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The adoption of digital learning tools in academy-industry partnerships

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Abstract

The purpose of this study was to begin to build substantive theory about stakeholders' perceptions of the use of digital learning tools for academy-industry partnerships. The study aims to focus on the following central objectives:
• to gain a richer understanding of the adoption of digital learning tools within the context of academy-industry partnerships;
• to build theory in explaining how e-learning becomes embedded (or not) within the cultivation process of organizational wisdom

Keywords: Organizational wisdom; e-learning; academy-industry partnerships; social media.

1. Introduction

While much is written about the integration of e-learning into organizations, few have written about how that e-learning might be applied for wisdom cultivation within academy-industry partnerships. This might be problematic at a time when organisations are in need of more qualified and competent employees. This research study- as part of a 3 year long PhD study of the researcher- intends to further this conversation by probing more deeply into the implementation of e-learning in such a way that organisational wisdom may be cultivated.

2. Research Background

Among the few organization candidates, ITKIB/IMA- a Turkish semi-government organization funded by the European Union -, has been selected as the successful case candidate for two main reasons. First, in researcher's home country, it is a large organization based on a public and private partnership that places a high value on e-learning integration as part of their partnership with the IECO/University of Arts/ London College of Fashion. Second, as such models of partnerships involving the academy, government and industry play a crucial role for both a country's educational and economic development a focus on organizational wisdom becomes more important.

ITKIB/IMA, is a semi government organization that has pioneered vocational education in Istanbul, Turkey to meet the demands of a large scale manufacturing economy supplying production services for Europe and the rest of

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the world. It also manages 5 vocational schools for young people between 14 – 18 years old, with 50% of the final year of study in the work place. ITKIB/IMA- one of the Istanbul textile academy's partners- has been highly successful in maintaining a strong position for the Turkish textile industry being fourth in the world. It has achieved outstanding success in the areas of vocational education, continuous training for the sector and is now investing in driving internationalization into their organization and operations. ITKIB/IMA was also chosen as the beneficiaries of the EU Funded Project as they were seen as one of the most important instruments of change for internationalization, improving competitiveness and maintaining a strong employment position for Turkey. This public/private funded model provides the industry with the necessary skills force, subsidized training programmes, international trade events for Turkish fabric and products, and promotes new talent through competitions and initiatives.

According to this European Union (EU) Funded project, in order to improve the competitiveness of Small to Medium Sized Enterprises in Istanbul, Turkey, three clustering services were established, R&D Centre, a Textile Institute and Business Consultancy centre. IECO- International Education Consultancy Office located in London, UK provided three year consultancy to support the establishment of a new Textile Institute in the centre of Istanbul to offer high quality vocational qualifications. This clustering service together will be referred to as ITKIB/IMA throughout the study. ITKIB/IMA was chosen as the beneficiaries of the EU Funded Project as they were seem as one of the most important instrument of change for internationalization, improving competitiveness and maintaining a strong employment position for Turkey.

The uniqueness of the case rests on the fact that as part of the government and industrial partnership, ITKIB/IMA has placed a strong value on integrating e-learning as a strategy to cultivate organizational wisdom. Given the organizational structure of ITKIB/IMA it would potentially bring forth the debate over how organizational wisdom becomes embedded (or not) within such a structurally complex organization.

The present study also seeks to build a framework of organizational wisdom development that is grounded in a detailed, in–depth analysis of both research and professionals involved in the field of e-learning.

2.1. Research Questions

The study aims to focus on the following central objectives:
• to gain a richer understanding of the cultivation of organizational wisdom through the use of digital learning tools;
• to build theory for explaining how e-learning becomes embedded (or not) within the process of the development of organizational wisdom.

1. To what extent, if at all, does the drive toward improving the adoption of e-learning contribute to the cultivation of organizational wisdom?
2. What changes will be required to make the shift to using online learning systems to support organizational wisdom?
3. What are stakeholders' perspectives with regard to the integration of e-learning into organizations which aim to be transferred into wisdom organizations?

It should also be noted that the terms "e-learning" and "digital learning tools" will be used synonymously through this research study.

3. Organizational Wisdom

Organizations and its members should be seen as embodied in particular and correlated ways (Merleau-Ponty, 1962). Organizational wisdom does not refer to an all or nothing condition. Neither individuals nor organizations are completely wise or non-wise. Rather, wisdom can be realized based on single individuals' activities, and wise deeds may arise due to the characteristics of an organization's culture or processes (Merleau-Ponty, 1962).

