THE LATEST TRENDS OF DESIGN INDUSTRY DEVELOPMENT AND PERSPECTIVES IN LATVIA

Tatjana Volkova
BA School of Business and Finance, Latvia

Inga Jakobsone
BA School of Business and Finance, Latvia

Miks Pētersons
Designer, SIA NORDI dizaina klubs, Latvia

Abstract

Purpose *– the aim of this paper is to develop an extended view on the broad applications and perspectives of design as a significant element of innovations in creating a sustainable competitiveness of the businesses and generating wealth of the region.*

Design /methodology/approach *– the study is based on literature review and activity observation of design industry.*

Findings *– the main findings of the study show that concepts such as strategic design, design management and design thinking are notably entering business environment by having conceptually new applications. Innovation policies, support, and education systems, have not yet caught up with these developments and these are the problems for further research in this emerging area.*

Research limitations/implications *– the study limits partially closed statistical data of companies' activity analysis.*

Practical Implications *– this work is useful for executives, who search for development of new innovative business models in highly competitive and fast changing business environment*

Originality/Value *– this work is the first attempt to highlight the latest trends in the development of design, conceptual changes and further perspectives of the industry in the development of Latvia economy*

Paper type *– Research paper.*

Key words*: design, sustainable competitiveness, radical innovations, innovation methods, Latvia*

Introduction

Thinking of design, the first comes in mind the stylish high-end products mostly in fashion, automotive and high-tech industry. When executives think of design "they ask designers to make products look beautiful" (Verganti, 2009) e.g. differentiate their products from the competitors in the matured markets when competition becomes severe. What is design - is it a stylish element of luxury goods or is it a supplementary attribute for differentiation of the products? A "lack of predetermined outcomes" (Boland and Collopy, 2004) is characteristic for the traditional view on the design process.

As a business activity, design is not only a tool to modify form and function of the products but "directly influences commercial constraints such as manufacturability, safety, and marketability. By creating new concepts, simplifying process to reduce cost, streamlining product function, or transforming business practice, designers create new experiences, add value, and sometimes give birth to new markets"(Heskett, 2004). Design activities, linked to the objectives, form three major design usage levels: "design as a product, design as a process and design as a transformation" (Friis, 2006). Depending on the design development level or formulated objectives to design, understanding of design use and significance completely differs.

The aim of this paper is to develop an extended view on the broad applications and perspectives of design as a significant element of innovations in creating a sustainable competitiveness of the businesses and generating wealth of the region. Our purpose is to highlight the latest trends in the development of design, conceptual changes and further perspectives of the industry in the development of Latvia economy.

Materials and methods of the work. The study is based on academic and research literature readings and design industry activity analysis.

Main results. Meaning of design, definition and development trends. In order to understand an entire meaning of the design, authors propose to look at its generic definition

proposed by Krippendorff (1989): "The etymology of design goes back to the latin *de + signare* and means making something, distinguishing it by a sign, giving it significance, designating its relation to other things, owners, users or gods. Based on this original meaning, one could say: design is making sense [of things]." Distinguished design scholars have emphasized a link between design and meanings, for example Margolin and Buchanan states that "products embody notions on identity that are socially recognized and thus become tokens in the symbolic exchange of meaning" (Margolin, Buchanan, 1996).Taking into account this standpoint when design is considered as an element what helps to bring value and usefulness of things, or in other words, to make them meaningful for the humans, design addresses much broader perspectives in applicability then single stylish element of luxury goods. Furthermore, innovation scholar Clayton Christensen has emphasized the importance of targeting meanings and understanding what people are really trying to achieve when they buy products. Thus, "the dialectic therefore is not between function and form, but between function and meaning" (Verganti, 2009).

Transferring these statements and meanings of design in our today's business applications, the design process has to deal with main goals:

- satisfaction of business requirements and customer needs,
- solution of social problems.

Therefore, design is a socially responsible process what combines esthetic appearance, functionality, ergonomics, technologies, market and research in order to achieve economic value and increase wealth.

In our interviews with design practitioners in Latvia and accordingly to Mollerup Designlab research (2006), we came to conclusion that the understanding of design directly correlates to the stage and level of development of design process. In the early stage, design is considered by executives of companies only as a stylish element of a product, what solves some problem of the product and professional designer is required to participate at the end part of production cycle. This is a common application form of design in Latvia. More advanced development stages are design as a process when broad understanding of the business process is integral, multi-disciplinary approach of the production process giving clear vision what and how design is integrated in the entire system. As a future target is a design thinking transfer to modify entire culture of the organization to form a platform for innovations, strengthen long-term competitiveness in the global marketplace.

The "old" business models (table 1) with former strategic thinking patterns can't bring sustainable competitiveness in the changed business, political and social environment. The fundamental changes do require transformed strategic thinking of any business in any industry.

