

EQUID-DEM: Empowering brand experience design with ergonomics

Aydée Ospina-Nigrinis¹, Laura Valentina Niño-Fandiño², Laura Nathalia Ávila-Hernández², Karen Lange-Morales¹

alospinan@unal.edu.co, lvnino@unal.edu.co, lnavialh@unal.edu.co, klangem@unal.edu.co

¹Universidad Nacional de Colombia, Colombia

²Lean Solutions Group, Colombia

³Caja Colombiana de Subsidio Familiar Colsubsidio, Colombia

Abstract

Ergonomics and brand experience design (DEM for its acronym in Spanish “Diseño de Experiencia de Marca”) are two theoretical and practical approaches that share a central element: the human being. Under this statement, this article presents how it is possible to enhance the DEM service through the structured incorporation of ergonomics thanks to the Ergonomics Quality in Design (EQUID) model. The EQUID-DEM tool is proposed as an alternative to enhance the inclusion of internal and external users in the DEM service. This proposal is especially useful for micro, small and medium-sized enterprises (MSMEs), since it enables a structured and effective process that is often only carried out in companies with many resources allocated to the development of the marketing area.

Keywords: brand experience design, ergonomics, MSMEs, EQUID

Introduction

According to the American Marketing Association (AMA), a brand is a name, term, sign, symbol or design, or a combination of these elements, that identifies the manufacturer or seller of a product or service. Consumers consider the brand as an important part of a product and branding could add value to it. Customers assign meanings to brands and develop relationships with them. As a result, brands have meanings that go beyond the physical attributes of a product (Kotler & Armstrong, 2008). But the brand is more than a logo or a symbol. In today's market-driven economic context, branding is a strategic tool.

Given the maturity of today's markets, it is no longer just a matter of marketing products or services, but of offering binding experiences based on the relationships established between users and their brands, through designs that define them. The brand is the main identifier of the organization, whether it is a company, a community, a territory, among others, allowing to build a true identity and emotional relationship with its users.

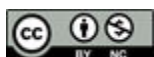
The brand is a basic component for the start of any business, no matter how small it may be. However, when one talks about branding in spaces related to entrepreneurship, it tends to be considered only as an identifier or symbol. It is assumed that its development is a priority only when the business is robust and has an economic profitability, instead of understanding the brand as a map of relationships between the brand and the users that allows establishing a culture from the beginning and understanding it as one of the assets and pillars of the organization.

However, talking about relationships between the users and the brand implies talking about emotions and sensations resulting from experiences, which implicitly leads to the field of ergonomics and user-centered design. Since the brand experience design (DEM) (Ospina Nigrinis & Galán Zambrano, 2010; Ospina Nigrinis, 2016) establishes different stages of interaction, the authors saw the opportunity to enhance it with a proposal from the field of ergonomics called Ergonomics Quality in Design (EQUID) (Nael et al, 2008), to establish an orderly system of design and monitoring around the brand and achieve a better market strategy, in which both internal and external stakeholders of the organization are involved. To establish the relationship between DEM and EQUID in a concrete scenario, we decided to take a microenterprise as a case study, thus opening up the possibility of circulation among MSME.

The purpose of the project was to establish a dialogue between DEM and EQUID to contribute to the design and development of DEM as a service, based on a case study conducted in a microenterprise in the market. In this way, the marketing area in the companies can be strengthened, and thus provide tools for the future development of the business.

Methodology

This is a qualitative-interpretative study, with the participation of experts in DEM and EQUID methodologies, industrial design students in the framework of their degree projects, and a micro-enterprise in the food sector. It began with an in-depth



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understanding of the EQUID and DEM methodologies by the work team. A case study was then selected that met a series of parameters, including accessibility to information at all organizational levels, as well as knowledge and implementation of a brand experience line in the company.

Semi-structured interviews and participatory workshops were conducted to gather information. This inquiry allowed to understand how the company works, the different stages of product development, as well as the components of the brand, including its vision, "DNA" and line of experience, which contains all the strategies that are carried out in the different stages: to attract, to maintain, to conclude and to extend.

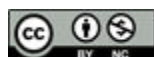
Once the company and its operation were understood, the EQUID matrix (Lange-Morales, García-Acosta & Bruder, 2014) was applied to both the company's base product and the brand. By analyzing the differences and convergences between EQUID and DEM found in the case study, the EQUID-DEM tool presented below was constructed.

Brand experience design (DEM) as a service

Within the framework of an Industrial Design career in Colombia, the DEM arises as an alternative to approach this relationship from a perspective oriented to the area of marketing, and thus to promote a professional approach, not only from the development of products, but from the relevance and impact on the development of the market. The DEM addresses the relationships between human beings, context, and product systems, based on emotions, senses and culture, to provide answers to the interactions between the brand and its users (Ospina Nigrinis, 2018).

