

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

# Market sense-making in design practice: exploring curiosity, creativity and courage

Charlotta Windahl, Senior Lecturer, University of Auckland Business School, 12 Grafton Rd, Auckland 1142, New Zealand. [c.windahl@auckland.ac.nz](mailto:c.windahl@auckland.ac.nz), +64 9 9236301.

## ABSTRACT

This paper introduces the three interrelated design catalysts of curiosity, creativity and courage, and explores how they actuate market sense-making activities in design practice. Drawing on the interplay between action and meaning dimensions in design practice and service marketing theory, it specifically investigates when desirability, rather than feasibility or viability, is the locus of innovation activities. Thus, the following three aspects of market sense-making in design practice are identified: (a) curiosity catalyses empathy and the deep understanding of markets, which are seen as socially constructed of individual (value-in-use) and connected (value-in-context) experiences; (b) creativity catalyses ‘logical with regard to understanding the opportunities for creating future markets; and, (c) courage catalyses learning through iterations which reduce cognitive bias with regard to market assumptions, hereby reducing cognitive bias in both curiosity- and creativity-driven activities.

Key words: design practice, service theory, SDL, market innovation, curiosity, creativity, courage

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

## Prologue - The Story

*'This is it... they are doing what we have been writing about theoretically and what 'my' industrial companies to a large extent failed to do....'*

The sentence above was forming in my head as I digested my first glimpse of a design team's interaction with its customers and future users. It was back in 2010 and I was walking around Air New Zealand's Hangar 9 facilities in downtown business district Auckland, New Zealand, where the team was displaying their recent design journey, including early prototypes such as that of a full sized aircraft interior. The project had been tasked with reimagining the long-haul flight experience, and in 2011, the developed seats and services were launched on the new 777-300 flight from Auckland to London. In hindsight, it was possibly this project that prepared the ground for the company's continuous innovation efforts using the so-called design methodology.

On a more personal level, this visit was also the start of my own design journey and industry collaboration with a number of people and organisations in New Zealand as well as internationally. I had worked in the intersection of technology and business development for a number of years before I was introduced to what I now call design practice. For me, this initial meeting provided a platform to start exploring what I had long seen as the missing link within the marketing discipline, namely, how market activities link to (and even proceed) innovation activities, that is, (or bluntly) marketing is and should be more than 'just' the understanding of how to push a product to a current market. More specifically, some of the theoretical marketing concepts such as 'value-in-use', 'service experience' and 'market creation' seemed to come alive through industry practice innovating for future markets.

Throughout the last few years, my own learning curve has been steep and this commentary is an attempt to summarise and reflect on my journey, specifically highlighting

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

the learnings I see as relevant to the intersection of marketing and design disciplines. The three interrelated design catalysts of curiosity, creativity and courage will guide the discussion. Hopefully my insights will inspire and provoke new discussions between practitioners and academics within the field.

The paper is organised as follows: first, I will elaborate on the background of my interest and how I approach design practice herein; second, I explore, through the three design catalysts of curiosity, creativity and courage, market sense-making activities in design practice; third, I summarise my exploration and discuss its implications and limitations, as well as reflect on opportunities to continue this conversation.

## **Introduction: Design practice and parallels to a service marketing perspective**

In the management literature, design practice<sup>1</sup> is currently heralded as a creative and necessary practice for companies facing uncertain futures – companies that want to succeed, not only with new services, products and business models, but also with strategy, organisational and system change (Brown & Martin, 2015). The traditional product designers' tools have found their way into managers' toolkits for business design; consequently, companies are experimenting with tools and activities, emphasising empathy, creativity and deep understanding of the customers and markets 'to be', rather than the company's technological capabilities and products (Brown, 2008; Liedtka, 2015; Martin, 2009). Thus, if a company is to succeed with this relatively new approach to business design, 'ordinary' business people are challenged to rethink and change, not only their innovation processes, but also their mindset and approach to both customers and future markets. It is

---

<sup>1</sup> In this paper, 'design practice' can be used interchangeably with how many authors and practitioners use concepts such as design thinking, human-centred design/innovation and service design.

