



A new structured interview approach applied to the perception of managers about the role of Design in business

Schoenacher, Rodrigo, School of Industrial Design, Brazil¹

Assanti, Virginia, School of Industrial Design, Brazil²

Guimarães, Marcelo, School of Industrial Design, Brazil³

Freitas, Sydney F. de, School of Industrial Design, Brazil⁴

SUMMARY

This article exposes a new approach to using structured interviews. The object of study is the understanding that entrepreneurs have about the role of design as an integral element of projects. The interview technique is detailed and its application is exemplified in three different studies. The first deals with the use of design in footwear production; the second is related to retail management *omnichannel*; the third aims to identify the understanding of design by business entrepreneurs *scale-ups*. The interviews were carried out in the metropolitan region of the State of Rio de Janeiro. The technique used allowed the identification of three main categories of design management. The first included the profiles of managers who understand design as an activity performed under the guidance of an external agent, with an operational profile and limited creative autonomy; the second gathers profiles of managers who describe design as an activity developed by specialized professionals with creative autonomy; and the third is characterized by the vision of design with a high degree of autonomy, developing solutions focused on the customer's needs. The categories include entrepreneurs who see in the *design thinking* an essential work tool for problem solving and innovation. The study portrays the different views of design from the point of view of business managers and the relevance of the structured technique used in exploring the field of design related to management. The article is organized to facilitate discussions of both the technique and the object of investigation.

Keywords: Structured Interviews, Business Management, Design Management, Entrepreneurship, Omnichannel, Footwear.

INTRODUCTION

The interview is considered the most important technique in qualitative research. Gil (2002) argues that it is for the social sciences what the microscope is for microbiology. In this work, the structured interview was used with a new approach that considers the objectives, justifications and theoretical foundations as essential elements for the effectiveness and reliability of the results. The clarification of the criteria that delimit the population and the sample are also considered essential.

¹ rspnet@yahoo.com.br; ORCID 0000-0003-3566-9532

² virginiaassanti@gmail.com; ORCID 0000-0001-7481-6254

³ maguimaraes@gmail.com; ORCID 0000-0002-6630-7545

⁴ sydneydefreitas@gmail.com; ORCID 0000-0002-4635-2170

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This article exemplifies its application in the investigation of the knowledge that managers have in the field of design. The choice of managers is justified as the role of design in companies in recent years has evolved from an operational tool to a strategic relationship to the point of contributing to the modeling of all the processes that a business needs for its existence, continuity and profitability. (Mozota; Klöpsch; Costa, 2011). This evolution is due, in part, to the profile of managers and their understanding of the role of design as an integral element of projects and products. Considering that their opinions, reflections and perceptions are essential for understanding the processes, it is extremely important to listen to their voices.

The work was organized in two phases. In the first one, 22 interviews were carried out with managers, in three case studies. The sample was selected from the universe of small and medium-sized companies in the state of Rio de Janeiro. In the second phase, 5 exploratory interviews were carried out with researchers who used the same interview technique with other populations.

The objective of this article is to present elements of how this new approach to the use of interviews in academic research related to the management of small and medium-sized companies can help to better understand the role of design as a tool for constant innovation in these environments. Additionally, the study intends to bring contributions to managers and researchers in the use of interviewing techniques to conduct their studies and assist in making more coherent and correct decisions, and to help in the search for solutions in line with their needs.

2. THEORETICAL FOUNDATION

There are two aspects to this article: a) studies that deal with the relationship and understanding that business managers have with themes related to Design; and b) concepts that support the choice of the structured interview technique used in this study.

2.1. STUDIES ON THE RELATIONSHIP OF MANAGERS WITH DESIGN

Mozota, Klöpsch et al (2011) recall that design became a profession in the USA after the 1929 crisis, a direct result of the perception of entrepreneurs that it would be necessary to offer products with competitive advantages. Despite this, the design still took a long time to be understood as a competitive differentiator by the market in general. Bonsiepe (1997) pointed out that, if in the past talking about the importance of design in companies was an eccentricity, in the last two decades not talking about design started to reveal a lack of knowledge of reality. Since then, the academic and business communities have developed studies in order to better understand this relationship between design and management.

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The process that takes place in the relationship between business managers and design involves at least four categories: entrepreneur, designer, consumer and product (Löbach, 2001). The present study seeks to shed light on the relationship between the entrepreneur, or his direct representative – the manager –, with the designer or with related activities within the companies.

This relationship is evidenced in some studies. Sheppard et al. (2018) found that studies conducted by consultancies provide evidence that design offers a competitive edge for companies. Along the same lines, the Danish Design Center developed in 2001 the Escada do Design concept, which represents four levels of design use by companies: (1) they do not use design; (2) design as an aesthetic differential; (3) design as a process; and (4) design as innovation (Kretzschmar, 2003).

