

Examining the trans-nationality and applicability of Nonaka's theory in the 'actual' context of the West

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Abstract

This paper aims to examine the trans-nationality and applicability of Nonaka's theory; his SECI model and five organizational conditions in particular, to the 'actual' context of Knowledge Management (KM) in the West, using an existing empirical case study, conducted by UK researchers. Whilst the development of KM as a concept in the West has been examined in relation to Nonaka's SECI model, five types of knowledge have been identified and incorporated into the integrated framework of the TEAM linguistic framework and Nonaka's SECI model. However, the 'actual' applicability of Nonaka's theory in the West has not yet been examined. Therefore, this paper shifts the focus towards the 'practices of KM' in the West. This has been examined in terms of the integrated framework presented in the previous issue by the author.

The examination of Universal Consultancy supported the trans-nationality and applicability of Nonaka's SECI model to the West context by identifying three out of four modes of knowledge conversion and four out of five of the conditions for organizational knowledge creation in Nonaka's terms.

Key words: Knowledge Management, Nonaka's SECI model, Case Study

1. Introduction

This paper aims to examine the trans-nationality and applicability of Nonaka's theory; his SECI model and five organizational conditions in particular, to the 'actual' context of Knowledge Management (KM) in the West, using an existing empirical case study, conducted by UK researchers. Whilst the development of KM as a concept in the West has been examined in relation to Nonaka's SECI model¹, five types of knowledge have been identified and incorporated into the integrated framework of the TEAM linguistic framework and Nonaka's SECI model.² However, the 'actual' applicability of Nonaka's theory in the West has not yet been examined. Therefore, this paper shifts the focus towards the 'practice of KM' in the West in particular. In other words, it examines the trans-nationality and applicability of Nonaka's theory in the West, using an existing empirical case study; namely, Universal Consultancy, conducted by UK researchers.

This will be examined in terms of the integrated framework, presented in the previous issue by the author.³

2. Examining Universal consultancy in terms of Nonaka's SECI model

Universal consultancy as a knowledge-creating company

Although a relatively small number of case studies that demonstrate a 'knowledge-creating company' in the West have been conducted, one that does is the research of a Knowledge Intensive Firm (KIF) in the UK, referred to as *Universal Consultancy*,⁴ by Robertson et al. (2000) and Robertson & Swan (2003). Universal Consultancy was founded in 1986 and is based in the south east of England in the UK. Robertson et al. (2000) states Universal Consultancy 'develops completely new ideas (inventions), which it markets to clients as Intellectual Property Rights

(IPR), and it also develops innovative solutions to organizational problems using existing concepts, ideas and technologies in innovative ways'. In this sense Universal Consultancy can be regarded as an archetype of a knowledge-creating company.

Knowledge creation in Universal Consultancy

The working style of Universal Consultancy is characterized by *inter-disciplinary team working*, in which members' backgrounds of disciplines are varied and teams are organized project by project (Robertson et al., 2000). At the start of any given project in Universal Consultancy, members of the inter-disciplinary team spend whole days together, 'brainstorming' and recording and putting forward relevant ideas (Robertson et al., 2000, p.6).⁵

Use of IT in Universal Consultancy

Robertson et al. (2000) provides an interesting insight into the relationship between IT and knowledge creation in Universal Consultancy. According to Robertson et al. (2000), the opportunity to introduce Lotus Notes (a widely used application for supporting collaboration) in their projects came from the necessity to collaborate with scientists outside of the organization, that is, in the USA and Japan and was done in order to overcome temporal and spatial obstacles. Robertson et al. (2000) explain that prior to this, team members usually shared and created knowledge through face-to-face communication, rather than by IT. However, despite the successful use of Lotus Notes on two major projects in collaboration with 'associates' in the USA and Japan, the exchange of knowledge returned to its original format, that is, face-to-face communication, while members of a team were in the UK and the usage of Notes decreased (Robertson et al., 2000). In other words, while team members are in the UK, there are no or few obstacles in temporal and spatial terms, and they choose verbal exchanges of knowledge with physical intimacy as the medium for knowledge creation. This may

suggest some limitations or disadvantages of IT in the processes of creating knowledge and the importance of exchange and sharing of (tacit) knowledge through social interaction.

Universal Consultancy and Nonaka's SECI model

In Figure1 the practice of knowledge creation identified in Universal Consultancy is applied to the integrated framework of the TEAM linguistic framework and Nonaka's SECI model.

