

# **Exponential Organization: How to Measure Them**

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## **Abstract**

In its early forms organization inventive power may be likened to a game. In those first manifestations of the power of reflective arrangement (organic), everything appears simple, harmless, and even beneficent. But as the phenomenon spreads and develops within an organization environment in process of becoming adult, what once looked like a game is suddenly found to be a must. It has become plain that however urgent may be the pressures driving us to unite (partnership), they cannot operate effectively in the long run except under certain conditions as, for instance, conscience and professional integrity. Therefore in the near future one will be hard-pressed to find a single organization, of any kind, that has not become more ethical and “social accountable”, depending on adding value to society as a source of what attracts customers and clients, these are the characteristics of an Exponential Organization. A model has been proposed to measure the extent to which an organization pursues differentiation leading to the organization differentiation index, which measures the degree an organization adds value to society. It is based on two sets of organizational variables: intervening variables called “commitments”, and a set of end-results variables called “results”, aiming at assuring a strategic and articulated logic across the company business, designed to increase its market value, achieved through the interaction of the two sets of variables. In order to verify how the proposed model works in the real world, a pilot study was conducted involving eight organizations of several sectors. None of the involved organizations reached differentiation.

Key-words: organizational differentiation, added value, intellectual capital.

## **Introduction**

You would be hard – pressed, in the near future, to find a single organization of any kind, that has not become more “social accountable” – dependent on adding value to society as a source of what attracts customers and clients, besides having a competent knowledge and information technology management, characterizing what we call nowadays an Exponential Organization (MALONE, 2015). We will come up with a model to measure the extent to which an organization pursue differentiation leading to the organization differentiation index, which measures the degree an organization add value to society, being considered, therefore, an exponential organization.

The ideal of the so called Exponential Organizations, which have as main asset the knowledge, is to provoke an reflection on the management structures and its changing impact for the society, creating companies with characteristics of more agility, responsiveness, and using disruptive technologies.

For many researchers this will be the only way to cope with a VUCA world (volatile, uncertainty, complex, and ambiguous).

How can we promote and measure the degree an exponential organization add value to society? No single measurement will ever describe an organization's stocks and flows of value leadership. 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 leadership accounting needs to look at organization performance from several points of view. On the other hand, what might be a key indicator for one organization 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 added – lots of stuff that organizations measure is only superficially related to value added.

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.

### **A proposed framework for rating organizational differentiation**

In order to perform this, *the Organizational Differentiation Model* (ODM)© is suggested (BRUNO, 2005).

The ODM is a comprehensive approach based on two sets of organizational variables – intervening variables called “commitments” and a set of end-results variables called “results”, aiming at assuring a strategic and articulated logic across the company businesses, designed to increase its market value, achieved through the interaction of the two sets of variables.

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

- commitments – encompassing “human capital”, “innovation capital”, “process capital”, “relationship capital”, “environment” and “society”; and
- results – involving end-results as “operational margin”, “net profit”, “capital turns”, “earnings before interest, taxes, depreciation and amortization” (EBITDA), and “economic value added” (EVA) or “cash value added” (CVA).

## Commitments

*Human Capital* does not belong to the firm, as it is a direct consequence of the sum of its employees expertise and skills.

*Process capital* means the internal and external processes that exist within the organization and between it and the other players; namely the *relationship capital* that is concerned with the customers, suppliers, subcontractors and other major player involved – as global business is today a reality, it being difficult to determine a company's boundary (JOIA, 2000); and *in*

*novation capital*, a direct consequence of the organization's culture and its capacity of creating new knowledge from the existing supply. These last three capital sources constitute what is called structural capital that belongs to the company, and can be traded, being the actual environment built by the organization to manage and generate its knowledge adequately. Ending up *environment* and *society* means the way the organization deals with the protection of natural resources and the development of society as a whole.

In order to create an overall picture regarding the **commitments** a set of closed instruments was developed involving the six before mentioned dimensions – see Appendix 1.

This set of instruments will lead us to an average score for the commitments, ranging from “0” to “1”, considering that the relative score involving each instrument has been taken into account.