This concept is consistent with that proposed by Bonsiepe (1997), in which companies have 5 alternatives for using design as a differentiating tool: (I) doing nothing; (II) copy an existing design; (III) subjecting an existing product to the redesign process, with functional and aesthetic improvements or simplifying production; (IV) acquire a license to produce a design, with access to know-how; and, finally, (V) develop a new design, internally or with the support of an external consultancy.

Zózimo (2018) argues that no practical result for the business will be obtained through innovation without Design Thinking. This is related to the issue of creating and supporting a design culture within the organization and at the same time gaining knowledge to put creative thinking into action. However, not all design-related activities are carried out by properly trained professionals. Gorb and Dumas (1987) evidence the existence of silent design, a definition coined to describe design activities carried out by professionals who have no training in the area.

Design practices allow organizations to develop approaches that innovate their products, services and promote a new experience for their customers. This transformative force is perceived in the organization's business when it creates meaning and emotional experience in the eyes of consumers. That is why design has become an important skill in companies (Zózimo, 2018). The designer has knowledge of important techniques for the construction, monitoring and maintenance of the strategy. It ensures that the project promotes a satisfactory experience for the consumer, as it is based on a user-centered design perspective (Norman, 2013).

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2.2. STRUCTURED INTERVIEW WITH MANAGERS

The present study aims to cover an area not covered by the consulted bibliography, which is to understand the relationship between management and design from the speech of the managers themselves. Aiming at this understanding, a structured interview was chosen so that managers could expose their experiences and opinions.

Researchers working with qualitative research use a variety of techniques to collect information by talking directly to people and evaluating how they behave and act within their context (Creswell, 2007). The most used techniques are Document Analysis, Observation, Questionnaire and Interview. The application of interview techniques is justified when trying to identify, among other factors, personal data and levels of information, opinions or expectations (Mucchielli, 1978). Along the same lines, Flick (2009, p. 153) understands that “the main objective of the interview is to reveal knowledge so that it can be expressed in the form of answers, being easily interpreted”. The focus of attention is on the subjective, that is, on the interviewee's opinion, on their perception; or on privileged information, something that only the interviewee knows or has witnessed. The structuring of the interview applied in this work differs from other methods due to its foundation. Its main approach is not organized in closed questions, but in its purpose translated by the objective, the justification and the theoretical foundation.

3. STRUCTURED INTERVIEW METHOD

The bibliography dedicated to qualitative research presents several interview methods and their applications. This section presents the description of the technique called structured interview. According to Yin (2016, p. 118), “all interviews involve interaction between an interviewer and a participant (or interviewee). Structured interviews carefully script this interaction.” It is important to emphasize that “in structured interviews, the formulation of the questions assumes a methodical character” (Gil, 1999, p. 124).

The main aspect of the structured interview technique described here is its support on three pillars: objective, justification and theoretical foundation. The three must be applied at all stages, which must be in line with the objective and justification of the research they are part of. This feature intends to provide validity to the answers, connecting the research, the interview technique and each question.

Marconi and Lakatos (1996, p. 88) emphasize that the answers must meet the requirements “validity, relevance, specificity and clarity, area coverage, depth and extension”. The attribution of the objective, justification and theoretical foundation pillars provides a cohesive

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script that favors the analysis and categorization of the information obtained in the field. Thus, it is expected to answer the main research question, contributing to the rigor in the results and the credibility of the information of the study. According to Santos (2000) there must be prior planning for any type of interview, in addition to care to ensure that the data collected is technically recorded and without defects.

Objective is understood as the precise point that the researcher wants to obtain with a given item, that is, what development will be generated from the information arising from the investigation. The definition of objectives is an activity that is very often disregarded, but of great importance, as it is a fundamental activity for the elaboration of the questions that will be used in the data collection instrument (Cervo; Bervian, 1996)

Justification is characterized by a fact – or evidence – verified in the field, which is important to investigate. This fact can be practical or theoretical. It denotes, therefore, according to Lakatos and Marconi (1992, p. 103), the reason why that investigation is relevant, contextualizing the main research question and highlighting its importance. The justification may be based on observations that the researcher makes and on the experiences he or she has.

Theoretical foundation, based on theses, dissertations, books and articles, is necessary to support the justifications and objectives defined above. Marconi and Lakatos (2003) that “all research implies the collection of data from various sources, whatever the methods or techniques used”, and they report that, according to Manzo (1971 apud Marconi; Lakatos, 2003), bibliography is a source for contextualization, investigation and solving problems not yet fully settled, in addition to those already known.

The general guidelines for defining the population, qualifying the sample, building the form and agenda, and the importance of carrying out pilot tests are described below. Important aspects for conducting the interviews and analyzing the responses are also listed.

According to Vieira (2019) **population** is the total set of people or groups that meet common criteria, related to the research question, about which the researcher wants to obtain information. Considering that companies can be managed by the partners themselves – entrepreneurs – or by professionals hired especially for this purpose – managers –, it was decided to consider both profiles in this study. The technique described in this article was applied to three distinct groups of managers: founders of Scale-ups companies, footwear producers and managers specialized in digital retail. The main criterion in common is the management role in their respective companies and the performance within the state of Rio de Janeiro. Each is detailed in the case studies described below.

