

Personnel management as a competitive measure in a mining advisory company**Gestión de personal como medida de competitividad en una consultora minera**

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Abstract

Herewith presented an investigation-action study inside the company "Minera Tierra Adentro, S.A. de C.V.". Located in the city of San Luis Potosi, Mexico, this company is a consultant in the Mining-metallurgical sector. This study has the goal of measuring qualitatively, the level of competitiveness that, as a microenterprise, MTA has in the practice as a staff- group management within the enterprises of the Mining-Metallurgical industry, analyzed from the personal management view, considering for this purpose, a descriptive qualitative approach, substantiated in an action plan that emerges from the experience, the moral optic and professionalism of the members that conform it. As the outcome of the investigation action, the strategic plan implementation, with a practical design of the personal management that incorporates the microenterprise, with defined parameters, the members of the company, are stakeholders of the construction, as well as responsible of the monitoring of it, seeking the creation of improvements that will lead to innovation and effectivity of the operational performance in the interest of the big and medium size companies.

Personal Management, Competitiveness, Strategic Plan**Resumen**

Se presenta una investigación-acción dentro de la empresa "Minera Tierra Adentro, S.A. de C.V.", ubicada en la ciudad de San Luis Potosí, México, desarrollándose como consultora en el sector minero-metalúrgico. Este estudio tiene como objetivo medir cualitativamente, el nivel de competitividad que, como microempresa, tiene en la práctica como una gestión de personal dentro de los corporativos de la industria Minero, considerando para este propósito, un enfoque cualitativo descriptivo, fundamentado en un plan de acción que surge de la experiencia, la óptica moral y la profesionalidad de los miembros que la conforman. Como resultado se obtiene la implementación de un plan estratégico, con un diseño práctico de la gestión de personal que incorpora parámetros definidos en donde los miembros de la empresa son partes interesadas en la construcción, así como responsables del seguimiento de la misma, buscando la creación de mejoras que conduzcan a la innovación y efectividad del desempeño operativo, de interés de las grandes y medianas empresas.

Gestión Personal, Competitividad, Plan Estratégico

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Introduction

Generally, microenterprises play a fundamental role in the economy of the countries. In Latin America they contribute 70% to employment generation; in the long run they have achieved a participation in the GNP of more than 50%. It is therefore relevant to perform research that springs from interdisciplinary analysis and accordingly achieves to integrate method with theory, enriching by the various areas of administration, economy, politics, history and sociology among others (Romero, 2006).

According to Landsberg (1994) the research in microenterprises poses serious obstacles, due to the privacy that is maintained in its activities and results, which usually are lacking in system and fixed formats, which he describes as afflicted by personal conflicts, managed in unprofessional ways, and additionally burdened by stigmas of inferiority.

Considering that a microenterprise may, through projects and advisory activities, endorse decisions of long range repercussion for medium, small and big companies, a research study with a descriptive focus of qualitative nature is proposed, the objective of which is to design a strategic work plan of a microenterprise, incorporating in it the strengths of its members, in such a manner as to potentialize the effectivity of the operating business proposals to clients generated.

The result of this study, which is developed through the method of research-action is a strategic plan that enables the qualitative measurement of competitiveness through the handling of personnel, utilizing as parameters the technical probity, the experience and the moral and ethical probity of the members of the microenterprise Minera Tierra Adentro, whose purposes are the operational advisory and consultancy services to the Mining-Metallurgical Industry in Mexico.

The scope of the study is the competitive strengthening, and eventually the growth of the microenterprise minimizing the obstacles that may arise from a traditional strategic planning; the qualitative measurement is focused on personnel management.

Theoretical basis

Competitiveness from the viewpoint of personnel management

A first approach to the concept of competitiveness is to define the concept of proficiency. Rey, (2014), describes that proficiency is the capacity to accomplish specific activities, since we understand that a person is able to do right or successfully an activity because he has the skills to do so. Concluding that proficiency exists, is done after a person completes the activity he was assigned to do, being this assignment, an acknowledgement and a demonstration of responsibility.

