# Using social media as a toolkit for co-creation when designing fashion with communities

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#### Abstract

This research introduces a transformational strategy for using social media as an access point to engage a wider community in the co-creation of fashion design. Past research in co-creative fashion has examined participatory opportunities through mass customization and crowdsourcing, but has undervalued the source of "user-generated content" from social media as an initiative in co-creative fashion design. This user-generated content on social media platforms can be used as a co-creative toolkit to encourage active engagement in the beginning of the fashion design process. Co-creative toolkits are used to invite non-designers into the beginning of the design process and allow further creativity to trigger different feelings, emotions and desires (Sanders & William, 2001). This approach provides more than mere product selection and customization. Otto von Busch (2008, p. 32) states:

Perhaps there can be forms of fashion participation, beyond mere choosing, in which we can create our own parallel but symbiotic arenas and practices. This does not mean becoming the new dictators of a new microculture, but instead of being able to experiment with radically participatory forms of fashion.

This research explores a new approach for participatory fashion by addressing the question, how can social media be used to engage communities throughout the entire fashion design process?

Through examination of a case study, new strategies illustrate how social media can be used for co-creation in the fashion design process. This case study employs Pinterest.com as a co-creative toolkit for a small community of young urban professionals to virtually pin inspirational ideas that inform designers throughout the

design process. Designs are added to the website where the community is further able to add input. The ability for these co-creators to post inspiration, thoughts and ideas initiates a creative conversation with the designer. Further, this open dialogue continues when the co-creators eagerly "like" and comment on previous posts. This provokes a fluid visual and verbal discussion that allows for more globally accessible co-creation over time. Unlike other co-creative toolkits used in a timed session, these co-creators are guided by their own desire to contribute when and where they want. When social media is used this way as a toolkit for co-creation, communities are invited to not only be involved in the design process but also to have greater influence over the final designs.

Keywords: co-creation, social media, fashion design, community, toolkit

## Introduction

There are limited opportunities for consumers of fashion to engage in the design process with fashion designers. Focus groups are often used to evaluate fashion products currently on the market. Mass customization and crowdsourcing invite consumers into the middle of the design process through choices in fabric, silhouette and colour, after exploration and inspiration have already been discovered. Ready-to-wear options do not encourage engagement and result in consumers of fashion simply selecting from a series of finished products (von Busch, 2008). Fletcher (2008, p. 119) describes this situation by explaining that consumers of fashion passively follow trends of the industry's chosen "homogeneous goods", which encourages the elitist designer myth to dictate fashion consumption, often resulting in dissatisfied individuals "who feel both unrepresented by the fashion system and unable to do anything about it". Exploring new strategies for encouraging co-creation in the beginning of the design process could grant more interactive experiences for consumers of fashion.

Using social media as a generative tool for fashion design provides consumers with a co-creative opportunity to engage in all stages of the design process from initial inspiration to finished product. Co-creative experiences invite consumers into the design

process to understand consumers' desires and dreams. This contrasts with the typical fashion design process that focuses on an individual designer's creativity. Seivewright (2007, p. 7) explains research in the fashion design process as "a very personal activity, which through its manifestation, provides the viewer with an insight into the thinking, aspirations, interests and creative vision of the designer". This limits the consumer to "viewer" and discourages collaborative co-creation. Fashion is generally consumed passively as ready-to-wear or within strict frameworks to recombine or customize garments outlined by those in public relations, and designers seldom have the time or freedom in a daily work environment to rethink new methods of working (von Busch, 2008). These limited frameworks to recombine or customize garments only scratch the surface of opportunities to engage consumers in fashion. By utilizing social media as an online generative toolkit for co-creation, consumers and designers can interact throughout the entire design process.

