

# THE IMPACT OF THE VALUE OF DESIGN FROM THE DESIGN MANAGEMENT PERSPECTIVE: CASE STUDY IN DESIGN FOR EXPORT

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**Abstract:** The Value of Design adds to Design Management in this exploratory research where the main concepts are addressed based on the literature review with an example of a case study in design for export. These concepts are interconnected when a company is seeking competitiveness and planning the product or service development process. Design Management is a process that makes it possible to increase the match of products and services with market quality requirements; furthermore, the Value of Design generated corroborates this practice in case of exports as well. In this context, this paper presents the main concepts and relates them to a contemporary practical example. To this end, the methodological strategy used was based on an unsystematic literature review and a single case study on the development of a project for export in the Design Export Program from the Brazilian government. As a result, the research connected some metrics of Value of Design with Design Management and identified qualitative indicators in a case study. It also highlighted recommendations for a more assertive development approach by informing the strengths, points of improvement related to quantitative metrics, threats and opportunities to assist in the use of Design Management in export projects, increasing the design maturity of companies and, hence, of the country.

**Keywords:** Value of Design; Design Management; Design for export.

## O IMPACTO DO VALOR DO DESIGN NA PERSPECTIVA DA GESTÃO DE DESIGN: ESTUDO DE CASO EM DESIGN PARA EXPORTAÇÃO

**Resumo:** O Valor do Design é agregado à Gestão do Design nesta pesquisa exploratória onde os principais conceitos são abordados a partir da revisão de literatura com um exemplo de estudo de caso em design para exportação.

Esses conceitos estão interligados quando uma empresa busca competitividade e planeja o processo de desenvolvimento de um produto ou serviço. A Gestão do Design é um processo que permite aumentar a adaptação dos produtos e serviços às exigências de qualidade do mercado. Além disso, o Valor do Design gerado corrobora esta prática também no caso das exportações. Neste contexto, este artigo apresenta os principais conceitos e relaciona-os a um exemplo prático contemporâneo. Para tanto, a estratégia metodológica utilizada baseou-se em uma revisão não sistemática da literatura e em um estudo de caso único sobre o desenvolvimento de um projeto de exportação no Programa Design Export do governo brasileiro. Como resultado, a pesquisa conectou algumas métricas de Valor do Design com a Gestão do Design e identificou indicadores qualitativos em um estudo de caso. Também destacou recomendações para uma abordagem de desenvolvimento mais assertiva, reportando pontos fortes, pontos de melhoria relacionados às métricas quantitativas, ameaças e oportunidades para auxiliar no uso da Gestão de Design em projetos de exportação, aumentando a maturidade de design das empresas e, portanto, do país.

**Palavras-chave:** Valor do Design; Gestão do Design; Design para exportação.

## **EL IMPACTO DEL VALOR DEL DISEÑO DESDE LA PERSPECTIVA DE LA GESTIÓN DEL DISEÑO: ESTUDIO DE CASO EN DISEÑO PARA EXPORTACIÓN**

**Resumen:** El Valor del Diseño se suma a la Gestión del Diseño en esta investigación exploratoria donde se abordan los conceptos principales a partir de la revisión de la literatura con un ejemplo de estudio de caso en diseño para exportación. Estos conceptos se interconectan cuando una empresa busca competitividad y planifica el proceso de desarrollo de un producto o servicio. La Gestión del Diseño es un proceso que permite incrementar la adecuación de productos y servicios a los requisitos de calidad del mercado; además, el Valor de Diseño generado corrobora esta práctica también en el caso de las exportaciones. En este contexto, este artículo presenta los conceptos principales y los relaciona con un ejemplo práctico contemporáneo. Para ello, la estrategia metodológica utilizada se basó en una revisión no sistemática de la literatura y un estudio de caso único sobre el desarrollo de un proyecto de exportación en el Programa de Exportación de Diseño del gobierno brasileño. Como resultado, la investigación conectó algunas métricas del Valor del Diseño con la Gestión del Diseño e identificó indicadores cualitativos en un estudio de caso. También destacó recomendaciones para un enfoque de desarrollo más asertivo al informar las fortalezas, puntos de mejora relacionados con métricas cuantitativas, amenazas y oportunidades para ayudar en el uso de la Gestión del

Diseño en proyectos de exportación, aumentando la madurez del diseño de las empresas y, por ende, del país.

