An overview of competence development in SMEs

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Abstract: This paper provides an overview of competence development in Small and Medium-sized Enterprises (SMEs). The paper suggests a rationale for competence development and highlights the need for reassessing the competence development process as it pertains to SMEs. The paper identifies a model that could be adapted as a framework for understanding such a phenomenon in SMEs generally, and points to the possibility of extending the model.

Keywords: competence development; SMEs; internationalisation; model development.

Reference to this paper should be made as follows: Katwalo, A.M. (2006) 'An overview of competence development in SMEs', *Int. J. Strategic Change Management*, Vol. 1, Nos. 1/2, pp.89–95.

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1 Introduction

Many studies on competence development continue to be done, some from a Social science point of view, while others have explored this phenomena from a human resource perspective. This paper suggests that understanding of small firm dynamics would necessitate looking at competence development from a more operations perspective.

The aim of this paper is to provide an overview of a framework of competence development in small and medium companies. It is hoped that the discussion will contribute to the debate on competence development in SMEs. The paper examines a theoretical framework derived from the concepts drawn from literature on internationalisation as well as competence development, and a study of SMEs in Greater Manchester and Northamptonshire in the UK.

2 Literature review

The debate on competence development in cooperate organisations has been around for a while. However the debate on competence development within the SME area is still fairly young. This paper takes the assumption that strategic renewal goes beyond the individual and groups, and encompasses the entire firm. This recognises that the firm operates in an open system and is not simply internally focused Argyris and Schon (1996), Barney (1995) and Crossan et al. (1999).

Frameworks such as the one developed by Crossan et al. (1999) enable us to understand better the tension between what they refer to as exploration (feed-forward) and exploitation (feedback). Under this proposition, organisational learning is presented as a dynamic process. This process is dynamic because learning takes place over time and across levels and it also creates a tension between assimilating new learning (what has been referred to as feed-forward) and exploiting or using what has been learned already (or feedback). The feed-forward process is used as an avenue for new ideas and actions from the individual to the group to the organisation. While at the same time what has already been learned is feedback from the organisation to the group and individual levels which influences the way people think and act. This framework outlines the progression of the firm's competencies from being novice, advanced beginner, proficient and expert, to becoming world class.

2.1 Competence

The basic definition of competence was taken from two perspectives, one by Caird (1992) who considered competency as referring to a set of knowledge, skills and personality variables, which related to successful behaviour in a designated field. A second by Hamel and Prahalad (1990) who looked at the concept of core competencies, which they define as a group of production skills and technologies that enable an organisation to provide a particular benefit to customers. This definition focuses on the unique firm specific characteristics, which add value to the ultimate customer and can be transferred to different organisational settings (Crossan et al., 1999; Grant, 1991).

2.2 Competence development

Since competence development has been linked to organisational learning, the starting point would be the emphasis that both organisational learning theory and the definition of competencies place on the human element of the process (Crossan et al., 1999; Bird, 1995).

This proposition considers that the better a group of people are at fulfilling the demands of the customer whether internal or external, the greater are the competencies the group of people exhibit along with technology and other elements. It is thus possible to superimpose known models for individuals' competence development on the development of competencies at SME level, because of the dual uses of 'competence and competent'. The assumption made is that to become more competent would be a function of the learning of an individual within a system. Thus there can only be competence development if the new technologies, new organisational forms, new norms and values

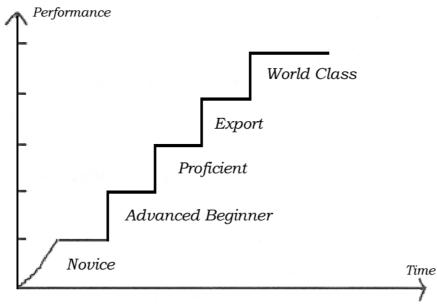
that may emerge during the process are linked to or part of the individuals' learning as illustrated in Figure 1 (Drejer, 2000).

The model based on Dreyfus and Dreyfus (1986) model for a persons learning, assumes that

- The individual begins the process as a novice, becomes an advanced beginner, proficient, competent and then finally an expert. For purposes of clarity, the proposition uses 'expert' and 'world class' for the last two categories.
- The group of people involved would have the same level of knowledge that evolves in the same manner as that of the individual along the categories as stated.

Finally that knowledge of the group would somehow be uniform.

