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External Design for Reputation, Perspective and Exposure

ABSTRACT

This paper analyzes why and how design-centered industrial firms with internal design teams contract external designers. This research is based on an exploratory multiple case study methodology, with a sample of five highly reputable design-centered industrial firms. While some results challenge the mainstream literature on design management, others expand the existing literature, highlighting that not all firms extract the same benefits from external designers; neither do all external designers bring the same benefits to firms. The paper shows that firms with internal design contract external design for (1) reputation (external designers sign products and bring their reputation to the product and the firm), (2) perspective (external designers bring a different perspective, especially when they come from a different industry from the firm), (3) exposure (external designers bring exposure that enriches internal design).

Keywords: design-centered firms, design positions, innovation

INTRODUCTION

The benefits and risks of external and internal design have been widely discussed in the literature. However, there is still no systematic evidence regarding which strategy is the most efficient between internal or external design. While some researchers defend that internal design appear superior to external design for incremental innovation (Abecassis-Moedas and Benghozi, 2012; Bruce and Cooper, 1997; Bruce and Morris, 1994; Dell'Era and Verganti, 2009; 2010), others found that design activities conducted by internal designers do not necessarily perform worse than those developed with external designers (Czarnitzki and Thorwarth, 2012; Sanderson and Uzumeri, 1995). These contributions show that it is not clear whether internal design teams lack creativity and innovation, neither whether external designers perform better than internal. This papers aims at contributing to this discussion, by answering the following research question: how and why firms with internal design teams contract external designers.

This research is based on an exploratory multiple case study methodology, with a sample of five design-centered industrial Portuguese firms. Our results reveal that first firms contract external design to sign products and increase reputation; second that external design brings a different perspective, particularly when the external designer background is distinct from the firm's industry; finally, external design provides exposure to the internal design team.

The paper starts with a literature review on design management, more specifically the benefits of design for firms, the benefits and risks of internal design, external design, and mixed design; followed by the methodology, findings, and finally a discussion of the results in light of the literature.

LITERATURE REVIEW

1. Benefits of design for firms

The success of design-centered firms, such as Bang & Olufsen, Apple, and Alessi, has called researchers attention for the effectiveness of design as a mean to differentiate and position products, increasing firms competition in national and international markets (Abecassis-Moedas and Benghozi, 2012; Abecassis-Moedas and 2012; Abec

Mahmoud-Jouini, 2008; Bruce and Docherty, 1993; Chiva and Alegre, 2006; 2009; Kreuzbauer and Malter, 2005; Verganti, 2006).

While companies used to compete on price and quality, now companies compete also on design (Czarnitzki and Thorwarth, 2012). Companies are increasing not only their budgets on design (Czarnitzki and Thorwarth, 2012; Gemser and Leenders, 2001), but also the relevance of design in their strategic agendas (Dell'Era and Verganti, 2010). Additionally, scholars have documented how the effective use of design in small and large firms can contribute positively to innovation, competitive position, and business performance (Bertola and Texeira, 2003; Chiva and Alegre, 2009; Czarnitzki and Thorwarth, 2012; Dell'Era and Verganti, 2009; Gemser and Leenders, 2001; Hertenstein, Marsili and Salter, 2006; Platt, and Veryzer, 2005; Ravasi and Lojacono, 2005; Verganti, 2003; 2006).

Design is gaining relevance mainly due to the increasing importance that culture and lifestyle have gained in consumer decisions. From clothing to home furniture, passing through transportation, and consumer electronics, everything is a means to consumers express and signal social identity. Therefore, with this shift in the consumption patterns, firms are increasingly facing the need to develop efficient and reliable products that also express lifestyles and cultural values (Ravasi and Lojacono, 2005).

For successful companies, design emerges as a part of the value chain, rather than a stand-alone activity (Borja de Mozota, 2003). Design is also seen as a way of thinking (Brown, 2008) that creates symbolic value (Kreuzbauer and Malter, 2005; Ravasi and Rindova, 2008) and offers an alternative or a complement to technological changes (Walsh, Roy, and Bruce, 1988), or even a source of to breakthrough design-driven innovations, which may lead to radical innovations of meanings (Verganti, 2008).

