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THE KNOWLEDGE MANAGEMENT KALEIDOSCOPE: KEEPING STAKEHOLDERS AND THEIR EXPECTATIONS IN **FOCUS**

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Abstract

Knowledge Management is a diverse and vibrant topical area within the business, management and information systems field. Over many years the roots and foundations of the definition of knowledge and its constructs have upheld the view that knowledge is an amorphous entity to be harnessed in its abundance. This developmental paper argues that knowledge is context sensitive and reliant upon an inter-relationship between stakeholders, their expectations, and associated organisational cultural factors which are modified by the lens of organisational context. By using the systems dynamics concept of the Eroding Goals systems archetype, a conceptual model- the Knowledge Management Kaleidoscope - is developed to explain and describe these components as an alternative model of identifying knowledge.

Keywords: Knowledge Management, Organizational Knowledge, Stakeholders, Systems Archetypes

1 INTRODUCTION

A search on the term 'organizational knowledge' and 'knowledge management' in the journals database EBSCO reveals that there are many thousands of papers on the subject (Coakes, Amar, et al. 2009)(Sezgin and Saatçioğlu 2009). These papers have elucidated our understanding of knowledge on an individual, organizational and even societal level. However, our contention is that knowledge in the context of the organization is flawed conceptually. In this development paper we put forward our argument to support this contention and to propose an alternative conceptualization of knowledge. Our concerns with the term 'organizational knowledge' stems from a bedrock assumption in the field: that what is deemed to be 'knowledge' is context sensitive (Faniela and Majchrzakb, 2007.). Using the organization as the context to separate-out knowledge, for example, from information and data is highly problematic (Alstete, 2007). A simple illustration is 'knowledge' of customers in the marketing department might well be deemed little more than 'data' in the finance department. In the context of the overall organization therefore, knowing about customers falls between the stools of knowledge and data. A further potential problem with knowledge in an organizational context is the tendency to search for the 'stock of knowledge' that provides some level of distinct advantage (Barney, 1991)(Alstete and Halpern, 2008). The notion that organizations have a single stock of knowledge that can be identified, shared, stored, and managed in a coordinated fashion is misplaced (Fahey and Prusack, 1998).

Instead, we argue that what is deemed to be knowledge changes continuously depending on the contextual backdrop. What matters are the factors used to circumscribe or define the context. A search through the knowledge management literature shows that little attention has been given to establishing conceptual factors that can define contexts that enable organizations to determine what is and isn't knowledge (Alavi and Leidner, 2001; Guo and Sheffield, 2008; Holsapple and Wu, 2008). Scholars have long known that theories are lenses that enable researchers to study and explicate phenomena. While theoretical lenses enable researchers to see certain aspects of the phenomena, they also hide aspects too. In a similar vein, the lenses organizations use to define the context determine what is perceived to be knowledge. An alteration of the context would result in knowledge that was perceived as important becoming redundant. For example, knowledge required to produce environmentally unfriendly Sports Utility Vehicles (SUVs) becomes redundant when stakeholders' expectations change to wanting electric cars.

Hence in this development paper we introduce and explain the 'Knowledge Management Kaleidoscope' as a conceptual framework to identify knowledge that is important and relevant to changing contexts. We use the metaphor of the kaleidoscope because as, every child knows, as you move a kaleidoscope the picture that emerges, in sharp relief, changes. So too as factors that define contexts change different knowledge patterns become more or less important. In order to progress our argument we have structured the paper as follows. In the next section we introduce the theoretical factors we believe define the context for knowledge. Then we examine the intrinsic and extrinsic forces that act on these factors to keep the Knowledge Kaleidoscope in constant motion. We then draw out the implications of our argument at two levels: theoretical and practical.

2 FACTORS THAT DEFINE THE CONTEXT FOR KNOWLEDGE: THEORETICAL UNDERPINNINGS

We propose that there are two interrelated factors that define contexts for knowledge: stakeholders and their expectations. Our rationale for selecting these two factors over and above others is that these two can be considered independent variables (Leonard-Barton, 1995; Probst et al., 2001). To be sure, any organization's strategy has embedded within it, either explicitly or implicitly, a set of stakeholders. They are the ones that the organization privileges over and above the population of potential stakeholders. For example, a low cost, short haul budget airline has a certain stakeholder in mind which is different to the long haul business airline. It is not that one stakeholder is better or worse than another it's simply their strategy leads them to different stakeholders (and therefore in due course, their expectations of service and experience).