Based on this, a theoretical-practical process arises regarding the possibilities of the DEM as a communicative and participative tool in the management of the brand within productive organizations. The approach and perception of brand management is modified, understanding it beyond a logo, to contribute to the development of these organizations and their durability over time.

DEM is the scenario in which the exercise of all designs (product/service, visual, advertising, exhibition, interior, among others) converge to generate tangible items from the DNA of the brand and allow communication between it and its users. It is a field of action that contributes to improve the experiences resulting from the interaction between brand and users and thus contribute to its durability in the market in a clear and coherent manner.



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Emotional branding (Gobé, 2005) was used as a conceptual framework for the development of DEM, which brings a new layer of credibility and personality to brands, connecting strongly with people on a personal and holistic level. "Emotional branding is based on the unique trust that is created with the public. It transforms purchases made out of need into purchases made out of desire." (Gobé, 2005, p15). Four base stages are determined for the development of the DEM line of experience: to attract, to maintain, to conclude and to extend. Along this line of experience, tangible touch points are developed to create the conditions for an intentional user experience.

Establishing in a concrete way the moments of interaction between user and brand, allows organizations to have a better understanding of the development of the brand and to make a short-, medium- and long-term planning for its development. Thus, the brand is understood as another product within the organization that is dynamic and requires not only a design but also a follow-up. In other words, the DEM allows understanding the brand beyond a logo and involves the participation of internal and external actors for its correct development and is understood as an asset of the organizations to face the market.

Developing the brand first facilitates the coherence of product development associated with the brand's value proposition. This was evidenced in the research project "From brand planning to product design" (Camelo Chacón & Camacho Barrios, 2022), which analyzed the creation process of the "CÍCLICO" brand (<https://ciclico.com.co>). This brand began its consolidation process with an environmental objective that gave rise to a specific organizational vision: "to democratize sustainability, putting it within the reach of all people" (Rebollo Sergio, personal communication November 25, 2021) In response to this vision, a scheme of values was defined that configured the brand's value promise: simplicity, sufficiency, and timelessness. It was then formalized with the name -Cíclico-, the design of its logo and the definition of its economic activity.

One of its founders explains how this case differs from what traditionally operates in the market, which is to develop the brand before the product. Today they have made significant progress in the national market, achieving presence in three points of sale in the city of Bogotá, the planning of points of sale in three intermediate cities, participation in various trade fair events throughout the country, strategic alliances with companies committed to sustainability and a development from e-commerce that has allowed them to increase sales by 50%. In this way, they are getting closer to achieve one of their objectives: "to be the largest sustainable product retailer in Latin America".



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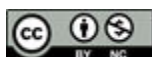
EQUID as a tool for quality assurance in handling user input in product design and development (PDD)

Ergonomics or human factors (HFE) is a scientific discipline that has been contributing for more than seventy years to both the improvement of people's well-being and the enhancement of a system's performance. While its application has been more frequent in the context of formal work and occupational health, it has also contributed significantly to the improvement of products and services. It is common to think of ergonomics as a "good chair," but it is much more than that. HFE is concerned with understanding and intervening in all systems where humans interact with technology. Three domains are recognized: physical ergonomics, cognitive ergonomics and organizational ergonomics, the latter also known as macroergonomics, which addresses the interactions between people and the other elements of a system as sociotechnical systems, looking for its improvement in terms of well-being and performance. It is at this level that the Ergonomics Quality in Design (EQUID) initiative is located.

EQUID is an initiative of the International Ergonomics Association (IEA) that seeks to promote the integration of ergonomics in the design process, among others. Since its launch in 2000, several versions and publications have been generated (Nael et al, 2008; Nael, 2011; Lange-Morales et al, 2014). In the original versions, a series of requirements were established that, when fulfilled, guarantee the quality of ergonomics management in a PDD project.

The latest published version incorporates five aspects to the requirements already included: a) systemic view, b) environment-oriented concurrent engineering (Riba, 2002), c) an approach to PDD phases, d) the differentiation between design process-oriented requirements from organization-oriented requirements and e) the explicit and extended involvement of all stakeholders (Lange-Morales et al, 2014).

EQUID's requirements are organized in two groups: a) oriented to design process and b) oriented to organizational management. The first group includes the initial definition of user requirements, design reviews, final ergonomic evaluation, and post-sales evaluation of user satisfaction. On the other hand, the second group of EQUID requirements includes organizational management (management commitment and control, quality policy, organizational planning, as well as human resources competence, awareness, and training) and documentation. Such requirements are streamlined through the involvement of internal and external stakeholders and are organized along the seven phases of the product sociotechnical cycles (CstP)



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(García-Acosta & Lange-Morales, 2020): vision, concept, development, production, marketing and logistics, use and maintenance, and final disposal.