While initially the design literature was focused on in-house design, this reality has changed (Bruce and Docherty, 1993). Design outsourcing is becoming an increasing trend in design-oriented industries (Berends, Reymen, Stultiens and Peutz, 2011; Chiva and Alegre, 2007; Czarnitzki and Thorwarth, 2012; Utterback, Vedin, Alvarez, Ekman, Sanderson, Tether and Verganti, 2006), and therefore has been calling researchers attention.

Basically, managers have three basic design positions when considering the location of design activities: develop the design in-house – internal design, employ external

designer or design consultancy – external design, or use a combination of in-house capabilities and external designers – internal and external design (Bruce and Morris, 1994; Czarnitzki and Thorwarth, 2012; Von Stamm, 2008). The following paragraphs are dedicated to summarize the benefits and risks of the three design options.

2. Benefits and risks of internal design

Internal designers or in-house designers are full-time designers that are located in a design department, or in R&D, or production, or marketing (Bruce and Morris, 1994). The main advantages for a firm of possessing internal design are the reduced lead-times and development costs. Since designers have strong knowledge on the products, services, and are more familiar with the firm's production, marketing, culture and practices, they are able to timely give advice or deal with problems that may arise through the product development stages (Abecassis-Moedas and Benghozi, 2012; Bruce and Cooper, 1997; Bruce and Morris, 1994). Internal designers can easily coordinate with other departments of the firm (Czarnitzki and Thorwarth, 2012; Von Stamm, 2008). Furthermore, the protection of the inside knowledge is guaranteed, which is an important for firms that intend to introduce market novelties (Czarnitzki and Thorwarth, 2012). Internal design teams reduce risks of involuntary spillovers effects and leakage of information to outsiders who may use the information to increase competition.

The main danger of relying on internal designers is that the design team may become inert with firms' politics and culture and market standards, resulting in less creativity and lack of innovative ideas (Bruce and Cooper, 1997; Bruce and Morris, 1994; Dell'Era and Verganti, 2009; Kristensen and Lojacono, 2002). In these cases, design departments become less independent and creative and more productive and efficient which limits their innovation ability (Abecassis-Moedas and Benghozi, 2012), therefore important for incremental innovations in product development (Perks et al., 2005). Several authors defend that the need for creativity and new ideas is the major driver behind external design (Czarnitzki and Thorwarth, 2012; Von Stamm, 2008).

3. Benefits and risks of external design

External designers are individual designer or design agencies that collaborate on a project basis with the outsourcer. The literature on outsourcing supports that firms outsource when the benefits of intra-firm learning and communication are higher than

the risks of asset appropriability, or when the supplier capabilities are superior than the contractor's capabilities (Jacobides and Hitt, 2005; Kogut and Zander, 1992; Schilling and Steensma, 2001). In the case of design, firms outsource design in order to acquire design skills that are located both in designers and design agencies (Abecassis-Moedas and Benghozi, 2012).

Having a rich designer portfolio is particularly relevant in design-intensive industries with the purpose of assuring the newness and innovativeness of their portfolios (Dell'Era and Verganti, 2009; 2010). The success of these companies seems not necessarily related to the choice of a specific designer, but rather to the capability to identify and manage an articulated portfolio of designers (Dell'Era and Verganti, 2010). Consequently, collaboration with several designers allows firms to anticipate customers' desires and to triangulate ideas and concepts proposed by different points of view (Dell'Era and Verganti, 2009). The advantages and disadvantages of using external design sources have been widely discussed in the design literature.

Benefits of external design for creativity and innovation

One of the most cited advantages of external design is the fact that external designers, individuals or design agencies, can bring fresh ideas, and high levels of innovativeness and creativity (Abecassis-Moedas and Benghozi, 2012; Bruce and Cooper, 1997; Bruce and Morris; 1994; Dell'Era and Verganti, 2009; 2010). Three main reasons sustain this argument. First, good designers are characterized by an individual, meaningful and unique vision of the world that imprint and enrich their works. Collaborating with such designers allows the contractor to have access to these new perspectives. Second, external designers are not hampered by firm's politics and culture, neither by market studies that may restrain creativity; therefore they are free from the constraints of internal institutional barriers (Bruce and Morris, 1994; Ravasi and Lojacono, 2005). Third, external designers collaborate with several clients what allows them to develop superior expertise in professional knowledge in comparison to internal teams (Dell'Era and Verganti, 2009).