Being one of the first researchers of organizational wisdom, Limas & Hansson (2004) conducted two research studies with the major aim of developing an instrument for studying wisdom in work organizations. Their investigation focused on how wisdom contributes to well-being in work organizations. Besides, the differences in

perceptions of organizational wisdom have also been investigated based on different age groups (Limas & Hansson, 2004). The focus of the other study has been "on those types of organizations which were likely to value wise persons of influence" (Limas & Hansson, 2004, p. 89). Their findings "suggest while studying wisdom might be relevant in diverse social and cultural contexts such as the workplace, demands of the environment may shape perceptions of the nature of wisdom" (pp. 100-101). This is not surprising given the embeddedness of wisdom within the situational factors and contextual interrelations. Another finding claims that "the nature of the organizational culture plays an important role in comparison to the nature or intensity of one's adaptive challenges with respect to the need for wisdom" (p. 102). Their second study asserted that "having wise persons of influence appears most important in cultures with a focus on team orientation." (Limas & Hansson, 2004). Yet, one might doubt whether every culture focusing on team orientation might value wise persons. Besides, a collective rather than a team orientation might make this finding more relevant, as especially in the Eastern countries, the focus is on the collective which corresponds to a greater number of people sharing a common aim rather than the team that exists of a few individuals.

De Meyer (2007) defines organizational wisdom as the cumulative and integrated knowledge that can enable an organization to make the necessary choices when facing a high level of uncertainty about the likely consequences of the decisions. Rowley & Gibbs (2008) agree with this definition and state that the practically wise organization is sustainable in dynamic, complex environments in which the interests of multiple stakeholders must also be accommodated. It embraces the uncertainty of its future through capturing knowledge and learning created by a deliberate engagement with its environment and becoming skilful at the engagement through experience, practice and judgment (Rowley & Gibbs, 2008). For this to be achieved, good decisions should not only be considered as just short-term goals, but ones that sustain the integrity of the organization based on the moral value of the organizational ethos (Rowley & Gibbs, 2008). Only then can become a learning organization a place where knowledge grows as wisdom rather than in the form of human capital (Rowley & Gibbs, 2008). Yet, for De Meyer (2007), in order for organizational wisdom to be realized, this Aristetolian notion of wisdom is not sufficient and the following areas of action need to be taken into account: creating credibility, stimulating diversity among learning unit, investing in communication and providing the appropriate tools (De Meyer, 2007). In order to create credibility, individuals should believe in each other and establish a consensual validation of the individual learning. Otherwise, the team's results or successes might not even be recognized (De Meyer, 2007). Stimulating diversity among learning units refers to the combination of different information held by every individual, department, group or organization (De Meyer, 2007). Investing in communication requires organizations to assign key people as a sort of international project ambassador representing his or her home unit and coming back after a period of time to the original organizational unit (De Meyer, 2007). Procedural mechanisms might also be required to enhance the communication requirements (De Meyer, 2007). In order to extend the international network of the organization, appropriate tools for communication might also be provided by deciding on who gets access to the knowledge and creating communities of users who share experience with each other (De Meyer, 2007). So, organizational wisdom is not limited to the organizational itself; rather it is dispersed over partners and collaborating units. To mobilize the organizational wisdom, these key pointers should be taken into consideration. Yet, De Meyer (2007) also asserts that one of the negative impact of organizational wisdom is that it might lead to rigidity and create blindfolds for mistakes. So, true organizational wisdom is not only making choices about actions to pursue, but also about 'knowing when to let go of conventional knowledge' (De Meyer, 2007, p. 360). Similarly, Levinthal (1997) claims that while in stable worlds the codification of past experiences might be viewed as wisdom, in changing environments the same phenomena might be termed as inertia.

