EVALUATING THE ROLE OF DESIGN IN THE APPAREL INDUSTRY
IN THE UNITED STATES

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The purpose of this study was to better understand the role of design in the product development process in the apparel industry in the United States, looking for variations in how design is used in the industry. In order to obtain a snapshot of the fashion design industry, creativity, originality, innovation, and product development were examined, as well as corporate culture and strategic orientation. The study also sought to examine pedagogical strategies based on these findings. A mixed methods approach, consisting of an on-line survey and interviews, was employed. The findings suggest variations in the role of design based on the time design-department employees spent on creative tasks. These variations were examined and industrial and pedagogical implications are explored. The significance of this study relates to the findings of the importance of creativity in the product development process of the apparel industry in the United States, as well as considerations for pedagogical strategies.
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CHAPTER 1

INTRODUCTION

The apparel business seems to be traveling down a road of processes and procedures in an attempt to turn fashion design into a sure thing: a money-making formula. In addition, fast fashion has upped the game by developing cheap products churned out quickly. Zara, a leader in fast fashion, admits that they do not want to predict future trends. Instead, their goal is to react to what exists by taking runway fashions and racing to get these looks into Zara stores before the original designs are available for the retail customer (Ferdows, Lewis, and Machuca, 2004). While many customers embrace this business model, concerns exist as to how the focus of copying designer looks and then competing against the designers will impact creative design in the apparel industry. It is expected that as the environment of fashion retailing continues to evolve, terms and roles will change, as well as the way products are designed. While these changes may be positive to retailers, what do these changes mean for creative design, the future of the designer in the fashion industry, and the long-term ideas of what we consider to be fashion?

Perks, Cooper, and Jones (2005) state that design became a subprocess of product development in the economic climate of the 1990s. Indeed, there has been a trend towards an all-encompassing process of product development in which design is delegated as merely one step in the process. Some apparel product development models leave out the word “design” entirely. Instead, the “design” tasks are broken down into components such as “silhouette and style decisions” and “theme development” (Wickett et al., 1999). In looking at publications on apparel design, manufacturers use terms such as “translating” designer looks and “adapting”
existing designs. Many designers rely heavily on researching trends through shopping and copying thus focusing less on original designs. It seems that in this climate, the designer’s role has been minimized to that of styling and adapting. If this is indeed the case, how will this attitude toward design and creativity impact the apparel industry and the educational approach for fashion industry professionals?

As some apparel companies focus on speed-to-market and giving the customer what they want quickly, one must ask how this is impacting the role of the fashion designer in the current apparel industry and indeed the role of design? Mass-market apparel is a product that has a customer and competition orientation, in that products change quickly and must be similar to the competition in order to provide the customers what they want today. In doing so, design has moved from a holistic process and has become one step in the product development process (Perks et al., 2005). Bruce and Vazquez (1999) found that separating design from other processes in the product development cycle was a major factor contributing to declining innovation in the United Kingdom. Design, in its definition, involves forward thinking – what will the customer want or need in the future? This paradox between giving the customer what they want now and what they need in the future suggests a rift in the apparel design industry. On one hand, we need clothing for today; however, we also need to imagine clothing for the future.

Statement of the Problem

The purpose of this study was to better understand the role of design in the product development process in the apparel industry, looking for variations in how design is used in the industry. Perks et al., (2005) observed the shift in the role of design in new product
development and sought to explore this phenomenon. Their study asked, “Are there variations in the current role of design?” In conducting the study, Perks et al. looked at design in all areas, including apparel design. Based on their study, three categories of design roles were identified: design as functional specialism, design as part of a multifunctional team, and design as new product development process leader. In order to create a snapshot of the role of design in the apparel industry, the categories established by Perks et al. (2005) were used for the current study to examine the apparel industry, looking at the roles and methods of design used and evaluate apparel business categories based on the function of the design role. Further, this study explores creativity and originality in fashion design, as well as the impact, if any, corporate culture and strategic orientation plays in the role of design in the fashion industry.

Research Objectives

The research objectives are as follows:

1. Obtain a snapshot of the fashion design industry, identifying areas where design thrives.
2. Look for variations in the role of design, based on the categories established by Perks, et al. (2005).
3. Explore the importance of creativity on the role of design in today’s fashion design industry.
4. Explore the importance of originality on the role of design in today’s fashion design industry.
5. Explore the importance of strategic orientation on the role of design in today’s fashion design industry.
6. Explore the importance of corporate culture on the role of design in today’s fashion design industry.

7. Identify potential fashion design education strategic learning outcomes based on the snapshot of the fashion industry obtained in this study.

In order for design to thrive in the fashion industry, it must be identified and nurtured. Creating a map of the role of design in fashion is important to provide understanding of the multifocal environment of today’s apparel industry. This information will also be of use to colleges when planning courses of study in fashion design to ensure degree programs are structured to meet the needs of the various categories of the apparel industry.

Definition of Terms

Fashion design industry – In this research, the fashion design industry refers to the business of designing a garment, from the initial idea through the production phase. While retailers select items to sell and consumers buy from that selection, this study focuses on the design element of the apparel process, including how designs are selected, and examines the apparel product development process from a design perspective.

Design - In the fashion design industry, “design” involves problem solving to create products that customers will want or need at the time the designs are offered to the customer. A more comprehensive definition of design is included in the literature review.

Creativity - As defined in the literature review, creativity is the ability to view the world from unique viewpoints to imagine something different than what currently exists. In the fashion design industry, creativity is a cognitive process that results in ideas for products that
anticipate what the consumer will want or need in the future. Creativity is forward looking and imagining the future.
CHAPTER 2
LITERATURE REVIEW

Introduction

While design seems to be garnering respect in other fields, fashion design seems to be lagging. Given the evolving nature of “fashion design,” an understanding of its role and importance in the product development process in our current socioeconomic climate is vital. The objective of this study is to understand the role of design in the apparel industry, look for areas where design is thriving, and explore new avenues in education for fashion design students.

In order to understand the relationship between design and the product development process, it is important to first establish definitions of these two terms. Also, as design cannot be discussed without considering creativity, a definition of creativity is provided as well.

Fashion Design

Creativity has always been an integral part of fashion design. From the time of Charles Frederick Worth, the father of haute couture design, until the 1960s, the world looked to creative minds for guidance in what was fashionable. In the 1960s, when the masses first refused to follow the established mode of fashion diffusion, industry experts declared that fashion was dead (Tortora and Eubank, 2010.). Although fashion didn’t die, the process of creating fashion changed and has continued to evolve. In order to achieve profit the apparel process has been studied and streamlined for efficiency. Design has been deemed as risky and in need of control to maximize efficiency (Regan et al., 1998). Perks et al. (2005) chronicles the history of design as coming into its own as a specialization in the 1920s, becoming a profession
in the 1960s, becoming a brand in the 1980s, and becoming a subprocess of the product development process in the 1990s. However, by the early 2000s, Perks et al. see the role of design as being a product development process leader. The Perks et al. study found three distinct approaches to design in the design industry as a whole: design as a functional specialism, design as a multifunctional team, and design as a process leader. In fashion design, the majority of companies utilized design as a functional specialism. Perks et al. defined the functional approach to design as one which delegates specific roles to individuals to make the design process more efficient, allowing quicker turnover in products. However, the role of design is very restricted to the specific job duties given. Perks, et al. found this approach was common when products can be slightly modified to create new offerings, as in the fashion industry.

The study participants recruited by Perks et al. (2005) revealed that no apparel design companies in the sample used the multifunctional team approach. However, their study does highlight an athletic shoe design firm’s approach to design using the product development process leader method. In this instance, the designer was involved in all aspects of the development of the product.

When describing terms for apparel design and the scope of what a designer does in the fashion design field, researchers have looked to other disciplines for definitions, most commonly engineering and business (Marxt and Hacklin, 2005, and Regan et al., 1998). Looking at design from an engineering perspective, it can be defined as a plan for making a change. Design has commonly been broken down into two elements: problem identification/evaluation and the design process (Regan et al., 1998). Indeed, design is more than making a plan. It
encompasses aesthetics, formulation of design strategies, how and what to design, and a plan of organization to make it happen (Marxt and Hacklin, 2005).