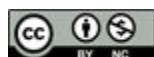
The understanding of the above phases, as well as the requirements mentioned, make sense when specific values, resources and capabilities of the company in question are recognized. In this way, a framework is established that allows the understanding of user facts as well as the involvement of all stakeholders throughout the PDD process, in an organized and planned manner.

Connecting DEM with EQUID in a case study: "De Muerte Lenta"

De Muerte Lenta is a family micro-enterprise created in 2011. It focuses on offering its customers 100% natural handmade jams, made with a wide variety of Colombian fruits. It currently has a catalog of eighteen flavors marketed in four types of presentations, according to consumption needs (www.demuertelenta.co).

It has two distribution channels, physical and digital, the latter is the main means of interaction with its customers. Its digital channels include its website and social networks, through which its users can carry out the entire product selection and purchase process. In its physical channels it has a network of distributors in different cities of Colombia.

The company is currently divided into two main areas, production management and commercial management. Internal and external stakeholders are distinguished. Internal stakeholders include five female workers, mothers who are heads of household. External stakeholders include: suppliers, customers, distributors, courier network, government agencies, among others. The activities carried out within the company are organized into two groups, one focused on production and the other on commercialization. In any case, both groups respond to the company's vision: "to be part of a fair-trade chain, paying for the important work of the farmers who grow the raw materials, and thus promote the Colombian countryside; generating employment for people with few educational opportunities." (Personal communication, Sara Cárdenas, May 25, 2021) (See figure 1).



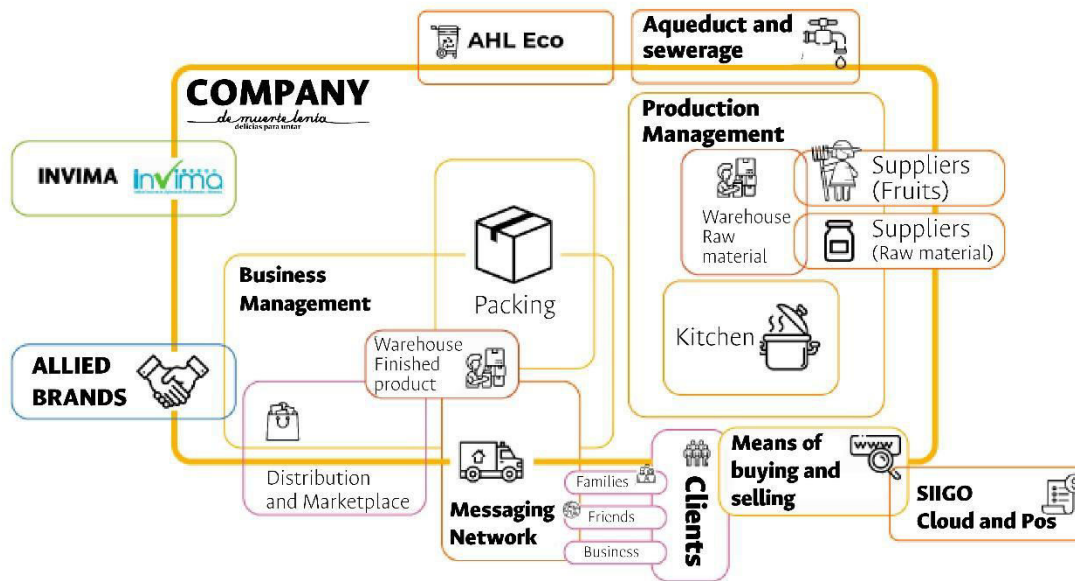
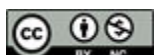


Figure 1. Diagram of the relationship between the company's stakeholders and its areas.
 Source: Adapted from Aplicación del Modelo EQUID en la Empresa "De Muerte Lenta" (p. 39).

To understand and differentiate the jam product from the brand, it was necessary to understand the brand as another product of the company. This led to the application of the EQUID matrix to both the jam product and the brand product. This made it possible to define the activities carried out around these products, according to the stages established in the PstC (García-Acosta & Lange-Morales, 2020) (see figure 2).



