

# A Research on QFD-“House of Brand” in Fashion Industry

Evrin Kabukcu

Celal Bayar University, Manisa, Turkey

Fashion continues to be an area that reflects the increasing popularity of different theoretical and practical approaches of researchers from different disciplines. Due to the rapid cycles of fashion, sustainable products and processes in terms of technical creativity and innovative approach are needed. In this context, fashion marketing emerges as an integrative marketing application with its both technical and social aspects by taking potential customers center that symbolize rapid change and creativity of fashion products. In this study, QFD-House of Brand was designed with Quality Function Deployment (QFD) approach. In this context, the experts (focus group) in Fashion Industry evaluated the selected fashion brand and its selected products by prioritizing the criteria. These evaluations were used in QFD-House of Brand. Thus, technical and social aspects of fashion industry were analysed together. By this technique, QFD-House of Brand established in relation to products and brand was interpreted and optimization suggestions were presented in accordance with the findings of the research. In addition, suggestions on sustainability and optimization of brand equity in fashion industry were provided.

*Keywords:* brand equity, fashion industry, product, quality function deployment, sustainability

## Introduction

In the fashion industry, a designer or a company spends large amounts of money, time, and expertise to develop innovations in fashion or apparel renewed every season. After the products' technical qualities are designed and manufactured, the products are transmitted to the target market. In this process, companies or designers try to ensure to differentiate the specific nature of the products by consumers. In this way, they struggle for protecting, improving, and more importantly sustaining their position in the market. In this context, within the framework of QFD, this study associates a brand which has manufacturing operations in Turkey and its selected products' technical specifications with the reviews of experts (focus group) from the fashion industry (focus group) and then develops a proposal for the improvement and sustainability of the brand in certain selected products.

## Configuring Focus Group

Focus groups involve blending techniques from group process theory and qualitative research (Dilorio, Hockenberry-Eaton, Maibach, & Rivero, 1994; Morgan & Krueger, 1993; Then, 2000; Then, Rankin, & Ali, 2014). Focus groups are considered to be a qualitative research method (Then, 1996; Kress & Shoffner, 2007; Then et al., 2014). Focus groups are generally used to gather in-depth knowledge about attitudes, perceptions,

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Evrin Kabukcu, Dr., Department of Design, Celal Bayar University, Manisa, Turkey.

Correspondence concerning this article should be addressed to Evrin Kabukcu, Manisa Celal Bayar University, Manisa 45300, Turkey.

beliefs, and opinions of individuals regarding a specific topic (Dilorio et al., 1994; Then, 2000; Then et al., 2014; Kingry, Tiedje, & Friedman, 1990). In a word, about what people think, how they think, and why they think the way they do about certain issues (Samfira & Rață, 2015). Currently, focus groups continue to be used by companies to gather consumer's opinions regarding products and to understand consumer's buying habits, attitudes, and perceptions (Dilorio et al., 1994; Then et al., 2014; Greenbaum, 1988). A focus group as Liamputtong (2011) sustained enables in-depth discussions, involves a relatively small number of people, and focuses on a specific area of interest that allows participants to discuss the topic in greater detail, which is interactive: group processes assist people to explore and clarify their points of view; and provide good and accurate information (Samfira & Rață, 2015). Focus groups can also be used to generate constructs and hypotheses in-depth understanding of phenomena of interest and clarifying the meaning of certain behaviours. In addition, the focus group researcher can obtain data that can be used in quantitative research such as questionnaire development (Dilorio et al., 1994; Then et al., 2014; Kingry et al., 1990). Conversely, it can also be used to gather additional information as an adjunct to quantitative data collection methods (it provides interpretations of numeric and measurable data collected through quantitative methods) (Samfira & Rață, 2015). And also, it can be used as “part of a mixed method evaluation approach to increase the validity of evaluation findings” (Samfira & Rață, 2015). Focus groups are socially organised situations, where participants and moderators enter the setting under shared assumptions of performance (Brannen & Pattman, 2005; Chatrakul Na Ayudhya, Smithson, & Lewis, 2014). As such, accounts generated should be interpreted as constructed within this specific social situation and context. As with many other research methods, they are shaped by the interests of the researcher and the questions that are asked and by the participants' interpretations of the questions and their own interests (Chatrakul Na Ayudhya et al., 2014; Brannen, 2012). Focus groups, however, are not meant to be a forum for debate, therapy, or an opportunity for an educational session. The focus is on the individuals in the group, to see how they interact, to allow them to develop their own ideas and questions, and to do so using their own words (Then et al., 2014; Liamputtong, 2011). The information obtained in the focus group is not only concerned with the actual words that are said, but also the non-verbal communication as well. Discussion among the group members allows for observation about individual views, as the views relate to others in the group. It is important for the observer to note what changes occur as the group progresses and what remains the same. It is as important to note whether the opinions of some participants change the opinions of others, as it is to note the opinions of themselves (Then et al., 2014).

