The individual and the collective

Factors affecting knowledge sharing in Saudi Arabian companies

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Abstract

Purpose – The purpose of this paper is to report a study which investigates some factors in the current state of knowledge management (KM) in Saudi Arabia, and to consider the relevance of the findings for KM and information sharing generally.

Design/methodology/approach – A survey of Saudi Arabia private companies with a KM policy was carried out, and the issues raised were investigated further by literature analysis.

Findings – Issues examined include the effect of demographics, the balance between human and digital resources, the relation between KM and organisational learning, the effect of the cultural context, the nature of reward for knowledge sharing, including enhancement of self-worth, and the relation between the personal and individual, and the collective and social.

Research limitations/implications – The survey has a self-selected convenience sample, which is rather skewed demographically. The literature analysis is selective rather than comprehensive.

Originality/value – Presents an analysis of some general issues of KM and information sharing through the lens of one cultural context.

Keywords National cultures, Learning organizations, Saudi Arabia, Knowledge management, Information sharing

Paper type Research paper

Introduction

As the discipline of knowledge management (KM) has developed, there have been numerous studies and analyses of information seeking and information sharing in KM contexts (Bawden and Robinson, 2012; Jashapara, 2004; Tsoukas, 2005; Desouza and Paquette, 2011; Martin, 2008; Srikantaiah and Koenig, 2008). Such studies have, for the most part been carried out in the developed world – Europe, North America and parts of the Far East and Australasia – as is reflected in the great majority of reports of such studies. An exception is the set of examples in the volume edited by Malhan and Shivarama Rao (2008), which cover a much wider geographical range.

It is reasonable to consider that studies of this kind carried out in different cultural contexts, and particularly in the developing world, might show different patterns of information behaviour in relation to KM. If so, these could offer important guidance for appropriate modes of KM in these contexts, which may differ from those prevalent in the developed world, and thereby cast interesting light on the nature of KM in general.

This brief paper reports an indicative empirical study, supported by detailed literature analysis, of some aspects of information behaviour and KM in Saudi Arabia, which have wide implications for KM and information sharing generally.

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Cultural contexts of KM

"The failure of many information or knowledge management systems", writes Jashapara (2004, p. 186) is often as a result of cultural factors, rather than technological oversights. The significance for KM of national cultures, particularly when a standard KM programme is put in place across varying national cultures in a multinational organisation, is emphasized by Ford and Chan (2003) and by Ardichvili *et al.* (2006). Sabri (2005), Nazari *et al.* (2009), Al-Maliki (2013) and Seba *et al.* (2012b) reflect on its particular significance in the Arab world, while Zakaria *et al.* (2003), Straub *et al.* (2001), Baker *et al.* (2010) and Hill *et al.* (1998) consider the influence of culture on IT implementation generally, in the Middle Eastern context. These papers are not reviewed in detail here, but they inform the discussion below.

So significant is this issue that Choo (1998, 2000) identified cultural knowledge as a third form of knowledge, to go alongside the tacit and explicit knowledge more generally recognised in KM models. This has not been generally accepted: for example. Bouthillier and Shearer (2002) found it surprising that none of the numerous organisations which they surveyed, made any mention of cultural knowledge in their KM provision.

Nonetheless, citing a wide range of studies, Martin (2008, p. 398) concluded that "organizational culture is widely regarded as a key influence on the success of knowledge management, relating directly and indirectly to attitudes, behaviours, practices and outcomes". This viewpoint, which is generally accepted in KM, is usually taken to mean variations in culture between organisations all operating in the same general national/regional culture. And indeed, many studies of KM in the developing world have dealt with local branches of multinational companies, using organisation-wide systems, where effects of local culture are either not apparent or not discussed; see, for example, Mankad (2008) and Ahmad and Daghfous (2010). What is arguably of greater interest, in taking a wide view of the issues affecting KM, is the influence of very different local, national or regional cultures.

There have been several studies of the management of indigenous knowledge in the developing world, see, for example, Stevens (2008). However, these have generally focused on specific issues of indigenous or local knowledge, and on the incorporation of such knowledge into KM systems (see, e.g. Srikantaiah and Rueger, 2008), rather than giving consideration to differing national and regional cultures, and how these may affect KM *per se*. Exceptions, which make interesting points about cultural and demographic issues in KM applied to local information, are the studies of Maina (2012) and Lwoga (2011), and these will be mentioned later.

This paper develops these considerations, in the context of KM in the Arab world, and specifically Saudi Arabia.

The Saudi Arabian context

Saudi Arabia, part of the Middle Eastern Arab world is a developing country, wealthy through natural resources, and with a strong traditional culture being influenced through external influences and modernisation. The Arab world is often treated as one, but in fact there are considerable differences between the Arab countries in their adoption of, and approaches to, information and communication technologies (ICTs); in general, however, indicators of a knowledge-based society, such as literacy rates and access to Internet, are lower than in the developed world (Chatfield and Alhujran, 2009; Mohamed *et al.*, 2008).

Saudi Arabia, despite its great wealth from oil production, is considered a developing economy based on per capita GDP, and strongly influenced by its cultural

and religious traditions (Idris, 2007). It is counted in the median countries within the Arab world in terms of adoption of IT systems in the public realm, suggesting that it could be further advanced in view of its economic status. However, considerable efforts are being expended to extend the effective use of ICTs in Saudi Arabia (ESCWA, 2007; Baker *et al.*, 2007; Al-Maliki, 2013).

There has been in the past a reliance on foreign workers in Saudi Arabia, especially in technical positions, and there remains high proportion, in some organisations, of foreign and transient workers, this presenting its own issues for knowledge sharing (Idris, 2007; Hamza, 2009). Cultural differences were noted as a major barrier to knowledge sharing among librarians in Qatar, a country with a similar high proportion of expatriate workers (Kumaresan and Swrooprani, 2013).

A detailed study of the barriers – related to technology, organisation, leadership and learning – to adoption of KM in Saudi Arabia has been given by Al-Hussain (2011), and a briefer account by Al-Maliki (2013).

A number of studies have been made of KM and information sharing, in Saudi Arabia itself, and in other countries of the region with which share, to some extent at least, the Saudi context.

In Saudi Arabia, the factors underlying adoption of KM systems in the public sector have been studied by Alatatawi *et al.* (2013), while case studies of KM in Saudi municipalities are reported by Al-Aama (2014) and Dulayami (2012). In the Saudi private sector, there have been studies of how KM has been implemented in medium-sized and large organisations (Albahussain, 2014), in small- and medium-sized organisations (Migdali, 2009), in a telecommunications company (Al-Adaileh and Al-Atawi, 2011) and in the banking sector (Nafei, 2014).

In the wider region, there have been studies of KM initiatives at the Bahraini Ministry of Health (Nawakda *et al.*, 2008), Jordanian insurance companies (Haan and Kloub, 2013) and Jordanian banks (Bourini *et al.*, 2013), multinational companies in the United Arab Emirates (UAE) (Ahmad and Daghfous, 2010), public and private organisations in the UAE (Boumarafi and Jabnoun, 2008); Siddique, 2012), public and private organisations in Bahrain (Al-Alawi *et al.*, 2007), Omani organisations (Al-Busaidi and Lorne, 2005), and the Dubai police force (Seba *et al.*, 2012a,b).

These studies have shown that many KM issues arising in the Arab world are essentially the same as in the developed world, particularly where multinational companies are concerned. Organisational structure and organisation culture (particularly issues of trust), the effect of the management level of the individuals concerned and the technical infrastructure available are particularly important. However, local issues do make a difference: especially the motivations for taking part in KM and for sharing knowledge. Overall strategies for KM in this region, taking account of its particular issues, have been proposed by Sabri (2005), Mohamed *et al.* (2008) and Al-Shammari (2008).

The study described below therefore builds on this body of knowledge by focusing on three specific issues of KM in the Saudi Arabian context: how do demographic factors affect KM-related information behaviour; what are the other main influencing factors; and are human or digital sources preferred. It is reasonable to think, on the basis of the quoted literature, that such issues might be affected by cultural context. Based as it is on a selective literature analysis and a small-scale survey with a convenience sample, the study can only be indicative, but it may hopefully indicate a direction for future research. The intention is that the insights from such studies will not only be of direct benefit for Saudi Arabia, and countries in a similar situation, but will also offer some general lessons for KM and knowledge sharing.