Table 1: Changes in business thinking models

Former thinking model	**Thinking model of sustainable competitiveness**
Continuous cost cuttings, lowering all expenses and prices; model based on:	Creating products with added value; model based on:
∗ mass production	∗ customization, understanding of identity and cultural requirements ∗ emphasis on products meaning and its value,
∗ low material and labor costs	∗ environmental materials and qualified labor, waste elimination
∗ reliance on RD investments as sole solution	∗ open innovations in various from through culture of the organization
∗ design increases costs and can be used only as differentiator in mature markets	∗ design integrates technology, commercial functions and human identity
∗ protection of IPR	∗ successful commercialization of IP

"The potential of design lies partly in its broad nature, allowing a wide range of considerations to be taken into account in the development of products, services and systems, and its bridging capacity, connecting technology with the user, engineering with the commercial, and transforming creativity into innovation" (Commission of the European Communities, 2009).

In macro-economic level there is a strong correlation between use of design in the country and its overall competitiveness (NZIER, 2003 and WEF, 2002). Among the 20 nations ranking highest in terms of design, 17 are also among the 20 nations ranking in terms of competitiveness.

Design gradually becomes an integrated part of European innovation policy, a building block of a policy model that encourages innovation driven by social and user needs, thus developing further European strengths such as heritage, creativity and diversity. EU Innovation Strategy and new European innovation plan by 2010 develops general political agreement that "all forms of innovation need to be supported and that the progressive shift in emphasis of the demand and user-based innovation strategy from exclusive reliance on "technology push" to more demand- and user-driven innovation must continue" (Commission Staff Working Document, 2009)

The significance of design in innovations and achievement of sustainable competitiveness of the business. "Good design is an increasingly important means for businesses to hold their own in international competition. Design has the power to make products and services more attractive to customers and users, so they are able to sell at a higher price by being differentiated from the competition virtue of new properties, values and characteristics", Design Denmark (2007). The principal role of design is to create an economic value to products, services, and organizations. Furthermore, the added value has to be seen and appreciated from the client's perspective as an experience value. When the technical quality of any product or service has become a standard requirement the emotional factors like play increasingly significant role in a process of choice of particular products and services. Added value and positive emotions don't arise themselves. They are planned and developed by research, business and design professionals in an integrative process. "Applied effectively, design does more than improve the single product or service. Design is a strategic development process, and it is a way of seeing problems and their solutions" (Mollerup Designlab, 2004).

There are two generic innovation methods:

1) user centred innovation method when existing products or services are changed by design process to satisfy the needs of the current customers of the industry. This method is based on incremental changes in the value chain of process and dealing with the current context of use; it has a relatively short life-cycle due to easy way to copy modified product;
2) design-driven radical innovation method gives completely new innovative solutions what creates a new industry and gives proposal of the new product to people. "Radical innovators don't go too close to current consumers, instead, they step back and investigate the evolution of society, economy, culture, art, science and technology" (Verganti, 2009) In a composition with radical technology innovation, design-driven innovation proposes a product with envisioned context of life, thus, longer life cycle, first mover advantage, higher profits and sales volumes, increases brand equity, reputation and more sustainable economic value.

By bridging designers and executives, media, suppliers, universities and design schools, consultants and researchers in sociology and anthropology in continuous fruitful networking and long-term efforts can be developed design-driven innovations what gives powerful competitive advantage in the global market place.

Research papers of some leading design development countries like Denmark (Danish National Agency for Enterprise and Housing, 2003) and Sweden (SVID, 2008) clearly indicate why and how design brings economic value in micro-economic level:

- companies investing in design have increase in profit of 22 % compare with the ones which don't invest;
- companies that have increased the investments in design have increase in profit of 40 % compare with those which haven't increased;
- companies which both employ in-house designers and outsource design services export 40 % of their turnover while other companies only export 18% of their turnover;
- companies on the upper level of design development have greater profitability then the ones on the lower level.
- Furthermore, Innobarometer (2007) survey identifies that:
- innovative companies across EU found that over 27 % considered that design staff had been a major source of ideas for their innovative activities, what is slightly ahead of RD staff (25%)
- in more than 50 % of the innovative companies the innovation process comes from non-RD functions;
- non-technological innovation enterprises are smaller in sizes, with limited resources of investments and basically acts in low-tech industries;
- non - technological innovations tends to develop at the same rate as technological innovations.

Additionally, design integrated into development processes or design as a key strategic element has a potential to lower costs, such as production, assembly, packaging, transportation, warehousing and disposal costs preventing investments into usage of inappropriate materials, wasteful processes with lack of compatibility with user needs, tastes or abilities.

It is particularly important and acute in economic down-turn to realize an open nature and various complementary sources of the innovations. A vital challenge is to comprehend full spectrum of relations between design, innovations and competitiveness. Design acts as fundamental bridge connecting science, technology and users, creating sustainable competitive advantage and long-term profitability for the business. "Great designs share characteristics: They seem simple but also complete; they involve users at an emotional level beyond function; they contain a reassuring familiarity while eliciting surprise; and they appear timeless and innovative at the same time", Liedtka J. and Mintzberg H. (2006)

Development of design in Latvia, its barriers and potentials. If design as a driver of innovations delivers what it promises either in its user-centered form or design-driven radical innovation form, at the advanced levels of integrated design into entire business model of organization, why does it attract so far rather limited attention and followers, particularly design-driven innovation method? As a part of the answer to the question is that design is nothing new but design's role in the context of innovation, competitiveness, social and environmental sustainability is linked to recent changes such as global competition, increasingly sophisticated consumer demand, increased social and environmental awareness and therefore the understanding of full spectrum of this new role of design is just emerging. It takes time for institutions (political, educational etc.) and commercial organizations to adapt to new thinking model and to implement crucial changes in current policies and models.

