Perspectives on Tacit Knowledge

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There is current debate in the literature about the meaning of "tacit knowledge." The debate can be seen as forming three schools of thought. We used Ambrosini and Bowman's (2001) method to operationalize tacit knowledge from a sample of senior managers. We chose this method because it does not violate the basic tenets of the any of the three schools of thought and allowed us to analyze the data from all three perspectives. Finally, we compare the perspectives. We found that two of the schools of thought are entirely compatible and enrich each other. The third is not.

INTRODUCTION

Tacit knowledge is a widely used construct in management, education, and psychology literature. The study of tacit knowledge begins with a physical chemist and philosopher named Michael Polanyi. Polanyi (1962) formally introduced the term and the theory, in his book, Personal Knowledge. Since then, tacit knowledge has become of interest to many disciplines including management, psychology, education, and theology. Theorists in management, psychology, and education believe that tacit knowledge plays a vital role in performance. More specific to this paper, management strategy theorists argue that tacit knowledge plays a key role in an organization's sustained competitive advantage. With the role that tacit knowledge is believed to play in sustained competitive advantage, it is remarkable that there is such disagreement about its nature.

There is current debate in the literature about the meaning of "tacit knowledge." The debate can be seen as forming three schools of thought. The original school of thought is based on Michael Polanyi's work. Polanyi believed that, "All knowledge falls into one of these two classes: it is either tacit or rooted in tacit knowledge" (Polanyi, 1969, p. 195). Tacit knowledge cannot be made explicit in any meaningful sense. Stated another way, tacit knowledge cannot be transformed into explicit knowledge that does not rely on tacit knowledge for meaning. Tacit knowledge is what makes explicit knowledge meaningful, and further, tacit knowledge is always personal to the knower requiring personal commitment.

The currently popular school of thought, characterized by Nonaka and colleagues within the Knowledge Management literature, contends that tacit knowledge is "highly personal and hard to formalize, making it difficult to communicate or share with others" (Nonaka & Nishiguchi, 2001, p. 14). A primary point of their work is to set out a method for making tacit knowledge explicit. A key point they make is that once tacit knowledge is made explicit, it can be understood by anyone and incorporated into

rules and procedures by the organization. According to this school of thought, once tacit knowledge is made explicit, it no longer has a tacit component.

Recent effort by critical theorists presents a third school of thought. They present a form of radical constructionism as an alternative way of understanding and making sense of tacit knowledge. (Ray, 2009; Ray & Clegg, 2007). Radical constructionism is a theory of learning and knowing that views the learner as constructing knowledge without requiring reference to objective truth. Knowledge is not measured in terms of how "right" or how "accurate" it is, rather knowledge is more or less "reliable." According to this school of thought, tacit knowledge made explicit will need to be evaluated by the subject in question, with the evaluation involving personal sense-making and assessment of reliability.

We used Ambrosini and Bowman's (2001) method to operationalize tacit knowledge from a sample of senior managers. We chose this method because it does not violate the basic tenets of the any of the three schools of thought and allowed us to analyze the data from all three perspectives.

METHODOLOGY

Ambrosini and Bowman (2001) recommend an interesting methodology for operationalizing the type of tacit knowledge that is argued to lead to sustained competitive advantage. Their recommended methodology requires the researcher to use a variety of techniques including self-Q, storytelling, and metaphoric analysis in order to generate a causal map of the organization's top management team. Ambrosini and Bowman (2001) argue that the causal map, representing the top management team's knowledge structure, should also make explicit some of the team's tacit knowledge.

Our setting involved two MBA Health Care Strategic Management classes. These students were enrolled in an Executive MBA Program, all participants were practicing professionals in Health Care organizations. We used a combination of Self-Q Technique and Semi-Structured Interviews, as recommended by Ambrosini and Bowman (2001), to elicit and create the Causal Maps. A unique outcome of this method is that the concepts are derived from the mapping process itself, not predetermined by the researcher. If the Causal Map makes tacit knowledge explicit, the subject will know. According to Ambrosini and Bowman (2001) evidence will come in the form of one or more of the following:

- The subject to express, "oh, yes, that is right," or, "ah-ha, I hadn't realized that."
- The subject to express that the Map explains something important that she knows but wouldn't have been able to express easily or at all.

We used two qualitative measures of tacit knowledge content in the Causal Map as a check on the elicitation method. We reviewed the completed map with the subject and ask him to reflect on

- The extent to which he would have been able to narrate the "Map" if asked.
- What is interesting or surprising about the content, concepts, or linkages in the Map.