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

clear that design as a practice *generally* challenges and complements a more traditional approach to market research (Chen & Venkatesh, 2013; Leonard & Rayport, 1997; Roberts & Palmer, 2012).

This managerially driven design discourse parallels a more academic discussion; innovation and marketing scholars have long discussed the need to shift from a product to a service, or even experience focus. More than a decade back, Normann (2001) summarised a new business logic: “Companies now are seen as having customer bases in which customers are individuals (institutions or persons) and representing sources of business; they are no longer anonymous markets and receivers/sinks” (p. 23); and Prahalad and Ramaswamy (2003) argued that, “the next practices of innovation must shift the focus away from products and services and onto experience environments – supported by a network of companies and consumer communities – to co-create unique value for individual customers” (p.12). Other authors (Berry, Shankar, Parish, Cadwallader, & Dotzel, 2006; Payne, Storbacka, & Frow, 2008; Vargo & Lusch, 2004; 2008) have reinforced the need for all firms to focus on service exchange and experience rather than goods and services. This service perspective implies that value creation is inherently interactional and that, as expressed by Vargo and Lusch (2008), “the customer is always a co-creator of value” (p. 7). For firms adopting this shift in perspective, the requirements change, not only for how to view the outcome of the exchange, but also for how to involve users in the development process of these new experience environments where so-called service exchange takes place (Korkman, Storbacka, & Harald, 2010; Ostrom, et al., 2010; Wetter-Edman, 2011). While the extant marketing literature gives examples of firms that have adopted co-creation and useful insights into what needs to be addressed in order to achieve this shift, there is little direction on how the service/experience

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

development process can be undertaken and relatively little is known about how customers and firms engage in co-creation (Payne, et al., 2008; Wetter-Edman, 2011).

Arguably, however, there are clear links between this ‘new’ service perspective and design practice (c.f. Kimbell, 2011; Wetter-Edman, et al., 2014): the former emphasises the need for new approaches to market(ing) theory that focus on customers and their experience, whereas the latter engages with the human experience and provides processes (tools and activities) and a way of thinking useful for creating and maintaining relationships with customers in an experienced-based economy. In this paper, I propose that marrying the two provides an opportunity to explore the interplay between meaning and action dimensions (Cook & Brown, 1999). Consequently, I will explore market sense-making activities in design practice.

### **Design practice with emphasis on process and desirability**

Practitioners, and an emergent, fast growing body of research (see Liedtka (2015) for an overview) discuss both the practical activities and tools linked to design practice, as well as its epistemological and cognitive foundations (Rylander, 2009). The process dimension includes using activities and tools such as observations, ethnography, early and fast prototyping, visualisation and interdisciplinary teams; it emphasises the importance of working iteratively, combining abstract and concrete activities, as well as divergent and convergent approaches (Brown, 2008). The cognitive dimension provides a deeper understanding of how knowledge is created; through design practice, firms and individuals need to balance analytical and intuitive thinking, in order to achieve both reliable and valid outcomes (Martin, 2009). Design practice uses abductive reasoning, the ‘logic of what could be’ (Peirce, 1994), and reflective practice (Schön, 1983) in order to achieve this.

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

Drawing on reviews of various design practice ‘schools’ reveals three main phases or stages: (a) *discover and comprehend* users’ needs and the problem or opportunity space, (b) *ideate and create* an offering addressing the problem or opportunity space, and (c) *experiment with and deliver* prototypes and tests (c.f. Liedtka, 2015; Seidel & Fixson, 2013). However, it is impossible to go through these stages in a linear fashion, as concluded by Liedtka (2015, p. 927):

All descriptions of the process emphasize iterative cycles of exploration using deep user research to develop insights and design criteria, followed by the generation of multiple ideas and concepts and then prototyping and experimentation to [learn and] select the best ones – usually performed by functionally diverse groups working closely with users.

