# Relationship Between People Management Practices and Disruptive Innovation and Organizational Modernity

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#### **Abstract**

This study aims to evaluate the relationship between people management practices and disruptive innovation and organizational modernity. The methodological path followed is characterized by a quantitative approach, using the survey procedure for data collection and treatment by means of Structural Equation Modeling Through the structural equation modeling, one can buy that the people management practices have a positive relationship with the organizational modernity; and the organizational modernity has a positive influence on the Disruptive Innovation. It was observed People Management Practices explain 82% Organizational Modernity and People Management and Organizational Modernity explain 78% of Disruptive Innovation. It can be stated that for the sample analyzed Organizational Modernity was confirmed a mediating variable

**Keywords:** People Management Practices. Disruptive Innovation. Organizational Modernity.

#### 1. Introduction

Empirical studies have shown that organizations that satisfactorily manage their people achieve different benefits, among which can be cited: increased competitiveness, improved customer expectations and improved efficiency of operations (COHEN; LEVINTHAL, 1990; NONAKA; TAKEUCHI, 2002; TSAI, 2001; ZHARA; GEORGE, 2002; LEVIN; CROSS, 2004; NONOKA; PELTOKORPI, 2006; CAMISÓN; FORÉS, 2010).

According to Sant'Anna's (2002) view, organizational modernity includes the increasing openness of individuals to participate in decision-making processes and the possibility of applying measures that are supposed to make corporate environments more democratic

Christensen (2006) states that disruptive innovation describes a process by which a product or service

begins with simple applications at the bottom of a market and progressively moves "above the market," eventually displacing or eliminating established competitors. This model of innovation allows a large part of the population, which previously did not have access to certain products and services, to start relying on them.

A disruptive innovation is only consolidated when the improvements make the product, which previously did not satisfy the leaders' customers, present the functionalities that interest the leaders' customers, but with a cost advantage in relation to the dominant companies. At this point, the threat is perceived. When this trajectory is consolidated, consumers switch to the entrant's product, and the leaders lose their leadership position in the market change. (CHRISTENSEN, 1997).

Regarding the object of study, the companies are located in the Northeast Region of the State of Rio Grande do Sul - Brazil. They are companies recognized by the Gaucho Quality and Productivity Program (PGQP), through the RS Quality Award in 2014.

This article aims to analyze the relationship between people management practices and organizational modernity and disruptive innovation.

In addition to the introduction, this article is structured with four other items, i.e., theoretical framework, methodology, presentation of results and final considerations

## 2 THEORETICAL FRAMEWORK

# 2.1 People Management Practices

The people management practices considered were recruitment, selection of people, performance evaluation, training and development of personnel, compensation system, career plan, and management by competencies.

According to Marras (2010), people management goes through constant changes, because leveling the company's needs with personal needs is a difficult and laborious task. Changes occur quickly, and modern structures tend to be lean and flexible. There is a great effort in the search for partnership between employer and employee, with this, the compensation programs tend to be seen as a positive instrument, no longer an expense.

Training is the short-term educational process applied in a systematic and organized way, through which people learn knowledge and skills to be applied in their work. It is the act of increasing the employee's knowledge for the development of a task (FRANÇA, 2009).

In relation to performance evaluation, it is considered, according to França (2009), the practice of analysis and assessment of the reach of the organization's people management objectives, with the efficient use of resources.

## 2.2 Organizational Modernity

Eboli (1996), based on the ideas of Buarque (1994), Faoro (1992), Motta (1992), Touraine (1994), and Zajdsznajder (1993), describes the attributes, the modernity indicators, that characterize modern society, embodied in the cultural, political, social, administrative, economic, and technological dimensions of organizations.

From the characterization of modern society and the understanding that these characteristics are reproduced in an equally modern organization, Eboli (1996) transposes such characteristics to the organizational context and establishes a significant set of indicators of organizational modernity, describing an Organizational Modernity Patterns Analysis approach.

Thus, at the level of organizations, modernity can be evoked to highlight the need for companies to prepare themselves to face competition in the patterns of the business world, through the adoption of management strategies and practices that favor the formation of contexts that encourage competent behavior (Sant'Anna et al, 2016).