RESULTS

Examples of elicited maps are shown in Figures 1 and 2. Following is an excerpt of a resulting conversation between the researcher and the subject regarding the maps. We found strong qualitative evidence that the combination Self-Q and Structured Interview method of creating a Causal Map does indeed capture and express tacit knowledge.

Figure 1 Excerpts
SUBJECT: "For me, the results were not exactly what I was expecting to find. But mapping the concepts involved helped to visualize what has seemed to work..."

"The connections weren't necessarily obvious, or directionally obvious until we talked it out and tried to "logic" it."

"The connections going from team to project and such 'should' be a positive effect, but from my stories they were not. So it was counter intuitive to what I am 'taught' that teams = success. I, of course, no better that I can do it better alone!"

Figure 2 Excerpts

SUBJECT: "The map is a good visual representation. I probably knew what went into it from our leadership updates, but explaining it to someone outside the company was difficult. You have to understand our business process to understand what leads to success."

RESEARCHER: "So, it communicates the more "tacit" parts better than you could verbally?"

SUBJECT: "Exactly. I can describe the process but we have buzz words that make more sense on the map. It's also easier to see how the strategic pieces fit together. It did for me because I really had to consider how our cost strategy differs from value creation. The connections were the most difficult part."
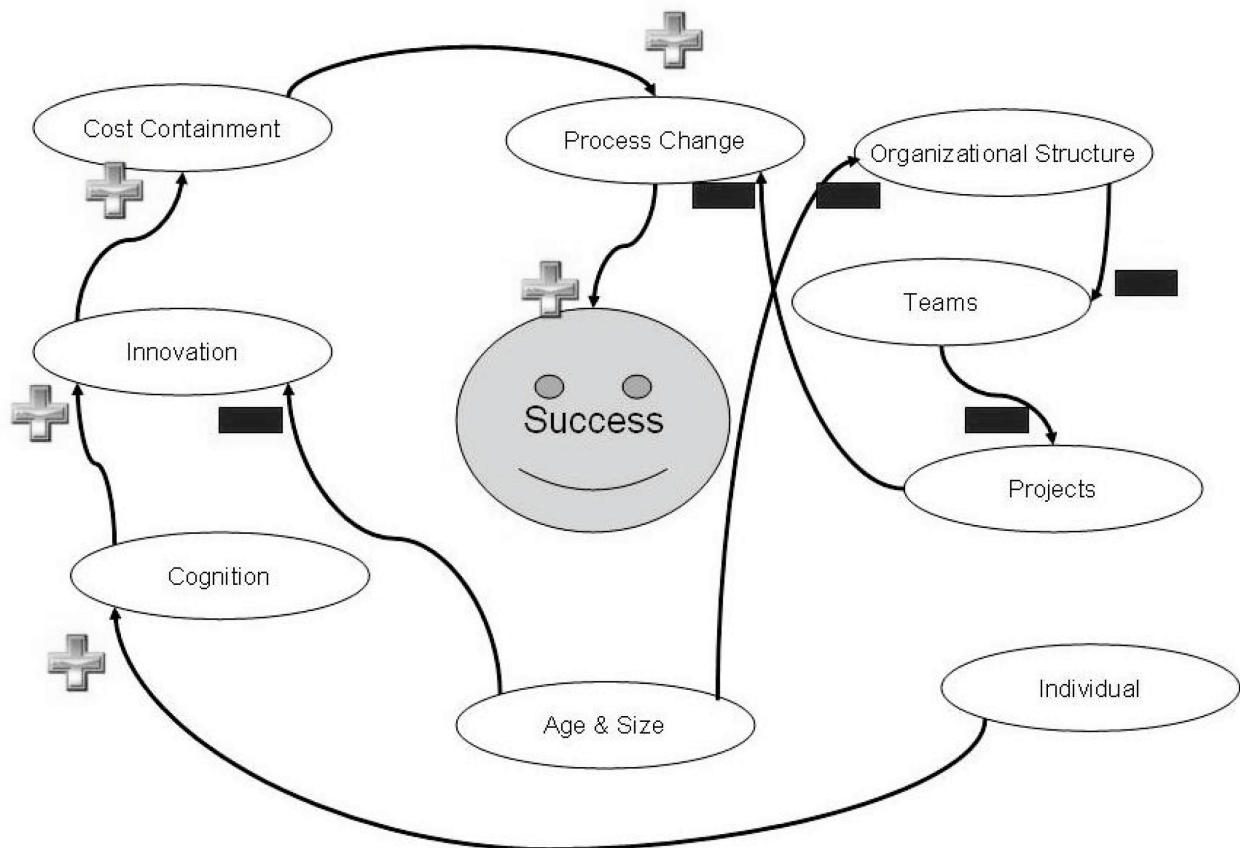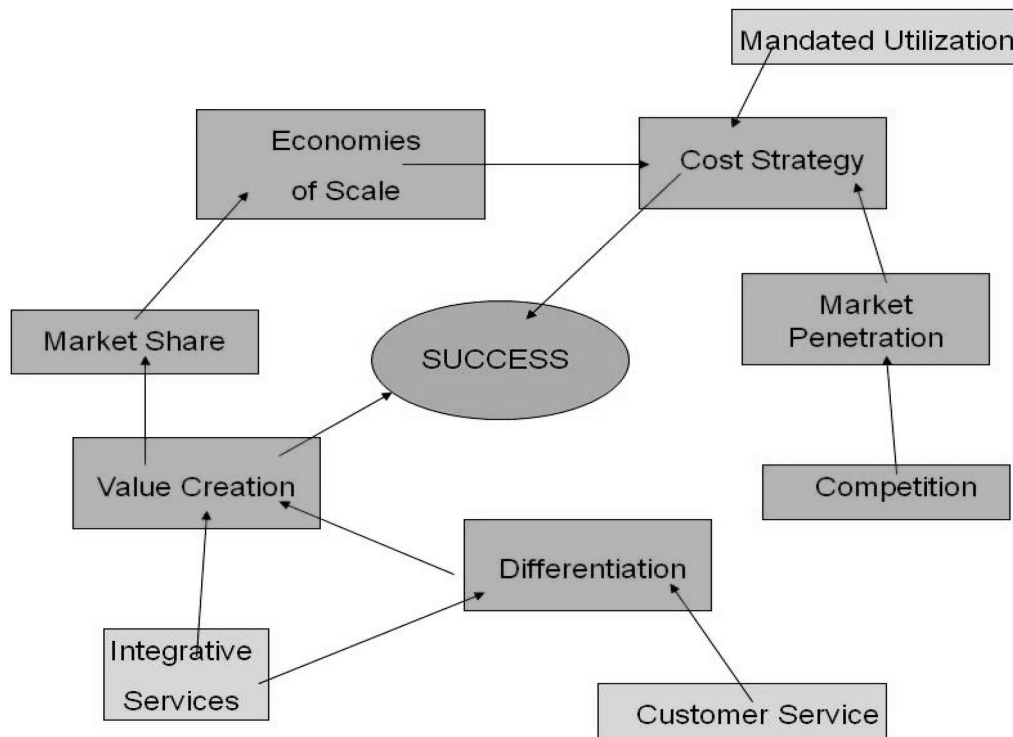
FIGURE 1
SAMPLE ELICITED CAUSAL MAP 1

