



Operationality of Knowledge Business Transfer to Overseas

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ABSTRACT

The business opportunities in Southern Africa have originated a growing interest on the part of foreign investors in markets like Mozambique. This fact justifies any effort to learn more about the phenomenon of the transfer of knowledge to subsidiaries in Mozambique. We studied three cases with activities in the industrial sector. The results obtained indicated that an efficient knowledge transfer from the source to the recipient depends on (1) the factors that determine the assimilation on the part of the subsidiary of the knowledge transferred to it from the MNE headquarters; (2) the subsidiary's absorptive capacity for the improvement of its competitiveness within the framework of the inter-organizational cooperation, and (3) the capacity to successfully overcome the difficulties arising in the transfer operations.

KEY WORDS: *Transfer of Knowledge; Multinational Enterprises; Subsidiaries; Mozambique; Absorptive Capacity; Culture*

INTRODUCTION

At present, the competitive capability of the organizations is based on the knowledge and abilities of their members. These individual abilities permit the acquisition, utilization, creation and transfer of knowledge, creating new organizational capabilities (e.g. via the improvement of operational processes in terms of productivity and marketing) as a result of the environment in which the multinational enterprises (MNEs) are operating.

Knowledge is the only source of a sustainable competitive advantage, since it is at the origin of intangible assets (e.g. technological know-how and deep understanding of customers) (Nonaka et al., 1996) which the individuals develop in the exercise of their functions. This understanding emphasizes that knowledge is essentially related to human action (Nonaka and Takeuchi, 1995). Experience propitiates the acquisition of knowledge on the part of the entire organization by means of learning through personal interaction. Polanyi (1966) contends that human beings acquire knowledge by actively creating and organizing their own experiences, which means knowledge is tacitly acquired. The knowledge that can be expressed in words and numbers represents only the tip of the iceberg of the entire body of knowledge. As Polanyi (1966) put it, we can know more than we can tell.

The most valuable knowledge for the company is of a dynamic nature because of the actions of tacit learning inherent to the environment and experience of each individual. Thus, the employees adopt an attitude of continuous learning and improvement through the incorporation of exterior knowledge in their business activities.

The inter-organizational learning can influence the competitiveness of the subsidiary by the acquisition of new knowledge through the willingness to teach and learn of the participants (transmitter and receiver) in the transfer of knowledge.

To a better understanding of this inter-organizational cooperation between the parent company and the subsidiaries located in overseas, the present paper focuses the efforts to transfer knowledge to be made in a context “unfriendly” business. One example of such overseas is Mozambique, where the stock of knowledge in the sectors of industrial activity is poor or outdated.

This study analyses the operationality of the transfer of knowledge in order to endow the Mozambican subsidiaries with the adequate abilities for the development of their economic activity.

Mozambique: Business environment

During the decade of the 1990s, Mozambique turned into one of the rare cases of success in Sub-Saharan Africa, rewarded with an extensive international assistance of donators and the subsequent installation of foreign direct investment (FDI) coming from a number of countries, among which emphasis is to be given to South Africa, Great-Britain and Portugal.

Attracted by the low costs of the factor work as well as the market potential to be expected by Mozambique's integration into the Southern African Development Community (SADC), the Portuguese companies that in the decade of the 1990's were initiating their internationalization process, ended up choosing the Mozambican market as one of the natural destinations of their foreign investment, due to the common language and the cultural proximity existing with respect to their former colonies.

This entry into the local market occurred via the acquisition of existing installations and joint-ventures with Mozambican investors. Subsequently, cooperation agreements were established with the parent MNE (i.e. headquarters) for the transfer of knowledge with a view to increasing the competencies of the local employees and, consequently, the subsidiary's base of knowledge (i.e. the stock of knowledge inherent to its core business).

The present work examines how experiences in one organization (MNE or source or transmitter) affect the competitiveness in another one (subsidiary or recipient or receiver).

METHODOLOGY

We obtained access to key informers through the study of three companies with the operative mode of joint-venture and acquisition of local installations. The number of employees varied between 40 and 1900 and the business volumes represented between 1.2% and 17% of the parent company's business, as is shown in Table 1.