The pressure around the competitiveness of companies, technological progress, and constantly changing market conditions highlight the relevance of organizations revisiting and reformulating their management models, particularly those directed at managing their human elements (Sant'Anna et al, 2016).

The pressure around the competitiveness of companies, the Corroborating, to respond to the characteristics of modern society, organizations must be agile, lean, and their activities must be performed by people who have extensive knowledge of the business and have skills, responsibilities and autonomy to make decisions, in increasingly complex situations and environments. (KILIMIK; SANT'ANNA, 2006).

This organizational transformation brings a great challenge that, according to Kilimik and Sant'Anna (2006), will be to transform task employees into process professionals; to rethink and redefine the roles of managers and employees; to reinvent and introduce new management systems, in which learning is part of the organizations' day-to-day routine.

# 2.3 Disruptive Innovation

Disruptive innovations give rise to new markets and business models, presenting more efficient solutions than existing ones. They cause the rupture of an old business model and change the existing bases of competition (CHRISTENSEN; HWANG, 2008).

According to Adner (2002, pp. 668) "Disruptive innovation occurs when, despite its inferior performance on focal attributes, the new technology displaces the core technology in the core market." Initially, disruptive innovation brings to the market something of lower performance compared to what is offered so far in the market, and may also in a first phase not be well regarded by prospective customers.

In this regard, Christensen (1997, pp. 264) states that: "Disruptive innovations change the value proposition in a market. When they first appear, they almost always offer inferior performance in terms of the attributes that customers care about."

On the other hand, they have other attributes that will attract the attention of the new consumers (less demanding). However, at this early stage, these attributes are not highly valued by the consumers of the previous technology, who are the most demanding consumers. The new products are usually cheaper, simpler, and more practical and convenient to use. Therefore, this will give rise to new markets, which can easily take over the position of the previously existing products in the markets (CHRISTENSEN, 1997).

On the other hand, they present other attributes that they will call disruptive innovations allow a larger portion of the population with lower income to acquire cheaper products that could be purchased only by people from higher classes, according to Christensen and Hart (2002). These authors also say that disruptive innovation is offering a product or service in a simple version, for people who would otherwise be totally

excluded or poorly served by existing products. These customers, therefore, can purchase a more modest version of a certain product, which was only available to the higher income class. They also maintain that companies gain attractive profit margins when they extend their luxury products to a less demanding stratum that has not yet enjoyed the current offerings.

## 2.4 Research Hypotheses

According to Severino (2002, p. 61) "particular hypotheses are ideas whose demonstration allows one to reach the various stages that one must reach for the total construction of the reasoning". Thus, considering the theoretical framework highlighted in the previous sections, the following research hypotheses are presented:

H<sub>1</sub>: People Management Practices have a positive relationship with Organizational Modernity;

H<sub>2</sub>: Organizational Modernity has a positive influence on Disruptive Innovation.

## 3 METHODOLOGICAL PROCEDURES

Among the companies recognized by the Gaucho Quality and Productivity Program (PGQP), through the RS Quality Award (18th edition - year 2013 and 19th edition - year 2014), ten were chosen to be part of this study, for being companies located in the Northeast Region of the State of Rio Grande do Sul, which includes a population of 1,009,66 inhabitants. Its area is 25,749.128 km². There are 53 municipalities grouped into three microregions: Caxias do Sul, Guaporé, and Vacaria.

With regard to the employees, the population was considered to consist of all the employees of the ten selected companies.

The number of participating employees was established based on the recommendation of Hair J, et al (2005), which is 3 to 10 respondents per questionnaire question, the final sample was 304 valid questionnaires, thus meeting the recommended criteria.

The total number of employees, i.e., the population was considered to consist of all employees of the ten selected companies.

The choice of employees was made through stratified probability sampling proportional to the number of employees in each company, since the probability of including each employee in the population in the sample is known and equivalent, since the employees were selected based on the list of employees provided by each company. (CHURCHILL, 1999; MALHOTRA, 2001).

