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Low Cost Innovation: Implementation in Footwear Industries that Produce for Consumers at the Base of the Pyramid – Bop

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ABSTRACT: This article presents an approach to the theory of innovation in low-cost industries that produce for the Base of the Pyramid - BOP, and aims to propose a set ofproceduresthat define and guide implementation in processes to support management during implementation and monitoring. A case study was carried out with two industries in the state of Ceará, to seek an answer to the following research question: What procedures can be proposed to support management during the process of implementing low-cost innovations in footwear industries? The collected data were treated with content analysis techniques divided into stages. As a result, it was possible to structure a set of procedures to be implemented, consisting of five steps, considered adequate to support the management team during the process of implementing innovations in the footwear industries. The proposed lines indicate that in order to implement innovations, the industry must awaken to the need to innovate, learn to innovate, reconfigure the environment, implement the innovations and monitor the results. The article presents academic contributions by exploring the theory of innovation and linking it to the industrial sector. It also presents managerial contributions by proposing a set of procedures for the implementation of innovations in the footwear industries.

KEYWORDS: Deployment. Innovation. Industrial environments. Base of the Pyramid

1. INTRODUCTION

The first records on the use of the term innovation date back to the end of the 19th century, although the innovation management process has come to occupy a prominent place in the literature only in the beginning of the 20th century when Schumpeter stressed the importance of companies “to create new products to outperform the competition and stand out in the market” (Śledzik, 2013 p.3). In the 1980s, Drucker (1986) drew attention to the fact that innovation could contribute to the way companies managed their resources. Years later, Hamel (2000) highlighted that, due to the innovation process, companies needed to reinvent themselves and generate new forms of management and the adoption of a new attitude favorable to innovation in companies became a managerial challenge for companies to achieve better results. results.

In the footwear sector, most innovation processes take place in industrial organizations which, in turn, are characterized by being a subsystem of the industrial sector of a manufacturing nature and whose function is the production of essential articles, being known for being organizations where they occur. several internal processes that are complex, interdependent (Souza, et al, 2009) and present management challenges.

The importance of management for the innovation process was highlighted by several authors. Djellal & Gallouj (2007) carried out a literature review on innovation in industries.Vargas (2014) applied the integrative perspective from the investigation of footwear and other industries. Engle et. al (2016) highlighted the importance of the manager's roles in the implementation of innovative practices. And, Helm & Graf (2018) highlighted the importance of managers managing existing relationships and having the necessary skills to manage organizational resources.

The existing literature on innovation management points to the existence of theoretical gaps, such as those pointed outperSilva (2011), who suggestedto propose a methodology for the management of innovation in industrial environments, considering the peculiarities of these environments.

The ones evidenced byNyle´n & Holmstro¨m (2015), when stating thatTheMost of the works found analyze the implementation or management of innovation processes related only to the manufacturing sector.Those evidenced byVagnoni & Oppi, (2015), who highlighted the need to carry out an evaluation from the point of view of quality and results.And those pointed out byCharterina et al (2016) when pointing out the need to expand research on facilitators and their effects on innovation capacity. By considering these gaps, this article contributes to the literature by proposing a set of procedures to support managers in the process of implementing innovation in the footwear industries.

Seeking to contribute to filling the gaps highlighted by Silva (2011) and Nyle'n & Holmstro¨m (2015), this article was designed to seek an answer to the following research problem: What procedures can be proposed to support management during the process of implementing low-cost innovations in footwear industries? To answer the question, the article was prepared with the objective of proposing a set ofproceduresthat define and guide implementation in processes to support management during implementation and monitoring.

As a research method, a qualitative approach was adopted (Ketokivi & Choi, 2014), of an exploratory nature, through a case study, allowing the collection of primary data, through interviews guided by a semi-structured script. Content analysis techniques were also used (Walter & bach, 2015).