In relation to the concept of competitiveness, other definitions will be explored in order to give it a wider meaning, as there is no known establishment as to its conceptual formalization. The World Economic Forum (2010) describes competitiveness in relation to institutions, policies and factors which determine productivity.

Tello (2017) performed research on competitiveness based on the welfare of the members of the enterprise, and concluded, among other things, that to reach success, the competitive will of the individuals when they are included in environments of challenges, persons, objectives, changes, processes must be considered.

The Inter-American Development Bank (IADB) proposes areas of analyses and pointers in order to measure the competitiveness of microenterprises, among which one finds a *Strategic Planning* that has as pointers the process itself of strategic planning and its implementation, and additionally *human resources*, which include the general aspects as indicators, training, organizational culture, and health and safety (Solano, Perez, and Uzcátegui, 2017).

In the business environment there are tendencies to promote competitiveness, which unfold from the economic globalization, technological development, privatization, sustainable development, internationalization of the administration of human talent, styles of leadership (Prokopenko, 1998) and, to follow them strategic models, as the industrial one and those based on resources are proposed, taking advantage of the concept of cluster and of organizations such as sets of available resources and know-hows to promote development and growth respectively.

When the administration of personnel is considered as a basis for the measurement of competitiveness, indicators of development of human talent are identified by placing at this level the participation and communication of the persons involved, as, if the measurement of competitiveness is only focused on strategies, policies, infrastructure, technologies, processes, its development will be nullified, in view of the fact that they are direct indicators of the measurement of productivity. From this point of view other measurement parameters are contemplated, as are the engagement, the responsibility, the capability for growth and the attitude contributing to the positive results of the businesses (Montenegro and Alvarez, 2011).

Strategic plan

According to Ward (2006), strategic planning in microenterprises is defined as the development of a business strategy involving the firm, the members, and the environment, looking for growth; it additionally contemplates the vision and plans of action to reach the objectives set.

In the process of defining the strategy, the firm as well as the members must focus on the permanency, the participation in the activities of the firm, maintaining as a latent challenge the interdependence of both. The basis of this strategy is the shared vision of ownership and the business (Araya, 2017).

The strategy's purpose is to take advantage of the resources, capabilities and individual and collective competences in the firm, focused on reaching the goals in the competitive environment (Hitt, Ireland and Hoskisson, 2008).

In relation to this, Thompson (2012) asserts that the essence of this strategy will be the changes made in order to design, create and strengthen the performance of the firm in the medium and long range, thereby obtaining in theory a competitive advantage in relation to its competition, as much operational as financially.

The microenterprise should always be ready to face change, because its continuity in the long range will engender complications that may arise from the inclusion of the members in the business system, generating an unbalance between the demands and opportunities of the firm and the needs and individual wishes. To attain equilibrium several variables are taken into account as are members control in the firm's decisions, management of capital, control of conflicts, plans and actions (Araya, 2017). Strategic planning becomes then a forced development for the microenterprise, considering that it must count with an effective process that permits permeability of the inter-generational knowledge and the facing of the socioeconomic changes that enable it to be profitable and achieve members harmony.

Strategic planning provides objectives and goals, policies of compliance, promoting also studies of the business environment, threats and contingency planning. Several authors hold that it should be applicable to all kinds of businesses; there are studies however show that it is not considered a priority in relation to providing more business competitiveness (Aragón, Rubio, Serna, Chablé, 2010).

Business Organization of Minera Tierra Adentro

Minera Tierra Adentro S.A. de C.V. (MTA), family business established in 2012 in the city of San Luis Potosí, Mexico, has as its objective to provide high level professional services and offer training of an integral nature to the mining industry, through consulting and advisory services, operational as well as administrative, environmental, social, safety, etc. The objective is to establish value and presence in the mining districts of Mexico (Martínez y Rivera, 2018).

In the corporation's legally registered deed it has two partners, whose family relations promote it as a family business; in addition to this it is formed of three persons, who contribute technical know-how and diverse business functions. In addition to this, MTA's scope of services extend to external services of consultants in related Earth Sciences and of multidisciplinary support, when the client's projects so require them.