Thus, it can be said that the sampling was carried out in two stages, the first encompassing stratified proportional sampling by company and the second, simple random sampling for the selection of employees who were the research units.

Simple random sampling was used to choose the employees who were the research units. According to Marconi and Lakatos (2006, p. 42), in the simple random sample, "those surveyed have the same probability of being chosen, excluding what could be called an almost random choice, usually without personal choice. If there is no personal choice, there will be greater veracity in the research, everyone having the same rights".

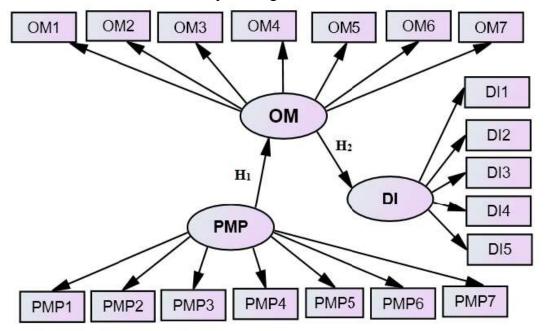
According to Sant'Anna (2002), the questionnaire was composed of eleven-point Likert-type response

scales, where 0=strongly disagree and 10=strongly agree, about People Management Practices, Organizational Modernity and Disruptive Innovation (SANT'ANNA, 2002). The questionnaires were applied in July, August and September 2014. Thus, this is a quantitative, descriptive research, operationalized through a survey, with the application of Structural Equation Modeling (SEM)

#### 4 ANALYSIS AND DISCUSSION OF THE RESULTS

Figure 1 presents the path model with the observed variables, latent variables, and the relationships among the latent variables, i.e., the relationship between People Management Practices, Organizational Modernity, and Disruptive Innovation

Figure 1 - Path model of the interrelationships among the dimensions



From Figure 1, it can be seen that the measurement model presents two hypotheses that connect the three latent variables to the xx observed variables. Next, through the path diagram, it is possible to describe the structural equations, as Table 1 presents the diagram for the model.

Table 1 - Path diagram for the model

Endogenous	=Exogenous	+Error
Dimensions	Dimensions	
MO	$=$ $\beta_1$ PMP	$+\epsilon_{PMP}$
ID	=B1 PMP + B2 MO	+ε <sub>MO</sub>

Source: Research data based on Hair Jr., Gabriel e Patel (2014).

Based on the initial path model and the respective proposed hypotheses, the next topic presents the evaluation of the measurement model.

## 4.1 Evaluation of the Measurement Model

According to the precepts of Henseler, Ringle, and Sarstedt (2015), Guerra; Camargo (2021) and Zanandrea et al. (2019) the following statistics were calculated to evaluate the model's reflective latent variables: (1)

factor weight; (2) internal consistency reliability and convergent validity; and (3) discriminant validity. Initially the factorial loads of all variables were evaluated, demonstrating the validity of the loads referring to the constructs close to 0.70. According to Hair Jr. et al. (2009), factor loadings between latent and manifest variables are considered acceptable values greater than 0.70. Next, model reliability was tested using Cronbach's alpha ( $\alpha$ ), composite reliability ( $\rho$ c) and the Average Variance Extracted (AVE) tests. The model presented validity and reliability indicators above the recommended thresholds, as presented in Table 2.

Table 2 - Internal consistency measures and convergent validity of the model

Constructs	ronbach's alpha	Composite	Average Variance
	(a)	Reliability (ρ <sub>c</sub> )	Extracted (AVE))
People Management Practices	0,914	0,932	0,661
(PMP)			
Disruptive Innovation (ID)	0,939	0,953	0,804
Organizational Modernity (MO)	0,934	0,947	0,718

Source: research data

Convergent validity was verified through the Average Variance Extracted (AVE) of each construct, which is above 0.5 (FORNELL; LARCKER, 1981). In Table 2 it can be observed that the results meet the requirements of obtaining values higher than 0.50 for AVE and values higher than 0.70 for internal consistency, as pointed out by Hair Jr. et al., 2009; Hair Jr, et al (2014).

