

1 Relevance of Customer Co-Design

*“Very few organizations make customer co-design a core competency –
the starting point for all new business initiatives.*

Yet this doesn’t make sense.”

– Patricia B. Seybold¹

As indicated with the introductory citation above, it is frequently recognized that *customer co-design* plays a major role in managing business initiatives successfully.² It ensures that products or services are designed through the customer’s eyes. This perspective is expected to increase the likelihood of customer needs being met more accurately with co-design than with conventional design processes, which are predominantly operated from a business perspective. Thereby *customer co-design* denotes the process of creative interaction between a customer and a business to develop a specification for a product or service, which is denoted *design*. In line with Sanders (2008), co-design thereby refers

“to the creativity of designers and people [e.g. customers] not trained in design working together in the design development process.”³

Many leading experts and thinkers in the domain of business propose manifold concepts of how to incorporate the customer’s perspective into business strategies in order to establish a new or maintain an existent competitive advantage.⁴ Thereby it may be stated that customer co-design follows the idea of *interactive value creation*, which suggests new forms of customer participation in the value creation processes of businesses. Reichwald and Piller (2009) state that, through *customer co-design*,

“processes of value creation, which were formerly dominated from a business perspective, turn into processes of interactive value creation through an active role of the customer.”⁵

¹ Seybold (2006, p. 6)

² Piller and Möslein (2002); Tseng and Piller (2003a); Franke and Piller (2003); Piller and Berger (2003); Berger, Möslein, Piller and Reichwald (2005); Seybold (2006); Reichwald and Piller (2009); Son, Sadachar, Manchiraju, Fiore and Niehm (2012)

³ Sanders and Stappers (2008, p. 6)

⁴ Normann and Ramírez (1993); Hippel (1994); Prahalad and Ramaswamy (2004); Benkler (2006); Tapscott and Williams (2007); Howe (2008)

⁵ Reichwald and Piller (2009, p. 41), translated by the author

One prominent business strategy which applies customer co-design as one distinctive principle is *mass customization*.⁶ This business strategy intends to respond to the growing consumer demand for individualization at a reasonable price level which is close to non-customized (i.e. pre-designed) products. Thus in contrast to pure customization strategies, which intend to provide products in small niche markets, mass customizers intend to operate in relatively large markets or a collection of niche markets.⁷ A remarkable example of such a business is the mi adidas program offered by the sport manufacturer adidas.⁸ The core idea is to manufacture consumer goods – in the case of adidas, sport shoes – which are customized to the specific needs of every single customer, while orienting towards the cost efficiency of traditional mass production concepts. To achieve this, the business needs to operate a cost efficient interaction system which enables customers to engage in a co-design process with the business. The process yields a design specification, which is then translated into a product by the manufacturer. After production, the customer receives the custom product for his personal use at a fair price. Through the possibility of individualization, mass customizers intend to gain a competitive advantage within their respective markets. Besides, mass customized products are expected to yield a price premium, i.e. an increased willingness to pay more compared to a non-customized product.⁹ Seybold (2006) states that

“...customers who self-configure their own products tend to spend 20 to 30 percent more than customers who purchase off-the-shelf solutions.”¹⁰

Two examples from the mass customization industry are depicted in the following to provide an idea how the process of *customer co-design* may appear. These examples are Spreadshirt, a mass customizer for apparel, and selve, a provider for individualized shoes. In each example, the process of customer co-design is briefly introduced and illuminated.

⁶ Pine (1992); Piller (2000)

⁷ McCarthy (2004); For a definition of pure customization refer to Lampel and Mintzberg (1996) or Blecker and Abdelkafi (2006).

⁸ Piller and Berger (2003) and www.adidas.de/personalisieren

⁹ Piller, Möslein and Stotko (2004)

¹⁰ Seybold (2006, p. 272)

The business of Spreadshirt focuses on the online channel to provide its customer interface.¹¹ Figure 1 depicts the online toolkit, which may be applied by users to design their preferred t-shirt or other available apparel. A huge collection of graphics, i.e. designs, and a rich toolbox for text editing is provided to adapt the t-shirt. Meanwhile, spreadshirt has established a well working eco-system around its sophisticated customer interface, where users may choose from a wide selection of pre-designed t-shirts.

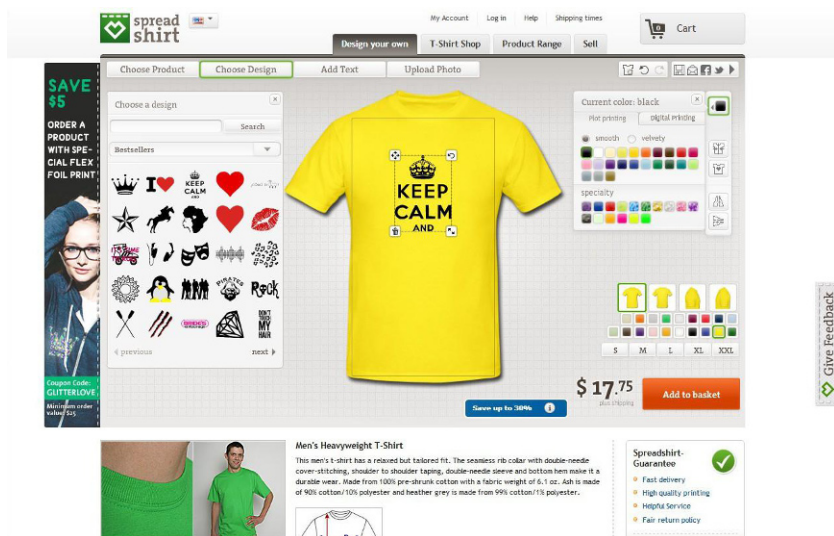


Figure 1: Online interface of Spreadshirt showing the toolkit to design a t-shirt¹²

Selve, in contrast, predominantly provides its co-design process in-store. Figure 2 depicts a photograph of a co-design session with two prospective customers, i.e. on the right-hand side, and one design professional from selve on the left-hand side. Based upon prior appointments, customers and design professionals meet in-store in a showroom and together explore the product solution space for individually designed shoes in terms of shapes, material, colors and sizes. In this process, which typically lasts 45 minutes to 1 hour, customers may feel and touch shoe samples. The co-design process is further supported via a tablet and the online toolkit available.