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The sample is a restricted but representative part of the population set, as “a subset of units drawn from a population”(Vieira, 2019, p. 13). The selection of participants must be carried out following established criteria and guided according to the objective and justification of the research. According to Flick (2009), in a study with interviews, sampling is related to the decision of who to interview and their groups of origin. Also according to this author, “decisions regarding sampling always oscillate between the objectives of covering a field as broadly as possible and of carrying out analyzes with the greatest possible depth” (Flick, 2009, p. 126).

In each case study there is a main question that constitutes the guiding question of the investigation. It is considered that the main question of the structured interview is equivalent to the role of the research question, or scientific problem, which, according to Gil (2002, p. 23), is an “unresolved question that is an object of discussion, in any domain of knowledge”. Thus, the questions on the agenda are formulated so that the main question can be answered, without it being one of the present questions.

The guidelines were elaborated in detail, containing the questions exactly as they were made in the interviews, helping to guide the behavior of the interviewer. Questions that allow answers such as “yes” or “no” were avoided because they made it difficult to analyze and categorize the information. According to Yin (2016, p. 24), “without good questions, you run the risk of collecting a lot of irrelevant information and at the same time not collecting crucial information”.

It is worth emphasizing that “the structured interview is developed from a fixed list of questions, whose order and wording remain invariable for all interviewees” (Gil, 1999, p. 121). Thus, the agenda is crucial for scripting the interview, preventing the interviewer from getting carried away by information that seems interesting to him, but which may not actually be relevant to the research. Questions answered in advance must be redone according to the agenda.

The guidelines developed in the three case studies have open questions, which the interviewees are free to answer. The set of objective, justification and theoretical foundation of each question aligned with the main research question guarantees its relevance and adequacy, playing a role equivalent to that of Ulrich's list (1999), justifying the preference for open questions in this study.

It is recommended to carry out a pilot test before starting the interviews. According to Flick (2009, p. 344), “With regard to interview data, reliability can be increased by conducting interview training with interviewers and checking interview guides or questions. generative in test interviews or after the first interview”.

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The objective of the pilot test is to identify possible points to be adjusted in the agenda. The test can be performed with other researchers, or with a sample of the population. Interviews carried out as a test with this sample can only be considered in the research if there is no type of change or consecutive adjustment. It is added that it is important that the participants are aware that this is a test (Yin, 2016). In the three cases reported here, pilot tests were carried out with researchers, making it possible to identify adjustments in the language and in the sequence of the questions.

In addition to the adjustments identified in the pilot test, there are recommended aspects for conducting interviews, such as good practices and postures indicated by the bibliography, which the researcher-interviewer should adopt. Gil (1999, p. 121) recalls that “interviews have traditionally been carried out face to face. This has been the most considered feature to distinguish it from the questionnaire.”

Conducting interviews involves “recruiting participants and finding places to do the interviews. The desired locations are readily convenient spaces for each participant” (Yin, 2016, p. 28). Therefore, it is indicated that the environment chosen for the interviews offers favorable conditions and can be reasonably controlled. It was found that the general suitability of accommodation can be strategic to obtain a satisfactory result, as recommended by Sampieri (2013, p. 431).

When choosing a location, you should observe the temperature, lighting, ambient sounds and suitable furniture. The presence and movement of other people, as well as the possibility of interruptions, must be considered. This set of prior care is not always enough to prevent any complications from occurring, but it helps to promote a suitable environment. Any eventuality that could cause discomfort to the interviewee could alter their behavior and their willingness to formulate the answers, which invariably interfere with the progress of the interview. It is important to emphasize that all interviews took place preferably in the same place, or in the same type of place.

According to Yin (2016, p. 120), some practices are recommended for the success of the interview, such as speaking moderately, being non-directive, remaining neutral, establishing a good relationship, using a protocol as a guide – the agenda fulfills this function – , maintain scripted behavior and conduct to ensure uniformity, be friendly but not flattering, and keep constantly analyzing what happens during the interview.

Some additional precautions recommended are: scheduling in advance, maintaining cordial contact, being empathetic and friendly, showing gratitude for the participant's availability, promoting a relaxed and comfortable atmosphere, using colloquial language and taking

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notes based on your perceptions after each interview. Flick (2009) specifically addresses this issue from Lofland and Lofland (1984), including the recommendation that the time allocated to this activity be controlled and equal for both stages: observation and notes.

Finally, it is necessary to provide a free and informed consent form. It describes the interview procedures and other pertinent information, such as ensuring confidentiality and anonymity. In some situations, prior authorization from an institutional ethics committee is required, as discussed by Yin (2016, p. 38), “every study with human participants, qualitative or not, requires prior approval from an institutional ethics committee (CIE) ”.

