

Marketing and Design Management in Design Education: a Brazilian Research

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Resume of the lead presenter

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1 Introduction

The proliferation of design courses in Brazil over the last decade points out the growth of this professional career and its acknowledgement all over the country. It also suggests the return of the discussion about the role of both design and designers in our society, as well the very definition of design as an academic subject.

Widely discussed in the 70s, the concept of design has evolved along the following decades to a debate about design education and the best practices in this area. In Brazil and more recently in Rio Grande do Sul, this discussion has been fueled by several institutions, particularly the Association of Design Professionals of Rio Grande do Sul (ApDesign), in lectures and issues of *Que Designers Estamos Formando?* (*Which designers have we been teaching?*) (CAETANO DA SILVA, 2004).

Considering the definition of design offered by Redig (1977), based on projecting factors that support the Design course in Centro Universitário Ritter dos Reis, and aligned with that discussion, a project of collective research was started aiming at a better understanding of some factors of design education (such as ecological, ergonomic, market and technological aspects). This article presents the research on the market factor, considering marketing concepts applied to design and the experience gained during this period.

In order to explore the market factor, an exploratory study was developed, approaching three major focuses: the understanding of this theme by both new and veteran students, the approaches developed by many other design colleges, and the theoretical definitions of marketing and design.

In this article, we describe the research and its results concerning market factors in design. Our goals and methods are presented, as well as the theoretical basis and results. The implications of the results in the modification of education programs are discussed. We also present the accomplishment of the project, which has become concrete through the application and assessment of the modifications proposed in the education program.

2 Objectives and Method

This research aimed at developing a teaching program that would integrate and/or adapt theories, principles, concepts, methods and/or techniques in the areas of Ecology, Ergonomics, Marketing and Materials Technology, and Design. The achievement of this general goal depended on the achievement of the specific objectives of each subproject; however, we must emphasize that the subproject presented in this article aimed at developing a teaching program of market factors in design that would integrate principles, concepts and techniques of both marketing and design that were adequate both to the process of projecting by drawing and to the concept of simultaneous equation of projecting factors.

In order to achieve this objective, an exploratory research with three different phases was planned. Firstly, the knowledge and perception of students from UniRitter, in Porto Alegre, Brazil, about marketing were assessed. In this phase, 48 students of the Design course, freshman and seniors, were interviewed in a qualitative survey seeking to find out their understanding of Marketing as a subject and its wide relation to design. The research was carried out through self-administered questionnaires, which were handed out by professors in the classroom and later rated according to the answers obtained.

The second phase comprehended a survey about the offer of Marketing as an academic subject in Design courses in higher education institutions. The survey was developed as a tool to evaluate the offer of the market factor in the Brazilian Design education. In order to do so, 120 institutions from several regions in Brazil were contacted through Internet. The course programs available were recorded and assessed. There were also contacts with institutions through e-mail, so that a wider amount of data could be collected.

In the third phase, a bibliographical study considering the contact point between marketing and design was carried out, also comprehending the origin of the market factor both in the definition of design and in the development of its teaching dimension, through the new plans generated.

Data analyses in those three phases led to the results, which are presented in the next section.

3 About the relation between marketing and design

Twenty-four years ago, in 1984, Philip Kotler and Alexander Rath published in *The Journal of Business Strategy* an article called: *Design: a Powerful but Neglected Strategic Tool*. The authors criticized big companies for neglecting design skills and not considering the competitive advantage originating from the use of design to develop new products. They also pointed out the need for having designers in the product development process since its very beginning and – why not – in the company senior management.

The fields of marketing and design have several interests in common, particularly, the communication with consumers, but seldom have those two areas worked together. This has happened due to either lack of mutual knowledge or lack of interest of companies and professionals.

To marketers, the communication with designers is often difficult; similarly, to designers, it is difficult to participate in marketing activities. Their languages and “worlds” are different, even though their final interest is the same: meeting the customers’ needs.

In an initial analysis, there seem to be two major areas of integration and study between marketing and design, although they are linked in several ways. The first one is consumer behavior and the relationship consumers develop with products. This area has something to do with the creative characteristics of design and the unconscious factors affecting consumers. It is likely to be related to issues concerning value to consumers and the concept and development of product value.

