Knowledge Management in Automotive Industry of Caxias do Sul, Rio Grande do Sul, Brazil

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ABSTRACT

This study aims to investigate, using the model of the Seven Dimensions of Knowledge Management Land (2005). For this, a case study in the automotive business of Caxias do Sul, Rio Grande do Sul, Brazil, from interviews with the manager of manufacturing enterprise was conducted and through the content analysis of responses, we checked the alignment of the management practices of manufacture with an effective knowledge management. The main results were: the company researched practices coexist with late practices business knowledge company, manufacturing undergoes a process of evolution of their managerial practices towards effective knowledge management, but despite this trend knowledge in manufacturing still is not considered strategic by the organizations studied.

INTRODUCTION

The corporate knowledge is essential to the survival and success of enterprises. Unlike traditional economy that saw the organization as a "black box" where resources impeding the products that came out and the markets to which the company participated were the only elements equated, the new business theory, based on skills and resources, turns his attention to a key dynamic in this process: the knowledge contained in the routines and practices that the company transformed into products and services that create wealth (BAGLIETTO TARDÍO, 2001).

According to (Nonaka and Takeuchi, 1999), the key to business success is the organizational knowledge creation should be understood as the organization's ability to create new knowledge, transfer it to the organization as a whole and incorporate it into products, services and systems.

Various environments, such as R&D, manufacturing and marketing, require specific approach in KM. Knowledge Management (KM) requires intellectual sophistication, empathy to engage employees and abstraction capacity to understand the nature of the different skills that wants to run (ALAVI; LEIDNER, 2001; TERRA, 2005; SHANG, 2014).

Terra (2005) explains that knowledge itself cannot be directly managed as it is in people's minds, is abstract, invisible, difficult to obeyant by people who have learned to manage data and information. Therefore, the KM is concerned with infrastructure and management processes, enabling the creation, sharing and use of individual and collective knowledge.

In the study, the main practices are identified, actions and characteristics of the surveyed manufacturers, comparing them with the dimensions that characterize the KM. Thus, it was possible to evaluate the alignment of the automotive manufacturing industry in Caxias do Sul, Rio Grande do Sul, Brasil, with the activities and practices of KM and propose actions that support this process.

Therefore, the research problem of this study is the importance of converting tacit knowledge, routines created in manufacturing, organizational assets in order to promote improvements in products, processes and work environment and contributes in maintaining competitive advantage compared to competition. Therefore,
considering the strategic nature of organizational knowledge, the research problem arose from the need to investigate how automotive companies in Caxias do Sul, Rio Grande do Sul, Brazil, are aligned with the practices and actions of KM and suggest improvements in the process.

A. Knowledge management:

Achieving a sustainable and difficult to be imitated by the competition, based the simultaneous improvement of productivity and competitiveness, competitive advantage should be the central objective of KM. When aligned with the strategic direction of the organization, this creates a competitive advantage to increase shareholder value and shall be perceived by the market generating income and wealth for the organization (DAVENPORT, 1999).

Terra (2005) states that it can manage is the infrastructure and management processes that promote the creation and sharing of knowledge. Knowledge itself is something invisible, elusive and abstract that exists only in people's minds, which makes the KM more complex than the management of data and information.

Despite the specificity of KM studies of (Davenport et al, 1998; Davenport, 1999), nine factors were identified as being common to KM and projects that succeed. However, as the authors themselves, the variables found in research only reveal the success or failure of the project, are not decisive, but rather should be seen as hypotheses about possible causes of the success of a KM project. They are:

• oriented culture knowledge: employees freely exploit their intellectual abilities and their creative activities have the backing of executives. People are not resentful toward the company and are not afraid to be replaced when the knowledge that theirs is shared. The KM project is aligned with the organization's culture;

• technical and organizational infrastructure: a uniform computing infrastructure and widespread communication in organization supports personal productivity and facilitates access to relevant data and information. Functions and organizational structures are created enabling each project to take off soon;

• top management support: provisioned resources and open spaces for infrastructure, the organization announced that KM and organizational learning are vital to the business, and clarifies what is important knowledge to improve productivity and competitiveness;