In the interviews, the transcript of the dialogue and the interviewer's notes are the textual base that will allow the analysis. Gil (1999, p. 125) explains that “the only way to accurately reproduce the answers is to record them during the interview, by means of notes or with the use of a tape recorder” and recommends recording the interviewee's attitudes and intonation, when relevant. .

Interpretation takes place in several stages. The first is the elaboration of a brief description of each case containing the following elements: statement, brief description of the interviewee and central topics mentioned. This procedure helps to create a system of categories for the single case (Flick, 2009). For Creswell (2007, p. 1940), “the process of data analysis consists of extracting meaning from text and image data” and “involves preparing the data for analysis, conducting different analyses, delving deeper and deeper into understanding of the data, to represent the data, and to make an interpretation of the broader meaning of the data”, which demands the transcription of the interviews and their reading, as well as the observations gathered in the field notes.

Coding begins with analyzing the data, organizing the information into groups and making sense of those groups, and “this involves taking data into text or images, segmenting the sentences (or paragraphs), or images into categories, and labeling those categories with a term, usually based on the participant's actual language” (Creswell, 2007, p. 196).

From the gathering of information into topics, and the condensation of similar topics, it is possible to delimit categories. The number of categories should be reduced, grouping similar topics together, forming between 5 and 7 categories in total (Creswell, 2007). Also according to Creswell (2007), the reflection on the data can occur comparing them with the information already existing in the literature, verifying the convergence or the divergence between the obtained data and the consulted sources.

Still, the analysis or interpretation of the answers has two distinct objectives. The first consists of revealing and exposing utterances, while the second seeks to reduce the original

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text through categorization, for example (Flick, 2009). The study described in this report fits the second case mentioned and the thematic coding technique described by Flick (2009) was chosen to analyze the responses collected during the interviews.

This technique is premised on the use of a data collection method that seeks to ensure comparability through the definition of topics, but remains open to views related to them (Flick, 2009). As mentioned earlier, the structured interview technique offers favorable conditions for the application of this type of text interpretation technique, as it standardizes data collection using a standardized agenda for all interviewees.

3.1. CASE STUDY 1: HOW DESIGN IS PRESENT IN FOOTWEAR PRODUCTION IN RJ

This case is intended to map design as a project activity present in footwear production units in the metropolitan region of the State of Rio de Janeiro. It is justified by the relevant presence of footwear companies in the region, as perceived in the exploratory phase, where 46 footwear producers were identified who operate under different business formats. More than twenty shoe brands from Rio de Janeiro were also identified, in addition to clothing brands that have shoes in their collections, both outsourcing their production outside the state.

As disclosed by the Footwear Industry Brazil 2019 Sectorial Report, Brazil is the fourth world producer of footwear, as well as the fourth consumer market in number of pairs. Among exporters, it occupies only the 11th position, which shows that national production is geared towards domestic consumption. The Report is prepared by the Brazilian Association of Footwear Industries (Abicalçados, 2019), containing strategic information about the sector in Brazil, contextualizing it with the domestic and foreign market.

The population comprises all shoe-producing entrepreneurs in the region. The form contains nine criteria that qualify the sample, all with their respective objectives, justifications and theoretical foundations: (1) name of the owner, telephone and e-mail; (2) age; (3) naturalness; (4) current residence; (5) education and profession (or main current professional activity); (6) trade name, Corporate Name, CNPJ, address of the place of production; (7) production format, including the level of knowledge and technical skills; (8) date and context of creation of each business; (9) main customer characteristics.

The six interviewees are between 50 and 78 years old, and started their activities as family businesses, maintaining the current format, except for one. The businesses are formalized, under current legislation, being the main occupation and source of income for their owners.

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None of the interviewees has training in design or management. They got to know the craft and got better according to the performance of their daily activities. The business emerged spontaneously from the identification of an opportunity, usually presented by a friend or family member who already had some experience with footwear. With the exception of one of the participants, previous experience in retail was identified as a common characteristic. The businesses have at least 15 and at most 60 years of operation, with some changes and adjustments to their original characteristics to adapt to market changes.

In order to find out how the interviewees behave in a given situation, and how they “derive their own understanding of some behavior” (Yin, 2016 p.117), questions were asked about two aspects of Design: abstract and concrete (Cardoso, 2004). The definitions of the term design encompass the abstract and concrete aspects. Regarding the product design elements, it will be considered that within the scope of the concrete are the production characteristics, as well as the choice of shapes, colors, materials, textures and ergonomics. The field of abstraction includes semiotics and the concept, including the identification of the public of interest. Thus, the agenda contains six questions that provide the answer to the research question: “How is design present in footwear production in the metropolitan region of the state of Rio de Janeiro?”.

The questions addressed the following aspects: (1) seasonality and timelessness; (2) ideation; (3) production steps; (4) material quality; (5) product definition; and (6) differentiation. As in the form, all have objective, justification and theoretical foundation, aligned with the objective and general justifications of the research. The six interviews were carried out with the business owners at the place where the production takes place.