The second major area would be related to the development of new products. In this sense, marketing interacts with design technical issues, such as the use of Materials Engineering, Prototyping and production processes. This area would comprehend, among other issues, the project information flow, QFD and organizational structures in the development of new products.

Both areas, regardless their perspective on the marketing-design relation, could indicate performance differences between companies that use design processes to develop products and those that adopt

other models. Design may be considered as a path to translate concepts conceived by a consumer, market-oriented company into an object desired by both of them.

As to consumer behavior, besides influences that are both internal and external to the purchase decision making process, which are the foundations of this theoretical stream (BLACWELL; MINIARS, ENGEL, 2001), it is known that people create their own symbolic universe over their lives. This universe stems from their experiences and it is also determined by the needs and interests of the individuals, their group or culture. Therefore, symbolism and related issues are fundamental to design. Regarding the second major interface area, i.e. strategy and development of new products, Kotler and Rath (1984) have pointed out the importance of a process of mutual discovery and comprehension between marketing and design when a company acknowledges design as an important tool. According to these authors, a common mistake in project management and development of new products is inviting designers to the team when it is too late. The designer is often brought to the team during the product development stage, when a prototype has to be designed. The designer also participates in market tests and marketing. The designer does not take part in the stages of idea generation, idea screening, concept development and testing, marketing strategy and commercial analysis. Thus, the designer cannot contribute either with ideas that consumers would not be able to express or suggestions that could be checked before the final concept definition.

The model proposed by Lars Hein (1984) is in accordance with the idea of integrated development of products. The purpose of Hein's model is to devise a coherent strategy of product development that would facilitate the integration of the central activities in the very development process: design, manufacturing, and marketing (commercialization). By using the concept of "integrated product development" proposed by Hein, features of marketing, design and manufacturing would be developed together in a consensual manner, thus allowing the company to optimize the product market potential. The research carried out by Hein (1984) in corporations has shown that it is essential that those three areas be given an integrated treatment by professionals and businessmen.

Yet, emphasizing the evident convergence of topics between marketing and design is not enough. In this study, it is also necessary to take a definition of design that delineates what we are studying.

A number of publications from the 70s (BÜRDEK, 199; LÖBACH, 2001; MALDONADO, 1993; REDIG, 1977) have highlighted the diversified character of design as project involving several factors. Maldonado (1993) has proposed design as factors (technical-economic, technical-productive, functional, symbolic, technical-constrictive and technical-distributive factors). Redig (1977), has proposed that Industrial Design is “the simultaneous equation of ergonomic, perceptive, anthropological, technological, economic and ecological factors involved in projecting elements and physical structures that are necessary to human life, well-being and/or culture”. Concerning the concept of factors, it is interesting to notice that authors that published their works in the same period mentioned design factors as part of the term definition, thus providing a definition based on knowledge areas. Acknowledged by Brazilian professors as one of the most comprehensive and valid definitions in the Brazilian reality, the definition given above structures the Design course in terms of practice and reach. Hence, Redig’s definition has been chosen as a parameter for this research.

4 About the Design Course at UniRitter and the Results of this Research

Centro Universitário Ritter dos Reis – UniRitter, founded in 1971 by the educator Romeu Ritter dos Reis, is located in Rio Grande do Sul, Brazil. With two campuses, one in Porto Alegre and the other in Canoas, UniRitter offers seven graduation courses – in Management, Architecture and Urbanism, Design, Law, Languages, Pedagogy, and Information Systems – and two technological courses: System Analysis and Development, and Technology in Managerial Processes: management of small and medium-sized companies. More than 5000 students attend UniRitter courses.

UniRitter also offers *lato sensu* post-graduation courses in Management, Architecture and Urbanism, Design, Law, Languages, and Pedagogy, as well as a *strictu sensu* Master’s course in Languages.

UniRitter has professionals and researchers that have shown important participation both in the professional market and in academic activities to guide a kind of education that aims at including people and respecting diversity to pursue human dignity. There are more than 200 hundred professors working with teaching, research and post-graduation.

