Towards Idea Generation for Fashion Product Design and Development in Bangladeshi Industry

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Abstract
New Product Development (NPD) has always been one of the most significant components for the fashion industry. Research has shown that investments in design can lead to the development of completely new trends or can transform an existing trend in such a way that can offer newer aspects in the industry in general. However, there is insufficient evidence on the most appropriate or effective role that design could play in the real-life scenario. Previous case-based research has identified alternative roles for designers in NPD, but there is only tentative evidence over such roles’ contribution to NPD outcomes. By using data on a large sample (c. 1300) of Irish manufacturing plants Bangladesh is now able to examine the effectiveness of three different levels of involvement of designers in NPD and their impact on NPD novelty and success. This analysis suggests that design is closely associated with enhanced performance regardless of the type of role it plays. However, from a practical point of view, the potential effects of involving design throughout the process appear to be much greater. It is important to note here that the relationship between design and NPD outcomes is also strongly moderated by contextual factors; for example, its significance is only evident for organizations which also engage in in-house R&D. Also, while both small and larger plants do gain from using design as functional specialism and in some stages of the NPD process, the additional benefits of a continuous involvement of design throughout the process are only evident in larger plants. Finally, while discourse and perceptions over design's role in NPD has certainly changed over time, suggesting a much more widespread and strategic use of design, providing a more static picture, showing that design engagement with the NPD process has not changed significantly over the last two decades.

Keywords: New Product Development (NPD), Fashion Idea Generation, Fashion Industry.
1. Introduction:

Idea generation plays a vital role for designing and developing any new product across the industry catering various market segments. This phase of the development process is vital because it creates the basis for a designer or an engineer to develop suitable options and finally to implement the most appropriate set of options towards delivering the actual products.

Design idea can be generated from various sources including the nature, flower, fish, fruit, and food and so on. It is possible to collect products’ colour, shape, texture and all other relevant things from these. In addition, idea can be collected from history as well. Various times designers took their design idea and motif from different nation’s historical cultures like Greek, Roman, Egyptian, Turkish, Moorish, Indian, Arabian etc. After getting the basic idea, new product design and development process begins (Johnson 2002).

Now-a-days ideas are not only generated from nature, flower, fish, fruit and historical places. Designers today tend to pick inspiration more from practical life and various realistic events like national or international trade fairs, shopping malls, street markets etc. For example, Bonnie Young, director of global sourcing, DONNA KARAN travels the world looking for shape, colors and detail. She uses still and video camera to capture the samples and carries on budgeting to buy what she sees and feels like progressing towards final orders. Then after returning she produces a movie using the visuals and stocks in the office to make it a design resource centre for the company. Again Toni Strutz, design and product development of LEE JEANS tracks lifestyle trends like adventure travel, mountain biking, rock combing, camping etc. and interprets those into jeans-wear for each season by expressing nostalgia through natural colors, washed twills, functional details and also with rugged fabrics. (Brannon E.L.)

Before designing & developing any product, the culture, norm, tradition, religion & region of any country must be considered. The textile product that will be designed & developed for such people whose lifestyle, educational background, economical condition, age & religion are vital issue Brannon E.L.).

As it can be seen, in this process before developing the product, material selection is also very important. Parallel to designing the products, the various aspects of fibre are also explored including absorbing ability, soil release ability, shiny effects and hygiene of the fibre (Brannon E.L.).

To summarise these aspects, it is obvious to denote that successful new product introduction helps the companies financially ensuring growth and profitability of the company. A 1990 study sponsored by the Marketing Science Institute found that 25% of successful firms’ current sales were derived, on average, from new products that were introduced in the last three
years. New product development can also be a potential source of significant economies of scale for the firm.

Successful new products also contribute to utilise firm’s raw material and distribution channel usage where it is possible to have lower unit costs and higher margins. Also, firms that have multiple successful products in their portfolios can command greater attention and priority treatment, such as preferred shelf space and payment terms, from wholesalers and retailers. This is a particularly important consideration given the fact that large retailers, such as Wal-Mart and Target, have evolved into positions of significant channel power and influence (Hines, Cheng & Grime 2007).