2. THEORETICAL FRAMEWORK

2.1 Innovation

Although there are records of the use of the term innovation in the late 1880s, the records of greatest influence for the construction of a theory of innovation are attributed to Schumpeter, who in his early writings defined innovation as "a process of industrial mutation, which it incessantly revolutionizes the economic structure from within, incessantly destroying the old, incessantly creating a new one" (Śledzik, 2013 p.3). The OSLO manual highlights that the work developed by Schumpeter had a great influence on innovation theories (OECD, 1997). The theory of innovation, developed by him in the early 1920s, was considered “a driving force for economic growth” (Kühl & Cunha, 2013 p.4).

In his writings, Schumperter proposed the existence of five types of innovation: “i) launching a new product [...]; ii) application of new production methods [...]; iii) opening of a new market [...]; iv) acquisition of new sources of raw material supply [...]; and v) new industry structure” (Śledzik, 2013 p.3).

This approach set precedents for new classifications. The OSLO Manual, for example, defines four types of innovation: a) product innovation; b) Process innovations; c) Organizational innovations; and, d) marketing innovations (OECD, 1997).

Since Schumpeter highlighted the importance of innovation for companies to stand out in the market and gain competitive advantage over their competitors, several authors (Wu, 2014;Xu et al, 2015;Nyle´n & Holmstro¨m, 2015; Tuti et. al, 2016; and, Cândido, 2017) have dedicated themselves to studying the topic of innovation. However, most approaches observed in the literature were dedicated to studying the topic from the perspective of the manufacturing sector (ALBERTIN et al, 2017).

The process of technological development and innovation had special acceleration from the first industrial revolution (Steele & Clarke, 2013) and from the 1980s the observed technological changes allowed the development of new processes and generated new managerial challenges for the management of internal and external resources, necessary to generate competitive advantage in the organizational environment (Wu, 2014) and this led to a search for a more adequate approach to innovation in the service sector.

In this sense, Djellal & Gallouj (2007) and Vargas et al (2014) presented contributions on the study of innovation in industries.

2.2 Innovation in Industry

In recent years efforts have been made to build a theory of innovation that is sufficiently comprehensive to encompass the industrial sector without, however, setting aside its differences (Vargas, 2006). The main discussions aimed at debating the compatibility between the neo-Schumpeterian innovation theory and the efforts to establish a new integrative approach to innovation in industries.

Among the main advances observed, three initial lines deserve to be highlighted: the first, which is based on the technological origin of innovations – Technisist Approach; a second, which presents the singularities of the innovation process relevant to the activities of industries; and the third, which seeks to integrate these two aspects and, with this, develop a theory of innovation in industries – Integrating Approach (Vargas et al, 2014).

The technicist approach seeking to draw attention to the importance of the industrial sector in the innovation process. This model became known as the reverse cycle of the product and aimed to promote an analysis of the changes caused in industrial processes due to computerization. This approach argues that new improved products are a result of the introduction of new

technologies. Although the model he developed was considered useful, he was not able to consolidate his theory, but he was recognized as the first to seek the construction of a theory of innovation in industries (Vargas, 2006).

The industry-based approach emerged in parallel with the technicist approach and aimed to identify the particularities of the production process and, with that, to show that even though in the activity it is possible to promote innovations in the production of products due to their relational character and the irreversibility of their production process (Vargas, 2006).

In this perspective, the OSLO manual highlights that innovations in the sector "can include important improvements in terms of how they are offered (for example, in terms of efficiency or speed), the addition of new functions or features in existing industries. , or the introduction of entirely new products" (OECD, 1997 p. 58).

This approach came close at times to Schumperter's original conception (1911) and considers customer relationships as a source of learning, which led to the emergence of a new type of innovation called contingency or ad-hoc ad-hoc innovation characterized by the "building interactive solution (strategic, organizational, social, legal, etc.) to a specific problem posed by the customer" and which involves the user as a co-producer of innovation (Vargas et al, 2014 p.6).

The integrative approach, in turn, was presented as a proposal to promote the integration of industrialized goods innovation in a single theory. Even considering that there are differences between these activities, this approach argues that the emphasis should be on the particularities of the manufacturing or transformation activity, depending on the intensity of the relationship with the customer (Vargas, 2006).

