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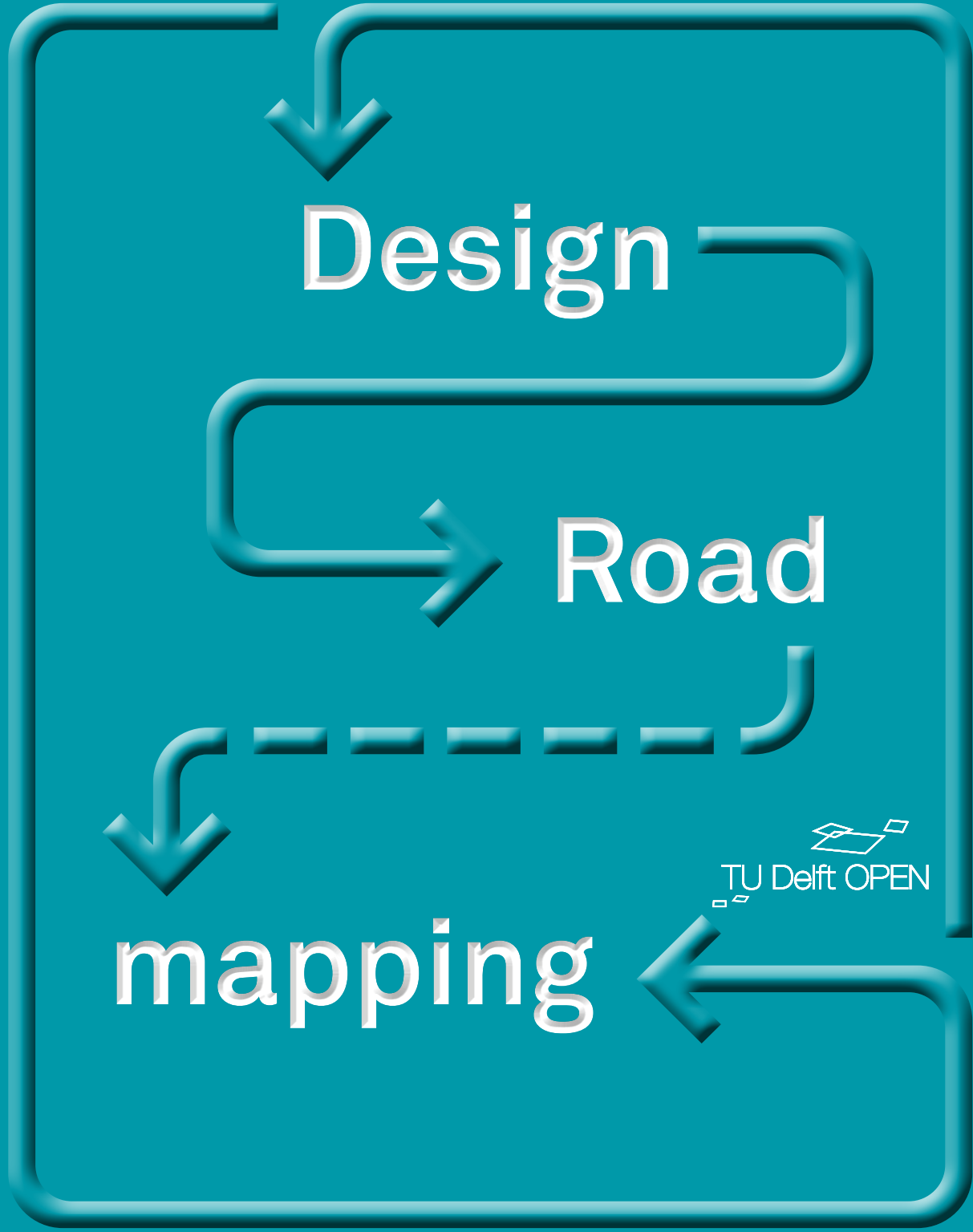
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Design Roadmapping:

Guidebook for future foresight techniques

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TU Delft OPEN



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DESIGN ROADMAPPING | Guidebook for future foresight techniques

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Foreword

DESIGN ROADMAPPING is for anyone interested in design, strategy and innovations and its wonderful combination. Design roadmapping is a process that enables organisations and designers to devise creative responses to future strategic challenges. This book is written for designers, strategists and innovators alike, to guide on your journey of roadmapping the future with the land marks of products and services you envisioned together with a team of innovators.

A journey that can start with uncovering new trends, scouting for new technologies and mapping the values on the roadmap. Along the way, you can map a future vision, frame the time pacing and create the pathways towards it. To arrive at the end of the roadmapping process with the result of a clear, complete and compelling design roadmap. Such an artifact can provide your organisation strong visualisation and decision support for your organisation's future plans on design innovations.

In this book you will find guidelines on how to roadmap altogether with explorations and definitions of theoretical concepts. Besides deep insights on the origins, theories and science results, designers, strategists and innovators share how-to examples and cases on their roadmapping experiences and achievements.

Writing this book has been a truly fascinating journey for me. Not only to express my passion for the subject that has captivated me for several years now, but also to be able to share this in a visual compelling way. Creating a design book comes with the joy of visualising the story as much as the freedom of writing it.

This exploration of design roadmapping stems directly from my working life as an industrial consultant, roadmapper, researcher and teacher in a design school. Because of these experiences, the question of the relationship between innovations and future time has emerged for me not only as an intellectual puzzle but also as an object of personal quest. I have become convinced that roadmapping is not just the business alignment of the long term strategy of technology research and engineering, with the strategic channelling of new inventions into breakthrough applications, parallel to the re-engineering of existing products into more cost effective solutions.

In my experience, at the heart of roadmapping are the user values that drive the future timing of innovation. Only when users embrace a new innovation, when there is a close connection between their value wishes, desires and needs, and only then when the time has come that a critical mass agrees on the value of the innovation, it can become successful. Therefore, in design roadmapping, future visions are built on value drivers that connect user values to an evolutionary pacing of design innovations. Mapping value innovations by the pacing of time intervals ensures continuous innovation for your organisation on the long run.

Design roadmapping is devoted to the values of users and committed to a time-based view of design innovations, design roadmapping fosters strategic design to practical competence and professional artistry. Although, not as a job of a lone designer, but as a team endeavour. Design roadmapping is a process in which creative conversations and multiple sessions build the common ground for the future plans of innovation.

CREATIVE TREND RESEARCH



HOW TO DO CREATIVE TREND RESEARCH

With the emergence of future foresight in the discipline of design, the attention for creative trend research has increased¹. It is also a trending topic online: several leading design bloggers believe that creative trend research and future thinking are now needed more than ever. In roadmapping, we practice creative trend research, which combines the designer's craft of intuitive observations with the strategic scanning of the environment.

The concept of 'trend' has gone through several generations of meaning²:

- FIRST, the term 'trend' is traceable back to the field of geography in the late 16th century, when the term 'trend line' was used to describe the general direction that a stream, coast, or mountain range tends to take. 'To trend' is derived from the Old English *trendan* and the Germanic *trundla*, which mean: to revolve, rotate, turn in a specified direction.
- SECOND, studies of demographic data used the noun 'population trend' in a figurative sense, to determine a trend as a statistically detectable change in collected data on a population. Researchers developed trend analysis tools, which use large collections of quantitative data. For linear trend extrapolation, mathematicians advanced the trend analysis techniques, on which many forecasting studies heavily rely.
- THIRD, studies on comparing groups of people in the social sciences gave rise to the term 'behaviour trend' that was used to refer to a pattern of collective, socially influenced behaviour. In the 1960s, human-related trend research also became common practice in the field of design. The word 'trend' also became associated with a person: 'trendsetter'. Interior and fashion designers were among the first to be considered trendsetters. Then, the term 'trend-spotter' was coined for people who observe, seek, or predict changing tides in media and material culture (fashion, design, etc.).
- FOURTH, social media technology ushered a new generation of trend term usage. 'Trend hypes', 'trending topics', and 'top trends' have become part of the daily communication referring to postings on for instance, Twitter, Youtube, and Instagram that are viewed thousands or even millions of times a day.