• linking economic or sectorial value: KM brings benefits involving economies, monetary gains and success;

• some guidance for processes: the procedural aspect of project confers robustness and systemic of KM;

• clarity of vision and language: all terminology used in the design of KM is clear and does not allow more than one interpretation;

• nontrivial motivating factors: employee behavior related to knowledge, receives long-term incentives, linked to the rest of the structure evaluation and pay to ensure the continuity of motivation;

• some level of structure of knowledge: the knowledge repository presents a minimal structure that reflects the usage pattern making agile and productive research; and

• multiple channels for the transfer of knowledge: knowledge is transmitted through multiple channels that reinforce and complement each other, and face to face meetings play an important role in this process.

According to Davenport (1999) the presence of nine items up on a project KM indicates that the company is on track. In the authors' opinion, the most relevant items for the project success of KM is knowledge oriented culture, human infrastructure, and support of top management, which, not coincidentally, are the most difficult to develop.

According to (Terra, 2005) there is a strong correlation between good corporate results and given the focus on managing the creation, acquisition and sharing of knowledge. According to the model of the (Terra, 2005), the good results, taking market share as metrics are correlated with 41 characteristics of effective KM. The degree of alignment of organizations with these characteristics divides them into three major groups: traditional businesses delayed firms, and companies that learn. Delayed companies maintain a management practice less aligned with KM; traditional, a management practice moderately associated with KM, and companies who learn management practices associated with more effective KM.

The 41 characteristics of an effective KM were divided into seven categories which (Terra, 2005) called dimensions of knowledge. They are:

• strategic factors and the role of top management: the role of top management leadership is the process and not just management. In the strategic plan should be consistent and reinforce the organizational structure and culture that you want to achieve. The other dimensions are directly affected by their performance;

• organizational culture and values: are important elements in the culture of creative organizations, the promotion and practice of dialogue, the resource usage time, workspaces, celebrations, trust and knowledge sharing, the characteristics of the environments and creative cultures, perspectives of employees in relation to the standards and values that encourage creativity and the implementation of new ideas;

• organizational structure: KM tends to change the organization of work in companies that learn as unconventional as inverted pyramid charts, spider, ring and others are deployed to facilitate and decentralize decision-making processes. The purpose of structuring the work is to reduce to a minimum the hierarchy, supporting teamwork, delegate responsibilities, foster creativity, provide the opportunity for the emergence of
new leaders, develop multiple skills, link performance objectives to customer satisfaction and make it fairer the evaluation process of the people;

- management of Human Resources: although knowledge is fundamentally individual, KM should happen from organizational strategies that provide collective and organizational learning;
- system information (IT): IT should be just a facilitator of knowledge sharing or information, as the process of transforming information into knowledge depends exclusively on the human mind and our ability to interpret;
- measuring results: companies engaged in KM stress the importance of intellectual capital, using qualitative and quantitative metrics, to demonstrate how intangible assets, tacit knowledge and explicit and collective learning bring competitive advantage to the organization, generating income and valuing capital to shareholders; and
- learning about the environment: organizational learning, increasingly, must be extended beyond the enterprise, and knowledge relevant to business are the customers, suppliers, universities and competitors.

The effective KM in the business environment requires new models of work organization, structures, processes and management systems that promote teamwork and foster creativity. The recovery and utilization of the intellectual capacity of each employee and leadership willing to break old mechanistic paradigms and break the barriers in the transformation process are vital to the success of enterprise KM (Terra, 2005).

**Methodology:**

All To investigate the KM in manufacturing, an exploratory aim, seeking a greater understanding of the research problem in an attempt to develop concepts and theories, gain insights and look for patterns, ideas or hypotheses was performed (Collis; Hussey, 2005).

As for logic, research on KM in manufacturing will be inductive, as theories, hypotheses and inferences will be developed by observation of empirical reality of KM practices in manufacturing. The research is classified as basic, also called fundamental or pure, it will be conducted to basically increase the understanding of how to manage the manufacturing processes of creation, distribution and measurement of knowledge (Collis; Hussey, 2005).