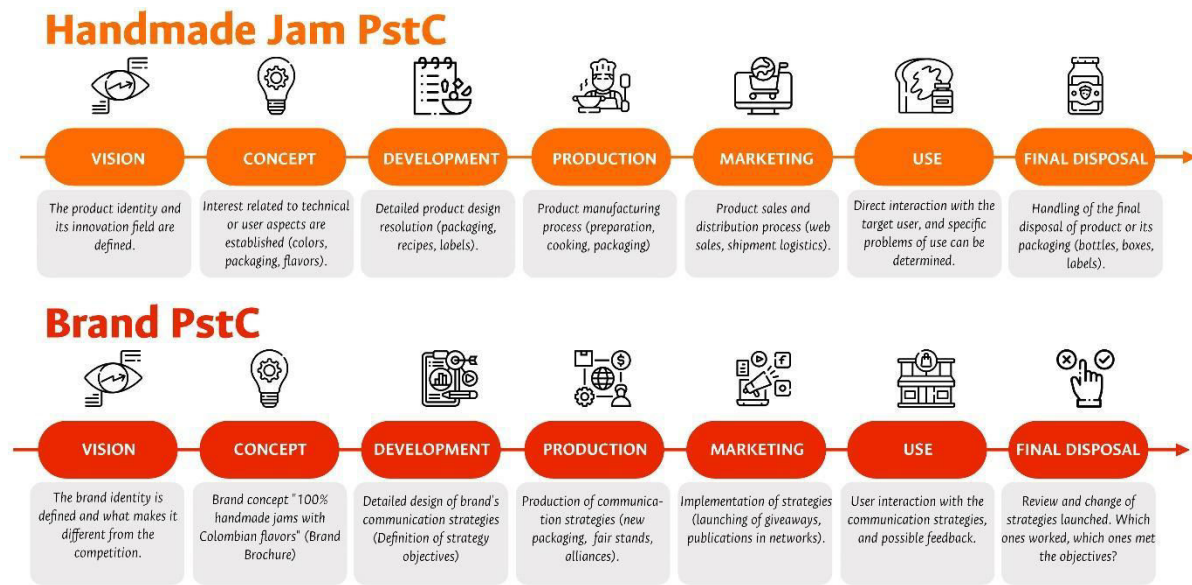
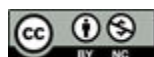


Figure 2: Description of activities happening in the PstC for the jam product and the brand as a product. Source: Adapted from Aplicación del Modelo EQUID en la Empresa "De Muerte Lenta" (p. 54).

With this information it was possible to make an initial structuring of the EQUID matrix for both products, jam and brand, as well as the identification of the existing strategies previously designed for the brand (moodboard and line of experience) and the actions already carried out. This exercise made it possible to identify the stakeholders involved in the PstC stages of the brand as a product (see figure 3), and then to identify the perception of the product brand by internal stakeholders. Finally, with this information it was possible to adjust and complement the EQUID matrix previously elaborated.



