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PROFESSIONAL COMPETENCY FOR IT OUTSOURCING: THAI BANKING EXPERIENCE

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Abstract:
The main purpose of this research is to develop a scale for IT professional competency evaluation, which is considered crucial for outsourcing. The study compares the competencies of IT consultants and IT staff in Thailand's banking sector. The participants were IT professionals with significant experience of IT outsourcing projects at seven leading banks in Thailand. Statistical techniques used to analyse the survey data included exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). The results identified a number of differences between the competencies of IT consultants and IT staff. Among the four dimensions of IT consultant competency, the most important was coaching and customer focus skills, followed by knowledge sharing attitude, project management skills and technical lead business knowledge. IT staff competency comprised three dimensions. The most important of these was project management skills, followed by results-oriented attitude and practical business knowledge.

Keywords: IT professional competency, IT staff competency, IT consultant competency, IT outsourcing, Thai banking

1. INTRODUCTION

As Thailand is in a period of transformation from a creative to a digital economy, the country's business sector—and especially banking—has sought to increase its competitiveness. Banks in Thailand have introduced digital technology to respond to customer needs and increase product value. As a consequence, the use of IT outsourcing is considered an interesting option as a means of reducing costs and addressing concerns about IT development expertise (Benkel, Martorelli, & Grannan 2011).

The impact of technology in banking has grown continuously, as evidenced by the 10% rate of increase in outsourcing (Software Industry Promotion Agency, 2014). However, successful management of IT outsourcing requires that banks employ effective IT professionals, including both IT consultants and their own IT team. As the IT consultant plays a crucial role in ensuring that development work will meet customers' business requirements, business competency is an essential requirement, including organization-specific knowledge and interpersonal and management skills (Bassellier & Benbasat, 2004). In addition, cooperative competency and trust are considered important in supporting knowledge transfer between the consultant and the organization's customers (Park, Im, & Kim, 2011; Chen, Hsiao, & Chu 2014). In any such project, the transfer capability of the knowledge owner and the absorptive capacity of learners are considered equally important for successful knowledge transfer (Wanga et al., 2007).

The use of outsourcing in IT development can create several challenges for IT staff. Most of these problems relate to the transfer of knowledge between bank staff and the outsourcing company, leading to ineffective work systems. Many previous studies stated that the knowledge transfer between these two groups of people is the most important factor affecting the success of IT outsourcing projects (Bassellier and Benbasat, 2004; Park, Im & Kim 2011; Chen, Hsiao & Chu 2014). However, the works that compare the crucial competencies of these two groups of professionals are not clear enough. Both IT consultants and bank IT teams are IT professionals, and they need to work collaboratively in support of the bank's competitive strategy.

2. THEORETICAL SYNTHESIS

2.1. IT Professional Competency

The concept of competency was first introduced in 1953 by McClelland, an American psychologist at Harvard University, who noted the importance of personality (McClelland, 1970) in this fundamental characteristic of human logic and effective work. Competency can be linked to three elements of work standard: knowledge, skills and attitudes (Spencer & Spencer, 1993). Knowledge refers to information personally collected within a person (Spencer & Spencer, 1993; Pavel & Maxim, 2014) and includes fundamental knowledge and expert knowledge. The former is knowledge about one's own work or organization, and the latter is the technical knowledge used within that work or organization (Harvard University, 2012). In the present context, knowledge means knowledge of the business process. Skills, which are demonstrated in work that involves physical and thinking knowledge (Spencer & Spencer, 1993), need ongoing training to achieve the required level of expertise (Chouhan & Srivastava, 2014). In an organizational context, attitude refers to the views, values, and beliefs of a person in respect of what he or she can do to contribute to effective work performance. Taken together, these elements of competency can be used to drive the organization's strategies (Chouhan & SIPA., 2014; Pavel and Maxim, 2014). A successful IT outsourcing project requires several competencies, such as planning (Testa & Sipe, 2012); communication and negotiation (Harvard University, 2012; Azevedo et al., 2012; Kim, Shin, & Kwonow, 2013); customer focus (Lokshin, Belderbos & Carree, 2008); and coaching and training (Testa and Sipe, 2012; Pavel and Maxim, 2014).

2.2. Knowledge Transfer Processes

The process of knowledge transfer encompasses the stages, mechanics and movements required for the communication and sharing of information. The integration of knowledge possessed by an organization's stakeholders leads to increased knowledge sharing (Blumenberg, Wagner, & Beimborn, 2009; Ayşe, 2015). In this process, the characteristics of sender and receiver are

considered important. To ensure successful transfer, both need to be willing to receive and share the knowledge in question. As well as the relationship between sender and receiver, type of knowledge is also important. For the purposes of knowledge transfer, knowledge is classified into two types: explicit and tacit (Distanont et al., 2012; Nonaka, 1994; Polanyi, 1962; Li. et al., 2013; Moskaliuk, Bokhorst, & Cress, 2016). Blumenberg, Wagner, and Daniel (2009) noted that knowledge transfer and knowledge sharing affect work performance and organizational effectiveness. More specifically, Nelson (1996) and Ayşe, (2015) reported that knowledge sharing influences the effectiveness of IT.

2.3. Outsourcing performance

Many organizations outsource IT projects, using consultants to ensure that the project can be implemented as planned. However, it is often the case that coordination between the IT consultant and the organization is less effective than expected, negatively affecting process and product performance, which characterizes poor outsourcing performance (Jun, Qiuzhen, & Qingguo, 2011). In particular, outsourcing performance can be evaluated in terms of effectiveness of follow-up and quality of the developed system, as there is often conflict between these two elements (Wallace, Keil, & Rai, 2004; Kenyon, Meixell, & Westfall, 2016). This reflects the views of Nelson (1996) and Liang et al. (2016), who argued that the effectiveness of IT outsourcing should be assessed in terms of product management and development process activities as well as services provided to customers after the system has been implemented. In this sense, the performance of the outsourcing team can be measured in terms of the team's work quality—that is, whether it can respond to the organization's requirements, ensuring coordination with the organization to achieve strategic goals.

2.4. Competency of IT Consultant and IT Staff

The study shows that IT consultant competency and IT staff competency is consisted of knowledge, skills, and attitudes (Picture 1).

Picture 1: Proposed models of IT consultant competency and IT staff competency

3. METHODOLOGY

The main focus of this study is the development of a scale for evaluating the competency of IT professionals, which is considered crucial for the success of outsourcing projects. The study compares the competencies of IT consultants and IT staff in Thailand's banking sector. This exploratory research includes a literature review and an empirical study to address questions arising from variables in the research model. A questionnaire was developed following the review of the relevant literature, and expert interviews were conducted to validate the content of the questionnaire. The sample included IT professionals (N = 700) with significant experience of IT outsourcing projects at seven leading banks in Thailand, selected by purposive sampling and parameter estimation by maximum likelihood (Lindeman, Merenda, & Gold, 1980). The statistical techniques used to analyse the survey data included exploratory factor analysis (EFA) and confirmatory factor analysis (CFA).