Evaluating design development level, Latvia is still in the very basic stage where design is treated as stylish addition and differentiation solution to some certain maturity products. In countries like Finland, Denmark, Sweden, UK design is at the much higher development level, having clear design policies and it is increasingly integrated as a key element into business processes, strategy and new business models. These countries successfully are implementing design policies that will enable them to reap the benefits of design in its broad application perspective and in long-term. Commonly, design policies address issues in six key areas: research and education, design industry, business, public sectors, general public and international audiences. "National design policy for Latvia must

bridge the gap between the current situation and preferred situation.…To realize a more competitive Latvia, many people must learn new skills and practices, and they must use current skills and practices more effectively. For this to happen, they need motivation and learning"(Mollerup, 2004).

To realize the key steps how to move forward into "preferred" situation, authors had determined the basic barriers which prevent further development of design integration into business processes.

1) the gap of common understanding of design's integrated role in innovation process between design professionals and companies,
2) business executives don't have a broader understanding of the role of design and how it can be applied in their business processes; they treat design as a stylish element and cost source;
3) they same for design professionals - they lack understanding of business requirements and processes to integrate them and use in innovations
4) research of design's broad nature is only emerging; specifically in a consolidated perspective of design and innovation
5) although some EU countries has successful design and innovation policies in action (like Finland, Denmark), in Latvia this process is still in the very basic stage.

Furthermore, authors have identified six key target groups to address the basic tasks in order to develop design integration in more successful way:

1) **Research and education.** Artistic sensibility, material sensitivity and craft skills are not enough in today's professional designer's education portfolio. Modern design education requires research, international orientation, integration of design and business education
2) **Designers.** Skilled design professional must be able to work and compete internationally. Domestic products and services have to compete successfully with imports and must be competitive in export markets, creating reputation of the designer and general nation's reputation as a country with high design standards. Life-time education, continuous networking with researchers, international experience and understanding of business requirements lead to excellence in design.
3) **Business and industry.** Awareness of design as integrated element of innovations, competitive advantage and long-term profitability. Long-term demand for design services requires a business sector what believes that design pays. Motivation, learning and experience are the key-stones of this. Although economic incentives and motivation can be developed through national design policies, authors proposes that experience should be built on "learning-by-doing" principle: launching creative laboratories together with professional designers, design studies integrated into business education, learning courses and seminars with professional design consultants. Business people require information, knowledge and understanding about broad application of design. This would let them feel comfortable and "speak the same language" with professional designers.
4) **Public sector.** If business sector requires private initiatives, public sector needs political decisions. Demand for professional design in public sector would be positive signal for the business environment and important driver for a national design development. As a positive example would be demand of good design in public procurements, social and environmental programs.
5) **General public.** Nation has to have a certain level of public design awareness to have a strong design industry. This demand for high design standards also stimulates young people to seek for career in design or integrate design into their future businesses.
6) **International audiences.** A nation's international reputation for delivering excellent products and services requires that these products and services are having a superior design. Furthermore, international reputation increases potential demand for the design

services. Proficient use of design becomes an integral aspect of the nation's image abroad and indirectly stimulates also other export potentials.

Conclusions

Design in its development and linked objectives, have dramatically changed from the narrative understanding as a form and style, through the design in process when application is related to basic questions "what is designed" and "how it is designed" to the new advanced level of design usage as transformation. It has happened due to economic reasons of continuously shortening product life cycle, product differentiation problems, increasing requirements of "heavy investments" in traditional RDs, economic slow-down, challenges of global competitiveness, and changes in social and environmental awareness. Traditional methods business methods based on "old" strategic thinking don't bring anymore expected results. With all that changes, economy enters innovation phase. In this challenging time new business models should be evaluated and one of the potentials what is still not used in full spectrum is design. The results are compelling: companies that invest in design tend to be more innovative, more profitable, and more competitive in the global markets than those who do not. At macro-economic level there is a strong positive correlation between the use of design and national competitiveness.

Design as a strategic tool for innovation has developed rapidly in recent years and the research in this area is just emerging. Concepts such as strategic design, design management and design thinking are notably entering business environment by having conceptually new applications. Innovation policies support, and education systems, has not yet caught up with these developments and these are the problems for further research in this emerging area.

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About the authors

Dr. Tatjana Volkova
Profesor BA School of Business and Finance
Research areas: Clusters management, Creative economy, creative industries, Strategic management
Email: tatjana.volkova@ba.lv

Inga Jakobsone
PhD. student, BA School of Business and Finance
Research areas: Strategic management, Competitiveness, Innovations, Integrative thinking
Email: inga.jakobsone@ba.lv

Miks Petersons
Designer, SIA Nordi Dizaina klubs
Research areas: Design policy, Cluster management, Project management
Email: miks.petersons@nordi.com