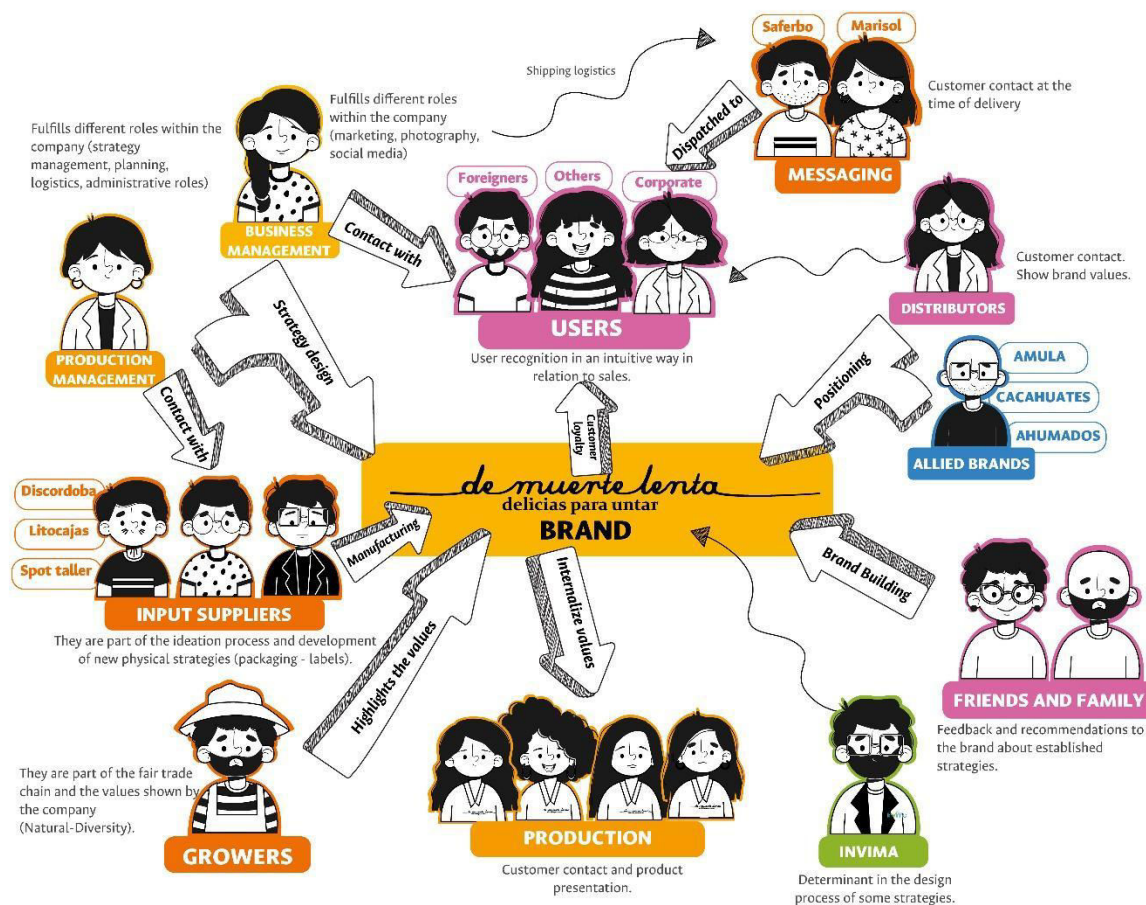


Figure 3: Identified product brand stakeholders involved during the PstC stages. Source: Adapted from Aplicación del Modelo EQUID en la Empresa "De Muerte Lenta" (p. 71)

The application of EQUID to the brand of a company in the market allowed the understanding of internal and external factors of the company in a real context, as well as the influence of these factors on the brand as a product. In addition, the relationship with internal stakeholders in the application of the tool made it possible to consolidate the brand as a product through the in-depth understanding of the brand by the employees. Finally, EQUID as an evaluation tool allowed to identify weaknesses in the brand and its structuring, evidencing the importance of building the EQUID-DEM matrix to promote the integration of the HFE within the process of brand creation and consolidation, incorporating rigor, systemic vision, user-centered design (UCD) as well as elements to ensure quality in a design process.



EQUID-DEM as a tool to enhance brand design within organizations

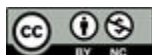
EQUID-DEM is a tool that allows managing a brand (understood as a product), favoring the traceability of the strategies and activities proposed in DEM. It is materialized in a matrix made up of requirements and groups of components.

Requirements are organized in rows:

- Organizational management: Management commitment; organizational planning; responsibility, authority, and communication; management control; and human talent competence, awareness and training regarding DEM, are the key aspects of organization management.
- Design reviews: understanding user issues, reviews, and evaluation.
- User requirements: understanding of user issues, and the translation into design requirements, with the following topics: target user(s), including their characteristics and variation limits; intended context of use, including possible variation limits and consequences for the user requirements; user goals.
- Sensory Evaluation: Matching of emotions with the values outlined in the brand moodboard.
- Documentation: refers to five documents that must be created and updated, which include: 1) user requirements, 2) design process / decision making, 3) final sensory evaluation, and 4) user satisfaction reports.

The above requirements intersect with three groups of components, represented in columns:

- Vision: Represents the principles and goals of the company, including what they want to achieve.
- Brand DNA: This refers to how the company wants users to perceive the brand. It takes into account the "brand personality": its values, culture and purpose. This guides the way in which the company expresses itself and communicates with its users. This includes:
- References: It is the collection of audiovisual, graphic, editorial, architectural information, among others that supports the development of the brand.
- Target user: User typology that can be linked to the brand. It is defined based on the characteristics of the company's vision.



- Moodboard: It is a visual board based on images and texts that represent the values present in the brand's DNA.
- Line of experience: Expresses all the strategies that the company uses to make its products, values and image visible. It is divided into attracting, maintaining, concluding and extending. (Ospina Nigrinis & Galán Zambrano, 2010)

These requirements include both internal and external stakeholders. An exercise was carried out at De Muerte Lenta to test the effectiveness of the EQUID-DEM tool. The graph below shows the whole matrix.

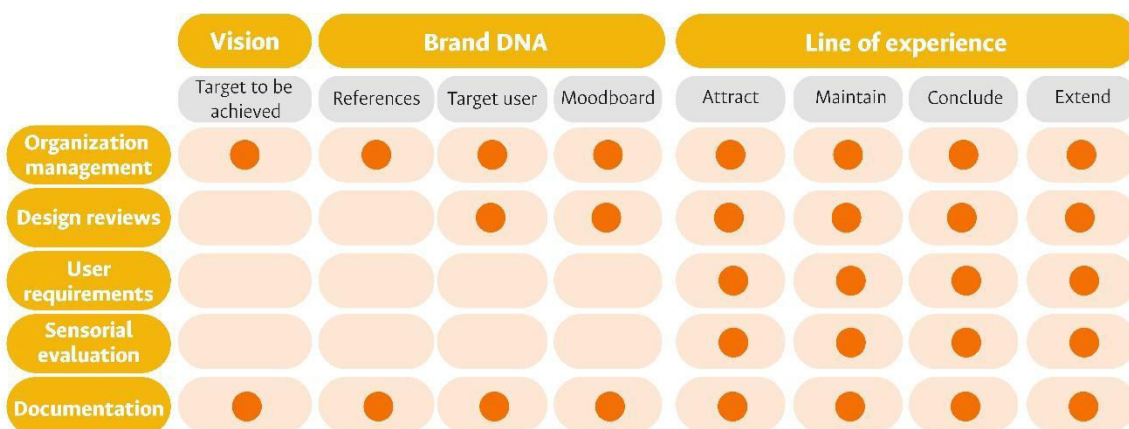
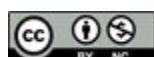


