

BUILDING BRANDS THROUGH DESIGN: A SYSTEMATIC BIBLIOGRAPHICAL REVIEW

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Abstract

There is a set of significant researches about branding and a consensus that design product is an important tool to create and maintain it. A set of authors demonstrated that functions and characteristics of products can influence during the branding process, but these practices were not collected or systematized. How does brands could be created through design? What are the most important decisions? Who are the actors on this process? The objective of this paper was to collect all practices cited on journals and summarized them inside a conceptual model to support designers into the comprehension of this topic and act during the design management. The paper concludes with a framework about “how designers can contribute to the brand creation” and offers some implications for design theory and directions for future research.

Keywords: Industrial design, Design management, Design process, Branding

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1 INTRODUCTION

The role of brands in the business world has changed during the human history. The brand concept originated from the idea of ownership, when early man stamped its animals as a mean of distinguishing them. Nowadays, the role of brand in society is more complex. In the end of 19th centuries, the trademarks, and the concern of differentiate the product through packaging, become an instrument to provide authenticity and reliability to the products. The industrial revolution, with its improvements in manufacturing and communications, opened up the Western world and allowed the mass-marketing of consumer products which requires a new and more globally level of competition and identity from brands (Blackett, 2004).

Currently, the brand has an expanded meaning. *“As competition creates infinite choices, companies look for ways to connect emotionally with customers, become irreplaceable, and create lifelong relationships. A strong brand stands out in a densely crowded marketplace. People fall in love with brands, trust them, and believe in their superiority. How a brand is perceived affect its success, regardless of whether it’s a startup, a non-profit, or a product”* (Wheeler, 2009). The loyalty become important to create a “brand religion” that enables to simplify the consumers “buy decision”. *“Brands thus reflect the complete experience that customers have with products. Brands also play an important role in determining the effectiveness of marketing. Finally, brands are an asset in the financial sense”* (Keller and Lehmann, 2006). Branded industrial products generate more confidence in the purchase decision, enhance the corporate reputation, offer more scope for competitive advantage, and can raise the barriers to competitive entry (Michell, King and Reast, 2001).

Branding is the set of activities performed by managers to lead with the company’s brands. It is responsible to provide actions capable to differentiate a product through better brand, which will influence the positioning and market response. One of the main asserted benefits of branding is its ability to build purchase confidence and improve customer loyalty (Aaker, 1991). Branding involves the process of endowing products and services with the advantages that accrue to building a strong brand (Keller, 2014).

There are several practices to build and to manage a brand. One of them is through the design process. According to core strategic marketing principles, product design is inherently a key tactical component of which a brand’s strategy is comprised (Townsend *et al.*, 2013). The translation of brand values into the design of a product requires an understanding of what designers in a team are doing when they express brand value through product design (Karjalainen and Snelders, 2010).

Many authors have treated this theme along years, but there is not a conceptual framework that can help designers, during the new product development, to enhance the creation of the brand. This paper contains a systematic bibliographic review (SBR) in order to answer some questions: How can the activities of the designers support the brand creation? What are the most important decisions? The objective of this paper is to summarize all the recommendations collected in journals, found in a systematic bibliographic review, and to present a conceptual framework to support designers leading with branding. This paper finishes with a framework about decisions, processes and roles to ensure that the product design will be coordinate with the brand positioning. This paper also offers some implications for design theory and directions for future research.

2 METHOD

A Systematic Bibliographic Review (SBR) is a special type of review, conducted in a rigorous and systematic way can contribute with a traceable base of knowledge, facilitating the theory development, especially in those fields with previous research effort. There are several SBR procedures and this paper followed Conforto, Amaral and Silva (2011). They summarized SBR recommendations from medicine and informatics authors in a procedure, and tested it in product development research. The procedure contains three stages inspired in previous papers and entitled: Entrance, Processing and Output.

2.1 Stage 1 - Entrance

The systematic bibliographic must be designed to answer a specific question (Conforto, Amaral and da Silva, 2011). In this paper the central problem is: “What are the decisions, processes and roles involving branding through the product design?”.