Rated with the highest grade by the Ministry of Education, UniRitter has also outstood in 2007 in evaluations by journals specialized in teaching as the best university center in Rio Grande do Sul and the third one in Brazil.

Included in the group of UniRitter Colleges in 2002, with habilitations in Product Design, Graphic Design and Fashion Design, the Design School has its philosophical principles grounded on education for practice of project drawing in the area of Industrial Drawing, as conceived and developed by authors such as Henry Dreyfuss, Gui Bonsiepe (1978), Gustavo Bomfim (1995) and Joaquim Redig (1977). The understanding of design practice as a simultaneous equation of project factors, as defined by Redig, is present in the curricular structure of the School, which articulates, by means of the subjects called Project (Product, Graphic and Fashion Project), the set of knowledge that constitutes the graduation courses.

Rated with the highest grade by the Ministry of Education, School of Design UniRitter offers a post-graduation course, extension activities, and community and research extension. Regarding research, two lines have been developed, comprehending themes related to design education and other themes linked either to project factors or to the insertion of design in society.

Still in its beginnings, but already with approximately 700 students, the School of Design UniRitter is outstanding in relation to other Design courses in Brazil due to its consistency, quality and participation in the Brazilian design scene.

4.1 Students' Perception and Knowledge

In the first phase of this qualitative study, a thirteen-question questionnaire was administered to students of the Design course in UniRitter. The questionnaire inquired students about the way they saw the application of marketing to design projects. About 50 freshmen and seniors were interviewed. The answers to questions about marketing were qualitatively analyzed. A comparative table showing thoughts expressed by freshmen and seniors was developed.

When asked about the meaning of marketing, first-year students defined it basically as sales and advertisement. According to them, promotion or the way to promote a product are also marketing functions, as well as publicization. Some mentioned either the consumers or the consumer market, but the majority of them interpreted marketing as advertisement or sales strategy. Students in their last year were more consistent. In their answers, market study and consumers' needs and wants were mentioned, besides marketing mix (4P's) and the study of consumers' habits and preferences. Marketing as sales or advertisement was also mentioned, but less often. Both beginners and seniors revealed their positioning as to what marketing is, but it was possible to notice that only a few students had considered this concept.

First-year students related marketing to design, highlighting sales as a main factor. To them, the role of marketing is to sell what was projected by designers. Some mentioned promotional efforts, saying that marketing should promote products. Few students mentioned the relation existing between marketing and consumer, but some interviewees said that marketers should know the product and direct it towards its right market. To some of the last-year students, the relationship between marketing and design takes place in the market. To them, marketing involves analyzing, knowing and guiding projects towards the right market; they saw this relation as something very important and set it as the starting point of a project.

When asked about the way marketing was applied to a design project, the beginners claimed that this application occurred through product research and sales, as well as by means of the relationship established with consumers. On the other hand, final-year students said that marketing was applied to project through market research and knowledge of the consumer market; they claimed that studying the consumer market and identifying the market target were important factors to that application. They also said that marketing is one of the six project factors and that there should be a hierarchy of factors in a project.

During data tabulation, it was interesting that words and phrases mentioned were basically the same, but the depth and the understanding of concepts became different over time, what may indicate a certain evolution of students' understanding of the subject.

4.2 Academic Approaches by Other Brazilian Design Schools

In the second phase of this research, we collected information about how marketing was offered as an academic subject in other Brazilian schools of design. We found information about 81 of 120 institutions whose electronic addresses were checked. Of those 81, 59 offer subjects dealing with marketing or subjects widely related to market, i.e. 73 per cent of Higher Education Institutions in Brazil understand the importance of marketing as an academic subject that should be considered as one of the project factors. In the programs of those institutions, the concepts of Marketing, Segmentation and Positioning, and Marketing Mix prevail. In some cases, Consumer Research and Behavior are also part of the institutional programs.

In general, the programs indicate a superficial knowledge of marketing, often focused on areas that meet some specific interests, rather than knowledge about the subject as a whole. A wider approach would allow for the students to have a general overview and later the possibility to deepen their knowledge in what really interests them in a Design course.