FIGURE 2
SAMPLE ELICITED CAUSAL MAP 2

DISCUSSION

Polanyi School of Thought

From the perspective of the Polanyi school of thought, the subjects changed their focal object from explicit to what had been tacit. The tacit knowledge they had been looking through became the explicit focus. They were able to better understand the tacit knowledge they had been using. They did not, however, create explicit knowledge that did not require tacit knowledge for its interpretation. They made explicit a set of knowledge which had been tacit, which, in its turn, requires another set of tacit knowledge for its interpretation. For the subject in Figure 1, the new realization that teams tended to impact project success negatively, can only be understood within the context of his team and related tacit knowledge. This is precisely what Polanyi's theory would predict.

Nonaka School of Thought

We found that from the perspective of the school of thought recommended by Nonaka, there is no doubt that tacit knowledge can be understood and mechanized – as long as the tacit knowledge you are looking for is "technique" - but any attribute of "meaning" is lost. The technique is a corpse; it cannot possibly have the same meaning to everyone, or anyone. In this sense it cannot be considered knowledge, explicit or implicit. A person's technique can be extracted and mechanized, but tacit knowledge is not converted into universal explicit knowledge as this school of thought would suggest.

Radical Constructionist School of Thought

From the perspective of the radical constructionist perspective, the subjects appeared to unpack a personal construction of a "truth", which was more or less reliable, as predicted by this school. Interestingly, this is entirely consistent with the Polanyi school as well.

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