Organizational learning in complex world

Agnieszka Dziubińska

Faculty of Management, University of Economics in Katowice, POLAND, Katowice, 1 Maja street 50, E-mail: agnieszka.dziubińska@ue.katowice.pl

Abstract – The article discusses the problem of organizational learning as a way of managing complex environment. As an empirical context for the study of the environment of emerging markets was assumed. In the sample of the studied enterprises, in context of single and double-loop learning, three distinct patterns of adjustment of the organization and the environment were identified, ie. avoidance, adaptation, and integration. In the complex environment, on the bases of the results of research, balancing of learning in single and double-loop learning seems to be key strategic competence of the enterprise.

Key words - organizational learning, emerging markets

I. Introduction

In comparison to the second half of past century, world of 21st century seems to be much more complex. Globalization and the rise of the Internet have led many to subscribe to the sense that "the world is flat", as information and communication technologies have made geographic distance less relevant (Friedman, 2005). The incidence of "black swan" events characterized by low probability, extreme impact and retrospective predictability has led many to reconsider their views on how the world works (Taleb, 2007). The discussion here concerning complexity builds closely on the work of Simon (1976) and the issue of interrelatedness of elements of a system. The complexity (or interrelatedness), may take the form of spatial (when one facet of a system affects other facet of the system) or temporal (e.g. when the value of moves is, in large measure, associated with their "stage setting" properties). Decisions made under similar circumstances are accompanied by fundamental uncertainty called an open-ended change by Stacey. Events based on such decisions might possibly transform the system they are a part of or/and themselves (Stacey, 1993). Learning is a way of managing complexity and unpredictability of changes in case of open-ended and partly closed changes (Rokita, 2009). In learning, reflective change occurs on the basis of progressing cognition (understanding) of knowledge and relations between past activities, their effectiveness and future activities (Fiol and Lyles, 1985; Huber, 1991). Such learning process is at the same time adaptive and "manipulative" in a way in which organizations defensively adjust themselves to reality and belligerently improve adjustment between an organization and environment (Hedberg, 1981).

Challenges within the scope of the organizational strategy that arose in relation to complex environment became an inspiration to conduct the author's own study. The environment of emerging markets (EMs) was assumed as an empirical context for the study. The research was aimed at identifying ways of adjusting activities of multinational enterprises (MNEs) in the conditions of EMs, in particular, at establishing whether and in what way experience gained on EMs is used in creating a strategy of a MNE at the level of a foreign market. Studies on enterprises from different contexts investing on EMs create an ideal opportunity to understand better the interactions between institutions of environment and organizations. The environment of western markets was shaped by comparatively similar philosophy of the market economy, which built a foundation for similar institutions. As formulated by Scott, "it is difficult, if not impossible, to recognize the influence of an institution on human structures and behaviour if all our cases are embedded in the same or very similar ones" (Scott, 2001, p. 146).

Qualitative approach with the use of case study was adopted in preparing the research project (Dul and Hak, 2008, 2010). The research procedure that contributed to the achievement of results presented in the article was designed on the basis of methodology proposed by Dul and Hak which is concerned with specifying the relation between known concepts, on the basis of theory-building research (Dul and Hak, 2008). Subjects of the study were ten deliberately chosen enterprises operating on an international scale and their foreign branches located on the EMs.

II. Results

The obtained results of studies revealed three different types of adjustment of MNEs and the conditions of EMs among enterprises involved in the study. Depending on the type of adjustment, specific conditionings of the foreign market were taken into consideration to a different extent in an organization. The identified patterns among the companies in the research sample, in some cases correspond to the typology presented by Cantwell, Dunning, Lundan (2010). Summary of the typology presented by these authors contains Table I.