## Results

The second group of dimensions are related with hard data, in other words, organization's results. In order to analyze the operational management performance the *operational margin* has been selected. To make sure that the stockholder is being satisfied both, the *net margin* and the *net capital turns*, have been chosen.

As far as cash generation is concerned the *EBITDA* (earnings before interests, taxes, depreciation and amortization) was selected as indicator. Finally, to check the effectiveness of the capital investments management, one of the two indicators has been chosen, namely *cash value added* (CVA) or *economic value added* (EVA).

In order to create an overall picture regarding **results**, their relative value, taken as reference the ideal scores for the business, should be considered and a simple average should be computed. Negative results received “0” as score, as well as performance indicators not computed. In the case of CVA and EVA it is necessary to consider at least one of them.

The advantage of the model is that it will lead us to compute what is called the *organizational differentiation index* (ODI) by multiplying the final scores for commitments (C) and results (R). This index shows the extent to which the organization besides presenting positive economic and financial results, are investing in intangible assets, as well as on their relations with the environmental aspects and with society.

This index varies from “0” to “1”. The maximum value means that the organization (imaginary company) reached perfection, as far as organizational differentiation is concerned, it covers the total area of the bi-dimensional model. Figure 1 presents the conceptual framework of the model.

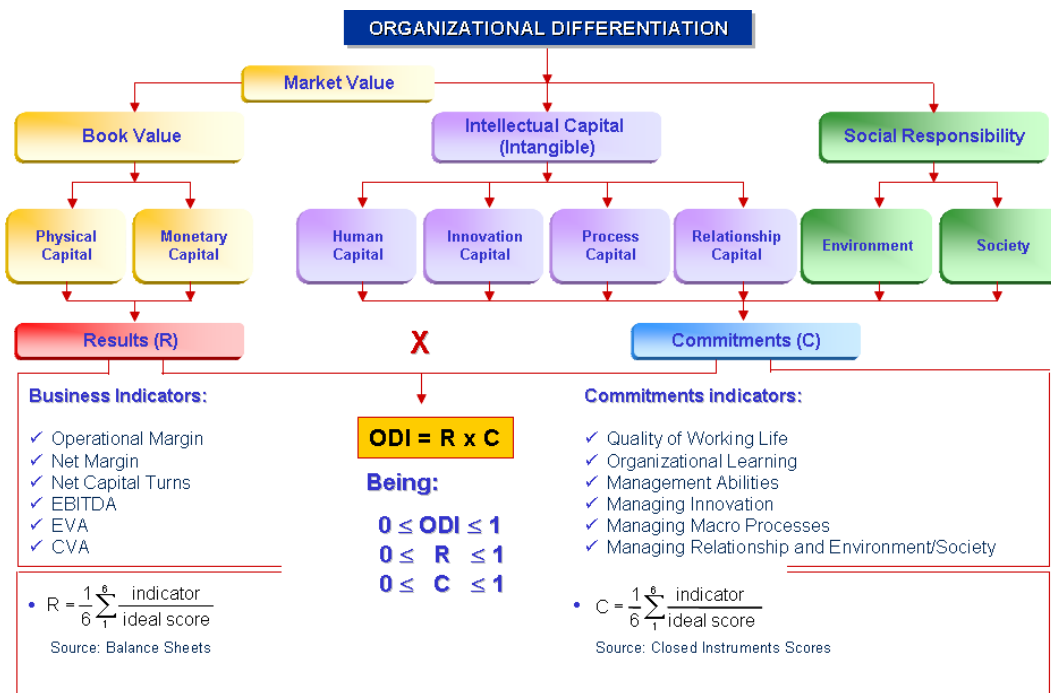


Figure 1 – Organizational Differentiation Diagnosis Model©  
Source: Bruno (2005).

The differentiated organizations score high in the organization differentiation index by pushing the value they offer stakeholders to new frontiers. They are “winners” in their industries.

At the other extreme are the “beginners”, businesses with differentiation indexes that conform to the basic behaviour of the industry.

The other alternatives are “sponsored” organizations meaning organizations scoring high in the commitments and low in results, and the “economic-financial” organizations, being those scoring low in commitments and high in results.

Figure 2 shows the graphic interpretation of the model, where the scores of six imaginary organizations (A to F) were plotted.

