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# **Understanding Retention of IT Professionals in Vendor Organizations:** A Job Embeddedness Model

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# Abstract

A major challenge facing the IT outsourcing industry is the high rate of turnover among IT professionals. Skilled and talented IT professionals are assets to organizations. When they leave, loses in the forms of human, knowledge, and social capital can be so substantial that it affects the operations of both vendors and their clients. Therefore, an important agenda for vendors is to understand the factors that will attract employees to stay with their current organizations so that effective retention programs can be formulated to keep the best IT employees productively engaged for a long-term. This paper adapts the Job Embeddedness Model to present a framework that identifies factors binding IT professionals to their current organizations. The framework captures the working environment of IT professionals in the IT outsourcing industry - where not only are they part of vendor organizations, but they are also highly enmeshed with client organizations.

**Keywords** Job retention, job embeddedness model, turnover of IT professionals, IT outsourcing

# 1. Introduction

Employees are assets to organizations [2]. They are the backbone that support the operations and running of an organization [6, 16] and bring revenue into the organization. Compared to the industrial age, the role of talented and skilled employees becomes even more prominent in customer-centric, knowledge-based In one emerging yet dominant industry - the IT outsourcing industry - having capable and knowledgeable employees is critical. This is because the IT outsourcing industry is built on a model that depends heavily on IT professionals to provide services, attract clients, and sell business profiles. For example, in comparing the potential of China and India as the destination for offshore outsourcing, Ou and Brocklehurst [17] stress that the lack of qualified labor is one reason why China lags behind India in the competition.

Due to the value of IT professionals to vendor organizations, the retention of these employees becomes one of the most critical issues for top management [8]. The challenge, however, is that turnover of IT professionals continues to be a chronic problem [1]. In the Indian IT services sector for example, the turnover rates have been reported to be as high as 80% [7] while its call centers reported a turnover rate of 100% [13, 14]. When IT professionals leave, vendors suffer substantial loses in the forms of human, knowledge, and social capital. Such loss may cause a decrease in customer service, delays clients' projects, and increases costs [8, 9]. If the IT professional who leaves is the point of communication in a project, it may create coordination and communication problems among the remaining team members [8]. In the worst case, the business of vendors as well as that of clients may be brought to a halt.

New recruitment is possible but it is expensive. According to a Forrester estimate, the cost of hiring a replacement ranges from 25-100% of the worker's annual salary [18]. Furthermore, it may take a lengthy time before new IT professionals are trained, gain experience, and become socially integrated into the operating systems of their employers before they are able to make substantial contributions [8]. Therefore, to avoid potentially negative long-term impact on business performance, it is imperative for vendors to understand the factors that tie IT professionals to their organizations so that effective program can be formulated to retain these employees.

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This paper presents a framework that identifies factors binding IT professionals to their current organizations. The framework is based on the Job Embeddedness Model introduced by Mitchell and his colleagues [e.g., 8, 15]. The framework takes into consideration the working environment of IT professionals in the IT outsourcing industry where not only are they part of vendor organizations (i.e., their employers), but they are also highly enmeshed with client organizations. Such an environment introduces additional challenges along the dimensions of temporal, cultural, organizational, geographical, functional, and business and technological knowledge [3] that may eventually affect the decision of whether to stay with or to leave current organization.

# 2. Theoretical Framework

The Job Embeddedness Model (JEM) of turnover [8, 15, 19] explains circumstances and factors that attract employees to continue staying with an organization. It posits that employees are reluctant to quit because they are enmeshed in a network of people and activities surrounding them. The relationships with the people and activities in the network act as a force to bind employees to their existing jobs and organizations. This force is called "job embeddedness".

Job embeddedness is consists of three elements - fit, links, and sacrifice. Fit is one's compatibility or comfort with the environments he/she is in. Links refers to the level of connection between a person and other people, activities, and institutions. Sacrifice is what the person would give up if he/she leaves. An employee who has a better fit with his/her job and communities, has strong links with people or activities in his/her organization and communities, and has to make greater sacrifices by leaving the current job is said to be fully enmeshed or embedded in the network. As a result, there is a higher likelihood that the employee will continue staying with his/her current job.

A notable aspect that differentiates JEM from other turnover theories such as organizational commitment and job satisfaction is that it emphasizes not only job-related factors, but also community related issues that may affect individuals' decision of staying with an organization [5]. The former is termed on-the-job embeddedness while the later is called off-the-job-embeddedness.