For the purpose of this paper, rather than providing a complete overview of design practice and its tools, I will focus on the activities closely related to customers, users and markets. This is in line with the more recent emphasis of business design practice (Liedtka, 2015), and possibly one of the reasons the practice is growing in the business managers’ worlds. Related to customers and markets specifically, the current discourse has an explicit focus on the importance of using design practice in order to understand the customers and their experience, emphasising: (a) the importance of early focus on desirability and customer/user empathy rather than feasibility and viability (Brown, 2008), in which (b) co-creation practices play an important part (Sanders & Stappers, 2008) when (c) surfacing and questioning current assumptions around value creation (Liedtka, 2015) and customer experiences.

It should also be noted that in this paper, design practice is seen first and foremost as a methodology and not as an outcome – a methodology that is specifically useful not only for ideating and solving for new innovations, but perhaps more importantly, identifying a valid

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

problem or opportunity space. And to somewhat reiterate, a methodology that, to a large extent, lets the identified desirability and user need drive the innovation opportunities, rather than what is technically feasible or economically viable. As such, it is a methodology that challenges firms and managers traditionally driven by new technical opportunities, their internal capabilities and resources, rather than customers' and future users' needs, when developing new products, services and/or business models and strategy.

In essence, in an ideal world, design practice is human-centred, it starts with people and an urge to understand their needs, dreams and behaviour, that is, understanding desirability before developing feasibility and viability. This is why it fits so well with a service perspective on market(ing); a service perspective inverts the logic of traditional innovation activities “by seeing market-ing as primary and manufacturing (and other production processes) in a support role. Market-ing, in this sense, is not limited to the activities of the marketing department [...]. Rather, it involves the creation and recreation of markets by finding innovative approaches to resource integration and service provision; it represents the *purpose of the firm*” (Lusch & Vargo, 2014, p. 208).

## **Design practice and market sense-making activities**

Guiding my exploration of market sense making in design practice are three interrelated design catalysts: *curiosity*, *creativity* and *courage*. Drawing on 5 years of working with student teams and design professionals using the phases discussed above, these three catalysts have been identified as especially important in challenging a more traditional approach to market(ing) activities. They transcend the three phases of design-practice ‘schools’ introduced in the previous section; as such, they can be associated with design attitudes (c.f. Michlewski, 2008). However, apart from a brief explanation in the paragraphs below,

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

exploring the catalysts in more detail is outside the scope of this paper; rather I will use them to highlight how design practice impacts market(ing) sense-making activities, hereby investigating links to important market conceptualisations.

The following quote from a design practitioner implicitly captures the importance of the three catalysts of curiosity, creativity and courage. “It [design methodology] won’t necessarily come up with the goods every time, but it does other things as well. It gives people skills, it creates a profile, it creates a noise and visibility. People walk past areas which are full of foam boards and sticky notes, and photos, and they automatically get interested. … And so that’s hugely valuable, you walk into this room, I can show you what I’m doing, ‘it’s this, we looked at this, look at what’s going on here.’ We have got some ideas and people get interested, but what drops out the other end is still entirely unpredictable”.

In the following section, the three catalysts will be used to explore market sense-making activities in design practice. Specifically, I will focus on (a) how curiosity catalyses increased understanding of customer experiences and consequently value-in-context, (b) how creativity catalyses creation of future contexts, and (c) how courage reduces cognitive bias in both curiosity and creativity driven activities.

#### *Curiosity and the need to experience [the market] rather than measuring [it]*

In this paper, curiosity<sup>2</sup> is seen as a catalyst specifically (but not exclusively) important for the exploration of customer experiences and current contexts, highlighting the need for a more thorough understanding of value-in-context, as discussed below. As such, it is defined

---

<sup>2</sup> Interestingly, a ‘curiosity’ search on Business Source Premier (20/09/2016) revealed only 771 hits in scholarly, peer-reviewed journals, most of them in the field of psychology, a few in marketing discussing curiosity and advertising, and some discussing curiosity and gaming.

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

as a process rather than a trait and linked to the continuous desire to know, to see or to experience in order to learn<sup>3</sup> (Litman, 2005; Loewenstein, 1994), even though it might not be clear what type of learning it will lead to.

