

Relationship Between Organizational Culture and Innovation Management: An Exploratory  
Investigation

Léo F. C. Bruno, Ph. D.

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## Abstract

The study sought to investigate the impact of the Organizational Culture, personal values profile (micro-culture) of the involved executives and organizations' culture (mezzo-culture) of the analyzed organizations, on the management of innovation. A sample of 400 executives of 48 organizations was selected, involving large and medium size ones of several segments having product and service development activities. Four closed instruments were applied, being two of them Likert type (opinion) – personal values and organization cultural traits inventories, and the other two of diagnosis type – innovation essential internal conditions (enablers) and customer-oriented processes. In the case of the last two instruments the Delphi technique was used for data gathering, leading to the value innovation index of each researched organizations. The results have shown an unbalance on the personal values profile of the involved executives, showing a typical managers' profile, rather than a leaders' one, as well as an inadequate average organization cultural index, both results negative as far as innovation activities are concerned. On the other hand the study showed a moderate to high positive relation between personal values balance and the organization cultural adequacy index, being these two variables positively related with the value innovation index of the involved organizations as depicted by the findings.

*Keywords:* Innovation, personal values, organizational culture, leadership and value innovation index.

# Relationship Between Organizational Culture and Innovation Management: An Exploratory Investigation

## **Introduction And Literature Review**

### **1.Values**

Many personal aspects will interact to determine the actions of a person in a leadership role. Perceptions, attitudes, motivations, personality, skills, knowledge, experience, confidence, and commitment are a few of the variables which are important for understanding the behavior of people. They are no less important for understanding the behavior of people at work, whether they are leaders or not. However, this study will highlight what may well be the crucial and underlying determinant of leaders' behavior - values.

According to Spranger (1928), an early and influential writer, values are defined as the constellation of likes, dislikes, viewpoints, shoulds, inner inclinations, rational and irrational judgments, prejudices, and association patterns that determine a person's view of the world. The importance of a value system is that once internalized it becomes, consciously or subconsciously, a standard or criterion for guiding one's action. Thus the study of leaders' values is extremely important to the study of leadership.

A number of studies have been done to uncover the values leaders and managers actually have. The most influential theory is based upon the thinking of Spranger (1928) who defined several types of value orientation as shown in Table 1, and has been developed by Guth and Tagiuri (1965). They studied the expressed values of 653 American executives, using a closed instrument, of rank order type, detecting that the executives in the sample in terms of group averages presented a predominance of economic, political and practical values. Additional

support to these findings is available in the studies of England (1967) involving a survey of 1,072 American managers. A follow-up study of England's results some seven years later found that managers' values had not shifted (LUCK, 1974). The idea that managers as a group tend to emphasize the importance of economic, or practical, ends is intuitively appealing; after all, the theory and research of the managerial process suggests that persons with such values would be compatible with it. Other important facts hindering any change in the value system orientation are: a) managers are selected by others having similar values, b) the job of managing reinforces the pragmatic orientation, and c) values are in the axiomatic core of the individuals, therefore they tend to be stable over time.

Table 1

*Five Types of Value Orientation*

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1. The ***economic man*** is primarily oriented toward what is useful. He is interested in the practical aspects of the business world; in the manufacture, marketing, distribution and consumption of goods; in the use of economic resources; and in the accumulation of tangible wealth (protestant ethics). He is thoroughly “practical” and fits well the stereotype of the businessman.
2. The ***theoretical man*** is primarily interested in the discovery of truth, in the systematic ordering of his knowledge. In pursuing this goal he typically takes a “cognitive” approach, looking for identities and differences, with relative disregard for the beauty or utility of objects, seeking only to observe and to reason. His interests are empirical, critical, and rational.
3. The ***political man*** is oriented toward power, not necessarily in politics, but in whatever area he works. Most leaders have a high power orientation. Competition play a large role during all his life. For some men, this value is uppermost, driving them to seek personal power, influence, and recognition in a continuous basis.
4. The ***aesthetic man*** finds his main interest in the artistic aspects of life, although he need not be a creative artist. He values form and harmony. He views experience in terms of grace, symmetry, or harmony. Lives the here and now with enthusiasm.
5. The ***social man*** is primarily oriented toward the well-being of the people. His essential value is love of people – the altruistic or philanthropic aspect of love. The social man values people as ends, and tends to be kind, sympathetic, and unselfish.

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Source: Adapted from Guth and Tagiuri (1965)

### **1.1. The Importance of Values**

Values will affect not only the perceptions of appropriate ends, but also the perceptions of the appropriate means to those ends. From the concept and development of organization strategies, structures and processes, to the use of particular leadership styles and the evaluation of subordinate performance, value systems will be persuasive. Fiedler (1967) came up with a leadership theory based upon the argument that managers cannot be expected to adopt a particular leadership style if it is contrary to their value orientations.

An influential theory of leadership (COVEY, 1990) is based upon four dimensions: personal, interpersonal, managerial, and organizational. Not by accident the personal dimension is considered the core dimension. Incidentally it encompasses the value profile of the individual.

Tannenbaum and Schmidt suggested that there are at least four internal forces that influence a manager's leadership style: value system, confidence in employees, personal inclinations, and feelings of security in an uncertain situation. Again value system plays an important role. In short, people decide according to the value system they spouse, in other words values and attitudes are important because they may shape behavior, and behavior will influence people.

### **1.2. Values and the Leaders of Tomorrow**

Employees will be the essential resources of twenty-first century organizations. These employees can be categorized into several generations, each with special motivation needs. Kuzins (1999) suggests that managers and leaders need to understand people, whatever their age. They need to find out their skills, strengths, and whatever motivates them. In short they have to recognize that everyone is different and deal with each employee as an individual.

On the other hand there are some important considerations that the leader of tomorrow will be confronted with: a) the phenomenon of unemployment, as a consequence of the extraordinary fast development of mechanization and automation, and the economic apparatus centered in the idea of currency stability, which instead of absorbing all the units of human energy creates a growing number of idle hands, and, even worse, brains; b) the phenomenon of research – who can say whether our combined knowledge of the atom, of hormones, of the cell and the laws of heredity will take us?; and c) the need for true union, that is to say full associations of human beings organically ordered, which will lead us to differentiation in terms of society; it should not be confounded with agglomeration which tends to stifle and neutralize the elements which compose it.

Therefore, responsible influence, leadership centered in collective objectives, coherence and fecundity, are the four criteria to be pursued in developing the leaders of tomorrow. Summarizing we need to put into practice the ideas presented by Nanus (1995) in his book *Visionary Leadership*, that is to say, an organization's senior leaders need to set directions and create a customer focus, clear and visible values, and high expectations, which should balance the needs of all stakeholders; ensuring the creation of strategies, systems, and methods for achieving excellence, innovation, and building knowledge and capabilities, including the development of leadership.

Finally, the democratization of the concept of leadership, and at the same time, as an activity, primarily focused on people and their needs, as proposed by Safty (2003), is a must.

## **2. Organizational Culture**

One of the broadest studies on organizational culture in the world was carried out at the end of the 1970s. The ILO (International Labour Office), headquartered in Geneva, asked

Professor Hofstede and a group of experts to carry out a study on work-related cultural differences in over 50 countries throughout the world and to find out how such differences affect the validity of management techniques and their philosophy in different countries.

The result achieved was that management should adapt itself to local conditions, mainly as to a country's cultural and social values, traditions and systems.

Some time later, and basing themselves mainly on Hofstede, Barros & Prates (1996) carried out a study on the main cultural traits present in Brazilian organizations by surveying the perception of 2500 executives and managers from large, mid and small-sized companies in the Southeast and the South of Brazil. The Barros & Prates paper (1996) studied local cultural traits within a Brazilian environment.

The study showed that managers brought a management style that reflected the characteristics of local culture into their organizations.