TABLE I

ADJUSTING OF MNE AND THE ENVIRONMENT

| Avoi- dance | Local environment is exogenous to firms Firms choose between different environments Firms react to poor institutional quality by adjusting their entry mode |
|------------------|--|
| Ada- ptation | Local environment is exogenous, but firms adapt their own behavior to achieve a better fit Firms may try to influence local institutions, but only to a limited extent Firms seek legitimacy by adapting to local isomorphic pressures As a result of local learning and adaptation, firms gain strategic options Embeddedness in an local context |
| Coevo- lution | Local (institutional) environment is partly endogenous Firms adjust to different environments by a process of co-evolution Firms introduce new institutions that are adapted to the local context Unintentional spillovers occur as a result of local imitation Active agency and institutional entrepreneurship |

Source: J. Cantwell, J. H. Dunning, S. M. Lundan, "An Evolutionary Approach to Understanding International Business Activity: The Co-Evolution of MNEs and the Institutional Environment", Journal of International Business Studies, vol. 41, no. 4, p. 576, 2010.

The research sample involved companies the activities of which corresponded to the avoidance strategy characterized by Cantwell et al. Acknowledging the need of change under the influence of specific conditions in their case did not exceed the scope which concerned key products. By applying avoidance as a form of adjustment, MNEs tried to create the most faithful replication of experiences gained on other markets. In the absence of complementary institutions in the environment, enterprises used their market power (Hymer, 1976) so that the insufficiency would not cause the need of change on the level of basic processes, as well as organizational solutions. The condition for effectiveness of such course of action was for an enterprise to have an appropriate possibility to influence local environment. In the sample of the studied enterprises it resulted from the size and scope of action, therefore avoidance as an adjusted strategy was used effectively by the six biggest MNEs. The use of similar practices in smaller MNEs was not possible, therefore pressure of competition made them lean towards greater flexibility in the face of local conditions.

Enterprises, the activities of which corresponded to adaptation described above, under the influence of the environment also changed their products but this change was a consequence of adjustment within the scope of basic processes (understood as set of activities undertaken on the foreign market which directly add value for a customer). In the studied three cases previous models of activities on this level were suspended by decisions made by authorised managers. Thus, innovation within the scope of basic products appeared but it was an effect of "deeper" adjustment to unique conditions of EM. Among the studied enterprises such form of adjustment was used by mid-sized and small MNEs, which simultaneously had their key competences based on technical knowledge acquired on the local market developed.

The most open way of adjustment to the conditions of EM was a model which to the greatest extent corresponded to the type characterized above as coevolution. In this case adjustment on the level of basic processes was a consequence of direct influence of environment as well as adjustment on the level of organizational processes. Processes on the level of an organization are comprised by intentional social groups, which control resources, create exchange relations, enter interactions with other individuals and use strategies in order to achieve their objectives. Organizational processes occur in the structural and strategic contexts (Burgelman, 2002, pp. 98-102). Top management in MNE uses the elements of structural context in order to maintain the intended direction of strategic activities. Forces which might impact change of this direction under the influence of experience from local environment are most often the result of autonomous grassroots movements. Following Burgelman, such cognitive processes consisting in identifying the occurring chances and building political support for development are referred to as strategic context.

Among ten studied enterprises only one - the smallest of all enterprises - operated in accordance with the model which to a certain extent corresponded to co-evolution. In this case the ideas came from various parts of the company as well as from the outside of it. The organization cooperated with a wide spectrum of strategic partners. The ideas on the level of basic processes came from employees who directly performed the tasks. The ideas for changes on the level of an organization (e.g. within the scope of various forms of cooperation) came from the President of MNE, however, they were inspired by experience gained in the course of action. Development of initiatives required legitimisation of "the main strategist", i.e. the President of MNE. Principles governing the selection on initiatives varied and were the consequence of decisions of the President of MNE. Changes of direction of action occurred relatively often, only "superior ideology" remained unchanged.

Summing up, the obtained results of the author's own study revealed various models of adjustment of activities of MNE in the context of EM. In case of avoidance and adaptation they were close to the characteristics presented by Cantwell et al. The third type differed from coevolution described by Cantwell et al. in the context on EM mostly because interaction with the environment was significantly outlined in two directions. Thus, in the conclusion this type of adjustment strategy to emphasize the difference was called integration. On the one hand, dynamic environment of EM was susceptible to the spillover effect "from" the foreign investor "to" the environment. On the other hand, enterprises adjusted their organizational forms, key processes generating results, as well as products to the environment. Thus, a complex structure of factors of change and relations connecting them arose. The studied case of the enterprise represented the level of technical knowledge higher than the standard ruling on the foreign market. However, the use of this source of advantage occurred because of combining knowledge from local market with customers' demands which resulted from their local specifics.

