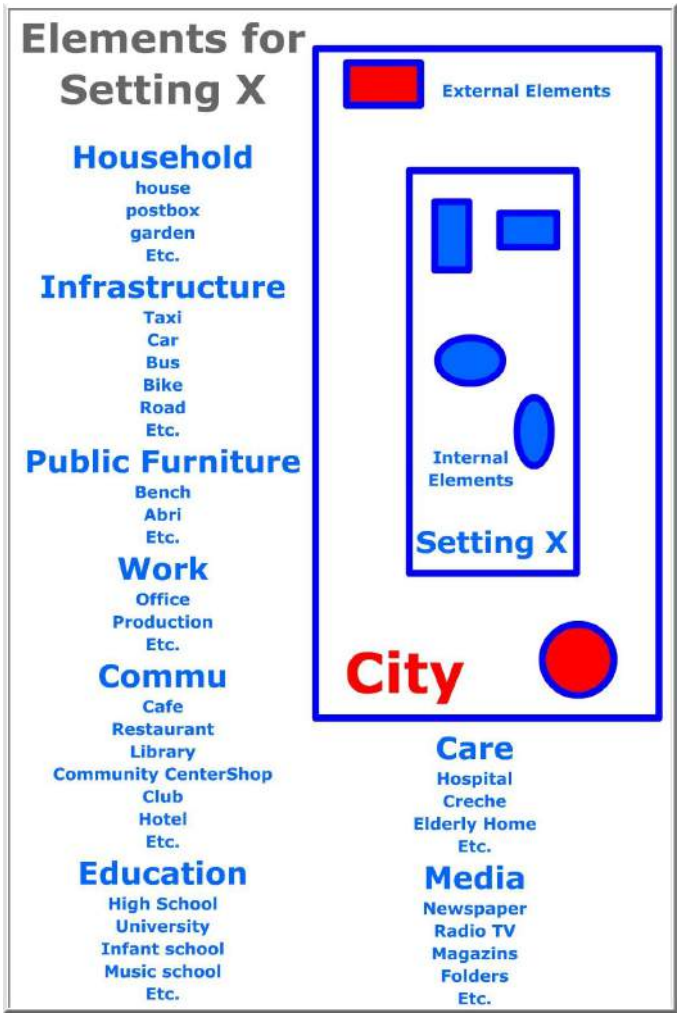
Industrial Design Engineering
Contribution:
Output:

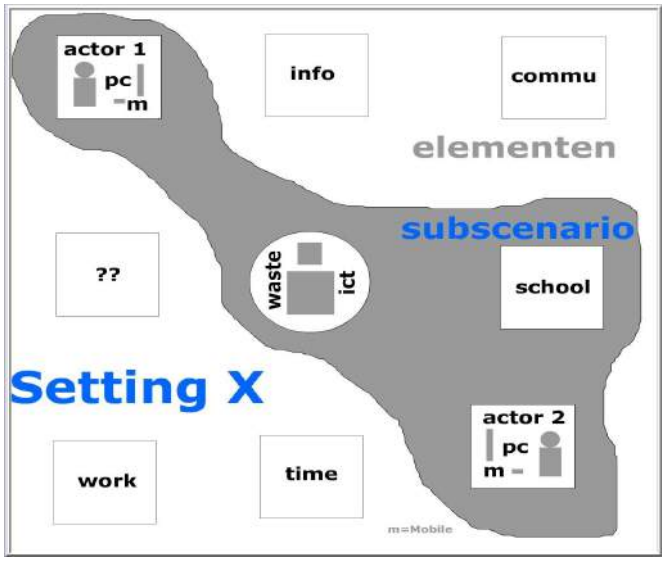
InHolland ICT
Contribution:
Output:

Willem de Kooning Art Academy
Contribution:
Output:

VMBO
Contribution:
Output:

Selecting Elements for Setting X





House Style

3D SCENARIO BOARD:





Group introduction

SOCIAL CITY

Studio logo

Logo is about the initials of our names Johan, Ona, Jessica and Sarai. This combination forms JOJStudio. Finally logo is like that:

JOJStudio

Housestyle

Group dynamics & organisation

Our group is formed by 4 members. We had devided in pairs to be more competitive with delivery timings. The organisation to do all work is the following list:

- First, all of us went to La Rambla and choose what's the perfect zone to do our performance. Then, we made a scenario board of this zone and we decided together the scenario and subscenarios.

