A sustainable management model based on business excellence as applied to mining companies

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Abstract

The success of a sustainable business project depends on different factors but there is no doubt that the excellence of business management is the single most critical factor, because of it is what connects all the others. In a constantly changing world, a new way of doing things will be proposed setting criteria for taking decisions that create value today and in the future. Professional ethics and transparency must be applied to employees, suppliers, customers and shareholders. A change organizational culture is necessary to respect social and environmental concerns, avoiding erroneous business decisions that endanger the well-being of future generations.

In this paper, a model based on excellence and sustainability is proposed, which is based on a diagnostics tool to determine defects and problems, where the areas for improvement are identified and defined both qualitatively and quantitatively, so an action plan could be designed. Subsequently, both solutions and the right tools are applied to move progressively toward our proposed model. The model proposed in this paper represents a new approach to sustainable business management based on excellence, is applied specifically to mining companies.
The challenge OF business excellence and sustainability.

The conception of businesses is undergoing a dramatic change where traditional industrial business models are no longer valid and many businesses are suffering from the lack of adjustment to new circumstances and requirements. Today, innovative concepts based on continuous improvement and sustainability are required to stay in taken without evaluating its effect on company stakeholders, the environment and the community.

Today, business excellence has become a work philosophy; this is, the only way to do a job at all areas and management levels of the organization. Implementation of business excellence requires of a new business culture where sustainability is a high professional and business value so that objectives may be implemented through commitment rather than just compliance. This new culture is well characterized by Lair Rivero [1] statement: “The true business culture is the subconscious of an organization and, in practice, it becomes stronger that business procedure. It is defined by everyday behavior of employees and is the result of all values, believes expectations and non-written rules”.

Bases for an alternative business model.

The model in Figure 1 represents the role of stakeholders in a functional model where we establish a simile between business and human functions. The objective is to draw some intuitive conclusions for an alternative business model where decisions are sought to enhance business excellence and sustainability for the company and its environment.

In this model, the resemblance between the organic and functional behavior of companies and human beings helps to intuitively understand the functions and the problems of a business [2]:

- A company “eats” products and services from suppliers and uses its own resources to transform them into new products and services which fulfill the needs of its clients, thus obtaining a return and profitability.

- In this comparison, the human brain is the intellectual asset – talent – of the employees (the software), plus other assets not related with intellectual capital (the hardware). Both assets are coordinated to achieve objectives in a way which relates with the business culture and is specific of each organization.
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- At the communications and information levels, there is an inflow to the company, an internal information flow and an outflow to the environment.

People are unique and hence, a treatment which is valid for a person may not be adequate for another. Similarly, companies are unique and while certain solution may be valid to solve a problem in a company, it may not solve the same problem in another company. Also alike people, companies change and at each moment, they are constrained by internal and external circumstances.

![Figure 1. The company and its physical environment](image)

The commitment to business excellence [3] extends to all areas of the company and to achieve it, decisions taking must comply with the following scenario:

- The company’s charter (vision, mission and values).
- The business model of the company
- All aspects of human resources management.
- The interactions with clients and markets.
- The financial and shareholder relations management.
- The respect to the environment and the community.
- The relationship with our suppliers and other stakeholders.
Focusing on creating value, the proposed role of stakeholders would be the following:

- **SUPPLIERS**: Creation of value from the external resources received. Tangible and intangible supplies are distributed or transformed by the company to fulfill the needs of its clients and related stakeholders.

- **EMPLOYEES**: Creation of value from the intellectual assets of employees and related stakeholders (e.g., knowledge, know).

- **CLIENTS**: Creation of value from the business activity itself, this is the fulfillment of the needs of clients and all other stakeholders.

- **SHAREHOLDERS**: Finally, the sustainable value creation from all stakeholders (e.g. suppliers, employees, clients, etc.), results in the creation of value for shareholders.

A Management model for Business excellence may be represented (Figure 2) as a three leg stool. Here, the three legs (minimum condition for stability) represent three types of stakeholders, i.e.: Suppliers; employees and external consulting associates; and clients, sales networks and final users.
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**Figure 2.** The three legged stool model for Business excellence and sustainability.