Stakeholders can be any individual or group of individuals who have power over the achievement of the organization's strategy and can affect or be affected by an organization's activities/practices. Stakeholders are exemplified by employees, customers, suppliers, governmental regulators, local community, business partners and investors (Clarkson, 1995). Stakeholders gain their power because they are embedded in the organization's strategy; in other words, there is an interdependency between strategy and stakeholders. Problems arise because organizations often have too many stakeholders – consider for a moment the numbers of customer stakeholders supermarkets have. Organizations rarely have an explicit prioritization of stakeholders. One implication is that consequently, scarce resources are used to address the needs of all stakeholders, resulting in all stakeholders rarely being completely satisfied. At an organizational level, often stakeholders are prioritized on an ad-hoc basis with each function or silo optimizing relationships with stakeholder it has most contact with. Consequently, other stakeholders are neglected. Inadequate prioritization often manifests itself in internal conflicts over resource allocation.

Organizations address sets of stakeholder expectations (Rowley and Moldoveanu 2003; Freeman 1984). Stakeholders have expectations of the organization. 'Expectations' is an umbrella term used here to include the needs, wants, delights, legal obligations and specific requirements of the stakeholder that the organization has to address. Organizations that identify their stakeholders' expectations realize that there are inherent conflicts between the expectations to which it must respond

(Meyer and Rowan 1977; Jawahar and McLaughlin 2001). Moreover, stakeholders might well have expectations that an organization may not actually want to satisfy it. Stakeholders' expectations can be segmented according to whether they are to be satisfied, exceeded, modified, created or eliminated altogether. This decision can affect the allocation of resources. The extent to which expectations are met is critical to the longer-term success of any organization. Figure 1 shows this theoretical context in vivid detail, where components of organizational stakeholders and their expectations are broken down and related to a combination of individual and shared outcomes.

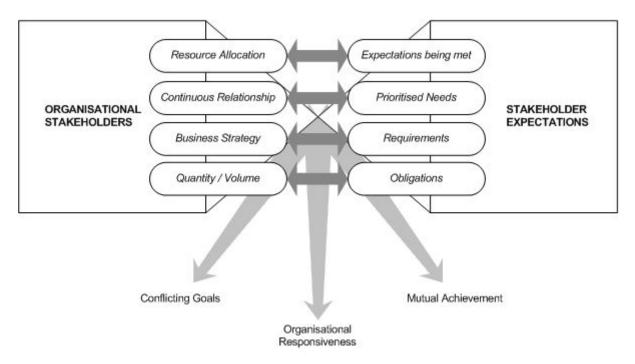


Figure 1. Organisational Stakeholders and their expectations – root causes and consequences

If a Systems Dynamics (SD) approach of this perspective is taken where an approach is taken to understand a system's behaviour over time in terms of feedback loops (Sterman, 2000) an interesting picture of the interplay between these aspects can emerge. By using SD artefacts known as System Archetypes in particular (Braun, 2002; Senge et al., 1994) which capture typical challenges in organizational and other types of system, the pattern of the behaviour and interaction between stakeholders and their expectations can be built up. Specifically, if either stakeholders or their expectations are either viewed as elements to be grown or fixed, two potentially different stories emerge. On the one hand, the stakeholder-expectation relationship could be viewed as a growth scenario, leading to an Accidental Adversaries system archetype model which is shown in Figure 2.

Here a partnership between an organization and their expectations is set up where win-win goals are desired (with an objective to accomplish together what cannot be achieved separately), but unwittingly stakeholder actions have an adverse effect expectations, deteriorating into an adversarial relationship. This continues until and unless the context is broken and stakeholders or their expectations are found in each (or both) of their favours. Hence mental models of the level of expectation are fuelling the demise of the stakeholder relationship which can only be broken by a shared vision or joint team learning. On the other hand, if the stakeholder-expectation relationship is viewed as something to be continuously maintained or fixed, there may be a tendency to become satisfied with less and less — which is known as the 'Eroding Goals' system archetype. Here, any perceived desire to meet a joint

goal is either achieved by taking action to improve or by lowering the goal to an achievable level instead (leading to potentially poorer performance). This is illustrated in Figure 3.

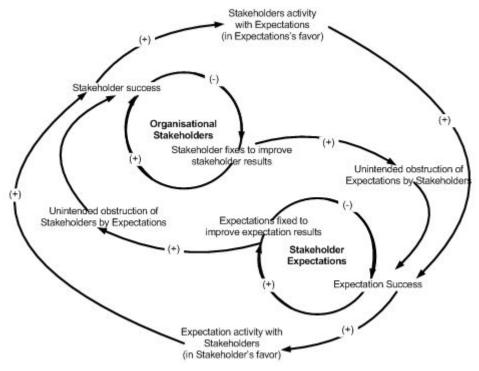


Figure 2. The 'Accidental Adversaries' system archetype



Figure 3. The 'Eroding Goals' archetype

The top feedback loop represents the given 'fix' (performance goal) whilst the bottom loop gives the 'fundamental fix' (actual performance) to the problem. Braun (2002) suggests this archetype has clear roots in the setting of expectations of stakeholders and can routinely realize itself in the form of behaviours and cultures.