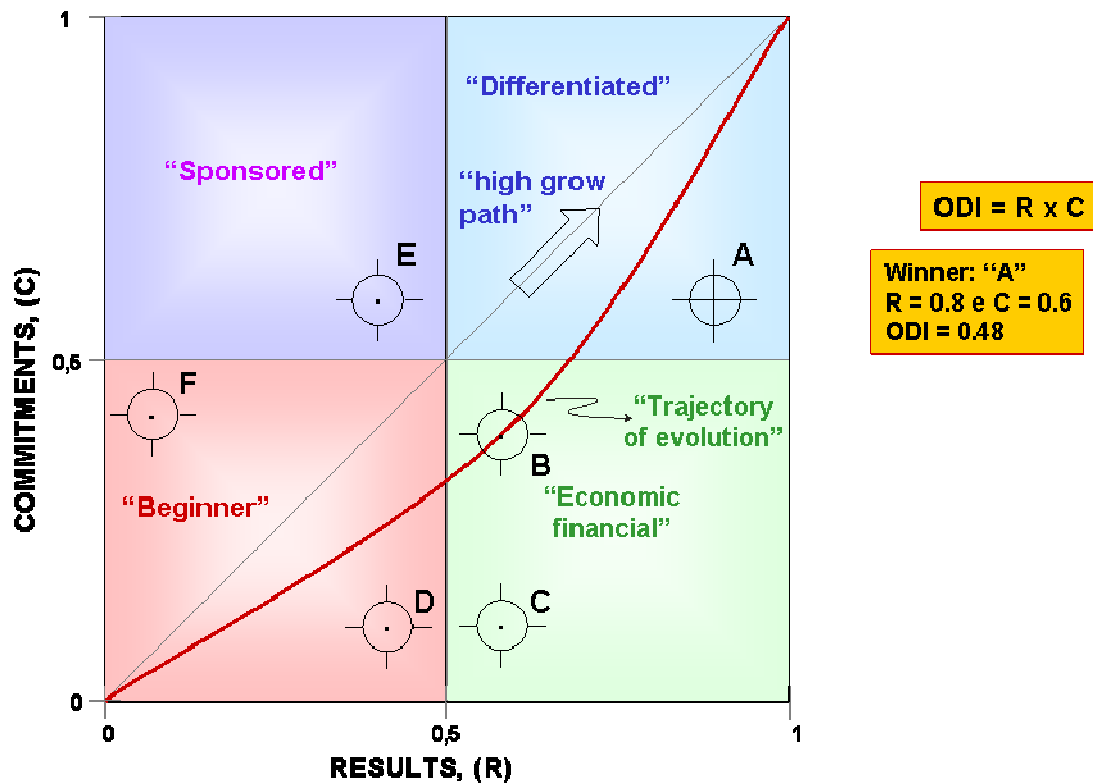


Figure 2 – Organizational Differentiation Model©  
Source: Bruno (2005).

“A” is a winner organization, scoring high in both variables, typically a differentiated organization. Another advantage of using such a model is the fact that the scores in the closed instruments’ specific dimensions and on the results performance indicators may reveal significant room for improvements in both variables, commitments and results, as depicted in Figure 3, which shows a gap per considered dimension, leading to an action plan for putting the organization in a trajectory of evolution over the course of time.