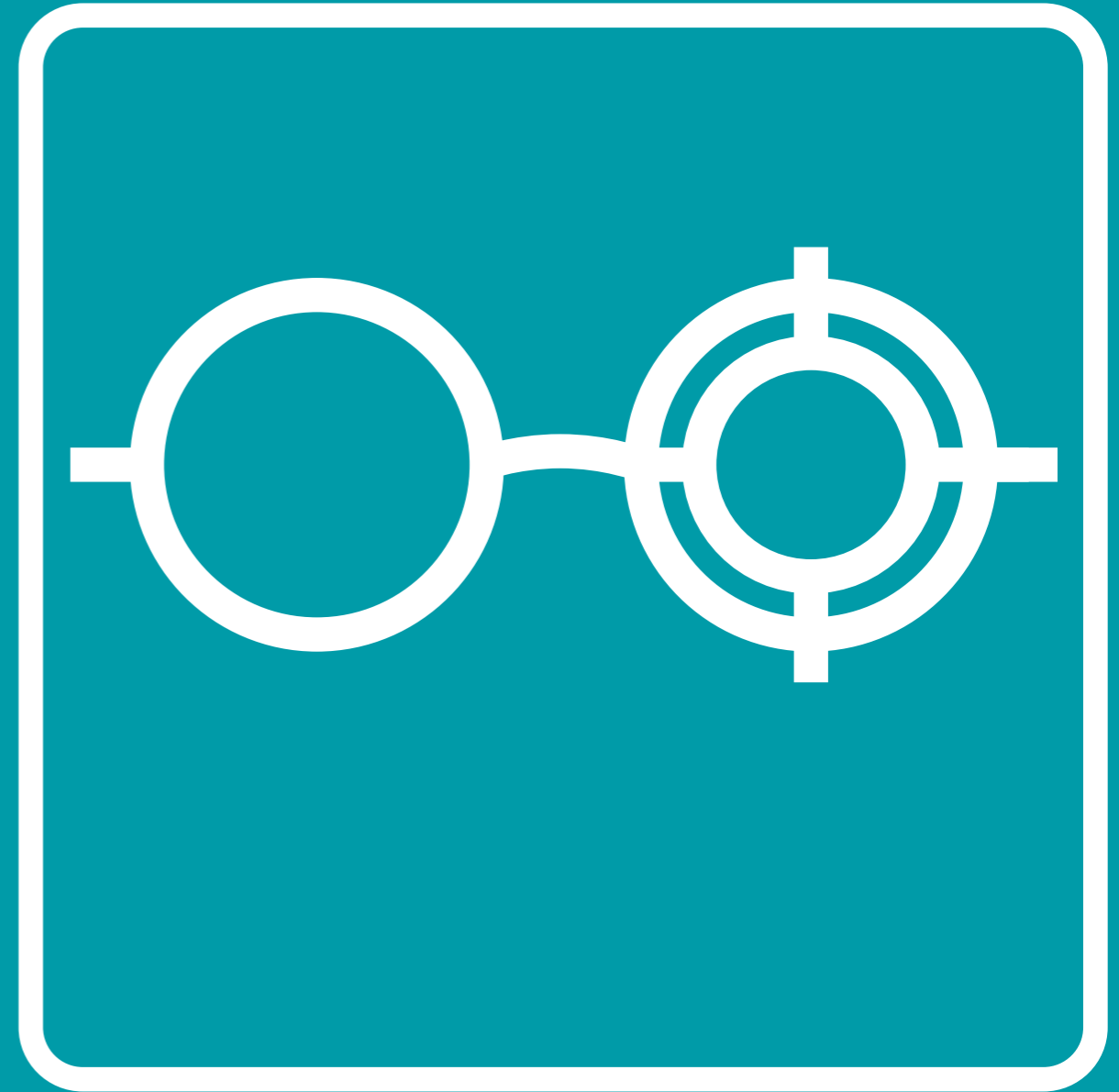
Considering all these disparate meanings, we concentrate in this chapter on trend research in the creative fields of fashion, architecture, and industrial design. To offer further guidance on how to carry out trend research, we present a framework that includes four techniques: trend scenarios, trend views, trend topics, and trend patterns.

Visual Trend Spotting

LIANNE SIMONSE, NIYA STOIMENOVA & DIRK SNELDERS

Often observed from a few weak signals, which are mostly visual in nature, trends are made by people but uncovered by designers. Design research detects the early signals of a vogue, swing, or drift in trend research:

- VOGUE: a current style or preference, such as a new fashion trend.
- SWING: a social movement, such as the shift towards food truck dining.



VISUAL TREND SPOTTING is counting instances of observed clues over time.



- DRIFT: a prevailing direction or inclination, based on an attitude or preference for one thing over another, such as the drift from living in the countryside to the town relates to the urbanisation trend².

Some designers stress that they rely on their intuition in detecting the clues, while others watch for confirmation from multiple sources before they call something a trend. We encourage you to back up your intuition by counting instances of clues you observe over time and then cross-checking your personal observations with other evolving data.

"Detecting the existence of a trend required no more than an intuitive plotting of points on a line . . . showing the direction of the fashion trend."

WILLIAM REYNOLDS³

William Reynolds, the renowned theorist on fashion trends, showed us how to make intuition explicit. He plotted observations as points on a line, defining them as evidence of intuitive observations. One of his examples presented the trend of the rise of pop art. By counting the inches of visual print advertisements over time, he generated evidence for his initial intuition about this rise of pop art. Another of his examples concerned the fins of Ford and Chevrolet cars in the 1960s; he plotted trend lines on both the fins lengths and their heights over the years. But his most famous example concerns the trend towards miniskirts. He measured the length of women's skirts on the images in magazines and revealed that skirts became shorter over the years³.

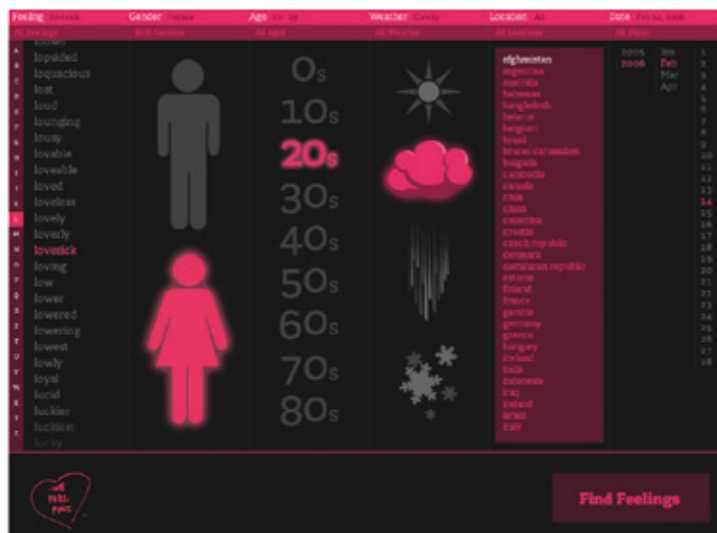
In daily life, we can intuitively detect hundreds of similar trends. Some are easily quantifiable, based on a strong track record in data from the past. We call these strong signals. Yet others may be subtler in signalling their importance for the future. These so-called weak signals are better examined using sensitive methods that rely on empathic attitudes and the intuitive filtering of observations in the present⁴. Or, as the trend director Hanne Caspersen at Philips Design expressed it, "The world is a jungle of trends. There is no end to them. We don't create them, people make them. Our job is to curate them."⁵

Building on the premise that trends indeed are made by people makes the 'trend setters' the people to watch for. We can seek and spot growing groups of early adopters and opinion leaders, until at a certain moment a critical mass of social influence is reached, and a larger majority of followers comes behind.

←
Americanos -Milano

© Ari Versluis & Ellie Uyttenbroek, 2011:
Exactitude 133.

Photographer Ari Versluis and profiler Ellie Uyttenbroek classify random people whom they see in cities around the world according to particular characteristics of their appearances and attitudes. They create categories which comprise of people who share the same attributes, and give each category unique names. This is the artwork they developed together for more than 20 years. They call their series 'Exactitudes': a contraction of exact and attitude. By registering their subjects in an identical framework, with similar poses and a strictly observed dress code, Versluis and Uyttenbroek provide an almost scientific, anthropological record of people's attempts to distinguish themselves from others by assuming a group identity.



←↵
We feel fine

© Jonathan Harris and Sep Kamvar, 2006.

We Feel Fine is an exploration of human emotion on a global scale. Since August 2005, *We Feel Fine* has been harvesting human feelings from a large number of weblogs. Every few minutes, the system searches the world's newly posted blog entries for occurrences of the phrases "I feel" and "I am feeling". The result is a large database of human feelings, increasing by 15,000 - 20,000 new feelings per day. At its core, *We Feel Fine* is an artwork authored by everyone. It will grow and change as we grow and change, reflecting what's on our blogs, what's in our hearts, what's in our minds.