In this context, a group of 10 people that included experts from the fashion industry to make a qualitative focus group research were formed. The products selected as research subjects were examined and technical specifications of the products manufactured with the same material discussed by experts and finally nine of the technical qualifications of the products were selected and evaluated.

### **Evaluation of Technical and Brand Criteria**

Brand equity continues to be a popular research topic. Although alternative brand equity measures have been proposed, a systematic investigation of them is lacking (Keller & Lehmann, 2006). Although, several brand equity measures have been proposed in the literature, a comparative assessment of their characteristics and performances is lacking (Huang & Sarigollu, 2012). According to a view, brand equity is an “elephant”. The elephant metaphor works at various levels, but it can be started with size: “brand equity is such a big concept that people have difficulty in describing it” (Ambler, 2003).

The diversity of its characteristics guides sceptics to put forward that they are seeing different beasts. “In fact, customer’s equity and company’s reputation are largely different aspects of the same animal. Once, one has the whole, the pieces fall into place” (Ambler, 2003).

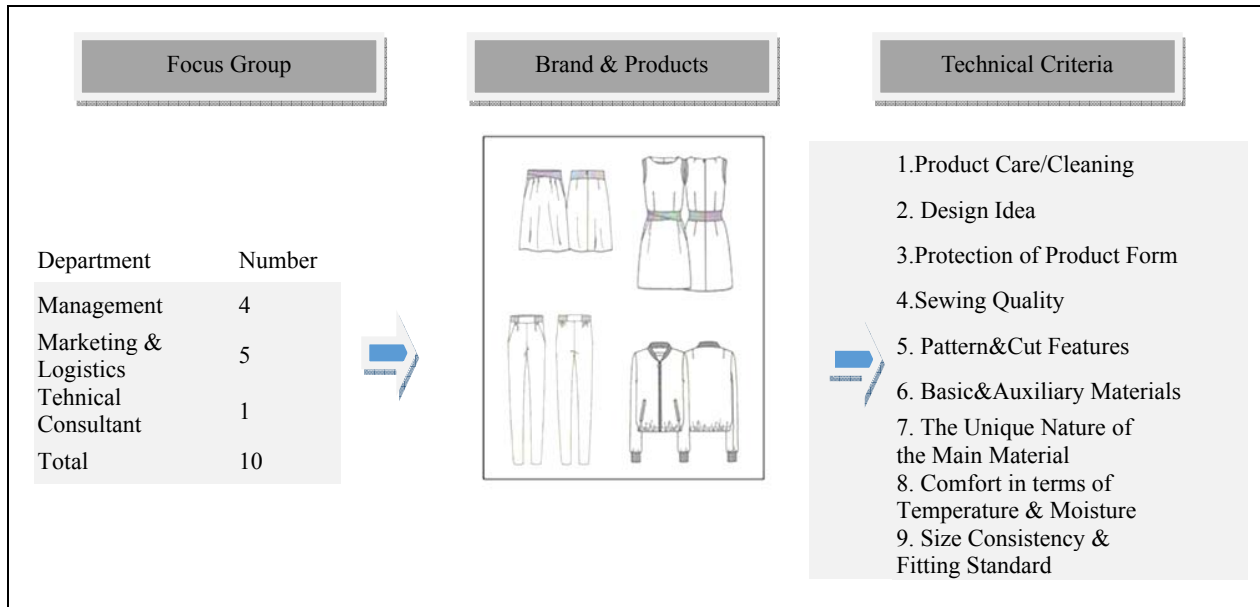


Figure 1. Process of determination & assessment of technical criteria by focus group.

