

TOWARDS AN ENTREPRENEURIALY ORIENTATED DESIGN PROCESS FOR THE SOUTH AFRICAN SMALL BUSINESS THAT PROVIDES CUSTOM-MADE APPAREL

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Abstract

The South African government has invested in skills development ever since 1995 in an effort to facilitate more opportunities for small business and micro business (SMME) owners. Skills development programs offered in South Africa include the development of technical skills like apparel construction. At least 129 active apparel SMMEs were operating in the Pretoria region of Gauteng province during between 2001 and 2013. Most of these SMMEs provide custom-made apparel for their individual customers and the owner-designers of these businesses are involved in the design process of the custom-made apparel, but also play an imperative role in the business functions that directly relate to the design process.

Unfortunately, small businesses in South Africa have poor sustainability. The number of SME failures in South Africa varies between 50 and 95% within the first five years. One of the contributing factors to business sustainability is the entrepreneurial orientation of the business or behavior yielded as a result of the entrepreneurial orientation of the owner of the business. Entrepreneurial orientation enhances creativity and innovation which is typically associated with design actions. Nevertheless, it is also associated with a competitive business advantage.

The question remains: how does entrepreneurial orientation manifest in the context of a small business that applies the apparel design process to custom-made apparel? Therefore, a larger study aimed to develop an entrepreneurially orientated-design process for a business that provides custom-made apparel. As part of the larger study, this paper reports on a qualitative approach implemented to explore and describe the design processes of a selected small business in Pretoria.

The findings showed that one of the cases in this study had an entrepreneurially orientated design process. The specific case that was more entrepreneurially orientated than the other two cases. Entrepreneurial orientation in the context of this study includes: risk taking, innovation and fashion leadership.

Keywords: *Entrepreneurial orientation, Custom-Made Apparel; Design; Small and Medium Enterprises*

Introduction

The number of small and micro business (SMME) failures in South Africa varies between 50 and 95% within the first five years (Willemse 2010). Business sustainability as well as competitive advantage has been linked to the entrepreneurial orientation of the business (Covin & Lumkin 2011; Wei, Bin, & Gan 2010). Entrepreneurial ventures as opposed to general SMMEs contribute to economic change (Fatoki & Garwe 2010). This entrepreneurial orientation facilitates business owners to grow business beyond inflation enabling the SMME ventures to thrive in the long run (Mwobobia 2012). Wales, Mansen and Mckelvie (2011) state that there can be different degrees of entrepreneurial orientation within a business and that it manifests in the behaviour of the business through the business owner's application of specific skills. Entrepreneurially orientated behaviour includes innovativeness, pro-activeness and risk taking (Slevin & Terjesen 2011).

Entrepreneurial orientation can be applied in an existing business and does not necessarily involve the start-up of a business (Neneh & Van Zyl 2012). Entrepreneurial orientation can therefore also be linked to strategy applied or management of a business (Ruyan et al. 2011). The owner of an SMME can therefore apply entrepreneurial and business skills to become more entrepreneurially orientated. There is consensus that the entrepreneurial orientation of a business owner requires skills like creativity and innovation (Nieman & Nieuwenhuizen 2009, p. 60; Praag & Versloot 2007; Brown & Ulijn 2004, p. 3). Creativity and innovation can be applied in any business for example an SMME that designs and manufactures apparel.

This paper focuses on the design process applicable to apparel design SMME's in order to be more entrepreneurially orientated. The argument is that not all apparel designers that own a business are entrepreneurial, but that an entrepreneurial orientation could be constructive to the business's competitiveness and consequently the business sustainability.

Literature review

South African apparel design and manufacturing SMMEs

The South African apparel and textile industry performs a wide range of manufacturing activities. The boundaries of this industry have not are not always clearly defined. Naumann (2002) have attempted to delineate the clothing and textile industry as an industry that manufactures menswear, womenswear, workwear, underwear, hats and fur and leather clothes. Many of this manufacturing apparel SMME's are less sophisticated cut measure and trim (CMT) businesses (Vlok, 2006). These apparel SMME's manufacture apparel by means of designing and constructing the garments from concept to customer. This process of manufacturing creates an opportunity for owner-designers to custom-make apparel according to client specifications and requirements.

Apparel owner-designers that offer custom-made apparel products to their private clients typically require their clients to pay a percentage of the cost when the client places the order (to cover materials used) and the final balance is requested when the apparel product is complete (Burke, 2008: 98). These custom-made products are made-to measure and the main competitive advantages for this business are often the exclusivity of the apparel (Bickle, 2011:57).