- The second day, two of us we're constructing a 3D scenario model with the new creation at setting X. The other two we're designing concept in main scenario and doing interviews to different people about public perception.

- Finally, all of us we're thinking about "Look & feel" of our performance like materials, colors, dimensions, naming and advertisement slogan. Then we've done a plan for Test-Pilot, people involvement and total cost.

Identification I-1

Setting X

There are many elements represented in La Rambla, because it's one of the most visited places in the city and the most popular by tourists.

That's why there are so many hotels, bars, restaurants, discotecs, souvenir shops, theatres, museums, emblematic architectures, places of interest, drawing artists, florists and more.

Our location X is in the middle of all this things and in the middle of the rambla too, where there's a confluation of diferent ways to other sites of the city and it's a very flat space.

An other reason to choose this placement is because people that get out of metro or hotel or diferent places that there in La Rambla will pass through our point of information.

So, many people of diferent countries will go there and share his experience with others.

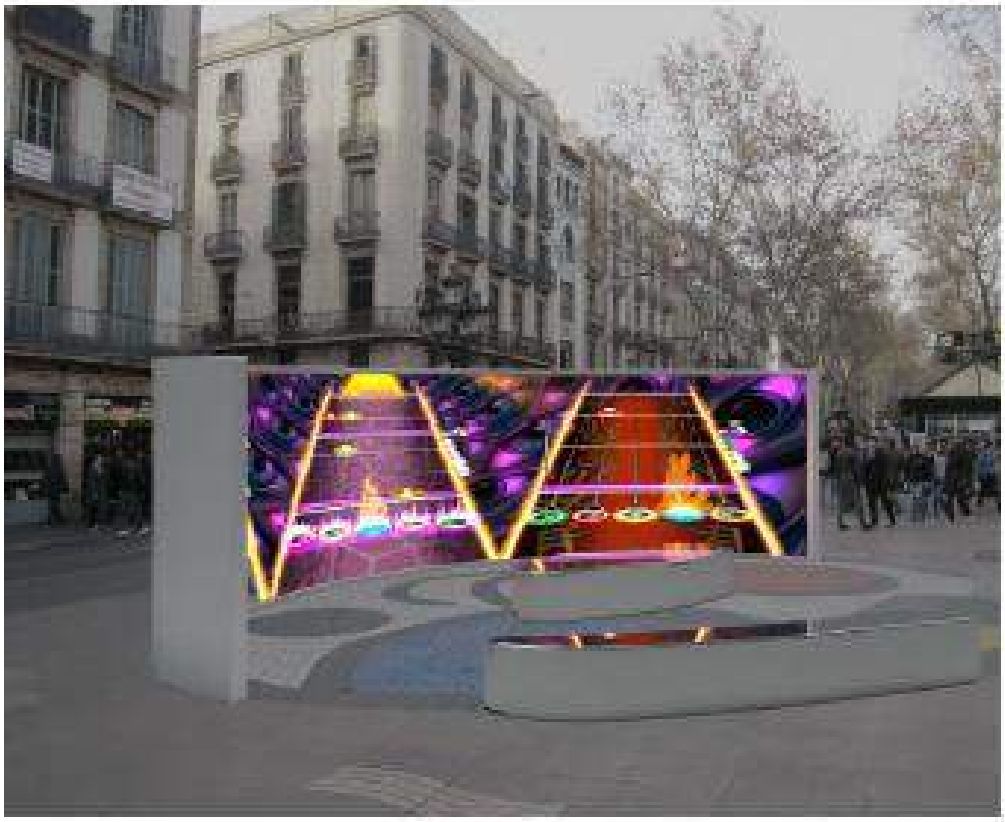
Identification I-1

Elements in La Rambla

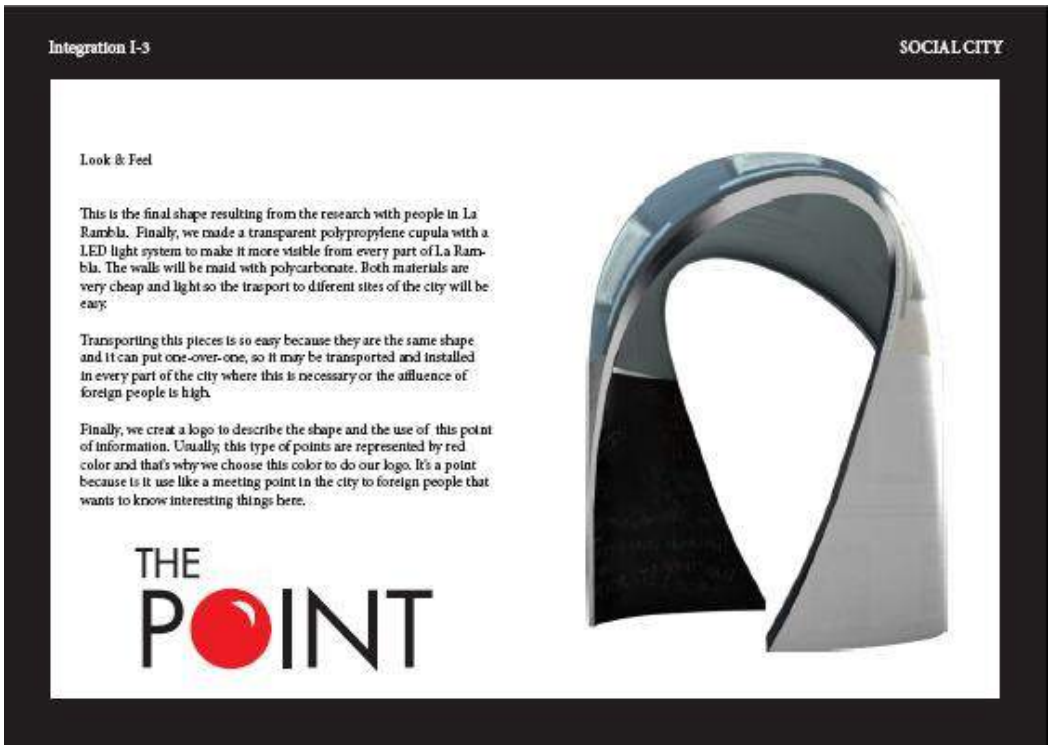
The diferent elements we detected in our setting X are the following:

- Hotel
- Souvenir Shop
- Liceu
- Banc
- Bicing
- Florist
- Bus stop
- Museum
- Market
- Metro
- Restaurant

Concept in Context



Look & Feel


Integration I-3
SOCIAL CITY
Look & Feel
This is the final shape resulting from the research with people in La Rambla. Finally, we made a transparent polypropylene cupula with a LED light system to make it more visible from every part of La Rambla. The walls will be maid with polycarbonate. Both materials are very cheap and light so the trasport to diferent sites of the city will be easy.