The logical sequence process for the implementing the Business excellence culture in is represented in Figure 3. The process must be started by the Management and shareholders of the company. Then, it should be adopted by the employees and finally, integrated down to suppliers and clients and the society.

![Figure 2: Three legged stool model for Business excellence and sustainability.](image)

**Figure 3.** A sequential process for implementing Business towards sustainability

Figure 4 shows the parallelism between people and the company in the processes of development of business excellence [4]. In both cases, the process is continuous and cyclical, where the human talent impacts the company in certain direction, which in turn, moves the company to a new business situation. Clearly, both processes – employee development and business excellence - are interconnected in a way that the failure in the developing the first will prevent the company to reach excellence in its business processes and policies [5].

Evidently, the commitment of competent, well motivated people with an adequate professional profile is the key to business excellence and sustainability. Furthermore, it is necessary that this challenge must be born and addressed inside the company (internal processes) so that it may be projected to the outside (external processes).

**Methodology for the development of business excellence**

The stages of the process (Figure 5) are described below:
Phase 1: Achieve the conviction and full commitment of shareholders and senior management (Shareholders and management).

Phase 2: Behavioral changes and new practices among employees at all levels (People).

Phase 3: Convey to suppliers and request their commitment to the new way of doing business regarding products and services. This is the INPUT (what the company eats) and hence very important (Suppliers).

Phase 4: Convey this new way of doing business, as a value added to clients. Once shareholders, management, employees and suppliers are committed to business excellence and sustainability, the resulting products and services will be accepted as an improvement by clients ND THE SOCIETY (Clients).

Figure 4. The process towards sustainability and business excellence
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A good management tool for the transformation process is GROW model, conceived by Graham Alexander and published by John Whitmore [6], with some modifications as described below:

G: Goal: Define new vision, mission and values including a commitment to manage for excellence in sustainability.

R: Reality: Analyze – quantitatively and qualitatively - the position in all internal and external areas of the company, e.g.: management, employees, suppliers, clients…

O: Options: Once the details regarding the company’s position is known, determine the actions and the alternative management tools to be used to achieve the new objectives in the short, medium and long term.

W: Will: Once required actions have been identified and decided upon, and priorities in the short, medium and long term, prepare an action plan and schedule to achieve the objectives.

Figure 5. The continuing improvement process towards business excellence and sustainability
Diagnosis

The subconscious of an organization is an invisible force which lies behind the organizational flow-charts, in between lines of codes and policies and in the equipment and facilities, impregnating everything [7,8].

A good diagnosis of the organization may be carried out by means of 360 degree survey to all management areas, which may be validated and complemented with information analysis and interviews.

This procedure may yield good qualitative results which may be used in a later stage to quantify key specific problems. The final result of the process is the development of a complete understanding of body and the character of the company, in the form of a well structured, scientific analysis of the situation.

The diagnosis allows not only to identify key problems in all areas of the organization, but also to determine root causes, solutions and management tools. It also helps the preparation of plans and schedules for a progressive evolution towards the proposed sustainability model.

Action plan for the application of the model

Once key problems have been identified, the alternatives solutions and tools to be used in implementation of the new model may be defined. Two types of goals should be considered, i.e., the goals directly affecting employees (people) and those addressing the problems not affecting people. For example, changing price policies or strategic positioning of the company does not have a direct effect on employees while a change in leadership or salary policies would clearly affect employees.

Once the goals and objectives have been well defined, the management technique known as “COACHING “ may be used as a powerful tool to accomplish both people and non-people types of goals. Whitmore [6,9] states that, when coaching a team or task force, the manager (coach) should make sure that goals are stated in a “SMART”, “PURE”, and “CLEAR” way, as described by the mnemonics in the following table:

<table>
<thead>
<tr>
<th>SMART</th>
<th>PURE</th>
<th>CLEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>S: Specific.</td>
<td>P: Positively Stated</td>
<td>C: Challenging</td>
</tr>
<tr>
<td>M: Measurable.</td>
<td>U: Understood</td>
<td>L: Legal</td>
</tr>
<tr>
<td>A: Agreed</td>
<td>R: Relevant</td>
<td>E: Environmentally sound</td>
</tr>
<tr>
<td>R: Realistic</td>
<td>E: Ethical</td>
<td>A: Appropriate</td>
</tr>
<tr>
<td>T: Time Phased</td>
<td></td>
<td>R: Recorded</td>
</tr>
</tbody>
</table>
In designing an action plan, goals and objectives must be analyzed and classified to define interrelations and priorities. This may be approached using three simple methodologies:

- The Pareto or 80-20 diagrams to identify the key tasks, this is, the 20% most important tasks, which all together account for 80% of the expected overall results.
- Segmenting the tasks required to achieve each specific goal into two groups, respectively relating to internal and external processes/strategies, and analyze the interactions of the former on the later.
- Identify the short term tasks which are constraining mid term objectives and the constraints posed by mid term tasks upon long term objectives.

