

Preliminary studies on innovation in services from the strategic design perspective

Estudos preliminares: inovação em serviços na perspectiva do design estratégico

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Abstract

This work is part of a broader research project entitled "Innovation Culture: development of a qualitative approach to subsidize the innovation in services of the footwear industry for SMEs (Unisinos SEBRAE/RS)", which foresees essentially four steps: (a) Literature review, which is active until the completion of the work; (b) Exploratory study of enterprises, based on the identification of contexts, cultures and corporate interpretive communities; (c) Identification of the key elements for the definition of an experimental proposal of services; and (d) Proposed model; Experimental application and evaluation of the results. The theoretical and methodological base is cross-disciplinary interfacing between the areas of Communication, Semiotic and Management. So far, the (a), (b) and (c) steps were developed to a stage considered to be intermediate, which allow the conclusion of premises for the construction of a model for digital network services for small and medium enterprises. The considerations presented on this paper are based on such insights.

Key words: design, enterprises, interpretations, services.

Resumo

Este trabalho está inserido em um projeto de pesquisa maior intitulado "Cultura da Inovação: desenvolvimento de abordagem qualitativa para subsidiar a inovação em serviços no setor calçadista para PMEs (Unisinos - SEBRAE/RS)" que prevê basicamente quatro etapas: (a) Revisão bibliográfica, etapa ativa até a conclusão do trabalho; (b) Estudo exploratório de empresas, a partir da identificação de contextos, culturas e comunidades interpretativas corporativas; (c) Identificação dos principais elementos para definição de uma proposta experimental de serviços; e (d) Proposta de modelo. A base teórico-metodológica é transdisciplinar com interfaces entre as áreas de Comunicação, Semiótica e Gestão. Até o presente momento foram desenvolvidas as etapas (a), (b) e (c), em estágio considerado intermediário, mas que já permitem inferir premissas para construção de um modelo digital de serviços em rede para pequenas e médias empresas. É inspirada nesses insights que se alicerçam as considerações apresentadas neste texto.

Palavras-chave: design, empresas, interpretações, serviços.

Introduction

This work is part of a broader research project entitled "Innovation Culture: development of a qualitative approach to subsidize the innovation in services of the footwear industry for SMEs (Unisinos - SEBRAE/RS)", which foresees several steps and should be carried on for the period of two years. These steps are: (a) Literature review, which will be maintained until the completion of the work, since the references are not limited to a determined period. The basis of the established knowledge is exploited, but texts about the subject that may eventually arise cannot be ignored as they are considered of major inspiration; (b) Exploratory study of enterprises, based on the identification of contexts,

cultures and corporate interpretive communities; (c) Identification of the key elements for the definition of an experimental proposal of services; (d) Proposition of the model; Experimental application and evaluation of the results; and (e) Final research report and dissemination of results. The (a), (b) and (c) steps were developed so far, in a stage considered to be intermediate, but which already allow the conclusion of premises for the construction of a model for digital network services for small and medium enterprises. The considerations presented on this paper are based on such insights.

Input deficiencies are identified for the innovation of the small and medium enterprises (SMEs) services in the offering of new products based on different theoretical perspectives. Such deficiency is reflected in the difficulty

of creating elements of differentiation and, most of all, of adding value to the SMEs. In times of globalization and speed, the markets scenario has been requiring a closer look at the impacts that directly affect the supply chain from companies. This increased competition between enterprises and the growing demand of the society for sustainable solutions constitute the main innovation parameters. On the other hand, the contemporary society has been defining itself as complex and polar as it dialectically oscillates between science and art, new and old, good and evil, individual and group, ethical and unethical, money and happiness, rush and fruition, among many other contradictions. The thesis on sustainable development seeks solutions that balance wealth demand and quality of life by building a welfare society, doubtlessly marked by the positive pole of the dichotomies mentioned above. Consumer goods are produced for such society and, therefore, one must understand the social configurations in progress and then operate in the consolidation or in the creation of the offered goods that respond to this new expression of desire in social organizations configured by new sociabilities.

From the industry to the outlet, every set of SMEs must respond to the present and future interests of the consumers - even when acknowledged as consumer-citizens. The challenges that this production segment faces in conquering national and international markets are also important. It is possible to say that the demand estimate for the industry is high, both by the sector and by the size of the enterprises (small and medium); small businesses, particularly, lack differentiated support. In addition, SMEs that are suppliers of products and services of the footwear chain sometimes are configured as a constraint to the development of new products and/or processes.

One of the alternatives encountered by organizations for surviving and increasing competitiveness was the investment in research and development for innovation carried out in partnership. The segment now aims at testing the potential of the research performed at universities, with the prospect that differentiated theories and methodologies may respond to differentiated problems, or problems not properly solved by the canonical tools so far.