Benefits of external design for accessing tacit knowledge

External designers also allow companies to access dispersed and tacit knowledge about product languages, socio-cultural trends and latent market needs of both close and distant markets and industries (Verganti, 2006). Product languages and meanings may

vary across product types, industries, or countries (Dell'era and Verganti, 2009). External designers, due to their capability to understand product languages, socio-cultural trends, and emergent consumers needs support companies in accessing new markets or industries that may be close or distant to their original activities (Dell'Era and Verganti, 2009; 2010; Verganti, 2006). Collaboration with international designers also enables firms to capture trends in socio-cultural contexts of distant markets (Dell'Era and Verganti, 2009; 2010). This access to tacit knowledge from different markets of industries allows companies to mix different points of view and approaches what not only favors the proposal of innovative product languages, meaning and concepts, but also guarantees better performances for those companies that compete in foreign markets, or even at the international level (Dell'era and Verganti, 2009).

Benefits of external design for refreshing methods and approaches

External designers bring complementary expertise that allows firms to continuously refresh product development methods and approaches (Berends et al., 2011; Dell'Era and Verganti, 2010). The collaboration with external designers requires interaction with firm's representatives, who may co-produce or shape the ultimate design outcomes, sharing responsibilities with the external designers (Millward and Lewis, 2005). The level of interaction between firm's representatives and external designers can vary: external designers can only interfere in the conception phase or they can be integrally involved during the product development phases (Berends et al., 2011). More the external designer is involved, more their complementary skills extend firm's capabilities (Berends et al., 2011) and more firms learn with the external designer. Therefore, these collaborations allow companies to continuously refresh the approaches and methods adopted in the new product development. In other words, collaborations with external designers allow for the accumulation of knowledge that can be exploited in future product development process either with external designers or with internal designers (Dell'Era and Verganti, 2010)

Although firms appreciate the access to fresh ideas and new knowledge, they also fear leakage of crucial knowledge (Bruce and Cooper, 1997) and the external designer lack of information about firms' practices and technologies, which constitute the main disadvantages of recurring to external design. Collaboration with external designers comes along with the increased risk of involuntary spillover effects and leakage of information to competitors who may use the information. Mansfield (1985) by

surveying R&D managers of 100 U.S. companies in high-tech sectors discovered that new product development crucial information reached the rivals after 12–18 months, on average. Mansfield's study concerned detailed technological knowledge, but design may be even less unique and cheaper to imitate. Thus, a firm relying mainly on external designers may not be able to capture a competitive edge over its rivals that may have access to the same (group of) external designers (Czarnitzki and Thorwarth, 2012). Additionally, external designers may have some problems moving from the concept to development stages, since they do not have sufficient knowledge of the firm's practices and technologies. The leakage of proprietary knowledge may be a problem, what rise to the question of how much information the external designer should have (Bruce and Morris, 1994).

4. Benefits and risks of internal and external design

The relative benefits of external versus internal design appear mainly in terms of creativity, innovation, and renewal. While, the relative benefits of internal versus external design derive from shorter lead times, and reduced development costs (Abeccasis-Moedas and Ben Mahmoud-Jouini, 2008). Since there is no evidence regarding which strategy is the most efficient between internal or external design, companies adopt mixed strategies. A blend of in-house and external design expertise appears to overcome the problems and build on the positive aspects of each situation. This allows firms to diversify their knowledge and product portfolio (Dell'Era and Verganti, 2010) allying innovation and efficiency (Abecassis-Moedas and Benghozi, 2012). Firms' markets and resources may explain preferences for one configuration over another (Vervaeke and Lefebvre, 2002).

The benefits and risks of external over internal design sources and vise-versa have been widely discussed in the literature and there is no evidence regarding which strategy is the most efficient between internal or external design. While Abecassis-Moedas and Benghozi (2012) showed that internal designers appear superior to external designers for incremental innovation; Sanderson and Uzumeri (1995) found that design activities that have been conducted only by a company's in-house resources do not necessarily perform worse than those that have been developed with the help of external knowledge flows. More recently, Czarnitzki and Thorwarth (2012), in a study that compared the contribution of internal and external design to new product sales across a sample of Belgian companies, defend that external design is not superior to internal design. Indeed

the results shows that while internal design is more relevant for product success, external is relevant only for imitation, for the products that are new to the firm but not to the market.