Table 1: Companies participating in the interviews

Companies	Activities	Type of ownership	Number of employees	Volume of business, (10 ⁶ euros)	of 2008
1	Telecommunications, industry, tourism	Joint venture, total ownership	1900	Total: 320 Local: 70	
2	Production of plastics	Total ownership	40	Total: 120 Local: 7	
3	Electromechanical and electronic production	Joint venture	120	Total: 400 Local: 5	

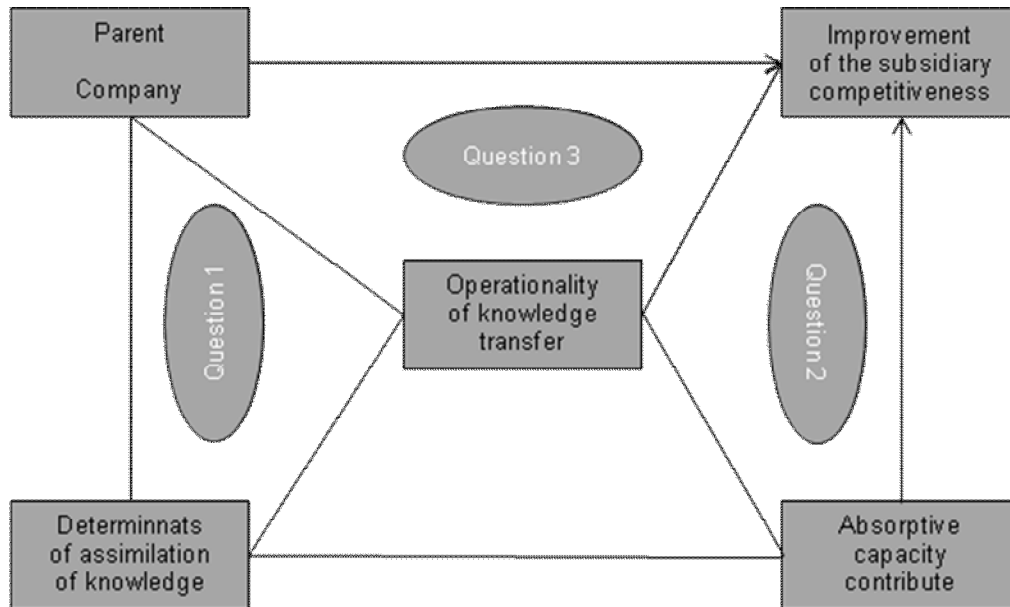
The semi-structured interviews with top managers during one hour followed an interview protocol that was applied to all interviewed persons in order to achieve reliable data.

Given the qualitative nature of the research questions, we adopted the method of case study because of our interest in individual cases, where we studied a set of problems of the phenomenon under research (Yin, 1994).

The gathered information was subjected to a combined treatment of (1) complete transcription and analysis of each interview before passing on to the next interviews, because starting the analysis immediately helps to progressively focus on the interviews and gain theoretical sensibility; (2) attribution of significance to the data by adopting the procedures of the systematic analysis (inductive and deductive) of data in a constant comparison of cases, supporting the plausible relations found in a descriptive context; and (3) the classification of data, named qualitative code (which when applied to the collection methods of data is called analysis of contents), that permits the standardization of the answers to the research questions. In order to learn more about this phenomenon of the transfer of knowledge that is

present in the development of the Mozambican subsidiaries, we answer to three questions centred on the elementary factors of the operationality of knowledge transfer (Figure 1).

Figure 1: Operationality of knowledge transfer from the MNE headquarters to the subsidiary



RESULTS AND DISCUSSION

Following the analysis of the three cases of knowledge transfer from the MNE to the subsidiaries, the research questions will be answered on the basis of the results of the interviews.

(1) Main factors that determine the assimilation of knowledge from the headquarters of the MNE on the part of the subsidiary

In the inter-relationship between the source (MNE headquarters) situated in a more advanced country and the recipient, situated in overseas, the context of the transfer became relevant, because it was desirable that the organizational cultures of the two units be compatible, in order to avoid cultural conflicts with negative effects on the recipient's performance — this can be attenuated by the existence of common cultural references between the country of origin (Portugal) and the destination (Mozambique) of the investment or by the familiarity with the local reality. Thus, it was important to explain to people that the only intention was to create conditions for the company to obtain competencies of its own through its local employees (case 3).