Based on the answers, the information on the form and on the agenda was analyzed, identifying converging points that constitute the categories for analysis. The coding sought to attribute concepts to the information, so “the uniqueness of the original field actions should not be ignored, but items that seem essentially similar will receive the same code” (Yin, 2016, p. 166).

The following categories were identified: 1) Industrial production, with an empirical and intuitive process, on demand for companies (B2B), without critical reflection; 2) Craft production, empirical and intuitive process, on demand for consumers (B2C), with critical reflection; 3) Mixed production, empirical and intuitive process, with an offer for consumers (B2C), based on a critical reflection.

Two participants attend category 1, which is configured as industrial production, which can be scaled, whether in series or not. The product design process is empirical and intuitive, REGMPE, Brasil-BR, V.7, Nº1, p. 113-136, Jan./Apr.2022 www.revistas.editoraenterprising.net

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taking place on demand business-to-business (B2B), in which the customer is a company, being mainly brands that develop their products and outsource their production. There is no critical reflection on the product, that is, the shoe models are developed and produced mostly according to the customer's wishes.

Three participants attend the second category, which is configured as artisanal production, considered the one that results in unique products, obtained through craft carried out with mastery and technical singularity, obtaining a relative refinement of the product with high added value. Its format is business-to-consumer (B2C), in which the customer is the final consumer. In this case, a critical reflection can already be perceived, since the wishes of the customers are evaluated and the models are adjusted according to ergonomic aspects and technical availability, mainly.

One respondent meets the third category. Handcrafts a small portion of its production. But most of the shoes produced are outsourced to local producers belonging to the first category. It focuses on the B2C format, its main customer being the final consumer, with a profile of the brand's public. The main difference consists in the fact that the products are created, produced and offered to customers, and are not created to order, as in the case of the first two categories.

From the identification of three main categories, it was verified that, despite the similarities between the business formats, there are predominant characteristics that are diverse. Thus, the sector presents itself as heterogeneous and diversified in terms of public, product, place, materials, processes and logistics.

3.2. CASE STUDY 2: HOW E-COMMERCE PROFESSIONALS MANAGE SALES CHANNELS UNDER THE OMNICHANNEL MODEL

Piotrowicz and Cuthbertson (2014) define that the concept of omnichannel retail is perceived as an evolution of the multi-channel model. While multi-channel implies a division between the physical store and the online store, omnichannel customers move freely between the online store, mobile devices and physical store, all within a single process. The purchase journey provides a unified and seamless experience for the customer, regardless of the channels used. As the channels are managed together, the interaction perceived by the consumer is not with the channel, but with the brand.

In order to model an overview of the understanding, management, planning and operationalization of the omnichannel model by digital marketing and e-commerce professionals in

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clothing retail, a structured interview was used. It is relevant to identify the degree of knowledge of specialists in the area and the level of understanding, difficulties encountered during the process and the differences between market practices and academic literature.

The sample consisted of six e-commerce specialists from brands that had their sales channels under the omnichannel model at any stage of implementation. In order to minimize any discomfort, it was necessary, in addition to the use of the Free and Informed Consent Term – to explain to professionals about the qualitative nature of the research, that the researcher was not interested in information about sales figures, results or investments of the company, but about information related to perception.

Of the six specialists that make up the sample, five are managers and one is an e-commerce analyst. The professionals represented five women's apparel retail brands and one handbag and accessories brand. The interviews were conducted between May 23 and July 3, 2019 and lasted an average of 23 minutes. All interviews were audio recorded and carried out in the metropolitan region of Rio de Janeiro.

The analysis of the transcribed answers allowed the organization into four categories that relate to the design characteristics of omnichannel retail: 1) Project integrating sales channels based on consumer behavior; 2) Project only integrating sales channels; 3) Project considering the designer as an operational professional; 4) Project considering the designer as a strategic professional.

Five of the respondents defined the concept of omnichannel as a customer experience. This corroborates the definition given by Juaneda-Ayensa et al. (2016) that the number of channels offered by the brand changed consumer behavior, which fostered a strategy allowing real interaction of customers who buy in any channel, anywhere at any time, thus providing a unique shopping experience that breaks down barriers between channels.

With regard to consumer behavior, Bell, Gallino and Moreno (2015) report that customers are increasingly omnichannel – implementing offline and online channels – in their thoughts and behaviors. From this phenomenon, companies have developed a customer-centric framework to offer these strategies based on empirical research. Traditional or offline, retailers need to leverage the online channel not only as an end in itself, but also as a place to deliver prices, inventories, and other information desired by the customer.

Four of the interviewees informed that they do not practice, in their brands, any type of technique or methodology to understand the knowledge of their own customer. The focus on the operation and integration of systems was reported to justify the lack of attention to this

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important issue. Only interviewee “A” reported the management of consumer behavior, in a structured way, validating the studies by Van Delft (2013).