The current study is based on the model proposed by Barros & Prates and it seeks to create a methodology to draw the cultural profile of an organization and analyze how it is used in the company's strategic analysis. From such an analysis we then make recommendations for the organization that is being studied.

An organization's development is closely linked to its cultural development. A company's values, beliefs, rites, myths, laws, technology, morals, work and management are all molded on the society it is inserted in through its historic and anthropological makeup.

According to Bethlem (1999), people are culturally different, as they have received different influences through education and thus they have a diverse set of motives and goals. Among the greatest challenges facing managers are (1) adapting the company to the external environment and (2) internal integration for organizational performance.



The problem focused on this study is the inexistence of data that refers to aspects of culture in organizations that can contribute to strategic planning, mainly during the stage of strategic analysis. As we currently live in a society whose markets are very much in evidence, a moment that is characterized as the age of information, a time when changes are happening at great speed, companies must have a culture of great flexibility to face problems related to uncertainty that are generated by this society that grows increasingly demanding, mainly as to adapting itself to the characteristics of the environment. Strategic planning has been a very useful tool and it helps company managers very much. As this planning goes through a stage of internal analysis, we intend to use this research to prepare a methodology to measure the elements that make up organizational culture, as they are very important for the company's internal integration. In many cases, cultural barriers are established and these will constitute a true bottleneck to organizational performance.

According to Tylor, cited by Willens (1962), culture is "that complex whole that includes knowledge, beliefs, the arts, morals and customs, as well as all the capabilities acquired by man as a member of society".

Everything we can imagine is part of a society's culture. Therefore, this complex whole led Edward B. Reuter, cited by Lenhard (1982), to propose to organize cultural content by segmenting it, as below:

- a – **material culture** - instrument and equipment building and handling tools;
- b - **manifest social behaviors patterns** – just as when dealing with material objects, so it is when sharing experiences among people, as members of any society need a greater or a lesser, but not always a large number of skills and routines on how to carry out their activities;

c - **mental patterns** - behavior techniques and standards do not exist by themselves, but they serve the needs and desires of Man. Such desires produce feelings and attitudes in relation to objects (material, social and nonmaterial), which, by turn, are traditional for the most part and, although rooted in individual minds, are culturally conformed. Society attributes value to certain objects (that is, it bears feelings and attitudes in relation to them) and such consensus is essential to its cohesion. It is therefore important to transmit it to the new generations;

d - **social organization** - a ranking of positions and social relations, rules and values, power distribution, institutions such as the family and organizations, property, the state, etc., ensures a properly balanced society;

e - **symbolic elements** - symbols are perceptible phenomena that are socially used to mean that which is inaccessible to the senses. Every society has a system of communication and thought symbols that include oral and written language and the special languages of mathematics, logics, etc., that is, the sensorial phenomena to which abstract meanings are attributed; and

f - **thoughts organization** - scientific, philosophic and religious systems built through symbols that stem from a society but that do not identify themselves with this society's system of feelings, attitudes and values.

According to Freitas (1991), culture is "something that is shared in the minds of the members of the community, such as the beliefs, values and ideas that people support in common". Bethlem corroborates with Freitas by citing the definition of culture according to the ILO study, which states that "culture is defined as the collective programming of the mind that distinguishes the members of one group from those of another".

The current study sought to use the main organizational culture traits observed by Barros & Prates (1996) in their work, which proposes "a cultural action model in business

management". This model is based on reflections on the reading about Brazilian culture (DaMata, 1984, 1987; Barbosa, 1992), as well as on the theme of national cultures (Hofstede, 1980; Bolinger & Hofstede, 1987) and on the results of a survey about the main cultural traits present in Brazilian companies from the perception of 2500 executives and managers from 520 from large, mid and small-sized companies in the Southeast and the South of Brazil. The traits observed will be used in this research and they are: Power Concentration, Flexibility, Paternalism, Personal Loyalty, Personalism, Impunity, Conflict Avoidance, Expectant Posture and Formalism.

### **2.1. The Barros & Prates Model**

The model proposed aims to deal with Brazilian culture in business management as a way to understand cultural action in an integrated way. This means that, when thinking about modeling Brazilian culture one must take into account not only the typical cultural trait in an isolated way and describe it but, mainly, its integration with other traits. This will lead to a cause and effect network within which those traits will influence each other mutually. From such a perspective, this Brazilian cultural action model was proposed for business management - a model of the Brazilian management style that portrays a multi-faceted cultural system with various facets, but one that acts simultaneously through several components. The model can be characterized as

a system made up by four subsystems: the institutional (or formal) one, the personal (or informal) one, the one of the leaders, and that of those who are led, each one presenting common cultural traits and also special traits that articulate the set as a whole.

These subsystems intersect each other at various points where common cultural traits can be found. There are four intersections which are characterized by power concentration,

personalism, expectant posture and conflict avoidance, distributed thus: 1) power concentration in the intersection of the leader and formal subsystems; 2) expectant posture in the intersection of the followers and formal subsystems; 3) personalism in the intersection of the leaders and personal; 4) conflict avoidance in the intersection of the followers and personal subsystems, according to Figure 1.

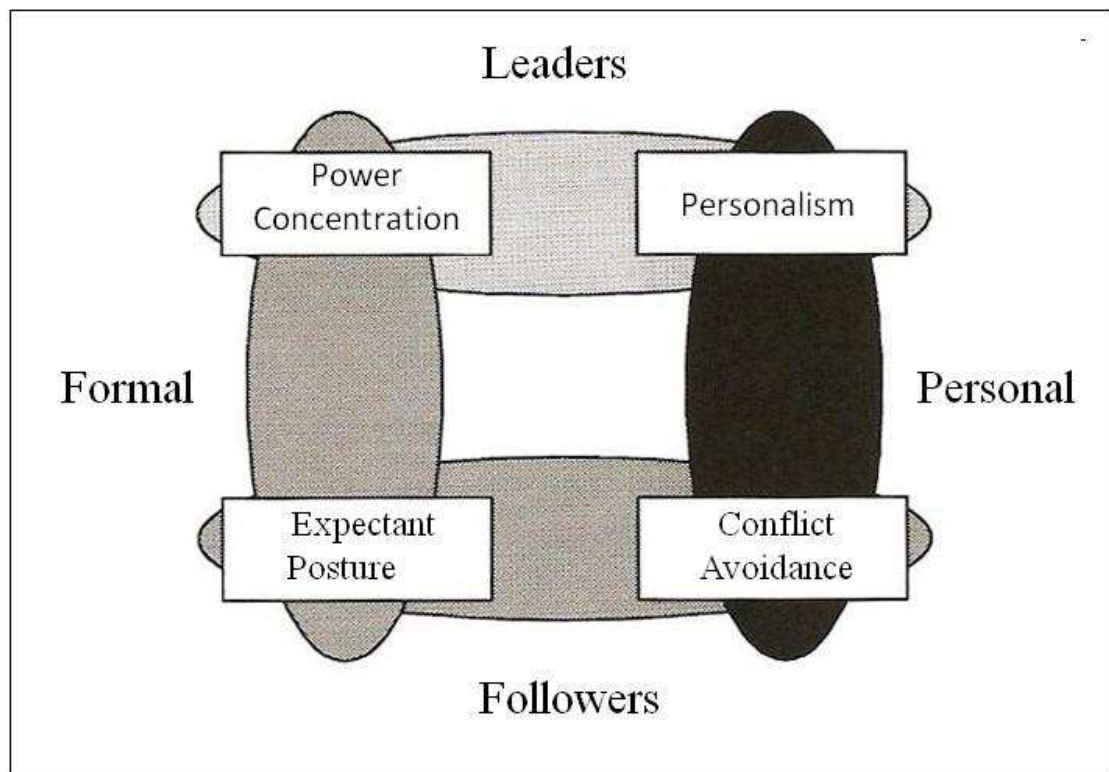


Figure 1 - Common cultural traits stemming from the intersection of subsystems

Source: PRESTES, Fernando C.; CALDAS, Miguel P., 1997.