Survey and literature analysis methods

A web-based questionnaire, largely quantitative in nature using Likert scales, was used, in order to obtain basic information from a wide spectrum of participants. Inevitably this meant that qualitative in-depth results could not be obtained, and this survey is therefore indicative, intended to draw out issues for future more detailed research.

The survey sought to investigate:

- the ways in which, and extent to which, information was shared;
- the main motivators for knowledge sharing;
- the relative use of human and technical resources in knowledge sharing; and
- the influence of demographic factors.

The survey was sent to 100 Saudi private companies, of varied size and across all industry sectors. This means that multinational companies, and public sector organisations, are not represented. They were chosen as having some formal KM or knowledge sharing processes, noted in their annual reports.

In all, 53 responses were received. The majority of the respondents were male (87 per cent) and relatively young (79 per cent 30 years old or less), and this poses a limitation on consideration of demographic factors. However, it is representative of the Saudi workforce in these sectors (Baker *et al.*, 2007). A high percentage, 93 per cent, claimed to engage in knowledge sharing for their job role; not surprising as those who chose to respond presumably had some interest in the topic, and their companies claimed to operate a knowledge sharing environment. A strong relationship was also evident between knowledge sharing behaviour and managerial level, as is to be expected from experience in all KM contexts.

The supporting literature analysis, to examine the issues raised by the survey, was carried by an initial scan of textbooks, monographs and review articles, followed by a search of several data sources – LISA, LISTA, Web of Knowledge, ABI Inform and Google Scholar – and by citation search. In view of the size of the KM literature, the search was selective, focusing on the issues raised by the survey. Some findings from the analysis have already been noted above.

Results

The results, of the survey and the literature analysis, are reported under three main headings: the effect of demographics; the relative significance of human and digital sources; and the main influences in, and motivations for, knowledge sharing.

Demographics

The survey indicated that there were no significant relationships between gender, age, education, job position and working experience and the information seeking and sharing behaviour of the participants, although managerial level had an effect. The limitations of the survey, in terms of skewed representation of age and gender have been noted above, so that caution is appropriate in interpreting the results.

These findings are in line with those of Bourini *et al.* (2013), who found no demographic effects in their study of KM in banks in Jordan, and also those of Baker *et al.* (2007), who derived similar findings in their study of IT implementation a variety of public and private sector organisation in Saudi Arabia. These latter authors suggest that the lack of effect due to age is not unexpected, due to the generally young Saudi

workforce, but that the lack of gender effect is surprising. Certainly, these findings are at variance with the common assumption that demographic factors always have an important influence on information behaviour.

As Case (2006, p. 307) points out, "compared to occupational or role-based investigations, relatively few studies have involved the information seeking behaviour of demographic groups. However, demographic variables still form a common schema for analysing the results of these other investigations". Case (2012, pp. 349-363) provides more detail on this, pointing out that an assumption that demographic factors such as age, ethnicity, gender and level of educational will predict attitudes, beliefs and behaviours underlies many studies of information seeking, information sharing and information behaviour generally.

In some cultural contexts it is clear that demographics do have a very strong influence. For example, in the traditional rural culture of Tanzania, gender strongly affects the way in which knowledge is accessed and shared (Lwoga, 2011), while age is an important determinant in the culture of the First Nations peoples of Canada (Maina, 2012).

But perhaps demographics are not so important as has been assumed; or may be becoming less so. There is some resonance here with the assumption that the behaviour of the "Google Generation", those who have grown up with the web as an ever-present feature of their lives, is clearly different from that of previous generations. But detailed study showed that this was not the case, and that the Google generation's behaviours were shared by other age groups (see, e.g. Rowlands *et al.*, 2008). If this effect, noted in the developed world, also applies in the different culture examined here, that would be a significant and general finding.

A more detailed survey of the kind reported here, with a more purposive and demographically balanced sample, is desirable, in order to investigate this further.