Five managers perceived the importance of the designer in terms of the integration of the brands' sales channels as fundamental, but the designer is seen only as a professional with operational characteristics. They reported that these professionals need to be aware of the languages of each channel they are working on, the aesthetics and usability, they need to communicate the integration of the channels in a visual way and transpose the brand objectives to the client in the “best possible way”.

The first association that is made to design is the visual part: images, graphics and colors. However, he is much more than that. According to Sebrae (2016), the design of a website, and especially an e-commerce website, should generally consider the ease with which the user performs the desired actions on each page of the portal and should provide the user with completing the purchase easily and quickly by going through the necessary steps with as few distractions as possible.

In this sense, design plays an important role – both strategic and tactical – in the overall process of developing a company's portal. In the strategic sphere, it is crucial to know the target audience, the competition (direct and indirect) and the characteristics of the offered product/service that facilitate or become barriers to online sales. It is this knowledge that will determine the company's positioning on the web and which, in design, will be translated as elements of the digital environment.

3.3. CASE STUDY 3: HOW THE FOUNDING ENTREPRENEURS OF SCALE-UPS UNDERSTAND THE TERM DESIGN

The objective defined for this case was to identify how the founding entrepreneurs of Scale-ups in the state of Rio de Janeiro understand the term design. The justification is that companies that apply design more strategically tend to be larger and more competitive than those in which design is used only incidentally or with a strictly aesthetic focus (Kretschmar, 2003).

The target audience is entrepreneurs from high-growth companies, more specifically Scale-ups, in the state of Rio de Janeiro. High growth companies (HCS) are those that grow at or above a certain rate for an intensive and observable period. What differentiates a Scale-up company from other EACs is its ability to increase its revenues at a faster rate than its expenses, increasing its scale (Monteiro, 2017).

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Brazil has around 25 million entrepreneurs (Sebrae, 2016), and around five thousand EACs in the state of Rio de Janeiro, which represents less than 1% of the total number of companies in the region. The state capital concentrates most (51.57%) and most are small companies (56.4%). In Brazil, they generated around 45% of new jobs in 2014 (Sebrae RJ, 2015).

Aiming, therefore, to identify how they understand the concept of Design, ten entrepreneurs who participated in the founding of Scale-up companies were interviewed. All participated in one of the editions of the Scaleup Rio program organized by Sebrae-RJ. Scaleup Rio is “a program to accelerate the growth of businesses with great potential, led by entrepreneurs capable of being the next great examples of Brazilian entrepreneurship” (Sebrae-RJ, 2017).

The interview agenda, including the form and questions, underwent two pilot tests. Both made it possible to identify necessary adjustments in the interview agenda before applying it to the selected sample. The final interview agenda, containing objective, justification and theoretical foundation for each of its questions, consisted of five questions in the form and seven questions directly related to the main theme. Six interviews were conducted via Skype (with audio and video), two were conducted in person and two by telephone. All recorded in full.

The form data generated four criteria to describe the sample: age of the entrepreneur; academic education; previous experience; and business segment of the company. The theoretical basis for each of these criteria was duly detailed prior to the interviews. Of the ten respondents, two are under thirty years old, four are over fifty years old, and four are between thirty and fifty years old. Regarding training, there was a concentration (5 of the 10 interviewees) in undergraduate or graduate courses focused on business management, such as Administration, Accounting Sciences, MBAs and the like. Their previous experience focused on careers as an executive or consultant (three interviewees) and on entrepreneurs with no previous professional experience (another three interviewees). Finally,

After applying the technique proposed by Flick (2009) to analyze the responses, it was possible to organize them into three distinct categories: 1) Design subordinated to another discipline, 2) Design as a tool to improve UX and 3) Design as an innovation process.

The first category, Design subordinated to another discipline, is characterized by a subordination of design to other disciplines such as marketing and architecture. The designer, in this case, is seen as part of a broader, multidisciplinary group, almost always led by a marketing professional or an architect. In all cases, the design is limited to the field of graphic design.

In the second category, Design as a tool to improve UX, characterized by the intensive use of user interface and user experience techniques (UI and UX, respectively), the subordination of design to other disciplines disappears and the designer starts to gain more prominence.

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Even so, in this category, the view persists that other professionals can act as designers. However, unlike the previous category, it is clear that the activity belongs to a designer, but that it is being performed by another type of professional.

In the third and last category, Design as an innovation process, design gains more diffuse airs and starts to permeate various activities and different areas of the company. In addition to the more tooling aspects found in the previous categories, the design incorporates new contours and becomes a broader concept. Respondents who make up this category more than once cite “the designer's way of thinking” as something important for solving problems. The already very popular concept of design thinking (Liedtka, 2018) is cited more than once as something that helps to solve any type of problem within the company that is directly related to the customer.

The identified categories, although distinct, are not antagonistic. This becomes clear when, for example, the presence of graphic design in the creation of advertising pieces is made explicit in all categories. There is a certain similarity between the categories identified in this study with those in the Design Staircase and the Alpay Er scale (Szpiz, 2016).