Typically, the visual trend spotting technique is characterized by use of observations, including the social influence that can be traced back in media and material culture (i.e., conspicuous consumption of fashion, design, etc.). We categorised three types of trend spotting in the fashion and design literature:

- VISUAL STREET SPOTTING. This technique mainly uses visual research by observations and photos⁶. Some design studios offer this trend spotting as a dedicated service for design research. For instance, Trendzoom and the Doneger Group promote 'Street Trending' as an approach to trend monitoring on the street or other places of social interest⁸. The results are 'a collection of visuals from various global markets around the world'.
- PROFILING TRENDSETTING CONSUMERS/FASHION OPINION LEADERS. The role of 'trendsetter' has been characterised as 'opinion leader', because the two terms define similar behaviours. Research found that in fashion, opinion leaders consider 'uniqueness' an important factor when choosing what to wear. This is far less important for opinion seekers, for whom, on the other hand, 'information on status consumption' and 'social comparisons' is much more distinctive⁷.
- SOCIAL MEDIA SPOTTING. This technique concerns a special interest in the use of social media technology for trend spotting. Initial findings on the use of blogs in combination with the output of text mining software show promising alternatives to street trend monitoring⁸. New trend methods derive trends from user-generated content from virtual communities such as Myspace⁹.

Overall, these three techniques rely on observations. In general, the object of observation is a social movement in fields such as fashion, architecture, and design that can be sensed intuitively. Trends can be observed in daily life, for instance, in newsmagazines, blogs, and speeches. Taste and style trends cohere in the narratives of opinion leaders and through visual material clusters. The detection of trend patterns involves 'fingerspitzengefühl', or a situational awareness, and an intuitive ability to detect emerging trends of the future that can already be felt today.

Strategic Trend Scanning

LIANNE SIMONSE, NIYA STOIMENOVA & DIRK SNELDERS

Strategists introduced 'environment scanning'—the systematic scanning of an organisation's business environment for relevant information¹⁰. The purpose is to ensure an organisation does not miss out on early signals of possible changes in the environment. Designers use strategic scanning to detect trends of change already underway.

For strategic decision making, designers and futurists crafted the trend technique STEP—an acronym for Social, Technologic, Economic, and Political trends. You can use STEP to scan signals in a global context according to Social and demographic developments, science and Technology inventions, Economical developments, and Political and regulatory changes. For initiating the vision of the roadmap we recommend you to evaluate the trends on their unique potential. The major challenge is to extract those trends that provide a unique opportunity for the future of the business you are working¹¹.

"Early identification and fast response to important trends and events which impact on the firm."

IGOR ANSOFF¹²

Igor Ansoff, the eminent strategy theorist, proposed that strategic trend scanning should not only be based on extrapolations from statistical data, but also must rely on more immediate observations that provide initial and emerging indications of potential futures. He distinguished between strong signals and weak signals. Some trends come with strong signals and can be validated with data collection and statistical trend analysis. Such strong trends have long forecasting horizons of estimated impact, and therefore allow for building a knowledge base before executing an appropriate response. Other trends come with weak signals that appear more immediately in the present, as evolving signals¹². According to Ansoff, weak signals are of equal importance in preparing a business for the impact of these trends.

Scanning weak signals involves heightened sensitivity and sustained reflection on the potential meaning of those signals. Intuitively sensing the importance of new observations requires professionals with an open-minded approach towards the environment. It is no wonder that designers and strategist adopted the STEP technique into their



STRATEGIC TREND SCANNING is the detection of change already underway in the environment of the organisation.



← Creative Trend Research: Trend patterns technique.

© Hanne Caspersen photography, PHILIPS DESIGN

Weak signal mapping in order to recognize patterns. To make relevant topic-specific trends we do this with weak signals derived from our network that has spotted these signals across different locations, based on our briefing - Hanne Caspersen.

trend research practice. In design practice we noted that designers also like to craft their own variants, such as the DESTEP technique, in which Demography has been differentiated from the Social domain and a new domain of Ecology has been added, reflecting the increased attention paid to sustainability.

One of the major challenges in trend scanning is to scan beyond the expected, and at the same time stay within the limits of understanding the complexity of the environment context. Researchers have found that the natural tendency of strategic managers is to scan narrowly, within the existing market. As a result, they fail to see competitive threats and innovation opportunities in the periphery of their current markets¹³. To overcome this pitfall you can help them to scan with an extended scope towards the edges. One place to look for breakthrough innovations is in fringe markets, such as for instance the snowboarding, microbreweries, and extreme sports once were. Nowadays these markets have become popular with wide audiences¹³.

Another challenge is to scan trends related to people's behaviour, the so-called social-cultural trends. The behaviour of two groups of people is important. The first group comprises users and purchasers, and the second competitors and business partners. Scanners for trends within the first group often focus on user attitudes, activities, and interactions in a broader customer experience process. This scanning is aimed at uncovering patterns of user beliefs, wishes, and dilemmas. And in particular situations, it concentrates scanners' attention on trends in purchasing behaviour. Trend scanners of the second group of people in the industry and market environment predominantly addresses changes in the behaviour of competitors and business partners. This strategic scanning often makes use of self-established datasets, proprietary sources owned by market and sector research agencies, and large datasets established by a government-affiliated statistical institute (e.g., EUROSTAT, UNDP). In business, academically educated marketers and strategists prefer behaviour trends that can be validated by scientific methods. In strategic practice, advanced techniques of data mining expand the possibilities for this type of social-cultural trend forecasting.

Overall, we advise a combination of in-depth and statistical research in projecting rising or waning strategic trend patterns into the future. The DESTEP taxonomy technique is not only helpful in systematically checking the information gathered by desk research, but also enables brainstorming sessions on trends with designers, experts, and stakeholders. In such sessions, DESTEP is useful in making the (tacit) knowledge of the participating professionals explicit. By taking on a context view on the organisation, DESTEP stimulates the participants to grasp trends from six different angles. From each point of view, participants capture important signals of influence on the organisation's business.

Four Techniques for Creative Trend Research

LIANNE SIMONSE, NIYA STOIMENOVA & DIRK SNELDERS

We position creative trend research between the two extremes of visual trend spotting and strategic trend scanning and define creative trend research as: "the act of understanding in combining and unifying the isolated data of sensation into a recognizable whole of a trend". Designers can capture a combination of visual and textual signals by scanning the areas of interest, blending global and local trends, and blending visual and statistical trends. The result is an intuitive and creative type of trend research, which for the most part pertains to the behaviour of people doing their jobs and living their lives¹⁴.

Figure 2.1 presents four techniques for creative trend research: trend scenarios, trend topics, trend views and trend patterns. All these creative techniques make use of trend synthesis. This is different from trend analysis; whereas an analysis breaks information into parts in order to identify causes and (trend) relations. A trend synthesis compiles information together in a creative way, by combining parts into new trend unities. The philosopher Kant has characterized synthesis as "the act of putting different representations together, and grasping what is manifold in them in one cognition - Kant¹⁵." The creative challenge in trend research is to unite in one sublime trend, the diverse mixed media forms of scanned bits and pieces.