The organization chart for the MTA business is depicted in figure 1. It contains also the general functions which the personnel of the family enterprise perform.

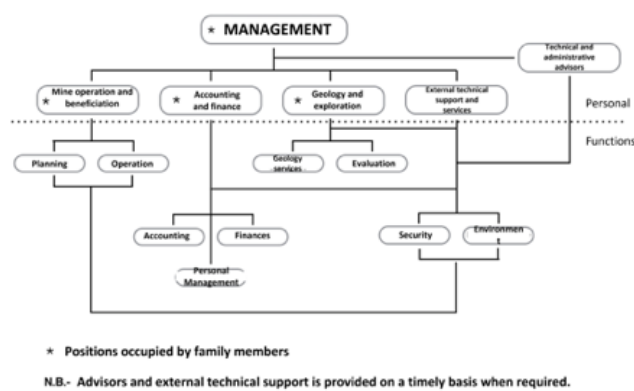


Figure 1 Functional organization chart of Minera Tierra Adentro

Investigation-action: methodology

For the purposes of this study, a measurement instrument made by Díaz (2012) with the purpose of determining the relationship between strategic planning and the performance of members of the enterprises in a place in the state of Puebla was applied. In this study the aspects identified by Romero (2006) as pertains the focus of the dynamics of members of relationships and their effect on the firm, as well as the basis of the aforementioned authors, who sanction the strategic planning as measured from the viewpoint of human resources or personnel supervision based on defined parameters as are individual experience and expertise of the persons, professional training, and technical and moral integrity. Considering this constraint, the statements of the instrument are extracted and are adapted for the appropriate information looked for in this study.

The instrument is applied to the three active members of the business and to two persons that constitute the staff of direct support, which makes a total of five cases from which to extract the desired qualitative information. Emphasis is placed on the method of research-action, in due consideration of the fact that investigators in this study were part of the activities and decisions that were realized.

Identification of the parameters to be measured.

To measure the competitiveness of the microenterprise, the listed fields of knowledge are joined: economy, organizational theory, international economy, strategic direction, finances, marketing and industrial organization (Camisón, 2014), from which theory of organization and strategic direction are extracted to conform the field considered.

Taking into account the measurement instrument and the literary basis, to measure the competitiveness of MTA the following parameters proper to personnel supervision are considered:

- 1) Level of schooling, training and use of communication technologies, personnel rotation, in order to formalize *technical probity of the individuals*,
- 2) Strategic planning, control of external organs and advisers, in order to conform the *individual and firm experience*,
- 3) Policy of human resources, control systems and management of performance, business-family norms, family environment and culture, communication and leadership, to describe the *moral and ethical probity*.

Results

After the analysis by the investigators and the carrying out of some proposals for practical work with the Director and his assistants, an exercise was performed to review the gathered information. This exercise was formalized with the presence of five members considered the "base", who in session were informed and analyzed the data and, based on it, presented proposals to develop a specific strategic plan that would promote the fortifying and the conceptual and practical transparency of the business relationship.

Additionally, the measurement of competitiveness was conscientiously registered based on the parameters shown:

Technical probity of the individuals

On the basis of the measured parameters, it is deemed that the technical probity can be gauged as a function of the level of studies, this being multidisciplinary, but with a clear focus towards the mining-metallurgical sector, with which proposals, budgets, preliminary studies become efficient as well as promptly prepared and delivered, which generates clients' trust; additionally, this probity gives MTA the opportunity to offer technical-operational support to the mining sector in interrelated and necessary areas: finances, environment, safety, efficient personnel management, use and handling of explosives, and so forth.

A basic premise can be considered. When the case is of projects in development (advisory to a mining society), the selection of external personnel to take care of them is necessarily based on their professional profile (related to earth sciences); however, for support of some services experience in the field suffices, training being a value-added characteristic to this parameter.

It may be mentioned that this training does not occur within MTA; however, the personnel counts within extended theoretical and field knowledge, derived from in situ training, through personal initiative or acquired during previous assignments. An important principle to be taken into consideration is that all members of the firm, internal or external, have a minimum of higher level verifiable academic studies, as frequently there is a requirement to officially endorse projects, documents, certificates, official minutes and meetings generated on work finished.