Processes applicable to apparel design

The apparel design process is in essence a creative process and requires the application of creative problem solving (Hodges & Karpova 2010). Design in general is defined as a process where elements or components are combined into a cohesive whole, in a creative manner, to change an existing situation into a preferred one (Boztepe 2007; Miller et al. 2005 p.55). Rath, et al. (2008 p. 5) state that design entails a great deal of pre-production planning before implementation (production) takes place. Apparel design in particular is "a process that utilises the design elements of line, colour, texture, pattern, silhouette, and shape to create a garment." (Keiser & Garner 2008 p. 238). Therefore design in this study refers to the creative actions taken in planning the custom-made apparel-concept as well as the implementation of that planning. With regard to application of creativity, apparel SMME owner-designers possibly have an advantage with regard to entrepreneurial orientation.

A comparison between different theoretical design processes as creative processes is provided in the following table.

	Common design action in apparel design (Au, <i>et al.</i> , 2004)	Engineering design process applied to apparel design (Regan, <i>et al.</i> , 1997)	Apparel Design process of Lamb & Kallal, 1992)	Universal Design process of Aspelund (2010)
Pre-production Planning	Analysis			1 Inspiration (motivation for the problem)
		1 Problem recognition (a) Problem statement (b) Creation of ideas (c) Solution generation	1 Identification of problem (functional, expressive and aesthetic dimensions of customer needs)	2 Identification of the design problem (Needs and constraints analysis of the problem)
	2 Problem definition (a) Objectives (b) Resources (c) Design boundaries (d) Sub problem			
	Synthesises	3 Exploration of problem (a) Information search (b) Assumptions (c) Design strategy (d) Market assessment (e) Objectives (f) Cost	2 Preliminary ideas (creativity: technical sketching, brainstorming, research, survey question and answer sessions)	3 Conceptualisation (brainstorming, presenting analogies, questioning, sketching)
		4 Search for alternatives (a) experience (b) Answers (c) Requirements (d) Design proposal		
		5 Evaluation and decisions (a) Outcomes (b) Feasibility (c) evaluation		
6 Specification of solution (a) Analysis		4 Prototype development	5 Definition/modelling	

	Common design action in apparel design (Au, <i>et al.</i> , 2004)	Engineering design process applied to apparel design (Regan, <i>et al.</i> , 1997)	Apparel Design process of Lamb & Kallal, 1992)	Universal Design process of Aspelund (2010)
	Evaluation	7 Communication of solution (a) Verbal (b) Visual (c) Approval	5 Evaluation (functional, expressive and aesthetic needs of apparel play a role	6 Communication
Production	Implementation		6 Implementation	

Table 1: A comparison between creative processes applicable to apparel design

The existing apparel design models illustrated in the above table fall short in illustrating how the designer's role as a business owner is incorporated in to the design actions. Furthermore, application of design skills, interwoven with the business processes that support optimization of design outputs, are unclear from the literature. Since design thinking is becoming a popular methodology with regard to innovation (application of creativity) in the businesses environment (Brown 2008), the creativity relating to design might also be applied in a business context. The application of creativity to a business environment could potentially yield entrepreneurial behavior. The manifestation of this behavior in the specific context of this study is however, unclear.