**Palabras clave:** Valor del Diseño; Administración de diseño; Diseño para exportación.

## 1. Introduction

Countries' exports are an important factor in the Economy. Herbert Simon allows us to make a connection between Economics and Design when, in his 1978 Nobel Prize-winning theory, he points out Design as not restricted to making material artifacts, but as a professional competence in making policies and varied practices in different levels, applicable to the three spheres of the Economy: the individual, the market and the global Economy (Heskett, 2009).

Among the main economic perspectives that strengthen this point of view, we have authors such as Verganti (2008) and Heskett (2017) who present us with the economic aspect that most influenced companies and the role of designers in their respective times. In the Industrial Economy (1980), they were mainly guided by technology, and the designer, in this case, was an interpreter. In the following decade, we had the beginning of the Experience Economy, guided by insights that came from market research and the designer was a differentiator, by applying these insights to projects. In the 2010's, we had the Knowledge Economy, guided by design, where the role evolved to be a planner (Oliveira *et al.*, 2020).

This trajectory follows the evolution of the designer's role, from more operational aspects, moving to a more tactical role and, finally, beginning its strategic approach in organizations. This increase in design maturity by companies within the economic context helps even more when talking about exports: it is necessary to plan and design according to the expectations and needs of customers, consumers and users from different parts of the world. In the Design Ladder framework, these characteristics are attributed to maturity level 6: as a differentiator for a country. Being at maturity level 6, these companies automatically use design strategically (Buccolo, 2015).

## **1.1 Methodology and objective**

Our method for this article was to cross attributes brought from an unsystematic literature review in relation to a practical case study of product design for export. The objective of this first study is a single case to exemplify the details of qualitative and quantitative criteria about Value of Design applied for Design Management and to evaluate the strengths, weaknesses, threats and opportunities for improvement of this process. We used interviews with experts as primary data for the case evaluation. We used secondary data from CBD report to contextualize and to generate connections for future studies.

## **2. Theoretical support**

By promoting the implementation of Design Management in companies, certain outcomes are attributed, thereby making the Value of Design evident and creating indicators that further foster this integrating movement. When established, it can be used for various purposes, including the development of projects for export such as the one found in this work.

### **2.1 Design Value**

When addressing Value of Design, the literature presents a myriad of points of view: Economics (Heskett, 2009), Marketing (Kotler, 1972, Ravald; Grönroos, 1996), Business or Management (Kay, 1995), etc. The concept of “impact” (Cisero *et al.*, 2017) or “effect” (Kretzschmar, 2003) or “effectiveness” (Candi *et al.*, 2010) of design directly connects with “measuring” it (Beda, 2017) and its maturity (Zajíc, 2022). Therefore, in this research, we use the concept of “value” also meaning the others, approaching its metrics and its global vision with maturity metrics, since we can only manage what is measured (Cisero *et al.*, 2017).

Lian Guo (Guo, 2010) tells us more about the financial impact of design: a complementary study based on previous research lists six hypotheses that were tested with class regression models. Using

a sample of 577 award-winning design companies selected from 34 countries and 46 industries, the results provide important evidence that product design has consistently contributed to business financial performance. The study shows that effects vary within countries and industries based on design maturity.

In Europe and North America, where companies have centuries-old design traditions, the maturity of product design has significant impacts on financial performance. In Asia-Pacific and emerging countries, the contribution of product design to sales and the gross profit becomes evident, but does not yet have a significant impact on results. Design also helps companies to escape price competition in sectors that traditionally do not make use of it – not so much in “high excellence” sectors. For intermediate sectors, the product design strategy appears to be more ambiguous. Previous studies to this one were mostly qualitative and by proposing a quantitative method to highlight the value of design management and evaluate businesses from different sectors, it helps give a more comprehensive view (Guo, 2010).

## 2.2 Design Management

Companies that want to become or remain competitive in the market need to apply Design Management regarding products, processes and services. It is an organizational strategy (Martins; Merino, 2011). While **design** is “a people-centered problem-solving process” (Best, 2012 p.12), **management** “is the process of planning, organizing, directing and controlling the use of resources”. In order to achieve the objectives of an organization’s activities, it becomes essential for its existence, survival, and success (Chiavenato; 2014 p.24).