The approach also argues that there tends to be convergence between manufactures and transformations.

2.3 Low-Cost Innovations for Low-Income Consumers

The extreme inequality in the distribution of wealth reinforces the view that the population at the Bottom of the Pyramid - BoP cannot participate in the market economy, despite constituting the majority of the population. Given its size, the BoP represents a multi-trillion market. According to OECD projections, through the OSLO Manual (2005), the population at the bottom of the pyramid could reach more than 6 billion people in the next 40 years.

Manufacturing and marketing with and for low-income people – two-thirds of the world's population – requires product and process innovation. The concept of innovation is constantly used in the business, environmental and economic context.

In all these perspectives, it means the need to create paths or strategies different from the usual means, to achieve a certain objective.To innovate means to break new ground until then. Successfully put new ideas into practice. Whether they are focused on new business models, processes and methods, or even on technology (PRAHALAD, CK 2005). This requires products to be designed and supplied that take into account regional customer requirements in emerging economies (AGARWAL, N.; BREM, A, 2012).

Four actions are critical to a thriving BOP market: building purchasing power, shaping aspirations, improving access and customizing local solutions. Prahalad (2005) also argues that countries that do not have the modern infrastructure or products to meet basic human needs are an ideal testing ground for the development of environmentally sustainable processes and products for the entire planet.

Innovative products are increasingly being developed by local companies in emerging countries and marketed around the world. Corporations in China and India in particular have thrived by developing what Bhatti (2012) has characterized as frugal innovation, products that deliver superior customer value at low costs.

The innovation scenario has intensified in recent decades(YUNG, 2017). This brought new managerial challenges, required the structuring of a management model focused on the development of new skills and continuous learning, and made the industries wake up to the need to develop new management tools to support themselves in the conduct of innovation processes (Nyle´n & Holmstro¨m 2015).

THE Innovation management in low-cost industries in the footwear sector is related to the need to develop skills and competences to create and manage an organizational environment that, in addition to being concerned with meeting user needs, also facilitates the dissemination of an innovative philosophy. in the conduct of processes and procedures.

PFor this reason, the involvement of management became the subject of studies (Tuti et al, 2016; Abuhejleh, et al 2016), to analyze and implement improvements in the models of driving innovation in industries, aiming to reduce the impacts of the changes caused through the innovation process and help companies in the process of learning to innovate.

3. METHODOLOGY APPLIED TO THE RESEARCH

For the development of the work, the multiple case study was used in order to guarantee greater magnitude and credibility and rigor in the research. Observing what Yin (2010) recommends, the case study deals with an empirical investigation pursuing the identification of a certain phenomenon, with the purpose of clarifying it.

The sample was non-probabilistic, as it was established through indications and contacts recommended by the first participant. The round of interviews was guided by unstructured questions. The questions were elaborated without identifying the actors, so that there is no exposure of these elements, being able to establish contact to understand how they operate and learn what threats and advantages exist in the environment of the industry that produces for BoP consumers.

As for the nature, it is classified as being for applied research, as it proposes the investigation and points out solutions to solve situations inherent to society, with the main objective of knowing the current state to later implement application in appropriate circumstances (Dresh, et al 2015).).

The present study has an exploratory character where Gil (2012) states that exploratory research aims to familiarize the researcher with the researched object so that he can know it more deeply.

It is presented as a type of research that requires a literature review and the application of interviews with participants in the context of the research problem, as well as case analysis, lead to a clear understanding of the phenomena. The purpose is the development, clarification and modification of ideas and concepts for the proposition of new approaches (GIL, 2012).

In order to describe, understand and explain the phenomenon under investigation in order to obtain an answer on how to reach the expected results, a qualitative approach was chosen, which encompasses several interpretation techniques (Dresh, et al 2015).

The qualitative method is based on the exploration of adopted practices and perceptions of small businessmen and was defined under the qualitative bias, as it is more suitable for the discovery and understanding of relationships.