These subsystems are also articulated through special cultural traits that, on final analysis, are the ones responsible for the whole system not rupturing. At the same time, these are the points that should alter in degree or nature so as to achieve effective change. Such traits are Paternalism, Personal Loyalty, Formalism and Flexibility. To complete the list of the most

important Brazilian traits we should highlight Impunity in the institutional subsystem (formal), which bears strong reflexes on the Brazilian cultural action system, as it can reinforce or undermine the maintenance and stability of the whole system.

The combination of all the traits cited is what makes up and operates the model called Cultural Action System, as shown in Figure 2.

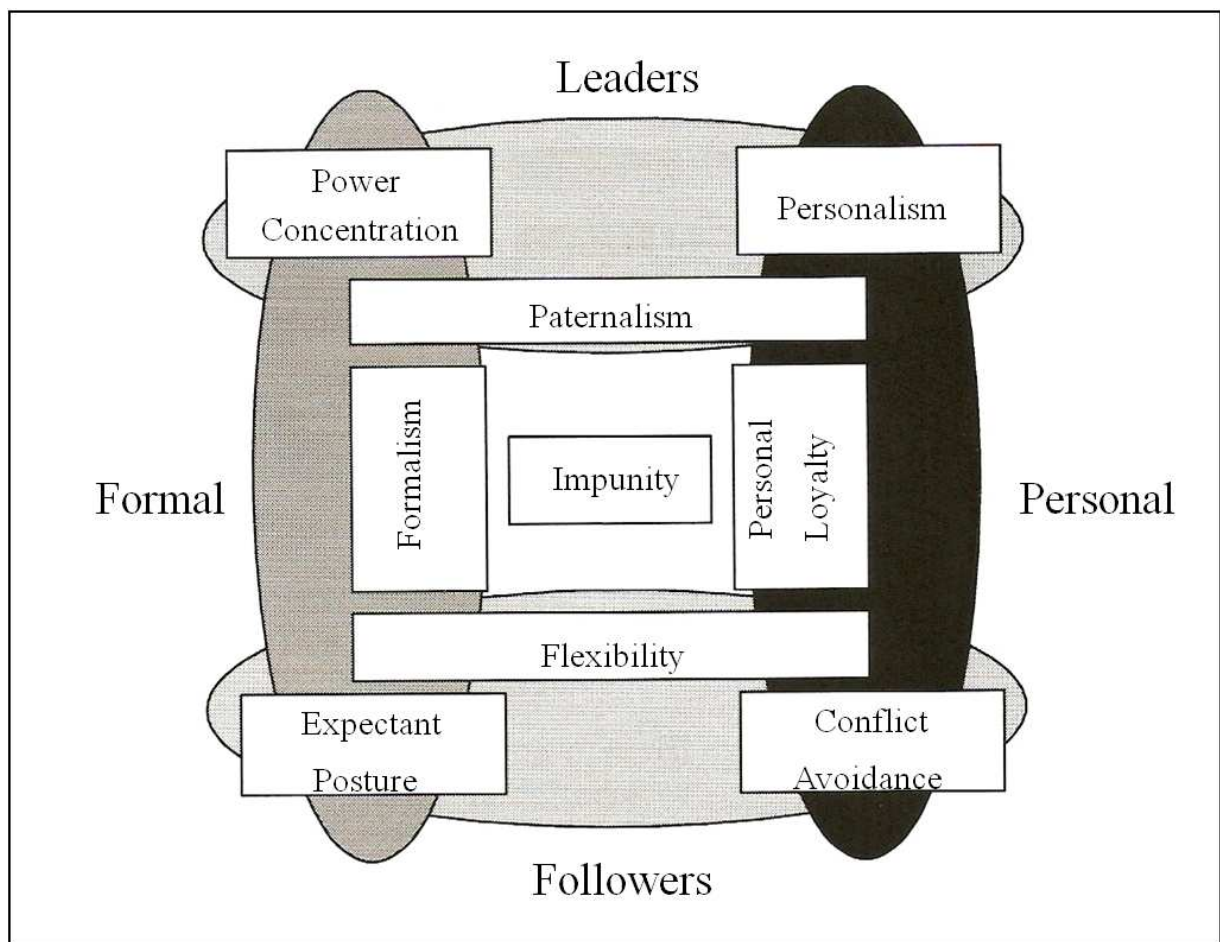


Figure 2 - An integrated vision of the proposed model Cultural Action System

Source: PRESTES, Fernando C.; CALDAS, Miguel P., 1997.

### **3. The Value Innovation Development Model**

Having reframed the company's strategic logic around value innovation, senior executives must ask at least four questions in order to pursue a new value curve:

Which of the factors that our industry takes for granted should be eliminate? Which factors should be reduced well below the industries' standard? Which factors should be reduced well below the industries' standard? What factors should be created that the industry has never offered?

To assure profitable growth one need to answer the full set of questions, rather than one or two.

Value innovation is the simultaneous pursuit of radically superior value for buyers and lower costs for organizations.

How can senior executives promote value innovation?

No single measurement will ever describe a companies' stocks and flows of value innovation. Just as financial accounting look at a number of indexes – return on sales, return on investment, cash value added, to name a few – to paint a picture of financial performance, value innovation accounting needs to look at corporate performance from several points of view. On the other hand, what might be a key indicator for one company could be trivial for another, depending on the industry environment.

Yet the existence of so many possible measurements creates the risk that companies will use too many of them, cluttering their corporate dashboard with instrumentation and, in the end, learning nothing important because they know so much about what is not important. Therefore, three principles should guide a company in choosing what to measure:

- Keep it simple – shoot for no more than a dozen measurements,

- measure what is strategically important – in this domain there are no simple recipes, the capacity to learn from experience and to conduct critical analysis is essential, and
- measure activities that produce value innovation – lots of stuff that companies measure is only sketchily related to value innovation.

In any way, a navigation tool, like a model, may help a lot in driving a company for high growth. Yet, a navigation tool should not only tell you where you are but also show you where you should be going.

In order to perform this, **the Value Innovation Development (VID) Model** is suggested (Bruno, 2005).

The VID model is a comprehensive approach to market and value innovation – based corporate management, on two levels, enablers (essential conditions) and processes (customer oriented), aiming at assuring a strategic and articulated logic across the company businesses, designed to increase its market value, achieved through the interaction of technology, market and organization abilities.

The model is based on the evaluation of nine major dimensions divided in two groups:

- essential conditions – encompassing “strategy”, “processes”, “organization”, “linkages” and “learning”; and
- customer – oriented processes – involving the processes of “understand” markets and customers, “create” superior customer offerings, “gain” profitable customers, and “retain” profitable customers.

In the **strategy** dimension there are no simple recipes for success, the important point is the capacity to learn from experience and having critical analysis ability.

In order to succeed companies also need effective implementation mechanisms, also called **processes**, to move innovations from idea or opportunity through reality. These processes involve systematic problem-solving and work best within a clear decision – making framework which should help the company to stop, as well as, to continue development depending on how things are going. Also are required skills in project management, risk management and parallel development of both the market, and technology streams.

In the **organization** dimension there is the fact that innovation depends on having a supporting organizational context in which creative ideas can emerge and be effectively deployed. Organizational conditions are a critical part of innovation management, and involve working with structures, attraction and relation of human capital (reward and recognition systems), and communication patterns.

Within the dimension of **linkages** it is meant the development of close and rich interactions with the external environment – markets, suppliers of technology and other relevant players to the business.

Finally, developing innovation management involves a **learning** process concerned with creating the conditions within which a learning organization can begin to operate, with shared problem identification and solving, and with the ability to capture and accumulate learning about technology and management of the innovation process. These five dimensions together constitute what in the VID model is called **enablers**.