This knowledge was transmitted in direct contact with the machines and equipments, during the execution of tasks that were accompanied by the headquarters' managers at the work place (case 2).

Knowledge was not always directed at the entire organization; what prevailed was the transfer of procedures in a way that established a minimum common denominator in a specific operative mode. The physical interaction, via the sharing of space and time, contributed to a good individual relationship (i.e. between the transmitter and the receiver) which is important for the sharing of knowledge and the creation of a common language that facilitates the development and assimilation of the new knowledge on the part of the receiver.

According to the obtained results, during an initial phase of the investment the appropriate transfer mechanism worked via visits of the domestic managers and technicians to the subsidiary, because this created the necessary conditions for the successful sharing of tacit knowledge, and allowed the headquarters' personnel to get to know the Mozambican reality, which in turn permitted the adaptation of the best operational format to the local market (cases 1 and 2).

The main operative facts that determine the subsidiary's assimilation of knowledge (1) derive from diagnosing the local needs with the participation of the Mozambican employees in order for them to recognize the necessity to effect the transfer of knowledge; (2) require an attitude of willingness

which results from the creation of a relationship of trust between the transmitter and the receiver; and (3) include the consolidation of the transferred knowledge as expressed by the reproduction of the operative process, and the subsequent search for new knowledge in accordance with the subsidiary's absorptive capacity.

(2) The importance of the absorptive capacity for the improvement of the subsidiary's competitiveness within the framework of the inter-organizational cooperation

In their interviews, the managers mentioned the importance of a good interpersonal relationship and the construction of personal affinities which make an effective knowledge transfer between the transmitter and the receiver possible, thus enabling them to communicate with a high degree of precision and comprehension of the exchanged information, for example, as far as the introduction of new, technologically more advanced practices is concerned.

In order to increase the individuals' familiarity with the new knowledge, training actions were carried out in the parent company, where they gained a perspective of integral re-structuring through the contact with machinery and procedures to be introduced in the subsidiary's organizational structure. At this point it was important to emphasize the role of the leaders in affirming the values and principles of the MNE's way of working, as well as in establishing an effective bridge between the operations in the subsidiary and in the headquarters.

The organizational culture influences the development of a similar work ethics between the transmitter and the receiver of knowledge. The tolerance of errors in the learning process is part of continuous work of accompaniment by the transmitter in order for the receiver to maintain an acceptable level of rigour in the execution of routine tasks (cases 1 and 2).

The transferred practices were flexible in their adaptation to the recipient's context — for example, as regards the degree of rigour demanded from the people that participated in the productive process (cases 1 and 3) — in order to raise their ability of acceptance and utilization.

The results obtained suggested that by raising the individuals' abilities and motivations it was possible to improve the organization's efficiency (cases 1 and 2). Contrary to this, the managers referred that the parting of employees as well as unforeseen occurrences in the replication of experiences complicated the transfer of knowledge (cases 1 and 3).

The absorptive capacity of the recipient depends on the employees' level of education and on their access to the knowledge necessary for the execution of tasks. This was achieved by means of training actions and the attendance of superior courses supported by the company (case 1). In other words, the knowledge possessed by subsidiary personnel enhanced the assimilation of new knowledge and, consequently, the implantation of superior practices in the exploitation operations. This made it possible, on the one hand, to produce goods with higher quality and, on the other, to expand the area of activity via the commercialization of new products that were without competition on the local market.

The consolidation of the transferred knowledge was reflected by its continuous diffusion throughout the entire subsidiary, with a consequent increase in competitiveness, in spite of the difficulties that were encountered in the transfer.

(3) Main difficulties in the transfer operations, and measures taken to overcome them

According to the managers that were interviewed, the stock of knowledge in the subsidiaries was very poor. There were individuals who did not meet the work norms and did not execute their tasks in a very rigorous way (case 2), who attributed more value to family duties than to those of work. This indicated a reality with low levels of education, which in turn was at the bottom of certain inertia with respect to the search for knowledge (case 3). There were, indeed, cultural differences between the business environment in the headquarters and the one in the subsidiary manifesting themselves locally in some resistance to change.

Apart from this, there was the contingency of the evolution of the Mozambican market itself which was largely influenced by the economic changes that took place in the South Africa dominated SADC.

The results of the interviews identified the non-existence of qualified human resources as the main difficulty facing the companies when transferring knowledge — the practice of case 2 showed that the Mozambicans did not know anything about the plastics industry.

There was an enormous absenteeism among the less qualified workers (case 2), which revealed a different perspective of problems. The way a Mozambican manager, for example, saw the problems,

their seriousness and hierarchic order was very different from the way these were evaluated and looked at by headquarters (case 1). This meant that his low level of knowledge resulted in a different perception of what was happening, rendering the reproduction of the source's operationality at the recipient rather difficult.

The transfer of knowledge required a supplementary effort both, in time and resources, and the rotating of the managers as regards functions and geographic locations in order for them to obtain a global vision of the enterprise and develop a sense of belonging to a transnational reality.

Following the results shown above, and as conclusion of the present study, Table 2 indicates the main common factors to be found in the answers that were given by the managers in their interviews.

Table :Communalities in the transfer of knowledge from the headquarters to its subsidiaries

<i>Research questions</i>	<i>Operational factors existing in the enterprises under study</i>
<i>As regards the operationality of the transfer of knowledge, which are the main factors that determine the assimilation by the subsidiary of knowledge transferred from the parent company?</i>	<ul style="list-style-type: none"> - Availability of individuals with African experience - Creation of a relationship of trust between the parties - Actions of demonstration and the carrying-out of experiences - Valuation of personal effort
<i>In which way can the absorptive capacity contribute to the improvement of the subsidiary's competitiveness within the framework of the inter-organizational cooperation?</i>	<ul style="list-style-type: none"> - Reproduction of the headquarters' productive process of - Fomenting the sharing of knowledge - Adaptation of the practices to the local context - Production of goods with higher quality
<i>Which are the main difficulties that have occurred in the operations of knowledge transfer and which measures are to be adopted to overcome them?</i>	<ul style="list-style-type: none"> - Shortage of qualified human resources - Practical on-the-job training - Different local perception of what is happening - Tolerance of errors during learning

CONCLUSIONS

Using the above indications, we identified an operational pattern that requires the availability of individuals with African experience to transmit knowledge and create a smooth flow of information between the source and the recipient.

The scarcity of qualified human resources was the principal difficulty which the enterprises under study encountered in the Mozambican environment. The level of competencies of the transferred knowledge was adequate to the Mozambican market in order for it to have operational relevance due to its comprehension and application, thus leading to the institution of new routines and increasing the local productivity.

However, the Mozambicans are not very rigorous in the execution of tasks, which called for a permanent accompaniment by the leadership in order to encourage their receptivity towards continuous learning and improvement. To this effect, the results of this study emphasized the importance of on-the-job training actions, where errors are tolerated and the risk of experimenting instilled into the individuals as a way for them to contribute to the improvement of the organizational competitiveness.

The top management played a stimulating role in the resolution of problems, encouraging the sharing of knowledge through the direct interaction of employees from different operative areas. In this way a work environment was promoted that encourages people to adopt a pro-active attitude of searching the knowledge adequate to the execution of tasks in the subsidiary's diverse operations.

Essentially, the transfer promoted the operational development based on procedures that guaranteed the incorporation of the new knowledge into the recipient's operations of exploitation. In this measure, its absorptive capacity grew by the application of best practices that led to a gain in its competitiveness as a supplier via the production of goods of higher quality on the Mozambican market.

LIMITATIONS AND FUTURE RESEARCH

The case study cannot be generalized to inform on populations or universes. In this qualitative research, we used an intentional sample. This does not imply that the explanations of the phenomenon may be generalized with respect to the population of foreign MNEs operating in Mozambique.

This study may be completed by a quantitative analysis, like linear regression, to help finding a set of important characteristics which allow a plausibility for generalizations at the level of the dynamics and constraints in the knowledge transfer to overseas.

The analysis of the operationality of knowledge transfer may be extended to other African countries, as well as to MNEs of other nationalities, in order to compare the influence of the companies' origins and of the destinies of the investments in the transfer process.

Finally, the comprehension of the operationality of knowledge transfer may be analysed not only from the perspective of the flow from the transmitter to the receiver, but also from the viewpoint of the receiver of the transferred knowledge.

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