For the analysis, Gil (2012), small companies in the field of footwear manufacturing, located in the city of Juazeiro do Norte - Ceará and operating in emerging markets, were randomly selected for accessibility.

This article was prepared through a multi-case study (Ketokivi & Choi, 2014), carried out in the first half of 2022 in ten small-sized footwear industries located in the interior of Ceará. The case study strategy was chosen because it is a type of empirical research used to seek the understanding of a phenomenon in its real context (Dresh, et al 2015) and which is suitable for studying a phenomenon in depth.

As a collection method, the research used primary data, raised in the case study, which was conducted through interviews, using an unstructured script, with subjective questions, prepared based on the researched literature and aimed at two different audiences: managers of tactical level and company owners and operational level employees of those surveyed, where, in total, 354 employees were surveyed.

All observations made were consolidated, summarized because of similarity, and analyzed to support the proposition of a set of procedures to support the management of industries when implementing innovations.

3.1 The Companies Surveyed

The research necessary for the elaboration of this article had as unit of analysis, two industries located in the Northeast region of Brazil.

In each industry, survey respondents were selected based on two criteria: occupy a managerial position (tactical level manager, sector or section head) or be an operational member of one of these managers' teams.

The industries surveyed have a total of 791 employees, including managers, owners and workers.

In these industries, a total of 354 employees were interviewed, being 32 team managers and business owners and 322 employees at the operational level.

The accessibility criterion determined the number of employees surveyed, since, during the conduct of the research, the industries restricted access to the teams due to the effects of the COVID-19 pandemic in Brazil.

Respondents were contacted “in loco” during their work shift. Data were collected in the first half of 2022, from April to June, through the application of an interview, with directed questions based on the researched literature and focused on seeking the perception of respondents on how the process of implementing innovations is conducted in industries.

4. DATA PRESENTATION AND ANALYSIS

In the production chain, employees and owners of 10 companies were interviewed, through which it also evidences the existence of low-cost aspects of innovation, there are barriers to the implementation of innovation, as can be seen through the transcription of the respondents' answers.

Respondents are identified by the letter “C1” employees in the operational area and “C2” Middle managers and owners.

Table 1. Actors Interviewed – Footwear

Actor	function of interviewee	education level	Activity Status	Average industry experience
C1 Employees (322)	industry workers	Elementary School	operational	14 years
C2 Managers (32)	Operations Managers	High school	tactical management	15 years

Source: Developed by the authors

The following is a summary of the responses of respondents in the surveyed industries, with their very peculiar characteristics, where they present barriers and opportunities for improvement through the implementation of low-cost innovation in products and processes.

C1 - Employees)– "The production operations of the products are very manual and of low quality caused by the lack of investments in equipment that help us to produce with more quality and without increasing costs. Today we are already a considerable number of workers, but we do not produce a volume that meets the demand for our products. We need equipment to implement innovations even with the aim of serving low-income populations".

C2 (Manager - Tactical Level)"We have worked here for over 14 years. Our production is low, as it is almost all manual. In the beginning, we worked only with our children, producing only with tools that we inherited from our parents, doing what we learned with them. Then we bought some machines to cut the soles and sew them. With the machines working, our children called us to put more workers to work, because production was low and sales were good. We hired a few more workers and continued making the same types of shoes, which are these sandals with soles made of synthetic material interspersed with our own cardboard. We are thinking, if all goes well, acquiring bigger machines for the production of other types of shoes. The difficulty is that company records are like Micro-enterprises. It is more difficult to make the purchase of machines with some financing. We do not have a structured method to identify opportunities or needs for innovation and employees are unable to develop the innovation process".

During the visits, records were also made with photos of the chain to illustrate each activity as shown in Figure 1.