The authors' arguments defend that this happens because of knowledge spillovers that quickly reach competitors who can anticipate the market novelties and therefore affect new products sales. These contributions show that it is not clear whether internal design teams lack creativity and innovation, neither whether external designers can perform better than internals. While some years ago companies were discovering the benefits and risks of external design, nowadays they are already aware of the setbacks of such strategy. Today information circulates faster and technology allows reduced development times, what allows competitors to catch up quickly. This reality sparks again the question how and why do design-centered firms contract external designers when they have internal design teams?

METHODOLOGY

To answer the research question why and how do firms with internal design teams contract external designers, we adopt an exploratory multi-case study approach in an attempt to "provide freshness in perspective to an already researched topic" (Eisenhardt, 1989, p. 548). Case study research is particularly suitable for bringing to the surface emerging phenomena whose dimensions remain poorly understood (Yin, 1984). With a multiple case study approach, it is possible to compare the findings across a range of situations, which strengthens the validity of findings and reveals contextual differences. Eisenhardt (1989) suggests that between 4 and 10 cases is ideal.

Research Setting and Data Sampling

Since the current study explores the reasons why and how design-focused firms contract external designers, we have focused on project-based companies that run their activity by the continuous development of new projects, possessing internal design teams and regularly contracting external designers on a project-based basis. These firms operate in hypercompetitive markets, launching regularly new products.

The cases were selected not for statistical, but theoretical reasons, which allowed "data gathering driven by concepts derived from the evolving theory and based on concepts of 'making comparisons', whose purpose is to go to places, people, or events that will

maximize opportunities to discover variations among concepts and to densify categories in terms of their properties and dimensions" (Strauss and Corbin, 1998; p. 201). This approach increases the probability that we can collect different and varied data (Strauss and Corbin, 1998).

The researchers contacted CPD (Centro Português de Design), the Portuguese design association a non-profit institution that works on putting into contact designers and design companies. One of their initiative is the *Design* + that aims at sponsoring young designers for an internship in a design-intensive company, in which they would work, develop a product and present it in an international fair, and therefore gain visibility. Fourteen companies participated to this initiative and five agreed to participate in the study and to be interviewed.

The sample was therefore selected from some of the top design firms in Portugal as selected by the design association and then based on the availability of firms to participate on a study on why and how companies with internal design teams hire external designers. The five companies in the sample are representative of the 14 in terms of industry, size, number of designers....

The sample is formed of companies with operations in Portugal. These firms were selected for their exemplarity in design activity: internal team of designers, willingness to invest in design, national and international reputation, and their creative prowess. The companies operate in industries such as ceramics, china tableware, porcelain, and glass, and street furniture, presenting high variation in terms of revenues, number of employees (see Table 1).

These companies are recognized in have received design awards, so they can be considered as recognized firms in the area of design. We want to know why recognized firms with awarded internal teams would risk. All the companies in our sample are industrial firms that use design actively. They present simultaneously business-to-business and business-to-consumer business-models. In their business-to-business segments these companies work as a design agency that not only designs the products but also control all the manufacturing part, delivering to the client design and manufacturing. In their business-to-consumer model these companies develop products that sells under their own brand. As in the business-to-business segment they also design and manufacture the products. The external designers can be involved in either

business-to-business and business-to-consumer projects. This allow us to classify these companies as highly specialized in design, and extreme cases that will help to extend our knowledge about external designers collaboration.

Data Collection and Data analysis

We exploited several data sources to facilitate validation and triangulation of the data (Denzin, 1978). The first source of data was interviews with the head of the design unit and designers that often direct some product development projects. We conducted a total of nine face-to-face interviews (two in each firm except for one firm in which only one interview was performed). The interviews followed a semi-structured interview protocol (see Appendix A) with open-ended questions and follow-up questions to provide a better understanding and clarification of responses (Spradley, 1979). The interviewee was encouraged to talk about different projects that they were involved with. This strategy allows recognizing different patterns of central constructs, relationships, and logic of the focal phenomenon.

The questions were about the following topics: company and respondent characteristics; products and services description three to four specific projects descriptions including at least two projects where external designers participate. Regarding these projects the questions encompasses goals, product characteristics, process, intervenient and their responsibilities; and the reasons behind the external design – why external, why that specific designer (see Appendix A).

At the end of each interview, we asked interviewees for comments on any other issues. We guaranteed anonymity to encourage candor. Interviews lasted on average 70 minutes. For each case, the data collected through the interviews were triangulated with archival data such as firm documents (reports), press articles, firm websites, industry reports and company visit. Particularly the interviewees shared some intermediary project reports, which were used to better understand the projects.

The aim of the data analysis was to analyze the cases and to identify similar patterns among them. The two researchers performed the data analysis separately and iteratively (two iterations: first each of the two researchers separately and then notes and codes were compared and differences reconciled). As typical in field research, we went through the data doing a descriptive coding (Miles and Huberman, 1994, p. 57). We examined the interviews and literature review to develop initial determinants and detect

emerging patterns (Eisenhardt, 1989). The central idea is that researchers constantly compare theory and data—iterating toward a theory that closely fits the data (Eisenhardt, 1989). The results were presented to two industry experts, which validated the results as an accurate interpretation of the reality.

FINDINGS

Recent studies have been questioning the role of external design in companies where design is a strategic priority. More specifically empirical papers have been pointing the lack of evidence of the superiority of external design over internal design. This paper, focusing on highly awarded and successful design firms, aims at understanding why these firms with highly developed internal design skills would still invest in external design. The results will be divided in three main sections that are the main arguments offered by firms for contracting external design: reputation, perspective and exposure.

1. Reputation

Firms mention that they collaborate with external designers with unique signatures that are invited to extend their very known signature to a new product for them, but not new to the firm. Apart from Case 1, and some situations in Case 2, in the other three cases, external designers are contracted mainly to perform these incremental layout innovations, which basically means change the layout of existing products that the firm developed in the past.

In all cases, firms explicitly advertise, through social media and catalogues, their collaborations with external designers. However, the question whether external designer sign physically the products (it is printed in the product "by designer x") or not is not straightforward. Two main factors impact the decision: firm's brand awareness in the market and external designer's recognition. Firms balance both factors, arriving to a solution that maximize results in the short or long run, depending on firm's strategies. For example, in Case 1, Case 3, the firms' brands are very strong in the market, so the external designers get royalties, their names are communicated in the marketing activities, but they don't sign the product itself. In Case 4, the firm's brand is not so strong in the market, so the firm often calls external designers that already have a known signature in the market. In this case the firm invites these external designers to extend their lines to other types of products, (e.g. fashion designer to homeware), and in this case the signature of the designer comes first, and the firm's

brand in second. The more famous is the external designer, the higher is the chance to sign the products. Some companies favors one strategy over the other, but they adapt based on the situation, what is the case of for example, Case 2 and Case 5. Despite the physical signature in the product, the external designers always sign the product or the product line campaign, what is communicated by the firm in all social media that they use.

We invited a painter to develop a new line of products based on some of his paintings. With his, ours and our local partner interventions we arrived to a product that at the same time respects price constrains, and respect the wishes of the painter, that in this case was the designer. So, only in this way can we use his name, and his presence in the marketing initiatives. (Case 5)

We work with a designer that is big success in UK. Based on this we talk with the designer, I mean her manager, to study the possibility to develop with her a line for home furniture (...). Therefore, we bought her signature for five years. (Case 4)

For these companies reputation encompasses two variations, the industry reputation and the design community reputation. Therefore, designers regarding their characteristics and backgrounds are contracted to enhance industry or design community reputations, or both. Industry reputation means reputation among clients (business-to-business or business-to-consumer), and direct competitors. The association with external designers helps design firms to solidify their image and positioning of innovativeness and design focus, what is a success factor in this industry. For these firms this positioning reflects a long-term strategy, where external designers play an important role, however not being the only driver. Other important drivers are the quality of the internal design team and the constant investment in innovation and design.

Design community reputation means reputation among companies and designers inside and outside a firm's specific industry. For these firms work with certain designers is a mark in their history. The more famous and recognized is the external designer, the higher is the firms' pride. Ultimately, firms' goal is to be widely recognized in the design community, possessing a distinct positioning, and being a firm that all famous designers would like to work with.