4. RESULTS AND DISCUSSION

4.1. Results

IT consultant competency

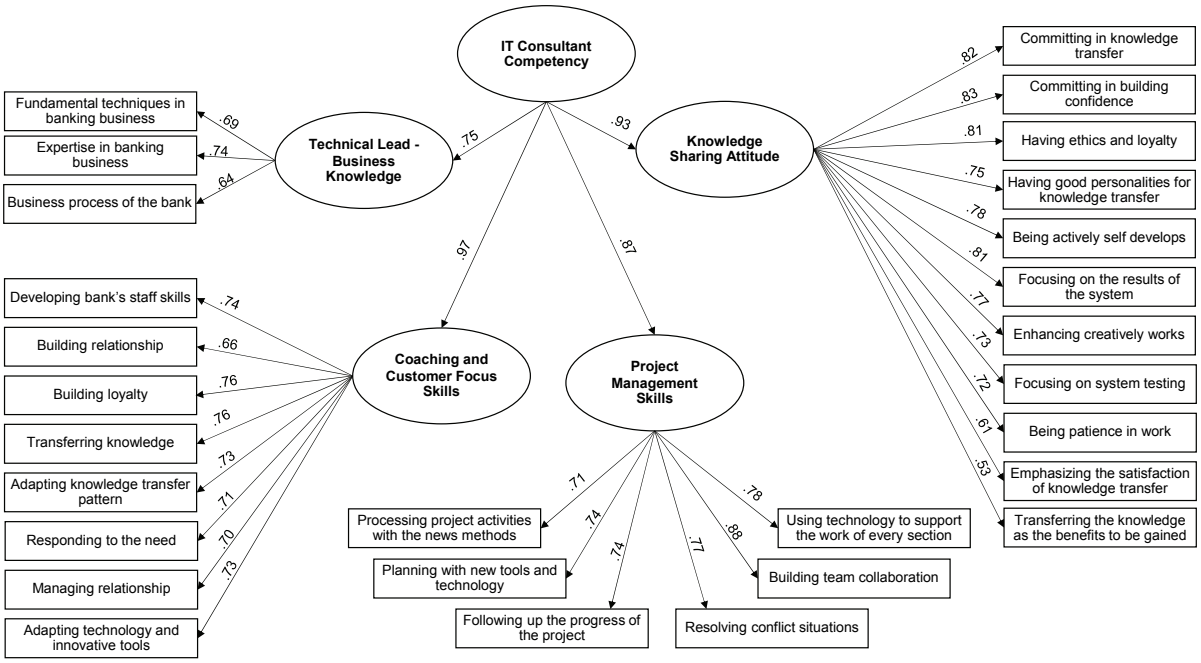
Confirmatory factor analysis (CFA) was used to corroborate findings determined through exploratory factor analysis (EFA), examining measurement models for scales relating to both IT consultant

competency and IT staff competency. Following EFA, CFA was conducted on the remaining 28 items to examine the construct validity of the IT consultant competency construct and sub-dimensions. To begin, CFA was conducted for each sub-dimension respectively. Then, all sub-dimensions were simultaneously examined for a more holistic picture of the construct of IT consultant competency.

Picture 2 shows the confirmatory model for IT consultant competency. The goodness-of-fit measure indicates degree of fit between model and data. In terms of CMIN/df, the goodness-of-fit (1.983) was less than 3, and both GFI and AGFI were higher than 0.9, indicating a fit between the model and the sample data. In addition, the RMSEA was less than 0.05. As such, the results in Figure 2 confirm the construct validity of IT consultant competency.

In the opinion of IT professionals at seven leading banks, the IT consultant's most important competency is coaching and customer focus skills (parameter estimate = 0.97), followed by knowledge sharing attitude (parameter estimate = 0.93), project management skills (parameter estimate = 0.87), and technical lead business knowledge (parameter estimate = 0.75).