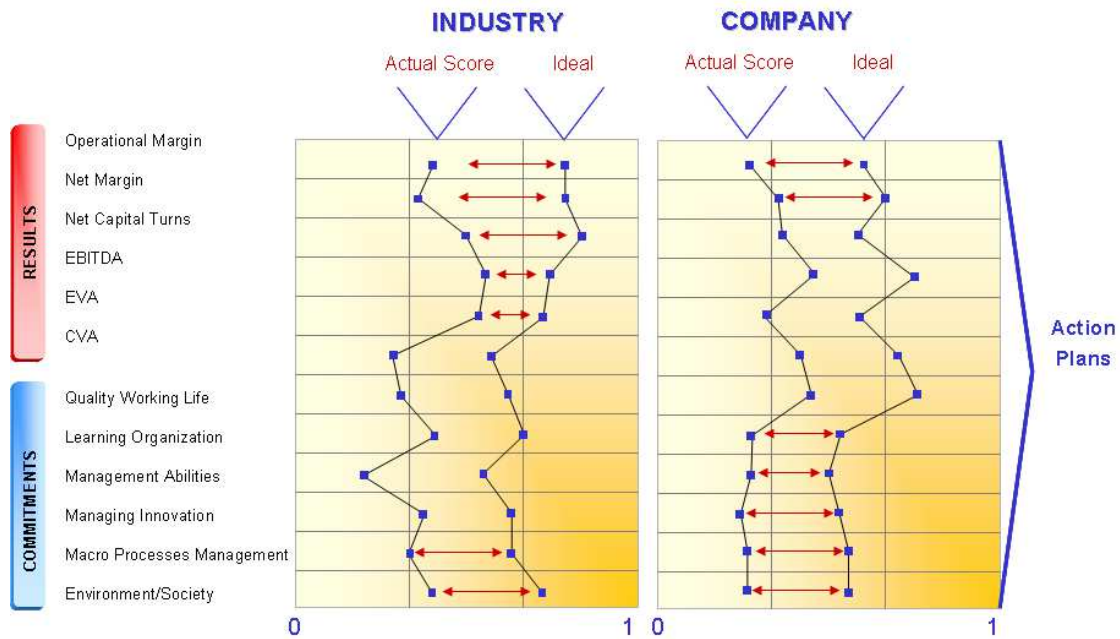


Figure 3 – Gaps per considered dimensions  
Source: Bruno (2005).

## Method

The methodological procedure followed in creating the present model is one among many that can still be used in the near future and represents an effort to overcome the paralysis by analysis effect (Ansoff, 1984) too common when dealing with intangible things, leading to endless discussions rather than practical results. A model is good if it adequately models and expresses the reality we are facing, rather than the excess of rigour it applies itself, measured by the number of variables taken into consideration.

The method draws from the existing models presented by Edvinsson and Malone (1997), Roos *et al.* (1997), Stewart (1997), Sveiby (1997), Klein (1998) and Winter (1998) who has inspired Joia (2000) in the creation of a heuristic frame model.

Earl (1997) leads us to infer that ascribing value is worthwhile if linked with the organization's vision, mission, strategy, focus-based action plans and some performance indicators. The composition of intellectual capital as a whole is an exercise that has been subject of discussions. Edvinsson and Malone (1997) propose that intellectual capital is the arithmetic mean of all the capital components in play. We have used this concept of calculation for the dimensions encompassed in the variable commitments. On the other hand, it has been adopted the same calculation concept for the indicators composing the variable results. Naturally, a very high correlation between commitments' values and results' values is expected, as time goes on, in the case of an individual organization (trajectory of evolution), or in the case of a set of pairs of the considered variables, if one consider a group of organizations taken at a certain point in time. Commitments on its own is worthless. It must be understood as a way of refining the company's business strategy, through positive feedback (ARTHUR, 1990). Therefore, a poor relationship between commitments ratings and results scores is, by definition,

proof of either a bad model or biased data as stated by Roos *et al.* (1997). Some hidden effects, such as a kind of "active inertia" (SULL, 1999) that delays total and immediate

deployment of the benefits derived from heavy investments in human and innovation capitals, which are part of the commitments. This asynchronous effect, is referred to as the “time-lag trap”, and needs to be analyzed in depth.

The following steps were followed in the methodological procedure:

- analysis of some of the existing models to evaluate the intangible assets of an organization;
- selection of a well-known business strategy formulation model;
- building a bridge between strategy and commitments (intellectual capital plus environment and society);
- definition of a set of closed instruments for scoring an organization’s commitments and its dimensions (components), over the course of time;
- use this scoring system is a pilot study involving some selected organizations, and calculating the correlation between commitments scores and results values; this computation can be done for each individual organization over the course of time to identify the specific organization trajectory of evolution;
- detection of some improvements required in the proposed model or in the instrumentation.

### Results and Analyses

In order to verify how the proposed model works in the real world, a pilot study was conducted involving eight organizations of several sectors. The results are as shown in table 1.