Furthermore, the image and reputation of the firm and its brands are heavily influenced by the number and calibre of successful products in its portfolio. Example of Nike can be cited here as an example that has enhanced its overall brand reputation, well beyond the realm of athletic footwear, as a result of its successful introduction of golf equipment and supplies, swimwear, soccer equipment and apparel, as well as numerous successful products that appeal to tennis, basketball, and baseball enthusiasts (Ha, Kwon & Lennon 2007).

From a broader marketing perspective, it can be summarised that firms that develop the necessary organizational structures and processes to continuously and efficiently generate new products are more likely to be in tune with their customers’ needs and wants (Kim & Ko 2012). Direct marketing and communication efforts with customers, an essential foundation of new product development, allows firms to learn their needs and tailor products and services to their unique requirements in various segments of the market in the industry. Such direct communication efforts, with the right blend of functional and emotional appeal with the required creativity enable firms to gain a wealth of useful customer insights and to develop the needed communication campaigns that influence every area of the 5Ps of marketing mix as – product, price, place, promotion and people orientation (Tarek 2015).

Unfortunately, new product development is an extremely challenging and complex process. Innovation is inherently risky, and firms may invest considerable time and money in new product ideas with no guarantee that they will ever become commercially viable.

Many new products fail, and the new product development landscape is littered with expensive examples. For example, although Henry Ford led the way in developing the automobile market, the Ford Motor Company in the 1950s introduced the Edsel and lost more than $100 million. Other examples include DuPont’s Corfam substitute for leather that resulted in hundreds of millions of dollars in losses. General Mills lost millions of dollars on the introduction of a line of snacks called Bugles, Daisies, and Butterflies. Gillette also lost millions on a facial cleansing cream called Happy Face. Xerox
invented the personal computer in 1973 (three years before Jobs and Wozniak got started), but failed to commercialize the “Alto” in spite of it being a brilliant technical success. Exxon lost hundreds of millions on its doomed forays into office information systems and high-tech electric motors while initiating to develop new products for the market. From a more precise point of view, as research has shown, almost 30-35% new products in the market failed in the history of modern marketing practices, which can be simply a line extension of an existing brand or a totally new brand that was introduced in the market.

I. Literature Review:

Secondary source of knowledge has been used to carry on the exploration and it has been revealed that product development is the creation of products with new or different characteristics that offer new or additional benefits to the customers. Matching the broad definition to the business and engineering scenario, new product development (NPD) is the complete process of bringing a new product to the market. In relevant literature, new product development is described as the transformation of a market opportunity (in terms of need, demand and want) into a product available for sale [1]. It is important to note that it can be tangible (i.e. something physical that can be touched) or intangible (i.e. a service, experience, or belief). A good understanding of customer needs and wants, the competitive environment and the nature of the market represent the top required factors for the success of a new product [2]. Marketing experience reveals that cost, time and quality are the main variables that drive the customer needs. By aiming at these three variables, companies develop continuous practices and strategies to better satisfy the customer requirements and increase their market share by a regular development of new products (Kim & Ko 2012). In this process, there are many uncertainties and challenges which companies must face. In that regard, the use of best practices and the elimination of barriers to communication are the main concerns for the management of NPD process as was revealed in several relevant publications (Kaplan&Haenlein 2010).

The series of steps involved in Product Development, also called new product management, include the conceptualization, design, development and marketing of newly created or newly rebranded goods or services. The main objectives of product development are to cultivate, maintain and increase a company's market share by satisfying a series of consumer demands (Polese&Blaszczyk2012). It is important to note here that not every product will appeal to every customer. In that line defining the target market product is a critical component that must take place early in the product development process. It is recommended that quantitative market research should be
conducted at all phases of the design process, including before the product or service is conceived, while the product is being designed and after the product has been launched (Kotler & Keller 2011).

The concept of Product Development Framework is very important and relevant in this regard that most of the literature mentioned about. Considering the holistic scenario, it can be evaluated here that although product development is creative, the discipline requires a systematic approach to guide the processes in order to get a new product to market to meet specific needs. In this regard, organizations such as the Product Development and Management Association (PDMA) and the Product Development Institute (PDI) provide guidance about selecting the best development framework for a new product or service in the market. In the practical scenario, a framework helps structure the actual product development in the market.