The change process is progressive and dynamic, thus requires of a continuous process of monitoring, diagnosis and corrective actions to COPE with deviations and changes in priorities and circumstances.

**Specificity of the Minerals Industry**

It is evident that the minerals industry is still regarded by the public as threatening and hazardous and hence, the vision and standards of companies in this sector may not be limited to the operational, market and financial considerations. It must focus on the social, political and environmental implications that could be crucial for sustainability.

The methodology for excellence and sustainability described above is applicable to the minerals industry, where the main goals and objectives for excellence and sustainability should be aligned with three key strategic aspects which are specific to the sector, these are: i) A vision of Corporate Social Responsibility; ii) A human resources management focusing on ethics and trust and iii) A strategic focus on relations with stakeholders.
A vision of Corporate Social Responsibility

The concept of Corporate Social Responsibility (CSR), refers to the voluntary acceptance by the company of social responsibilities and sustainability standards above and beyond legal requirements, implying the commitment to behave ethically and contribute to economic development and improving the quality of life of the workforce, the local community and society at large.

Within most mining companies, corporate values typically include considerations towards ethics, social license, and safety and clearly represent a commitment to upholding standards and codes of conduct relative to company employees, local communities, the environment, and stockholders/investors. It is essential that these values be understood by every employee within a company regardless of position or classification, and are discussed regularly. Employees should be recruited and developed with respect to these values, and be held accountable to insure that they are followed.

A good number of internationally reputed sustainability frameworks are offered as guidelines and codes of conduct that the mineral industry can use to align their vision to the CSR concept. We want to highlight two: the United Nations Global Compact and the ICMM sustainable development framework.

A human resources management focusing on ethics and trust

While the impact of labor productivity and cost on the economics of mining operations have long been the main focus of management in the minerals industry, the traditional philosophies toward human resources and workforce issues have recently undergone substantial change. This change mainly relates to the challenges facing minerals industry companies as a consequence of government regulation and negative public image. In fact, the ability to manage talent and understand the motivation and needs of workforce are now skills that must be fundamental to sustainable management in the minerals industry.

Throughout most of the world, one of the most prominent risks now facing mining and resource companies involves their ability to develop and maintain a social license to operate, this is, a covenant drawn up between the company and the affected communities and stakeholders whereby mining companies make a commitment to provide tangible benefits and improve the quality of life of residents during and after mining. While the legal permits to mine are embodied in the regulatory consent granted by governmental agencies, this “legal right” is only as valid as the explicit or implicit social license granted by the potentially affected communities and stakeholders.

Employees play a critical role in facilitating this social license. Employees serve as a conduit for disseminating information about the company and its practices to the general public and hence, everything associated with human resources management, from recruitment to skills development and safety, either directly or indirectly impacts a company’s reputation and how they are perceived by
local communities. In addition, employees also convey important information back to the company about social and community issues, a feedback which is critical for assessing the outcomes of specific social programs and identifying key factors that might indicate community needs or potential conflicts.

A strategic focus on relations with stakeholders

The concept of “stakeholder” as relates to sustainable management was promoted in the 1980s by R. Edward Freeman, and refers to any party which affects, or can be affected negatively or positively by, the company’s actions. Though applicable to any business activity, the stakeholder concept becomes critical for the minerals industry, due to the great diversity and magnitude of its potential (positive and negative) impacts and the controversial legacy of mining around the world throughout history.

Therefore, the interaction between the company and its stakeholders should be considered as a critical part of corporate strategy and corporate communication systems must be specifically conceived to build and maintain an appropriate image of the company reputation among all stakeholders.

REFERENCIAS: