MANAGEMENT PERFORMANCES BASED ON SUPPLY AND SALE. CASE STUDY: THERMAL TECHNOLOGY, LOCAL INDUSTRY COMPANY

Erica Olga BRAD[1]

ABSTRACT
Thermal Technology is a local industry buisness witch importes the materials from Italy and ansambles them in the fabric located in the industrial area of Oradea city, in Bors, location near the border and exports the finished product in other countryes and also in Romania.
Thermal Technology appeared in 2001, starting to use carbon as the resistive element. After various studies and tests, Thermal Technology decides to test the effectiveness of carbon that covers producing heating element heater for heating the tires of race engines.
I have choosed to make a research on this local company regarding the management prformances based on supply and sale, because its market is focused on various domains.

KEYWORDS: *management performances, supply, sale, thermal technology*

JEL CLASSIFICATION: *M10, M11*

1. INTRODUCTION

The issue of management performance based on supply and sale was presented in many papers: Antoncic and Scarlat (2005), Richard et al. (2009), Butilca, et al. (2011).
The management performance depends of the type of company and represents an important goal of modern industrial activity. In this regard, a romanian company, named Thermal Technology, was chosen to present the way to develop of material supply strategy of the company.
Thermal Technology is, since 2001, a leader in developing new technologies that are based heating using carbon fiber.
Carbon is the element of high performance that is based on all production of electric heating systems whose technology is patented Thermal Technology.
Thermal Technology appeared in 2001, starting to use carbon as the resistive element. After various studies and tests, Thermal Technology decides to test the effectiveness of carbon that covers producing heating element heater for heating the tires of race engines.

2. DATA AND METHODOLOGY

Given the excellent results at the end of 2003 Thermal Technology achieved first production line covers sports and industrial heating purposes, becoming the technical partner of teams participating in various championships.
In 2005 Thermal Technology apply heating technology for residential premises. The first orders were executed in Romania, representing 2750 sqm underfloor heating and were completed before winter 2005-2006 when temperatures reached -23 ° C peaks.

[1] Bucharest University of Economic Studies, Romania, ericabrad@yahoo.com

With these surfaces made, it could check functioning, thermal performance and energy consumption for the different heating systems for indoor and outdoor (multilayer and mesh heaters). Next, they created electronic temperature control systems, adapting wall by mounting under plaster and under plaster, and then were made of carbon fiber electric radiators with a low energy consumption.
In 2006 a full range of Thermal Technology is presented Italian market, finding a deep interest in low energy consumption, the environmental aspect of the system and ease of application. Soon the same interest was manifested throughout Europe. In early 2008 appears in Thermal Technology products idea to create modular, easy to install, functional, efficient, dedicated DIY segment, "do-it-yourself". Thus was created the brand Genius Carbon.

Carbon fiber characteristics are follows:

- Absence of thermal inertia;
- The ability to store a large amount of heat;
- Transfers its heat very rapidly;
- Long-lasting;
- Maintains its efficiency under all conditions of temperature (-40 / + 300 ° C);
- No thermal dilatation;
- Does not oxidize;
- Is flexible;
- Recyclable;
- Does not produce electromagnetic fields.

Common features of all products:

- acquisition costs and significantly reduced installation;
- ease and speed of installation (no need skilled workers);
- reduced thickness of all the heating elements (eg underfloor heating thickness of 4 mm, all hanging radiators have a thickness of only 2.5 cm.);
- not require any maintenance or periodical;
- there are no mechanisms or parts to wear out (no moving parts);
- special feature to regulate the temperature in every room, thereby achieving a more efficient use of programmable control units and automation domestic consumers;
- eco - compatibility (CO2 does not occur, there is no electromagnetic fields);
- ideal solution for using renewable alternative energies.

Types of heating

- **Heating by thermal radiation**

The system is a solution advantageous economically for heating buildings class high energy (Class ABC), because only the economy of energy, but rather the lack of fixed costs yearly, given that in the case of traditional fixed cost annual maintenance and amortization sometimes exceed the cost of energy needed to run them.

- **Underfloor heating**

Electric heating system, patented, with a thickness of only 4 mm can be produced both in control (in terms of power and the geometric shape in areas with a surface up to 25 square meters) and in the form of modules standardized sizes and power.

- **Wall and ceiling**

This system is applicable when it is not possible to install an underfloor heating, or when it is necessary to integrate an area heated, eg bathrooms or stairwells, The one which has floor surface insufficient, or When You Want To use a system heating exclusive installation costs. The system is ideal for Creating Also environments with similar features saunas, Turkish baths, etc.