Aaker (1996) is closer to the mark when he discussed “brand personality” and “brand-customer relationships” as essential elements in a “brand identity system”. Keller (1998) focused on “brand equity” and understated the role of a brand’s “personality” in building “brand loyalty”. Best (2013), from the University of Oregon, views brand equity as the analog to the owner’s equity in the balance sheet, except that brand equity is determined by subtracting brand liabilities from brand assets. He proposed two useful scorecards, one measures brand assets and the other measures brand liabilities (Davis, 2007).

In this research, primarily technical criteria were identified regarding the products with focus group work, and then the brand equity proposed by Best (2013) was associated with technical criteria, and finally, the corresponding values were placed in the relevant places in “House of Brand” restructured with QFD approach.

### Design of QFD-“House of Brand”

W. Edwards Deming is widely credited with planting the seeds of statistical process quality control in Japan. The Japanese, as willing learners, carried forward his use of data-driven management into broader company-wide applications (Akao & Mazur, 2003). One of these applications, QFD applies Deming’s quality principles to the field of new product development. The goal of QFD is to uncover positive quality that will excite the customer, and then to ensure the quality of all downstream activities in design, manufacturing, service, etc. (Mazur, 2015). QFD is a customer-driven product development technique that translates customer’s needs into design requirements (DRs). It ensures that the voice of customers is implemented into final products or services to increase customer’s satisfaction. Since being initiated in the early of 1970s, QFD has been widely studied and applied in various fields, such as product development/design, quality management/planning, decision-making, manufacturing, service, and education (L. Chen & C. Chen, 2014; Chan & Wu, 2002; Geum, Kwak, & Park, 2012; Jia & Bai, 2011). QFD is a comprehensive quality system aimed specifically at satisfying

the customer. It concentrates on maximizing customer's satisfaction (positive quality) by seeking out both spoken and unspoken needs, translating these into actions and designs, and communicating these throughout the organization. Further, QFD allows customers to prioritize their requirements and benchmark (Ching-Wen & Shih-Tao, 2011) against their competitors, and then leads them to optimize those aspects of their product, process, and organization that will bring the greatest competitive advantage.

The basic concept of QFD is to transform customer's voices into technical requirements to ensure customer's satisfaction. The QFD processes are performed by applying the design information embodied in the relation matrix, called the house of quality (HOQ). In practice, QFD transforms customer's needs into technical (or design/engineering) characteristics via the HOQ during the design or planning stage. The interior of the HOQ matches customer's requirements (CRs) with the corresponding design requirements (DRs), identifying the relational intensity between each pair of CRs and DRs to ensure quality performance that can satisfy the target customers. If necessary, the roof of the HOQ, represented as a correlation matrix, is constructed to indicate the technical correlations among DRs (Liang-Hsuan & Cheng-Nien, 2014). In this way, the design team strive for determining the priority of DRs to be able to achieve the goal with the maximum customer satisfaction. The active aggregation and use of the information in the HOQ are critical to implement the QFD technique successfully for product development.