The working style of *inter-disciplinary teams* is quite similar to Nonaka's notions of a *cross-functional team* (or a *micro-community of knowledge*), which is mainly related to the socialization mode of knowledge conversion and 'brain-storming' is a typical process of knowledge creation. This can be referred to as a mixture of the socialization and externalization modes of knowledge conversion in Nonaka's SECI model. Moreover, the use of Lotus Notes falls into the combination mode of knowledge conversion. In the analysis of Robertson et al., there is no mention of the internalization mode of knowledge conversion and the absence of this can be explained by the evidence that 116 out of 137 consultants at Universal Consultancy have the degree of Ph.D. In other words, necessary knowledge has already been *internalized* by each consultant. It can also be said that knowledge is internalized through 'learning by doing'. When taking this into consideration, the examination of the Universal Consultancy case study confirms the applicability of Nonaka's SECI model to a KIF in the West context.

3. Examining Universal Consultancy in terms of Nonaka's five organizational conditions

This sub-section examines the applicability of Nonaka's theory in the West context by finding the presence and absence of the 'five enabling organizational conditions' in Universal Consultancy which Nonaka assumes will facilitate the processes of organizational knowledge creation.⁶

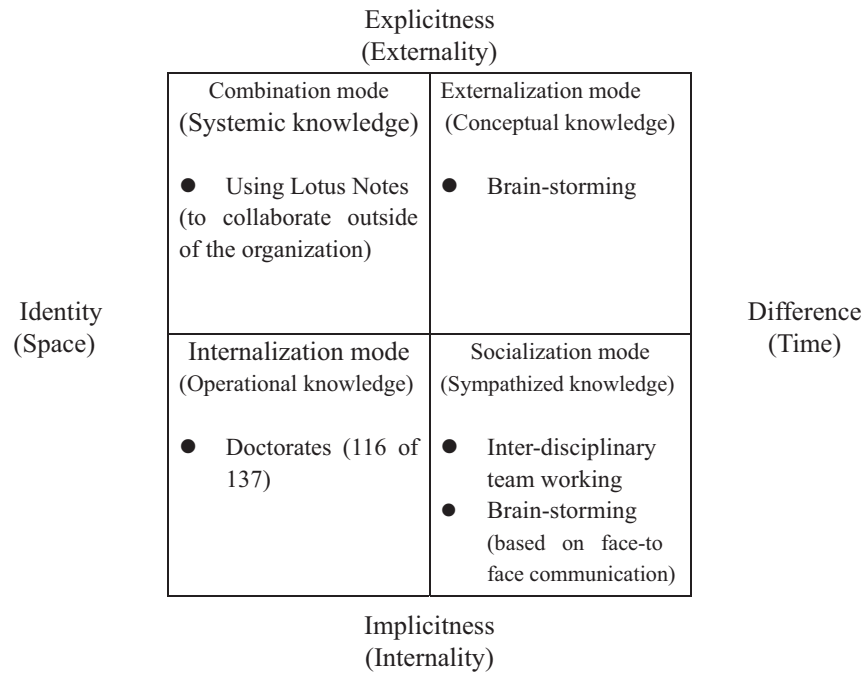


Figure1: Knowledge activities in Universal Consultancy within Nonaka’s SECI model framework (Source: Author).

Organizational Intention

Nonaka assumes that *organizational intention* (an organization’s aspirations) as a form of a corporate strategy (or knowledge vision) facilitates the process of knowledge creation in an organization, leading to employee commitment and providing the most important criteria for judging a piece of knowledge. In Universal Consultancy, there do not appear to be strategies in place to achieve this, as Nonaka himself assumed there would be. The method used by Universal Consultancy to stimulate employee motivation and commitment is the establishment of a performance management system, known as divisional revenue targets (DRTs) and personal revenue targets (PRTs). With this system up and running, consultants are able to judge knowledge value through the project (Robertson & Swan, 2003). In order to fulfill the requirement of PRTs, consultants would generally be awarded a small number of projects at any one time through an internal or informal tendering system by e-mail. In short, the situation at Universal Consultancy is unlike Nonaka’s assumptions and although organizational intentions such as a strategy or knowledge vision are vague, commitment and

motivation have been developed by fostering a sense of individual responsibility through personal revenue targets (PRTs), on which Nonaka places less emphasis.

Autonomy

Nonaka assumes that an organization that allows *individual autonomy* maintains greater flexibility in acquiring, interpreting, and relating information and although Nonaka does not emphasize it, the existing literature on KIFs in the West claims that having well-educated, qualified employees who form the bulk of the workforce is the precondition which allows individuals to act autonomously (see, e.g. Starbuck, 1992; Robertson et al., 2000; Alvesson & Kärreman, 2001.). This is also true in the case of Universal Consultancy, where in 1998, 116 out of 137 members of the staff were consultants with doctorates who were allowed (and expected) to act autonomously through an internal e-mail tender system (See condition of *requisite variety*.).