On-the-job embeddedness focuses on an employee relationship with the network of people and activities from work (i.e., work and organizational related factors).

Off-the-job

embeddedness refers the employee's relationship with the network of people and activities from his/her community (i.e., non-work related factors).

Using the three elements of fit, links, and sacrifice. and the two dimensions of organization and community. Mitchell and his colleagues propose a 2x3 matrices of organization-fit, organization-link, organization-sacrifice, community-fit, communitylink, and community-sacrifice. The existing six matrices, however, are not sufficient to capture all the factors that may bind an IT professional in the IT outsourcing setting to continue staying with his/her employer. The reason is IT outsourcing creates an environment where IT professionals are fully embedded both in their employer's organization (i.e., vendor organization) and in client organizations. This is evident especially in the case where IT professionals are stationed permanently in client organizations. When such is the case, IT professionals essentially work in the same environment as the clients they service. Therefore, issues and factors in client organizations as well as their relationships with client employees may contribute to IT professionals' decision of whether to continue staying with the same employer or to leave existing job.

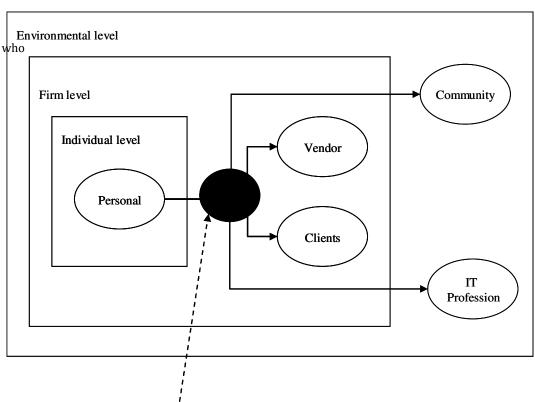
Since the "client" element is important in the IT outsourcing setting, there is the need to weave in this factor into JEM. The existing "on-the-job embeddedness" dimension of JEM has an assumption that an employee only functions within one organizational environment (i.e., that of the employer that hires them). Therefore, we break the "on-the-job embeddedness" into two components: vendor organizations (i.e., the employer that hires the IT professionals and client organizations (i.e., the external clients these IT professionals service).

Figure 1 shows the proposed research framework while Table 1 provides definitions of the constructs. Following Joseph et al [11], we emphasize the important of contextual level [4] and classify the factors to be included in our model into three levels - environmental, firm, and individual. Such classifications give a more holistic view into factors that may affect IT professionals' decisions to continue staying with their current organizations [4, 11]. At the environmental level, we have factors related to the community as suggested by JEM. Besides that, we also include factors related to IT profession such as the general technological trends and the IT labor market. Previous research suggests that these factors are influencers in IT professionals' decision of whether to stay with or to leave an organization [10, 11]. For example, if the technological trends pace too fast for IT professionals to catch up, they may feel that the profession no longer fits them. This may bring about the thought of changing jobs. Similarly, if the general IT market has an abundance of IT professionals, they may be reluctant to leave because of potential difficulties in getting a new job. At the firm level, two organizational contexts may affect the decision of IT professionals – that of the employer and that of their clients.

Even though JEM focuses on individuals' perception of their relationships with their jobs and the communities they are with, it does not distinctively singling out personal individual factors. Previous research, however, has argued for the value of incorporating individual-level factors [11] into a very personal decision like one of staying with existing organizations or leaving and changing jobs. We agree with existing research and incorporate individuallevel factors in our model. One individual-level factor that we are particularly interested in is that of personal goals related to one's career and life. Personal goals may have influence on IT professionals' decision to continue working with the current organization or to seek better opportunities in other places.

work in the IT outsourcing setting, managers in vendor organizations need to explore the different dimensional factors related to individual employees, vendor organizations, organizations, the community, and the IT profession in general. More importantly, they need to understand the interplay among these different dimensions. The form of the interplay and its associated effect are called the point of embeddedness. Such point of embeddedness is shown as a black dot in Figure 1 to signify that it is a black box that varies from one individual to another. Therefore, to effectively manage and retain IT professionals, vendors can no longer fall back on their existing standardized retention packages Instead, they should tailor each retention program to individual employees.