As to the bibliographic references found, the situation seems to be even more complex. Most of the bibliographic sources are outdated both in terms of publication date and in terms of theoretical approaches, since there are more recent options in this field that are consistent with the modern conception of marketing, even in Brazilian versions. It is also important to emphasize that several authors have been superficial in relation to theory, composing bibliographic references that are not compatible with the knowledge expected of a Design student.

4.3 Theoretical Approach of the Theme

In the third and last phase, this research project sought the theoretical approach as a way to understand the market factor in design. Besides literature about marketing and the search for contextualization of

marketing/design relation, we attempted to understand the role of the market factor in the definition of design so that its importance and dimension could be brought about.

Figure 1, developed through bibliographical survey, presents a theoretical summary of several relations between marketing and design that support and justify this research project. Figure 1 illustrates the main points that constitute design as an academic subject and its correspondents in projects.

The relation shown in Figure 1 is grounded on the basic model of consumer behavior as suggested by Kotler and Keller (2006) about the Blackwell's theory (2001). It starts at the bases of marketing that act on psychology and consumer characteristics, and extends to the very purchase decision. This process ranges from the problem recognition to post-purchase behavior, going through brand choice and payment way. The two points in which design has a direct influence are the ones mentioned in the theoretical foundation of this article as the main points of contact in an initial analysis.

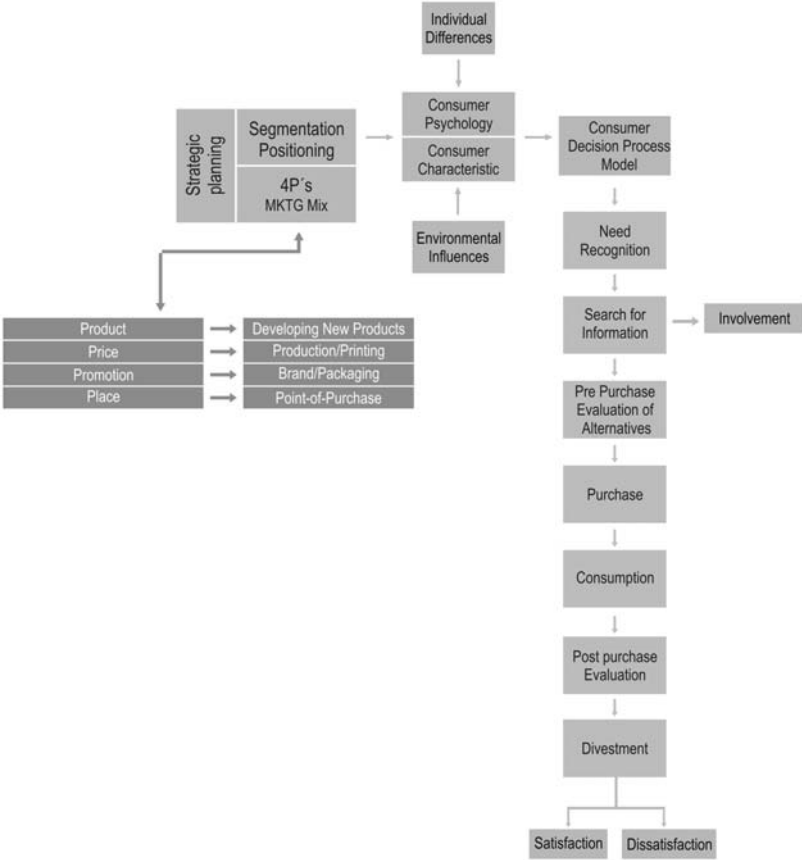


Figure 1: Marketing / Design Relation 1

From our theoretical search, we decided to refine this scheme, by synthesizing it in three major dimensions: Foundations, Consumer Behavior, and Marketing Mix. This has allowed for an easier understanding and enabled a relation of all points with design, instead of a relation between the two main points. The new model is shown below.