This case study uses the social media website Pinterest.com as an online toolkit for a co-creative design experience between consumers and designers. Pinterest.com allows members of the online community to create virtual inspiration boards for their everyday lifestyles and aspirations. In this way, the pinned items are reflections of who these members are and who they desire to become. This user-generated content from pinned items is a valuable source of inspiration for co-creation in the fashion design process. This paper begins by explaining co-creative methodology and illustrates the importance of a continued co-creative dialogue in an online environment using social media. The case study further describes details regarding the toolkit, process and results. Finally, evaluation of the online co-creative process reveals the significance of a visual and written dialogue when using a generative toolkit through social media in an online environment.

#### The need for co-creative fashion

People are now demanding more interactive consumption experiences. These new consumers may be described as transitioning, "from isolated to connected, unaware to informed, from passive to active" (Prahalad & Ramaswamy, 2004, p. 2). Sanders (2006)

explains this "human-centred design revolution" is encouraging people to voice demands for new design spaces that will incorporate consumer creativity. The shift of active, creative consumers is evident in mass customization and crowdsourcing opportunities where consumers have the ability to participate in making decisions about the end product. However, these forms of co-creation may still not be enough for some consumers. Consumers want more than tiny, incremental choices in product or service customization (Prahalad & Ramaswamy, 2004). Donald Norman, acclaimed expert on human-centred design explains that to make something personal requires expressing a sense of ownership or pride, not simply selecting "from a catalog of choices" (Norman, 2004, p. 220).

Encouraging consumers to engage in the fashion design process can foster creativity and positive interactions within consumption practices. Fletcher (2008) suggests that involvement with the process of making a garment or influencing the design idea is an enjoyable experience for people. Perhaps this is because the most interesting and important things in life are often a result of creativity, which provides a sense of core meaning in human life (Csikszentmihalyi, 1966). These active experiences in the design process further connect consumers to the final end product. According to Norman (2004, p. 225), designs we create for ourselves are best because they are "in harmony with our individual lifestyles". Chapman (2005) further explains that the more an individual connects (consciously or unconsciously) to an object through sensory / aesthetic, cognitive / behavioural, and personal / symbolic qualities, the more penetrating the attachment. Experiences for collaborative co-creation may strengthen the connection with and attachment to garments created through this type of design process.

# Conventional methods of co-creation and generative toolkits

Traditional approaches of research like focus groups, direct observation and ethnography focus on what people say and do, but it is sometimes difficult to distinguish people's reasoning and emotions (Sanders & William, 2001, p. 3). Abbot (2007) explains that Web 2.0 has created opportunities for consumers of fashion to bring ideas

to companies, but this on-going co-creative dialogue is more than a focus group or telling the consumer to do-it-yourself. Web 2.0 characterizes current online experiences such as blogs, wikis and podcasts where people are encouraged to generate content by sharing and collaborating in a co-creative experience (Lorenzo, Oblinger, & Dziuban, 2007). The opportunity for connectedness through this technology could strengthen collective engagement in the design process. Generally people who buy and use products are not asked to join in the beginning development stages of a product, but playful participation early on in the process is needed to drive human-centred product development (Sanders & William, 2001). Co-creation is more than outsourcing part of a product to consumers, or customer events that follow scripts based on select offerings (Prahalad & Ramaswamy, 2004).

Using co-creative design methods encourages creativity and pushes people beyond current experience to further express their dreams, aspirations and ideals (Sanders & William, 2001, p. 3). A co-creative dialogue is integral to the process because, as Sanders (2001) explains, ordinary people may have a harder time expressing their creativity, and often their non-creative reputation with designers limits them to participating in focus groups. Rajah, Marshall and Nam (2008) agree that a co-creative experience includes an active consumer who is able to contribute to the "design, delivery, and creation of the customer experience". These co-creative design spaces are interactive and at times may be a little bit chaotic and constantly developing (Sanders, 2006). Benefits of co-creative approaches are critical because people can, "communicate and cooperate across disciplines and between organizations" (Steen, Manschot, & De Koning, 2011, p. 54).