In order to create an overall picture regarding the **enablers** a closed instrument was developed involving the five before mentioned dimensions. For each one of these dimensions



some statements were developed in order to enable a judgment using a score varying from “0” (not true at all) to “5” (very true).

This instrument will lead us to an average score for the enablers.

The second group of dimensions are related to the customer – oriented processes, which has to do with the value – added orientation. Lets explore these dimensions a little deeper.

In order to **understand** markets and customers the following investigations should be done:

- data collection and integration,
- customer data analysis, and
- customer segmentation.

Regarding to **create** superior customer offerings the following aspects should be analyzed:

- products/services offers and prices,
- communication and branding,
- multi-client ownership, and
- affinity partnership.

As far as **gain** profitable customers, the following elements must be considered:

- multi-channel management,
- e-commerce, and
- sales force automation

Finally, in order to **retain** profitable customers, the following assessments should be conducted.

- Customer service/customer care,
- Loyalty programs, and
- Customer satisfaction.

In order to create an overall picture regarding these **processes** a closed instrument was developed involving the before mentioned four dimensions. For each one of these dimension some statements were developed in order to enable a judgment using, again, a score varying from “0” (none) to “5” (ideal).

This instrument will enable us to have an average score for **processes**.

The advantage of the model is that it will lead us to compute what is called the value innovation index (VII) by multiplying the final scores for enablers and process. This index maximum score will be “1”, once the enablers and process values are taken as relative figures. This maximum score means that the organization (imaginary company) reached perfection, as far as managing innovation is concerned, it covers the total area.

Figure 3 presents the conceptual framework of the model.

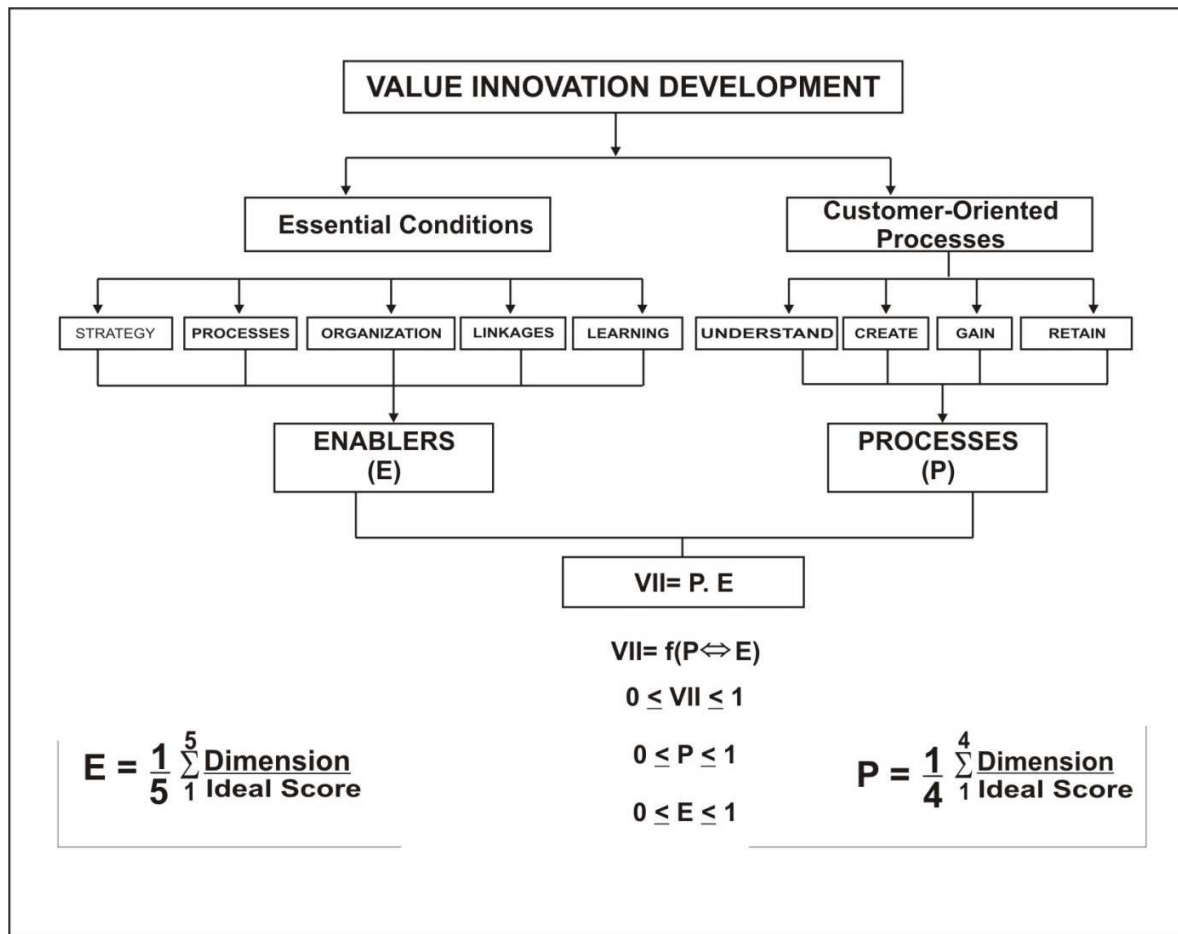


Figure 3 – Value Innovation Development Model Framework

Source: Bruno (2005).

The value innovators scored high in the value innovation index, not necessarily developing new technologies but in pushing the value they offer customers to new frontiers. They are **pioneers** in their industries.

At the other extreme are the **settlers**, business with value curves that conform to the basic shape of the industry. The settlers VII score is generally low.

The **migrators** lies somewhere in between. Such businesses extend the Value Curve of the industry by giving customers more for less, but they don't alter its basic shape. They have moderate VII scores.

Figure 4 shows the graphic interpretation of the model, where the scores of nine imaginary companies (A to I) were plotted.