Some points raised are in line with the theoretical foundation. This is the case of the age of the entrepreneurs, with a clear predominance of people over thirty years old and, even, with a concentration above fifty years old. Graphic design and UX design were the concepts most frequently presented by respondents. The term design appears both as an attribute and as a work process. In both cases, it is seen as something positive, although in the first situation (as an attribute) it is seen as a consequence and in the other, as a form of work.

Other points diverge from those indicated in the theoretical foundation, such as the concept of silent design (Gorb; Dumas, 1987). It appears that despite being present, the concepts described by the interviewees are only close to those offered by the authors in category 1. In the case of category 2, although the design can be carried out by another professional, there is a clear view that the role in this case is up to the designer. In category 3, design transcends the role of the designer and starts to be seen as a way of thinking.

4. DISCUSSION

This section of the article is organized into two parts. The first deals with the discussion of the results found in each of the case studies and a consolidated analysis of the responses. The second part of the discussion focuses on analyzing the application of the structured interview technique from the point of view of the authors and other researchers who applied the same technique in different situations.

4.1. RESULTS OF CASE STUDIES

Based on the categorization presented in each of the case studies, a new analysis was carried out in order to identify commonalities in the categories and to help answer the main question of this study: how managers relate to different aspects regarding design. This new round made it possible to organize the previous categories into three new ones, which summarize the views found in the case studies (Chart 1).

The first category included the profiles of managers who understand design as an activity performed under the guidance of an external agent, with an operational profile and limited creative autonomy. It includes shoe producers whose process of developing new products is empirical, intuitive and uncritical, and is based only on customer demands. Also in here are e-commerce managers who design the omnichannel experience just by integrating channels – with designers working with an operational profile – and entrepreneurs who understand design as an activity subordinated to another discipline, such as marketing and architecture.

Table 1
Final categories on how managers perceive design

	Category 1	Category 2	Category 3
Description	Design as an activity performed under the guidance of an external agent, with an operational profile and limited creative autonomy.	Design as an activity developed by specialized professionals with creative autonomy.	Design has a high degree of autonomy and must develop solutions focused on customer needs.
case 1	Industrial production, empirical and intuitive process, on demand for companies (B2B), without critical reflection.	Artisanal production, empirical and intuitive process, on demand for consumers (B2C), with critical reflection.	Mixed production, empirical and intuitive process, with an offer for consumers (B2C), with critical reflection.
case 2	Project considering the designer as a strategic professional. Project integrating sales channels based on consumer behavior.	Designer with a strategic profile in the project.	Management that designs integrating channels based on customer behavior.
case 3	Design subordinate to another discipline.	Design as a tool to improve UX.	Design as an innovation process.

Regarding the theoretical foundation, this category has similarities with the second level of the Design Staircase (design as an aesthetic differential) and with alternatives II and III

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proposed by Bonsiepe (1997), described, respectively, as copying an existing design and submitting an existing product to the redesign process, with functional, aesthetic improvements or simplifying production. In the case of shoe producers that fall into this category, there are doubts about whether there is a design process or whether it operates only as a producer of projects sent by customers. In this case, they would be framed in step 1 of the Design Ladder and in alternative I proposed by Bonsiepe (1997).

The second category includes profiles of managers who describe design as an activity developed by specialized professionals with creative autonomy. In it, the role of design professionals in omnichannel projects should be more strategic and not limited to formal and aesthetic aspects. This also includes new footwear projects in which the customer has influence in the creative process, but there is room for contributions and a critical view of the company that produces the footwear. This creative autonomy is also present in the vision of entrepreneurs who hire professionals to develop users' experience in their products or services.

In this category, design is seen as a work process relevant to the business. The relationship between manager and designer is similar to that proposed by Löbach (2001), where the design professional is responsible for proposing solutions to meet customer needs, but limited to product or communication aspects. The process is limited to information about the customer's need provided by another agent. It is equivalent to step 3 of the Design Ladder, in which design works as a work process.

In the third category, characterized by the view that design has a high degree of autonomy and must develop solutions focused on customer needs, there are entrepreneurs who see design thinking as an essential work tool for problem solving and innovation. This category is also illustrated by managers who design their e-commerce solutions with a focus on customer behavior, footwear producers who create their products based on market and customer information. In these cases, even with a specific demand, managers understand that the design is free to develop solutions as long as they are based on customer behavior and consumption information.

In this category, managers perceive design as a way of solving problems. It is not limited to the development of products or services, but the identification of solutions to improve the customer experience. In agreement with Zózimo (2018), innovation is the result of an integration of Design Thinking with a reflection on the business model, even if tacitly. It would be the equivalent of step 4 of the Design Ladder, where design is equivalent to innovation and, as described by Norman (2013), it must ensure that the project promotes a satisfactory experience for the consumer.