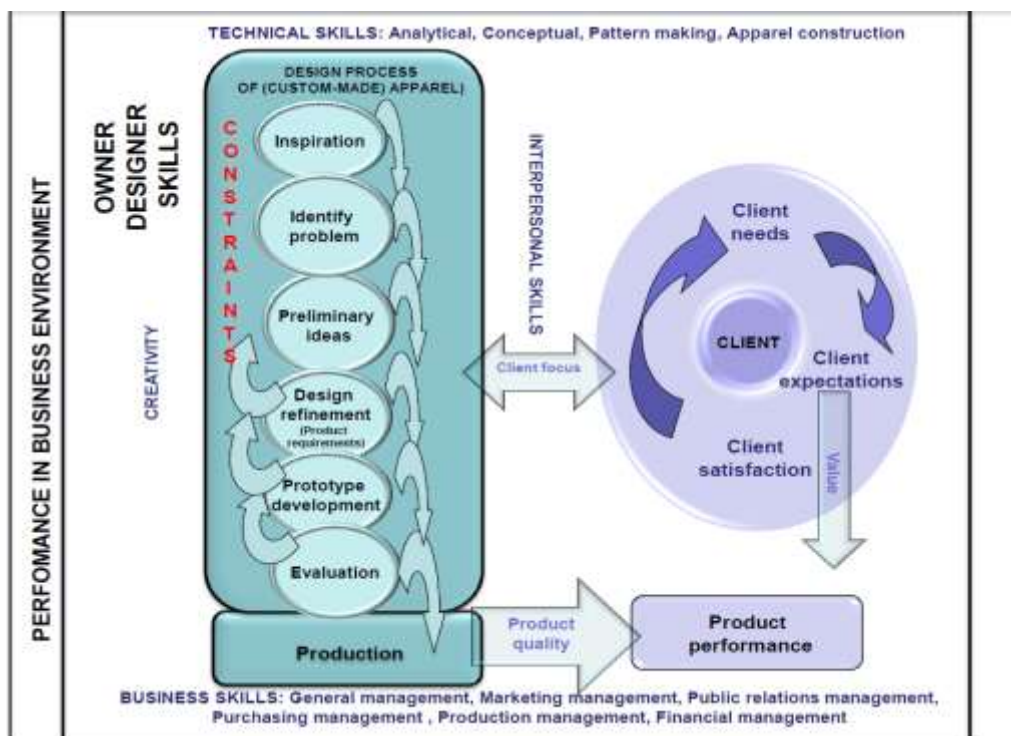


Figure 1: Conceptual framework

Only a section of the first phase of a larger study is addressed in this paper. The role of creativity and interpersonal skills in the design process, but also with regard to the business environment is illustrated as skills that enable value creation for clients of custom-made apparel. With the background and theory in mind,

the aim of a larger multi-phased study was to develop an entrepreneurially orientated design model for the South African SMME that provides custom-made apparel. The aim of this paper is to report an entrepreneurially orientated design process applicable to custom-made apparel.

The objectives covered in this paper are:

Objective 1: To explore and describe design processes implemented by owner-designers of selected SMMEs in Pretoria (Gauteng Province).

Objective 2: To explore and describe possible entrepreneurially orientated behaviour (including application of skills) applied to the design process in selected SMMEs.

Methodology

Research design

The research design appropriate for this study was a case study research design. The researcher was interested in understanding events, actions and processes in their context which is referred to as contextual interest (Denscombe 2007, p. 35; Babbie & Mouton 2001, p. 272). In this regard a case study is an empirical enquiry that can be implemented to investigate a contemporary phenomenon in great detail within a real-life context (Yin 2008, p. 18). The actions (events) and processes in three cases were described and appreciated in the natural context that they occurred. More specifically small businesses that provide custom-made apparel were explored in Pretoria (Gauteng Province).

The cases in this study were selected according to the classification provided by Denscombe (2008, p. 40). According to this classification an extreme instance, typical instance and most unlikely case can be selected especially for theory building purposes. In order to select what a typical case, extreme case and least likely (marginal case) entailed, the researcher first compiled a comprehensive list containing information and names of 129 active small businesses that provide custom-made apparel in Pretoria. Specific criteria were determined for each category (typical, extreme and least likely cases). The criteria for the cases are provided in table 2:

CASE TYPE	CODE NAME	CRITERIA FOR THE CASE
Typical	Case A	1) Full time business 2) Provides custom-made apparel (all types of apparel including every-day wear as well as special occasion wear) 3) Drafts all patterns 4) Owner is the designer. 5) Employs at least one other person (seamstresses) and/or contractors
Extreme	Case B	1) Full time business 2) Provides only exclusive occasion wear 3) Drafts all patterns 4) Owner is the designer 5) Employs at least three people 6) Have been operating for at least four years 7) Prominent in the media 8) More than one branch
Marginal	Case C	1) Part-time business 2) Owner is the designer 3) Drafts patterns but also alters commercial patterns 4) Have been operating for at least four years 5) Employs no people, no sub-contracting

Table 2: Criteria for the selected cases

An additional criterion for the selected cases was that the business had to operate for at least five years, since the larger study also addressed the sustainability of the cases.

Research methods

Multiple research methods were implemented in this study: semi-structured interviews with owner-designers of the selected cases, participant observation and visual analysis of custom-made apparel designed and produced by the selected small businesses. Data was documented and a preliminary analysis was done after each data gathering session. Data analysis was done mainly following guidelines provided by Leedy and Omrod (2005, p. 136). The data analysis involved: 1) the processing of contextual information on every case, 2) creation of initial categories in tables according to the conceptual framework and interview schedule 3) reading data sources repeatedly in order to make sense of the patterns and themes/categories that emerged for each case, 4) coordination of the categories and sub-categories in the different cases 5) recording and translation of findings into a revised conceptual framework which was verified by theory.

Findings

Findings on the design process applied in the selected cases

The findings regarding the categories applicable to design processes of the selected cases are presented in Table 3.