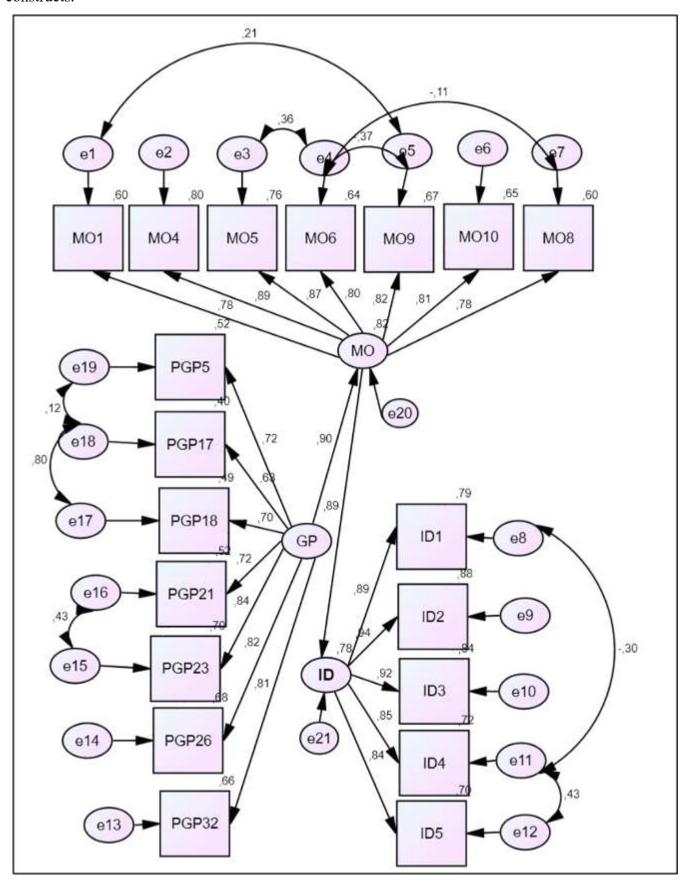
Following the recommendations of Hair et al. (2009), the convergent validity of the indicators was verified and confirmed, since the indicator loadings of each construct are greater than 0.65. Next, Table 3 presents the relationship between the constructs evidencing that the appropriate discriminant validity after verifying that the square root of the AVE for each dimension is greater than the correlation between the dimensions, according to Fornell-Larcker (1981) criteria and Henseler, Hubona, and Ray (2016) notes.

Table 3 - Análise da validade discriminante pelo critério Fornell-Larcker

Constructs	PMP	ID	MO
PMP	0,813		
ID	0,774	0,897	
MO	0,762	0,762	0,847

Source: research data

After the interrelationships arising from the variables are identified and the path measurement model is structured (Figure 2), the path model provides the results of the factor loadings between indicators and constructs.



Source: Software AMOS

It is observed that People Management Practices explain 82% of Organizational Modernity and People Management and Organizational Modernity explain 78% of Disruptive Innovation. It can be stated that for the sample analyzed Organizational Modernity was confirmed a mediating variable. GILIOLI (2014).

## 4. FINAL CONSIDERATION

The objective of this study was to evaluate the relationship between people management practices, disruptive innovation, and organizational modernity. Through structural equation modeling, the proposed hypotheses can be verified, that is, H<sub>1</sub>: People management practices have a positive relationship with organizational modernity; and H<sub>2</sub>: Organizational Modernity has a positive influence on Disruptive Innovation.

A contribution of the study comes in the sense of demonstrating to organizations that good people management practices bring organizational modernity and, consequently, disruptive innovation in people management. In this study, disruptive disruptive innovation in people management is perceived when the company is recognized by the Quality and Productivity Program of Rio Grande do Sul (PGQP), through the RS Quality Award.

It can be concluded that people management practices that positively affect motivation and job satisfaction will bring characteristics of organizational modernity to companies, resulting in disruptive innovation, that is, an innovation that will bring advantages to companies in terms of greater productivity and quality to processes. (GILIOLI, 2014)

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