Examples of some frameworks, like the Fuzzy Front End (FFE) approach, define what steps should be followed, but leave it up to the team to decide which order makes most sense for the specific product that is being developed. FFE product development has five elements:

Identification of Design Criteria in this regard involves brainstorming to derive possible new products. Once an idea has been identified as a prospective product, a more formal product development strategy can be applied here to implement the core idea (Lipovetsky 2007).

Idea analysis involves a closer evaluation of the product concept to inspect the elements further. In this regard, market research and concept studies are undertaken to determine if the idea is feasible or within a relevant business context to the company or to the consumer in general.

Concept genesis here involves turning an identified product opportunity into a tangible concept that can be used as a basis for further development.

Prototyping involves creating a rapid prototype for a product concept that has been determined to have business relevance and value in the industry. Prototyping in this front-end context means a "quick-and-dirty" model is created, rather than the refined product model that will be tested and marketed later on in the process.

Product development in the process involves ensuring the concept has passed muster and has been determined to make business sense and have business value from an integrated marketing point of view.

For a more elaborated view, other frameworks, like Design Thinking, can also be explored here that have iterative steps that are designed to be followed in a particular order to promote creativity and collaboration. The five components of design thinking include:

Empathize –To learn more about the problem from multiple perspectives.
Define –To identify the scope and true nature of the problem.
Ideate –To brainstorm solutions to the problem.
Prototype –To weed out unworkable or impractical solutions.
Test –To solicit feedback.

The concept of the New Product Development Funnel is also relevant here. Most marketers now view new product development as an integrated, end-to-end process that involves multiple (iterative) stages. The details of the process are represented by a funnel to resemble the notion that many different ideas are winnowed and developed into a few high-potential products that are ultimately launched in the market.

The process of this funnel includes Opportunity Identification & Idea Generation, Product Concept Development, and Concept Testing, Designing & Engineering and prototype development and testing.

Further literature reviews and field level insight explorations were conducted towards this end to add theoretical value to the project to fulfil its aims and objectives.

Objectives and Aims of the Project:
For this exploratory study the specific set of projects include:
1. To increase the value of garment both by appearance and price.
2. To attract the customers to buy a particular garment or textile product.
3. To create new fashionable look through product development.
4. To investigate and analysis the effect of developing product on garments.
5. To identify different cultural identical techniques.

The specific sets of aims of the Project include:
1. To know the traditional development of product in Bangladesh & also in Indian sub-continent.
2. To know the rare techniques of developing product.
3. To know the development techniques of product in modern fashion trends.
4. To introduce those modern techniques in recent fashion trend.

3.0 Methods and Materials:
The method and material aspects for the study focus on the basics of integrating perspectives from the end-consumers and the producers (manufacturers and designers). The theoretical and industry specific perspectives and analysed so that a complete scenario can be drawn in this regard.

In that line, it has been revealed that from a customer’s point-of-view that a product generally consists of a bundle of features and benefits resulting from its use that can be tracked and evaluated. On the other hand, from the
firm’s perspective, the product consists of a bundle of parts and the processes that result in its manufacture leading to the delivery of a final output.

In this broad scenario, when making cost and feasibility trade-offs it is important for the design team to integrate both customer and firm perspectives in the manufacturing and designing process. In the industry specific terms, this is known as value engineering where it relates to the importance that customers place on each function performed by a product to the cost of the parts contributing to that function in the manufacturing process.

From the business profitability point of view, a key principle underlying value engineering is that the marginal cost of each part of a product should be less than its marginal contribution to customer value. In that regard, to implement value engineering the team must know - (1) the value placed by customers on each function and (2) the cost of the parts and manufacturing to provide that function.

Industry specific analysis has revealed that value engineering requires that we link customer needs to product solutions so that the NPD team can make intelligent trade-offs and, perhaps, find creative solutions that do not require trade-offs at all. Quality Function Deployment (QFD) provides one method to make this linkage in this regard that is in practice in many relevant situations.

In regard to QFD, in reality –it itself is a set of processes that link customer needs all the way through to production requirements in the manufacturing/designing arena. Although the full QFD process is sometimes used, it is the first matrix of QFD, called the House of Quality (HOQ), which is used most often in the regular practices across the industry.

In the work process, the HOQ provides and organizes the information that the NPD team needs to refine each concept to meet the specific requirements. Such an approach has proven to an effective measure in a variety of applications including frequently purchased consumer goods, consumer durables, consumer services, business-to-business products and services across various industries. HOQ and related techniques are also known to enhance communication among NPD team members to contribute effectively in the process (Hansen & Andersen 2013).