In design practice, the tools for understanding the customer experience, such as customer journey mapping for example, include more than activities linked to a specific offering. Rather, they also aim at capturing the activities, mood and emotions throughout the whole experience, as well as throughout possible connected experiences. Thus, the design team needs to be curious about what goes on in the customers' lives beyond their own business activities. For example, during the design project in which Air NZ worked on reimagining the long-haul experience, the team moved beyond the traditional customer journey focusing on plane activities, towards including all activities between the time of the booking to the time of arrival (Lakhani, Fayard, Levina, & Pokrywa, 2013). This approach seemingly adheres to a 'new' view on value, where it is seen as "created at the point of [...] 'experience', rather than during production" (Lusch & Vargo, 2014, p. 8). Additionally, it implies that each specific experience(s) is part of a network of experiences and thus context dependent. Furthermore, it is worth highlighting that design practice emphasises the importance of empathy for the *individual* customer experience; this approach is an implicit acknowledgment that markets come together rather than act in isolation (Aspers, 2011), and that they are subjective as opposed to objective realities – markets are socially constructed in the world of design practice.

This holistic and subjective view of the customer experience prevalent in design practice expands the notion of the boundaries of the firm and its activities. First, design practice, with its initial focus on desirability, that is, understanding customers' (latent) needs

---

<sup>3</sup> C.f. curiosity in Oxford Dictionaries. Retrieved 20 October 2016, from <https://en.oxforddictionaries.com/>.

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

through empathy for the customer experience, implicitly assumes that value-in-use is co-created over time rather than exchanged at a specific point. Second, through its holistic view of the customer experience(s), design practice acknowledges that this value co-creation is dependent on a number of different resources and actors, implicitly acknowledging the importance of understanding value-in-context (Chandler & Vargo, 2011). In other ('service') words: through the understanding and sense-making of individual customer experiences (value-in-use), as well as connected experiences (value-in-context) a design team identifies opportunities for *future* value-in-use and (re)configures value constellations, hence mobilising "the creation of value in new forms and by new players" (Normann & Ramirez, 1993, p. 66). Third, seeing markets as socially constructed implies that they are created through interaction rather than measured and targeted. Thus, in order to be able to participate in (new) market creation, it becomes important to learn *with* rather than *about* the market(s) and challenge "existing constraints and [...] develop new practices and new ways of looking at the world" (Storbacka & Nenonen, 2015, p. 73). How design practice approaches the latter will be discussed in the following section.

### *Creativity and the need for insights [about possible new markets]*

Even though creativity can be considered interlinked with curiosity (Hunter, Abraham, Hunter, Goldberg, & Eastwoook, 2016), in this paper, I discuss it separately in order to emphasise and explore design activities aimed at sense making and creating so-called 'logical leaps' in order to be able to innovate for the future and create future (new) value-in-contexts. Seeing creativity as a design catalyst rather than a trait or outcome implies that it includes the activities facilitating the outcome; that is, for the purpose of this paper, I treat creativity as a creative process (Rhodes, 1961) and view the creative behaviour catalysing design practice as

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

having a basis in cognition (Runco, 2014). Design activities encourage divergent thinking and the use of associative, analogical thinking as well as metaphors; these practices are enhanced through a number of cognitive abilities such as breaking perceptual and cognitive sets, exploring new cognitive pathways, keeping response options open, suspending judgment, using and connecting wide categories, remembering accurately and breaking out of performance scripts (Amabile, 1983). Possibly, the larger the knowledge base and empathy that curiosity has catalysed, the better are the foundations for creativity (Hunter, et al., 2016; Kashdan, & Fincham, 2002).

It should be noted that with regard to the activities in focus in this paper (i.e. activities closely related to customers, users and markets), creativity catalyses, not only brainstorming and idea generation around possible new value propositions, but also identification of (latent) customer needs and development of insight with regard to opportunity areas. For example, design practice highlights the importance of understanding so-called extreme users and/ or analogous contexts when identifying pain points, latent needs and insight<sup>4</sup>, deliberately introducing new ways of market and customer sense-making through new use of symbols, metaphors and action (Gioia, Thomas, Clark, & Chitipeddi, 1994). Ideally, in design practice it is this deep customer and market insight (rather than insight about technological feasibility) that helps identify opportunity areas for value creation, which in turn guides the ideation phase.