Figure 4: EQUID-DEM matrix with the relationship of requirements and components. Source: Adapted from Brand Experience Design Feedback by Equid. (p. 70)

To demonstrate the application of this tool, most of the strategies were evaluated. It should be clarified that organizational management is reflected in the efforts made by management to make possible the implementation of all strategies, as well as in the commitment and control over this development to maintain each strategy. The same is true for the brand DNA previously established through management and design support (organizational management and design review).

To explain more clearly how to fill out this matrix, the example of the strategy "Stand for product tasting" is taken. This strategy is part of the line of experience in the stage of "attracting". It starts with organizational management, where management is responsible for planning the exhibition of products, having necessary resources, people in charge and that it is delivered on time as required. As for the design review,



all components that are part of the aesthetics desired by the brand are evaluated, including materials, design, composition, among others.

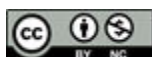
User requirements consider the problems that a user might face with this strategy: whether it is understood what a user wants in this stand to satisfy their needs, for example, to use elements that are linked to the brand, whether the dimensions of this stand allow interaction with the products, among others. The sensory evaluation allows to understand which senses are involved and how the user feels, and if it is consistent with the brand values, being in this case diversity, closeness, tradition, natural and handmade. All of the above is achieved through information collected directly from customers. Finally, documentation is based on the collection of information at each stage of the process, for example, at this point there would be documentation of the mission, the referents, the moodboard and of everything necessary to carry out the strategy.

In general terms, it was possible to evaluate sixteen current strategies, of which it was determined that less than 30% of the strategies had been rigorously documented, and that most of the development and ideation had been carried out intuitively. Thanks to this, it was possible to consolidate a template that made it possible to start with the traceability of DEM, which is the starting point for structuring the design process in this area.

Discussion

Combining two approaches such as EQUID and DEM entails a series of lessons learned, on which some reflections will be made. These focus on the convergences and differences between approaches, the relevance of participatory workshops, as well as the implications of the results obtained, i.e. the EQUID-DEM tool as a strategy for the democratization of knowledge.

Both EQUID and DEM focus on the user and therefore the user is at the center. However, since the former is part of ergonomics and the latter is part of marketing, there is an important difference in terms of objectives. The purpose of ergonomics is to improve the efficiency of a system, as well as the well-being of the people who are part of that system. Marketing, on the other hand, aims to reach the end consumer and increase sales of a product or service by establishing relationships between that consumer and the brand of the product or service. By combining both approaches, the result is a tool that makes the design process more efficient, considers the



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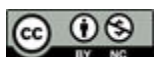
stakeholders involved in greater depth, while increasing the chances of success in the marketplace.

There was previous experience in applying EQUID to products and services, but it had not been applied to a product/service as complex as DEM. This experience made it possible to recognize that the brand, understood as a product, requires a "depository": an organization, a service or a product. In the case study, it was determined that the brand fulfilled the function of identifying the jam product and differentiating it in the market. Therefore, the brand within the company would not exist without a specific product, in this case jam. In other words, the depository is the jam product, making the brand a product that "owes" itself to the depository, which empowers it and which in turn requires its own management.

Understanding the brand from EQUID as a product that requires development and management like any other product or service, made it possible to monitor the different moments and processes that occur within the organization until the deposit product and the brand are placed on the market. This process resulted in several lessons learned. First, it made it possible to identify organizational management information that was transversal to the brand and the jam product, i.e., those key activities or tasks in the company that were necessary for the existence of both products. Secondly, it made it possible to identify necessary information to be obtained by the company's collaborators, which was related to communication, organizational planning around the brand and the requirements of each of the internal and external stakeholders, among others. Finally, it was recognized the importance of designing and structuring strategies to transmit the concepts of EQUID in a clear way, so that the employees could internalize and understand them, facilitating their participation in the workshops.