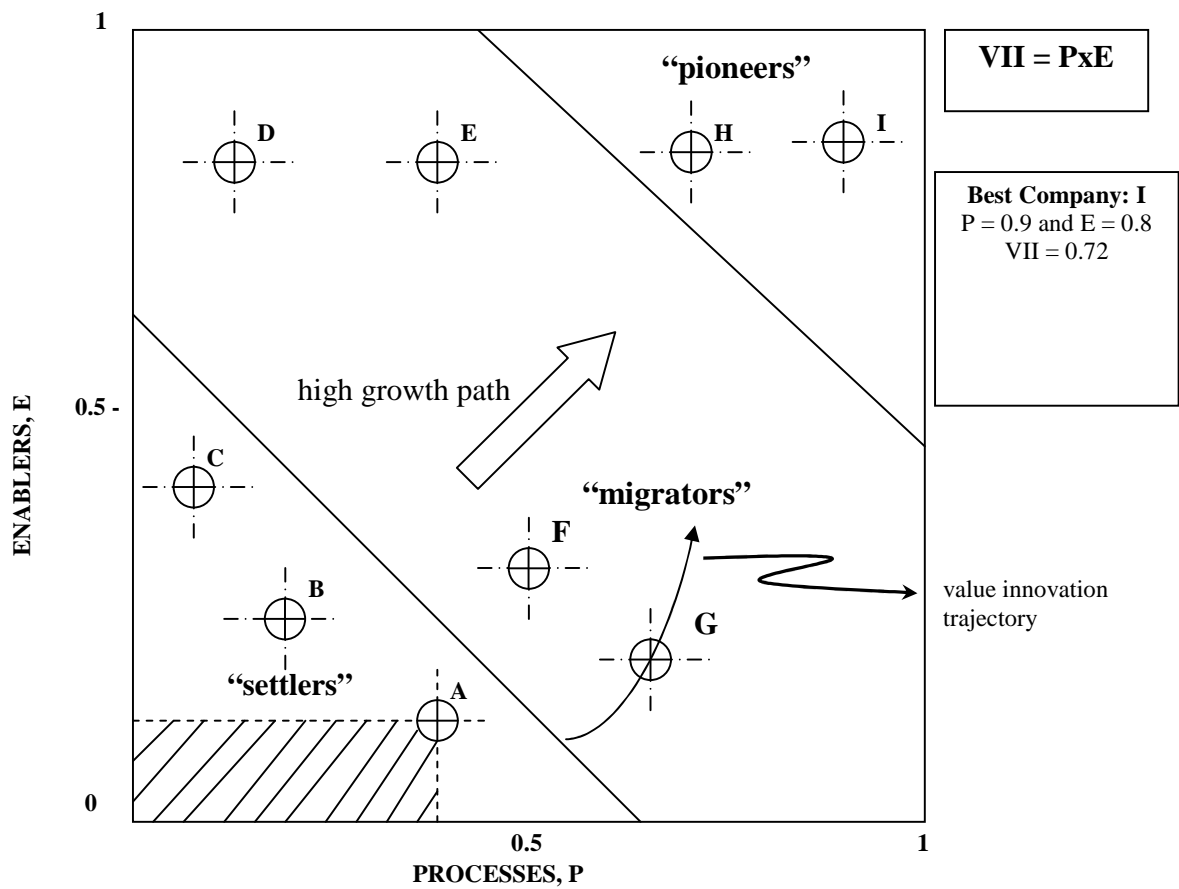


Figure 4 – Value Innovation Development Model

Source: Bruno (2005).

Analyzing the chart, company (or business unit) “A” is the worst case, typically a settler, while “I” is a winner company (or business unit), typically a pioneer.

Another advantage of using such a model, is the fact that the responses to the closed instruments' specific dimensions may reveal significant room for improvements in enablers and processes, as is depicted in Figure 5, which shows a gap per considered dimension.

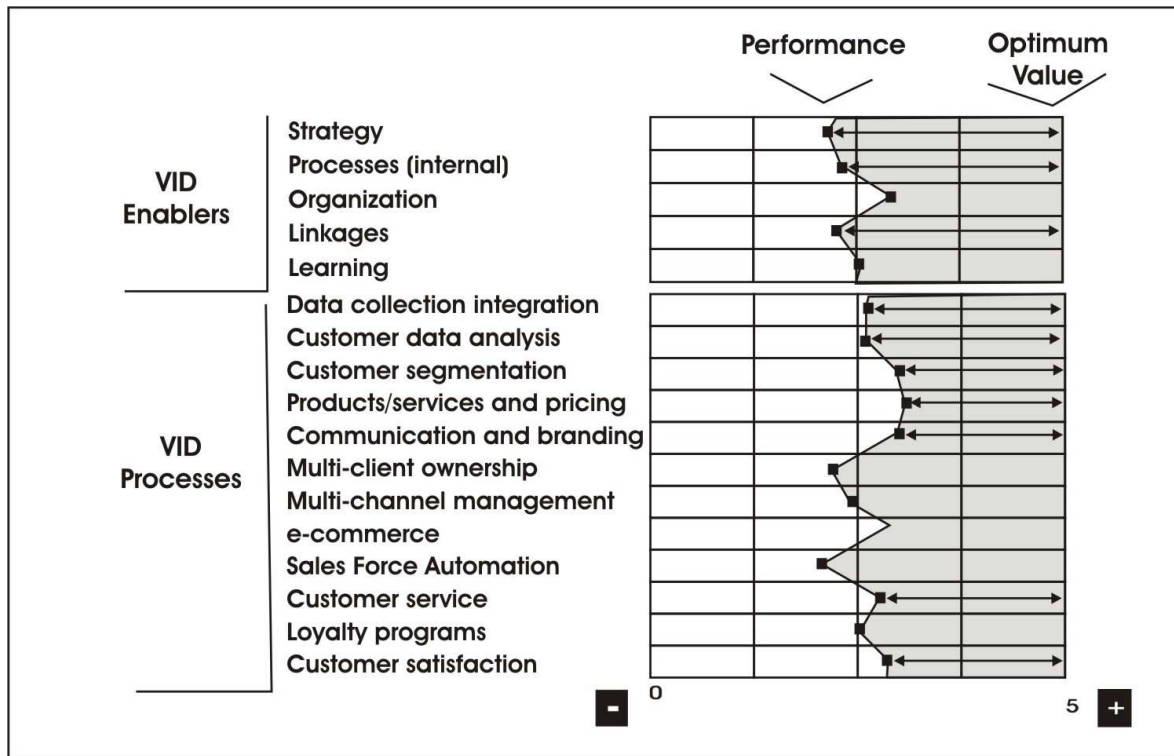


Figure 5 – Gap analysis by dimension

Source: Bruno (2005).

The self-assessment of own performance in each dimension of the Value Innovation Development model will show the company's current profile a useful exercise for a management team pursuing growth is to plot aside the current profile. A useful exercise for a management team pursuing growth is to plot aside the current profile a planned one following the logic of a new positioning of the company (or business unit) at the pioneer – migrator – settler map,

defining, therefore, a possible value innovation trajectory, aiming at the “pioneer” area of the model.

### **Research Questions**

The study sought to answer the following research questions:

1. What is the personal values profile of the executives involved in the research?
2. What is the personal values balance of these executives?
3. What is the cultural profile of the researched organizations?
4. What is the cultural adequacy index of these organizations?
5. Is there a relation between the executives’ personal values balance and the cultural adequacy index of their organizations?
6. Is there a relation between executives’ personal values balance and the value innovation index of their organizations?
7. Is there a relation between cultural adequacy index and the value innovation index of these organizations?

### **Methodology**

#### **1. Sampling**

It has been selected 400 executives involving 48 organizations operating in Brazil and South America, encompassing medium and large size ones. Most of them were organizations in the fields of consumer electronics, vehicles, health care, paper and packing, mechanical and electrical components, transportation and logistic, virgin media, telecommunications, white goods, service, energy, IT, super markets, clothes, shoes, graphics, departmental stores, office material, individual protection equipment, and cell phones. The majority of the executives were

Brazilians (366) and some foreigners (34), being 142 females and 258 males with ages varying from 28 up to 48.

## **2. Data Gathering**

In order to uncover the **personal values** a questionnaire, which measured the relative importance of each value, was developed and applied covering the five value orientations as depicted in Table 1.

The 10 item validities for each of the five values ranged from 0.30 to 0.81, and the reliabilities results for each of the five values ranged from 0.80 to 0.89. All the coefficients were significant beyond 0.01 level. The personal values balance was computed taking the number of values falling within the central scoring interval in percentage. The central scoring interval falls in between 11 and 13, including the extremes.

To measure the **organizational culture**, and its adequacy, of the researched companies a closed instrument of Likert (1932) type was used covering the nine traits of the Barros and Prates model. The instrument was validated in terms of statement and reliability. The cultural adequacy index was computed taking into consideration the number of traits with adequate scores divided by the total number of traits considered in the instrument in percentage. Adequate scores are those under two for all the traits, with the exception of one trait, namely Flexibility.

To compute the **value innovation index** of each organization two instruments of diagnosis type were used a first one involving five enablers, internal to the organizations, and the other involving four aspects of the customer-oriented processes, and the Delphi technique for gathering the data was used.

To check if a relation existed between the **average personal values balance** and **cultural adequacy index**, the linear correlation coefficient has been computed taking into consideration the set of paired data, involving the before mentioned variables, per organization.

To analyze a possible relation between the average executives' **personal values balance**, per organization, and **value innovation index**, the Value Innovation Model (Bruno, 2005) has been considered and the VII – Value Innovation Index has been computed per organization, and, then the linear correlation coefficient was computed taken into consideration the set of paired data involving the before mentioned variables per organization, therefore the computation involved 48 pairs.

The same procedure has been followed to verify a possible relation between the **cultural adequacy index** per organization and their respective **value innovation index**.