Design practice aligns with the discussion on market-orientated firms that “not only respond to current market conditions but also anticipate future market conditions” (Atuahene-Gima, 2005, p. 64). Arguably, through addressing latent needs, design practice facilitates a

---

<sup>4</sup> Dane and Pratt (2007, p. 40) provide a useful distinction between insight and intuition: “in the former one consciously becomes aware of the logical connections supporting a particular answer or solution, whereas in the latter one is unable to consciously account for the rationale underlying the judgment that has arisen.”

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

proactive market orientation (Narver, Slater, & MacLachlan, 2004); and through using creative tools for both sense-making and idea generation, it facilitates discontinuous and disruptive innovation (Bower & Christensen, 1995). Potentially, further exploration of design practice could contribute to increased understanding of the micro level in market creation activities (c.f. Storbacka & Nenonen (2011)'s discussion on market scripting activities in relation to firm and meso levels).

Sense-making does not only involve “pure” cognitive interpretation processes, but interpretation in conjunction with action’ (Gioia, et al.’s, 1994, p. 365); through an iterative approach to their creative ‘logical leaps’, design practitioners acknowledge failure in their interpretation processes and iteratively move between the abstract (creative interpretation) and the particular (customer understanding and empathy). This iterative approach will now be discussed.

#### *Courage and the need for continuous learning about [market] assumptions*

The word courage stems from the Latin word for heart, ‘cor’, and can be defined as “the ability to do something that frightens one” and “bravery”<sup>5</sup>. In this paper, with the argument that it can be frightening to face our own assumptions, courage as a design catalyst specifically highlights the importance of iterative behaviour which encourages feedback and learning loops. Design practice fosters a willingness to test and learn without fear for failure (Luchs, 2015), and ‘fail fast to succeed sooner’ is an often cited mantra amongst design practitioners (Kelley, 2001). Hence, courage is discussed separately in order to emphasise (a)

---

<sup>5</sup> Courage in Oxford Dictionaries. Retrieved 20 October 2016, from <https://en.oxforddictionaries.com/>.

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

the need to learn from failure, and (b) how design practice, through its iterative approach reduces cognitive bias in both curiosity- and creativity-driven activities (Liedtka, 2015).

Design as a learning practice is highlighted by Beckman and Barry (2007) when integrating Owen's (1998) work on design and knowledge with Kolb's (1984) experiential learning cycle; (Beckman & Barry, 2007, p. 27) propose that:

the design process has both analytic and synthetic elements, and that it operates in both the theoretical and practical realms. [...] Movement between the theoretical and practical realms happens as participants in the process draw insights from what they have learned in the world of practice, convert them to abstract ideas or theories, and then translate those theories back into the realm of practice [...]

Consequently, the design process represents continuous ideal learning cycles in which the participants improve their personal knowledge systems that are linked to stance, tools and experiences (Martin, 2007; 2009). Potentially, these learning cycles mitigate the consequences of our tendency to, as humans, use heuristic-based intuition (Dane & Pratt, 2007; Kahneman, 2011). In fact, this iterative approach seems to reduce cognitive bias, and improve the abilities to, for example, (a) imagine the experiences of others, (b) assist others to identify and assess their own needs and (c) look past one's own experiences and thus manage to create more novel ideas (Liedtka, 2015). In other words, it mitigates cognitive bias with regard to market assumptions present in both curiosity- and creativity-driven activities.

A key component of these iterative learning loops is that they occur in close interaction and collaboration with customers, or potential future customers/users. Design practice increasingly includes co-design activities where the users become part of the actual design team (Sanders & Stappers, 2008) and thus co-produce (future) value (Lusch & Vargo,

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

2014). However, whether design practitioners use co-design or close interaction with customers and potential users during different types of prototyping activities, they emphasise the importance of testing in real environments. Receiving this external feedback, from actual individual users in context, is crucial when testing and identifying assumptions in market sense-making activities (Liedtka, 2015). Thus, feedback – together with reflection – creates occasions for learning and identifying valid<sup>6</sup> opportunity area(s) for future value creation, that is, understanding desirability before addressing feasibility and viability.