There are a variety of tools to use in co-creative methods based on the type of research project. In a co-creative workshop, designers utilize generative toolkits as a method for participants to create easy and rapid prototyping to visualize thoughts and emotions in the early stages of the design process, and designers can then analyse this information to better understand the participants' unique needs and desires (Sung, Shin, & Kang, 2003).

These techniques allow participants to do creative exercises that prompt them to reflect on their daily lifestyles in a way that brings awareness to these experiences and increases the ability to express related experiences through artefacts such as drawings or collages (Sleeswijk Visser & Visser, 2006). Contextmapping is a co-creative technique that encourages people to create physical artefacts to discuss their ideas through verbal and written explanations (van Rijn & Stappers, 2008). Using contextmapping to create collages with a variety of images, text and colourful abstract two-dimensional forms evokes memories and encourages emotional responses (Sleeswijk Visser, Stappers, Van der Lugt, & Sanders, 2005). Sanders and William (2001) further explain that toolkits made by participants help to inform designers, and design teams often keep the artefacts from the co-creative workshops near them when they start their own design activities.

#### Profile of Pinterest

Pinterest has been gaining a lot of attention in the media, but only few academic researchers have started to investigate its content (Gilbert, Bakhshi, Chang, & Terveen, 2013). Pinterest is an online social network that allows members of the community to pin visual imagery to categorized inspiration boards. Pinterest became the fastest growing website in history when it exceeded the 10 million user mark in January 2012 (Constine, 2012). The site has continued to increase in users and has reached 48.7 million unique users as of February 2013 (McBride, 2013). This increased use of Pinterest warrants a further look into its capabilities for co-creation activities. In this study the social media website, Pinterest, was used to create inspiration boards in a similar way to the contextmapping exercises in co-creation methods. Past research on Pinterest has analysed user content, but this case study aims to analyse and utilize user-generated content in a collaborative online environment in a fashion design process.

Pinterest's ability to connect others through imagery and text is a valuable source for co-creation in the design process. Zarro, Hall and Forte (2013) identified "discovering and collaborating" as two categories of activities that explained both the personal and

professional uses of Pinterest, making the website an appropriate environment to experiment with online co-creation. Sanders (2006) says that working with people in a co-creative process requires an understanding of the individual's "relevant past memories and experiences, their thoughts and feelings about their everyday experiences, and the dreams and fears for the future". Items pinned on Pinterest to users' unique inspiration boards often reflect these individuals' thoughts, feelings and dreams for the future. Gilbert et al. (2013) highlight these desires through their collected data that shows the most common verbs used on Pinterest website's comments section included the words "want and need". These aspirational "wants" and "needs" are shown in desirable imagery of our most basic needs of food, clothing and shelter. Specifically, Mittal, Gupta, Dewan and Kumaraguru (2014) found the most common topics for pins were design, fashion, photography, food and travel. This strong connection of usergenerated content illustrates an individual's aspirational lifestyle and identifies Pinterest as a valuable source for a co-creative experience.

### The Co-creative Process

The purpose of this study was to utilize the social media website, Pinterest.com as a generative tool for an online co-creative process and to further analyze the usefulness of this co-creative process in an online environment. An informational letter was sent to colleagues for referrals of female participants with a creative background and interest in fashion who had a basic design vocabulary to communicate with students. Three interested participants were contacted and recruited by purposive convenience sampling. These customers were young professionals between the ages of 25 and 29 years of age and lived in urban areas of Midwest America. According to Lenhart, Purcell, Smith and Zickuhr (2010), social media use for 18 to 29 year olds is on the rise, making this age group appropriate for the case study. Each customer was assigned a design team of two fashion design students from a liberal arts college in Northeast America.