While Tam et al., (2008) asserts that fashion designers are problem solvers with many responsibilities and roles in the product development process, their study found that almost three quarters of the designers surveyed stated that understanding their customers’ wants and needs was their most important job duty. Based on the literature review, one could summarize the designer’s role is giving the customer what they want or need in the future season(s) by solving any issues related to those future wants and needs with creative design, and then organizing a plan of action to make it happen.

Product Development

Product development is the process of creating apparel that has value to the customer (Kunz, 2010). In order to develop a product, steps that do not add value are eliminated, ideas are communicated through extremely detailed specifications, and strict schedules and ordered systems are imperative for ultimate success (Keiser and Garner, 2003). Understanding what the customer wants through market research is a part of product development, as are the functions of production, sales and ongoing tasks for producing and selling the product (Marxt and Hacklin, 2005). Product development is a function of teams with designers, marketers, product managers, and other departments often working together (Keiser and Garner, 2003).

Keiser and Garner (2003) divide product development into two distinct tracks, one design driven and the other manufacturing driven. Design driven product development considers the integrity of the design more important than streamlined production, whereas the goal of manufacturing-driven product development is to simplify the design and production
process for mass market production. Based on Keiser and Garner’s assumption, a product development model would look very different based on whether a company is using a design-driven approach or a manufacturing-driven approach. Perks et al. (2005) defined design based on the tasks performed which are strictly related to the creating of the design. In evaluating the role of the designer, their study also encompassed areas outside of design, such as marketing (fashion direction) and post-design product development, to evaluate the scope of the designer’s role in the product development process. Designers who operate within clearly defined boundaries of design were categorized as having a functional specialism approach, and those who took a broader role in the entire process were categorized as taking a process leadership approach.

The product development model outlined by Gaskill in 1992 for private label brands does not use the word “design” (Figure 1). It encompasses a process from trend analysis and concept evolvement to silhouette and style direction and, ultimately, line presentation (Wickett et al., 1999). Notably missing from Gaskill’s definition are the elements of production (activities that take place post-design) which were identified in the product development model proposed by Marxt and Hacklin (2005), as noted above.
Wickett et al. (1999) goes on to reference the taxonomy of the apparel merchandising system (TAMS) developed by Grace Kunz in 1998 and summarizes the TAMS model as steps in the product development process. These steps are “line concept, pre-adoption product development, line adoption, and post adoption product development.” Wickett et al. does not use the word “design” in their discussion of the TAMS model, and their revised product development model shown in Figure 2 does not contain the word “design.” This dismantling of “design” into subprocesses of the product development process is consistent with Perk et al.’s (2005) summation of the evolution of the role of design in the apparel product development process.
In looking at the most current TAMS, the word “design” is included in the model presented in Figure 3 (Kunz, 2010). Compared to the model used by Wickett et al. (1999), this current model has expanded on the design tasks associated with line development, and product development is included under the line adoption tasks. This model places product
development as a part of the design process that begins once the designs are adopted into the line and approved for production.

Table 1

*Line Development Section of the Taxonomy of Apparel Merchandising Systems*

<table>
<thead>
<tr>
<th>Business Plan</th>
<th>Line Concept</th>
<th>Creative Design</th>
<th>Line Adoption</th>
<th>Technical Design</th>
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<tr>
<td>Mission</td>
<td>Synthesize current issues/trends</td>
<td>Develop Designs</td>
<td>Determine styles in line</td>
<td>Perfect styling and fit</td>
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<td>Goals</td>
<td>Economic</td>
<td>Sketches</td>
<td>Wholesale finished goods</td>
<td>Finalize patterns</td>
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<tr>
<td>Merchandise mix</td>
<td>Social</td>
<td>Precosting</td>
<td>Product development</td>
<td>Test materials</td>
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<tr>
<td>Fashion emphasis</td>
<td>Cultural</td>
<td>First patterns</td>
<td>Establish list or first prices</td>
<td>Test assembly methods</td>
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<tr>
<td>Policies and practices</td>
<td>Technological</td>
<td>Design specifications</td>
<td>Assign styles/sizes/colors to line plan</td>
<td>Develop style samples</td>
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<td>Price range(s)</td>
<td>Demographic</td>
<td>Fit standards</td>
<td>Balance assortments</td>
<td>Develop style/quality specifications</td>
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<td>Description of fashion trends</td>
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<td>Review prototypes</td>
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Kunz, 2010
However, in the product-development models reviewed here, the term “product development” appears to not simply incorporate design into the umbrella of product development but to break down the role of design into steps in the process of creating clothing, thus diluting the integrity of design as a holistic process. These actions support the observation of Perks et al. (2005) that design has become a subprocess of new product development.

Wickett et al. (1999) defines retail product development as “the process of creating research-based private label merchandise, manufactured or sourced by a retailer, for its exclusive sale to an identified target market.” In their study, 66.7% of industry professionals surveyed stated they selected their style and silhouette direction from either knock-offs alone or a combination of original designs and knockoffs. Only 33.3% of those surveyed used all original designs in their product development process.

In looking for a sustainable apparel product development model, Gam et al. (2009) identified four steps in the process: “(1) Problem definition and research, (2) sample making, (3) solution development and collaboration, and (4) production.” The apparel product development model visualized in this study is intended to be reiterative, with each step being interactive with the other steps as needed to solve problems. In the Gam et al. model, shown in Figure 4, the role of design begins in the idea generation phase and is present in the sample making phase as well.
Zeng et al. (2010), explored a product development model for ergonomic design and developed a circular model (as opposed to linear) which has creativity in the center directly influencing aesthetics, interactivity, novelty, flexibility, affect, importance, commonality/simplicity and personalization. These loosely correlate to the elements of creativity identified as novelty, effectiveness, elegance, communication, emotion, surprise, and ethicality discussed in *Creativity in Fashion Design* (Jennings, 2011). In this ergonomic model, shown in Figure 5, the designs are modified based on the objectives necessary to meet overall goals. In ergonomics, these are defined as functionality, affectivity, usability, and safety. Again, the relationship between all of these elements is reiterative. This reiterative nature of both Gam et al.’s (2009) and Zeng et al.’s (2010) models is supported by the assertion that design is more a circular process than a linear one (Jennings, 2011).
Innovation

Whether reading newspapers or looking at industry news sources, the word “innovation” has become a topic of almost daily discussion. Companies are realizing that to thrive, innovation needs to be a key element in their product development process. Innovation at its simplest definition means introducing new ideas, and Marx and Hacklin (2005) discuss two categories of innovation: product and process. Product innovation involves introducing new or improved products to customers. Process innovation involves changes to business models: for example, changes to the way business is run to create new markets for products or ways to manufacture by minimizing costs. Innovation is described as the process of making something that is useful and desirable (Finn and Finn, 2010). In comparing design and innovation, Marx and Hacklin (2005) suggest that product design is a multi-faceted process.
that requires design-specific knowledge whereas process innovation is more concerned with the logistics and business models necessary to deliver the product to the target market. Looking at innovation from a design (product) aspect, Finn (2011) explains that a design can be creative by the piecing of fabric, but that activity is not innovative. Chanel is known for the unique methods she used in cutting, fabrication and construction techniques, and these are examples of innovation (Finn, 2011). Finn believes innovation is the key to successful, sustainable design.

Isabel Toledo (2012) believes innovation in fashion is a hands-on approach that comes from working with the fabric and the design. Toledo believes that innovation involves using technical skills and a high level of craftsmanship to explore concepts that result in clothing that is creative and engineered to fit well and comfortably. Toledo states that when innovation occurs, the art of fashion is pushed forward. In contrast to pushing innovation forward, Choi (2011) believes that innovation was not advanced by Japan’s outsourcing to China for cheaper labor. If a hands-on approach is needed for innovation, then the role of design in an apparel firm could have an impact on the innovativeness of the products offered.