## Conclusion

In summary, this paper identifies the following three aspects of market sense-making (interaction between market action and interpretation) in design practice: (a) curiosity catalyses empathy and the deep understanding of markets which are seen as socially constructed of individual (value-in-use) and connected (value-in-context) experiences; (b) creativity catalyses ‘logical leaps’ with regard to understanding opportunities for creating (abstracting) future markets; and (c) courage catalyses learning through iterations which reduce cognitive bias with regard to market assumptions, thereby reducing cognitive bias in both curiosity- and creativity-driven activities.

The three interrelated design catalysts of curiosity, creativity and courage highlight the need for a new market(ing) approach to innovation activities (especially for firms and individuals with a traditional market(ing) understanding). First, it becomes important to be

---

<sup>6</sup> According to Martin (2010): “Most businesses, in terms of strategy, structure, process and culture, have tended to favor exploitation and reliable replication of a proven success formula in the present (a reliability orientation) over exploration and search for a new formula that might be more relevant in the future (a validity orientation). Recognition of this reliability bias will be an essential first step on the road to transformation” (p. 41).

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

curious and creative with regard to future individual users and connected contexts, not ‘just’ regarding current segmented customers and context. Second, it becomes important to be curious and creative with regard to identifying latent needs and insights, not ‘just’ regarding identifying new offerings. Third, courage catalyses the identification of valid opportunity areas through questioning and testing (market) assumptions in interaction with (future) users in context. Consequently, desirability, rather than feasibility and/or viability, drives the early stages of the innovation process.

There are a number of limitations with this exploration. Fully aware of the importance of viability and feasibility, I have focused on activities related to understanding markets when innovating for desirability, and more specifically, market sense-making (interpretation and action) in design practice. Thus, my intention has not been to capture the whole complexity and messiness of design practice, but rather to highlight how its early emphasis on desirability complements and, to a certain degree, challenge technology- or business-model driven innovation processes. Additionally, it is important to note that this paper does not include a complete review of the vast number of scholars engaged in the academic discussion around a service perspective and/or a service-dominant logic; I have only used a few concepts seemingly relevant to a micro-level (individual and team) approach to design practice, and there are likely to be more.

Despite its limitations, this paper is an attempt to contribute to the emerging discussions on synergies between design practice and a service perspective on market(ing) (c.f. Wetter-Edman, et al., 2014). Through exploring how design practice challenges a traditional view on markets and value-exchange, academics can continue the quest towards useful concepts and theories; and for practitioners, an increased conceptual understanding of market sense-making adds a dimension to the process-oriented toolkits many managers are

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

currently presented with, and increases the understanding on how their *interpretation* of their markets interacts with their *actions* (drawing on Gioia, et al. (1994)'s discussion on sense making).

However, it is important to resist the temptations to reduce design to marketing or vice versa, rather, as expressed by Buchanan (1992, p. 6):

The significance of seeking a scientific basis for design does not lie in the likelihood of reducing design to one or another of the sciences [...] it lies in a concern to connect and integrate useful knowledge from the arts and sciences alike, but in ways that are suited to the problems and purposes of the present.

Design practice is breaking the artificial disciplinary boundaries existing in both industry and academia, providing an excellent empirical setting for exploring how practices and theories within arts and business can complement one another and improve innovation outcomes.