## Findings And Analyses

In order to answer the first research question the average scores of the respondents were computed taking into consideration each one of the five value orientations considered in the measuring instrument, as shown in Table 2.

Table 2

*Value Orientations of a Sample (400) of Executives*

| <b>Value</b> | <b>Score</b> |
|--------------|--------------|
| Theoretical  | 13.3         |
| Economic     | 13.2         |
| Social       | 12.0         |
| Aesthetic    | 11.5         |
| Political    | 10.0         |

Table 2 depicts that this sample of executives obviously values more highly theoretical and economic ends than social, aesthetic and political. It should be kept in mind that the scores in Table 2 reflect the relative importance of each value; that is, one can increase one value only at the expense of another. On the other hand, the results are in terms of group averages; individual executives may have responded differently from the group. In any way Table 2 shows a lack of balance in terms of executives' personal values profile, and, as a consequence, in their decision process they will value more highly the predominant ones. Comparing with former studies of the same nature (LUCK, 1974) one can notice one major shift involving the social and political values. Luck (1974) has uncovered political value ranked in second place, and social in the last position. This can be explained by the fact that in the last decades this kind of value orientation

(political) is seen by people as somewhat “dirty” due to the bad example shown by the majority of the politicians, and on top of that 72% of the sample belongs to Generation X (ZEMKE et al., 2000), ages from 23 to 34. This group has a demonstrated concern for survival, both economic and psychological, and have a casual approach to authority.

The second research question was answered taking into account the data presented on Table 2. One can perceive that only two values laid in the central scoring interval, therefore, according to the methodology, the average personal values balance of the group of executives was 40%. This result has shown an unbalance on the personal values profile of the involved executives, showing a typical managers’ profile, rather than a leaders’ one, and has great likelihood to induce the executives to practice win-loose games which will result in losses for the organizations according to previous research (BRUNO, 2005), being specially negative as far as innovation activities are concerned.

Regarding the third research question Figure 6 shows the averages for the nine considered traits: power concentration, personalism, paternalism, expectant posture, formalism, impunity, personal loyalty, conflict avoidance, and flexibility.

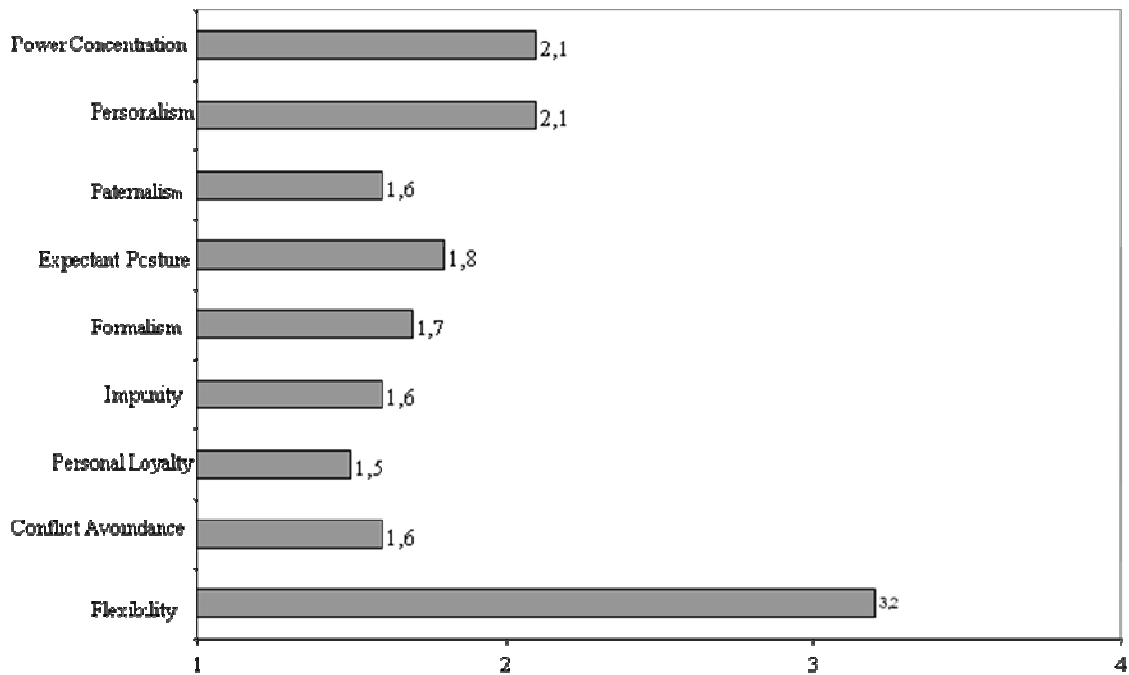


Figure 6 – Executives' attitudinal profile by dimension

Source: Research Data.

Figure 6 shows that the means for six dimensions paternalism, expectant posture, formalism, impunity, personal loyalty and conflict avoidance, can be found in the low preponderance zone, that is, means between 1.00 and 1.99.

The dimensions power concentration and personalism can be found in the average preponderance zone, that is, their means varied between 2.0 and 2.99. The flexibility dimension can be found in the high preponderance zone, as its score laid between 3.0 and 4.0. From Figure 6 one can compute the cultural adequacy index following the methodology, As we have seven traits with convenient scores among nine, therefore the cultural adequacy index of the composite organization was 78%, slightly below the desirable (80%). The result has shown an inadequate average organization cultural index, which is very negative as far as innovation activities are

concerned, once power concentration, for instance, leads to lack of participation of the stakeholders on the innovation process.

In order to provide data for answering the last three research questions Table 5 was constructed involving the average personal values balance, cultural adequacy and the value innovation index for each one of the 48 organizations involved in the research.

Table 5

*Value Innovation Index, Personal Values Balance and Cultural Adequacy Index*

| <b>Nbr.</b> | <b>SECTOR</b>        |      | <b>E</b> | <b>P</b> | <b>VII</b> | <b>PVB (%)</b> | <b>CAI (%)</b> |
|-------------|----------------------|------|----------|----------|------------|----------------|----------------|
| 1           | Health Care          | O 1  | 0.44     | 0.08     | 0.03       | 0              | 44             |
|             |                      | O 2  | 0.55     | 0.24     | 0.13       | 20             | 55             |
|             |                      | O 3  | 0.65     | 0.24     | 0.15       | 20             | 55             |
|             |                      | O 4  | 0.62     | 0.40     | 0.24       | 40             | 66             |
| 2           | Paper & Packing      | O 5  | 0.63     | 0.45     | 0.29       | 80             | 77             |
| 3           | Mechanical Parts     | O 6  | 0.30     | 0.05     | 0.02       | 0              | 44             |
| 4           | Electrical Parts     | O 7  | 0.45     | 0.65     | 0.30       | 40             | 55             |
|             |                      | O 8  | 0.71     | 0.39     | 0.27       | 60             | 77             |
| 5           | Transport/Logistic   | O 9  | 0.29     | 0.49     | 0.14       | 20             | 44             |
|             |                      | O 10 | 0.56     | 0.65     | 0.36       | 60             | 66             |
|             |                      | O 11 | 0.53     | 0.50     | 0.26       | 40             | 55             |
| 6           | Consumer Electronics | O 12 | 0.34     | 0.25     | 0.08       | 0              | 44             |
|             |                      | O 13 | 0.65     | 0.55     | 0.36       | 60             | 66             |
|             |                      | O 14 | 0.60     | 0.65     | 0.39       | 40             | 67             |
|             |                      | O 15 | 0.65     | 0.65     | 0.42       | 60             | 77             |
| 7           | Vehicles             | O 16 | 0.48     | 0.70     | 0.34       | 40             | 55             |
| 8           | Virgin Media         | O 17 | 0.49     | 0.22     | 0.11       | 40             | 44             |
| 9           | Info Technology      | O 18 | 0.63     | 0.62     | 0.39       | 60             | 77             |
|             |                      | O 19 | 0.60     | 0.69     | 0.41       | 60             | 78             |
|             |                      | O 20 | 0.63     | 0.77     | 0.49       | 80             | 66             |