Creativity

Creativity is considered a key economic resource in the 21st century. Understanding creativity will be beneficial to a company competing in the current and future markets (Zeng, et al., 2010). Again, it should be noted that creativity and innovation are two separate entities. Creativity refers to the generation of new or unique ideas whereas innovation refers to the processes that implement and carry out those ideas. Creativity involves breaking down preconceived ideas and making connections (Mauzy and Harriman, 2003). It is the mental
process of looking beyond what is already present to discover something new (Finn and Finn, 2010). From a design perspective, creativity involves developing ideas that are both useful and original (Askland et al., 2010). A broad definition of creativity would be a cognitive process carried out in a specific framework that results in an idea, product, service or solution that is considered unique and appropriate and is deemed as having value by consumers (Zeng, 2010). Tam et al. (2008) takes it a step further and states that creativity, in the context of fashion design, expresses needs or wants based on cultural or lifestyle needs or wants that the customer may not even be aware of having. Thus the job of the designer is to anticipate the customers’ future wants and needs. There is no recipe for creativity; however, foundations and principles can be applied to position a company to foster creativity (Mauzy and Harriman, 2003).

It is important to note that creativity is multidimensional and requires a focus on its various components to create a successful concept (Zeng et al., 2010). Zeng et al. (2010) note that creativity has been divided into six major theories. These multiple ways of looking at creativity have created confusion instead of clarification. Laura Richardson, principal designer at Frog Designs, notes that mankind is losing its resiliency and suggests that we need to rethink traditional meanings of creativity. Richardson states creativity is, among other things, the ability to see the world from a unique point of view and imagine something entirely different from what currently exists. Creativity requires a flexible mind; and for most people, creativity also requires the ability to step outside of their comfort zones, overcome their fear of the unknown, and be willing to accept uncertainty (Enayati, 2012).
Finn and Finn (2010) note that innovation cannot occur without creativity. Creativity can occur without innovation; however, it loses effectiveness. In order for a company to benefit from a creative mindset, both creativity and innovation must be nurtured throughout an organization (Mauzy and Harriman, 2003). Creativity must also be central to a design process. It not only serves as a focus and a force that propels the project but it also links the various stages together and provides feedback loops that can result in alterations of the original design along the development stages (Zeng et al., 2010). Companies must be willing to create an environment and policies that foster creativity (Mauzy and Harriman, 2003).

A 2010 study conducted by IBM asked CEOs to identify the most important trait for a leader, and the answer was creativity (Enayati, 2012). Despite the call to creativity and innovation, creativity seems to be faltering in mass-market fashion design. Fast fashion is said to be a result of designers’ failure to respond to an uncertain future (Jennings, 2011). Enayati (2012) reports that in times of crisis it is human nature to return to what we know and are familiar with; however, creativity is what we need in order to find new ways of responding to a changing world.

The Role of Design in Today’s Fashion Industry

Up through the 1950s with Christian Dior’s new look, the function of design was to appear fashionable. From the 1960s to the present, clothing has taken on many roles and is required to function in numerous ways in our everyday lives. From high-tech workout wear to cutting edge evening wear, to cheap and trendy sportswear, each garment offers a different problem definition for the designer. In interviews with designers, Regan et al. (1998) found that the design associates believed apparel to be 80% design and 20% function. Interestingly,
11 years later, Kim and Johnson (2009) see design as functional with an aesthetic touch. An overwhelming number of researchers cited in this paper discussed the ill-defined problem in the creative process. A designer must know the purpose of what is being designed and the problem that needs to be solved (Zeng et al., 2010). For an apparel designer, the main design “problem” is how to create a design their customer will love (Karpova et al., 2011). This thought is supported by Keiser and Garner (2003) who note that design has become consumer driven.

Over time, our perception of design has changed from that of a spontaneous activity, not associated with economic gain and often a singular pursuit, to a team-based activity associated with economic gain. Design today is performed within a theoretical framework that downplays the uniqueness of creativity and promotes the idea that everyone can be taught creativity (Askland et al., 2010). This can be seen in the trend to transition the merchandise buyer into a role of product designer/developer (Kim and Johnson, 2009). Additionally, some envision a world where technology will control the creative aspect of the design process. Data could be input into a computer, which would use the data, along with the computer’s extensive knowledge base of all aspects of fashion and inspiration sources, to create designs (Kim and Johnson, 2009). These actions eliminate the designer entirely from the apparel product development.

With all the changes in the fashion industry, there is no one clear role for a fashion designer. As demonstrated in this literature review, in some companies the role of the designer has widened to encompass such tasks as development and innovation (Marxt and Hacklin, 2005). In others the role of design has been broken down into well-defined steps, with each
member of the design team being responsible for a narrow scope of responsibilities (Perk et al., 2005; Wickett et al., 1999). Additionally, body scanning and other technologies, as well as the increasing role of the customer as a designer are changing the way clothing is created (Kim and Johnson, 2009).

With the prevalence of off-shore production, it is more imperative now that designers are using their problem-solving skills to ensure function and utility are inherent in their designs, as well as make them aesthetically pleasing and creative (Keiser and Garner, 2003). Off-shore production has led to the need for technical designers who are knowledgeable in details of function and performance; and as technology continues to revolutionize the apparel production process, and design becomes less hands-on, technical designers will increase in importance (Kim and Johnson, 2010).

Technology will continue to influence product development and design. As technology improves, it is possible that the product development process will go completely digital and online. While this will speed up the product development process, as one of Kim and Johnson’s (2010) survey participant says, it will also marginalize the impact of creativity. Another of Kim and Johnson’s participants states that the skills most sought after are related to finding, selecting and adapting as opposed to designing. New areas of specialization and new positions within the product development process will be required to keep up with the changes in the industry. As we embrace changes, however, it is important to the future of fashion design and the long-term satisfaction of the customer that design not be left out of the equation.
Implications

The distinction between roles of product development, design, creativity and innovation continue to blur (Martx and Hacklin, 2005). It appears that many apparel manufacturers are looking at design as a subprocess of the product development model, and originality is not a priority. Forever 21, the company who puts the bible verse, John 3:16, on their shopping bags, has been sued more than 50 times for copyright infringement (Sauers, 2011). Speed is replacing creativity, and “adopting” other’s designs has become the new role of fashion designers. Retailers such as Zara, H&M and Mango are speeding up the fashion cycle to place in their stores what customers want now, as opposed to what they may want in the future (Bhardwaj and Fairhurst, 2010).

Perhaps the image of fashion design has also been hurt by the art clothing shown in the runway shows of high-profile designers. These pieces place emphasis on creativity over function. Hussein Chalayan states his runway show pieces garner more attention than the wearable clothes (Finn and Finn 2010). This might give the public the impression that couture or haute couture fashion is not wearable and that designers just draw pretty pictures and are not in touch with the reality of everyday life.

This literature review has implications for the future of design in the apparel industry. As mass-market fashion trends toward a here-and-now approach, it is important that we explore the various roles design plays in the apparel industry. The public perception, as well as the perception of mass-market apparel firms, is that anyone can be a successful designer. It is true that anyone can make clothing, but a designer is more than a maker of clothing for the
here and now. Visionaries are vital to the fashion industry, not simply to dress us today but to meet our future needs as well.
CHAPTER 3

METHODOLOGY

Introduction

In apparel production, the time between idea and the appearance of a garment in the stores has decreased significantly. This is the result of innovations in managing the apparel product development process, but it has resulted in changing the role of design. At the same time, a traditional, more design-centered approach to apparel product development is still used by many companies for aesthetic or functional reasons. In 2002, it was observed that no clear picture of the fashion industry exists (McRobbie, 2002). Now, twelve years later, the picture is even less clear. The goal of this study is to open a dialogue for the discussion of design in the apparel industry, to create a snapshot of how design is utilized in the current fashion industry, to look for areas in the industry where design is thriving, and to provide new insights for educators to prepare students for careers in the fashion industry.

Method

In order to look for apparel production classifications based on the role of design, an online survey was administered to identify variations in the role of design and to look for relationships between predetermined variables and the role of design. The subject pool consisted of:

1. A convenience sample of 63 personal and fashion design departmental contacts at the researcher’s university, located in the southwestern portion of the United States
2. Alumni of fashion design colleges in the United States. Survey invitations were sent to 188 fashion design education members of the International Textile and Apparel Association teaching at schools located in the U.S. with the request that these professors forward the survey to their alumni.