Design Management is not just an “administrative instance” (Phillips; 2008; p.11); it is an activity that considers consumer needs, design visions and company values (Cooper; Press, 2009). However, even acting strategically, Design Management combines components such as “creativity as a competitive lever” (Wolff; 2010; p.48); without ceasing to combine the interests of groups in decision-making in organizations, preserving the company’s profile and identity (Martins; Merino; 2011).

It is a matter of vision, creativity and interpretation (Braga, 2016). It can be said that it is a developing business function (D'Ippolito *et al.*, 2011). However, as the popular saying goes based on the speech of the notable professor Deming “what cannot be measured, cannot be managed” (Ramos, 2016). Performance metrics are a form of internal management used by organizations to achieve or exceed planned goals. They can also be used to show how efficient or effective the budget was applied to help improve planning in each cycle. A series of qualitative and quantitative indicators come into play that help demonstrate the value of what is done through design (Best, 2012). Some examples are described in Table 1:

**Table 1 – Qualitative indicators and quantitative metrics (Best, 2012)**

<b>Qualitative Indicators</b>	<b>Quantitative Metrics</b>
Aesthetics	Profit and loss
Perceived quality	Revenues
Reputation	Operating cash flow EBITDA (Earning Before
Knowledge development	Interest, Taxes, Depreciation and Amortization,
Long-term skills	which means Earnings Before Interest, Taxes,
Durability	Depreciation and Amortization)
Ergonomics	Cash flow
Security	Sales price (with margin)
Good quality-price ratio	Stock Prices
Awards	Investment payback period
PR/Peer Reviews	Time (time to market)
Better brand image	Customer retention
Better product/service quality	Brand recognition
Better user experience	Process performance
Better customer service and communication	Market share/penetration - Company revenue /
Customer satisfaction	Total market revenue
Brand awareness	Copyright
	Patents
	Cost reduction
	Economy (savings)
	Waste reduction
	Reduction of overhead expenses

### **2.3. Design management for export**

Design Management can be used as an instrument to articulate the search for differentiation, particularly when the challenges include increasing the value of products/ services aimed at external markets. The effectiveness of good Design Management can be a determining factor in strengthening the company on the international stage through exports (Martins; Merino, 2011). In this sense, Ughanwa and Baker (1989) considered that Design Management offers the opportunity for effective control and even review of the new product development process. In the context of export-oriented products/services, Design Management also provides the opportunity for the efficient application of techniques to improve a product/service, directing progress towards the organization's objectives in the international arena. The challenge of Design Management is to manage design activities in a way that is directed towards the organization's strategic objectives. This demands holistic action in relation to the internal and external contexts of a company (Best, 2012).

Design Management, when focused on exports, must involve the following activities: a) Diagnosis to understand the company's situation internationally and its relationship with competitors; b) Definition to identify the fields of activity in the future, linking technology, product and market, establishing the company's positioning in the international arena; c) Determination goals related to the company's strengths and weaknesses, seeking to increase competitive advantage; d) Integration In the development process – marketing, production, engineering, finance, design; e) Culture of design and innovation in the organization (Merino, 2002); f) People involved in the design (end user, clients, advisors, technicians, specialists and providers); g) Financial assumptions for Design (ensure that all design expenditure is explicit); h) Time managed in Design (the work itself); i) Effectiveness of Design work; and j) Management of the Design organization (Martins, Merino, 2011).

There is a complementarity of activities that emphasizes two important actions in Design Management for exports: the integration

of areas for discovering opportunities, which also characterizes the management of Design actors. Additionally, there is the Design and Innovation culture promotion, in the management of the organization of Design for efficiency.

### **3. Export case analysis**

The Value of Design in Design Management cases with a focus on exports still has fewer records than other maturity levels such as brand impact analysis or local products. The case analyzed was chosen because it brings together these characteristics in a redesign process, migrating the company's strategy from the local market to the international market. To achieve this, we sought a pioneering initiative in Brazil, the Design Export Program. According to the Design Ladder framework, these characteristics are related to maturity level 6: as a differentiator for a country as well as strategically used by companies (Buccolo, 2015).