The method used was case study. Qualitative data were analyzed for their content and management practices classified according to the model of Terra (2005) in delayed business practices, business practices and practices of traditional learning company.

As to the respondent profile, he's 50 years old, is a graduate in Business Administration and is currently pursuing a specialization in environmental management. With the company for three years and since joining the organization holds the position of manufacturing manager. Data were collected using multiple sources of evidence, such as interviews, direct observations on the websites of the organizations surveyed and queries in the intranet home page and the same.

The guiding questions were designed to identify and assess the alignment of manufacturing in automotive industries Caxias do Sul, Rio Grande do Sul, Brazil, with the dimensions of KM cited by (Terra, 2005L), as well as highlighting practices and managerial actions related to these dimensions that allow classifying manufacturing as delayed, traditional or learning.

**Results:**

The Company is American Multinational Company, founded in 1911, headquartered in Cleveland, U.S., and regional headquarters in Shanghai, China, Morges, Switzerland, and Sao Paulo, Brazil. Has approximately seventy-five thousand employees, and its products are marketed in more than one hundred and fifty countries.

Operates in various segments of the economy and is divided into two major business sectors: electrical and industrial, and the industrial sector is subdivided into three groups: vehicle, aerospace and hydraulic. Its sales in 2010 amounted to 13.7 billion dollars and 6.4 billion from the electricity sector, and 7.3 billion, the industrial sector. In Brazil, began operations in 1957 in the city of São José dos Campos, São Paulo, manufacturing valves for the nascent Brazilian automotive industry. It currently has seven plants in Brazil and one in Caxias do Sul.

The plant in Caxias do Sul, part of the industrial sector (vehicle group) and produces spare parts, sub-assemblies and transmission assemblies for major automakers in the agricultural market. Began his career in the city in 2005, after acquiring a local family company in the same industry. It currently has 611 employees of which 370 are in manufacturing.

DKM 01 - Dimensions of analysis of the alignment of manufacturing enterprise with the KM
DKM 01 - Dimension strategic factors and the role of top management
DKM 01/01 - are clear and are shared for all levels of manufacturing, what are the core competencies (strengths) of the department in terms of skills and competencies?

The interviewee's answer, the power to react to adverse situations and the ability to adapt to non-routine situations are strengths of the department. There is a collective consciousness about that power, so that, throughout the year, manufacturing has been tested several times for their ability to, in the face of events that fied the planning, adapt demonstrating flexibility and speed in responding to unexpected demands. Thus, we can classify the organization as company Learning in relation to this aspect.
DKM 01/02 - Leaders are manufacturing distributors and controlling tasks of subordinates or have the profile coaches (teacher, mentor or facilitator) to encourage people in the organization to develop fundamental skills for the existence of a learning able to recreate the world?

For the respondent, leaders act as distributors of manufacturing tasks. They are not prepared to coach their teams, because their superiors also act likewise concerned with distributing tasks and achieve goals; do not give due importance to the development of their subordinates featuring this way, the organization as a company delayed in relation to the profile of leadership. The respondent also points out that empathy is essential to profile coach, and that this ability - to put yourself in someone else's - is rarely found among the leaders in manufacturing.

DKM 01/03 - Manufacturing teams work with a few key benchmarks?

Regarding this question, the interviewee explains that, with few indicators, it is possible to measure manufacturing performance. Are used in day to day production, indicators hours generated, safety and quality. This management practice characterizes the organization as company learning.

DKM 01/04 - The size and explicit knowledge is widely incorporated into the strategic planning of manufacturing?

The interviewee's answer to this question focused more on the section manager, which according to the respondent, is the most important figure in manufacturing. The interviewee's answer, the knowledge dimension is considered important, but not strategic. Depending on the need, knowledge is relegated to the background leading to improvisations and unsuccessful bets. Managers do not have the knowledge necessary to lead large groups of manufacturing and internal promotions are made rashly. However, the company is classified as belonging to the group of delayed company.

DKM 01/05 - The manufacture of knowledge gaps are systematically identified and there are strategies to fix them?