As for *organizational autonomy*, a self-organizing, cross-functional team, where there are members from diverse backgrounds, is the ideal condition

that provides organizational autonomy. At Universal Consultancy, as mentioned earlier, this takes the form of a project team, which is a self-formed and self-managed basic unit, in which consultants work in an inter-disciplinary and collaboratory manner. In short, Universal Consultancy has a high level of individual and organizational autonomy, as Nonaka assumes it would.

Fluctuation and Creative Chaos

Universal Consultancy depends on project teams and project leaders and whilst in some projects very few team meetings take place, in others many are arranged (Robertson & Swan, 2003). This kind of ad-hoc approach makes for *fluctuation* and *creative chaos* in an organization, which Nonaka (Nonaka & Takeuchi, 1995) assumes will improve the organizational knowledge system. Moreover, a typical project meeting at Universal Consultancy will adopt a ‘creative abrasion’ approach to knowledge creation, which emphasizes argumentative cognition, rather cooperation. This has the potential for fluctuation and creative chaos and this has been identified in the organizational structure at Universal Consultancy.

Information Redundancy

Redundancy is the existence of information that goes beyond the immediate operational requirements of organizational members and this is in evidence at Universal Consultancy, where a redundant structure exists in the form of an e-mail system. According to Robertson et al. (2000), regardless of how important, sensitive or trivial, the majority of e-mails were sent to everyone and replies also went to everyone without any effective classification system (Robertson et al. 2000).⁷ Nonaka (Nonaka & Takeuchi, 1995) claims that for Western managers ‘redundancy may sound pernicious because they tend to be preoccupied with the idea of efficient information processing or uncertainty reduction’. Indeed, Robertson et al. (2000) consider that this internal overlapping of information,

which is embedded in organizational culture, constrains management efficiency due to the high volume of communication flow. However, this type of overlapping knowledge is, according to Nonaka, regarded as a knowledge enabling condition.

Requisite Variety

Nonaka suggests that *requisite variety* is one of conditions that advance knowledge creation within an organization. At Universal Consultancy, the organizational structure is in the form of a knowledge acquisition system, again by e-mail and, according to Robertson (2000), in this company there is a project leader who collates relevant knowledge for the project and at the initial stages negotiates with consultants from different disciplines through e-mail. This flat information system, in which the different units are interlinked within a network, enables personnel to collect appropriate information and deal with complex and specialized client demands in a relatively ideal system that realizes requisite variety in the organization.

Nonaka has developed five organizational conditions through which organizational members may create and generate knowledge, most of them have been found in the organizational systems of Universal Consultancy. *Individual and organizational autonomy*, *fluctuation and creative chaos*, (information) *redundancy*, and *requisite variety* have been identified as almost the same structures which Nonaka assumes. As for *organizational intention*, whilst Universal Consultancy has weak organizational intention, motivation is provided through performance management systems. These suggest the applicability and trans-nationality of Nonaka’s five conditions to the West context to a great extent.

4. Conclusions

The paper has examined the trans-nationality and applicability of Nonaka’s theory in the context of

Table 1: Nonaka's five organizational conditions in Universal Consultancy

Nonaka's five conditions for knowledge creation	Universal Consultancy
Organizational intention	Low (but a performance management system)
Individual autonomy:	High (based on well-educated, qualified employees)
Group autonomy:	High (a cross- functional team)
Fluctuation / Creative chaos	High (a ad-hoc approach to managing a project team)
Information redundancy	Exist (a redundant e-mail system)
Requisite variety	High (an e-mail system for collecting project members)

the 'actual' (empirical) management practice of the West. The examination of Universal Consultancy has identified three out of four modes of knowledge conversion and four out of five conditions for organizational knowledge creation in Nonaka's terms. In this sense, the examination supported the trans-nationality and applicability of Nonaka's SECI model to the West context to a great extent.

Notes

- 1) See the paper argued by the author (*Yamanashi Global Studies* No.7)
- 2) See the paper argued by the author (*Yamanashi Global Studies* No.8)
- 3) In the previous paper (see *Yamanashi Global Studies*, No.6) in addition to the examination of the relationships of various concepts between Nonaka's theory and organization studies in the West, it also created an integrated framework from the TEAM structure and Nonaka's SECI model (see p.31, Figure 4-1.)
- 4) This research kept the organization anonymous and referred to it only as *Universal Consultancy*. See Robertson et al. (2000) and Robertson & Swan (2003) .
- 5) This is a similar approach to *task forces* for developing new products in Japanese companies such as Mazda (RX7), Honda (City) and Canon (Mini-Copier). See Nonaka & Takeuchi (1995).
- 6) See Nonaka & Takeuchi(1995), p.73-p.83.
- 7) Therefore division managers received on average between 150 and 200 e-mails each day and other consultants only slight fewer (Robertson et al. 2000)

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