In Brazil, such issues gain special importance due to public and governmental policies for encouraging entrepreneurship through the volume of resources and funding programs available so that universities and enterprises join forces towards the accelerated development of the country. It is in this niche that this proposal is included, in other words, in the University/Enterprise partnership. If there is a problem clearly identified and the intention of the Enterprises is to seek solutions in cooperation with the University, it is up for the researchers to demonstrate that they are able to contribute in an innovative, pragmatic and qualified way through research results. In this perspective, some questions guide the discussion: How to develop new products and services based on the macro-expressions that set the symbolic representations in the current scenario? Which parameters of this new hybrid culture, shaped by knowledge, creativity and technology, should be considered relevant for the innovation in SMEs? What

new ways of observing organizational phenomena and proposing solutions through the theories that structure strategic design, articulated by meanings? What is the leading role of digital technologies in formulating solutions for the development and management of the innovation processes?

These would be the questions to stimulate the development of a qualitative approach based on SD which could offer inputs for the innovation in services for small and medium enterprises (SMEs). This model considers the tools for understanding the needs of the enterprises and for supplying new existing products, besides recognizing opportunities presented for a significant change in the standards and business conducts of this market segment. In this trajectory, the empirical information on real-world environments and on the conduct of interpretive communities facing tangible and intangible goods stands out. This culture mixture will result in the formulation of a method whose development would produce effective cultural innovation.

The investigative process

On the epistemological foundations

This first methodological approach is grounded in the theoretical-conceptual framework in which the essential topics for the research emerge, such as symbolic representations, interpretive communities and technological mediations, among others.

Guiding this research is the neo-structural and pragmatic thinking, which answers to the issues of communication, culture, meanings and contemporary society as inputs that are beyond their understanding and description, and that also contributes to the strategic planning of the products or services that could be designed and offered. The Culture theme appears as relevant as it leads to the discussion of the globalized society and its counterparts stimulated by more specific local cultures. The commitment to the interests of this tecnicized, globalized society is lessened, which shifts the center of the investigation into the contextualized plural spaces. The logic organizational potential that the models offer contributes to the design of services.

The services designed consider the semiotic flows consisting of modernity inputs, globalization, subjectivity and power. Castells (1996, p. 373) calls it *supertext*, in other words, it would correspond to hybrid symbolic products that are created by mixing several realities through the combination of messages sent from several levels of existence. Data collection results could be used here as it indicates that in this socio-economic context, network solutions are the ones that best respond in terms of quality and economy of resources, especially in the case of small and medium enterprises. Communication resources and available information also positively converge into the effectiveness of the services, enabling enterprises and their employees to positively interact for the construction of knowledge and the specificity of each one of them, which are also connected by their differences, even though they are physically apart. Communication and Information go back to forming a cohesive whole in which social

dimensions can only be considered in a hybrid scenario. These people or enterprises are initiators and creators of the cultural experience through communicative processes. They are programmers of the entrepreneurial culture in virtual scenarios that can be considered globalized as well.

Concerning this scenario, strategic design proposal fits when traditional and cultural components are central and comprehensive in an organizational context, since they comprehend general and specific cultures. Criticism towards contemporary society regarding the transformation of everything into goods and the complete disappearance of the traces of a welfare society tend to completely disappear as equations that would understand design not any longer as a product but as a process were formulated; as symbolic meanings and not as objects; as project/metaproject that covers qualitative and quantitative methodologies for evaluating scenarios, and not just as a project; as a complex process of planning, production-consumption, management and communication, and not just the product itself; as a collective action and not an individual one; and finally, as a sustainable and committed reality for the citizen-society. Therefore, knowledge of the several areas involved in the field of applied social sciences is covered. In this project in particular, communication, design and management dialogue. Zurlo (2010), Celaschi (2007) and Manzini's (2008) formulations support the reflection. Experiences in social networks illustrate the processes and report on partial results on how the "market"/society are seen differently. Among the elements that stimulate these operations, the most important is, perhaps, the speed, as it operates in the time category, in addition to constructing a contextual dimension of great experimental capability.

This type of investigation is nourished by the belief in the heuristic potential of the production of new cultural arrangements and in the possibility of technological advances that demand explanatory efforts differently from the operating descriptive systems. Thus, new technologies would rupture mental paradigms, questioning more stable and traditional organizations which involve several and different profiles.

Fitzsimmons and Fitzsimmons (2000) state that one must recognize that services are not peripheral activities in the economy, but an integral part of the society. This recognition requires an understanding of what can specifically be defined as services. At this point, there is no consensus on a concept of services. For example, for Zeithaml and Bitner (1996, p. 5), "Services are actions, processes and performance." As for Groonros (1990), a service is an activity or a series of intangible nature activities (in a greater or lesser scale), which usually but not necessarily occur in the interactions between the customer and the service provider. Finally, Fitzsimmons and Fitzsimmons (2000, p. 10) define "a service is a time-perishable experience, intangible, and performed for a customer that acts in the role of co-producer."