From the account of the respondent, the gaps in knowledge are not treated in a strategic manner, with little training, especially regarding aspects of leadership of managers of manufacturing. For the respondent, the gaps of the leading managers are reflected in the performance of the entire manufacturing team, and there is a more hard-hitting action of company management to solve the problem, therefore the company is considered delayed regarding this topic.

DKM 01/06 - Creative activities have backing of executives in manufacturing?

How punctuated by the respondent, the unpreparedness of managers and lack of features make manufacturing work only in urgent demands leaving no space to encourage and stimulate the creativity of the team. The lack of time devoted to creative activities featuring the company as delayed.

DKM 02 - Dimension organizational culture/values

DKM 02/01 - There employee confidence in organization? There is, in general, pride in working for the company?

According to interviewee's answer, the little promotion of values the company - for lack of preparation of the managers or the absence of internal marketing - affect the perception of employees on the company, featuring the same as delayed regarding this aspect.

DKM 02/02 - New ideas generated in manufacture are valued? There is evidence?

In this topic, the respondent points out the program of suggestions and creative ideas, created this year and has worked as a stimulus to the creation and dissemination of suggestions as well as tools to evaluate the best ideas with cash prizes. Thus, we can classify the company as traditional as it started this year, a program to develop good reviews focus on manufacturing.

DGC 02/03 - There, manufacture, spaces conducive to the exchange of information (open spaces and meeting rooms)? Few symbols of status and hierarchy?

In this matter, as the interviewee says, there is no structure available to operators, where they can gather to exchange tips. The meetings take place in the workplace, featuring the company as delayed.

DKM 02/04 - Mission, Vision and Values are promoted with symbolic acts and actions?

According to the interviewee, the company attaches great importance to the values of the organization and it shows with practical in day to day operations. Mainly refers to the values that speak of ethics (doing business the right way) and security, health and environment. Have promoting Mission and Vision is restricted to the time of audits. As there are practices associated with effective medium KM, the company is classified as traditional in relation to this aspect.

DKM 02/05 - The people in manufacturing are encouraged to test their ideas without fear of making mistakes? No time for this practice?

The interviewee's answer, there is little involvement of employees in the manufacturing problems of everyday life. There is a culture of listening to what the employee has to say about a particular problem or situation, characterizing the company as delayed. The program suggestions and creative ideas is gradually transforming this reality, engaging the operator in finding solutions to the problems of the organization.

DKM 02/06 - The good results of manufacturing are shared with employees and victories are celebrated?
As the interviewee, the celebrations occur, and the company is strengthening that habit, because he feels the importance of celebrations in training and team motivation. There are already standardized in company as the days without accident each area celebrations when, depending on the goal reached, the team gets a cash value and a differentiated coffee, characterizing thus the organization as a company learning. However, for the respondent, the weekly communication tool with factory employees could explore further the results and achievements of the week of manufacture.

**DKM 02/07** - There is a new leadership in the organization arising from the manufacture?

Regarding this topic, the respondent demonstrates (with examples) that are in the organization of the section managers who have recently been promoted coming from manufacturing, and so can frame the organization as company learning.

**DKM 02/08** - There is a discussion of the problems of manufacture with the participation of all levels forums?

In view the interviewee, there are several discussion forums where there is participation at different hierarchical levels, such as meetings of alignment with any plant, the coffee with the director in meetings to discuss quality issues, etc.. However, for the respondent, there is little participation of officials from the factory floor, it is not stimulated by the leaders of an open debate on the issues of the company. Despite the various forums, the modest involvement of operators in manufacturing reflects a traditional profile of the organization in relation to this aspect.

**DKM 03 - Dimension organizational structure**

**DKM 03/01** - In manufacturing, the information is used to control or to support the front line?

The interviewee's answer, the information is used mainly for leading manufactures such as control operators tool. There is a strong concern of the leadership to control details of the operation, demonstrating leadership immaturity of manufacture or team of operators or, more likely, both characterizing the organization as delayed, using the information to control and not to leverage the development team.