Figure 1 - Footwear chain: main actors and structure

Source: Prepared by the authors

The main findings of the case study, which served as a basis for proposing the new procedures are presented in the table below, where the last column, referring to the steps, which are repeated, depending on the groupings that will be carried out later, in the structuring of the procedures proposed in table 1 below:

Table 02: Main findings of the case study.

finding	Recommendation	theoretical basis	Step in the proposed method
"the innovation process is often reactive and opportunities for innovation arise from the identification of problems or bottlenecks"	"industries need to wake up to perceive opportunities for innovation"	Teece, Pisano & Shuen (1997); Souza et al (2014).	Awakening

"Industry does not have a structured method to identify opportunities or needs for innovation and employees do not feel that they are participating in the innovation process".	"It is necessary to create an adequate environment to involve internal actors in the process of development and implementation of innovation"	Souza et al (2014); English e. al (2016); Tuti et al (2016); Abuhejleh et. al (2016)	reconfigure
"Managers are not adequately prepared to lead the innovation process and employees are not encouraged to innovate"	"industries must develop an institutional practice capable of encouraging the team to learn to innovate"	Tidd, Bessant & Pavitt (2008);Birken, Lee & Weiner (2012); Souza et al (2014); Engle et al (2016).	Learn
"the environment is not suitable for the practice of innovation, there is a lack of funds for the modernization of the industrial park".	"Industry must create an internal environment that encourages the practice of innovation"	Souza et al, (2014); Soda et al (2017).	reconfigure
"there are no metrics or structured mechanisms at the organizational level to evaluate the result of the implemented innovations"	"a constant monitoring methodology must be defined to assess the indicators and monitor the results of the implemented innovations".	Ioan et al (2012); Si et al (2017); Luna et al (2017);	To monitor
"there are flaws in the process of management and preparation of the team for the innovation process".	"It is necessary to involve middle-level managers in the process of implementing innovations"	Helm & Graf (2018); Manca et al (2017); Shamsuzzoha et al (2017).	implant
"due to its complexity, the industrial environment often discourages the practice of innovation"	"the industry needs to create an innovation ecosystem where the entire team can participate by presenting ideas, criticisms and suggestions"	Souza et al (2014); Engle et al (2016); Soda et al (2017).	reconfigure

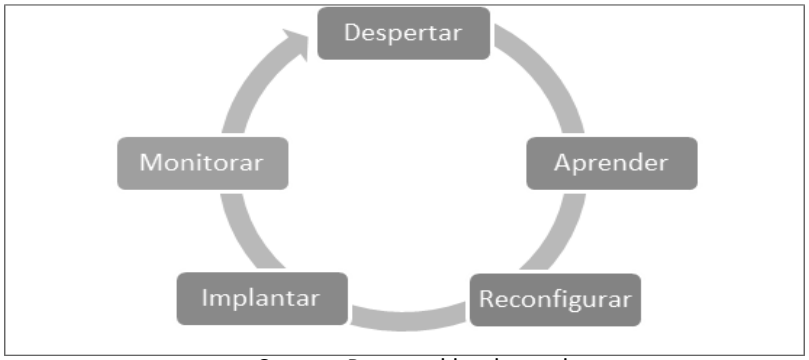
Source: Prepared by the authors.

In view of the above and as a result of the analyzes carried out, it was possible to propose a set of procedures that can help to support managers when conducting innovation implementation processes in the industries surveyed. The procedures developed for the suggestion were based on the deficiencies pointed out by those surveyed, as well as using as a basis the weightings found in the researched literature and were structured in five stages, where each one corresponds to a part of a macro process that, together, constitute the guidelines proposed by this article.

For each of the five stages, a set of guidelines for procedures was prepared to support management in the process of implementing innovations in the industries and were structured in a sequenced way, where the result of the monitoring stage generates the need to awaken to a new process. innovation, which constitutes a virtuous cycle.

The following figure presents the proposals for the implementation of innovations, according to the diagnosis raised during the investigation.

Figure 2: Proposed steps for the implementation of innovations in the surveyed industries



Source: Prepared by the authors

Stage I – Awaken

The industry must be able to recognize the need to innovate and detect existing opportunities and threats (Souza et al, 2014; Luna et al, 2017) in the internal or external environment. Then, it must eliminate the bottlenecks that impede or hinder the innovation process and must focus on developing the necessary internal skills (Dynamic Capabilities) for the innovation process (Teece, Pisano & Shuen, 1997) to obtain a competitive advantage. As a proposition for this stage, the industry must observe the following procedures: carry out an initial diagnosis on the need to implement improvements; recognize the need to innovate; and, identify opportunities for innovation.