|    |                       |      |      |      |      |    |    |
|----|-----------------------|------|------|------|------|----|----|
|    |                       | O 21 | 0.62 | 0.37 | 0.23 | 60 | 44 |
| 10 | Service               | O 22 | 0.62 | 0.58 | 0.36 | 60 | 67 |
|    |                       | O 23 | 0.58 | 0.50 | 0.29 | 40 | 66 |
|    |                       | O 24 | 0.58 | 0.76 | 0.44 | 60 | 77 |
| 11 | Physical Distribution | O 25 | 0.54 | 0.62 | 0.33 | 40 | 67 |
| 12 | Car dealer            | O 26 | 0.59 | 0.37 | 0.22 | 40 | 55 |
| 13 | Language School       | O 27 | 0.63 | 0.40 | 0.25 | 40 | 55 |
| 14 | Banking               | O 28 | 0.61 | 0.52 | 0.32 | 60 | 66 |
|    |                       | O 29 | 0.64 | 0.71 | 0.45 | 60 | 77 |
| 11 | Supermarket           | O 30 | 0.56 | 0.40 | 0.22 | 40 | 44 |
|    |                       | O 31 | 0.79 | 0.57 | 0.45 | 60 | 67 |
| 12 | Telecom               | O 32 | 0.57 | 0.40 | 0.23 | 40 | 55 |
|    |                       | O 33 | 0.57 | 0.54 | 0.31 | 40 | 66 |
|    |                       | O 34 | 0.61 | 0.40 | 0.24 | 40 | 55 |
| 13 | Clothes               | O 35 | 0.64 | 0.56 | 0.36 | 40 | 66 |
|    |                       | O 36 | 0.76 | 0.62 | 0.47 | 40 | 67 |
| 14 | Shoes                 | O 37 | 0.73 | 0.40 | 0.29 | 60 | 56 |
|    |                       | O 38 | 0.69 | 0.77 | 0.53 | 80 | 66 |
| 15 | Graphics              | O 39 | 0.63 | 0.40 | 0.25 | 40 | 56 |
|    |                       | O 40 | 0.57 | 0.40 | 0.23 | 40 | 66 |
| 16 | White Goods           | O 41 | 0.65 | 0.45 | 0.29 | 40 | 45 |
| 17 | Software House        | O 42 | 0.58 | 0.59 | 0.34 | 40 | 67 |
| 18 | Construction Material | O 43 | 0.54 | 0.50 | 0.27 | 20 | 55 |
| 19 | Hotel Chain           | O 44 | 0.58 | 0.75 | 0.43 | 60 | 77 |
| 20 | Office Material       | O 45 | 0.71 | 0.79 | 0.56 | 80 | 78 |
| 21 | Protection Equipment  | O 46 | 0.69 | 0.25 | 0.16 | 20 | 44 |
| 22 | Fabrics               | O 47 | 0.56 | 0.40 | 0.22 | 20 | 45 |
| 23 | Departmental Store    | O 48 | 0.65 | 0.35 | 0.23 | 40 | 55 |

O= Organization, E = Enablers, P = Market-Oriented Process, PVB = Personal Values Balance,

CAI = Cultural Adequacy Index, and VII = Value Innovation Index.

Source: Research Data.

At first, to verify if there was a relation between executives' Personal Values Balance (PVB) and organization Cultural Adequacy Index (CAI), the average executives' Personal Values Balance and the Cultural Adequacy Index per organization were computed and linear correlation coefficient involving the PVB and CAI was calculated taking into account the set of paired data involving all the 48 organizations, being **personal values balance** one variable, and **cultural adequacy index** the other. The result was a linear correlation coefficient of +0.71 which suggests, according to Schmidt (1975), a moderate to high degree of positive relation between the two considered variables.

Finally, to verify if there was a relation between executives' Personal Values Balance (PVB) and the Value Innovation Index (VII), as well as Cultural Adequacy Index (CAI) and the organization Value Innovation Index (VII), the average executives' Personal Values Balance and the Cultural Adequacy Index per organization were computed and linear correlation coefficient involving the VII and PVB, as well as VII and CAI were computed.

Considering the variables **personal values balance** and **value innovation index** of the 48 organizations, the result was a linear correlation coefficient of +0,81, showing a high degree of positive relation between the two variables.

Finally, considering the set of paired data involving the 48 organizations, being **cultural adequacy index** one variable, and **value innovation index** the other, the result was a linear correlation coefficient of +0.77, which, again, suggests a moderate to high degree of positive relation between the two considered variables.

In order to have an overall idea of the performance of a composite organization regarding Enablers (E) and Customer-Oriented Processes (P) the scores involving the five enablers and the

four customer-oriented processes aspects, Figures 7 and 8 were constructed with the data collected from the 48 organizations.

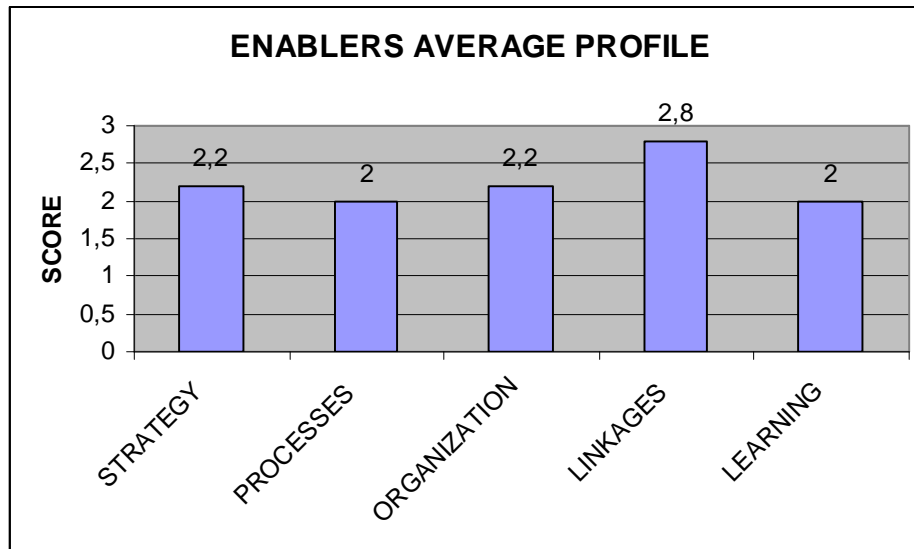


Figure 7 – Enablers Average Profile of the Composite Organization (E = 0.46)

Source: Research Data.

As can be seen in Figure 7 there was plenty of space to improvements once the scale interval is zero to 5, and the best score was 2.8 (linkages). The worst cases involving the biggest gaps are internal processes to implement innovations and learning. The variable E was computed and the value found was 0.46.

On the other hand Figure 8 shows a slightly better situation, presenting as worst case the ability to gain profitable clients or customers. The variable P was computed and the value found was 0.60. therefore the Value Innovation Index of the composite organization was  $VII = P \times E = 0.27$

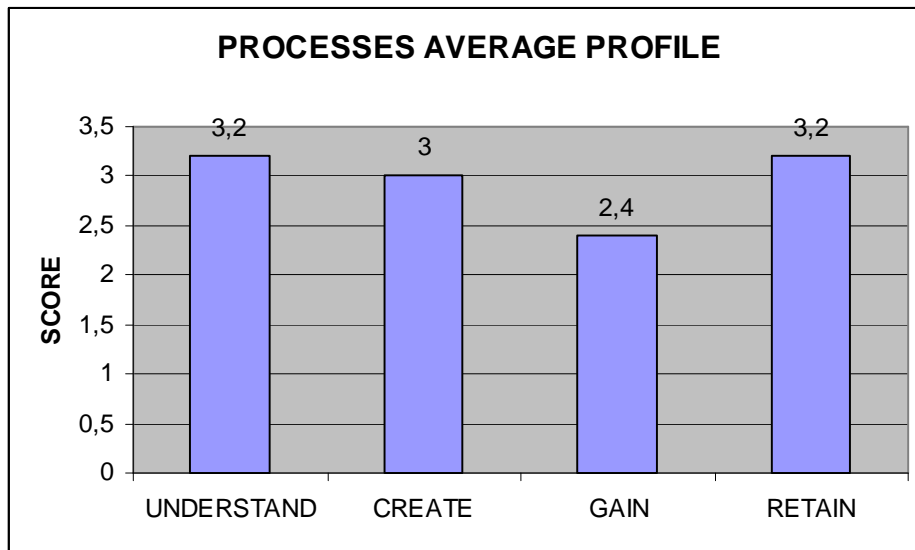


Figure 8 – Customer-Oriented Processes of the Composite Organization (P = 0.60)

Source: Research Data.