**DKM 03/02** - In manufacturing, decisions are made at the lowest possible level? The decision making process is nimble, the bureaucracy is minimal?

Regarding this question, it is clear that decisions, manufacture, are made at the highest level of management. It is usual practice to share with operators strategic decisions of the organization, demonstrating a company profile delayed, given that employees at manufacturing some participate in decisions that will affect their daily lives.

**DKM 03/03** - It is common practice in manufacturing, the use of multidisciplinary teams and formal overlap with traditional hierarchy, focused on innovative projects?

For the respondent, no shares of manufacturing accordingly. The two multidisciplinary groups formed the company were created to solve engineering problems. In the opinion of the interviewee, and lacking culture for this kind of work in manufacturing, lack of knowledge on the part of operators, which are more focused on the problems of his cell and have no opportunity to interact with other production areas. As the company has featured some multidisciplinary groups can be classified as Traditional enterprise in relation to the practice of management.

**DKM 03/04** - Teamwork is standard practice in manufacturing? Evidence?

According to the story, teamwork and everyday examples, cited by respondent, teamwork is not a strong point of manufacture. Rather, there is little collaboration between teams and even rivalry between shifts and between teams in the same industry. Thus, it may be characterized as manufacturing delayed regarding the practice of teamwork.

**DKM 03/05** - The flexibility of manufacturing is sufficient to produce varying amounts of different models?

Manufacturing has been specializing in making a large number of setups with few losses. This is considered a strategic competency and has been enhanced with impressive results. In this practice, the company is characterized as learning company, producing a large number of part numbers in the quantities demanded by customers, said the interviewee.

**DKM 03/06** - Changes in products and processes are rapidly incorporated into manufacturing?

The respondent reports that communication failures identified in previous issues, hinders change management. Also attributes part of the problem of passivity in relationship to manufacturing difficulties, it always expects a solution that will support areas and not do your part as a catalyst for multidisciplinary actions to resolve problems. Thus, the manufacturing company, in relation to this aspect, is characterized as traditional, because in spite of frequent changes in the area, disrupts the communication process.

**DKM 03/07** - There is a repository pertaining to the manufacture of easy and effective access knowledge?

The interviewee's answer, the manufacture does not have a repository of explicit knowledge. The knowledge is in the mind of the most experienced operators, who teach the younger and who are responsible to alternative solutions when the process described by engineering failure. The little explicit knowledge of the manufacturing company characterizes it as delayed.

**DKM 04 - Dimension of human resources management**

**DKM 04/01** - In manufacturing, knowledge sharing is one of the criteria for performance evaluation?
Manufacturing uses a tool called "skills matrix" where the knowledge of the operator is qualified and quantified. The more complete the matrix, the operator will be most valued. The tool has become increasingly important, but is not yet fully implemented. This practice, although to be consolidating, indicates that the company believes that sharing knowledge is a strategic characteristic of firms learning, according to the interviewee.

**DKM 04/02 - This is a profit sharing program involving most employees?**

Regarding this topic, the respondent replied that there is a profit sharing program that includes all employees of the company, including manufacturing. Therefore, in relation to the practice of management, the company can be classified as company learning.

**DKM 04/03 - There is a reward and recognition for results and extraordinary contributions scheme?**

The respondent stated that the company has a system of awards for outstanding contributions, and that it is already part of the organizational culture, being well used in manufacturing. This management practice already well-used and incorporated into the organizational culture demonstrates a company profile learning.

**DKM 04/04 - Is this a payment program linked to the performance of the team?**

Response by the interviewee, there is an initiative to reward the best team of manufacturing, but it is still experimental, featuring traditional manufacturing as compared to the practice of management.

**DKM 04/05 - The organization has explicit strategies to identify and retain talent?**

The interviewee's answer, retaining talent in manufacturing has no defined strategy and does not receive the necessary attention from the top management. Regarding this aspect, the company is classified as delayed.

**DKM 04/06 - The turnover in manufacturing is compliant companies in the same industry?**

The respondent states that the turnover is high and undermines the company in many ways, which characterizes the company as delayed relative to turnover in manufacturing.