#### Procedure

Customers participating in this co-creative process initiated inspiration for the fashion collections by using Pinterest.com to create a visual inspiration board of who they are and who they desire to become. The only limitation was that these participants could not pin fashion clothing they wished to purchase. This was done to encourage the design teams to look into all aspects of the customers' lifestyle and to avoid direct copying of existing clothing that the customers liked. Unlike traditional generative toolkits that provide limited photos and abstract shapes, participants in this study had the opportunity of adding any image from the internet including any personal images to the Pinterest inspiration board. This allowed the customers to have full control over the content placed on the inspiration boards. The customers also had a month to complete the inspiration boards at their leisure when they felt most inspired. They had time to reflect on what they had pinned, unlike other co-creative sessions that are often limited in time. In this way, the user-generated inspiration board was a reflection of their ideal identity and was an informative foundation for the design teams.

The content on the participants' inspiration boards guided the concepts, themes, colours and textures for the fashion collections. Some of the most common items participants virtually pinned to the board included inspirational typography, colourful art, favourite products, home interior aspirations and lifestyle photography. For example, one participant pinned a visual graphic quote saying, "Sometimes I have to remind myself that I don't have to do what everyone else is doing". This participant also pinned ideal travel locations including San Francisco, Germany and other European destinations. She also included tattoo imagery and multiple home interior images with repeated wood grain textures. Throughout the pinned images, design teams identified common visual themes in colour, texture, line and pattern. The design teams also tried to gather information from the Pinterest boards regarding consumer behaviour and overall aesthetic tastes. Using the content from the Pinterest boards allowed the customers to initiate the design process with personal inspiration. Figure 1 shows an example of the imagery pinned to a customer's Pinterest board.

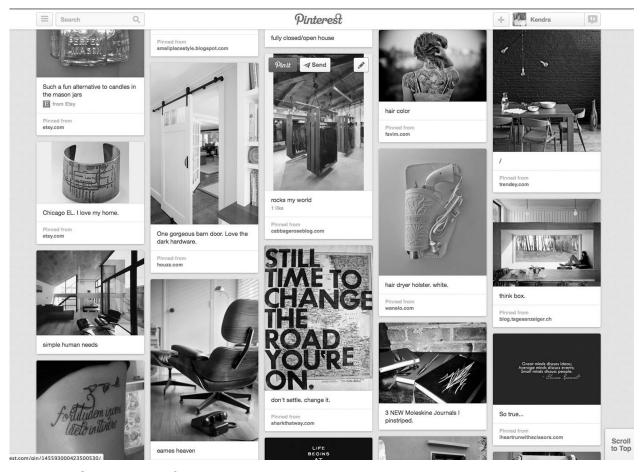


Figure 1. Screenshot of customer's inspiration Pinterest board.

The design teams were given a photo of the customer along with a basic profile outlining the customer's career, geographic location, salary range and favourite activities. After analysing the customer's Pinterest board and customer profile, each design team started to gather fabrics and sketch garment ideas. The design teams were able to continually reference the customers' Pinterest boards while coming up with ideas. The Pinterest boards gave additional insight into the customers' lifestyles and overall aesthetic tastes. After sketching, six final garment ideas were selected by members of the design team to be rendered as front and back flats in Adobe Illustrator. These front and back flats illustrated colour, silhouette, fabric and any additional details, including buttons, zippers or other closures. The design teams then uploaded the garment ideas as digital jpegs to each individual customer's Pinterest board.

In order to continue the co-creative conversation, the customers were able to view the garment ideas on the Pinterest board in an online environment. The customers were able to click the "like" button or share their thoughts in the comments section of each virtually pinned garment idea. Specifically they were asked to comment on whether they would be interested in buying a particular garment and, if not, provide a reason regarding why they were not interested in owning this item. The customers were also asked to suggest revisions if they had ideas to change the garment to better reflect their individual styles. Example responses from customers include the following thoughts. Customer one compliments the designers' idea by saying, "Love this fun spring piece! Sleeves are very on trend along with the pattern. BUY!" Customer two explains the style may not flatter her figure by stating, "Not sure thick corduroy and cut of pants would suit my body shape." Customer two also makes a design suggestion by saying, "Love the Japanese style influence, I wish it would include a unique pocket or subtle textured patch somewhere." Customer three explains the silhouette and fit are not her style by stating, "Straight leg is not my style. Perhaps with a stronger texture, I could incorporate these in my wardrobe for client visits." Figure 2 illustrates some of the garment ideas and example comments made by the customers.