3. Members of Linked-In who subscribe to the following groups: Fashion and Lifestyle (179,775 members), Fashion (36,526 members), Fashion Connections (71,971 members), and Style Careers (59,844 members).

The survey participants are those employed as a designer or in a position within a design department of an apparel firm. For the purpose of this study, a yearly sales criteria of $50,000 or above was set. Despite extensive attempts to recruit participants, only 27 usable surveys were obtained. Therefore, a mixed methods approach was employed. A second, qualitative phase consisted of interview questions to explore the role of design through the experiences and observations of the interview participants.

Qualitative research embraces the belief that there can be multiple realities as opposed to just a single truth (Krefting, 1991). In apparel production, there are many approaches, and thus the subject of this study lends itself to qualitative research. Qualitative research aims to gain an understanding of a phenomenon (Leininger, 1985). Thus, the value of a qualitative study is in the truth of the experiences of those studied (Krefting, 1991). Interviews were chosen as the qualitative approach to this study in order to perform more in-depth research into the experiences of designers employed in the fashion industry. The interview participants were recruited through personal contacts, recommendations by fashion design faculty at the University of North Texas, and via Linked-In.
In quantitative data, consistency is a key factor in trustworthiness of the survey’s findings. In qualitative research; however, the researcher’s goal is to gather experiences. Thus, the goal of qualitative research is to obtain as much variability as possible (Krefting, 1991). In this present study, it has been established that difficulty exists in reaching the target study group. Therefore, in planning this portion of the study, three designers with diverse experience in the fashion industry were selected. These designers were selected from word-of-mouth recommendations, personal knowledge of the individual, and through biographical data on the designers found on the Internet. These three participants each have experience in multiple methods of apparel product development. Each participant was able to compare her own experiences and offer unique insight into the apparel industry. Once the interviews were completed, the content of the interviews was evaluated, for variations in the role of design and for factors that influence those variations.

Because of the geographical distance between the researcher and the subjects, the three interviews were conducted by telephone in one session. The interview questions presented were in a semi-structured format to maintain consistency among the interviews while allowing flexibility in input from the interviewees.

Instruments

It is understood that in any business innovation and design are not limited to one department. This study, however, specifically focused on the tasks carried out by the apparel design department. Therefore, care was taken to ensure that it was understood that the responses related only to the apparel design aspects of a firm and not the company as a whole.
The role of design in the apparel firm was measured with survey questions based on the criteria established by Perks et al. (2005) to look for variations in the role of design. Strategic orientation was measured based on the scale used by Gatignon and Xuereb (1997) in their study to evaluate strategic orientation and new product performance. These questions addressed how companies view and respond to competition, the importance of innovation within the company, the importance placed on dissemination of information through the company, and the ability to predict customer preferences. A 5-point Likert scale where (5 = not at all and 1 = always) was used to measure responses.

Corporate culture was measured using the questions from Desphande et al. (1993) in their study to evaluate corporate culture, customer orientation, and innovativeness in Japan. These questions were measured on a 5-point Likert scale (5 = not at all and 1 = always). The questions asked about the company’s views towards risk taking, developing personal relationship with employees, innovation, work ethic, creativity, and production orientation. In addition, questions were included to determine the demographics of the sample and to ascertain the nature of the products designed by the participants’ apparel firms, the number of employees in the design department of the company, and yearly sales.

Forty semi-structured questions were used to guide the interviews. These questions were formulated after evaluating the data collected in the quantitative survey with the purpose being to expound, clarify, and further explore the findings of the survey in order to create a snapshot of the role of design in the apparel product development process. The questions were divided into six areas of exploration. The first section was personal information. These questions were designed to provide a background of the interviewee’s professional and
educational experience. The next four sections explored creativity, design, product development, and innovation. The last section explored the interviewee’s opinions on fashion-design education.
CHAPTER 4

RESULTS

Data Analysis

The purpose of this study is to evaluate the role of design in the product development process in the fashion industry, looking for areas where design thrives; to explore the impact, if any, the variables of creativity, strategic orientation, customer orientation have on the product development process; and to evaluate fashion design education based on the findings. All phases of this study were reviewed and approved by the University of North Texas Institutional Review board for administration to human subjects.

Once the survey was created online using Qualtrix software, the link was sent to a convenience sample of University of North Texas fashion design alumni and personal contacts. International Textile and Apparel Association education members were contacted to distribute the survey to their fashion design alumni, and the survey link was posted on related message boards on Linked-In. In all, twenty-seven usable surveys were obtained.

Demographics

The demographic questions were used to determine company sales, size of the company’s design department, and the participants’ job title within their design department.

Thirteen of the 27 participants listed their job title as designer/product developer, six were owners/managers, six were creative or design directors, and two were technical designers. In addition, one textile designer completed the survey. The majority of those responding, 36%, worked in companies with 11-50 employees in the design department. Nine participants stated their design departments consisted of 1-10 employees. Four respondents reported a design
department with 51-100 employees, and five participants stated more than 100 employees were employed in their design departments. Yearly sales for the participants’ companies ranged from $50,000-$250,000 (29%), $251,000-$1,000,000 (11%), and over $1,000,000 (61%). These findings are important as they show a good representation of company size and jobs within the design department are represented in the survey results. A complete description of the sample is provided in Table 2.

Table 2

*Demographic and Descriptive Data of Survey Participants*

<table>
<thead>
<tr>
<th>Sample Descriptor</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job Title</strong></td>
<td></td>
</tr>
<tr>
<td>Designer/Product Developer</td>
<td>13</td>
</tr>
<tr>
<td>Owner/Manager</td>
<td>6</td>
</tr>
<tr>
<td>Creative Director</td>
<td>5</td>
</tr>
<tr>
<td>Technical Designer</td>
<td>2</td>
</tr>
<tr>
<td>Textile Designer</td>
<td>1</td>
</tr>
<tr>
<td><strong>Yearly Sales</strong></td>
<td></td>
</tr>
<tr>
<td>$50,000-$250,000</td>
<td>8</td>
</tr>
<tr>
<td>$251,000-$1,000,000</td>
<td>3</td>
</tr>
<tr>
<td>Over $1,000,000</td>
<td>16</td>
</tr>
<tr>
<td><strong>Number of Employees in Design Department</strong></td>
<td></td>
</tr>
<tr>
<td>1- 10</td>
<td>9</td>
</tr>
<tr>
<td>11- 50</td>
<td>9</td>
</tr>
<tr>
<td>51-100</td>
<td>4</td>
</tr>
<tr>
<td>100 or more</td>
<td>5</td>
</tr>
<tr>
<td><strong>Business Model</strong></td>
<td></td>
</tr>
<tr>
<td>Mass Market</td>
<td>7</td>
</tr>
<tr>
<td>Designer Label</td>
<td>5</td>
</tr>
<tr>
<td>Specialty Retailer</td>
<td>3</td>
</tr>
<tr>
<td>Private Label</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
</tr>
<tr>
<td><strong>Manufacturing Category</strong></td>
<td></td>
</tr>
<tr>
<td>Bridge</td>
<td>1</td>
</tr>
<tr>
<td>Better</td>
<td>13</td>
</tr>
<tr>
<td>Moderate</td>
<td>8</td>
</tr>
<tr>
<td>Budget</td>
<td>5</td>
</tr>
</tbody>
</table>
Market Segment

The next set of questions related to the market placement of the participants’ companies. Twenty-six percent of the respondents described their business model as mass market manufacturer, 21% of respondents were in private label, 18% in designer labels, and 11% were employed in specialty retailer or companies supplying designs for specialty retailers. Two respondents listed a combination of these categories: one stating private label and licensed apparel and the other stating private label and specialty retail. In addition, one respondent sells handmade apparel items at local markets. Respondents were also asked to choose their manufacturing category. Options included bridge, better, moderate, and budget. These categories are related to price points, with bridge being the highest price point and budget the lowest, per the industry practice. The majority of participants, 13, worked in the “better” category of design. Next was moderate at eight, then budget at five, and bridge at one. This demographic data shows that responses were received from a variety of categories.