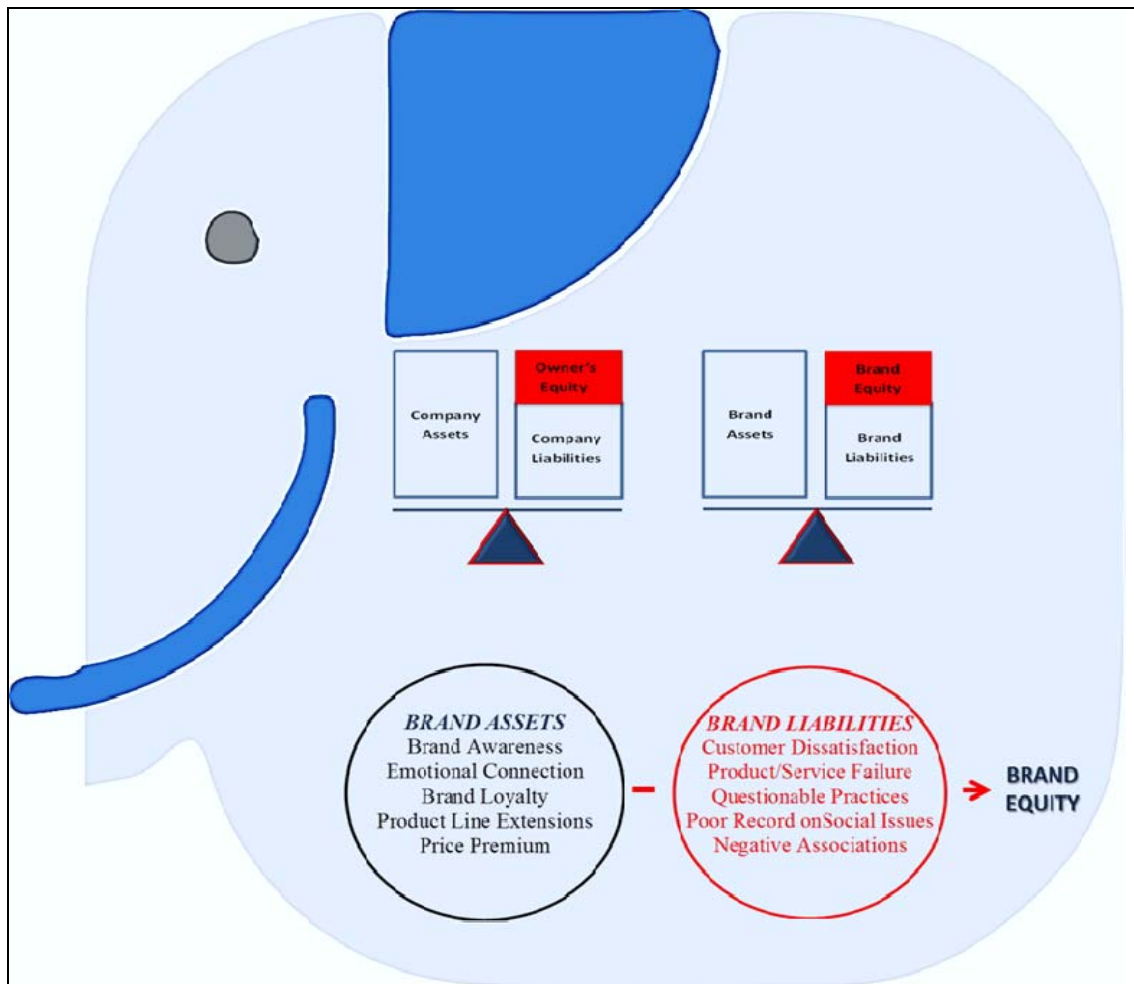


Figure 2. Measuring brand equity.