Case A (Typical case)		Case B (Extreme case)		Case C (Marginal case)	
Category	Sub-Category	Category	Sub-category	Category	Sub-category
		Analysis of fashion trends and mentors	Inspiration		
Analysis of client	Consultation (Client needs: occasion and figure type)	Analysis of client	Consultation (Client needs: figure type and clothing personality)	Analysis of client	Consultation (Client needs: preferences and figure type)
Synthesis	Client ideas, (sketch), measurements, product costs labour and client budget	Synthesis and evaluation	Preliminary sketching (initial idea of client)	Synthesis	Client ideas (Sketches) and technical aspects
	Fabric selection to suit garment concept	Refining garment concept	Fabric selection and refining sketch		Fabric selection to suit design concept
First Implementation	Prototype evaluation	First Implementation	Prototype evaluation	First Implementation	Prototype evaluation
Implementation	Cut and sew (designer &	Implementation	Cut and sew basic garment	Implementation	Cut and sew (designer)

	seamstress)		(production team)		
Evaluation	Other fittings	Evaluation	Other fittings	Evaluation	Other fittings
Implementation	Finishing: Detail surface work	Implementation and evaluation	Detail work and top layers added. Starts on basic garment (canvas stage)(designer team collaborates) Final sketch is made as gift to client	Implementation	Finishing: Detail surface work

Table 3: Categories emerging from the various design processes of selected cases

The phases of theoretical design models and the marginal as well as typical case correspond. However, the extreme case uses a different analysis technique where the inspiration for the custom-made garment is drawn not only from client needs, but also from the client's clothing personality. The conclusion drawn is that skills to classify clients can be an additional technical skill applicable to the design process.

Findings also suggest that the synthesis of ideas and materials are only used as a starting point and the sketch is not finalised until the actual garment is complete. The product specifications are not finalised during the pre-production phase as other cases do. This challenges the theory that stipulates that progression should be made during a design process towards the product-concept which is the final stage before implementation/production (Mitchka et al. 2009). The garment concept is therefore flexible and subjected to some changes later in the design process. A more flexible thinking style has been associated with application of creative skills in design (Meneely & Portillo 2005). The conclusion is drawn that there is evidence of flexible thinking in the application of the extreme case's design process as opposed to thinking styles that are more entrenched in the other cases. Moreover, flexibility or ability to apply flexible thinking has been linked to competitive business advantage (Wei et al. 2010).

A collaborative design process was the other difference between the extreme case and the other cases. The main evidence of the collaborative design model is provided in Table 4:

Verbatim	<p>P3 "Do you know, I think we have accomplished what we have because we are a team. Because the entire time we have a dress on a doll we walk past and this one will comment. I feel comfortable to ask Designer 3 and Designer 1 what they think of this. Then they will say ja, ok..."</p> <p>P1 "...that is why I don't understand how designers can work on their own. It is really important that they (pointing to other designers) also see."</p> <p>P1 "... the designs evolve as we go on. You'll have the fabric and then add something here and we add other stuff. It is done on the dress. It is different than what we started with, but it is always an improvement."</p>
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Participant observation	<p>Observation: The basic garments (referred to as “canvasses”) are displayed on fit mannequins and all the designers comment on what the dress “needs” or what is working or what is not “working”. Music is playing in the large open design area where the clients also fit. All the designers work her simultaneously commenting on each other’s work. The clients that walk in also get to see the creative process in action. With the dress on a figure form, designer 2 starts to add draping and lace detail until the look he wants and the look the other two designers’ approve is obtained. He sews the added pieces by hand (with four threads) and often re-creates his initial idea. He is busy creating an evening dress and drapes fabric in an artistic manner over the dress. He frequently steps back to appraise the garment from a distance. Owner-designer 1 also steps back and comments on the length of the fabric that is different on the one side and Owner-designer 2 fixes this. He works with precision to please designer 1, but also talks about what the client would like with regard to her personality. She is apparently less dramatic and more romantic.</p> <p>Owner-designer 3 asks for owner-designer 2’s advice on a fascinator that she is creating. Owner-designer 3 also advises owner-designer 3 on how she can perhaps design the fascinator to be more commercial, so that a wider market will appreciate it. She is encouraged to do more items in that range.</p>
Visual analysis	<p>Visual analysis: Garments are innovative in the sense that lace is never used as it is. It is re-engineered. Furthermore the garments all challenge the boundaries with regard to what is traditionally acceptable. For example garments have frayed hems or instead of a rolled hem the garments are finished with a soldering iron or candle. Moreover new methods for fasteners are developed.</p>

Table 4: Evidence that illustrates the collaborative design process of the extreme case

It was apparent that in the collaborative apparel design process, there is one designer who is always encouraging and leading the design team (other two members). This “leader” is the designer with the most experience, but he never makes the final decision which implies that he only guides the process. Therefore it seems that this leader takes on a role as mentor. Nevertheless, the mentor can also guide the other designers with regard to business processes (for example marketing) that interlink with the design process. The phenomenon applicable to this situation seems to be collective creativity.