Conforto, Amaral and da Silva (2011) suggest to identify some primary bibliographical sources to plan the SBR. The primary sources are articles, journals and databases whose researchers are sure they contain relevant papers, preferential the most relevant or classic ones. This material is used then to define search strategies, keywords and the overall scope of the SBR. This “seeds” are important because will generate the strings that will be applied and will influence the advanced search (Conforto, Amaral and da Silva, 2011).

The authors Bloch, Townsend and Aaker, the journals Design Studies, IJPIM, Journal of Business Research and specifics searches, inside the Web of Science, were used as primary sources. To create the string was necessary to know the keywords that better recognize papers contributing for the SBR objectives (Conforto, Amaral and da Silva, 2011). In this case, we were looking for papers that explain, bring cases or identify design practices to support branding. We tested the words and found two distinct set as presented at Table 1: a set that allow to identify papers about branding and other set that identify papers about design or product development. Combining the two groups with the logical operator “AND”, we resulted at the string that brings better results during the tests: (*"brand strategy" OR "brand relationship" OR "brand - consumer relationship" OR "branding"*) AND (*"new product development" OR "product development" OR "design management"*).

Table 1. keywords

Objective	Keywords
Identify paper about “branding”	"brand strategy", "brand relationship", "brand - consumer relationship", "branding"
Identify paper about “product development and design”	"new product development", "product development", "design management"

A SBR planning contains a set of definitions, criterion, which are used to filter and to classify the search results (Conforto, Amaral and da Silva, 2011). The criterions used were: a) the papers must describe practices or cases; b) the study must provide unless one recommendation about design practices related with brand issues. These criterions were applied in an iterative way as recommended by Conforto, Amaral and da Silva (2011) using a set of filter steps. It was used three filters:

1. Readout the title, the summary and keywords.
2. Readout the introduction and conclusion
3. Complete reading

The set of these definitions results at the SBR protocol, which is the procedure to be followed during the processing stage. Some practical artefacts, as tables to register the search results and a bibliographical manager software (Mendeley), was developed too. At the end, the researchers were ready to start the next stage.

2.2 Stage 2 - Processing

The search effort identified 64 papers in the Web of Science database. From the 64 papers found through the string, 32 papers passed in the first filter, identification by title, summary and keyword. From this set, 13 papers passed in the second filter application and just 4 papers from the third filter. This occurred because just few of those papers deal with the interface between design and branding, that is, to paid attention to the question of how to build brands from the design management perspective.

These four paper were integrally read. The phrases contained in the articles (wrote by the authors or cited by them from others paper that are not in the list) were judge and classified by three different aspects: **recommendation** (when the phrase gives a sense of “what to do”), **facts** (phrases that is agreed by all researches and involved people) and **challenges** (passages that manager need to strategically choice one way).

Each paper was read and the phrases that were selected into one of this category were tagged using different colours to identify each one. At the end of this analysis, the researchers performed an analysis of the references of these four papers in order to get further knowledge about this theme. This constitute the cross-search. All the reference contained in the collected papers passed through the same criterions and filters used at the first search. Thus, were collected seven (7) additional papers. During the reading process the authors just identified two categories of papers, a group purely theoretical and

other composed by more analytical and applied studies (cases). The table 2 summarize the found result, including the number of recommendations, facts and challenges identified in each group.

Table 2. Identified papers by category and frequency of practices

Category by central objectives	Papers	Quantity of practices or recommendations	Quantity of facts	Quantity of challenges
Theoretical papers	Bloch (1995); Townsend <i>et al.</i> (2013); Beverland, Napoli and Farrelly (2010); Kumar, Townsend and Vorhies (2014); Michell, King and Reast (2001).	94	159	26
Analysis one or more cases	Karjalainen and Snelders (2010); Kristensen, Gabrielsen and Zaichkowsky (2012); Stompff (2003); Kreuzbauer and Malter (2005); Townsend, Cavusgil and Baba (2009); Aaker and Shansby (1982).	75	127	34

2.3 Stage 3 – Outputs

The recommendations were collected and translated into decisions that designers could perform to support the brand positioning, during the product design process. Some terms had highlight: *Brand Values, Innovation, Quality, Competitors, Consumers, Price, Competitive Advantage, Product Attributes, Brand recognition and Consistency*. These highlights are based on the importance given by the author and the constancy in each paper. All terms were analysed in order to generate a theory model to designers and brand managers when are dealing with branding during the design process.