It's worth emphasizing that the theoretical framework prepared by Cantwell et al. had the nature of an appreciative theory, rather than a formal theory (Nelson, 1994), but was based on a vast literature study. In the social science, an appreciative theory allows scholars to examine a more complex web of casual associations, by being more historically grounded, closer to real life situations, and by making greater allowance for variations in institutional and contextual specificities. At the same time, the concept presented by the authors does not provide unambiguous instructions regarding EMs.

III. Intepretation of the results and conclusions

Diverse scope of adjustment of MNE to local environment marked levels of analysis which refer to the process of learning as a way of managing unpredictability of changes. Referring to Argyris and Schön's (1978) terminology, organizations need to undertake activities in a single and double loop learning in order to sustain continuity of action, coherence and stability. The difference between the first two levels lies in changes made on the basis of learning in the organization, Rokita describes them as adaptive and reconstructive (Rokita, 2005). The first level is corresponsive and adaptive, close-coupled with the changes in the environment through negative feedback, aimed at sustaining the existing equilibrium. This type of learning consists to a large extent in the stimulant-response mechanism. The second type of learning corresponds to characteristics of open systems, which implies self-reorganization or selfrepositioning in the environment or change of rules of action and system behaviour. Argyris calls it a double loop learning, whereas Hedberg (1981) - meta learning, and Bateson (1972) - deutero-learning. Its essence is not a change of system behaviour, but a change of rules of system behaviour. Rokita distinguishes also the third level of learning in an organization and refers to it as process learning (Rokita, 2009, p. 117). He defines it as process learning, which involves all the phenomena which occur together with changes in the flow of action and gaining experience. In other words, it is about learning to understand adaptive and reconstructive learning on particular levels and how these levels interact.

It may be said, employing the above terminology, that adjustment consisting in avoidance is based on a single loop learning. Adaptation is about single and double loop learning, although change of rules of action under the influence of experiences of EM was limited to basic processes which were more directly exposed to selective impact of the external environment. In terms of integration, specific conditions of EM reached even deeper, since they inspired to changes in a double loop as well as in organizational forms. Thus, an even more complex model of adjustment to complex environment was created, which in each case finds its reflection in key products that are offered to customers. Understanding the importance of a hierarchy of levels, on which adjustment to specific conditionings of EM takes place and including this area in the scope of creating strategy of an enterprise is learning on the third level.

Each of the identified forms of adjustment to the conditions of the foreign market entails particular consequences. Single-loop learning favors exploitation of accumulated experience but also causes inflexibility. On the other hand, inferences which may be drawn from the obtained results prove that without an open attitude of an organization towards specific conditionings of the local market it is impossible to benefit within the scope of knowledge diversity at the level of an MNE. The appropriate level of diversity is a necessary condition for creative learning of an organization (Zollo and Winter, 2002; Doz, Santos and Williamson, 2001). However, excessive openness to the influence of environment, double-loop learning means constant questioning of assumptions, which may lead to chaos (Weick, 1982). The results of randomly chosen activities are even more serious for an organization if the form of adjustment is "deeper". A co-evolutionary approach towards changes in an organization suggests that the solution should be to

balance single- and double-loop learning at various levels. However, such an approach requires relevant assumptions at the level of company (learning at the third level).

Summing up, it is worth emphasizing that the research was of qualitative nature and it does not give a basis for generalizations. Nevertheless connecting the types of adjustment described in the author's own study with the types of strategy at the level of MNEs and setting their conditions for effectiveness presents itself as an interesting direction for future studies. The problem more and more often attracts the attention of researchers, especially due to the fact that complexity and dynamics of the environment increasingly concern also mature markets. From this point of view, EMs are becoming an attractive research laboratory, which facilitates the conceptualization of the issue of adjustment based on learning in the "ragged landscape".

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