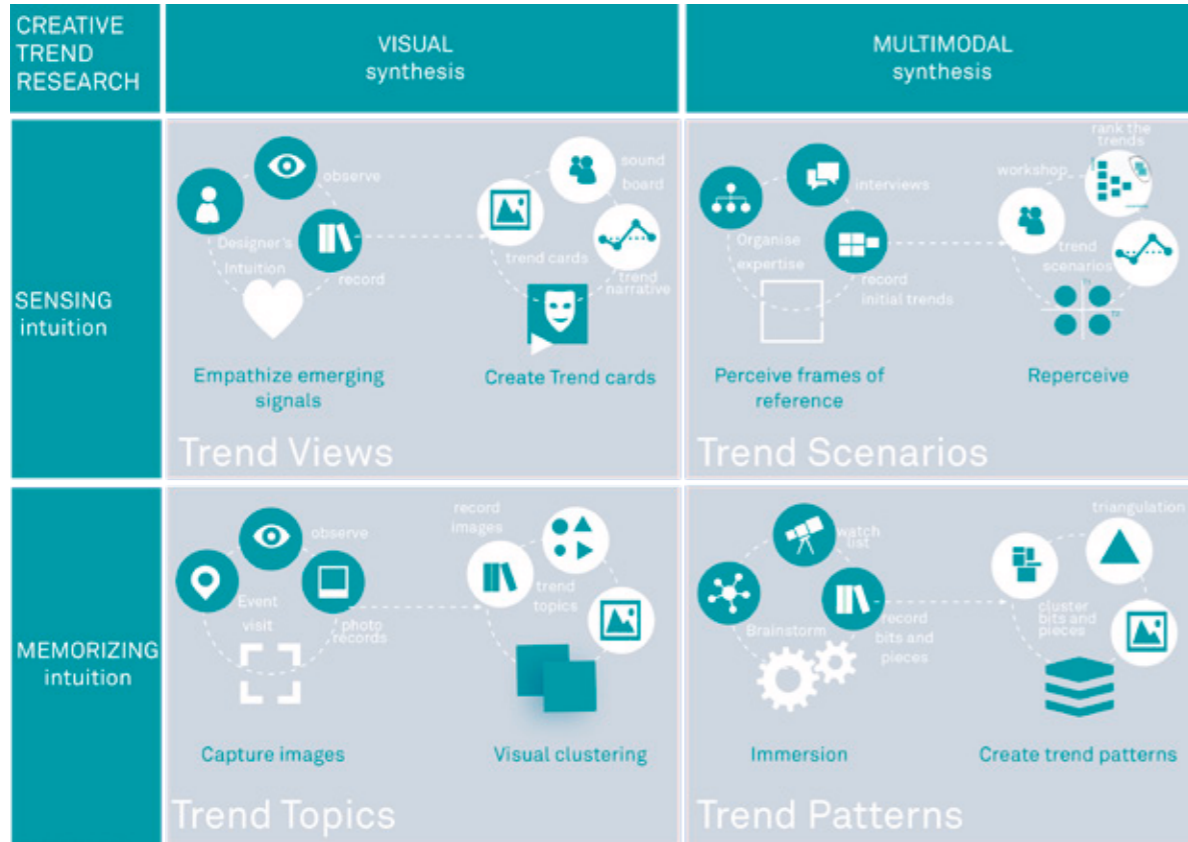
We build the framework for creative trend research (figure 2.1) with at the heart two dimensions of (1) synthesis and (2) intuition that go hand in hand in carrying out creative trend research. Intuition allows the trend researcher, the person who will bring either sensed or memorized information together, to conceive a new trend. Intuition plays a vital role because a trend projects future value¹⁶. All these creative techniques are targeted towards identifying new opportunities for the creation of future value. Through intuition designers disclose the visible elements in connection to the sensed and memorized elements in trends. We introduce the four trend techniques below with examples from our readings in the literature, interviews, and work with students.

▾ Trend Scenarios

Generating trend scenarios has been described as an art, a craft, and a learning process, all implying the use of creativity^{17,18}. Creating trend scenarios involves explorations that discover possible occurrences in the future¹⁹. "A trend scenario attempts to capture the richness and range of possibilities. At the same time, it organises those possibilities into narratives that are easier to grasp than great



Intuition and synthesis lie at the heart of CREATIVE TREND RESEARCH.



volumes of data¹⁸." In contemporary design practice, designers use visualisation tools to make trend scenarios come alive. They create storyboards and videos to tell a story about someone's future experience, making the imagined communicable. If done well, good stories become vivid in our minds, sometimes even more than our actual immediate reality.

According to Jan Nekkera, an experienced professional in trend scenarios, the important sources for scanning trends are knowledgeable people who perceive the future context from a personal view²⁰. Before creating scenario storyboards the designer's job is to access the information that the involved persons sense and to collect multiple views on the future.

The two main activities of the trend scenarios technique are:

- **PERCEIVING:** carry out several interviews with experts both from within and without the company. Important to ask is what people see as trends: "the trends people identify tell you something about the way they look at that environment.

←
Figure 2.1
Framework of creative trend techniques

cc Niya Stoimenova, 2016.
Creative Trend Research:
the role of methodology and intuition.
Paper for the master course
Design Roadmapping. Faculty
Industrial Design engineering,
Delft University of Technology.

So, the trends are a mirror of their frames of reference. And maybe the trends people identify say more about themselves than about the reality - Jan Nekkera²⁰." Besides uncovering and explicitly listing the most important trends for the future, a parallel intention is to discern the frames of reference of the involved decision-makers. In this way you can also uncover the dominant thinking inside an organisation. Scenarios can help people to come out of their frames of reference; the trend research also anticipates this by scanning trends that are opposed to, and break with, the dominant thinking patterns.

- **REPERCEIVING:** the follow-up activity is to reperceive the environment in a workshop that brings the experts together. The workshop starts with a presentation of identified trends, followed by a brainstorm on additional trends. During the brainstorm, the DESTEP taxonomy is used as a checklist to draw attention to previously unconsidered domains. After this co-generation of trends, the workshop participants rank the trends on (user) impact and uncertainty, from high to low. The two trends with the most impact and uncertainty are selected as scenario drivers. By placing them as two opposing dimensions in a space, four quadrants arise out of which four scenario narratives are constructed.

The strongest benefit of having all the participants brainstorm and rank the trends together is that "they change the way they look to the business environment. They are reperceiving reality - Nekkera^{20,17}." This collective and multimodal synthesis (framed in figure 2.1) also helps to develop a sense of ownership of the scenarios and hence increases further utilization of the trend results.

↳ Trend Topics

The technique of trend topics has been conceived at events such as the Première Vision in Paris, the leading trade fair in the fabric industry for apparel, which has a long history of influencing fashion. Today, trend topics have found their way into other industry events such as those for consumer electronics, aerospace, and interior design. 360-degree trend reports represent a notable example, comprising a visual selection of exhibition highlights from a specific industry, comparing emerging topics with previous years²¹.

This trend technique relies heavily on visuals, mainly photographic material from the exhibition, clustered and thematised with the best representative images of each newly identified trend. We characterize the process of examining trend topics by the two activities of:

→
Urban Farming Trend

cc Trend view by blogger Amelys Erard, 2016.



- **CAPTURING:** based on collecting visual information and taking photographs during the visits to influential events, such as trade fairs and design weeks. Suzanna Skalska, an experienced creative trend researcher, emphasizes that the activity of capturing is not a nine-to-five job: "it is 24/7 sensitivity to the world around²¹." It is also keeping up with several opinion-making magazines and TV programs, memorizing plenty of trend data regarding the industry under study.
- **CREATING TREND TOPICS:** as the follow-up activity is based on visual clustering, of all gathered images from within and across events. The designer's intuition on the clustered visuals is crucial in creating trend topics. For example, Skalska visualised a trend topic called Trash Generation from a cluster of eleven images of emerging design work by young designers spotted at design weeks in different cities. She said, "For a few years now I have observed among a new generation of thinkers and designers a very big interest in trash. They all know that our daily rubbish will be a new source of material for future product development . . . this requires [a] new way of production as a challenge, but also as the only way to survive in the future. I call these new pioneers the Trash Generation - Skalska²¹." In synthesising such trend topics for an industry, designers often connect their findings both to local topics with short-term foresight, as well as to industry-transcending trend topics with long-term foresight.

Given that the designer has the creative lead to identify trends and create visual convincing topics, we framed the creative synthesis as a visual synthesis (see figure 2.1).

↳ Trend Views

Trend views are based on sensed information, but unlike trend scenarios, trend views are established by the single voice of an expert (see its framing in figure 2.1). Often this expert voice is that of a designer, who has sharply observed changes in the daily lives of people²². In trend views, the expert perceives signals directly, mostly as pictures, photographs and graphical images, which (s)he visually synthesises into mood boards, colour palettes, and other expressive visuals²³. We distinguish two activities for the trend view technique:

- **SENSING AND RELATING TO THE SUBJECT:** "the designer visits the places-where-it-happens to observe and become inspired, take pictures, make drawings, and discuss new developments with the people on location- Bol²²." (S)he acquires additional trend knowledge through reading and design exercises such as making a mind map and a product lifecycle analysis. The designer interviews experts, for which (s)he might use pictures to trigger views and opinions about new trends. To check whether all areas are covered in this sensing exercise, (s)he would carry out a final DESTEP check. The designer then writes a short trend report, synthesising the most striking observations and insights, and her professional view on the most important upcoming trends. These trends are briefly summarized on trend cards - paper card, on which the trend is described in one or two sentences, an inspiring title, and a visual- ²².
- **CREATE TREND VIEWS:** in this second activity, the designer maps the trend cards on a grid and decides on the two dimensions of the grid, clustering the trend cards into four scenarios. For each scenario, designers make a highly expressive visual or materialization (scale model, movie, etc.) to "feel connected to the subject as if one lives the scenario' and to delve into the details - Bol ²²." After designers develop the scenarios, a peer group discusses all the scenarios, sometimes with a client team, covering what is realistic and what one would want to avoid or stimulate. Next, the designer creates the trend views. (S)he formulates a design vision of the issues relevant to the future, including an agenda on what needs attention. Trend views present the possible, future experiences of possible, future users²².