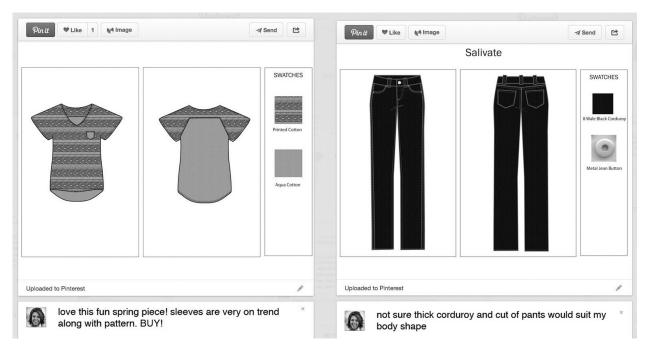


Figure 2. Screenshot of the garment ideas and customer comments.

The design teams analysed the customer comments and made revisions to the garments accordingly. These flat illustrations were then sent to another university in the United States to have the garments three dimensionally rendered as a virtual first sample using Lectra Modaris V7R patternmaking and 3D simulation software (Freeman & Lapolla, 2013). The sample garments were rendered on virtual models that reflected each customer's height, general size and hairstyle, but exact measurements were not taken. The revised three-dimensional renderings were then posted to the Pinterest boards for the customers to review again before final garments were made in fabric. Some example responses of the customer opinions based on the three dimensional sample are as follows. Customer one discusses both fit and design details by saying, "The fit is great, but the lace detailing gets lost on me here. Also, the colour isn't as taupe as the flat illustration." Customer one also positively responds to a design revision by stating, "This is spot on to the flat (including my revision request of removing the yellow zipper in the back)." After reviewing the customer comments, a few garments were selected and made in final fabric for the customers to wear.



Figure 3. Shows one of the completed garments.

#### **Evaluation of the Co-creative Process**

When evaluating this online co-creative design process using the social media website Pinterest.com, it was apparent that a continued dialogue between customer and designer was important. Customers can be more involved in the design process beyond crowdsourcing and mass customization if social media is used to engage them in a continued conversation. In order for this to happen there must be an open dialogue between customers and designers throughout the entire design process. Using the social media website Pinterest.com enabled designers and customers to interact globally over a longer span of time to embrace reflection and sustain a continued cocreative conversation. Customers initiated inspiration for the fashion collections, and designers were able to respond with ideas. Further, the conversation continued between the customers and designers as the design ideas were revised. Through this collaborative experience, two important aspects about the online cocreative environment were revealed. This included the significant ability to have a cocreative conversation both visually and in written language. First, the act of pinning visual imagery to a board for the collaborative group to see allowed for strong visual communication. Second, the customers' creative backgrounds provided a basic design vocabulary to communicate with the designers, using text in the comments section. In future cases where customers may have less design vocabulary, the visual dialogue may become more important. It was revealed that the combination of both visual and written communication in the co-creative conversation was important in the online environment.

# Visual Dialogue

The visual dialogue was initiated by the customers' original pinned imagery. This communicated the customers' aesthetic tastes, consumer behavior, future aspirations and overall personal identity. Designers were able to react to the imagery and respond to the customer with visual design ideas that attempted to reflect the identities in the inspiration boards. For example, designers in one group utilized the colour palette from a customer's pinned images of a painting to create a print as an accent for the cuffs and

collar of a shirt. The customer responded to the design by commenting that it was one of her favourites. This was a shared experience because both customers and designers were able to communicate visually with each other in an approachable way. King et al. (1989) agree that using visualization is important for participation because it is the only common language that all participants, whether technical or non-technical, can equally understand. Having a visual conversation allowed customers and designers to further the dialogue through written communication.