Creativity

When asked about the originality of designs, 15 respondents stated their designs were more original than other firms in their market segment. Twelve stated they were the same in originality, and one stated their designs were less original. However, when asked to define the originality of their designs, only five respondents stated their company produces all original designs. Fourteen respondents stated their company’s designs are a 50/50 mixture of original designs. Three respondents stated their designs were mostly adaptations with a few original designs, three respondents stated their designs were mostly adaptations with some direct
copies of others’ designs; and three respondents stated theirs was a blend of original designs, adaptations, and direct copies.

When asked about the time spent on creative tasks, only 3 respondents stated 76-100% of their time was spent on creative tasks (Table 2). Three respondents stated 51-75% of their time was spent on creative tasks, while 11 respondents spent 26-50% of time on creative tasks, and 11 spent 0-25% of their day on creative tasks. In comparing job positions with time spent on creative tasks, seven of the 12 designers/product developers spent less than 25% of their day in creative tasks while four spent 26-50% of their time on creative tasks.

Table 3

*Time Spent on Creative Tasks by Employees in Design Departments*

<table>
<thead>
<tr>
<th>Percentage of Time Spent on Creative Tasks</th>
<th>All Design Department Employees</th>
<th>Designers/Product Developers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-25%</td>
<td>41%</td>
<td>58%</td>
</tr>
<tr>
<td>26-50%</td>
<td>37%</td>
<td>33%</td>
</tr>
<tr>
<td>51-75%</td>
<td>11%</td>
<td>0%</td>
</tr>
<tr>
<td>76-100%</td>
<td>11%</td>
<td>9%</td>
</tr>
</tbody>
</table>

When comparing time spent on creative tasks to the manufacturing category, one participant stating the highest amount of time spent on creative tasks, 76-100%, is employed in a budget category and two are employed in the better category. The better category showed the most diverse range across the creative task range, with eight respondents at 50% or below and five at 51% and above. In the moderate category, all eight respondents spent 50% or below on creative tasks. No significant difference was found in amount of time spent on creative tasks when comparing this variable to the participants’ business models. Likewise, in
reviewing the limited responses in this survey, there is no identifiable relationship between time spent on creative tasks and offshore production.

A cross-tabulation of the participants’ perceived originality of their companies’ offerings by manufacturing category shows the better and bridge categories have a majority of participants (10 out of 14) stating their designs are more original than others in their market segment. Only three of the eight in the Moderate category perceive their offerings as more original, and only one out of the five budget category responses reported being more original. However, when comparing the mixture of original designs, adaptations, and direct copies, no clear differences exist between the manufacturing categories.

Comparing perceived originality among business models shows that 100% of designer labels perceive their designs as more original, as do two out of the three specialty retailers (Table 4). The majority of private label and mass market lines perceive their originality as the same as their competitors. The one response that states designs as being less original is in private label. When comparing the business model to the mixture of original designs, adaptations, and direct copies, no clear differences can be seen between the business models, with the exception of the two positive responses to using direct copies and adaptations with no original designs were in the mass market manufacturer category.
Table 4

Originality of Designs

<table>
<thead>
<tr>
<th>Measure of Originality</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Originality</td>
<td></td>
</tr>
<tr>
<td>More Original</td>
<td>14</td>
</tr>
<tr>
<td>Same Originality</td>
<td>12</td>
</tr>
<tr>
<td>Less Original</td>
<td>1</td>
</tr>
<tr>
<td>Originality in design source</td>
<td></td>
</tr>
<tr>
<td>All original</td>
<td>4</td>
</tr>
<tr>
<td>50/50 mixture</td>
<td>14</td>
</tr>
<tr>
<td>Mostly adaptations with a few original designs</td>
<td>3</td>
</tr>
<tr>
<td>Mostly adaptations with some direct copies</td>
<td>3</td>
</tr>
<tr>
<td>A blend of original, adaptations and direct copies</td>
<td>3</td>
</tr>
</tbody>
</table>

Role of Design

In looking at the role of design, Perks, et al. (2005) found that fashion design companies used design as a functional specialism where design was kept in very strict functional limitations related only to the design tasks at hand. In the 27 surveys completed for this study, there is no evidence of design tasks being delegated to a functional specialism within the design and development phase. Figures 6, 7, 8, and 9 show the respondents’ performance of the tasks used in the Perks, et al. (2005) study.
Figure 5. Tasks performed during need identification stage

Figure 6. Tasks performed during concept generation stage
Figure 7. Tasks performed during design and development stage

Figure 8. Tasks performed during production and launch stage
There were no tasks that were 100% out of the design department’s reach; however, tasks associated with meeting and interacting with the customer, interacting with shareholders, and managing public relations showed the least amount of participation by the design department.

In comparing tasks to the amount of time spent on creative tasks, differences were found between the creative moderate group -- those who spent less than 50% of their time on creative tasks -- and the creative intense group – those who spent 51% or more of their time on creative tasks. These differences show that the creative intense group were more likely to be involved in researching technology, considering business and market drivers, performing direct customer observation during the need identification stage. In the concept generation stage, the creative intense group was more likely to receive fashion direction, as well as to participate in market and sales data translation, develop design themes and mood boards, participate in discussions with other departments, work with marketing, and research competitors. During the design and development of the apparel product line, the creative intense group was more likely to be involved in negotiations with other departments and measuring consumer responses. In the production and launch phase, the creative intense group reported more involvement in liaising with manufacturers and suppliers, monitoring production quality, dealing with problems, and reviewing product launch. Conversely, there were no tasks that showed more involvement by the creative moderate group.

Corporate Culture

Another aspect this study looked into was to explore whether a relationship existed between corporate culture and the role of design. The results are detailed in Table 5.
assessing corporate culture, differences were seen between respondents in the creative moderate group and those in the creative intense group. The survey asked respondents to answer the corporate culture questions on a 5-point scale consisting of the following options: *not at all, rarely, sometimes, frequently,* and *always.* In evaluating the data, *frequently* and *always* have been interpreted as affirmative responses, and *sometimes, rarely,* and *not at all* have been interpreted as non-affirmative responses. All six of the respondents in the creative intense group identify their employer as being competitive and placing high emphasis on measurable goals. Conversely, 12 of the 21 respondents in the creative moderate group do not agree that their employer is competitive or places high emphasis on measurable goals.

Likewise, all six of the creative intense subjects report their company emphasizes growth and acquiring new resources. Readiness to meet new challenges is important to their firms. Only 10 of the 21 creative moderate respondents reported an affirmative answer to this statement.

Table 5

<table>
<thead>
<tr>
<th>Corporate Culture and Creativity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Time Spent On Creative Tasks</td>
</tr>
<tr>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Creative Moderate 0-50%</td>
</tr>
<tr>
<td>Creative Intense 51-100%</td>
</tr>
</tbody>
</table>

Emphasis on tasks and goal accomplishment is the glue that holds their organization together for five out of six of the creative intense group and 13 out of 21 of the creative moderate group. Likewise, five out of six of creative intense group report an emphasis on
creativity and originality while only 12 out of the 21 in the creative moderate group give an affirmative response to this statement. A commitment to innovation and development is affirmed in five of the six in the creative intense group and only in 11 out of 21 in the creative moderate group.

Organizations viewed as dynamic and entrepreneurial places where people are willing to take risks were affirmed by one half of the creative intense group, but only one-third (seven out of 21) of the creative moderate group affirmed this statement. Both groups disagreed that their employers were production oriented and placed high concern on getting the job done with little personal involvement (four out of six of the creative intensives and 14 out of 21 of the creative moderates).

These results point to corporate culture as being a factor in the amount of time design employees spend on creative tasks. Setting measurable goals, emphasizing growth, readiness to meet challenges, emphasizing goal accomplishment, an emphasis on creativity and originality, as well as a commitment to innovation and development were strongly associated with respondents who reported spending the most time on creative tasks.

**Strategic Orientation**

As the strategic orientation of a company has a bearing on the performance of a firm (Gatignon and Xuereb, 1997), it was believed that the strategic orientation related to customer orientation, technology and competition of the apparel firms could have an impact on the role of design in the apparel industry. These strategic orientations were evaluated using the percentage of time the survey’s respondents reported spending on creativity each day. Respondents were divided into creative moderates, those spending 50% or below of their day
on creative tasks, and creative intensives, those spending 51% or higher on creative tasks each day. The results are detailed in Table 6.