3 FORCES DRIVING THE FORMATION OF A KALEIDOSCOPE OF KNOWLEDGE

From a stakeholder perspective, the choices made, decisions taken by management and longer term organizational survival, are functions of the extent to which an organization satisfies its stakeholders on a sustained basis (Carroll 1993). Therefore, we argue that the context to identify valuable knowledge is dependent on the stakeholders that have been prioritised and the particular expectations that organizations choose to fulfil.

The Knowledge Kaleidoscope suggests that with a given configuration of stakeholders that have been prioritised and a set of expectations that are being fulfilled, organizations will deem certain knowledge to be vitally important. Where there is a change in the prioritised stakeholders and / or their expectations, so the importance of some knowledge will be curtailed and other knowledge becomes more important (or indeed degrades into information or data). In this section we outline the forces that change the context for identifying knowledge that is important within the kaleidoscope model, which is thus developed. We segment these into two categories, Intrinsic and Extrinsic forces. Intrinsic forces are those that emanate from and driven by stakeholders themselves often independently of the focal organization and extrinsic forces that are found in organizations and the external environment more generally.

Intrinsic forces include, and are not limited to, stakeholders existing expectations changing. One illustration of this is the US government's expectations of the car industry which have changed significantly in recent times (within the so-called credit crunch, emanating from the latter half of 2008). Chrysler, for example, sought Chapter 11 protection because a powerful stakeholder (President of the United States, Barack Obama), wanted major reforms to be implemented (Financial Times, 2009). Chrysler has to develop more fuel efficient cars and is collaborating with Fiat who has proven knowledge in this field. Another intrinsic force is where stakeholders develop new expectations to be delivered by a focal organization. The retail sector provides an illustration of this force. In this sector, as the major retailers invested in and developed their systems and processes they developed new expectations of first, second and third tier suppliers in terms of delivery timings, order fulfilment and visibility of the production pipeline. Suppliers to the retail sector had to respond to meet these stakeholders' expectations or cease trading with them (Tapscott et al., 1998).

Extrinsic forces are found with organizations and the environment. An organization's strategy has a significant influence on the priority of stakeholders and expectations to be delivered. In the consultancy sector, for example, McKinsey's strategy would direct attention to quite different stakeholders than say Accenture. The range of expectations the two firms would seek to address would also vary because their work is directed to different levels of seniority in organisations. An organization's culture will play a major part in the choice of stakeholders and expectations. Where organizations have had success with one stakeholder group it is difficult to introduce new stakeholders that might be a smaller part of the business now but form the future growth area of the business. Consider, for example, a university that successfully deals with large volume undergraduate students and then enters the lower volume but highly demanding MBA market. Often the culture restrains the organisation from recognising the importance of MBAs, who might well get treated in the same ways as undergraduates (but where their expectations may not be met under constraints of eroding their original goals towards that of 'volume' stakeholders, i.e. the undergraduate population). Internal politics has a major role in determining the importance of stakeholders and the expectations to be met. This therefore implies an organisational and demographic cross-cultural set of expectations (Hofstede, 2001), not least of which also include the effective usage of knowledge (Sharif, 2006) as well as the impetus required to reward, recognize and support knowledge successfully (Holm, 2001).

3.1 The Knowledge Kaleidoscope

The intrinsic and extrinsic forces outlined above drive continuous changes in the prioritisation of stakeholders and the expectations to be delivered. As these change so the context for determining knowledge gets reframed. For most organisations these changes evolve gradually over time. What is missing is any form of theoretical basis to explain discontinuous changes in the prioritisation of stakeholders and changes to expectations. We propose that the Knowledge Kaleidoscope leads to an emergent Theory of Knowledge Contexts, which as noted in the previous section can be explained via the Eroding Goals systems archetype. Thus, individuals and teams within organizations may need to develop or absorb new capabilities rapidly to meet stakeholders' new expectations while concurrently maintaining or enhancing those that address stakeholders' on-going needs (Cohen and Levinthal 1990; Eisenhardt and Martin 2000) – but without eroding singular or shared goals along the way. As Boland et al. (2005) describe, knowledge has a social component as well in terms of how social interactions affect the representation, and sharing of knowledge through narratives and consensual or communitybased view of what and how knowledge is used. This socially constructive perspective on knowledge is important as there needs to be an inclusion of the so-called human process element to this concept. As such, March (1991) describes a model in which the interplay between the exploitation and exploration of knowledge is enabled through a codification of up to thirty parameters across an organization, the individuals within it and the organizational 'code' which both components adhere to. Prietula and Bray (2007) built upon this recently, noting that a symbiotic relationship exists between increasing levels of organizational hierarchy and the ability of that organization to change and adapt in the face of internal as well as external pressures. Hence our theory supposes that the appropriate context for understanding and identifying knowledge should involved a combination of (internal) stakeholders and their (external) expectations, where stakeholders' expectations change in ways that require knowledge, people, systems, processes and structures and need to respond an interact with each other dynamically, just like a kaleidoscope. This is illustrated in the schematic in Figure 4.