The discussion among designers in the second activity—create trend views—mainly seeks to strengthen the voice of the trend viewer. Other sources of creative authority (framed in figure 2.1) include formal design

education from a respected school and a proven track record in research projects. In essence, trend views help designers and their clients empathize with people in a future situation.

↳ Trend Patterns

The creative challenge of the trend patterns technique is to spot robust substance from thin slices of emerging trends. According to the highly experienced trend researcher Hanne Caspersen, "trend research thrives on absorbed memories of prior experiences: through triggers of small pieces of signals, these memories can be retrieved and patterns recognized - Caspersen^{24,4}."

The trend patterns technique consists of two distinct activities: (A) intensive immersion into the context matter of the area of interest, and (B) a synthesis of trend patterns with authentication of different pieces of evidence.

→ IMMERSION, the first activity, is a deep dive into a specific area of interest to observe and absorb context. The creative lead starts out by mind-mapping the area of interest together with the stakeholders. As a result, (s)he makes a long list of their brain-dump to enable a better understanding of the subject matter and to apprehend what influences changes in relation to the topic. Next, the trend research team looks for clues and interesting bits of information collected through fieldwork, interviews, expert interviews, and "a lot of desk



→
Roadmapping
Trend patterns

© Bastian Schultes
photography
PHILIPS DESIGN

Collaborative work-session where we are discussing the implications of the trends for future user experiences. From a series of workshops run simultaneously at different locations across the globe - Hanne Caspersen.

research, involving reading books and articles and searching on the Internet - Caspersen²⁴." In-depth immersion requires the fieldwork of visiting people and having empathic conversations. Curiosity is critical in absorbing information and "you need to have a lot of respect for the subject matter - Caspersen²⁴." Another part of immersion is a media 'watch list' compiled of Twitter accounts, webcasts, TV programs, events, experts, etc., which are all necessary as a foundation for further expanding the search and underpinning initial clues. This media investigation concentrates on observing and "absorbing the area of influence of opinion leaders and also alternative voices - Caspersen²⁴." For memorizing, the results of all observations and mixed media bits are solidly documented for later use in evidencing trends.

→ CREATE PATTERNS : the second activity involves creating trend patterns in the absorbed information to uncover a new trend. When it becomes possible to connect and link several pieces into clusters and to discern the underlying meaning, a trend is conceived. In support of such a synthesis in trend patterns, (s) he uses mapping tools to uncover visual patterns in the mixed data. When creating visual patterns, you can use, for instance, a map layered with dimensions of people's motivations to ensure proper trend identification. Once an initial trend has been identified, it can be backed up with other slices of information gathered in the immersing step. The trends can also be linked to statistical data of social change to strengthen credibility

Through all of the confirmatory practices of the multimodal bits and pieces, the trend researcher triangulates the trend pattern in the second activity. After expansive research on bits of information that establishes a memory of the area of interest (as framed in figure 2.1).

Overall, we gained insights in four creative trend techniques. All these can be of important value to your efforts in formulating the user value drivers in design roadmapping. Future value drivers can be based on: Trend scenarios that include re-perceiving the organisation's mental frame of reference on value drivers (multimodal synthesis by the involved experts); Trend topics based on visual pattern creation of captured images; Trend views on foreseen trends (creatively sensed by the expert) or on Trend pattern creation from thin slices of documented memory (substantiated with multimodal evidence) that can provide a solid base for future value drivers.

Shared Service Design

ANNA NOYONS

Inspired by the sharing economy trend, two entrepreneurs in Amsterdam started Peerby, a company that provides a peer-to-peer lending service. Via the online social media platform Peerby.com, users can borrow and share products with their neighbours. In this way, the utilization of products is extended. For example, an electric drill that is used by only one person is operated for 13 minutes on average during its lifespan, but can be put to more use when shared. More than 200,000 people have become members of this social community service and altogether they have registered over 1.5 million items that are available for sharing.

Besides saving money, time, and storage space, the users of the Peerby service also get to know their neighbours. Peerby's mission is realizing 'instant access to everything, everywhere and for everyone'. The entrepreneurs formulated their strategic identity by three pillars that they strongly believe in: social cohesion, sustainability, and social entrepreneurship. In addition, Anna Noyons, the chief product officer (CPO), commissioned an assignment to create a design roadmap that gains a longer-term perspective, supports the scaling up of innovation efforts and most importantly contributes to a positive member experience.

Strategic trend scanning

A team of designers (all MSc candidates in strategic product design at Delft University of Technology) took up this challenge and created a roadmap for Peerby based on creative trend research. They explored that the origins of shared services, like Peerby's, thrive on experience value rather than ownership value. Building upon the popularity of sharing services such as Airbnb, and its frontrunner, couch surfing, various initiatives and new initiatives on product sharing pop up rapidly. The team of designers found twenty sharing services on the web in the Netherlands in 2013—and just one year later, in 2014, there were nearly two hundred. In other words, product sharing is booming, with successful businesses such as like Renttherunway (US) for sharing designer clothing and GetMyBoat for sharing a boat. The trend is almost becoming mainstream through this rapid increase of shared services business.

Trend spotting on sharing services

For their trend spotting research the team gathered information from different sources, ranging from daily observations to global news magazines, from trend-watching blogs to a Forbes trend study and from



↑ Shared products service
PEERBY members.

↑ PEERBY venture team.

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collecting advertisements to a Harvard study on the subject of shared services. As guiding questions for their trends exploration they had formulated: "What triggers the interest in sharing?"

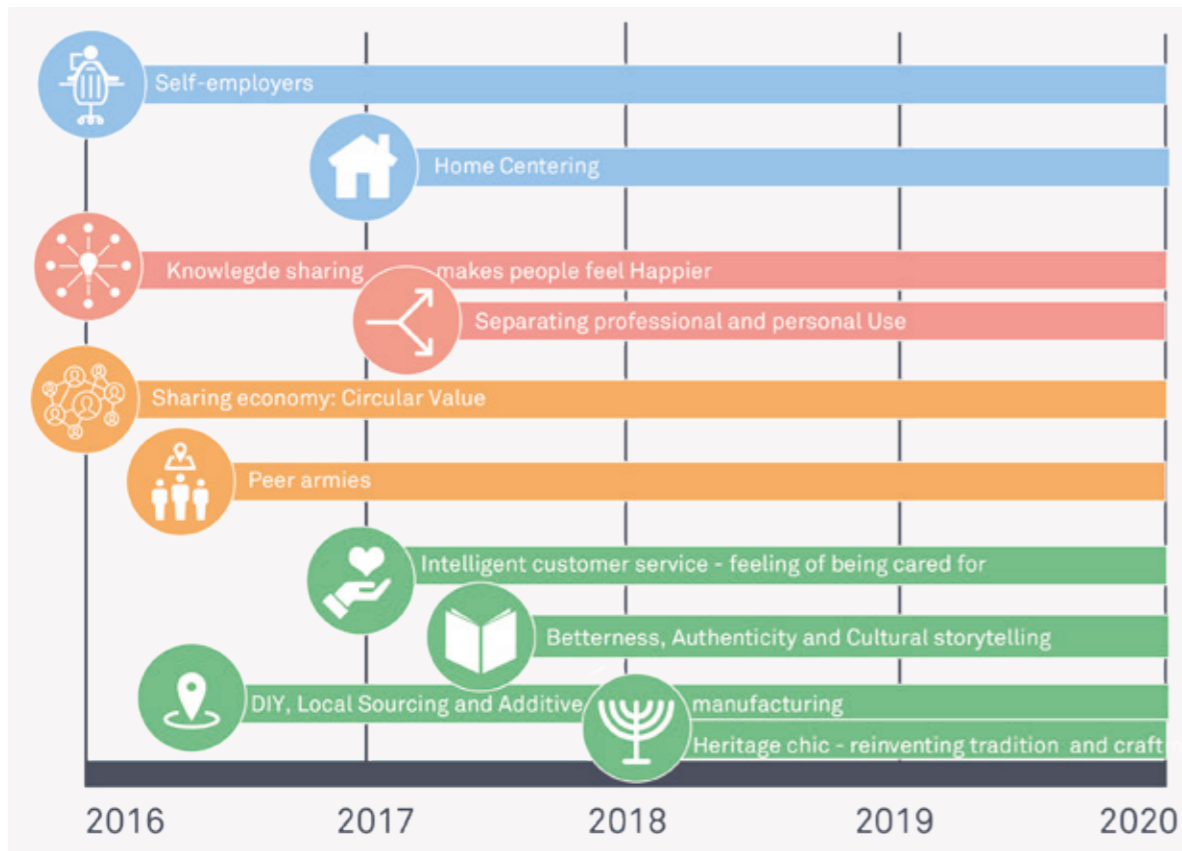
In a team meeting all trend data was brought to the table and each element was discussed in terms of user impact and their relevance for the Peerby service. On the wall, they clustered the relevant findings (dropping the irrelevant and those with almost no user impact) and created patterns of substantial visual and textual data. For each pattern, they formulated a trend theme.

