

## Additional case studies

### **Advancing the Knowledge-based View of the Firm: How Firms Develop their Competitive advantage via the Development of Knowledge**

**Relevant to: Chapter 2 (Objectivist Perspective on Knowledge)**

One of the fundamental assumptions of the knowledge-based view of the firm is that organizations can achieve competitive advantage through the development of firm-specific specialized knowledge. However, understanding of exactly how firms develop such knowledge is relatively limited. Nag & Gioia (2012) make a significant empirical and conceptual contribution to knowledge in this area through the development of an inductive model of how firms develop their own specific and specialized knowledge via a study of managers working in firms in the metal casting industry in the USA. The paper in which they develop this model and present their empirical data is almost 60 pages long, so all that can be done here is provide the briefest of outline sketches of this model, and the assumptions it is built on.

Nag & Gioia begin from the assumption that senior managers in organizations play a key role in the transformation of industry or sector level, common knowledge into firm-specific knowledge. The model they develop is fundamentally concerned with how they do this and is focussed on the cognitive processes they engage in to achieve this. They argue that the metal casting industry is a good industry to examine this process because it is a relatively mature industry with a high level of institutionalized and formalized, industry level knowledge. Knowledge-based competitive advantage is argued to derive from how individual managers utilize this common knowledge and adapt, customize and transform it into firm specific knowledge.

Three of the fundamental components in Nag & Gioia's model of the managerial process concerned with the development of firm-specific knowledge are 'executive knowledge schemes', 'executive scanning processes', and 'knowledge use practices'. 'Executive knowledge schemes' refer to the belief structures and assumptions managers make regarding the nature of valuable knowledge. 'Executive scanning processes' refers to the specific mechanisms and processes managers undertake in attempting to identify useful knowledge. Finally, 'knowledge use practices refer' to how managers utilize and adapt any knowledge which they regard as potentially valuable.

Nag & Gioia found differences between managers in all three processes. They also distinguished between distinctive aspects of each process. For example, in relation to executive scanning processes they distinguished between scanning intensity (the extent to which people engaging in knowledge scanning processes) and scanning pro-activeness (the extent to which experiment by looking for new and distinctive sources of knowledge). For example, the scanning pro-activeness of one interviewee was articulated as follows, '*I have been very active in finding unusual information. I am the type of person that if I want some information, I will pick up the phone and call whoever I need to get it*', (p. 443)

In broad terms the starting point in Nag & Gioia's model is executive knowledge schemes, which shape the nature of their scanning processes, which in turn leads to specific knowledge use practices. However, they distinguish between two specific and distinctive types of knowledge use practice, and suggest different processes are involved in achieving them. One type of knowledge use practice is knowledge adaptation, where knowledge is adapted to solve specific and particular problems or issues. For example, one interviewee, talking about process adaptation argued that, '*we are good at developing little advances by tweaking of the equipment and process*', (p. 432). In contrast, knowledge augmentation is concerned with the development of new generic knowledge and insights which have potentially diverse applications. The following illustration of knowledge augmentation was provided by one manager, '*we analyze problems to figure out how solutions apply to other problems*', (p. 429).

Overall Nag & Gioia's analysis highlights in detail the crucial role that managers play in the development of specialized knowledge that can lead to competitive advantage and argue that, '*managers can help to create better knowledge when they influence commonly held knowledge to be used in uncommon ways*', (p. 448). Finally, they argue that of all the variables they examined, scanning pro-activeness was found to play a crucially important role in the development of specialized knowledge through the way in which it facilitated the identification, sharing, and '*amplification*' (p. 449) of potentially important knowledge.

Question:

- 1) Assuming, as Nag and Gioia suggest, that scanning pro-activeness has a potentially fundamentally important role to play in the development of firm specific knowledge, what, if anything can organizations do to develop the capability of their managers to proactively scan the business environment for potentially relevant knowledge?
- 2) The study conducted by Nag and Gioia concentrates on the role that managers play in transforming common knowledge into firm-specific knowledge. Do you think that the view of workers at the individual level in organisations are also important in identifying this? Explain reasons for or against your view.

Source: Nag, R., Gioia, D. (2012). 'From Common to Uncommon Knowledge: Foundations of Firms Specific Use of Knowledge as a Resource'. *Academy of Management Journal*, 55/2: 421-457.