3 BRANDING AS POSITIONING AND DESIGN

The findings' research are very explicit. When the subject is 'brands and products', there are two important aspects: positioning and design process. Brands are recognized as strategic assets within a firm. It is important to consider a brand's positioning and its associated meaning when developing new products (Beverland, Napoli and Farrelly, 2010).

The design process efforts need to be strategically aligned with brand positioning. The positioning decision is often the crucial strategic decision for a company or brand because its can be central to customers' perception and choice decisions (Aaker and Shansby, 1982).

Wheeler (2009) highlights the emotional relationships between brands and society. Thus, there is a consensus that brand is not just a name, logo or mark, but a promises, an authenticity and a guarantee of the standard quality that the products of a brand can offer to consumers. These characteristics influence on consumers thinking. Consumers can turn loyalty when agree with the brand values and theirs needs and desires are achieve. Interbrand (2007) bring new stakeholders to this definition: "*a brand is a mixture of attributes tangible and intangible, symbolized in a trademark, which, if managed properly, creates value and influence. [...]. A brand is intended to ensure relationships that create and secure future earnings by growing customer preference and loyalty. Brands simplify decision-making, represent an assurance of quality, and offer a relevant, different, and credible choice among competing offerings*".

3.1 The role of positioning

Ries and Trout (1981) are considered the "father" of the concept involving positioning when published the book "Positioning: The Battle for Your Mind" in 1981. The definition of positioning on this book is: "*Positioning starts with a product. A piece of merchandise, a service, an institution, or even a person. But positioning is not what you do to a product. Positioning is what you do to the mind of the prospect*". Another understanding of this concept is given by Interbrand (2007): "*the term "Positioning" involves the careful manipulation of every element of the marketing mix. Positioning defines to whom the brand is trying to appeal, what the basis of that appeal is going to be, and why*

key targets should believe the message". Positioning is, in a couple of words, to establish what are the core idea and values of the brand through the creation of associations to consumers.

The framing of the choice situation, the quality of the object at hand and its competitors, and the prestige of the competitor's name all may need to be carefully looked at, to gain some competitive advantage. (Kristensen, Gabrielsen and Zaichkowsky, 2012). The organization's current positions and past history form the basis of the ways routines, practices, and means of learning are combined and coordinated to implement product decisions that support brand objectives (Townsend, Cavusgil and Baba, 2009).

3.2 The role of design

Product designers are often very skilled in determining relevant design attribute-values and transferring them to other objects (Kreuzbauer and Malter, 2005). These product design features clearly support strategic intent and define the brand relative to competitors (Townsend *et al.*, 2013). Product design and branding must be entirely integrated. Brands moderate the relationship between design dimensions and consumer opinions (Townsend *et al.*, 2013).

An important question when managers are studying the design philosophy of their company is: "How can the design of products communicate brand values? Understanding the concerns of clients can provide insights into their preferences for specific values, resulting in a product design that communicates these values. (Stomppff, 2003). Well-defined and observed core values of the brand also will act as a legitimizer for new products (Michell, King and Reast, 2001). Design features create associations that connect the product with specific brand values, and, at the same time, the brand values and their historical representations strongly affect the interpretation of the design features (Karjalainen and Snelders, 2010). Social and emotional values play a critical role in creating affective bonds between the consumer and product and brands (Kumar, Townsend and Vorhies, 2014).