In looking at customer orientation, the majority of both groups reported a strong customer orientation. However, in looking at competitor orientation, a difference was seen between the two groups. The creative moderate group reported a high tendency to respond quickly to competitive actions (15 out of 21 respondents), whereas, only two out of the six of the creative intense respondents gave an affirmative response to this statement. When responding to the statement, “We target customers where we have an opportunity for competitive advantage, five of the six of the creative intense group responded affirmatively. In the creative moderate group, the majority agreed with this statement but to a lesser degree, with only 12 out of the 21 respondents agreeing with this statement.

When examining technology orientation, the results were split equally among the creative intense group; however, in the creative moderate group, less than half, nine out of 21 respondents, reported affirmatively to incorporating new technologies into their products and only six out of the 21 respondents reported their products used state of the art technology.

Table 6

<table>
<thead>
<tr>
<th>Strategic Orientation and Creativity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group</strong></td>
</tr>
<tr>
<td>Creative Intense</td>
</tr>
</tbody>
</table>
Gatignon and Xuereb (1997) state that demand uncertainty has an impact on the strategic orientation of a firm. For example, products with high uncertainty require a greater degree of customer orientation to be successful while products with lower uncertainty are hindered by a high customer orientation. In evaluating demand uncertainty, the creative intense group, those who spent over 51% of their time on creative tasks, showed a lower demand uncertainty. This creative intense group overwhelming believed customer demand was easy to forecast (five out of six respondents), as compared to only 10 out of 21 of those in the creative moderate group who spend less than 50% each day on creative tasks. Only two out of the six members of the creative intense group believe competition in our industry is cutthroat, compared to 17 out of 21 members in the creative moderate group. Also, the creative intense group overwhelming believed customer tastes were easy to assess accurately (five out of six), compared to 12 out of 21 of those in the creative moderate group.

Interviews

When it became apparent that the survey pool would be a low number, it was elected to conduct interviews to discuss the themes of this study with three subjects and execute a two-phase, mixed-methods design. In selecting subjects for Phase 2, the criterion was to look for fashion industry professionals with a wide range of experiences and at least ten years and in the industry. Table 7 provides detailed information on the interviewees’ experience in the fashion design industry.
The purpose of the Phase 2 interviews was to qualitatively evaluate the experiences of the interviewees and compare their statements to the findings of the data collected in the Phase 1 quantitative study. Questions asked in the interviews were based on the findings of the Phase 1 survey.

Creativity

As detailed above in the Phase 1 findings, creativity was noted to be a key element in the role of design. The interviewees were asked not only about how much time they spent on
creative tasks but also if they were satisfied with the amount of time they were able to devote to creative tasks. The responses are detailed in Table 8. Participant A and C indicated they were not happy with the amount of time spent on creative tasks. Participant B, a technical designer, stated she was happy with the amount of time spent on creative tasks. It is important to note that both Participant A and B have apparel-related side businesses which help to fulfill their need for a creative outlet.

Table 8

*Interviewees’ Time Spent on Fashion-Design Related Creative Tasks*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Time Spent on Creative Tasks</th>
<th>Satisfied with Time Spent on Creative Tasks: Yes or No</th>
<th>Ideal amount of time a designer should spent on creative tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Most creative task is problem solving</td>
<td>No</td>
<td>75%</td>
</tr>
<tr>
<td>B</td>
<td>One-third</td>
<td>Yes</td>
<td>78-80%</td>
</tr>
<tr>
<td>C</td>
<td>1-2 hours a day</td>
<td>No</td>
<td>Unclear: 25-30% pure creativity but 100% mind creativity</td>
</tr>
</tbody>
</table>

Participant C questioned what was considered creative tasks. She believed pure creative tasks included such job duties as sketching and putting trims on and these should only take 25-30% of a designer’s time. She believed the rest of the time was best spent working with merchandising, technical design, and fabric suppliers. However, she observed that a designer’s mind should be thinking creatively 100% of the time. This includes shopping visits, as well as time spent on Pinterest, social media, and other visual sources. Participant C believes
that designers actually have more access to creative stimuli than they did 10 to 15 years ago, and the opportunity to focus on creativity is available 24 hours a day, seven days a week.

Both Participants A and B mentioned time restraints as a major factor inhibiting creativity in the fashion industry. Participant B states the creative process is completed too quickly and rushed through too hastily. Participant A believes that to create something worthwhile takes time, and creativity is not appreciated in the apparel industry. It is more about getting garments out quickly than producing creative designs. She states that there isn’t time to research, sketch, and perfect: things are often thrown together. Of note, this statement correlates to a product development process that is more forward moving and less reiterative in nature. Participant A also believes that if the fashion design industry would stop the practice of knock-off design, many labels wouldn’t be in the financial trouble they are in now. She believes if companies let designers do their thing and offer new and innovative products, then sales would increase. This belief correlates with the Phase 1 findings on corporate culture and strategic orientation. Participant A also notes that in lean economic times, apparel companies are more inclined to steer away from originality and “stay safe.” She believes this hurts (rather than helps) sales. Her belief aligns with the statements made by Enayata (2012) that in hard times, companies should be more creative and original instead of playing it safe.

When asked if creativity is equally important in all aspects of the apparel industry, Participant C stated it was. She states that creativity is important to design something that the customer wants to buy, no matter what the selling price. Participant B believes designers starting new companies need high levels of creativity. These designers are starting with a blank
slate and need to make their mark. Participant A sees higher levels of creativity as being related to higher price points. A certain level of design detail and quality is expected by those customers in the higher price ranges. The problem to solve in the mass market, on the other hand, is how to make the garment at the lowest possible price to maximize profit. She observes, however, that this type of problem solving does require a certain type of creativity as well. Participant A also notes that companies selling a lifestyle brand also need higher levels of creativity in offering products that are consistent with the brand and meet the brand’s standards.

Design

One of the challenging concepts of fashion design is to design for what the customer wants in the future. Fast fashion has increasingly shortened the time between the beginning of a design and the date it is available to the customer. When the participants were asked how they balance what the customer wants now versus what will be needed in the future, Participant A states that, especially in junior clothing, oftentimes the designer is only working one month ahead of what is to be offered. She states the trend towards a market every month, except for July and December, and the need to give the customer what they want now, right now, has eliminated the need to anticipate and design for what the customer wants and needs in the future. Participant B stated that a designer should always have their eye towards the future, and Participant C provided a broader view. She is an advocate of short-term, mid-term, and long-range goals. In order to provide the customer with what they need now, one must also keep the long-term goals in focus to be sure the short-term objectives are facilitating the long-term goals.
All three participants state the designer should be free to design. The designer is pulled in so many directions, such as sales and merchandising, it is difficult to focus on design, says Participant A. Participant B believes design is a talent that should be nurtured, and the designer should not be managing a team or trying to run a company. Design takes a lot of energy, she states, and it is best to optimize the designer’s talents. Participant C states that the designer should “own” the design and creativity of her product and should be able to defend the designs among the different departments involved, such as merchandising, sales, and marketing. Participant A, when asked about her ideal fashion design job, corroborates this by stating being left alone to do her job would be ideal. More time to be creative and less time parceled out to other tasks would be ideal. Participant B’s ideal job involves working for a couture house in Paris, and Participant C would like to focus on custom design full time. Although the answers were diverse, all three participants show a desire to be have more design and creative tasks in their career.

The participants see the role of design as aligning with creativity as far as areas where they believe design as being of greater or least importance in fashion. Participant B states new companies need higher levels of design to get into the market. Mass market and private label brands show less design in their offerings. Participant C believes design is important in the higher price points; however, she sees design as important even in basics. If a company is selling a basic shirt, it takes time to be creative and design something that will catch the customer’s eye. She believes the elements of design in this instance can be achieved through fabric selection, whether surface design or performance features built into the fabrics.
When asked about originality of designs, Participants A and B both state that originality is not important at all to their companies. Participant A said her company doesn’t care if the design is an original idea of the designer or a direct copy of an existing garment as long as it sells. Participant C stated that originality is important in apparel companies; however, she believes that originality involves a mixture of marketing and brand identification, as opposed to purely originality in design. She does state, however, that in her custom equestrian clothing business, originality in design is essential, as it enables her customers to stand out in competitions.