	<b>SECTOR</b>	<b>C</b>	<b>R</b>	<b>ODI</b>
1	Health Care	0.45	0.08	0.04
2	Paper & Packing	0.63	0.45	0.28
3	Mechanical Components	0.30	0.05	0.02
4	Electrical Components	0.45	0.65	0.29
5	Transportation/Logistics	0.30	0.50	0.15
6	Consumer Electronics	0.35	0.25	0.09
7	Vehicles	0.48	0.70	0.34
8	Virgin Media	0.49	0.22	0.11

C = Commitments

R = Results

ODI = Organizational Differentiation Index

Table 1 – Organizational Differentiation Pilot Results

Source: Bruno (2005)

Another way of presenting the results is in the form of a graph as shown in Figure 4.

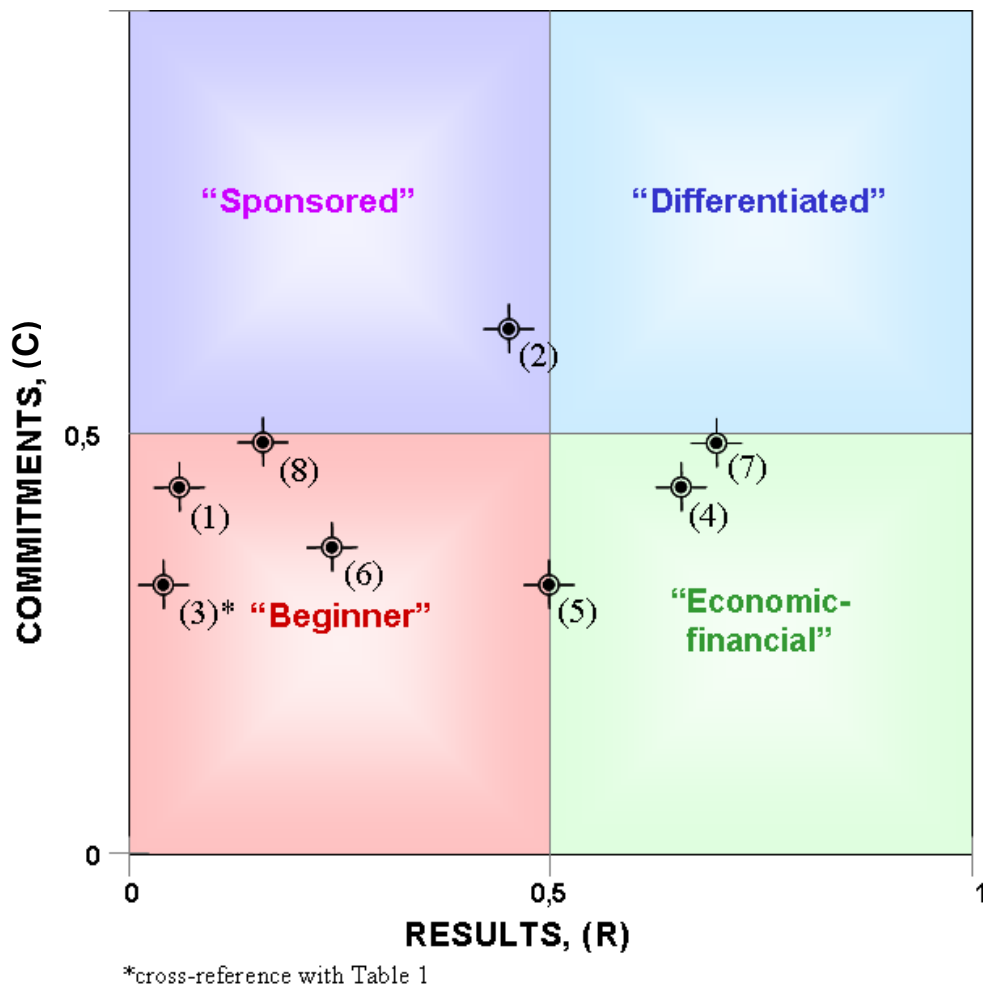


Figure 4 – Graph showing the position of each of the considered companies  
Source: Bruno (2005)

As can be seen in Figure 4, the majority of the considered organizations are located in the “beginner” area of the graph. That means there is plenty of space for improvements.