To understand the decision of IT professionals



Point of embeddedness signifying the interplay among the dimensions

Figure 1: A job embeddedness framework for IT professionals who work in vendor organizations

### 3. Future Work and Potential Contribution

This paper presents the research framework that will guide our empirical work in the area. We are currently in the data collection stage where interviews are being conducted with IT professionals who work in vendor organizations in the IT outsourcing industry. Since the decision to stay or leave a job is a sensitive subject, we are careful in approaching potential participants and in convincing them to participate in the study. We believe that the personal interview method used in this study helps us to establish trust as we are able to clearly communicate our research purpose and ensure confidentiality.

has several research potential contributions. First, it provides a holistic view of why IT professionals choose to stay with their current organizations by focusing on issues at individual, firm, and environmental level. Such an understanding will form the foundation needed for the formulation of effective retention programs to keep best IT professionals. Second, it addresses the gap in existing IT turnover studies. Even though there are nearly 50 studies on turnover of IT professionals [11], research that focuses specifically on the context of IT outsourcing industry is scant. The framework developed in this research is designed to specifically target IT professionals in the IT outsourcing industry. Third, most IT turnover studies adopt March and Simon's [12] Theory of Organizational Equilibrium. This research answers calls for more research using different and more contemporary perspectives.

Table 1: Definitions of each dimensional factor in Job Embeddedness Model<sup>1</sup>

_	Table 1: Definitions of each dimensional factor in Job Embeddedness Model <sup>1</sup>						
	Embedded						
	Elements						
		Fit	Link	Sacrifice			
Embe							
Dime	nsions						
	Definition of	"an employee's perceived	"formal or informal	"the perceived cost of			
	the elements	compatibility or comfort with	connections between a	material or psychological			
		an organization and with his	person and institutions	benefits that may be			
		or her environment" (Mitchell,	or other people"	forfeited by leaving a job"			
		2001, p. 1104)	(Mitchell, 2001, p. 1104)	(Mitchell, 2001, p. 1105)			
	Personal	The extent to which a vendor	The extent to which an	The extent to which an			
=		employee feels working with	employee feels working	employee feels he/she			
na _		the organization is	with the organization	will suffer only minimal			
Individual level		compatible with his/her	creates a strong link with	loses with respect to			
diy le		personal goal.	his/her personal goal.	his/her personal goal if			
ln	personal goal.		may ner personar goan	he/she leaves the			
				organization.			
	Vendor	The extent to which a vendor	The extent to which an	The extent to which an			
	organization	employee feels he/she is	employee feels he/she	employee feels he/she			
	organization	compatible and comfortable	has established strong	will suffer only minimal			
		with the working	relationships and	with respect to his/her			
		environment and culture of	connections with his/her	employer if he/she leaves			
		his/her own organization.	colleagues.	the organization.			
	Client	The extent to which a vendor	The extent to which a	The extent to which a			
_	organization	employee feels he/she is	vendor employee feels	vendor employee feels			
ve	organization	compatible and comfortable	he/she has established	he/she will incur only			
Firm level		with the working	strong relationships and	minimal loses with			
Į.		environment and culture of	connections with client	related to the client			
ΕĒ		client organization(s). In the	employees. In cases	he/she services if he/she			
		case where the vendor	where a vendor	leaves the organization			
		employee is stationed in the	employee services a few	leaves the organization			
		client organization, this refers	clients, this refers to the				
		to the level of compatibility	strength of the				
			relationships with all				
	and connection with the environment in the client		clients.				
		organization.	cheffes.				
	Community	The extent to which a person	The extent to which a	The extent to which an			
	Community	feels he or she is compatible	person feels he/she has	employee feels he/she			
		and comfortable with the	established strong	will suffer only minimal			
		community and the	relationships and	loses with respect to			
		surrounding environment	connections with the	his/her community if			
7		where he/she lives.	community where he/she	he/she leaves the			
yve		where he she had s	lives.	organization. This factor			
t le			117 651	is more prominent in the			
en	eu			case of relocation to			
Ē				another city or country.			
Environment le	IT profession The extent to which a person		The extent to which an	The extent to which an			
vir	11 profession	feels he or she is compatible	employee feels he/she	employee feels he/she			
En	and comfortable with his/her		has established strong	will suffer only minimal			
_	chosen professional. This		standings and	loses with respect to			
	may refer to the general IT		professionalism in	his/her professional			
	labor market and the		his/her profession.	standing and status if			
		changing technological	/ nor protostom	he/she leaves the			
		trends.		organization.			
	1			015011120010111			

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<sup>&</sup>lt;sup>1</sup> The definitions presented in this table are based on the work of Mitchell et al (2001) and Holtom et al (2006).

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