The participants were asked to comment on how much involvement, if any, designers should have in various stages of the product development process. In regards to the need identification/recognition stage, Participant B acknowledges that it is important for the designer to be in touch with the customer and know who they are designing for. Participant A relates her answer to personal experience. She feels the more she is involved with the trend research and the fashion direction, the more committed she is to the design process. She says design becomes a chore for a creative person, if they can’t get excited about the concept. Being able to present designs that you believe in is important. This statement is echoed by Participant B’s observation that it is important for a designer to “own” their designs and be passionate enough to stand behind their ideas and defend them when necessary. Participant C notes the role of design’s involvement at the need identification/recognition phase depends on the size of the company. The designer needs to “support and back the brand identification and marketing guidelines,” she says, but they don’t necessarily have to be hands-on with the research and selection of fashion direction. The involvement could range from very involved
for a small company’s designer to just receiving quarterly updates for a large apparel company’s design team.

All participants agree that trend research/identification is a key part of the designer’s job. A designer should be performing trend research daily and keeping on top of trends as they are evolving, states Participant A. Trend forecasting companies are an important source of trend information that designers should utilize. Participant C states that, while a designer may chose not to follow the trends forecast by these services, they should at least be aware of what is being forecast.

When asked about the involvement of design functions with other functions within a company, such as marketing and merchandising, Participant A states that involvement should consist of attending review meetings and present progress reports on the product development. These meetings, she believes, are more effective in the middle to end of production. Meetings, she states, can be counterproductive if too much time is spent meeting and not enough time designing. Participant B believes designers should be designers and should not be spread thin with too much involvement with other departments. Participant A believes the designer’s vision should be clear to marketing and merchandising so that all are going the same direction. It is important that the design point of view be known and considered in the various departments.

The key change the participants have seen in design during their careers has been related to technology. Participant A says that technology has enabled the industry to be a lot more organized and to keep in daily contact with factories. Participant C states that how the designer sketches and how patterns are made has changed due to technology; however, the
same principles and fashion cycles are present that existed in the beginning of her career. Participant B sees the design process as being faster than it was 20 years ago. Also, she notes that people are more diverse and individualistic. There are more things to anticipate when designing than there were in the beginning of her career.

Participant A goes on to state that in the future she believes prices will have to go up. The pressure to keep prices down, she believes, has hurt design and has been detrimental for human rights as well. The pressure to keep prices low results in poor working conditions, such as the Bangladesh factory fire that killed 200 workers. As a designer, she would like to see the industry take a little more responsibility and consumers be more conscious of where their clothes are manufactured.

Product Development

When asking the interviewees to define product development, all three participants gave a different answer. Participant A defined product development as the process of tailoring something to specifically meet a specific customer’s needs, such as designing private label products. Participant B sees product development as being about brand identity and brand development. It is a liaison between the designer and the merchant to achieve the brand objectives. Participant C defines product development as the entire design process. She states, “It starts with story boards, flows to fabric selection, sketches, sample making, sourcing, costing, and fine tuning for pricing, and production.” Participant C goes on to say her definition outlines the steps involved in the product development process and that process is the same whether making one garment or 100,000 garments.
Participant A describes the product development model as beginning with setting trends, themes, and colors. After researching trends and ideas, as well as what is currently in the market, the trends are narrowed to 10-15 groups of 5 styles per group. Key items, like cardigans, may have 10-15 per group. Once the selection is completed, the tech packs are created and sent to the factories. A model of Participant A’s product development process has been created and can be found in Figure 9. Of note, Participant A defines the steps related to design as separate from product development. The manufacturing of the designs is what she truly considers product development. When asked what would need to be added to create an ideal product development model, Participant A stated more time, and Participant C believes the production manager should have a good relationship with the designer to ensure that the factory can produce exactly what the designer envisions.

![Figure 9. Participant A Product Development Model](image)

Participant B also sees the product development process as being separate from design. She describes product development as keeping the production calendar and keeping everyone informed on delivery dates. The design department and the product development team work
together but on different aspects of the process. In her company, the trend team is separate from design as well and presents themes and colors four times a year. When asked how design fits into her company’s product development model, she believes the role of design is to present new ideas. The designer presents the ideas, but the ideas evolve in the process to fit the brand and the cost perimeters. A model of Participant B’s product development process has been created and can be found in Figure 10.

![Figure 10. Participant B Product Development Model](image)

Participant C sees the role of design as being involved throughout the entire product development process. She describes a reiterative model wherein issues go back to the designer for problem solving. This could involve tweaking a design or its construction details to researching suppliers and materials to meet costing or quality standards. A model of Participant C’s product development process has been created and can be found in Figure 11.
When asked how product development has changed during their careers, Participant A states that designers have less say than they have in the past. More companies have creative directors who oversee the process. Participant C states overseas production has been a significant change in product development during her career. More information is required to be sent to the factories, and this takes a proactive approach to anticipate and work out issues early in the process. She states it was much easier when production was carried out domestically.

Innovation

When asked to describe innovation, all three participants describe it as being something new. Participants A and C offered fabrics created with new technology as an example. Otherwise, Participant C states that innovation is mostly related to marketing and branding. Participant A stated innovation hasn’t changed much in her career while Participants B and C state that technology has made many changes to innovation in how garments are produced, from CAD software to machines that can sew men’s shirts without the use of hands.

Education

Participants were asked if fashion design students were getting the education they need to succeed in the apparel industry. All three participants believe the students are receiving satisfactory educations. However areas of weakness are seen in life skills, attitude, and new
students applying themselves to the job at hand. Participant A believes the strength in the schools is the amount of technical information that is passed along to students. Participant B sees a drive to instill and nurture creativity as a strength in fashion design education. When asked to identify areas of weakness, Participant B wishes students had more patternmaking practice, and Participants A and C believe real life skills and students applying what they learn are weaknesses.
Chapter 5

CONCLUSIONS

Findings

Role of Design

This study was conducted to evaluate the role of design in today’s fashion design industry in the United States. The findings by Perks, et al. (2005) which show fashion design as being a functional specialism was not shown to be true in this study. In the Phase 1, quantitative, portion of this study, Design teams were involved in all stages of product development, from need identification to production and launch of the lines. Likewise, the product development models where design has been dismantled into tasks, while seen in some areas of apparel production, are not the definitive product development model in the apparel industry.

In the Phase 2, qualitative, portion of the study, each of the participants described different product development models. Participant A saw the product development process as consisting of two phases, design and production, with production entailing the steps to make the garment. Participant B also saw design and product development as being separate; however, in this instance design was more of functional specialism. Participant C’s product development model showed design as being more involved throughout all the steps and thus presented design as being more of a process leader. These findings support the Phase 1 finding that design has a variety of roles in product development process for fashion products.

The Phase 2 interviews indicated that designers are more likely to thrive, be more invested in the process, and be more creative and enthusiastic when they are involved
throughout the product development process. Participant A commented that designers need to be involved in the fashion direction in order to be enthusiastic and invested in the products. On the product end, Participant C’s statements regarding the importance of design being in close contact with production managers as the designs are manufactured supports the need of design’s involvement throughout the production phase.

At various points in the interviews, the participants stated the importance of being “left alone” to design and not be spread too thin on other tasks throughout the product development process. It is clear, however, that the participants are not advocating a hands-on involvement throughout all stages of the process. The interview participants wanted to be kept informed and have the ability to step in and give input when necessary to keep the designer’s vision intact. Participant C stated that too much time spent in meetings was counterproductive, and designers need to be able to spend their time designing and following trends. These opinions do indicate the participants’ idea of design as playing a key role in the product development process.

Additionally, when asked if design plays a greater or lesser role in different areas of design, the participants in Phase 2 believe that, while new companies and those selling to higher price points are expected to have more original designs, design is important in all aspects of fashion. While it was shown in the literature review that in some instances design was becoming simply a step in the product development model, the Phase 2 participants see design as being important in all aspects.
Creativity

While the study was limited by the number of participants, the Phase 1 findings do suggest that variations exist in the role of design based on the amount of time design department employees spend on creative tasks. Clear differences were seen in the role of design at all levels in the product development process – from need identification to production and launch – between creative moderate employees who spent 50% or less time in their day on creative tasks and creative intense employees who reported spending 51% of their day or more on creative tasks. The employees spending more time on creative tasks were more involved in all aspects of the product development stages.