4 IMPROVING BRANDING PROCESS THROUGH DESIGN

The content analysis of the recommendations, facts and challenges, collected in the papers, indicate a set of decisions related with the product: Brand Values, Innovation, Quality, Competitors, Consumers, Price, Competitive Advantage, Product Attributes, Brand recognition and Consistency. These recommendations demonstrate the players and their roles inside the product design process integrated with the brand positioning. All the decisions could be grouped into some processes, as described on Table 3.

The analysis of the table 3 allow us to conclude that the branding practices related to the design management has been considered in a similar way of consumer response design models, performed by Bloch (1995) and actualized by Crilly, Moultrie and Clarkson (2004). In truth, the parameters involved in the brand consolidation seems to be a subset of the attributes and process involved in a "consumer response design" theory, besides the previous authors from these theories did not spent significant attention for branding aspects it that models. The conclusion was that should be possible to lead with the branding phenomena in design in a similar way, as a process composed by roles, processes and decisions. The next section will explore each one of these aspects.

4.1 Process and roles

Considering branding as a process, it needs some actors, the professionals that are involved through theses actives. Crilly, Moultrie and Clarkson (2004) created a model for the design team to participate in the communication process. The authors suggest that the design team need to create a message that is encoded in the product and is perceived by the consumer within an environment. They revealed this concept through a framework that describes the attributes, roles and processes involved the consumer's response to the product design. They propose two actors, consumers and design team, as central for this process, whose were frequently cited in the collected recommendations about branding. Nevertheless, the analysis about branding identified a new role: the brand manager. Brand managers are those professionals responsible for the positioning decisions. They must to create associations that will influence the way customers think. These associations are the base to build the brand values. Thus, designers must to use design features to expose this values. The brand values need to be translated into the product design. When managers understand these values, the design team must to create the features that will allow customers perceive a visual brand recognition.

Brand managers need to evaluate the quality perceived by customer and its price to provide some insights to designers of what technical features the product must to have.

The decisions of the brand managers influence designers, those professionals responsible to translate the brand values, the level of innovation and product quality intended into the characteristics, functionalities and design of a product. Who are the consumers, what are the brand values, the product innovation and the quality/price pair provide some insights and constraints about the product features that designers must to create during the product design process. These features need to be compared against the competitor in order to allow a competitive advantage. This will enable consumers to turn loyalties when all their needs and desires are satisfied and the values are agreed.

The customers appears at the end of this process because they will recognize and perceive all design features, the innovation efforts and the economic value (trade-off between the willingness to pay and the quality perceived) of the product created by designers. It depends on theirs previous experience that influence their repertory and the capacity to recognize some attribute as an innovator or not and if it belongs to a particular brand or it is general at the market place. The consumers repertory have an important role to identify if the brand values are present into the product design.

4.2 Practices and decisions

All the recommendations contained at the SBR were examined and the identified decisions are listed at Table 3, in a total 11 decisions. Considering the role of the authors and the process, all can be synthetized at Figure 1. Therefore, from the current theory existent, the paper presents how the product design is related with the brand positioning: the brand manager need to set the brand values, the level of innovation, to identify the consumers and competitors, and to establish the quality/price pair required in theirs products. This will provide some insights to the design team to take better decisions about design features, innovation efforts and the economic value of the product. These actives allows consumers over time to turn loyalty, to provide a product feedback and to recognize the brand.

5 FINAL CONSIDERATIONS AND CONCLUSIONS

The first important aspect is the absence of a precise definition about the meaning of “building a brand through design” phenomenon. The consolidated definition is: *“Building brands through design is a joint effort of designers and brand managers to ensure that the products have functions and features in harmony with the brand positioning”*.

The RBS demonstrates a consensus over the decisions, actors and process that are described and synthetized at the Figure 1. The activities are related with specific professionals or roles. Brand managers need to care about the brand positioning and work together the design team to translate it into the product design through design attributes, innovation efforts and the economic value.