## Written Dialogue

Customers continued the conversation through written dialogue by making comments on each design idea created by the designers. These customers' creative backgrounds provided them with a basic design vocabulary to articulate their thoughts about the design ideas. The designers interpreted the suggestions and were able to ask questions in the comment section on Pinterest if they did not have full understanding. In some cases customers were very direct in suggesting changes to the garment ideas. For example, one customer responds to the design by saying, "I like the colour break up, however the palette may need some refining to hit my style exactly. Something in the blue, white or black/grey space I would go for!" In other cases, the suggestion was open to the designers' interpretation as seen by this customer saying, "... liked the concept, but would just have loved to see a neon or a surprise colour for the pink knit somewhere." Although the customers may not have known some common industry specific language, they were able to communicate through written language with the designers to give suggestions. Designers were then able to revise the designs based on the comments.

Additional literature also supports the importance of a strong dialogue in co-creative experiences. Lapolla (2014) emphasizes the need for dialogue in co-creation by placing it as the foundation of Prahalad and Ramaswamy's (2004) co-creation building blocks. Payne, Storbacka and Frow (2008, p. 84) reiterate dialogue as an important interaction between designer and customer in "each stage of product design and product delivery". In this way, evaluation of the co-creative process in this case study is supportive to

existing literature. For most past studies, dialogue was addressed through the use of verbal and written language. This case study builds on the existing literature by also including visual communication as an important element of dialogue in a co-creative design process. Using Pinterest.com was an accessible way to have continued conversation from beginning to end of the co-creative design process.

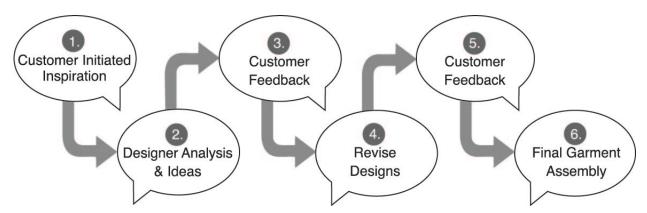


Table 1. Illustrates the co-creative design process used in this case study. This model shows the importance of the conversation between customer and designer.

#### Limitations

Using an online social media environment for co-creation did have some limitations. While the online environment was beneficial for customers to respond at their ideal time, a real time discussion between designers and customers did not occur. This made it more difficult for the co-creative dialogue between the designers and customers to be fluid and spontaneous. Information from the conversations in this online environment was ideal for contemplative and reflective responses to the designs and inspirational imagery. Another limitation of this case study was the photo representation of fabric choices in the online environment. The tactile nature of a three dimensional garment was missing in the online environment. Customers in this case study were not able to touch and feel the designers' fabric choices. Although the social media environment limited the ability for a spontaneous discussion and understanding of the tactile feel of

fabric, this co-creative experience was strong for visual communication through imagery and beneficial for global collaboration over a longer length of time.

#### Conclusions

Using the social media website Pinterest.com provided a beneficial opportunity for fashion designers and consumers of fashion to collaborate in a co-creative experience. This case study illustrated how consumers could be more actively involved in co-creation of fashion beyond mass customization and crowdsourcing. Using Pinterest allowed designers and customers the ability to react to and communicate with imagery and written text. Analysis of this co-creative process revealed the importance of combined visual and written communication in an online co-creative environment. This visual and written dialogue was integral to a successful co-creative experience. The dialogue tended to be more reflective in nature because designers and customers were given longer spans of time to respond to each other. Future research may incorporate more customers contributing to the Pinterest boards to investigate the differences and challenges of a larger community in the online co-creative experience. Other opportunities to build on this research may include the combination of on location co-creation with additional experiences that utilize the reflective visual and written dialogue of an online co-creative experience using the social media website Pinterest.com.

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