Antecedents of Local Personnel Absorptive Capacity in Joint Project Engineering Teams in Nigeria

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ABSTRACT

This study investigates the significance of individual differences on the local personnel capability to acquire knowledge from joint project engineering teams. The model proposes individual’s prior experience, learning orientation and perception of partner’s support as antecedents of local personnel absorptive capacity. The hypothesized model was validated through the outcome of the structural equation modelling conducted on a cross sectional survey of 248 local personnel of joint project engineering teams in the Nigerian upstream oil industry. All the hypothesized relationships were supported, with the exception of that between learning orientation and ability to assimilate knowledge. Accordingly, the theoretical and practical implications of the findings were explained, with suggestions offered on the direction for future research.

KEYWORDS

Individual Absorptive Capacity, Individual Differences, Joint Project Team, Knowledge Acquisition, Partner Support

INTRODUCTION

Despite the abundance of natural resources, most emerging economies depend on multinational corporations from developed economies in driving their extractive industries as well as gaining access to the international market. Such dependence is prominent in the Nigerian oil industry (Oyejide and Adewuyi, 2011). Unlike the Nigerian firms, the foreign companies have the resources, technologies, capabilities, expertise and managerial know-how and are better positioned to attract the high end knowledge intensive upstream projects. In an attempt to reverse this trend, the Nigerian Government has taken initiatives targeted at enhancing local participation and capacity building. For example, the local content act of 2010 mandates all companies in the oil industry to allocate additional funds to training local employees and ensure that at least 70% of the total upstream projects are handled in-country by local firms or their international joint ventures (IJVs). Specifically, through IJVs the local firms can access the external knowledge embedded in the foreign partners, however, several factors could limit the acquisition of this knowledge. These include the nature of the knowledge, partner, interaction and coordination (Meier, 2011; Nielsen & Nielsen, 2009; Simonin, 2004; Dyer & Singh, 1998).

Studies have demonstrated the significance of absorptive capacity (ACAP) in the acquisition of external knowledge (Lane et al., 2001; Park, 2011), yet the underlying differences at the individual level have been overlooked (Ojo and Raman, 2016). Based on cognitive and behavioral theories, ACAP can be expressed as the firm’s capability, which enables future learning by building on
individual’s prior acquired knowledge (Cohen & Levinthal 1990). The firm’s capability evolves with the engagement of the individual members in R&D and other productive activities. These activities expose the individuals to new concepts and knowledge, which could be institutionalized into the firm, thereby expanding the knowledge bases (Cohen & Levinthal, 1990). However, extant studies have overlooked the underlying role of individuals, but ACAP has repeatedly been associated with the organizational and dyadic antecedents (Lane et al., 2006; Ojo et al., 2016). Consequently, firm’s heterogeneity has been isolated from differences at the individual level, thereby dissociating organizational level outcome from the underlying choice and actions of the members (Volberda et al., 2010; Felin et al., 2012).

Recent studies have acknowledged the individual antecedents of ACAP, including prior experience (Lane et al., 2006; Minbaeva et al., 2003; Zhao and Anand, 2009), cognition (Zahra and George, 2002), and task motivation (Silva and Davis, 2011; Ojo and Raman, 2015). However, limited empirical clarification have been offered (Ojo and Raman, 2016). Specifically, the effects of individual differences on the associated dimensions of ACAP have been overlooked. This is because the data have mostly originated from single respondent and proxy measures have been used to infer individual differences. Following the dynamic capability perspective, clear delineation of the individual characteristics and interaction pertinent to learning capabilities could offer clarification on the micro-level origin of ACAP (Teece, 2012; Ojo et al., 2016). Therefore, further to the extant emphasis on organizational mechanisms, individual differences is another important building block to organizational change (Ojo and Raman, 2016; Tortoriello, 2015).

Given the above, the present study investigates the underlying differences and the implication of the context of engagement on individual’s ACAP. The context is the asymmetrical joint project teams, set up to facilitate the transfer of knowledge from expatriate to local employees in the Nigerian upstream oil industry. In line with recent conceptualization on micro-antecedents, we argued that the local team members of the joint project teams must demonstrate the right aptitude and disposition, in order to acquire the foreign knowledge. The next section presents the theoretical background for our propositions, after which the research method is explained. This encompasses sub-sections on the sample and procedure, measurements, as well as analysis and results. Furthermore, we discuss the theoretical and practical implications of our findings. Thereafter the concluding section considers the limitations of the present study and offers relevant suggestions for future research.

THEORETICAL BACKGROUND AND HYPOTHESES

In addition to the organization members experience and intensity of effort, Cohen and Levinthal (1990) suggested other factors like the interaction and communication among the actors, as significant antecedents of ACAP. Building on the dynamic capability view, Zahra and George (2002) delineates ACAP into potential and realized components, ensuing through individuals and their interactions. Following Cohen and Levinthal (1990) assertion of conceptual affinity, Lane et al. (2006) conceptualized ACAP as the learning capabilities associated with the exploration, transformation and exploitation of new knowledge. Although, they identified the firm members’ characteristics and the context of their engagements as underlying drivers of ACAP, however limited empirical clarification have been advanced. Relatedly, Volberda et al. (2010) suggest future studies to situate the role of individuals in ACAP within the context of their engagement.

At the individual level ACAP can be described as the capacity to learn, i.e., acquisition of knowledge (van den Bosch et al., 2003). Basically, an organization learns through the members, who acquire knowledge by interacting and sharing experience with others (Antonio, 2010; Crossan et al.,
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