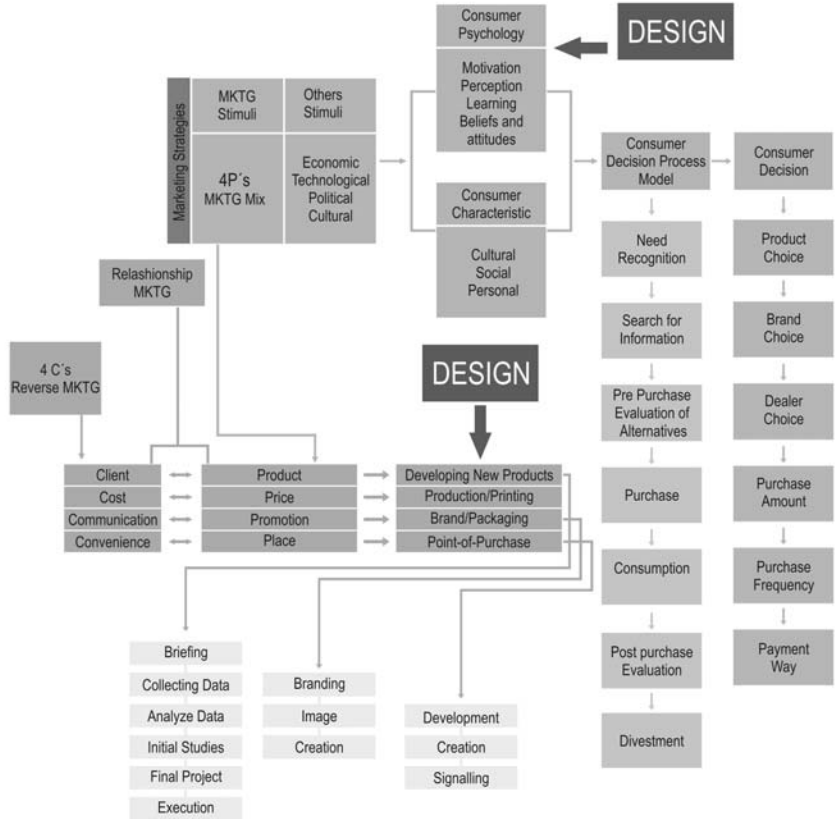


Figure 2: Marketing / Design Relation 2

The new model stems from the foundation or main point of influence of marketing on design, i.e. the Strategic Planning, which consists of Segmentation and Positioning, and Marketing Mix. Considering that the same product cannot be sold to all kinds of consumers, it is necessary to choose a market, since different consumers have different tastes, time or income. Thus, Segmentation represents an effort towards increasing the target precision of a company, and this notion is fundamental to a design student, who needs to promptly understand that he or she will project for a certain target audience.

Positioning acts together with Segmentation and is also a fundamental marketing effort in good strategic planning. Only identifying the target audience or potential buyers does not solve all the issues related to marketing strategies. It is necessary to position the product in a market segment, establishing its main benefits to people in that market. Companies should pursue relevant positioning and differentiation. Within the process of brand strategic management, every company and product needs to represent a differentiated idea in consumers' minds. Every marketing strategy is developed according to the SMP trinomial – Segmentation, Market, and Positioning. These points must be clear in a designer's project.

Still concerning foundations, the Marketing Mix represents 4Ps: Product, Price, Place and Promotion. These factors act in an integrated way, as any change in any one of those Ps affects the others almost automatically. This is very important for a better understanding of Design/Marketing interface. Promotion is particularly important because it also involves, in terms of marketing, issues related to packaging and merchandising, which refer to the designer's work and their integration in managerial processes. Furthermore, promoting a product is basic to make it known. This is very important in design, since developing a new product implies informing consumers about its existence.

Following the model, two more dimensions are considered: Consumer Behavior and Purchase Decision Process. This wide theme, which has been deeply studied in marketing, involves all issues related to Consumer Psychology, as well as its internal and external influences. In studies dealing with Consumer Behavior, these multiple influences shape the purchase decision process in all its phases and are decisive in terms of purchase and consumption of goods and services.

The Purchase Decision Process, according to Blackwell *et al* (2001), consists of seven phases: Problem Recognition, Search for Information, Evaluation of Alternatives, Purchase Decision, Consumption, Post-Purchase Behavior and Disposal. In the analysis of this process as a whole, we can see that design is present from the product conception until its use by the consumer. Design is also important in the translation of needs and wants into technological objects, in the conception of brands and packages, in usability (Ergonomics) of the object and also in its disposal, which should be ecologically adequate. Design has a fundamental role in explaining the symbolic aspect of products and brands to consumers; due to this characteristic, it allows for important consumption bonds.