The Design Export Program (DEX) is a pioneering Brazilian initiative to support the development of design and innovative solutions aimed at exports (ApexBrasil, 2024). The program consists of selecting companies to receive consultancy, training and technical and financial support to identify the best opportunity for innovation through design (CBD Report Design Export IV, 2023). The Design Export Program has been running for over 10 years, under the coordination of Centro Brasil Design. In these four editions, 429 companies were supported in the insertion of design and business focusing on exports.

One of these supported companies is Distillerie Stock of Brasil Ltda. Founded in 1884, Distillerie Stock is a multinational company with origins in Trieste, Italy and has been in Brazil since 1934 in the city of São Paulo. Over the last 80 years, the company has stood out for the quality of its products, high technology used and sophistication. It consolidated its image by reaching high levels of leadership in the



distilled beverages market, such as liqueurs, gins, aperitifs, among others. It also has non-alcoholic drinks such as a line of concentrated natural fruit syrups. The company currently serves more than 1000 customers, including distributors, wholesalers and retailers, with a presence in more than 1 million points of sale throughout Brazil, being a supplier to all major supermarket chains in the country, such as Carrefour, Walmart, Casino, Cencosud, among others. Its internationalization trajectory is presented on e-commerce platforms and also on site in the following countries: Paraguay, Chile, Uruguay, United States of America, China, Canada, Mauritius, United Arab Emirates, Saudi Arabia and Portugal. The characteristics of the case are described and applied according to its qualitative indicators and quantitative metrics in Table 1.

### **3.1. Distillerie Stock case study analysis**

The connection between the company Distillerie Stock and the design office ENTRE Gestão & Design through Design Export Program occurred after the portfolio presentation, a phase in which the company had a first impression of its work. Next, the office presents details and differences in the company's working method. The Design Export Program creates the possibility of connecting the Brazilian export industry with the best packaging designers in the country.

Lucas Baldissera, ENTRE Gestão & Design CEO, in his statement in April 2023 for the technical coordination of the Design Export Program<sup>4</sup>, highlighted that

Connection is an important central point to value both national design and Brazilian products. With the new packaging design, the company gains in competitiveness and added value in target countries. Ultimately, it is a cycle that continues and only brings positive results for everyone involved.

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4 Unpublished interview with experts from the Design Export Program by one of the authors in April, 2023.

The company has won several international awards, such as:

- World Drinks Awards in 2020, in the liqueurs category, Best Coffee Liqueur in the World and Best Brazilian Coffee Liqueur with Coffee Liqueur; Gold Medal with Amaretto Dell Órso and Best Creamy Liqueur in Brazil with Marula Liqueur.
- ISC - International Spirits Challenge in 2020 in England, with Bronze Medal for Amaretto Dell Órso; Coffee Liqueur and Marula Liqueur.
- SFWSC - Spirits Competition Awards in 2020 in the United States of America, with a Bronze Medal for Coffee Liqueur.
- Concours Mondial de Bruxelles | Spirits Selection in 2019 in Belgium, with a Silver Medal for Cassis Liqueur and Amaretto Cream Liqueur.

These awards praise the perceived quality and the company and product reputation. Although the company has so many global awards regarding quality of the drink, there was still a demand for packaging that would perform better on the international market. This information corroborates the qualitative metrics.

Based on this demand, the company selected in the government program went through all phases of the Design Export Program Methodology. The Santa Catarina design office ENTRE Gestão & Design developed the packaging for Galys liqueurs. We sought to highlight the differences between drinks through design. Galys liqueurs gained new labels focusing on the international market. Currently, the company exports liqueurs to the United States, Portugal, China and Canada — the latter should receive the first shipment of drinks with the new packaging in the first half of May 2024. The company's expectation increase market revenue by at least 10% from the development of design for export. This goal reinforces the relationship with revenue, cash flow and profit, with return on sales (payback). The latter are quantitative metrics evaluated by companies, making the Value of Design tangible.

ENTRE's first challenge was to adapt the labels (Figure 1) for the international market, both in legal aspects and in design. "Our

objective was to visually express the difference of Galys liqueurs, through the concepts of “flavor” and “balanced sweetness”. The graphic design of the labels added value to the product, meeting the trend of premium level, through design and printing finishes”, explains Lucas Baldissera (2023). These are aspects of improving service and customer communication, increasing brand awareness and indirectly impacting customer satisfaction. Since it is easier for the end consumer to identify the desired attributes in the product and in the supermarket shelf, there is synergy between these indicators.