Figure 1 The levels of competence development



Source: Drejer (2000, p.215)

Drejer (2000) uses a typology of these competencies as simple, middle complex and complex and thus attempts to plot the learning process that may lead to competence development. The definition of competence that is put forward by his proposition takes an internal approach and considers competencies as being a system of technology, people, organisational (formal) as well as cultural (informal) aspects and their interaction.

Note, that the model is descriptive and secondly that there maybe an issue of how to move from one stage to another or the process of competence development.

The issues that would affect the process of competence development would include:

- the starting point for developing the competence further
- the means for creating the learning of the people involved in order to develop the competence.

The model clearly shifts from the definition of competencies as systems of technology, human being, organisation and culture and moves towards a model for explaining competence development (Drejer, 2000). It provides an avenue for understanding the process of competence development by helping to plot the learning process that may lead to competence development and thus an interesting tool to examine.

The shortcoming however is the difficulty of knowing exactly how to move through the entire cycle of competence development. In fact Drejer points out that the list of possible means for creating, supporting and facilitating the necessary organisational learning is much too long. This situation is not very different when looking at the list of contingencies such as type of competence, product of the firm and national culture which is equally long thus making it impossible to make everything in the process explicit.

3 Research design

A survey was conducted between 31 Small and Medium Sized manufacturing companies in the UK. Of the 31 firms surveyed 20 were in Greater Manchester and 11 in Northamptonshire. The survey covered a range of industries including Textiles 22.6%, Leather 19.4%, Engineering 29% and Household goods 6.5%, Chemical products 12.9% and others 9.7%. In depth semi structured interviews were used to collect the data.

4 Discussion

4.1 Competence development in SMEs

Understanding the competence development process in organisations generally, but in SMEs in particular Continues to preoccupy many scholars.

From the findings above as well as those of this study it is possible to conclude that what is needed is a framework that would help us to understand the phenomena further. This would help to shape both policy and practice for the SME in order to enable them to develop the necessary competencies that will enhance their growth.

Since SME competitiveness is determined and affected by the availability and use of resources, the resource development and adjustment process both within and among firms, is dependant upon interactions with other firms in line with the principle of learning by doing. In order to achieve competitiveness therefore, there must be an all round purposeful effort to accumulate and develop the resource stocks. This then points to the need to incorporate further dimensions into this model or to develop alternatives in order to get a better picture of the competence development process (Katwalo, 2005).

4.2 The development from one stage to the next

Existing literature does not provide a conclusive picture of how a firm moves through the entire cycle of competence development. From the study it was also found that firms did not go through a linear process of competence development. Rather they may begin at any point within the framework. It was also possible to link particular antecedent factors to the different stages of the model. This meant that the time variable was an equally important component of the model. Therefore for a firm to become world class, it must

have been affected by any one of these particular factors long enough to consolidate or grow its competencies.

It was also found that the movement through the cycle of competence development depended upon this causal relationship. If we took international business activity as an example, where a firm engaged in only one particular international activity over time, it could become proficient or expert in that particular activity. However a truly world class firm would be one who's portfolio of international activities over time was wide enough to have brought about the development of a significant variety and level of competencies that set it apart from the others.

5 Independent antecedent factors in competence development

5.1 International business activities and competence levels

For purposes of developing understanding of this phenomenon it was necessary to consider one such factor. When a closer look was taken of international business activity, the model could be mapped thus.

- Import/export Novice
- Use of agents Advanced beginners
- Collaboration Profective
- Joint venture Expert
- Overseas production World class.

From this linkage it was possible to assume that a firm which possessed the necessary competencies to start exporting could be defined as a novice. If this firm then developed or acquired new competencies to do more than just direct export for example by using agents, this firm could be said to be an advanced beginner. If the same firm were to then begin to collaborate with other overseas firms in the various aspects of business, it could be said that this firm was proficient. The essence here was that the longer the firm engages in any particular activity and the more new activities it engages in, the more it was likely to move from one stage to another within the competence development framework.

The task therefore was to try and identify which competencies the firm would need in order to begin or continue to successfully engage in any particular activity. This process would enable the mapping of competencies against the various international activities thus enabling us to understand better the process of acquisition, leveraging and development of competencies. This process would require the readjustment of Drejer's model to a multi-dimensional model.