Each creative that works with us get a tree in our garden, and sometimes when I meet other designers in events or so, they came to talk with me saying that they want also to plant a tree in our garden. This type of things sets us in a position, where no other company is. (Case 1)

We work with three Pritzker Prizes; I think no other company in the world works with three Pritzker winners like we do. (Case 1)

An aspect that gives consistency to our positioning in the market as a design-focused firm is the frequent association with recognized designers. Therefore, we have a triangle around design, our internal design team, recognized designers and a constant investment in design. (...) We have an internal design team that can obviously create products, but when we call external well-recognized designers, it enhances a lot the brand. (Case 3)

2. Perspective: external designers bring different perspectives that are sources of inspiration

In this sample, firms dominantly invite designers from completely different backgrounds. These external designers are architects, landscape architects, painters, plastic artist, or even writers. In the analyzed firms, very few use designers specialized in the industry in which they operate. For example, Case 1, which is a street furniture design and manufacturing firm, widely awarded (17 design awards since 1991) only collaborate with designers from other industries such as architects, landscape architects and product designers. Case 2, is also a representative example of this trend. They develop what they call "author collections" where they invite "authors" that are architectures, plastic artists, painters and sculptors, and other artists to collaborate in their projects. Case 5 also accounted for the collaboration with a writer that created sentences to imprint in a product line. These examples illustrate this trend of collaborations with designers specialized in areas far from the firm's operating industry.

By collaborating with these external designers, firms aims at enriching their portfolios with fresh and innovative products, in order to achieve higher performance in terms of sales in close or distant markets. External designers, through their diversified backgrounds, expertise, and unique style and vision, rethink the way products are done in the industry and support firms in developing unique products. For example, in Case 5 and Case 2 external designers such as painters and plastic artists are invited to extend their famous style to the products creating a new layout, and consequently unique products with their signatures. Other examples are Case 1 and Case 3, where companies usually contract external designers to create completely new products in form, not only layout.

The fact that we have an internal design team doesn't mean that we cannot recognize that there is good design out there. (...) These designers have unique styles, very striking, which results in very innovative pieces (...) The board thinks that they (external designers) can enrich and diversify our portfolio. (Case 3)

The good authors, they imprint in their pieces a deep emotional load, and we don't understand why the pieces look so good, and this is related with the unique characteristics of the authors. (Case 1)

Firms also collaborate with external designers envisioning improved performance in distant markets, where firms have no prior or few experience. For these firms that compete in several international markets, collaboration with external designers has a double intent. On the one hand, external designers boost firms' reputation, solidifying a positioning of innovativeness and design focus on the market; and on the other hand help firms to succeed in this distant and unknown market. In this case the external designer is a local or international famous designer that helps the contractor to capture trends and stimulus of distant social-cultural contexts. This strategy boosts the success chances of the product in the foreign market.

We developed a project that was based on two exhibitions of a Norwegian painter about Antarctica for National Geographic. He made a series of paintings for this art exhibition. We and our local partner we agreed that we needed a design developed by renowned name close to the final consumer, since they are very design aware. (Case 5)

If we compete in 40 markets, we need to open our horizons in order to adapt to the new trends and absorb these influences that in other way will not be possible. (Case 5)

3. Exposure: external design is used to develop internal design skills

The role of internal designers gains relevance when external designers don't have industry knowledge. Therefore, internal designers are important actors in the product development process in making the bridge between manufacturing and the external designers, they are the ones responsible for adapting the projects specificities of the firm's industry. Though, the role of the internal team in the process is to suggest available options, helping the external designer to redesign the product, until getting to a conceivable product that meets technical and market specifications. In the end, the final product reflects the participation of both external and internal designers, with risks and responsibilities shared.

The designer develops the emotional part, and the internal team takes care of the technical details... (Case 4)

The external designers work always in collaboration with the internal design team. The industrial representatives also participate in the process. The external designers develop for different areas, so we need the support from the specialists that will manufacture the product that explain all the limitations that may emerge in the production process of such product. (Case 3)

When we see some drawings, we already know that with this design the product will be complicated to produce, so we talk with the author and convince him to redesign the product, and together we arrive to a conclusion. (Case 1)

Through the interaction with external designers, internal designers gain new perspectives and knowledge. By getting in contact with designers with different backgrounds, superior knowledge and unique visions, the internal team learns new trends, challenges the "status-quo", and re-things technologies and processes. Ultimately, this interaction between inside and outside designers will impact future design and production processes.

On the other hand, the interaction with external designers is extremely important to motivate internal designers. This is very important for the firm since the internal designers are the ones that support the daily firm activity. In this case external designers not only inspire internal teams, but also motivate them, opening their horizons and visions. Collaborating with external designers is also a way to invest in the internal design skills.