Transporting this pieces is so easy because they are the same shape and it can put one-over-one, so it may be transported and installed in every part of the city where this is necessary or the affluence of foreign people is high.
Finally, we creat a logo to describe the shape and the use of this point of information. Usually, this type of points are represented by red color and that's why we choose this color to do our logo. It's a point because is it use like a meeting point in the city to foreign people that wants to know interesting things here.
THE
POINT

Sub-scenarios

Case 1 : Pedal Power Led
February 2010
Develop a C.I.P.S. for
Pedal Power Led
in Slum Setting X

Case provider:
Social Cohesion
Design Foundation

Sub-Scenario 1
Element : School
Goma is now seven years old and lives with her six older sister and brothers and her parents in a very small hut. Since half a year she goes to school and she really likes it. She always looked up to her older brothers and sisters and now she can just as smart as them.
Today is a very special day and Goma cannot wait to go to school. Today they will go to the pedal box centre. Next to the community centre the pedal box centre is housed with pedal boxes for a big part of their slum. Not only their community uses it but also the rest of the slum. Because of this their community has gained a lot of respect and also became one of the richer parts of the slum. The whole pedal box project started in their community and the villagers are really proud of that.
Goma has never seen the pedal boxes since the centre is only opened for everyone older than nine years. She really wonders what they look like after the great stories she heard about the pedal boxes and how they changed live in the community. Maybe they are even allowed to try one of the pedal boxes.