Trend Roadmap

Top 10 trends listing

↓
Figure 2.2
Trend roadmap for PEERBY

cc Tess Poot, Tonino Gatti, Lars Scholings, Eva van Genuchten & Pepijn van der Zanden.
PEERBY Project Report Design Roadmapping Master Course, Faculty Industrial Design Engineering, Delft University of Technology.



→ SELF-EMPLOYERS

The boundaries between work and private life will continue to blur; social status will replace work status, and more people will become self-employed. This is unleashing creativity. More than a million “makers” are currently selling their own designed products via online marketplaces like Etsy, and as many people have become “hosts” on short-term accommodation platforms like Airbnb. The home is becoming the center for all kinds of different activities. Working and living will take place in the same spot. The number of self-employed people in the US grew by one million. Work and life will become further intertwined.

→ HOME CENTERING: HYPER-EFFICIENCY OF INSTANT ACCESS

Consumers are seeking faster and more efficient ways to overcome issues of lack of time, space and resources. They want instant access to products, even faster than going to the shop or hiring it. Additional match and bring services are driving service providers to the limits.

→ KNOWLEDGE SHARING MAKES PEOPLE FEEL HAPPIER

Harvard University has studied the experience of sharing and giving. The researchers found that sharing activates those parts of the brain that relate to feelings of happiness. This indicates that sharing makes people feel happier.

→ SEPARATING PROFESSIONAL AND PERSONAL USE

User-generated boosting by uploading photos and video, writing blogs and posting comments, users are actively generating, updating and creating content as well. One retailer claims that online shoppers who come from Pinterest are three times more likely to make a purchase than the average shopper on their site. At best this boosts the online reinforcement of “Keeping Up with the Joneses.”

→ PEER ARMIES

After “I”, the era of “we” is emerging. After that advertisements focused dominantly on the use of ‘i’ to denote individuality (iphone, I amsterdam, etc.), highlighting in particular the product properties that enhance personal identity, a countertrend has been observed. Under the influence of social media, a growing number of advertisements show groups of friends announcing the era of “we”: an era in which personal development and reputation depend largely on communities of friends.

→ SHARING ECONOMY: CIRCULAR VALUE

The circular economy aims to generate more value and economic opportunity with less material and energy consumption. Through the power of circling, materials are kept longer in use by multiple cycling or by lengthening cycling duration. Creating value exchanges instead of transactions also includes using “alternative currencies” such as time, reputation and craftsmanship products. This business model innovation can provide new growth opportunities for material, component and product reuse.

→ INTELLIGENT CUSTOMER SERVICE – FEELING OF BEING CARED FOR

Open access services are further challenged by artificial intelligence technology that will make it possible to “read” consumers and give them what they want, even before they ask for it.

→ BETTERNESS, AUTHENTICITY AND CULTURAL STORYTELLING

In a world full of buzz and superficial interactions, people are seeking more authenticity, depth and meaning. They choose to be offline and use their leisure time for cultural experiences, creative expressions and storytelling. These activities are all about mutually beneficial relationships. They are intended not only to make those who engage in them better people, but in a way that makes these people part of a larger collective – social actualisation.

- **DIY, LOCAL SOURCING AND ADDITIVE MANUFACTURING**
More local and do-it-yourself production will be made possible by additive manufacturing facilities such as 3D scanning and 3D printing. Co-creation and partly personalized products become more feasible and viable to ensure perfect fit.
- **HERITAGE CHIC – REINVENTING TRADITION AND CRAFTSMANSHIP**
In both Europe and Asia, cultural traditions such as beer brewing or scarf knitting are being preserved, but also reinvented – and often by the people you'd least expect: serve, facilitate and connect with them!

↳ Design Roadmap for PEERBY

The design team shortlisted 10 trends (see figure 2.2) and ranked them on long term user impact and how Peerby could respond with innovations (Innovation strategy fit). This provided inspiration and direction for formulating the roadmap vision: ‘Circular community value’ based on the highest ranked trend: “Through the power of circling the products in a neighbour community, they are kept longer in use by multiple cycling and by lengthening cycling duration”. Then they decided on which trends to map on the market roadmap with a view to providing the most unique and promising values for Peerby:

- Betterness, authenticity, and cultural storytelling
- DIY, local sourcing and additive manufacturing
- Intelligent customer service – feeling of being cared for
- Heritage chic—reinventing tradition and craftsmanship

In creating the roadmap, the team mapped these trends to the timeline. Figure 2.3 presents the roadmap in connection to the trends. They shaped the future direction, building upon the shared neighbourhood service of lending and borrowing stuff, they could also create things together. For instance, thanks to help from a neighbour, one participant was able to build a table. They propose that Peerby should grow and become a truly established community platform by emphasizing more the interactions between neighbours and building their services around environmental awareness in combination with the momentum of the sharing-economy. To communicate this, the design team made a roadmap that contains four horizons over a period of ten years.

↳

Top trends combination:
Repair Café event.

An event where volunteers with repair skills invite members of the community to bring their broken things in to be fixed. They work together to understand the problem and find a solution. The fixers share their knowledge and tools to show the owners of the items how to do the repair.

cc Repair Café Toronto,
photography.



ANNA NOYONS is a strategic product- and service designer. After working as a design consultant for several years for big and small companies, she joined the PEERBY team in a very early stage as the Chief Product Officer and helps to create the companies vision and strategy and translate that into the product experience.