Personal and digital sources

The survey results show that the participants tend to seek information by consulting colleagues personally somewhat more than by accessing digital resources; but the difference is small, and not statistically significant. No-one in the sample claimed to make extensive use of both approaches, rather distinctly preferring the one or the other, and there was some evidence that the available digital resources were under-used.

The issue of the relative value of these two forms of knowledge sources is much debated in the KM literature; see, e.g. Jashapara (2004). Martin (2008, p. 394), cites a wide range of literature to conclude that "the management of tacit knowledge, although to an extent facilitated by communication technologies, happens best through face-to-face meetings, socialisation, and mentoring activities. Put differently, information technology plays a supportive role in most KM programmes and people play the performative role". On the other hand, much KM provision seems to overlook this point: for example, in a study of KM in private and public organisations in the developed world, it was noted that person to person exchanges were not mentioned as central in any of the KM strategies Bouthillier and Shearer, 2002).

Considering the Saudi context, it is generally accepted that Middle Eastern culture tends to put high emphasis on intuition and personal relationships (Nazari *et al.*, 2009). To express this more formally, a useful distinction has been made between "high context" and "low context" cultures (Hall, 1976). The former emphasizes information sharing through trusted personal relationships in a common cultural context, where information is often implicit, where metaphor and story-telling are important, and

where non-verbal and contextual cues are important. The latter emphasizes a more impersonal and compartmentalised information sharing, with explicit presentation of all relevant material. In high-context cultures, such as China and Brazil, it has been found that face-to-face and telephone conversations are preferred for knowledge sharing, whereas in low context cultures, epitomised by the USA and the UK, e-mail messaging, online forums and written materials in general are preferred (Ardichvili *et al.*, 2006). Zakaria *et al.* (2003) identify Saudi Arabia as a high-context culture, with the important corollary that, to be accepted and effective, ICTs should be used as a supplement to personal interaction, rather than as a replacement for it.

The rather inconclusive nature of the survey results may reflect mixed cultural preferences due to the high proportion of expatriate technical workers in Saudi Arabia. A more detailed study relating such preferences to the backgrounds of the participants could cast light on this. Or it may simply be that the preference for one or the other approaches is an individual preference; it is not always necessary to seek culturally-grounded explanations. At all events, these results confirm that the balance and integration of personal and digital approaches to KM advocated by authors such as Jashapara (2004) is still lacking.

Influences and motivations

The survey indicated that the main influences on, and motivators for, knowledge sharing were individual in-role behaviour (important to 94 per cent of respondents), a sense of individual self-worth (94 per cent), and organisational learning (90 per cent). In itself, this is a notable mix of individual and collective issues. Several studies, summarised by Nazari *et al.* (2009), have suggested that there may be a conflict in Middle Eastern culture between individuality and collectivity, creating a potential issue for knowledge sharing, and this may be reflected in these findings.

We will consider each of these in turn, drawing from the studies, mentioned above, of the influence Arab culture on KM and on use of ICTs, while noting that the significant proportion of expatriate technical workers in Saudi Arabia may ameliorate these effects.

In-role behaviour. Knowledge sharing may seem to be an inherently collective activity, yet this finding suggests a focus on the situation of an individual. This is not necessarily a contradiction. As Tsoukas (2005, p. 117) points out, many researchers have emphasized the link between knowledge and action in the KM context, and this fits with the importance given to the sharing of knowledge for the carrying out of a particular role. Indeed, Pollard (2008) gives a cogent argument for restructuring KM programmes entirely around individual roles, proposing a "personal knowledge management", which is primarily concerned with "enabling people to obtain relevant context-rich information […] so that they can be more effective doing their unique jobs" (Pollard, 2008, p. 97). The survey results here certainly validate this perspective, in a different cultural setting from the one in which it was derived.

Sense of self-worth. The enhancement of self-worth as a result of knowledge and information management programmes has been little discussed, although it is clearly related to motivations such as sense making and reduction of uncertainty and of anxiety (Case, 2012, pp. 85-87).

Some information behaviour studies have found that a feeling of being valued and supported in the work setting can be in itself a worthwhile outcome of information provision(see, e.g. Robinson and Bawden, 2007). In a KM context, Chait (2008) gives examples of where self-worth may be enhanced by a personal acknowledgement of the

sharing of their knowledge, and an assurance that its significance would be recognised so that it would be properly applied. He notes that the opposite may occur: self-worth may be enhanced by analysing issues and solving problems directly, rather than by using someone else's knowledge.