This means that rather than simply looking at the development of competencies over time we would be able to look at the role of a particular variable/s in the process over time.

It was important to state at this point that some of the competencies identified would be required for more than one activity. Table 1 provides a summary of some of the international activities as well as the likely associated competencies as adopted by this paper.

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The model proposed would start by asking how a group of individuals become more and more competent on a regular basis. This it was assumed would take place through a process of learning to do things better and being increasingly able to meet the output objectives of the competence. It then adds to this the other elements of competence development of technology and processes to turn this into a firm dynamic.

5.2 Assumptions of the framework

The assumptions that were made in this proposition as illustrated in Table 1, which allow the establishment of the appropriateness of the model to describing the competence development process in SMEs. This can be achieved by looking at the characteristics of each stage of the model. (The difference between a novice and an advanced beginner), as well as the competencies the firm would need and learn by engaging in these activities.

 Table 1
 Activities and some likely associated competencies

Activity	Competencies
Importing	Purchasing (order processing)
	Contract negotiations
Exporting (direct)	Production
	Distribution
	Sales and marketing
Export (agents)	Production
	Marketing
	After-sales
Collaboration	Reputation
	Processing technology
	Quality (product and process)
Joint venture	Reputation
	Technical skills
	Creativity/Innovation
Overseas production	Management
	Brand image
	Financial strength

It is therefore true to assume that a firm which becomes world class will have accumulated by acquisition and development, several competencies via engaging in different activities over time.

The model also assumes that competencies develop or are acquired in discrete bundles with every experience over time. Thus the longer the firm engages in a particular activity the better it becomes at that activity and the more activities it engages in the more the diversity of competencies the firm will develop. This shifts away from the view that competence development is linear, to the view that this is composed of more discrete clusters of competencies that come into being or expand as the firm interacts with any antecedent factors.

Thirdly, those competencies are inherently unstable and can be easily lost if not protected or improved upon over time, and that the development process relies on the mutual interplay between people, technology, as well as processes. So a firm has to engage with the independent factors in order to be able to develop competencies from these activities, as well as being in a position to safeguard all existing competencies. Thus it would be in the interest of the firm to seek out and engage with the independent factors.

This would require an illustration of the linkages that exist between the firm's value chain, which is made up of the activities within and around a firm, which add value, and any particular independent factors. Therefore, while there maybe resource and capability gaps within a firm's value chain, there is a constant acquisition, development and leveraging of these over time.

6 Conclusion

This model while providing some basis for understanding of the processes of competence development it does not help to describe how involvement with independent factors would lead to competence in small firms. However it lays the foundation for future work on competence development.

This also makes it possible to start to think about ways in which the existing model can exactly be extended and how it would enable the measurement in more detail of the influence which particular variables might have on competence development in small businesses.

References

- Argyris, C. and Schon, D.A. (1996) Organisational Learning: II. Theory, Method and Practice, Addison-Wesley, Workingham, UK.
- Barney, J. (1995) Looking Inside for Competitive Advantage, Academy of Management Executive, Vol. 9, No. 4, pp.49–61.
- Bird, B. (1995) 'Towards a theory of entrepreneurial competency, advances in entrepreneurship', *Firm Emergence and Growth*, Vol. 2, pp.52–72.
- Caird, S. (1992) 'Problems with identification of enterprise competences and implication for assessment and development', *Management Education and Development*, Vol. 23, pp.16–22.
- Crossan, M.M., Lane, H.W. and White, R.E. (1999) 'An organisational learning framework: from intuition to institution', *Academy of Management Review*, Vol. 24, No. 3, pp.522–537.
- Drejer, A. (2000) 'Organisational learning and competence development', *The Learning Organisation*, Vol. 7, No. 4, pp.206–220.
- Dreyfus, H. and Dreyfus, S. (1986) *Mind Over Machine: The Power of Human Intuition and Expertise in the era of the Computer*, Free Press, New York.
- Grant, R.M. (1991) 'The resource based theory of competitive advantage: implications for strategy formulation', *California Management Review*, Vol. 3, pp.114–135.
- Hamel, G. and Prahalad, C.K. (1990) 'The core competence of the corporation', *Harvard Business Review*, May–June, pp.79–91.
- Katwalo, A.M. (2005) Analysis of the Role of International Business in Competence Development in SMEs, PhD Thesis, University of Bradford, Bradford, UK.