**DKM 04/07 - The selection process for employees at manufacturing is rigorous and aligned with the organization's goals?**

The process of recruitment and selection criteria has not aligned with the company's strategy, and the profile that the company expects operators is not clearly defined. However, the company is considered delayed in relation to the selection process.

**DKM 04/08 - There is a high investment in training for manufacturing?**

The respondent stated that the turnover is high and undermines the company in many ways, which characterizes the company as delayed relative to turnover in manufacturing.

**DKM 04/09 - The scope of manufacturing jobs, is mostly pretty comprehensive?**

The respondent argues that the description of the operator's activities at different levels, is clear and comprehensive, but it is not compatible with the training load it receives to enable it to perform the scope of the position. Therefore, although the training is not compatible, regarding the scope of manufacturing jobs, is an enterprise learning.

**DKM 04/10 - The career planning in manufacturing seeks to equip individuals with different perspectives and experiences?**

The interviewee's answer, it is observed that, even in a scenario where the company is reducing its staff, there are opportunities for growth and learning. The rotation itself above average contributes to this, more by virtue of the situation than for career planning. So the company can be classified as traditional in relation to that criterion.

**DKM 04/11 - The rotation of functions is practiced as a way to share knowledge?**

Depending on the respondent, the rotation of duties between managers is used, but the main goal is to supply technical deficiencies or lack of resources rather than sharing knowledge. Between operators, there are some initiatives to job rotation with the aim of sharing knowledge. Thus, the company is characterized as traditional regarding this management practice.

**DKM 04/12 - There is a "team" responsible for the design and management of the KM process?**

There is no "team" responsible for this activity. The large amounts of tacit knowledge that would have to be registered, because what you lose when people leave the organization, said the witness, characterized the company as delayed in relation to that criterion.

**DKM 05 - Dimension Information System**

**DKM 05/01 - Communication in manufacturing is efficient in every way?**

The respondent reports that communication is poor and constitutes a major problem for manufacturing. Regarding communication, manufacturing is delayed.

**DKM 05/02 - There is wide access of employees of manufacturing to databases and knowledge of the organization?**

For the explanation of the deponent, access to the database is restricted. Operators do not have computers available in manufacturing, where they can access the databases of the organization. Regarding this practice, manufacturing is delayed.

**DKM 05/03 - The knowledge and know-how of manufacturing are documented with efficiency and discipline?**
The perspective of the respondent, only the technical knowledge is documented via processes; other activities are manufacturing and knowledge in people's minds. Therefore, the company is traditional about this management practice.

**DKM 05/04** - The system to access and share such knowledge is friendly (easy to learn and use)?

As the previous answers of the respondent, despite an organized system of information on the intranet, manufacturing operators do not have access to it. Regarding this issue, manufacturing is delayed.

**DKM 05/05** - The most relevant information is organized into virtual spaces/database generally accessible, including for manufacturing?

Whereas previous responses questioned, although there is a system of organized information on the intranet, manufacturing operators do not have access to it. In relation to this, manufacturing is delayed.

**DKM 05/06** - The criticism of manufacturing activities are known and there is information available about them?

The interviewee's answer, the critical activities are known, but the treatment of problems often does not reach the root cause for lack of information and expertise on the critical activity. Nevertheless, the interviewee feel an improvement in the treatment of critical processes. Thus, it can be classified as traditional manufacturing in relation to this aspect.

**DKM 06/01** - The results of the organization are disseminated widely to manufacture and are sources of learning for management actions?

On this question, the respondent argues that the disclosure of the results is inefficient and does not provide subsidies for taking actions with the goal of changing future results. Is restricted to thanks when the results are positive or critical, when negative. Thus, we can classify the company, this criterion, like delayed.

**DKM 06/02** - There is concern measure the results of manufacturing in various aspects (financial, strategic, knowledge acquisition)?

The interviewee's answer, note that the company takes care to measure various aspects of the operation, but this culture is not widespread in manufacturing. So the company is classified as traditional, since they are measured various aspects of the business, but these indicators are poorly reflected in manufacturing.