Although distinct, these definitions are complementary. The fact that they are not definite opens an important field for study. The complexity of the classification of services goes through a more extensive discussion of the following points: (i) what actually counts as services; (ii) if it is possible

to separate products and services; (iii) according to the distinction between products and services there are different ways for the management of production of services and products. Levit (1976) discusses the view that production concepts are applicable to the services, leading to the industrialization of services. In this sense, the production operations are characterized as transformers of resources and inputs into a final product. One of the functions of the production area is the processing of the inputs into products and services that the enterprise sells. Slack *et al.* (1999) highlights the model input-transformation-output when the inputs enter the process of transformation, being, altered and resulting in products and services.

Services have different characteristics in comparison to the production of goods. It has consequences, especially in the area of operations and production. Among the characteristics that differentiate products and services, Fitzsimmons and Fitzsimmons (2000) present aspects that have guided the discussion on services: (i) *Intangibility* - "since services are performances or actions, in general, they cannot be seen, touched or felt the same way as products" (Zeithaml and Bitner, 2005, p. 36 and ss.); (ii) *Heterogeneity* - in general, it is not possible to standardize the output of services if compared to goods. According to these authors, the experience is unique in services, as customers and service providers' change. "The heterogeneity related to services is associated with the result of human interaction and all the resulting variations in a large-scale; (iii) *Perishability* - "compared to goods, services cannot be stored, resold or even returned"; (iv) *Inseparability* - unlike products, which can be produced in advance, most of the services are generally sold first and then produced and consumed simultaneously. Corroborating with the classification, one of the basic characteristics of service delivery is the simultaneous production and consumption (Karmarkar and Pitbladdo 1995); Fitzsimmons and Fitzsimmons, 2000). Simultaneous production and consumption imply in the inclusion of the customer during the manufacturing process of the services, resulting in impacts to the operations area.

On the methodologies

The methodologies used are of a qualitative and partially limited nature, like all methodologies, but capable of interpreting the empirical realities. These eventual limitations would be compensated by the dialogue between methods and areas. This dialogue must lead to qualification, even if incremental in the viewing, organizing, analyzing and proposing the external realities modes. The methodologies used have resulted in individualized Services, shared Services and digital media shared Services scenarios, this last one being chosen. These scenarios based the semiotic readings which were the basis for the proposition of the services to be offered to small and medium enterprises. At first, the results point to the origin of the digital services network offering. In this type of communication, the redundancy of information reaches higher relevance, since it dispenses the interpersonal interaction. The distinctive design for digital services in network does not

demand just building friendly and intelligent interfaces, but responses to the business tactics that respectively answer to the strategies defined in its planning. Thus, there is a set of common structural elements in service design that are complemented by specific software, which when it dialogues with the base, it responds in a distinct and confidential way to the specificities of the enterprises. This specificity gains more relevance the smaller the enterprises are. In general, grouped in large parks, as systemists or members of a set of small firms of the same branch, footwear in this case, lack differentiation to access businesses by free competition.

The transactions on the visible, enabled by the new technologies, stimulate experimentation in a way that so far was only imagined. One must also recognize that the visual sign contains a strong reproductive commitment that is able to be removed or exalted, but always materializes itself. It is possible to say that whatever the style or genre may be, it all comes down to simulation. To stimulate means to imitate, to represent, to reproduce, but it also means to fake, to cheat, and to lie. The art of simulation, for example, contains the executive portrait ability, the statue and the representation of an idea. It also holds the fraud, in other words, the stratagem (Bettenini, 1991, p. 4) by analogy, and the strategy.

The first results

For the formulation of a qualitative method (Jensen and Jankowski, 1993) of qualified data collection for the preceding interpretation and construction of a services model, two basic procedures will be used: literature review and field research.

The deeper literature review was made on the most used models in the market, based on materials already published, such as books, magazines, newspapers, periodicals, etc, printed or digital media. These subsets of theoretical materials confirmed the theories in effect in the area on market, innovation, products-processes, tools and consumer researches. This area of knowledge could result in incremental innovations, but rarely lead to radical innovations. The field research was made through data collection, and it demonstrates the expectation of radical innovation as a way to compete in the market, although the formulations that sustain them can be recognized by it. Otherwise, enterprises would be in the opposite side of history. The dilemma is then defined: how to be different by breaking the paradigm, integrating the paradigm through the transformation that innovative proposals produce in this same paradigm?