The theory of Hargadon and Bechky (2006) explains the phenomenon of collective creativity. The collaboration (between designers) enhances the chances for creativity through: 1) help seeking, 2) help giving, 3) reflective reframing and 4) reinforcing. According to these scholars, help seeking involves that an individual in a group seeks for help from the others, help giving entails that there is a willing devotion of time and attention to assist a group member, reflective reframing involves the mindful behaviour of all participants in a group interaction and finally reinforcing involves any interesting solutions that he group might have come up with. In view of these actions the interaction is all about pooling resources, ideas and people. This theory can also be applied to the business environment.

Findings on the categories indication application of creativity that enhance entrepreneurial orientation are presented in Table 5:

Case A (Typical case)		Case B (Extreme case)		Case C (Marginal case)	
Category	Sub-Category	Category	Sub-Category	Category	Sub-Category
Business opportunities identified	Expansion of target market	Business opportunities identified	Expansion of target market Expansion of product and		

			service offerings		
		Overcoming marketing constraints	Applying social media and public relations to create a brand image		
Overcoming time constraints	Applying	Overcoming time constraints	Planning of new ranges in a designer group	Overcoming time constraints	Using photos of products in the making to get client approval on detail
		Overcoming Seasonality	Launching ready to wear range that can be customised		
Competing with Imports	Quality craftsmanship Providing value for money Exclusivity (unique products)	Competing with Imports	Quality craftsmanship Providing value for money Exclusivity (hand crafted and tailored fit) Fashion leadership through innovative apparel	Competing with Imports	Providing value for money Exclusivity (tailored fit)

Table 5: The application of creativity in the cases

From Table 5 it is apparent that creativity is applied to identify opportunities to grow the business. Creativity is also applied to overcome business constraints. It is however apparent that in the extreme case, innovative apparel and fashion leadership emerges through the application of creativity. In this regard, there was also evidence of risk taking in two cases.

The following table displays some evidence that supports the propensity to take risks in the extreme case that was more entrepreneurial than the other two cases:

Verbatim	P3 "It [doing things they are not familiar with] is a learning curve all the way."
Participant observation	Designer 2 and Designer 1 do not finalize the sketch of the garment until the garment is complete. They cut very expensive fabric without knowing exactly where or how they will apply it to the "canvas" (basic constructed garment). They do the same with lace that is costly and where they cannot afford to lose the lace to mistakes.
Field note	The extreme case has a ready-to wear range that is customized on the request of a potential client. This range incorporates the latest fashion trends and requires capital. There is however no guarantee that the range will sell out which makes it more risky to produce than custom-made apparel (produced on order only).

Table 6: Evidence of risk-taking in the extreme case

From Table 6 it is apparent that risks can be taken during the design process but also with regard to the business opportunities.

Conclusion

The first objective of this paper was to explore and describe design processes implemented by selected owner-designers of SMMEs in Pretoria (Gauteng Province). In this regard, the design process applied by all the cases had analysis, synthesis and evaluation phases before owner-designer teams applied their skills to implementation (actual construction). Nevertheless, the extreme case implemented a finishing phase (part of the implementation) which was open to re-interpretation of initial ideas. The practical implications were that designers often changed initial design concepts and used the basic garment (constructed garment of the basic silhouette) as a canvas. This artistic inclination in the design process is facilitated by the collaboration between designers. Flexibility was identified in two cases as a factor that contributes to creative ideas.

The second objective was to explore and describe possible entrepreneurially orientated behaviour applied to the design process in selected SMMEs.

The collaboration seems to be the key feature for innovative garments as opposed to re-creating or re-finishing the client design-concept. Since innovation is crucial to entrepreneurial behavior it is concluded that the case that implements the collaborative design process is more entrepreneurially orientated than the other two cases. Additional evidence supports the manifestation of risk taking and fashion leadership in the design process (especially in the extreme case) to an extent that it puts the business in a more competitive position.

The implications of the findings is that the same creative thinking skills can be applied to the broader context of the designer's world (business) so that the designer can become more entrepreneurially orientated and grow the business. Entrepreneurial orientation in the context of this study includes: risk taking, innovation and fashion leadership.

Entrepreneurial orientation involves skills that might be developed best in a collaborative apparel design environment. Marginal and typical cases that do not have more than one owner-designer might consider a collaborative design process with other SMME's.

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