External designers challenge us, help us to adapt and to access a variety of influences that in other way will not be possible ... We need to have wide horizons, to adapt and to absorb a diversity of influences that in other way will not be possible. (Case 5)

The problem of working in one industry is that we think too much about what can be done, about the way we use to do. People that come from the outside, they are not locked like people that work in the firm. We know how much it costs to do everything... and this creates a barrier to see further. People that comes from the outside they don't know, so they propose new things, and internal people need to interpret and evaluate what can be risked and what can be adapted. This is a great advantage since it forces to develop products as designed. We say ok, we need to do that, what are the solutions. (Case 2)

In the end the product is developed by someone else, that is signed by someone, but more than 50% is done by our internal team, not a, b, or c, but by all the team, however obviously only with our team the projects are not possible. (Case 5)

DISCUSSION

The discussion comprehends three topics that deserve further reflection: reputation, perspective and exposure.

1. Reputation

The main contribution of this paper is the firm's reputation enhancement as a reason for contracting external designers. Past research presents innovativeness and freshness as the main reason for contracting external designers (Bruce and Morris, 1994). Our findings show that maybe more than innovation, companies looks for industry and design community reputation. We defined industry reputation as reputation among

clients (business-to-business or business-to-consumer) and direct competitors; and design community reputation as reputation among companies and designers inside and outside firms' specific industries. For firms, contracting external designers is a signal to the market of their focus on design and innovation, solidifying their image and positioning. This result not only challenges past research but also raises questions regarding the effectiveness and real return of this kind of strategy. Further research could focus on how much cost to build reputation, and how reputation may pay-offs the investment.

The results reveal that in all observed firms, collaborations with external designers are explicitly advertised, through marketing, social media and catalogues. However, we verified that not all designer physically sign the products ("by designer x"), this depends on the balance between firm's brand awareness and external designer's recognition. The more famous is the external designer, the higher are the chances to sign the products. The signature issue is also related with the coverage and exclusivity terms of the contract. Further research should interpret this topic in light of intellectual property literature. We believe that this will be emerging topic of interest, since external designers is a perspective gaining relevance in design management research.

The increasing concerns regarding signatures, communication, and contracts maybe linked to the fear of knowledge spillovers. Bruce and Cooper (1997) and Czarnitzki and Thorwarth (2012) have also exposed this argument. They defend that when companies collaborate with external designers the risk of crucial knowledge spillovers is high. Indeed, the signatures and the communication of the collaborations may fulfill other goals than only reputation enhancement. They are also strategies to protect the knowledge, and reduce risk of imitation from competitors by contracting the same designers. Imitation for design-centered firms is widely undesired. Therefore, the higher is the communication level, the lower is the risk of competitors imitation by collaborating with the same external designers.

2. Perspective

The results reveal that firms prefer to collaborate with designers specialized in areas far from the firm's operating industry. Since the analyzed firms are design references in their industries they may believe that designers in the industry don't have much to add

to their product portfolio that is already very innovative in the industries. Therefore they may believe that only designers specialized in other industries or with unique signatures are able to enrich their product portfolios with innovative or unique products.

The results show that firms contract external designers because they aim at diversifying their product portfolios with unique products. Their goal is to achieve higher performance in terms of sales in close or distant markets. One important remark here is the distinction between innovativeness and uniqueness. Unique products result from external designers signature extensions to new products. It means that external designers give a new layout to an existing product, therefore we do not consider these products innovative, but they are still unique. Indeed, we verified that external designers are contracted mainly to perform these layout changes in existing products, while the internal team is the one responsible for the radical innovations. This result is in contrast to the dominant literature in internal and external design. Researchers have been defending that through time internal designers may become hampered by firm's and market's standards what reduce their ability to come up with new and innovative ideas (Bruce and Cooper, 1997; Bruce and Morris, 1994; Dell'Era and Verganti, 2009; Kristensen and Lojacono, 2002). On the other hand, external designers with their unique and fresh perspectives free from firm's and market's constraints are natural sources of innovativeness and creativity (Abecassis-Moedas and Benghozi, 2012; Bruce and Cooper, 1997; Bruce and Morris; 1994; Dell'Era and Verganti, 2009; 2010). Some researchers even defend that the need for creativity and new ideas is the major driver behind external design (Czarnitzki and Thorwarth, 2012; Von Stamm, 2008). However, recently Czarnitzki and Thorwarth (2012) showed that the benefits of external design over internal design in terms of innovation are not significant when measured in terms of sales or even innovation.