**Figure 1** – Before and after images with details of the new labels.



On the new labels, the coat of arms with the letter “G” for “Galys” is framed by a light and fluid composition, which references the ingredient of each flavor of the liqueur. The ease of colors was also reflected in the production process, helping in the assembly lines. There is a more sustainable sticker also: moving from paper with metallic applications and lower contrast colors to greater brand visibility, with increased typography, characterizing the kind of product by its colors; seals and certifications further enhance the quality of the product. Refinement in the form of packaging is best suited to the premium target audience. Greater contact area of the plastic label with greater ease of removal for packaging recycling at the

end of its life cycle also helps. The qualitative indicators of durability, brand awareness, better brand image and the quantitative metrics of brand recognition enrich the case evaluation.

The new packaging was developed in line with the profile and expectations of consumers in hotel, restaurant, cafeteria and catering environments. “We seek to understand the dynamics of the drinks and liqueurs market and compare design strategies of direct competitors. Trend research focused on the category was also crucial for the development of packaging with an appropriate and lasting design”, highlights Baldissera in an interview in April 2023. The development of the project together with the Design Export Program lasted six months. “The reduction in development time had an impact on waste reduction, reduction of general expenses, savings, cost reduction and process performance, characterizing quantitative metrics. We had the opportunity to meet excellent design companies thanks to the program”, said Rose Mary Estácio in a statement taken in April 2023, an international consultant who represented Distillerie Stock in the program. The development of metrics for long-term knowledge and skills is presented in this consultant’s statement.

The connection can be lasting, going beyond the duration of the ApexBrasil program. “The packaging design experience for Galys was positive and we are working with the company on new projects, after the end of this edition of Design Export”, said the CEO of ENTRE. These aspects are related to the indicators “Knowledge development” and “Long-term skills”, as the company becomes familiar with the Design Management process applied to its product export, reducing the distance in the search for trustworthy service providers with already proven effectiveness. This reinforces the 6th level of the design maturity ladder and the strategic planner role of the designer.

## 4. Conclusion

The results of the presented analysis in the last session were confronted with theoretical concepts of Value of Design and Design Management. Those outputs were compiled using the SWOT matrix logic. This structure was chosen to better organize the conclusions. Based on the concepts of Value of Design, we focused on the qualitative indicators for lack of quantitative metrics. The Design Management approach exemplified in the case study focused on developing a product designed for export where it is clear that there are strengths, points for improvement, threats and opportunities to be mapped. They are presented in this order.

As **strengths**, design in public policies brings companies and designers closer together and allows knowledge and interaction to encourage the use of design. There is a generation of competitive advantages for companies that adapt to consumer needs, producing better business. Design as an activity is not restricted to making material artifacts, but as a fundamental professional competence in the formulation of varied policies and practices at different levels, applicable to the three spheres of the Economy: the individual, the market and the global Economy (Heskett, 2009).

On the other hand, there are **improvement points** in relation to the identification of quantitative metrics for companies. It was not possible to collect information such as profits, losses, revenues, operating cash flow, among others, as previously stated (Guo, 2010). Another aspect to overcome is the difficulty of having internal design teams in companies that are still looking for investment, which the DEX comes as an alternative with the approach to design offices with proven performance in the market.

There are **threats** when companies confuse the practice of design with marketing, not having clarity about the planned and targeted activities and investments. The promotion of the Design Export Program comes as an incentive for good practices in the use of design,

whether presenting professionals, monitoring results or controlling impacts.

Finally, the **opportunities** of improving the design process become important to incorporate a culture of Design Management focused on the Value of Design in companies. It goes beyond merely hiring a designer or even creating a Design department (CPD; 1998). Consequently, it impacts the image of the country exporting goods and services.

This effort comprises the frequent effort to bring the solutions offered by a company closer to people's actual needs. In the continued search for alignment of Design Management with organizational dynamics and culture, raising the level of maturity in relation to previously carried out activities. It refers to the practice of a new way of thinking about Design activity and fully integrating it into the company, operationalizing Design resources to meet its objectives (Gorb; 1990). For future research, an analysis of more case studies is in order. This approach can also be sectoral in order to identify specific demands of companies in their operating niches.

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