DESIGN ROADMAP

PEERBY Shared services

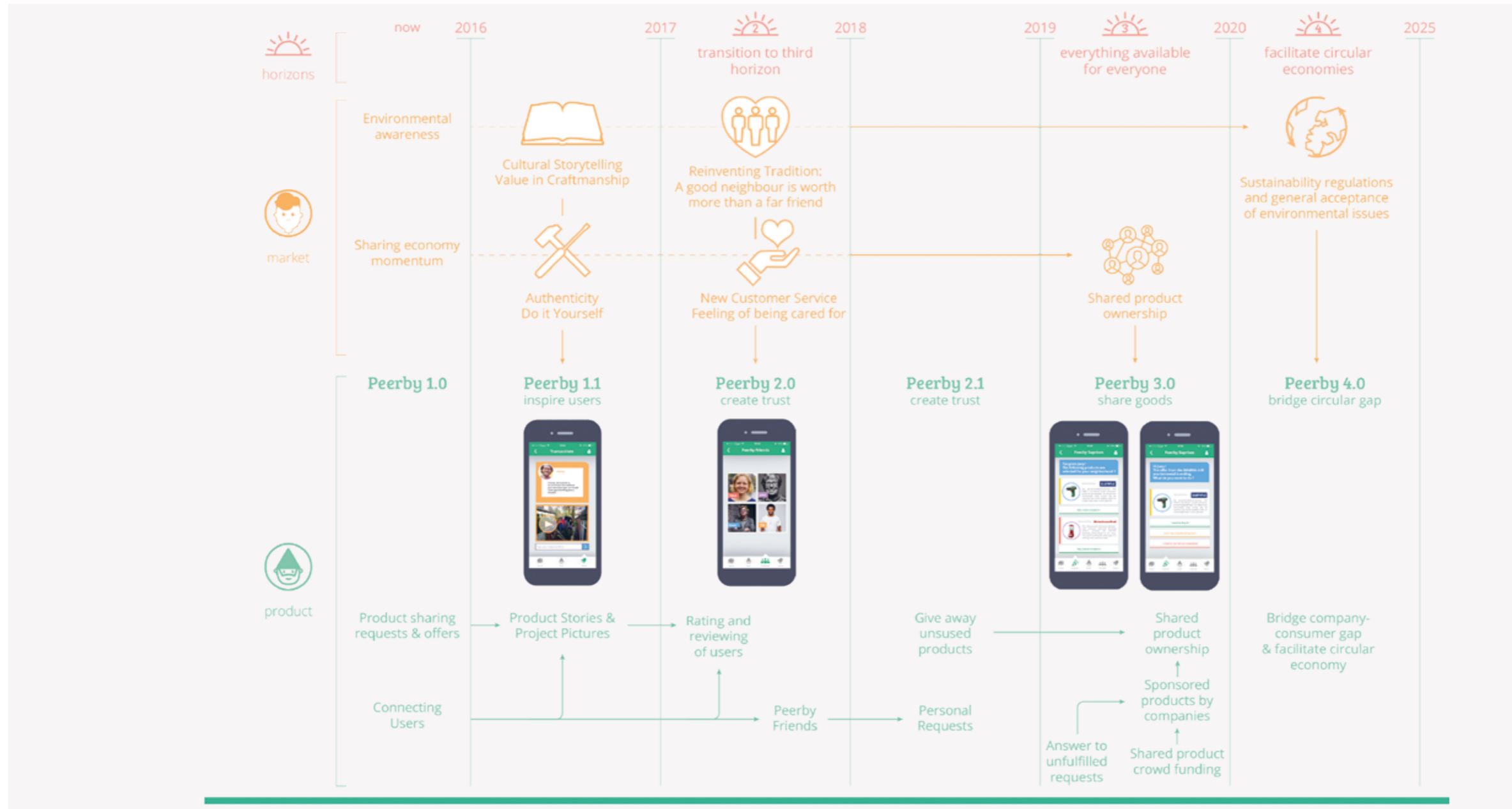


Figure 2.3
Design roadmap for PEERBY

cc Tess Poot, Tonino Gatti, Lars Scholings, Eva van Genuchten & Pepijn van der Zanden. PEERBY Project Report Design Roadmapping Master Course, Faculty Industrial Design Engineering, Delft University of Technology.

Please note that the design roadmap is created for PEERBY by Strategic Product Design Master students, and therefore do not reflect Peerby's actual strategy.

LAB ↗

Try out the Trend Topics technique

MATERIALS NEEDED:

- lifestyle magazine
- access to the Internet to search the web for images

1 Take a lifestyle magazine or decide to spend two hours on the Internet and use a search engine with an image view (for instance Google Image).

2 Formulate an area of interest, a 'radar' to start your trend research, for instance, a lifestyle activity (e.g., dining, sporting, etc.), an industry (cars, drones, retail), or a product/market/technology combination (coffee machines, 3D printing, etc.).

3 Capture images that are new and innovative and in some way express a promise for the future. Go for quantity and collect about fifty images.

4 Cluster the images that have similar elements and label these elements. Identify trends with a second round of clustering the image clusters. Create larger clusters that connect or unify the image clusters to each other and propose a term for the trend cluster.

5 Arrange the trend clusters on the decision grid of user impact and innovation fit (see figure 6.5). Rank the trends from high to low impact and high to low innovation urgency.

6 Choose the meaningful trends with significant to high impact on user values for your top 10 listing of trend topics.

7 For each trend topic, create an inspirational title, a few sentences of explanation, and one characterising image.

This kind of try out you could easily do in one sitting, usually in less than four hours if you're taking this simple, hands-on trend technique. It's a perfect opportunity to try out your creative trend research skills.



Prof. dr. SUSAN REID on the subject of Market Visioning and Creative Trend Research

LS In design roadmapping, formulating a market vision is an essential element. Your scientific research on market visioning^{11,25} shows that for successful development of radically new, high-tech products, a market vision is a prerequisite. How do the firms you researched start market visioning?

SR Well, according to my research, market visioning competence and market vision each have separate and cumulative impacts on early performance of firms involved with radically new high-tech products. The inherent risks and rewards associated with these types of high-stake ventures require that firms create long-term visions to guide their efforts. A clear and compelling vision about the product-market opportunities associated with radically-new ventures can help firms to achieve superior competitive advantages.

LS Have you come across the use of (creative) trend research used in formulating a market vision?

SR Firms can come to a market vision from many different paths, including those routes to creating a market vision, which is largely top-down versus those which are more bottom-up. It would be more likely the case that if a firm is 'cognizant' of formulating a market vision and actively striving to do so that it would be a case of top-down formulation. In such cases, then, trend research might be used to create the market vision.

LS What do you consider as the most important elements in creating a market vision?

SR The numbers would say that the strongest, most important component of market visioning competence (in terms of statistical impact) was idea-driving, championing behaviour on the individual side, and having a proactive market orientation on the organisational side.

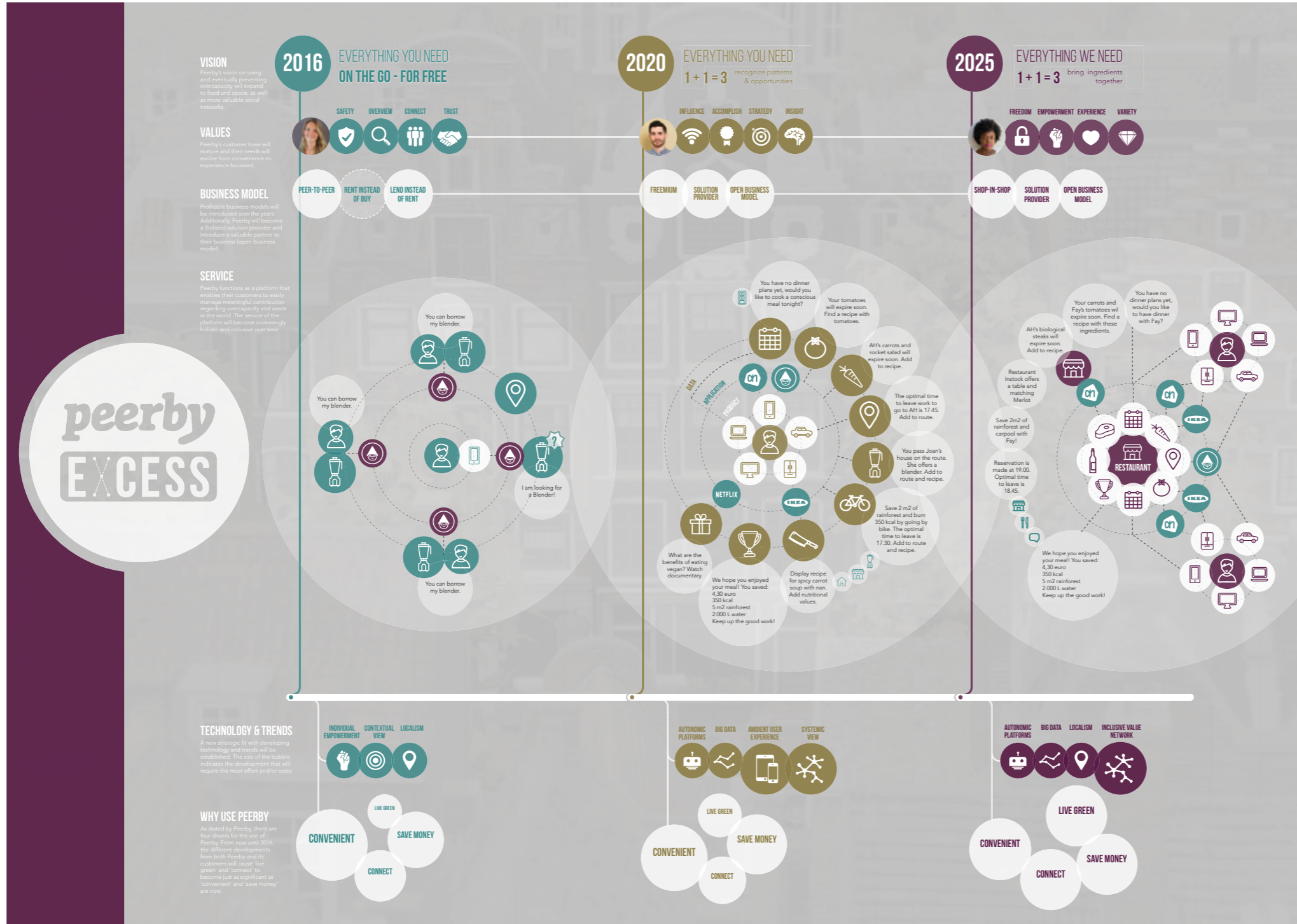
LS In your research, you showed that the impact of market visioning on innovation performance is positive, in particular on the key aspects of the early performance, early success with customers, and ability to attract capital for the business development plans behind the radical innovations. What are your thoughts about the impact of creative trend research?