In the model proposed by this study, we have emphasized the main points of contact between marketing and design, clarifying those in which marketing can act and design can produce. Therefore, when it comes to marketing strategies, they must be delineated at the beginning of the process, but also must act throughout it. The designer must participate in the whole production process of a product and not only in the project phase. According to the model, the Strategic Planning acts on the consumer, showing the main actions in relation to his/her behavior and purchase decision. Thus, the designer should know the people who will buy or use the product, thus assuring the creation of an efficient, functional product, directed to the right audience.

5 A New Teaching Program

Considering the results found in the three phases of this research and the teaching programs that include marketing in the Design course at UniRitter, some alterations have been proposed, particularly, in the subject known as Marketing II. As to Marketing I, no alterations have been proposed, given its obligatory, instructive character. The aim of Marketing I is to enable students to understand the foundation of marketing, including concepts of Marketing, Markets and Demand, Segmentation and Positioning, and Marketing Mix (4 Ps). However, new practical activities have been added to the program, such as assessment of a company that should be chosen in the light of the themes approached and seminars to discuss key themes. Already offered to students in this way for two terms, Marketing I has been extremely productive. Practical works have shown to be efficacious and efficient, and most students have produced excellent papers, with good performance.

Marketing II has undergone several modifications, considering the findings of this research. Firstly, the evaluation of the existing proposal presented a gap in relation to knowledge of marketing itself. There seemed to be a subject that had not been taught, i.e. contents of Marketing II should be in Marketing III, and part of the content that would bridge both types of knowledge was not presented to students.

Marketing II was intended to show students the Strategic Planning, a dense topic that requires previous knowledge of marketing and in a deeper degree than that required in an introductory subject. This perception has been confirmed not only through the knowledge about the theme, but also from the type of answer given by students in the research.

Assessing the theoretical possibilities of design and marketing, that is, points of contact between those subjects, a deeper knowledge of Strategic Planning was eliminated from the teaching program, leaving only the basic tools of this process, such as Environmental Analysis. Contents related to Consumer Behavior, which fundamental to understand the very tools offered as well as to issues concerning project and design were also included.

Two semesters have already been conducted according to this new proposal, and the results have pointed out a substantial improvement in students' understanding. Cases and practical examples have been added to the subject and a practical work allows for the student to apply his/her knowledge as well as his/her experience in terms of market. Better performance and more satisfactory feedback have also been noticed among students.

In order to fill the gap of contents generated by changes in the program, seminars and short-term courses have been offered to students as complementary, optional activities. Themes such as design office management, service marketing, entrepreneurship, and consumer behavior have been emphasized. These courses have been often requested by students, with new groups being formed each semester.

6 Conclusions

Considering and evaluating the results of the three phases of this research, it is possible to claim that the general objective of this study has been achieved. A new teaching program consists of a new (or partially new) proposal, not only in terms of content, but also in terms of the way that content is exposed to students. Very disseminated and discussed, marketing as an academic subject is already mature in courses such as Management or Advertising, but it is still young in Design courses in Brazil.

Providing moments of reflection to students and connection of contents is our major challenge, since marketing has been perceived as an essential element of the development of design projects.

After assessing the results of each phase and the implantation of the new teaching program, one can notice that we could still advance in the theoretical study of the origin and dimension of the market factor, as well as of its application to design projects, or design management. Undoubtedly, this would be the scope of new research projects.

As this is a transversal study, time and structure limitations have prevented students to be systematically consulted, both before and after taking Marketing I and II. New perspectives to assess students' perceptions and understanding could result from the system used in this research.

Yet, the results constitute a valuable material for academic discussion and offer perspectives for new discussions and new proposals in the Design course. We can claim that the project has successfully accomplished its main objective, thus widening the discussion about marketing teaching in Design courses in Brazil and offering new teaching programs, including marketing as a subject in the Design course at UniRitter. By listing contact points between marketing and design, this research has turned clearer the correlation between those subjects, thus leveraging students' learning, which is the main goal in daily activities of any professor.

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