Towards a more elaborated analysis it was revealed that the driving forces behind the HOQ consist of the short, accurate, relevant list of key customer needs identified and structured into strategic, tactical, and detailed work process in a systematic way. In that line, in the HOQ these needs are found to be related to product features, which are then evaluated as to how well they meet customer needs and demands in terms of the overall offerings of the products. In the competitive market scenario, product features are “benchmarked” against competitors’ features in their ability to meet customer needs, which is a standard practice across all the industries globally although
the exact nature and protocol of it vary from industry and market culture to culture in various parts of the world (Jenkins 2008). One of the common objectives for most firms for such efforts always remain to evaluate the total product by the ability of its features to meet customer needs more effectively and at lower costs than competitive products in the market. However, there are other marketing efforts where prestigious brands are nurtured to focus more on posh product offerings with high image and thus, pricing/costing plays less important role in the holistic process.

The methods and materials components as discussed in this section is a broad outline and these can be followed to develop platform for further analysis. This study aims to carry on the research towards a more elaborated level gradually to explore the aspects in further details.

4.0 Experimental Works:

For this study, a great deal of importance was given to explore now the theoretical components can be used as sources of inspirations and, at the same time, as a guideline for technical details leading to implement ideas into real life work. Creative image references, concept boards, mood-boards and technical specification sheets were explored and new ideas were tossed to formulate a set of right working materials and relevant creative inspiration. When it comes to the shape, color, structure, texture and other relevant aspects to explore, attention is given to the original creative reference in focus and the possible modification and transformation as need to generate the idea for the actual products. For color, texture and style reference, the study looked at various creative sources such as flowers, seasons, fruits, vegetables, landscapes, birds and as such.

While referring to the work process of deriving ideas and concepts for fashion styles, the study was inspired to set a new term for the creative sources as the ‘Naturally Creative, Naturally Clothing’ (N2C2!). The study puts ample emphasis to carry this process further to define the terms in more structured ways and to formulate a systematic approach where students and professionals will be motivated to transform more elements from the Mother Nature into fashion elements. The study aims to carry such pioneering effort not only for the Bangladesh industry, but also to extend the core ideas and systematic approaches beyond the geographical boundaries and to unite with the global fashion scenario by adding unique creative values. In that regard, researchers and creative professionals from overseas countries such as the United Kingdom, Australia, Canada) are also involved in the project.

Conclusion:

As this study has revealed both from theoretical and practical point of view, the business environment and customers' needs are constantly changing
in today’s dynamic business environment. Industry oriented research has indicated in this regard that science-based organizations in particular should invest in more elaborated research and development activities to help them respond to these changes in the industry (Kozlowski, Bardecki & Searcy 2012). Needless to say that, this is a costly and time-consuming process – yet R&D can result in the development of innovative new products and services in the industry leading to greater profit and overall prosperity for the companies in focus.

From marketing perspective, given this competitive market scenario, businesses must constantly adapt its product development, pricing, and distribution and promotion strategies to stay ahead of their competitors. In this regard, one of the most vital aspects is to design and develop products that meet customer needs precisely and creatively (Gupta & Hodges 2012).

As per the analysis of the study, if the current scenario of garments industries of Bangladesh is considered, it will found that most of the industries make the garment products according to the tech packs or designs sent by the buyer either from with-in the country or from overseas. In reality, there are very few industries like Esquire Knit Composite Ltd. and Viyellatex who offer the buyers their own designs or creations to boost their holistic creative drives. The industry practice also reveals that sometimes the buyers send them the trend book in which the motif, color-board, silhouette style and all other details are given and then the designers design the garment keeping the buyer’s choice in mind as direction. Towards the true advancement of the industry, Bangladesh needs more industries who can offer the buyers their own creations by presenting their own original works on design and overall creativity. Towards this end, Bangladesh needs to produce more creative and talented designers of it’s own to make the garment industries more successful as well as to make our country earn more currencies from the RMG sector from all over the world. It is expected that the relevant organisations and companies in this regard will take initiatives so that the true flair of creativity of Bangladesh can reach the whole world through the fashion and RMG sector.

References:


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