Stage II: Learn To Innovate

The industry needs to understand that innovation management is a learned skill and, therefore, it must focus efforts to seek learning from perceived opportunities (Teece, Pisano & Shuen, 1997; Souza et al, 2014) to involve employees and employees. tactical level managers in the innovation process (Birken, Lee & Weiner, 2012).

At this stage, the main objectives and results to be achieved must be defined.and an organizational climate must be created that allows for collaborative involvement - bottom-up and not just imposing - top-dow (LUNA et al, 2017). After that, it is necessary to define the roles of employees and managers in the process of implementing innovations (Birken, Lee & Weiner, 2012) and, when necessary, involve partners and key people in the innovation process(JOHNSTON & Huggins, 2016; Shamsuzzoha et al, 2017; Prokop et al, 2019) to then coordinate and integrate the flows, in order to generate collective learning (Prahalad & Humel, 1990).

The proposal for carrying out this step is that the industry must observe the following procedures:define objectives and main results to be achieved; identify the necessary resources; develop policies, implementation practices and the roles of those involved; and, involve partners and key people.

Step III: RESET THE ENVIRONMENT

At this stage, the industry must understand that, often, the complexity and dynamics of the environment (Souza, et al, 2009) ends up not encouraging the team to participate in the innovation process. Therefore, it is necessary to carry out a self-analysis of its functional structure and assess the quality of the infrastructure and available resources to then promote the necessary readjustments.

The industry often perceives the need to reconfigure the environment and internal competencies (Teece, Pisano & Shuen, 1997; Souza et al, 2014) to encourage team engagement. The environment must be conducive and have clear rules to avoid conflicts of interest (Helm & Graf, 2018) in the innovation process.

The environment must also be flexible (Manca et al, 2018) and capable of promoting disruptive thoughts and actions to generate innovations. The guidelines proposed for stage III are presented below: carry out an organizational climate survey to identify the team's level of engagement with the innovation process; identify barriers and facilitators of the innovation implementation process; reconfigure the environment and create an ecosystem suitable for the innovation process; elect person or sector responsible for the innovation process; define the rules and evaluation criteria, and involve and engage the necessary links in the innovation implementation process.

Step IV: Implementing The Innovations

In the implementation stage, some care needs to be taken in order to ensure success and gain in competitiveness. In this sense, the industry needs to involve and encourage employees to participate in the innovation process and, if it does not have all the necessary resources internally, it is recommended to make partnerships for the development and implementation, in a collaborative way (Rajkumar & Stentoft, 2017), which helps to reduce process risks and uncertainties and facilitates achieving goals (Garmann-Johnsen & Eikebrokk, 2014).

In addition to internal collaborators, there are potential external partners(Johnston & Huggins, 2016) that can be organized in the form of collaborative networks and contribute to the innovation process (Bueno & Balestrin, 2012). Collaboration networks constitute an efficient strategy for the process of developing and implementing innovations (Mircea, 2016) and for obtaining competitive advantage (Rajkumar & Stentoft, 2017; Fossas-Olalla et al, 2015). The proposal presented is so that the process of implementing innovations can be conducted through the following procedures: structuring a flowchart for the implementation of innovations; involve internal links (managers and employees); include external partners (collaborative networks) when necessary; and, implement the innovations as planned.

Step V: Monitoring Results

It is in the monitoring stage that it will be evaluated whether the planned results were achieved. This step must be conducted interactively between the different sectors, in order to constantly assess the alignment of results with organizational purposes

(mission, vision and values) and, with that, define the need to initiate new innovation processes. This step must be conducted through constant monitoring cycles (Luna et al, 2017), whose results will support the identification of new opportunities or needs for innovation.