The results of this paper spark again the discussion of the benefits of external designers over internal designers, and whether external designers are indeed the best option that firms with developed and awarded design skills have as a source of innovation. It may be the case that the benefits of external design may vary according to the level of internal design skills, meaning that not all firms extract the same benefits from external designers. This relationship maybe mediated by the level of development of internal design skills. Therefore, we suggest that more developed the internal design skills, the more firms use internal design for radical innovation and the more they use external

design for incremental innovation. It is important to highlight that the sampled firms are design references in their industries, what lead us assume that these practices have been helping them to achieve such positioning.

3. Exposure

Another contribution of the paper is the importance of the internal design team in the support of the external designers, mainly when they present different backgrounds.

Past literature reinforces the importance of internal designers through the collaboration process. Since internal design teams possess deep market and technical knowledge, they are more efficient in terms of problem solving, lead times and development costs in contrast with external designers (Abeccasis-Moedas and Ben Mahmoud-Jouini, 2008). However, the literature is not clear whether the benefits of external design stand or not in the absence or existence of internal teams; or even if the designer background influence the importance of internal design teams. We don't aim to answer this question due to the exploratory nature of this project, but we can indeed make some contribution. The results reveal that when external designers are specialized in an industry different from the firm's, the internal design team gains importance. In other words, the farther is the external designer background from the firm's industry, the more important is the internal design team for the success of the development and performance of the product.

Regarding the level of interaction, another contribution can be made. During the product development process, the external designer interacts with the firm's internal design team and both may co-produce or shape the design outcomes, sharing responsibilities (Millward and Lewis, 2005). Our findings show that these co-production and shared responsibilities between external and internal designers gain even more relevance when external designers possess different background from the contractor. It means that farther is the background of the external designer from the firm's industry, the higher the level of interaction.

Through the interaction with external designers, internal designers and representatives gain new perspectives on technologies and processes as well as will gain a renewed motivation. Collaborating with external designers is also a way to invest in the internal design skills. Past research defends that external designers bring complementary expertise that allows firms to continuously refresh product development methods and

approaches (Berends et al., 2011; Dell'Era and Verganti, 2010). In other words, collaborations with external designers allow for the accumulation of knowledge that can be exploited in future product development process either with external designers or with internal designers (Dell'Era and Verganti, 2010). Our results are aligned, but we still would like to add that farther is the designer background from firm's industry, more the internal team learn with the external designer.

This discussion highlights that not all external designers bring the same benefits for the firms, and that the distance between external designer background and firm's industry may influence the nature of the relationship and also benefits that firms extract from collaboration with external designer.

CONCLUSION

The current research explored the reasons for firms with internal design to contract external design. It was found that external design can be successfully combined with internal design to bring an additional signature or reputation, to bring a different industry perspective and finally to bring exposure to the internal design teams. More than opposing the benefits of internal and external design like in prior literature, we conclude that the two are complementary and bring different benefits to the firm.

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Tables and Appendix

Table 1

Cases	Industry	Market	Number of employees	Number of designers	Design Awards	Revenues (M €)	Interviewee
1	Street furniture	B to B	25	3	Yes	1.1	CEO (in charge of design) New Product Development Director
2	Ceramics tiles	B to C	318	3	Yes	39	Marketing Director Head of Design
3	China tableware	B to C	520	5	No	15.3	New Product Development Director Designer
4	China, home linen, glass, clothing	B to B	36	2	No	48	New Product Development Director Head of Design
5	China tableware	B to C	73	2	No	2.7	Sales and Marketing Director Head of Design

Table I: List and characteristics of the cases

Appendix A

Interview protocol

- 1. What is your position in the company?
- 2. How long you work for the company
- 3. What is the story of the company?
- 4. Which are the main company products/services?
- 5. What is the structure of the company?
- 6. How many employees, and how many internal designers?
- 7. How is the design team organized?
- 8. Do you contract external designers? How often?
- 9. Can you describe a typical product development process?
- 10. Can you talk about a specific project? (3 to 4 projects with and without external designers) (goals, product characteristics, process, intervenient and their responsibilities, why external designers, why that specific designer)?