Several authors have highlighted the importance of participatory workshops as a strategy for both design and ergonomics (Kumar, 2013); (Noro & Imada, 1991). In this project it was a fundamental tool since it allowed stakeholders to understand the brand and make suggestions for its management. This contrasts with what is common in small organizations, where brand development is not a participatory management process that arises from within the organizations. It is perceived as an objective to improve market conditions, as something external to the company.

The participatory workshops were conducted with two objectives in mind. The first was to understand the stakeholders' perception of the brand, while the second was to identify the moments in the management processes that require the inclusion of stakeholders for the development and management of the brand. In this way, the



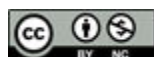
brand is conceived as a core product of the organization, becoming an important asset of it. In the case study, this notion was made concrete from the participatory work with the members of the work team, where it became evident how the brand is transversal at different times to the management of the organization and not only a "facade" at the time of integration with the end customer. Each of the stakeholders of the organization must manage the brand from their area, and the organization itself must also involve the brand as a product that requires planning, management, design and measurement.

In addition to the above, during the participatory workshops, other aspects that have an impact on the sustainability of the brand were recognized. Not only were internal stakeholders and their perception and internalization of the brand recognized, but also different roles of both managers and workers within the company were identified. The importance of including internal stakeholders in the brand consolidation process, as well as in the external communication of the brand, was also evidenced.

EQUID-DEM makes it possible for small organizations to develop their brand experience and access a brand management process for their consolidation and growth in the market. MSMEs are aware of the importance of marketing, of taking care of their most loyal customers and of going out in search of potential consumers. But when it comes to brand experience, many of these companies believe that it is not for them. However, this is a mistake. As stated by López-Rodríguez (2016), a step from operational marketing to strategic and tactical marketing should be considered, as shown in Table 1.

| Strategic marketing | Tactical marketing | Operational marketing |
|--|---|---|
| <ul style="list-style-type: none"> ● Market research ● Segmentation ● Competitor analysis ● Branding | <ul style="list-style-type: none"> ● Product ● Processes ● Productivity and quality ● Price ● Distribution ● Promotion and advertising ● Presence-infrastructure ● People | <ul style="list-style-type: none"> ● Sales ● Customer service |

Table 1. Total marketing concept for MSMEs. Taken from: Lopez-Rodriguez, C. (2016).



Although MSMEs have limited resources, it is important to implement a marketing plan that determines their corporate strategy in relation to the organizational environment. This makes it possible to determine the path to follow in the market in relation to the customer and the competition. It is important to propose a sustainable strategy, based on a value proposition that is developed from a set of activities and establish the relationship between the user and the brand to obtain a competitive advantage in the market.

MSMEs make a great effort in their production processes as an initial stage in business management and leave aside the points related to the market, which really are the ones that determine the permanence in it. In contrast, robust organizations base part of their marketing management on the DEM to devise, operate and make profitable an image associated with products that respond to the values and desires of a specific market segment. It is important to recognize the relevance of the brand in its valuation process, that is, to recognize the existence of brand equity in brand management, since measuring the value of a brand and identifying the essential elements of its management are considered fundamental issues in the marketing area (Ortegón, 2013).

EQUID-DEM enables MSMEs access to knowledge by providing a service of ideation, operation and traceability of the actions undertaken around the development of the brand, which allows capitalizing resources and makes it possible to understand the importance of executing a permanent traceability around it. In this way, this type of service democratizes access to market opportunities. Small organizations, lacking large investment capitals, do not prioritize brand actions and end up operating only an image without considering the relationships that this should establish inside and outside the organization.

It is proposed to develop a service applied to small organizations, either operated by themselves or with the support of third parties, to strengthen a brand that accompanies the management of MSMEs organizations in a coherent and effective way for their immersion in the domestic market and, why not, in the international market.

The EQUID-DEM matrix is a tool that can facilitate brand management within small enterprises. Given that such organizations have few resources, consulting for the application of the proposed tool could be financed by institutions that promote and support entrepreneurship. One example is the Bogota Chamber of Commerce (CCB), which for 143 years has accompanied entrepreneurs in the construction of suitable environments for business and has developed support strategies. According

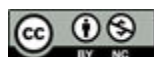


to its management report for the year 2021, the CCB from its program "Tools for entrepreneurship" developed a toolkit with informative resources, methodological proposals, tools and solutions, to support the strengthening of new businesses (Management Report CCB-31/12/21, January 2022). This kit has reached more than 16,000 downloads and more than 390 entrepreneurs were supported in the path to business creation. Including EQUID-DEM in this type of scenario is a possibility to disseminate and apply this tool in nascent entrepreneurial environments.

In line with the above, the university where this project was developed, complying with one of its missionary purposes, such as university extension, has supported from the Faculty of Arts the creation of a solidarity outreach project called "Brand Office". The purpose is to support the reactivation process of different sectors of the Colombian industry through the structuring and conceptualization of the brand as a key tool for the generation of added value of companies for their users, offering services related to brand design, allowing MSMEs to access this knowledge.