Picture 2: Confirmatory factor analysis of IT consultant competency



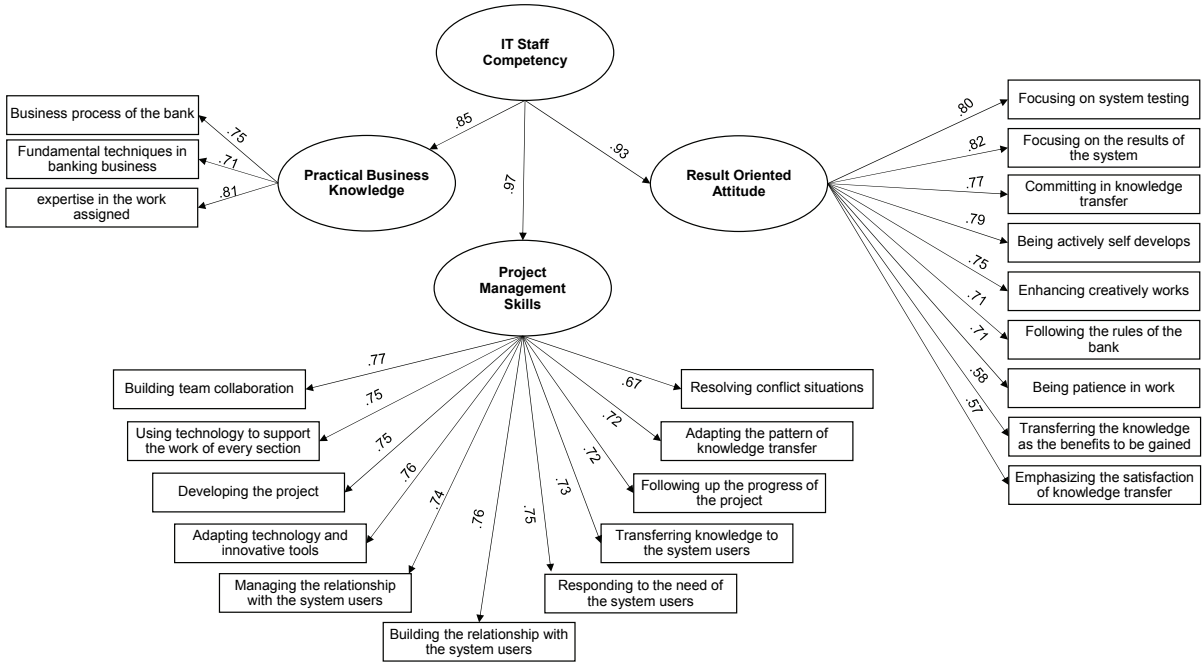
CMIN/df = 1.983 p = .000 GFI = .933 AGFI = .912 RMSEA = .041

IT staff competency

Following EFA, 23 items remained for CFA. Picture 3 shows the confirmatory model for IT staff competency. The goodness-of-fit measure indicates degree of fit between model and data. In terms of CMIN/df, the goodness-of-fit (1.825) was less than 3, and both GFI and AGFI were higher than 0.9, indicating a fit between the model and the sample data. In addition, the RMSEA was less than 0.05. As shown in Figure 3, these results confirm the construct validity of IT staff competency.

In the opinion of IT professionals at seven leading banks, the most important IT staff competency is project management skills (parameter estimate = 0.97), followed by results-oriented attitude (parameter estimate = 0.93) and practical business knowledge (parameter estimate = 0.85).

Picture 3: Confirmatory factor analysis of IT Staff competency



CMIN/df = 1.825 p = .000 GFI = .961 AGFI = .958 RMSEA = .032

4.2. Discussions

Scale development for the evaluation of IT professional competency is considered crucial for the success of outsourcing projects. From a managerial perspective, top-level management in the banking sector can utilize IT professional competency both to develop the IT team and to arrange IT outsourcing contracts. In setting up an outsourcing project, bank executives should select staff with project management skills, and especially those skilled in building team collaboration, building a relationship with system users, adapting technology and using innovative tools. As IT staff must work with both IT consultants and system users, executives should focus in particular on the IT consultant's coaching and customer focus skills, including knowledge transfer, building loyalty, and developing the skills of bank personnel.

5. CONCLUSION AND RECOMENDATIONS

These findings confirm that IT consultants and IT staff differ in their competencies. The consultant's competency comprises four dimensions, of which the most important is coaching and customer focus skills, followed by knowledge sharing attitude, project management skills and technical lead business knowledge. The most important of the three dimensions of IT staff competency is project management skills, followed by results-oriented attitude and practical business knowledge.

This research compared the competency constructs of IT consultant and IT staff in the context of Thailand's banking sector. Future research should expand the scope of investigation to examine whether and to what extent the competencies of IT consultants and staff affect IT outsourcing performance.

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