The creative intense group reported a corporate culture more conducive to encouraging creativity and innovation. Also of note, this group also reported a corporate culture where measurable goals were set and achieving goals was a high priority. The creative intense group stated their company valued risk taking and that people within their company were not afraid to take risks. The majority of respondents in the creative moderate group did not believe it was okay in their company to stick their necks out, competitive actions and achievements were not a priority for their companies, and innovation and development were not priorities as well. The majority of this group reported a production oriented ethic and emphasis on being creative and original, although not to the extent seen in the creative intense group.

Additionally, differences were seen in the two groups related to demand uncertainty. Those in the creative intense group had less demand uncertainty, while those in the creative moderate group reported greater demand uncertainty. Gatignon and Xuereb (1997) report
demand uncertainty impacts customer orientation and competitive orientation. Both groups show a high customer orientation focus; however, differences exist in competitive orientation. Employees in the creative intense group do not show interest in responding quickly to competitive threats, although they show a strong competitive thrust when targeting customers where there is a competitive advantage. Gatignon and Xuerub (1997) state that when demand uncertainty is less, as is the case with the creative intense group, a competitive orientation is to be favored over a customer orientation. Gatignon and Xuerub further state that a high customer orientation in firms with less demand uncertainty can be detrimental to innovation.

In the Phase 2 portion of the study, Participant A stated her company is very customer/sales oriented and is not interested in originality or creativity in design. The company just wants to make sales. This statement mirrors the findings of the Phase 1 portion of the study for the group who spend less than 50% of their time on creativity. However, Participant A states she believes her company would be better off if it were more creative and original. This belief is supported by the Phase 1 findings.

As Participant C notes in the Phase 2 portion of the study, designers today have more opportunities to explore creativity than ever before; however, 91% of the designers in the Phase 1 survey are spending less than 50% of their day on creative tasks. The findings in Phase 2 indicate the ideal time a designer should spend in creative tasks is 75%. This study indicates a disconnect in the fashion industry between how designers are being utilized and how they should be utilized. Additionally, time constraints were a concern to participants in the Phase 2 interviews, indicating a conflict between design and fast fashion.
The findings from both the Phase 1 and the Phase 2 portions of this study suggest that companies who embrace creativity are better positioned to pursue innovation and originality. In addition, they fear competition less and feel more comfortable in predicting what their customers want. The design employees in these companies feel their corporate culture supports them in creative endeavors and utilizes their design skills in all stages of the product development process. Design firms who do not encourage creativity in design should reevaluate the role of design and the designers within their companies.

Technology

The participants in the Phase 2 interviews noted technology was the biggest change in design and product development during their careers. In Phase 1, a difference in technology orientation was found based on the time spent on creative tasks. One-half of those in the creative intense group also reported working for companies who have a technology orientation, while less than one half of those in the creative moderate group reported a technology orientation. In companies with technology orientations, Gatignon and Xuereb (1997) suggest that more energy be spent on competition rather than customer orientation in order to maximize growth. For the creative moderate group, who have higher demand uncertainty and are less inclined to incorporate technology, the findings show that less emphasis is being placed on competition and more on customer orientation. This follows the guidelines outlined by Gatignon and Xuereb.

Education

The participants in the interviews believe that fashion design programs are doing a good job at providing education for careers in the fashion design industry. All three, however, note
traits in the students themselves that make the transition from college to the “real world” in a fashion design career difficult. These include an unteachable attitude and lack of interest in applying knowledge and skill to work situations. Participant A stated some interns and new employees come in with an attitude that they know more than those with years of experience in the industry. While a college education is essential, a fashion design education doesn’t end at graduation. Instead, on-the-job experience and skill building are essential to a fashion design career. Most colleges provide internship opportunities to students; however, classes specifically designed to allow students to work through real world problems or tasks, as well as incorporating more real-world problem solving into existing classes may help prepare students for the reality of a fashion industry career.

Additionally, based on the findings of the importance of creativity in fashion design, colleges should continue to place a strong emphasis on creativity in fashion design programs. While courses in product development may be beneficial, creative design is still vital to the fashion industry. Preparing fashion design students to perform at a high level of creativity and to push their design abilities is just as important now as it has been in the past.

Future of Fashion Design

These findings, rather than showing a diminishment of design in the fashion industry, point to a need to nurture and embrace creativity and originality in fashion design. Art degrees are becoming the “it” degree (Tepper, 2013) and more companies are seeing the need for creativity (Enayati, 2012). It is hoped that fashion design will see a resurgence in focusing on creativity and originality and a renewed respect for design in the coming years. Those fashion design companies best positioned to meet the future embrace a corporate culture that
nourishes originality in design and focuses on innovation to give themselves a competitive advantage in their market.

Limitations of the Study

A primary limitation to this study is the size of the response group. Reaching the study group was difficult due to not being able to find methods to successfully reach a large number of employees within apparel design firms. The small numbers make running statistical analyses unreliable. Data was measured using cross tabulations, and examination of results was based on simple calculations. Because of the small size of the sampling, the results cannot be generalized to all design departments. However, it is hoped that the information gleaned from this study will identify issues to be researched regarding the role of design and provide avenues for further research in this area.

When conducting this survey, members of design departments were sought and questioned on their business model (mass market, designer, specialty retailer, private label, and fast fashion), as well as on their manufacture category (bridge, better, moderate, or budget). The type of apparel being produced, women’s wear, children’s wear, menswear, etc., were not factored into this study. Also not factored into the study was profit. Yearly sales were used to determine company size; however, in analyzing data it became apparent that company profits would have provided useful information in regards to a company’s success in relationship to their strategic orientation, corporate culture, and employee time spent on creative tasks. Future studies looking into the role of design should include these components in their data collection.
When asking for some information, the survey relies on the user to define the terms. For example, when asking for time spent on creative tasks, the participant is using their own definition of “creative tasks.” This definition could vary from one participant to another, and there were no controls in place to create a consolidated definition of the variable. Giving the survey participants a pre-defined definition of creative tasks, or asking survey questions to identify the participants’ definition of creative tasks could have reduced this limitation.

**Recommendations for Further Study**

For further study, researchers should consider ways to successfully reach the target study group. Obtaining a larger pool of participants will make the findings more reliable and generalizable to the apparel design profession as a whole. A larger pool of participants will also enable researchers to perform deeper analyses of the data, including multivariate analysis to identify variations in the role of design. Including questions to ascertain profitability and type of clothing produced will also help researchers to better understand the role of design within the various facets of apparel design.

Further study on the impact of time spent on creativity has on the role of design will be beneficial in understanding how design can thrive in the apparel industry, as well as provide valuable information for colleges when preparing fashion design students for careers in the industry.

There remains a need in the fashion industry for product development models that reflect variations in the role of design within the product development process. Few models exist in the literature, and the ones that do are not representative of all the ways that design is utilized in the product development process. Further study to develop viable models will
provide the industry with better resources to allow for growth while giving creativity and design
the environment needed to thrive.
APPENDIX

INTERNAL REVIEW BOARD APPROVAL LETTER
March 18, 2014

Dr. Tammy Kinley
Student Investigator: Diana Beard
Department of Merchandising and Digital Retailing
University of North Texas

Institutional Review Board for the Protection of Human Subjects in Research (IRB) RE:
Human Subject Application #13-147

Dear Dr. Kinley:

The UNT IRB has received your request to modify your study titled "The Role of Design in the Apparel Product Development Process: As required by federal law and regulations governing the use of human subjects in research projects, the UNT IRB has examined the request to add a data collection instrument, add an informed consent form, and add a new recruitment pool for your study. These modifications to this study are hereby approved for use with human subjects.

Please contact Jordan Harmon Research Compliance Analyst, at (940) 565-4643, or Boyd Hemdon, Director of Research Compliance, at (940) 565-3941, if you wish to make changes or need additional information.

Sincerely,

Patricia L. Kaminski, Ph.D.
Associate Professor
Chair
Institutional Review Board

PK/jh

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