The processes design seeks inspiration are in the sources of culture, technology, interpretive communities and languages, corresponding in a particular context to market, innovation, products, tools and consumers; and to sectors of planning, execution and commercialization of the products manufactured by the enterprises in focus, and to the members of the users communities.

The analysis of the secondary sources - documents, enterprises reports, marketing surveys and records of internal communication - brought non-essential information for the production of innovation, in other words, the formal records in the case of the first two follow standards of

canonical performance of acceptability, or as a strategy to guard the secret, or as a response to legal requirements; as to the marketing or internal communication production, the strategies are also specific to the intention of informing and seducing/persuading, typical conditions of internal or external communication pieces, in relation to products/services on offer or in terms of mobilization and adherence of the internal teams of enterprises. Even in small and medium enterprises, in which the effective body consists of fewer employees, communication pieces cannot be waived. What is also proposed in this segment is not to follow the general thesis that guide the production of advertising pieces and communication management of the large enterprises. In smaller companies, the organizing element of the relations is less formal and more gregarious, not by function, but by proximity. The information strategies also give occasion to the most direct ones in colloquial and performative speeches, inspired by the specific cultures of these interpretive communities. What is intended for that matter is to produce a general matrix, with an opening to attend to the specificities previously stated as relevant, that shall be also in innovation in providing products/services. The strategies of information has also brought out by the most direct, in colloquial speech, and performative, inspired by the specific cultures of these communities of interpreters. What is intended for that matter is to produce a general matrix, with an opening to attend to the specificities previously stated as relevant, that shall be also in innovation in providing products/services.

This choice was made because the in-depth interviews, according to Vergara (2007) are the most widely used in exploratory studies. The main objective of this type of interview is to understand the meaning that the interviewees attribute to questions or situations, as well as to understand the constructs used by interviewees as the basis for their opinions about a given situation. The semi-structured interviews allow flexibility and openness, since the interviewer can bring up unfamiliar situations not yet addressed by researchers in scientific studies. At the same time, the interviewer avoids to speak freely without maintaining the research line of investigation (Godoy, 1995). The questions in the survey are open in their entirety. Among them, there are a small number of questions that require only one answer for the descriptions of the enterprise, being most of the questions attitudinal, in order to thoroughly investigate the relation under study. Different instruments (previously validated) were used instead of one instrument for all selected organizations, which contemplated the different objectives in each of the organizations.

References

- BETTENINI, G. 1991. *La simulazione visiva: inganno, finzione, poesia, computer graphics*. Milano, Bompiani, 163 p.
- CASTELLS, M. 1996. *The rise of the network society*. Oxford, Blackwell, 556 p.
- CELASCHI, F.; DESERTI, A. 2007. *Design e innovazione: strumenti e pratiche per la ricerca applicata*. [S.l.], Editmabi Com Srl.
- FITZSIMMONS, J.A.; FITZSIMMONS, M.J. 2000. *Administração de serviços: operações, estratégia e tecnologia da informação*. Porto Alegre, Bookman, 564 p.

- GODOY, A.S. 1995. Introdução à Pesquisa Qualitativa e suas possibilidades. *RAE – Revista de Administração de Empresas*, **35**(2):65-71.
- GRONROOS, C. 1990. *Service Management and Marketing*. Lexington, Lexington Books, 298 p.
- JENSEN, K.B.; JANKOWSKI, N.W. (eds.). 1993. *Metodologias cualitativas de investigacion en comunicacion de masas*. Barcelona, Bosch, 324 p.
- KARMARKAR, U.S.; PITBLADDO, R. 1995. Service markets and competition. *Journal of Operations Management*, **12**(3/4):397-411. [http://dx.doi.org/10.1016/0272-6963\(94\)00014-6](http://dx.doi.org/10.1016/0272-6963(94)00014-6)
- LEVIT, T. 1976. The industrialization of Service. *Harvard Business Review*, **54**(5):1976.
- MANZINI, E. 2008. *Design para a inovação social e sustentabilidade; comunidades criativas, organizações colaborativas e novas redes projetuais*. Rio de Janeiro, PEP, COPPE, CAPES.
- SLACK, N. et al. 1999. *Administração da produção*. São Paulo, Atlas, 796 p.
- SEBRAE/RS. 2010. *Tempo de Agir*. Ano. 1, n. 3. Porto Alegre, Sebrae/RS.
- VERGARA, S.C. 2007. *Métodos de Pesquisa em Administração*. Porto Alegre, Editora Atlas.
- ZEITHAML, A.V.; BITNER, J.M. 2005. *Marketing de Serviços a empresa com foco no cliente*. Porto Alegre, Bookman, 553 p.
- ZURLO, F. 2010. Design Strategico. In: *Gli spazi e le arti*. Roma, Editore Enciclopedia Treccani, vol. IV.

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