This heater can be installed on the wall or ceiling and is based on the principle of heating by thermal radiation.
Thermal radiation is an exchange of heat through infrared waves, the station transfer vector. In fact, two bodies or two objects having different temperatures, radiating naturally heat each other, and the flow of heat moves from warmer to the body of the cooler. Ambient radiation emitted by the heating system turns into heat upon contact with an object, a colder wall or a person. Thus, the flow of energy is not absorbed by the whole surface of solids only encountered that turns it into heat. It is broadcast environment, creating in this way optimal comfort for residents.

Necessary data for making supply policy

Supply Policy of Thermal Technology company is subject to a number of parameters, which for supply officers are as many restrictions or options. Among them: the amount of capital available to be invested in stocks; consumption periods (volume and its regularity); costs, buying conditions and nature of the products (Lu, 2011; Wright and Datskovska, 2012).

Develpoment of material supply strategy of the company

As a basic requirement to achieve the objectives of Thermal Technology company is to ensure timely, rhythmically, in quantity, quality of assortment and structure of all material resources for all consumption destinations.
This requirement imposed still ahead the development of the reporting period, a strategic plan and supply programs.
The strategic supply plan of the company nominates the resource materials for a certain period (usually up to 1 year) various categories of resources (raw materials and various materials, equipment, spare parts), their level and sources of coverage. Necessary data and information are estimates based on certain known elements and projections of company activity. Based on firm production orders and signed contracts there is made a degree creation of certainty in the provision of material resources.
The final content of the supply strategy, highlights a real situation, judiciously dimensioned in terms of volume consumption requirements, which will then correlate with the overall strategy of the company, trends and mutations that are registered on domestic and foreign raw materials market. Following supply strategy will be continuously under the influence changes in technical, technological and organizational changes as possible and depending on the volume and range of activities of the enterprise.
Supply strategy of this company is focused on a plane which in turn is defined by two categories of indicators:

- Indicator that reflects the needs (requests) consumption of material resources to fulfill the strategic objectives for the final (product manufacturing
- Indicator that highlights the potential sources of coverage quantitative and structural material resources of needs.

Consumer needs material resources express the quantities of raw materials, fuels, etc that will be consumed for the plan and the formation of stocks at the end of the reporting period.
Sources to cover consumer needs, according to their origin, can be internal (own) and outside the company.
The company tries to aim to its overall activity to take place in good conditions by having a perfect balance between needs and resources and stability throughout the reporting period.
Any deviation from this equality cause unwarranted material resources or assets or the occurrence of lack of materials. Both states generate adverse economic consequences. Usually, the more pronounced are economic consequences that lead to lack of materials.

In the calculations underlying the necessities of material resources for the plan using multiple methods, such as method of calculation directly (on the product), the calculation method based on analogy, method of calculation based on the assortment type, method of dynamic coefficients, etc.
Continuity of supply material consumption into a new reporting period requires the existence of a stock of materials at the beginning of the reporting period.
Home based training material is provided by actual production stocks which was in the previous reporting period. Since the supply strategic plan for the materials regarding a reporting period shall be prepared before the start of its stock at the beginning of the reporting period is a preliminary stock.
In the reporting period is up stocks of materials production (current stock, stock in transport, safety stock, stock preparation, stock winter) with a view to ensuring continuity of consumption, transport, etc. These stocks, the entire fiscal period, will experience a permanent process of formation and consumption.
At the end of the reporting period will exist for each type of material stock.

3. CONCLUDING REMARKS

We can conclude that supply strategy applied by Thermal Tecnology is the science and art of starting all company resources for assuring the necessary raw materials successfully achieving goals set by company management.
Company management is focused on various kinds of markets, such as: constructions, car and motorcycles industry, etc, even if it's the same or different consumers.

REFERENCES

Antoncic, B. & Scarlat, C. (2005). Corporate entrepreneurship and organizational performance: A Comparison between Slovenia and Romania. In: *Proceedings of the 6th International Conference of the Faculty of Management Koper*. Slovenia, Congress Centre Bernardin, Slovenia, 24-26 November, 2005. Bernardin: Faculty of Management Koper.

Butilca, D., Crisan, E., Salanta, I. & Ilies, L. (2011). The adoption/adaptation of the „Supply Chain" concept in Romania. *Annals of the University of Oradea, Economic Science Series*, 20(2), pp. 650-60.

Lu, D. (2011). *Fundamentals of supply chains.* [Online] Available at: < http://library.ku.ac.ke/wp-content/downloads/2011/08/Bookboon/Magement%20andOrganisation/fundamentals-of-supply-chain-management.pdf> [Accessed 01 September 2014].

Richard, P. J., Devinney, T. M., Yip, G. S. & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management*, 35(3), pp. 718-04.

Wright, J. & Datskovska, D. (2012). Addressing supply chain risks. *Risks Management*, July/August, pp. 63-65.