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

## References

- Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology*, 45(2), 357–376.
- Aspers, P. (2011). *Markets*. Cornwall: Polity Press.
- Atuahene-Gima, K. (2005). Resolving the Capability—Rigidity Paradox in New Product Innovation. *Journal of Marketing*, 69(4), 61-83.
- Beckman, S. L., & Barry, M. (2007). Innovation as a learning process: embedding design thinking. *California Management Review*, 50(1), 25–56.
- Berry, L. L., Shankar, V., Parish, J. T., Cadwallader, S., & Dotzel, T. (2006). Creating New Markets Through Service Innovation. *MIT Sloan Management Review*, 47(2), 56–63.
- Bower, Joseph L., & Christensen, Clayton M. (1995). Disruptive technologies: Catching the wave. *Harvard Business Review*, 73(1), 43–53.
- Brown, T. (2008). Design Thinking. *Harvard Business Review*, 86(6), 84–92.
- Brown, T., & Martin, R. (2015). Design for Action. *Harvard Business Review*, 93(9), 56–64.
- Buchanan, R. (1992). Wicked Problems in Design Thinking. *Design Issues*, 8(2), 5–21.
- Chandler, J., & Vargo, S. (2011). Contextualization and value-in-context: How context frames exchange. *Marketing Theory*, 11(1), 35-49.
- Chen, S., & Venkatesh, A. (2013). An investigation of how design-oriented organisations implement design thinking. *Journal of Marketing Management*, 29(15–16), 1680–1700.

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

Cook, S. D. N., & Brown, J. S. (1999). Bridging Epistemologies: The Generative Dance Between Organizational Knowledge and Organizational Knowing. *Organization Science*, 10(4), 381–400.

Dane, E., & Pratt, M. G. (2007). Exploring Intuition and Its Role in Managerial Decision Making. *The Academy of Management Review*, 32(1), 33–54.

Gioia, D. A., Thomas, J. B., Clark, S. M. & Chittipeddi, K. (1994). Symbolism and Strategic Change in Academia: The Dynamics of Sensemaking and Influence. (1994). *Organization Science*, 5(3), 363–383.

Hunter, J. A., Abraham, E. H., Hunter, A. G., Goldberg, L. C., & Eastwood, J. D. (2016). Personality and boredom proneness in the prediction of creativity and curiosity. *Thinking Skills and Creativity*, 22(December), 48–57.

Kahneman, D. (2011). *Thinking, fast and slow* (1st ed.). New York: Farrar, Straus and Giroux.

Kashdan, T., & Fincham, F. (2002). Facilitating creativity by regulating curiosity: comment. *The American Psychologist*, 57(5), 373-374.

Kelley, T. (2001). *The art of innovation: lessons in creativity from IDEO, America's leading design firm* (1st ed.). New York: Currency/Doubleday.

Kimbell, L. (2011). Designing for Service as One Way of Designing Services, *International Journal of Design*, 5(2), 41-52.

Kolb, D. A. (1984). *Experiential learning: experience as the source of learning and development*. Englewood Cliffs, N.J.: Prentice-Hall.

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

Korkman, O., Storbacka, K., & Harald, B. (2010). Practices as markets: Value co-creation in e-invoicing. *Australasian Marketing Journal (AMJ)*, 18(4), 236–247.

Lakhani, K. R., Fayard, A.-L., Levina, N., & Pokrywa, S. H. "OpenIDEO." Harvard Business School Case 612-066, February 2012. (Revised October 2013).

Leonard, D., & Rayport, J. F. (1997). Spark Innovation Through Empathic Design. *Harvard Business Review*, 75(6), 102–113.

Liedtka, J. (2015). Perspective: Linking Design Thinking with Innovation Outcomes through Cognitive Bias Reduction. *Journal of Product Innovation Management*, 32(6), 925–938.

Litman, J. (2005). Curiosity and the pleasures of learning: Wanting and liking new information. *Cognition and Emotion*, 19(6), 793–814.

Loewenstein, G. (1994). The psychology of curiosity: A review and reinterpretation. *Psychological Bulletin*, 116(1), 75–98.

Luchs, M. G. (2015). A Brief Introduction to Design Thinking. In M. G. Luchs, K. S. Swan, & A. Griffin (Eds.), *Design Thinking* (pp. 1–12), Hoboken, New Jersey: John Wiley & Sons.

Lusch, R. F., & Vargo, S. L. (2014). *Service-Dominant Logic: Premises, Perspectives, Possibilities*. Cambridge University Press.

Martin, R. (2007). How successful leaders think. *Harvard Business Review*, 85(6), 60–67.