SR I tested the model as a whole and found that market learning tools, which would encompass techniques like trend research, is a statistically significant component of the market visioning competence, which has an impact directly on ability to attract capital and indirectly on early success with customers. Importantly, I used four items to measure market learning tools and the item which had the highest standardized loading and reliability was measured using the item: "we tried to develop several potential technological scenarios before choosing market(s) to pursue"²⁶. This leads me to believe that in fields governed by technological development, it's important for the researchers to focus on technology trends in addition to the market trends in their field, and to do so early on, in the front end of innovation.

LS What are your recommendations for design roadmappers on creating a market vision?

SR I think it is important to try and understand the context under which a vision is being 'born', both in terms of initiation with a low or high level of market context, and in terms of whether the focus is from an individual or organisational perspective²⁷. The easiest to map will be in the case of an innovation being initiated from an organisation and having high extend market context. To this end, design roadmappers might start to work on contextualizing a given market vision form.

SUSAN REID is a professor at Bishop's University, teaching and researching in areas where marketing, innovation and entrepreneurship intersect: market vision, networks, radical innovation, brand and innovation management. She has published in refereed journals including: Journal of Product Innovation Management, Technological Forecasting and Social Change, R&D Management, World Development, Business History and International Journal of Technology Marketing. Her academic background combines with over 25 years of consulting, business and board experience for the aviation, biopharmaceutical, nanotechnology and consumer goods sectors (including for the ice cider and spirits business, Domaine Pinnacle, co-founded with her husband Charles Crawford in 2000 and sold in 2016). Her mission is to help others negotiate the path between their passion and successful product/market vision.



← Design roadmap for PEERBY, Jan Buijs award, 2016.

cc Esmee Mankers, Mark Kwanten, Nienke Nijholt & Ben Hup. PEERBY Project Report Design Roadmapping Master Course, Faculty Industrial Design Engineering, Delft University of Technology.

Please note that the design roadmap is created for PEERBY by Strategic Product Design Master students, and therefore do not reflect Peerby's actual strategy.



↑
Shared Products
services
PEERBY members

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IN SUM

In this chapter, we positioned creative trend research between the two extremes of visual trend spotting and strategic trend scanning. We gained the insight that creative synthesis rooted in human intuition is the key characteristic of creative trend research. Creative synthesis unites bits and pieces of mixed media into a trend creation that imagines future value.

Creative synthesis can be established by:

- Designer's view on foreseen trends (creative authority of the expert).
- Visual pattern creation of captured images (peer-to-peer authority).
- Re-perceiving the organisation's mental frame of reference (collective authentication of trends by the involved experts).
- Pattern creation from thin slices of documented memory (substantiated with multiple evidence authentication).

The synthesis is driven by creative authority or authentication of multiple sources.

With a framework four creative techniques are distinguished: trend views, trend scenarios, trend topics, and trend patterns on the dimension of intuition and creative synthesis. The Peerby case demonstrated the importance of trend research for the roadmap. The lab provides a do it yourself experience on the art of trend research.

- 1 Evans, M. (2011). Empathizing with the Future: Creating next-next generation products and services. *The Design Journal*, 14(2), 231-251.
- 2 Oxford English Dictionary Online, accessed June 2016.
- 3 Reynolds, W. H. (1968). Cars and clothing: understanding fashion trends. *Journal of Marketing*, 32(3), 44-49.
- 4 Gladwell, M. (2007). *Blink: The power of thinking without thinking*. UK: Little, Brown and Company, Hachette Book Group.
- 5 Philips Design Stories: People centric research: Putting people at the heart of innovation. <https://www.90yearsofdesign.philips.com/article/87>, accessed August 2016.
- 6 Gaimster, J. (2012). The changing landscape of fashion forecasting. *International Journal of Fashion Design, Technology and Education*, 5(3), 169-178.
- 7 Goldsmith, R. E., & Clark, R. A. (2008). An analysis of factors affecting fashion opinion leadership and fashion opinion seeking. *Journal of Fashion Marketing and Management: An International Journal*, 12(3), 308-322.
- 8 Rickman, A.T. & Cosenza, R.M. (2007). The changing digital dynamics of multichannel marketing: The feasibility of the weblog: text mining approach for fast fashion trending. *Journal of Fashion Marketing and Management: An International Journal*, 11(4), 604-621.
- 9 Boyd, T. J., Okleshen Peters, C. & Tolson, H. (2007). An exploratory investigation of the virtual community MySpace.com: What are consumers saying about fashion? *Journal of Fashion Marketing and Management: An International Journal*, 11(4), 587-603.
- 10 Aguilar, F.J. (1967). *Scanning the business environment*. New York, NY: Macmillan Co.
- 11 Reid, S. E. & Brentani, U. de. (2012). Market Vision and the front end of NPD for radical innovation: The impact of moderating effects. *Journal of Product Innovation Management*, 29(S1): 124-139.
- 12 Ansoff, H.I. (1980). *Strategic issue management*. *Strategic management journal*, 1(2), 131-148.
- 13 Day, G.S. & Schoemaker, P.J.H. (2004). *Driving through the fog: Managing at the edge*. *Long Range Planning*, 37(2), 127-142.
- 14 Tovey, M. (1997). Styling and design: Intuition and analysis in industrial design. *Design Studies*, 18(1), 5-31.
- 15 Kant, E. (2001). *Critique de la raison pure* (1781). PUF, 63-64.
- 16 Badke-Schaub, P. & Eris, O. (2014). A theoretical approach to intuition in design: Does design methodology need to account for unconscious processes? In: *An Anthology of Theories and Models of Design* (pp. 353-370). London: Springer.
- 17 Wack, P. (1984). Scenarios: The gentle art of re-perceiving: A thing or two learned while developing planning scenarios for Royal Dutch-Shell. Cambridge: Harvard Business School, division of Research.
- 18 Van der Heijden, K., Bradfield, R., Burt, G. Cains, G. & Wright, G. (2002). *The Sixth sense: Accelerating organisational learning with scenarios*. Chichester: Wiley.
- 19 Nekkens, J. (2016). *Developing Scenarios*. In: *Foresight in Organisations. Methods and Tools* (pp. 11-40). London: Routledge.
- 20 Nekkens, J. (2016) on *Creative Trend Research: the role of methodology and intuition*. Transcripts by Stoimenova, N. (2016).
- 21 Skalska, Z. (2016). Internet blog <http://www.360inspiration.nl/inspiration/trash-generation/> accessed August 2016.
- 22 Bol, S. (2016) on *Creative Trend Research: the role of methodology and intuition*. Transcripts by Stoimenova, N. (2016).
- 23 Bol, S. (2016). *Creativity in foresight: Seven exercises*. In: *Foresight in Organisations. Methods and Tools* (pp. 190-200). London: Routledge.
- 24 Caspersen, H. (2016). on *Creative Trend Research: the role of methodology and intuition*. Transcripts by Stoimenova, N. (2016).
- 25 Reid, S. E. & Brentani, U. de. (2010). *Market Vision and Market Visioning Competence: Impact on Early Performance for Radically New, High-Tech Products*. *Journal of Product Innovation Management*, 27(4): 500-518.
- 26 Reid, S.E., Roberts, D. & Moore, K. (2014). *Technology Vision for Radical Innovation and its Impact on Early Success*. *Journal of Product Innovation Management* 32(4): 593-609.
- 27 Reid, S. (2015). *Vision and Radical Innovation: A Typology*. In: *Adoption of Innovation*. Switzerland: Springer International.