The central role of consumers in design recognition was reinforced. The perception is formed into the consumers mind and depends of the authentic feelings and experiences in products. Consumers will evaluate these features and, if the translation was adequately, will provide a product feedback, to recognize the brand and to turn loyalties. Then, it is fundamental important that designers understand this aspect and look for experiences that reinforce the feeling associated with brand values. The framework, showed at figure 1, can support design teams to see this process in a broader way, considering all aspects.

An important observation is the absences of the roles of services associated with products. The technology of the internet, as *“internet of things”*, and the need of less environmental impact are generating an increasing wave of services associated with products, or leading the creation of new business model involving Product Service Systems (PPS). We did not found specific practices or cases describing the aspects of services, associated with products, during the brand creation. There is a tendency of this role be important in the future, because the user experience could be more influenced by services than the form and function, which was prioritized in the literature. Therefore, it could be an important to be treat to enhance the theory and to help designers to deal with this challenge.

This bibliographical review indicates future research opportunities. Try to expand the meaning of the attributes identified, in order to explicit the drivers of each decisions. To evaluate if this theoretical model is sufficient to understand branding issues relating with design process. Surveys about it, using this framework, could be an important contribution, in order to understand the differences between industries that have to deal with it.

Table 3. Identified Decisions

Decision	Sinonimous (depending on context)	Role	Frequency
To create brand values	Value associated	Brand Manager	14
To establish the level of innovation	radical innovation, incremental innovation, market-driven, driving market	Brand Manager	18
To identify the consumers	user needs, customers, buyers, market segmentation, target market	Brand Manager	33
To establish the quality/price pair necessary	quality, price, willingness to pay	Brand Manager	10
To care about competitors	-	Brand Manager / Design team	9
To create the design features	design elements, product features, product design, design attributes, design form, design dimension, product form	Design team	37
To apply the innovation efforts	using innovation, radical changes, product changes, innovation process, new possibilities, such innovations, "new to the world", deliver innovation	Design team	12
To establish the economic value	-	Design team	2
To turn loyalty	brand loyalty, repurchase intention	Consumers	6
To provide a product feedback	Perceived quality, customer feedback, design perceived, consumer perception, perceived utility	Consumers	13
To do brand recognition	brand identity, consumer associate, visual identity	Consumers	10