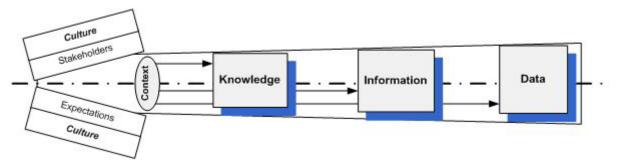


Figure 3. The Knowledge Kaleidoscope

Much like a kaleidoscope, Figure 4 shows a 'cut away' schematic of the components that make up this organizational device. By defining organizational stakeholders, expectations and working cultures as well as noting the context of organizational priorities, knowledge, information and data within the firm can change. Hence the interplay between modes of working, roles and responsibilities can therefore mean that working knowledge (as Davenport and Prusack, 1998 noted), becomes transparent and decomposes into information (knowledge which is shared) or data (knowledge which can be encoded and re-arranged into new information). As noted separately by Braganza (2004) and Sharif (2006), the usage and interaction of knowledge therefore sublimates into a dialogue more in line with that of either information or data. This model therefore attempts to highlight the complexity of defining what knowledge actually is. And noting the dynamic interplay between stakeholders and their expectations as shown in Figures 3 and 4, the authors suggests that as the context for such a dynamical relationship changes, the definition of what is and isn't knowledge also changes. Thus engendering an

organizational imperative to manage both stakeholders and their expectations proactively, to align and ensure that each aspect doesn't lead to the degradation of the other.

4 IMPLICATIONS FOR PRACTICE

In terms of practice, our argument suggests that differing expectations can lead to disparities between espoused practices (found in manuals and procedures) and actual practices. Organizational knowledge needs to be linked to actual practices that deliver expectations to stakeholders – and therefore must also take internal and external factors which impinge upon the organization into account also (such as organizational culture and affiliation to groups of individuals) (Al-Karaghouli, Taylor and et al 2008). Thus, the implications of viewing knowledge within organizations as a combination or output of organizational stakeholders and their expectations can therefore be supported by the following multistep approach as identified by the literature:

- Identifying the stakeholders' expectations and 'actual' rather than 'espoused' practices (Schultze and Boland, 2000)
- Taking a top down approach from knowledge to data rather than data to knowledge (Braganza, 2004)
- Executing a knowledge management audit, in order to uncover tacit cultural factors that therefore
 can create cultural barriers and impediments to understanding and recognizing stakeholder
 expectations (Levy et al., 2008);
- Extending and realizing how exploration and exploitation of knowledge works in the organization (March, 1991);
- Mapping existing or emerging networks and communities of practice (Chae et al., 2001);
- Developing a contextual lens based upon successive simulation models which describe complexities of the organizational business (as suggested by Kane and Alavi, 2005).

5 CONCLUSION

This paper forms a counterpoint to much of what is 'taken for granted' in the literature on Knowledge Management. We conclude that rather than making the assumption that the most suitable context for managing knowledge is the organization, scholars and practitioner are orientated towards a different assumption set. We argue that the use of stakeholders and their expectations to identify the actual activities that organizations perform is an alternative to the organisation as the context. The challenge this raises for knowledge management practitioners and academics is that they have to clearly identify the context before knowledge can managed. This paper concludes that the foundations of organisational knowledge and its existence as currently understood, is not easily discernable within contemporary business contexts. This is due to the reliance upon lenses which consider a hierarchical approach to (structural) data, (interpretive) information and (evaluative) knowledge where each layer of these strata decomposes neatly into another. Yet this is rarely the case. As even the fathers of knowledge management note (Davenport and Prusack, 1998; Nonaka and Takeuchi, 1995) knowledge is a dynamically aware entity that evolves and is moulded through organisational contexts – a fact which most of the knowledge management literature has tended to ignore over recent years. We have sought to encapsulate aspects of stakeholders and their expectation and the culture within which they exist, via a systems dynamics analogue to the eroding goals systems archetype. Thus the knowledge management 'kaleidoscope' allows an alternative perspective, on this important area, to be generated. The progression of these ideas will be manifested in an action research-based interpretive study with target organisation(s) to verify and validate these concepts in terms of their efficacy and realisation in strategic IS terms.

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