Sub-Scenario 2
Element: Atelier fabric
A new supply of wool arrives they have to make the fabrics as quickly as possible.
Marka yawns, after ten hours of work she is really tired. And now she also has to go charge their battery. Two months ago her husband and she finally bought a LED-lamp and the belonging battery, they finally has enough money. Since then they charge it every three days at the charging point, which is situated near the Social Entrepreneurial Design Group. Today it is her turn to charge the battery, so she has to stop at the charging point on her way home. She also needs to kook and hopefully her daughter has bought the ingredients she asked for.
Together with her friend Gimya she walks to the pedal stool point. There they have to wait for two others to finish but then they can charge their batteries simultaneously since there are two pedal stools. During the pedaling they have a little conversation and also some other friends of Marka arrive. At a certain point Marga feels so tired that she has to stop pedaling, she really cannot do anything more. Quickly one of her friends runs to the community centre and comes back with a cup of tea. One of her friends takes over the pedaling and this way she gets a full battery after all. Then she is walked home by two friends who live nearby and at home she asks her oldest daughter Nuria to do the cooking. She herself sits down completely exhausted.

Sub-Scenario 3

Elements: Metal workshop

Issay works at the metal workshop of the community and he is head of the pedal box manufacturing. Because of this he, his wife and children have gathered a lot of respect in the community and they also are quite rich.

Lately he got a new idea to further improve the pedal box; he wants to make a sunroof for them to protect the pedaling people from the sun. For this reason he has gone to the atelier fabric today to talk with Loba, the boss of the atelier fabric. He shows her some sketches of his ideas and explains what he wants to make. Loba is directly enthusiastic and assures they will cooperate to make the roofs.

Together they select the type of canvas which is best to use and Loba helps him optimizing the design of the sunroof. Because of the way the women will sew the canvas some things needed to be changed. Normally the women only make the fabrics and then sell them. For this kind of projects however they kindly make an exception. Issay and Loba agree to a price for the roofs and then Issay returns to the steel workshop to start working on the frames for the sunroofs.

While working he thinks about his oldest son and he hopes he will not forget to charge the battery for their LED-lamp. His son already forgot yesterday and because of that they only had light for ten minutes yesterday evening.

Sub-Scenario 4

Element: Super market

In the supermarket there is a separate department were the people can charge the batteries with the pedal boxes. It has developed as a social to go there and chat about the resent events with the other people when you are pedaling your batteries full.

Sub-Scenario 5

Element: Community centre

At the community centre Sheila is everyday trying to work for the people. She also has to be face to face with different needs of the people of the slum. As she is trying to cope with the difficult problems what poverty provides such as crimes, prostitution and drugs. Lot of people come there and talk to Sheila because she is one of the most trusted person in the community. Sometimes Sheila hopes that she could give something concrete to the people of the slum different than a shoulder to cry on. At this case the pedal box are pretty useful because of the fact that many people visit the community centre and it is a vocal point at the community. Also protection measures are taken because the big amount of crimes going on constantly.

Sub- Scenario 6

Element: Community centre, pedal box space inside, special hours

The service of charging the batteries has also has a social aspect at the community centre. The people are charging batteries and getting off from the weight that they have on hard at the special paddling space at the community centre. Sheila has also managed some special hours for the people to charge the batteries. Mostly it’s common for the men of the society to come and have this social event.

Sub-Scenario 7

Element: Community centre, rental of pedal boxes

The rental services could also be offered by the community centre because it is expensive to buy the pedal box from the store. But it has a lot of limitations because you have to be known and trusted to get the pedal box. Otherwise they would all be lost and not returned to the centre.

“Red & Yellow”: Social Plaza Delft

Explanation

Interpretation of Factors in Q

Constructing The Mental Picture

Explanation