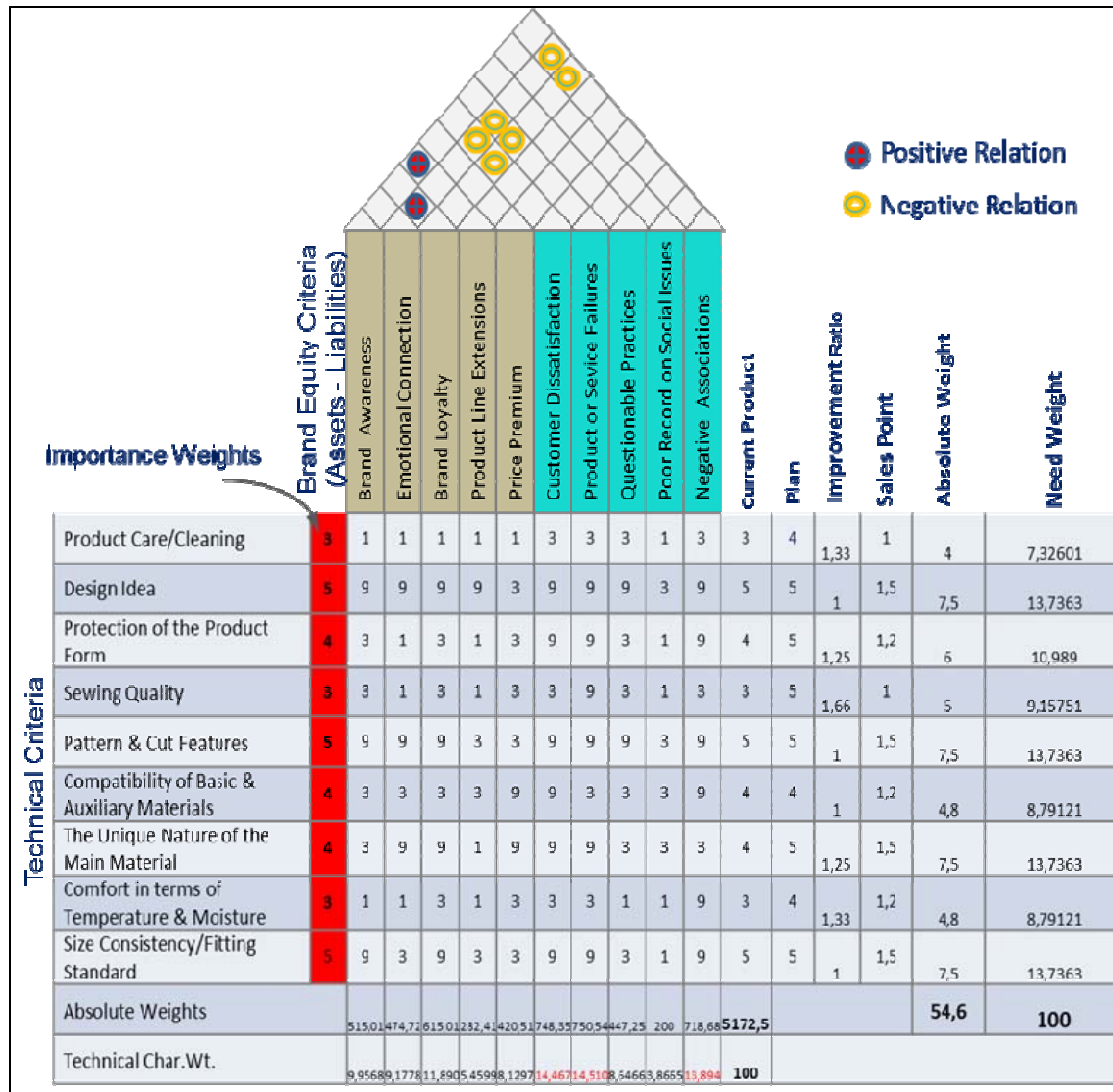


Figure 3. QFD-“House of Brand”.

In this study, technical criteria were associated with brand criteria in the matrix of QFD-“House of Brand”. With this vision, the degree of impact of technical criteria on brand criteria was tried to determine. Prioritization of the technical criteria and triangular relationship matrix located on the brand criteria that indicate positive/negative correlation between each two brand criteria, was carried out by experts. Need weights and absolute weights generated by expert assessments are shown in the QFD-“House of Brand” matrix above (Figure 3).

#### Interpretation of QFD-“House of Brand”

The process of QFD-“House of Brand” and restructured matrix led to the following findings:

QFD-“House of Brand” that has been created on the basis of concept of brand equity which was proposed by Best (2013), associates technical and brand criteria. In technical sense, the highest expectations of the brand from products are design idea, pattern & cut features, the unique nature of the main material (100% natural silk), and size consistency/fitting standard. This standard is possible with the selected design, material, and pattern

quality. In addition, the use of natural material is especially noteworthy. The highest values of absolute weights are product/service failures, customer's dissatisfaction, and negative associations. Fashion brand can be optimized ratio of 42.87% with improvements to be made to these criteria.

$$14.467\% + 14.510\% + 13.894\% = 42.871\%$$

- According to Best (2013), brand equity is provided by subtracting the liabilities of brand from brand assets. Therefore, improvements which will be held in liabilities (reduction) will contribute to the sustainability of the brand ensuring increased brand equity directly.
- The integration of the technical and social aspects is provided with association of products and brand in QFD-“House of Brand”.
- In this study, it tries to establish a sustainable unique holistic process by involving products, brand, and experts (focus group) to ensure a research on physical (products) and metaphysical (brand) elements together.
- In addition, the purpose of this research is to contribute to the sustainability of the fashion brands and their equity by implementing of QFD-“House of Brand” process in fashion industry in which creativity and innovation plays an important role.

## Conclusion

In this study, QFD-“House of Brand” was restructured with QFD approach. In this context, the experts (focus group) in fashion industry evaluated the fashion brand and its products by prioritizing the technical criteria. These evaluations were used in QFD-“House of Brand”. Thus, technical and social aspects of fashion industry were analysed together. By this technique, QFD-“House of Brand” was interpreted and optimization suggestions were presented in accordance with the findings of the research. Besides, proposals on sustainability and optimization of brand equity in fashion industry were provided.

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