Computing the linear correlation coefficient taking the two variables, commitments (C) and results (R), involving the considered organizations, the result was + 0.30, that means a low positive correlation between the considered variables. This result was expected due two major reasons, the small sample size and the active inertia (“time-lag trap”) that delays total and immediate deployment of the benefits derived from investments in intangible company assets.



## Conclusions

To add value to society in a knowledge economy environment the organizations, more than ever, need to increase their investments in the intangible assets, once the current balance sheet and income statement are able to present an X-ray of a company, i.e. how it is today, but are not reliable tools to foresee its performance in the very near future. This hidden treasure is nowadays what really matters in a society in constant turmoil. On the other hand we need to consider, besides knowledge, the way the organization relates itself with the environment and with the community. Despite the advances made in understanding the nature of knowledge – both tacit and explicit – and its transfer mechanisms within an organization (NONAKA and TAKEUCHI, 1995) and among their partners (BADARACCO, 1991), a long and difficult way is still to be covered for assuring convergence of the business world, the political institutions, and the civil society, in order to assure projects and decisions towards the human society development (SAFTY, 2003). Reliable measurements of these efforts are only part of the game, what really matters is the attitude of the decision-makers, and leaders towards this direction.

A remaining research question is the relation between the ODI evolution and the market value of the organization as time goes on. It is expected a positive relation between both, in any way this is, as said before, a *research question*, therefore, there is no overnight answer.

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## Appendix 1

### Set of Closed Instruments

Six closed instruments were developed to enable the computation of an overall picture regarding the commitments variable. Three of them are of the attitudinal type scale and cover the following subjects: Quality of Working Life, Learning Organization, and Management Abilities. The first two are used in surveys covering samples of the total number of employees, the last one involves a sample of the managerial population. The three need to be validated regarding items of the instrument and stability (reliability) of the instrument as a whole.

On the other hand the other three instruments are of the type fact finding and cover the following subjects: Managing Innovation, Macro Processes Management and Environment & Society Management. They don't need statistical validation before the final computations, and are applied only to collect information from the management level (sample).

For each instrument the following dimensions are considered:

- Quality of Working Life:
  - a) Salary and Benefits,
  - b) Health and Safety Conditions at Work,
  - c) Utilization and Development of Competences,
  - d) Growth Opportunities and Work Stability,
  - e) Social Integration at Work,
  - f) Constitutionalism at Work,
  - g) Work and Total Life Space, and
  - h) Social Relevance of Working Life.
  
- Learning Organization:
  - a) Personal Domain,
  - b) Systemic Thinking,
  - c) Mental Models,
  - d) Systematic Performance Appraisal Processes,
  - e) Learning Recognition,
  - f) Sharing Recognition,
  - g) Space for Learning,
  - h) Teamwork,
  - i) Decentralization,
  - j) Past Experience,
  - k) Shared Vision,
  - l) Leadership Involvement,
  - m) Multiple Defenders,
  - n) Mistakes Treatment,
  - o) Openness Climate,
  - p) Curiosity,
  - q) Continued Education, and
  - r) Actions Materialization.
  
- Management Abilities:
 

a) Leadership,	d) Communication,	g) Innovation, Technology
b) Interpersonal Skills,	e) Strategy Definition,	and Change Management

- c) Decision-Making,                      f) Business Management
- Managing Innovation:
  - a) Strategy,
  - b) Processes,
  - c) Organization,
  - d) Alliances, and
  - e) Learning.
  
- Macro Processes Management:
  - a) Products,
  - b) Human Resources,
  - c) Decision and Information,
  - d) Products and Services Development,
  - e) Physical Resources,
  - f) Market Attendance and Logistics,
  - g) Advertisement and Promotion,
  - h) Distribution Network,
  - i) Technical Service,
  - j) Market Share,
  - k) Company Image,
  - l) Financial Results, and
  - m) Quality (products and services).
  
- Environment and Society Management:
  - a) Values, Transparency and Governance,
  - b) Suppliers,
  - c) Consumers and Clients,
  - d) Community,
  - e) Society and Government, and,
  - f) Environment.