According to Vaill (1998), Weick (1998), Beyer and Nino (1998), organizational wisdom is a sense-making response to emergent processes and to specific conditions and opportunities rather than being a transcendent attribute. Sense-making refers to sizing up a situation when one is faced with an imperative to act (Weick, 1998). Sense-making also creates the context for communicating with others and sets the frame for decision-making (Weick, 1998). Sense-making can be described as an improvisational way of learning that makes action more intelligent and adaptive (Weick, 1998). Similarly, Vaill (1998) claims that improvisation allows individuals to wade into situations with fallible knowledge by shifting fallibilities around. Improvisation has been defined by the Baltes and his colleagues - also referred as "reworking precomposed material in relation to unanticipated ideas conceived under the special conditions of performance" (Baltes & Smith, 1990, p. 30). Wisdom also entails a balance of asking questions and appreciating that all knowledge is fallible (Vaill, 1998). Organizations should also be seen as

communities where coordination of multiple meaning systems and voices becomes the primary concern (McNamee, 1998). Therefore, the focus should be on the communal processes through which certain realities are created (McNamee, 1998). Other similar communal processes include collaborative inquiry (Argyris & Schon, 1978), collaborative diagnosis (Cicourel, 1990) and confrontation and contest (Cicourel, 1990).

In Wilber's (2000) terms, wisdom emerges out of the embedded contextuality and the dynamic set of relations (Wilber, 2000). Similarly, Kuepers (2005) asserts that in alignment with this interpretation of wisdom, wisdom can also be viewed as a network of meanings and communcal interchange (Kuepers, 2005). Due to a comprehensive framework required to investigate interrelated processes involved, any single perspective might be limited (Kuepers, 2005). To avoid reductionist fallacies in thinking, a holistic view of wisdom is required to understand its complex process (Kuepers, 2005).

Furthermore, Rooney & McKenna (2003) also refer to Giddens's (1984) theory of human agency in which structure and agency are intricately related in a "recursive way" (p.32). Although agents may decide things intentionally, the social fabric in which they exist is reproduced in an unintentional way (Rooney & McKenna, 2003). So, based on Gidden's structuration theory, the individuality of agents' intention, knowledge, and rational action should also be accommodated when discussing organizational wisdom (Rooney & McKenna, 2003). Besides, organizational knowledge can be theorised as flows, relations, and patterns contextualized in particular complex systems that are articulated through discourse (Rooney & McKenna, 2003). These discourses themselves operate within a wider context of macro-discourses (Rooney & McKenna, 2003). They may often be ideologically based, and form part of a larger set of discourses that produce isomorphic effects (Rooney & McKenna, 2003). In order to step outside these ideological and isomorphic strictures organizational leaders should filter and interpret the enormous amount of knowledge present in organizational discourse (Rooney & McKenna, 2003).

4. Methodology

An exploratory case study design has been selected for this research. The essence of case study theory lies in an empirical inquiry that "investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 1994, p.13).

Prior to conducting the focus groups, extensive meetings with the key executives of ITKIB/IMA are arranged to fine-tune the process of data collection, by identifying targeted informant groups, study locations and potential open-ended questions to be asked. In total, five focus groups, comprising 25 informants (7 from the e-learning committee, 9 from ITKIB/IMA management level and 9 from non-management level) are organized within three months (see Table 1). Each focus group lasts approximately one and a half to two hours, depending on the degree of participation and the amount of information elaborated upon.

Table 1. List of Participants

Focus Groups	Participants/Informants
Group 1	6 informants: Head of E-learning (IECO), Manager (IECO), IT Manager (ITKIB/IMA), Head of Library and Learning Resources (ITKIB/IMA), Marketing Manager (ITKIB/IMA), Head of International Relations (ITKIB/IMA)
Group 2	6 informants: Director (ITKIB/IMA), Head of Short Courses and Industrial Liaison (ITKIB/IMA), Short-course Administrator (ITKIB/IMA), Short-course Coordinator (ITKIB/IMA), Library Assistant (ITKIB/IMA), Course Leader (ITKIB/IMA)
Group 3	5 informants: General Manager (ITKIB/IMA), General Manager (Destek), International Relations Manager (ITKIB/IMA), Manager (IECO), Academic Administrator (ITKIB/IMA)
Group 4	5 informants: Head of E-learning (IECO), Manager (IECO), Manager for Ministry of National Education (ITKIB/IMA), 2 Course Leaders (ITKIB/IMA)
Group 5	4 informants: 1 academic staff (ITKIB/IMA), Library Assistant (ITKIB/IMA), Account Manager (ITKIB/IMA), Account Leader (ITKIB/IMA), Head of Marketing and Communication (ITKIB/IMA)

Preliminary results from focus groups help the researcher assemble a skeleton of organizational wisdom concepts and practices in ITKIB/IMA. Questionnaires used in this research are considered an instrument to illustrate additional data in support of qualitative analysis (Patton, 2002).