For this reason, monitoring parameters need to be well defined so that everyone understands how they will be evaluated. In this sense, the industry must define which individual and collective performance indicators (Ioan et al, 2012; SI et al, 2017) will be used to monitor the achievement of objectives and main results (Luna et al, 2017) and the frequency with which the measurements will be carried out. The procedures proposed for the monitoring stage are presented below: monitoring the innovation implementation process; evaluate performance indicators; prepare evaluation reports; and, identify the need and new opportunities for innovation.

The elaboration of the monitoring stage finalizes the stages and serves as a basis for the identification of new opportunities for innovation, which constitutes a virtuous cycle, capable of assisting management in the process of implementing innovations and, with this, confirms that it is possible to elaborate procedures to assist management in conducting the process of implementing innovations in industries.

5. FINAL CONSIDERATIONS

The need for innovation in industries arouses the interest of research in the literature for its application in the most varied sectors. However, the literature does not present a specific methodology to support the process of implementing innovations in companies. The elaboration of this article fulfilled its objective by answering the research question and by proposing a set of guidelines to support management during the implementation of innovations in the footwear industries.

As a result, it was possible to structure a sequence of actions, grouped into five stages, capable of supporting management in the process of implementing innovations, from the moment the company awakens to the need to innovate until the effective monitoring of the achievement of the intended objectives. with the innovation process, which made it possible to propose a set of procedures to support management professionals in carrying out each of these stages.

The proposed guidelines highlight the importance of the company awakening to the need to innovate (Teece, Pisano & Shuen, 1997; Souza et al, 2014; Luna et al, 2017) and seeking to learn from perceived opportunities (Teece, Pisano & Shuen, 1997; Souza et al, 2014; Luna et al, 2017) to reconfigure the environment (Souza et al, 2014; Helm & Graf, 2018; Manca et al, 2018) in order to create an innovation ecosystem that facilitates the implementation of innovations (Garmann-Johnsen & Eikebrokk, 2014; Johnston & Huggins, 2016; Rajkumar & Stentoft, 2017), capable of encouraging team participation and allowing the company to monitor projected results (Ioan et al, 2012; Si et al. , 2017; Luna et al, 2017).

The article contributed to the literature by presenting empirical contributions in the field of study to fill in gaps, such as those presented by Silva (2011), whosuggestedpropose a methodology for the management of innovation in industrial environments, considering the peculiarities of these environments, and thoseevidenced byNyle´n & Holmstro¨m (2015), when stating thatTheMost of the works found analyze the implementation or management of innovation processes related only to the manufacturing sector and, therefore, do not present approaches related to the transformation sector and that, in this case, there is a theoretical gap to be filled.

The article also allowed us to corroborate the position of authors such as Engle et. al (2016), on the importance of the manager's roles in the implementation of innovative practices, by Aires et al (2017), on the learning of people in organizations; and added academic and managerial contributions.

The theoretical contributions lie in exploring the theory of innovation and in presenting empirical contributions to fill gaps, highlighting the importance of realizing the need to innovate and reconfigure the environment to take advantage of innovation opportunities (Souza et al, 2014), establish indicators to monitor the innovation process (Ioan et al, 2012; SI et al, 2017; Luna et al, 2017); and, by proposing adequate procedures for the implementation of innovation in the footwear industries.

The managerial contributions highlight the importance of managing the innovation implementation process and presents a set of procedures capable of supporting management when implementing innovations in industries.

Although the article was developed with scientific rigor, the fact that the research was carried out in only two industries in the state of Ceará stands out as a limiting factor, which can configure characteristics of regionalism and, therefore, as a suggestion for For future studies, it is recommended to replicate the research in industrial units in other regions or states, in order to corroborate or refute the validity of the proposed procedures or even suggest complementation to the procedures presented.

It is also recommended that the procedures can be applied in other types of industries to support the development of an empirical method for the implementation of innovations in industries in general. In this sense, the application of practices of the proposed procedures can support the development of an empirical method for the implementation of innovations even in the service sector.

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