¹¹ Thallmaier and Straßburger (2010)

¹² Screenshot retrieved on January 23, 2013 from www.spreadshirt.de



Figure 2: One employee and two customers designing shoe within selve showroom¹³

However, besides the aforementioned examples, several remarkable failures such as Levi Strauss's *Original Spin* or Mattel's *My Design Barbie* have delivered practical refutations to the strategy of mass customization.¹⁴ Thus, until today, the success of the concept remains unclear. Salvador et al. (2009) for example conclude:

*"Most companies could benefit from mass customization, yet few do."*¹⁵

Scholars attribute this fact, inter alia, to a deficient understanding of the business strategy as a whole. One specific point of criticism is the inherent process of *customer co-design*, which is necessary to provide every single customer with a customized product which best fits his personal preferences. As Franke et al. (2009) note

*"scholars have questioned the merits of customization because it requires extensive customer participation."*¹⁶

One of the problems with mass customizers is the potential for *mass confusion*.¹⁷ It is argued that consumers typically say that they to prefer more choice over less. However, at the point in time when they need to choose from a variety of product design alternatives, they may get confused and feel uncomfortable, because of the

¹³ Photograph taken on January 11, 2013 within selve showroom

¹⁴ Salvador, de Holan and Piller (2009)

¹⁵ Salvador et al. (2009, p. 71)

¹⁶ Franke, Keinz and Steger (2009)

¹⁷ Huffman and Kahn (1998)

sheer amount of options. The dilemma is that providing more options may actually lead to less satisfaction. Besides that, operational efficiency from a business perspective is addressed as a core problem of customer co-design in the mass customization industry.

“Whether the elicitation stage is performed in a retail setting, or solely on the Internet, efficient information handling systems are the pin-points leveraging MC.”¹⁸

In this context, mass customization businesses with online toolkits, comparable to the previously introduced interface from Spreadshirt, have received much attention in the literature.¹⁹ Studies so far have concentrated on electronic co-design services and the questions of how to optimize the online experience in order to increase customer attraction and conversion efficiency. Hence these investigations predominantly focus on the appearance of websites, toolkit usability or user experience. Here it is frequently argued that online mass customizers need to find a balance between the appropriate level of utility, e.g. increasing the preference fit, and complexity, e.g. offering too many choices.²⁰ However, researchers and practitioners realize that certain customers need more support to carry out creative design activities, as they are usually not trained for that kind of task.²¹ The need for human assistance in designing a product is not adequately met by these online interfaces, unlike in physical stores where design professionals may advise the customers in real time, as Zou (2007) indicates:

“However, many customers have criticized these automated online systems, calling them impersonal and time consuming in trying to locate the information they want.”²²

To solve this problem, researchers are considering complementing online co-design processes with additional service channels and digital media, e.g. community features, or with feedback mechanisms which are actually known from physical stores, e.g. through direct contact with sales personnel.²³ Physical stores in contrast profit from the fact that direct real-time contact with design professionals is

¹⁸ Piller and Berger (2003, p. 44)

¹⁹ Müller (2007)

²⁰ Dellaert and Stremersch (2005)

²¹ Salvador et al. (2009)

²² Zou (2007, p. 1)

²³ Dellaert and Dabholkar (2009); Franke, Keinz and Schreier (2008); Turner, Merle and Diochon (2012);

possible. However, it is argued that in-store co-design processes are less efficient than online co-design processes. Lee and Chang (2011) even emphasize that the

“use of the Internet is considered necessary in customizing products in that it has allowed effective and spontaneous communication between company and consumer”²⁴

Inarguably, co-designing products within physical stores or online may differ significantly in terms of customer experience, even when the same product is purchased.²⁵ Each service channel however exhibits certain strengths and weaknesses for performing co-design processes. The problem that remains is how to combine these strengths and outweigh potential deficits to increase customers' value perception. With the increasing proliferation of service channels and new media, more and more promising combinations arise, i.e. in-shop tablet solutions or social toolkits. This development increases the need to understand how these combinations may affect customer co-design.

“The challenge is to leverage and coordinate the strengths of online and offline channels to increase the overall value for customers.”²⁶

Following this line of argumentation, the present thesis aims to understand the value each channel or medium may add to the process of customer co-design. Based upon this understanding, mass customizers may adjust or complement their co-design processes to increase customers' value perception. The initial research question thus reads as follows:

How can mass customizers coordinate the strengths of various service channels and digital media to increase customers' value perception?²⁷

This initial research question will be further detailed and clarified in part II with the help of a thorough literature review in the domain of mass customization and the derivation of the theoretical framework. The present thesis will explore customer co-design within the mass customization industry and reveal important findings for researchers and practitioners to add new knowledge in this domain. The remainder of this part is structured as follows. In chapter 2, a definition of customer co-design is introduced and grounded in its initial roots of appearance in academia. Finally, chapter 3 provides an overview of the structure of this thesis with its six parts.

²⁴ Lee and Chang (2011, p. 171) based on Anderson (2008); Hibbard (1999); Kim (2002)

²⁵ Broekhuizen (2006)

²⁶ Montoya-Weiss, Voss and Grewal (2003)

²⁷ Refer to part II for the detailed research question and the theoretical framework for the present thesis.