**DKM 06/03** - The dimension learning and skills development course is presented in department meetings?

The respondent states that competence development is not a concern that occupies place at meetings of the manufacturing department. The company is delayed regarding this management practice.

**DKM 06/04** - There is evidence that knowledge emerged in manufacturing results in new products, processes or significant improvements to the organization?

Interviewed by the argument, it is seen that the use of the suggestions of improvements stemming from the manufacturing part of the routine of the organization. Many processes have been optimized at the suggestion of operators as well as working in manufacturing systems deployed have the direct participation of these, featuring a company learning.

**DKM 06/05** - Intangible assets such as organizational climate, are measured in manufacturing?

Regarding this issue, the respondent asserts that there is an annual survey of organizational climate, with participation of 100% of the work force of the plant, and that this research arise action plans to change the unfavorable scenarios for next year. The survey is a requirement of the corporation is held worldwide during the same period, by a third party. Thus, for this management practice, the organization can be defined as a company learning.

**DKM 07** - Dimension with the learning environment

**DKM 07/01** - There are formal and informal mechanisms through which the manufacturing learning with customers?

For the explanation of the interviewee, there is a formal mechanism by which the manufacture learns from customers, which characterizes the company as learning in relation to that criterion.

**DKM 07/02** - There is knowledge transfer from suppliers to manufacturing?

In the interviewee's opinion, is a feature used by some manufactures, suppliers transfer little knowledge for operators, which characterizes the company as traditional in relation to this practice.

**DKM 07/03** - The visiting officials from other manufacturing companies, such as suppliers, customers and other business units?

According to the respondent, there is no such practice in manufacturing. It features a company as delayed regarding this aspect.

**DKM 07/04** - Employees of manufacturing are somehow encouraged the company to continue your studies?

Although the company has a policy of subsidy, for the respondent, it is not well explored. Should be more focused on technical courses that give results in the short term both for the company and for the employee. But the policy exists, and the financial incentive, too. Thus, for this management practice, the organization is seen as company learning.
Conclusion:
It is noticed that the Company is manufacturing delayed on the practices of effective KM. In six of the seven dimensions studied, has more than 33% of respondents identifying a company whose management practices are associated with less effective KM. And the total of the items in the seven dimensions studied, 47.92% of the responses also point to a company with delayed practices in relation to effective KM.

The lack of information system that supports the manufacture, little explicit knowledge, associated with high turnover and out talent, they are problems that require attention from the top management, since they affect manufacturing knowledge repository and prevent integration of new entrants.

Strategic factors in the size and role of top management, the company is delayed, top management underinvested in training for manufacturing, and the profile of the middle management controller is not exploring the creativity of the team. The focus is on manufacturing production targets, the development of skills and competencies is not treated as a strategic value to the organization.

The scale organizational culture and values was between delayed and traditional. Senses a change in the organization in the last year in relation to the valuation of creative ideas generated in manufacturing with the formatting of a specific program for this purpose. However, the lack of proper time and place for the meeting of groups is fragile. The mission and vision of the company are worked with operators of manufacturing only in time of audit. The values, especially ethics, safety and the environment are stated in the daily manufacture and part of the culture of the organization.

Regarding the dimension organizational structure, the Company has manufacturing management practices associated with less effective knowledge management. The dimension of human resources management practices reveals some aligned with effective knowledge management, such as: financial recognition when an operator performs something that exceeds the expectations of your manager, promotion of employees manufacture and program participation in company results. However, these good practices share space with other considered backward, as high turnover, little investment in training and lack of a program to retain talent. Thus, we can say that the dimension of human resources management is traditional because it is associated with a moderately effective KM.

The dimension of information system is one with the highest number of delayed management practices in relation to effective KM. About measurement results, it can be stated that Company is traditional therefore coexist in balanced manner, manufacture, management practices delayed companies with practical business management learning.

The last dimension studied, learning about the environment, is the only one in which the practices of a company learns that represent the majority. A robust grant program for operators who are studying and a formal, systematic and participatory tool for analysis and management action taken in relation to customer issues are the strengths of this dimension.

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