Semi-structured interviews are also used to gain communicative validation (Robson, 2002), and to follow some divergent themes emerging from interviews (Mason, 2002).

5. Preliminary Findings

As the research project is still ongoing some initial findings have been summarized below. The interview data show that a key concern for organisational staff revolves around the extent to which they are able to develop their individual competency of online collaboration within ITKIB/IMA.

ITKIB/IMA staff who started using the use of the digital learning tools also began to see how this could facilitate other areas of their work.

> "Some of them are very keen to find out how it does work, because […] they're realising that it's becoming an increasingly important part of work life, they're going to more conferences now where there are PowerPoint presentations using digital [resources], and they see it working better and better as the technology gets better. And I think they want to be involved in it themselves. If they're having particular [resources] made for something that they might not ever use to project in a classroom again, they can digitise them and use them for that." (Interview: IT Manager (ITKIB/IMA) (Turkey))

Surprisingly, one of their critical views is centred on the rigid bureaucratic system - a symptom of the industrial culture. Although, in practice, it seems not to support an environment for knowledge exchange, it underlines the importance of structural issues in the development of human capital initiatives.

Some comments are:

> "A disconnection between the management academic staff seems to be a stumbling block of becoming a wisdom organization through the lens of academic staff members…The bureaucratic system hinders effectiveness of the online collaboration and communication…and probably the way to become a wisdom organization. Bureaucracy at ITKIB/IMA may prevent us from developing knowledge and abilities, which is necessary to promote individual's creativity…Because it is the key to wisdom within the organisation." (Interview: Manager for Ministry of National Education (ITKIB/IMA) (Turkey))
> "…I've heard the term [organisational wisdom] around a bit during the meeting. They sound sophisticated but it would be better if I have more details about them." (Interview: Academic Administrator (ITKIB/IMA) (Turkey))

Moreover, the General Manager of ITKIB/IMA claims at interview that the management concludes that the notion of e-learning should be much focused and given high priority on the agenda. The General Manager of ITKIB/IMA corroborates this by stating:

> "…The integration of e-learning into ITKIB/IMA seems to be a long-term strategy but it's important for us to realize and realize the e-learning strategy to support knowledge-sharing all the way through." (Focus Group)

Furthermore, the specialist knowledge held by IECO participants is not limited to technical aspects of the e-learning services. It also reflects an understanding of specific partnership arrangements and organisational requirements.

> "I guess it's in terms of the academic knowledge, you know, specific [resources], just knowledge of what's what, especially in terms of cataloguing of online resources on the wiki. There's more – in terms of the basic cataloguing of [resources] it's fairly simple [...]. But in terms of the more complex corners of the collection,

the things that don't really fit, then it's where we come in and make our own decisions." (Interview: Manager of International Educational Consultancy (IECO) (UK))

It is also important to recognise that the expertise of some staff involved in ITKIB/IMA E-Learning Committee is not static. As noted in the previous section, as relationships with academics develop, new demands are placed upon the service. In response to this, new areas of expertise have to be developed on an ongoing basis.

"We are exploring new areas all the time – new software and what we do. […] [A colleague has] just produced a website with live streaming video. We've never done that before. And now we know how to do that. I'm just about to venture out onto the 3D software, design a building and walk through it. I've not done that before, not using this software. […] So as projects go along we find we need to do something or to make the project work so we then try and gain the skills and we do that because we're very practical, we get round the problems." (Interview: Head of Library and Learning Resources (ITKIB/IMA) (Turkey))

6. Conclusion

While this research study has not been completed yet it contributes to the existing body of knowledge in the following ways:

• *First,* the research study will highlight the processes that develop between organizational wisdom and the introduction and implementation of e-learning within an organization.
• *Second,* the adoption of an exploratory, qualitative approach enables the researcher to contribute to the small but growing body of empirical work in the field. By focusing on in-depth reports this study aims at developing a more empirically grounded understanding of wisdom cultivation in an organization through the use of digital learning tools.
• *Third,* the proposed study will illuminate whether the development of organizational wisdom, is determined solely by the activity of a particular stakeholder, or is the outcome of an iterative interaction between many levels of employees.

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