Martin, R. L. (2009). *The design of business: why design thinking is the next competitive advantage*. Boston, Mass.: Harvard Business Press.

Martin, R. L. (2010). Design thinking: achieving insights via the “knowledge funnel”. *Strategy & Leadership*, 38(2), 37–41.

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

Michlewski, K. (2008). Uncovering design attitude: Inside the culture of designers.

*Organization Studies*, 29(3), 373–392.

Narver, J., Slater, S., & MacLachlan, D. (2004). Responsive and Proactive Market Orientation and New-Product Success. *Journal of Product Innovation Management*, 21(5), 334–347.

Normann, R. (2001). *Reframing business: when the map changes the landscape*. Chichester; New York: Wiley.

Normann, R., & Ramirez, R. (1993). From value chain to value constellation: Designing interactive strategy. *Harvard Business Review*, 71(4), 65–77.

Ostrom, A., Bitner, M., Brown, S., Burkhard, K., Goul, M., Smith-Daniels, V., Demirkan, H., & Rabinovich, E. (2010). Moving Forward and Making a Difference: Research Priorities for the Science of Service. *Journal of Service Research*, 13(1), 4–36.

Owen, C. L. (1998). Design research: building the knowledge base. *Design Studies*, 19(1), 9–20.

Payne, A. F., Storbacka, K., & Frow, P. (2007). Managing the co-creation of value. *Journal of the Academy of Marketing Science*, 36(1), 83–96.

Peirce, C.S., (1994). Collected Papers of Charles Sanders Peirce (1839-1914), Vols 1–6, ed. Charles Hartshorne, C., & Weiss, P. Cambridge, MA: Belknap Press of Harvard University. Electronic edition.

Prahalad, C. K., & Ramaswamy, V. (2003). The new frontier of experience innovation. *MIT Sloan Management Review*, 44(4), 12–18.

Rhodes, M. (1961). An Analysis of Creativity. *The Phi Delta Kappan*, 42(7), 305–310.

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and courage. *Journal of Marketing Management*, 22(3-4), 280-291.

Roberts, D. L., & Palmer, R. (2012). Developing a visceral market learning capability for new product development. *International Journal of Market Research*, 54(2), 199–220.

Runco, M. A. (2014). *Creativity Theories and Themes: Research, Development, and Practice* (2nd ed.). Burlington: Elsevier Science.

Rylander, A. (2009). Design Thinking as Knowledge Work: Epistemological Foundations and Practical Implications. *Design Management Journal*, 4(1), 7–19.

Sanders, E. B. N., & Stappers, P. J. (2008). Co-creation and the new landscapes of design. *CoDesign*, 4(1), 5–18.

Schön, D. A. (1983). *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books.

Seidel, V., & Fixson, S. (2013). Adopting Design Thinking in Novice Multidisciplinary Teams: The Application and Limits of Design Methods and Reflexive Practices. *Journal of Product Innovation Management*, 30, 19-33.

Storbacka, K., & Nenonen, S. (2011). Scripting markets: From value propositions to market propositions. *Industrial Marketing Management*, 40(2), 255–266.

Storbacka, K., & Nenonen, S. (2015). Learning with the market: Facilitating market innovation. *Industrial Marketing Management*, 44, 73–82.

Vargo, S. L., & Lusch, R. F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, 68(1), 1–17.

Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of Marketing Science*, 36(1), 1–10.

Accepted, Journal of Marketing Management. Please quote and refer to the published version:  
Windahl, C. (2017), Market sense-making in design practice: exploring curiosity, creativity and  
courage. *Journal of Marketing Management*, 22(3-4), 280-291.

Wetter-Edman, K. (2011), Service Design – a conceptualisation of an emerging practice,  
Licentiate Thesis, University of Gothenburg, Artmonitor, Gothenburg, Sweden. ISBN: 978-  
91-978477-7-3

Wetter-Edman, K., Sangiorgi, D., Edvardsson, B., Holmlid, S., Grönroos, C., & Mattelmäki,  
T. (2014). Design for Value Co-Creation: Exploring Synergies Between Design for Service  
and Service Logic. *Service Science*, 6(2), 106–121.