Figure 9 presents the positioning of the composite organization on the Value Innovation Model graph.



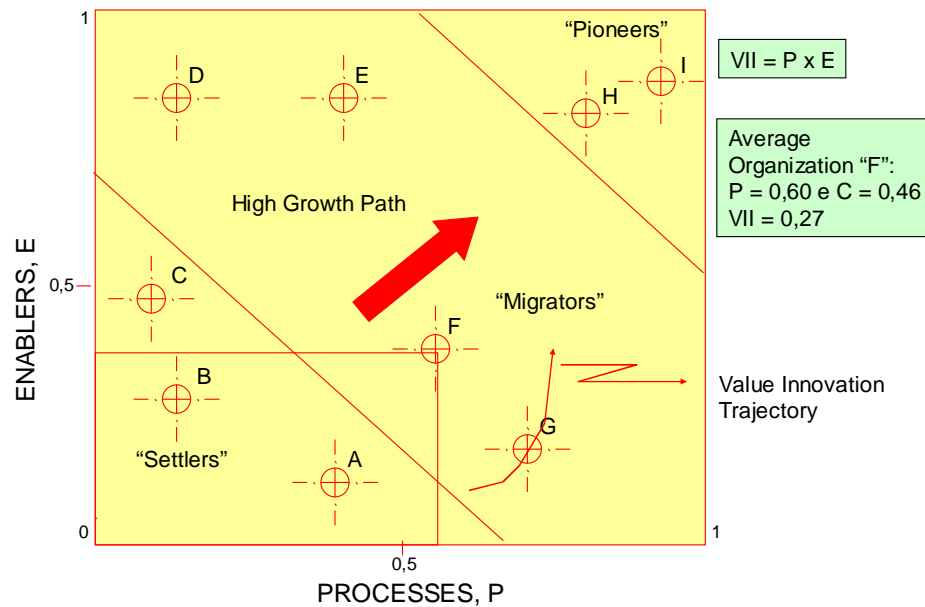


Figure 9 – Positioning of the Composite Organization (F)

Source: Research Data.

As can be seen in Figure 9 the Value Innovation Index of the composite organization was  $VII = P \times E = 0.27$ . This means plenty of opportunities to improvements, once F is near the settlers area and defines on the graph an area that is only 27% of the total possible one. These improvements can be derived from the gaps presented on Figures 7 and 8.

## **Conclusions and Recommendations**

### **1. Conclusions**

The following conclusions were reached based on the research:

- The study has shown that the executives involved in the research have an unbalance in their personal values profile; and, even worse, is the fact that the political orientation, which has partially to do with the process of influencing people, that is to say leadership, received the lowest average score (10.0). This finding can be partially explained, as said before, due to the fact that the great majority of the executives of the sample (72%) belongs to the Generation X (ZEMKE et al., 2000), the survival generation with a casual approach to authority, and, on the other hand, the political value is associated with politics, which is somewhat “dirty” for the majority of the citizens. In any way this is the moment to face this problem. If we really want to have leaders with traits such as: responsible influence, people centered, showing coherence between attitudes and actions, and fecundity, that is to say, leading the process of assuring progress, than we need to work hard in order to develop knowledge for better understand and influence leaders’ personal values.

- Regarding the cultural aspects the results of the analyses indicated the preponderant traits, based on the model proposed in the study. The Flexibility dimension showed the greatest preponderance, thus indicating that there is great flexibility within the companies. This means that the organizations have great capacity to adapt themselves to the circumstances of the environment, which can be a positive point when we consider that, currently, society has been undergoing constant and fast changes that demand that organizations be agile so they can meet the demands of the environment. Personal Loyalty was the dimension that showed the least

preponderance. It means that the executives who took part in the research are more loyal to the organization than to their leader. Thus, personal relations at the workplace remain in the background, which makes for a healthy environment from the point of view of motivation and collaboration. Power concentration is present, which means that some executives still impose their will through traditional legal power and their hierarchical positions, leading to expectant posture which will create difficulties to release new ideas and innovation. Another undesirable trait is personalism, which appear with moderate preponderance, once it may lead to personal loyalty.

Some actions are needed to reduce some of the negative cultural aspects that are present within the environment of the researched organizations.

The following actions are deemed to be necessary to achieve the above-mentioned objectives:

- a. Power Concentration: create a culture where power is not concentrated, where an executives' authority is not only based on rational legal power, on hierarchy-subordination, on the threat of sanctions and punishment, but also include other variables such as knowledge, performance and autonomy, enhancing participation.
- b. Personalism: in their dealings with their subordinates, keep leaders from emphasizing relationships focused on the figure of the leader, either through their discourse or their power from being linked to other influential people in the company.
- c. Paternalism: keep leaders from acquiring the hierarchical and absolute power culture imposed from top to bottom with traditional acceptance by its members, as this will create dependence, a lesser degree of freedom and less autonomy for the group.

d. Expectant Posture: keep leaders from displaying expectant posture, which is generated by developing the bossing, protectionist and dependent practices represented by paternalistic solutions. This must be done by practicing dialogue, power balance, critical awareness, incentives to initiative, greater freedom and autonomy to act, and responsible acts.

e. Formalism: resist formalism culture in the company by having everyone follow internal norms and regulations. Practice what has actually been set down in company regulations. Avoid nepotism, favoritism, and corruption. Avoid situations in which established criteria are ignored in deference to greater business mobility.

Whenever there is a gap between fact and right, use common sense in a shared way.

f. Impunity: avoid the impunity culture - the company should make an example of all those who break internal norms and guidelines.

g. Personal Loyalty: resist the personal loyalty culture by giving more value to the company's needs than to those of the leader. That is, centralize needs into the representation of the company. Strengthen the company by making compliance to norms an impersonal issue.

h. Conflict avoidance: resist the conflict avoidance culture by creating an environment that fosters empowerment, independence and autonomy in leaders. This will probably create an environment that is less alienating and passive while, at the same time, it will lead to improved motivation and initiative on the part of the employees. Conflict situations should be dealt with through institutional relations.

i. Flexibility: maintain a position of flexibility. As the world is currently very dynamic, the speed of changes demands that companies should almost routinely adapt themselves to the conditions of the environment (the market). Thus, they should remain agile to adjust both their internal and external processes to produce all kind of innovations.

- The study also has shown a large space for improvements as far as innovation, of all kinds – process, systems, products, services, management and ways of doing the businesses, is concerned. These improvements are largely related with executives' attitudes and behaviors, having an adequate balance in their personal values and creating cultural environments that enhance the involvement and effective participation of all the stakeholders of the organization.

## **2. Recommendations**

The use of the conclusions and the instruments that have been presented by this research in other business realities should be carried out with great caution due to the fact that the study was limited to 48 organizations located in Brazil with their own characteristics, technology and management systems.

The sample investigated by this study was a small one, which has led to unstable correlation statistics. Future studies that would involve larger samples and other categories of executives and sectors would be highly recommended.

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