4.2. ASSESSMENT OF THE STRUCTURED INTERVIEW TECHNIQUE

In addition to the direct results of the interviews in each of the case studies, an evaluation of the technique applied in this study was carried out. The evaluation was not limited to the authors' perceptions regarding the technique. Exploratory interviews were conducted with five researchers who used the same technique in other studies. The objective of these interviews was to complement the authors' view of the technique, its advantages and disadvantages, with external perceptions from other researchers.

The main advantage of the technique, indicated by all researchers, is the ease when analyzing and consolidating the answers, arranging them in groups, in successive agglutinations, according to the categorization indicated by Creswell (2007). Since each of the questions has a theoretical foundation, it is easier to compare the sample's answers with what is found in the bibliography related to the topic. Another advantage, mentioned by two researchers, is that the systematization offered by the technique reduces the subjectivity inherent to qualitative research, confirming what Yin (2016 p. 23) has exposed, who suggests that researchers must remain attentive to the sub-lines and intentions of respondents to carry out field work.

In the case studies, it was possible to analyze each item of the form and the agenda from its objective and justification, comparing them with the answers obtained. The analysis took place primarily by verifying the aspects that were in line with the type of information that was desired to be obtained, as well as the unpublished information that eventually emerged from the responses.

Two other advantages were presented by at least one researcher. The first is the possibility that the technique offers to capture both the personal and professional views of the interviewee, not restricting it to just one or another facet of the interviewee. This can be corroborated by Yin (2017, p. 120) when exposing that qualitative research seeks to “represent a complex social world from the perspective of a participant”. The second is the ease with which the interviews are applied. The script defined by the agenda offers more security to the interviewer, as described in the bibliography.

The researchers also reported some disadvantages. The difficulty in preserving the direct relationship between the purpose of the interviews and the questions was reported by two of them. Some of the questions initially formulated were relevant to the research in general, but were not within the specific objective of those interviews. Both reported that they managed to do it, but only after several adjustments. Another issue that also appeared on two occasions was the time needed to build the agenda. The process proved to be laborious and the questions

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had to be reformulated several times until they reached an acceptable format. In this sense, one of the specific difficulties was the fact that the questions cannot allow the respondent to simply answer yes or no.

The difficulty of scheduling the interviews to be carried out in person was also a point addressed. Finally, one of the interviewees said that the technique does not clearly provide a way to record responses that were not originally provided for in the agenda.

All researchers offered recommendations for improvements to the technique. Two of them reinforced the importance of carrying out pilot tests before departing to interview the sample. Another recommendation made by one of the researchers was the importance of having a clear view of the research as a whole before setting up the interview agenda, helping to clearly define the objective and facilitating the construction of the agenda. Conducting exploratory interviews before the construction of the agenda also emerged as a recommendation to facilitate the alignment of the agenda with the objective. The last recommendation offered by one of the researchers is the importance of putting the interviewee at ease so that he can speak openly about the topic being asked.

5. CONCLUSION

The clarity of the results found in each of the case studies and the ease of comparing them with the theoretical foundation indicate the suitability of the interview technique for this type of research, subject to the due limitations of the study. The structured interviews applied in this study were able to expose characteristics of managers' thoughts on design in three categories. One group understands design as an activity performed under the guidance of an external agent, with an operational profile and limited creative autonomy. Another understands design as an activity developed by specialized professionals with creative autonomy. The third group believes that design should have a high degree of autonomy and responsibility to develop solutions focused on customer needs.

These categories encourage discussion about the perception of design in business management, the role of design professionals and their contribution to these endeavors. The results of the structured interviews describe the vision of design through the mental model of its managers, enabling designers to integrate or even rethink new attributions to the scope of the profession.

The structured interview technique used in this study met the needs of the investigation and proved to be adequate, allowing a consistent analysis of the responses offered by the inter-

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viewees. The ease of analyzing the participants' responses and comparing them with the information found in the bibliography proved to be the main advantage. Another important point is the perception that it helps to minimize the subjective aspects inherent to this type of study.

On the other hand, the technique requires considerable time and effort in building the agenda. The need to ensure that the objectives for each question asked are clear, in addition to the need to justify and justify each one, is one of the main reasons why the process of building the agenda becomes more laborious. The precise definition of objective, justification, theoretical foundation, population and sample in each case was a critical success factor for the study result. Interviews with researchers, carried out after interviews with managers, validate the importance of prior determination of these points.

As limitations, the technique raises indirect information, filtered by the interviewee's point of view. The presence of the interviewer and the designated place during the interview can influence the answers, in addition, not all people are articulate and receptive when talking about their experiences, so in some cases of this study it was necessary to explain to the interviewees about the qualitative nature. of the research and that the researcher was not interested in confidential company information.

For future studies, it is relevant to validate the efficiency of structured interviews, applying the technique with other populations with specific demands. And to better understand the relationship between management and design, it is suggested to expand the sample and apply other research techniques, whether qualitative or quantitative.

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