The utilization of technologies is applied in its totality, and in relation to personnel rotation this has not happened, and as for external advisors, they do not really influence this parameter as they are people contracted when the nature of the project in case requires their participation.

Experience

The parameter of strategic planning produces several differences in the responses, as an operation axis exists that however is only known to the members of the firm. In the joint exercise, the strengths, weaknesses, threats and opportunities expressed were examined and classified and, for their ease of handling were classified under two headings: beneficial conditions and conditions of opportunity (figure 2).



Figure 2 Conditions to establishing the strategic planning of MTA

There are no organisms or protocols that regulate the operation of MTA; in relation to the external advisors, the support they provide is considered invaluable and necessary, but their functionality has not been formally described.

The dexterity, knowledge and expertise that the MTA personnel denotes has managed to balance the lack of parameters evaluated by the business strategic planning, as proved by the years of experience, individual and accumulated by the advisors on which the company relies, members headed by the Director, and external ones, which are invited to work because of the know-how and effectivity they have proved on the job. It is considered that the experience proved constitutes a competitive advantage over other companies that provide advisory services in the mining-metallurgical sector, which in addition allow it to offer integral services and not only point by point.

Ethical and Moral Probity

This parameter has its foundation, basically, in the members harmony which has values that unanimously have expression in terms like the respect between advisors, and clearly towards the Director, who in turn expresses trust and union towards the rest of the team, as well as external to it.

Business interests and members ones, as well as codes of behavior and of ethics have not been documented; a commitment has been undertaken in developing this study, in which dates of meeting to formalize some premises that may be expressed as value added, so that in this way clients recognize it.

Competitiveness as a function of personnel management

Throughout this study, the Director and the other participants and occasionally active members of the business, recognize a medium level of competitiveness, generating commitments of participation in those parameters that have not been complied with or haven't been adequately formalized. The qualitative description of the measurement parameters of competitiveness arise from this evaluation, a particular scheme of operativity that distinguishes the doings and compromise with MTA's (figure 3) clients of the mining sector to which it offers integral specialized services.

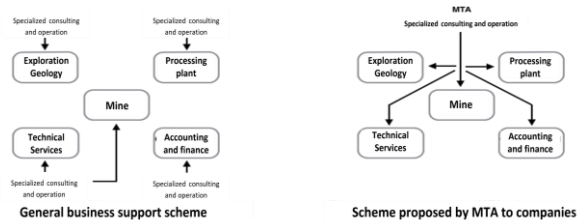


Figure 3 Tradition flow diagram vs Innovation diagram of MTA

Conclusions

The measurement of competitiveness as a function of qualitative parameters of personnel management is analyzed and structured in an improved manner through the insertion of a strategic plan; this study, made partial as described, signified effectivity to the investigators when presented to the Director and founder of the microenterprise, as in spite of his disposition, a comfortable thought remains of control in regard to the operativity of the projects developed with the various clients.

The acceptance of the interpretation of the data collected, and, before that, the disposition of the members of the enterprise to generate them, gave the investigators the opportunity to fulfill the initial purpose of the study, upon measuring the competitiveness level.

During the development of this study, various operative and strategy concepts not considered and others not formally considered are made explicit, which represents for MTA the opportunity to establish systemic management controls, having established a first phase of business strategy planning, as a function of personnel management.

The work strategy of MTA is flexible; it depends on the operativity and requirements of the small, medium and big units of the mining-metallurgical sector which have deposited their trust so they morph into projects that are managed from their beginning or as a continuity project, as required, and thereby implemented in situ by MTA. Therefore it is a result considered as value added in this study.

The plan of work of MTA is flexible; it depends on the operativity and needs of small, medium and big units of the mining-metallurgical sector that have deposited their trust in MTA, so that they are converted in projects that are managed from the start or are continued, depending on the situation, and MTA implements it in situ. Therefore the creation of a scheme of innovation to look after the needs of the clients is a result considered as a value added of this study.

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