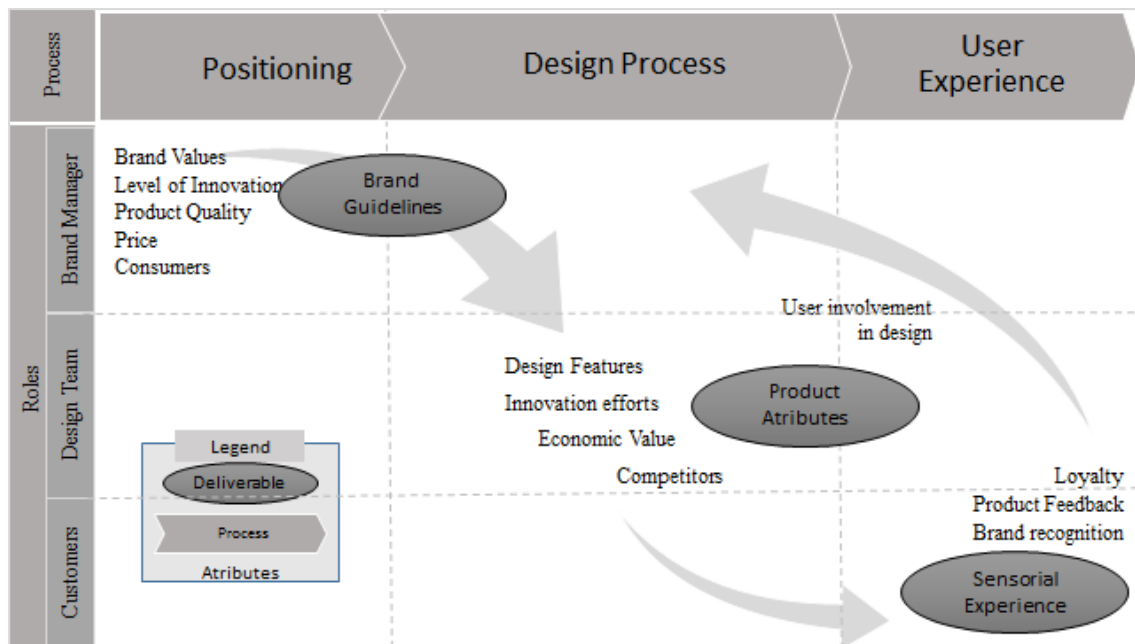


Figure 1. Decisions, Processes and Roles

REFERENCES

- Aaker, D. (1991) *Managing Brand Equity: Capitalizing on the Value of a Brand Name*. New York: The Free Press.
- Aaker, D., and Shansby, J. (1982) 'Positioning Your Product', *Business Horizons*, 25(3), pp. 56-62.
- Beverland, M. B., Napoli, J. and Farrelly, F. (2010) 'Can All Brands Innovate in the Same Way? A Typology of Brand Position and Innovation Effort', *Journal of Product Innovation Management*, 27(1), pp. 33-48.
- Blackett, T. (2004) 'What is a brand'. In: Clifton, R. and Simmons, J. *Brands and Branding*. London: Profile Books Ltd.
- Bloch, P.H. (1995) 'Seeking the Ideal Form: Product Design and Consumer Response', *Journal of Marketing*, 59(3), pp. 16-29.
- Crilly, N., Moultrie, J. and Clarkson, P. (2004) 'Seeing things: consumer response to the visual domain in product design', *Design Studies*, 25(6), pp. 547-577.
- Conforto, E.C.; Capaldo, D.C., and da Silva, S. L. (2009) 'Roteiro para revisão bibliográfica sistemática: aplicação no desenvolvimento de produtos e gerenciamento de projetos', *CBGDP 2011*, pp. 1-12.
- Interbrand (2007) *The Brand Glossary*. London: Palgrave Macmillan.
- Karjalainen, T.M. and Snelders, D. (2010) 'Designing Visual Recognition for the Brand', *Journal of Product Innovation Management*, 27(1), pp. 6-22.
- Keller, K. L. and Lehmann, D. R. (2006) 'Brands and Branding: Research Findings and Future Priorities', *Marketing Science*, 25(6), pp. 740-759.
- Kreuzbauer, R., & Malter, A. J. (2005) 'Embodied Cognition and New Product Design: Changing Product Form to Influence Brand Categorization', *Journal of Product Innovation Management*, 22(2), pp. 165-176.
- Kristensen, T., Gabrielsen, G., and Zaichkowsky, J. L. (2012) 'How valuable is a well-crafted design and name brand?: Recognition and willingness to pay', *Journal of Consumer Behaviour*, 11(1), pp. 44-55.
- Kumar, M., Townsend, J., and Vorhies, D.. (2014) 'Enhancing Consumers' Affection for a Brand Using Product Design', *Journal of Product Innovation Management*, 8 October. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/jpim.12245/abstract>. [10 November 2014].
- Michell, P., King, J. and Reast, J. (2001) 'Brand Values Related to Industrial Products', *Industrial Marketing Management*, 30(5), pp. 415-425.
- Ries, A. and Trout, J. (1981) *Positioning, The battle for your mind*. New York: McGraw-Hill.
- Stompff, G. (2003) 'The Forgotten Bond: Brand Identity and Product Design', *Design Management Journal*, 14(1), pp. 26-32.
- Townsend, J., Cavusgil, S., and Baba, M. L. (2009) 'Global Integration of Brands and New Product Development at General Motors', *Journal of Product Innovation Management*, 27(1), pp.49.
- Townsend, J., Kang, W., Montoya, M. and Calantone, R. (2013) 'Brand-Specific Design Effects: Form and Function', *Journal of Product Innovation Management*, 30(5), pp. 994-1008.
- Wheeler, A. (2012) *Designing Brand Identity: An Essential Guide for the Whole Branding Team*. New Jersey: John Wiley & Sons.