Numerous studies have shown that the reward systems common in the developed world are not effective motivators for participation in KM in the Middle East (Al-Busaidi and Lorne, 2005; Seba *et al.*, 2012b; Al-Adaileh and Al-Atawi, 2011). Al-Alawi *et al.* (2007) found a more complex response in their study of KM in Bahraini businesses; perceptions of what people perceived as worthwhile rewards for knowledge sharing differed greatly according to their background and experience. It may be that the sense of self-worth identified as important in this survey is an alternative form of reward. However, the examples cited above show that the same may be true in the developed world, and this may therefore be a rather general issue for KM in all cultures. This is in line with ideas of authors, such as Seba *et al.* (2012b), who suggest that the whole idea of "reward" in the KM context needs to be rethought.

Organisational learning. According to the classic exposition of Huber, organisational learning consists of four components: knowledge acquisition, information distribution, information interpretation, and the development of organisational memory (Huber, 1991; see also Jashapara, 2004). It has evident and clear links with KM (Jashapara, 2004; López *et al.*, 2004; Martin, 2008).

Nafei (2014) found a close link between KM and organisational learning in a study of the Saudi banking sector. Earlier studies in the region had not identified this factor, and Al-Hussain (2011) found that one of the major barriers to effective use of KM in Saudi Arabia was the lack of a culture supporting creative learning for knowledge generation. A strongly collaborative culture is essential for effective organisational learning (López *et al.*, 2004), and Middle Eastern culture has been characterised by relatively low levels of trust and openness, and relatively high levels of bureaucracy, leading to problems for organisational learning (Nazari *et al.*, 2009).

The strong recognition of this factor in the survey, together with Nafei's results, suggest that it may have become more recognised and important as Saudi experience with KM has grown, or that the culture may have been influenced by the expatriate community in Saudi Arabia.

We might note that although, by definition, organisational learning is a collective phenomenon, it is individual at root. Organisations can learn only through their individual members, and as Argyris and Schon (1978, p. 9) put it "There is something paradoxical here. Organizations are not merely collections of individuals, yet there are no organizations without such collections. Similarly, organizational learning is not merely individual learning, yet organizations learn only through the experience and actions of individuals. What then are we to make of organizational learning? What is an organization that it may learn?"

The close and subtle relation between individual and organisational learning has been analysed by authors including Kim (1993) and Friedman (2001). Studies have also shown that organisational learning is clearly related to individual attributes, particularly an adherence to a collective tradition (positively) and a strong sense of individual self-direction (negatively); (see, e.g. Cohen *et al.*, 2011).

This is a further indication of the complex relation between the individual/personal and the social/collective, which is a matter for debate not merely in KM, but in the study of information behaviour more generally (Bawden and Robinson, 2013).

Conclusions

Despite the limited nature of the survey, taken together with the literature analysis it casts light on a number of issues for KM, and for information behaviour generally. We may summarise these indicative findings as follows:

- demographic factors may not be as significant for KM, and for information behaviour generally, as is commonly assumed;
- culture is an important factor, both for KM and for information behaviour generally, but is not necessarily the over-riding factor;
- the right balance between, and integration of, human sources and digital sources for knowledge sharing has yet to be achieved;
- the importance of the link between KM and organisational learning appears to be growing stronger; and
- self-worth is an important, and under-valued, motivator for knowledge sharing, and perhaps more widely in information behavior.

Underlying all of these issue is the complex relation between the individual and personal, and the social and collective.

These findings are of value for the local context in Saudi Arabia in which the survey was conducted, and in similar developing countries. They point to the need for greater attention to appropriate information sharing processes for different managerial levels, for the anticipation of greater demands on digital resources, and for the better integration of human and digital sources.

The findings are also potentially of wider relevance, in other cultural settings. More research, along the lines mentioned at various points above, is needed to establish clearer understanding of the issues. It will advantageous if this can include more qualitative data collection, to give a richer picture of the issues in their context.

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