Finally, Table 2 shows a comparison between methods commonly used in brand design versus EQUID-DEM.

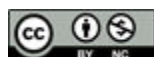
| Method | Purpose | Stages | Considered stakeholders | How stakeholders are considered | Emotional experience | Documentation |
|--|---|---|---|--|---|--|
| Customer journey (Temkin, 2010) | Examine the customer-company interaction from the customer's point of view, understanding customer needs and perceptions. | Before, During, After | <u>External stakeholders</u> (customers and users) | Interviews; Perception surveys; Joint construction of the tool | Measurement of customer emotions at specific touch points of the designed experience. | Customer experience mapping (not including specific information from conducted research) |
| AARRR (Metric) (Nir, 2018) | Evaluate the overall performance of a digital product and identify areas for improvement, seeking to optimize the product to improve performance. | Acquisition, Activation, Retention, Revenue, Referral | <u>External stakeholders</u> (customers and users) | Interviews; Observation; Market results; Data collection and analysis | It focuses purely on the result (whether it became a lead, whether the goal was met). | Metrics-based documentation at each stage. |
| AIDA (Rehman, Nawaz, Ilyas, & Hyder, 2014) | It captures consumers' attention, generates interest and desire in the product or service, and | Attention, Interest, Desire, Action | <u>External stakeholders</u> (customers and users) | Advertising; Contact through digital media; Data collection and analysis | It focuses on sales; it does not emphasize the user's emotions. | Documentation based on KPIs (interpreted according to reader) |



| Method | Purpose | Stages | Considered stakeholders | How stakeholders are considered | Emotional experience | Documentation |
|---|---|--|--|---|---|--|
| | persuades consumers to take a desired action. | | | | | |
| Inbound Marketing (Silveiro & Pinto, 2022) | Attract and retain potential customers through relevant and useful content that responds to their needs and problems within the digital marketing field | Attract; Interact; Close; Loyalty | <u>External stakeholders</u> (customers and users) | Interviews; Observation, data collection and analysis; Continuous feedback | Create valuable content and tailored experiences | There is no documentation. |
| Agile Marketing (Ewel, 2013) | Increase marketing efficiency, effectiveness and adaptability, through: Continuous value delivery, data-driven decision making, continuous process improvement. Note: Focus on digital products | Scope definition; Automation Measurement; Document Analytics; Continuous Improvement | <u>Internal stakeholders</u> (workers) <u>External stakeholders</u> (clients and users) | <u>Workers:</u> Ongoing sessions for planning; Product improvement. <u>Customer:</u> Understanding their needs; Satisfaction of them as a priority | It does not consider the user's emotional experience beyond understanding their needs. | Customer data, lessons learned and process documentation. |
| EQUID-DEM (Niño-Fandiño, L, Ospina-Nigrinis, A. Ávila-Hernández, N, Lange-Morales, K, 2021) | Manage a brand (understood as a product), favoring the traceability of the strategies and activities proposed in DEM | Vision; Brand DNA; Line of experience (attract, maintain, conclude, extend) <u>Organizational and design requirements:</u> Organization management; Design reviews; User requirements; Sensorial evaluation; Documentation | <u>Internal stakeholders:</u> Employees; Suppliers; Collaborators; Friends and family; Allied brands <u>External Stakeholders:</u> Customers; Users; INVIMA | Feedback; Participatory workshops; Data collection and analysis; Evaluation of strategies and results | It focuses on the user, evaluating each strategy to improve the user's experience and brand loyalty | Permanent documentation of all the processes outlined in the matrix. |

Table 2. Comparison of methods commonly used in brand design versus EQUID-DEM.

There are similar methodologies for brand consolidation and design. However, the difference is that EQUID-DEM makes a greater inclusion of stakeholders, their needs and emotional experience with the brand, in addition to having a rigorous documentation of the processes.



Conclusions

There are important connections between ergonomics and marketing that, when worked rigorously as in this case study, enhance DEM, even turning it into a corporate strategy.

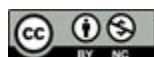
Considering a company's internal and external stakeholders is a key factor in DEM. The EQUID model together with a participatory approach proved to be very useful in identifying them and incorporating them in such a strategic product as the brand, understood as more than just a logo.

The structure of EQUID-DEM allows its incorporation as a service for MSMEs, enabling organizations with limited resources to access a powerful tool for growth through brand management.

The application of EQUID-DEM in the offices of academic institutions can become a strategy for the democratization of knowledge that can benefit MSMEs as well as entrepreneurs and other organizations.

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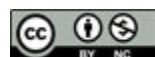
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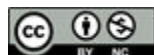
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