

## **Examining the Mediating Effect of Employee Engagement on the Relationship between Talent Management Practices and Employee Retention in the Information and Technology (IT) Organizations in Malaysia**

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### **Abstract**

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As Information and Technology (IT) industry is vital to the country's economic growth, it is important to ensure the smoothness in its operations so that long term growth and development can be achieved with fewer obstacles. Hence, a constant availability of a large pool of talented and experienced people is crucial to carry out these functions. However, employee turnover issue is a critical phenomenon within IT industry globally and locally. To curb this issue, academic attentions have diverted the focus upon the implementation of talent management practices on both employee engagement and employee retention. This study seeks to determine the relationships between talent management practices (managerial support, employee career development and rewards and recognitions), employee engagement and employee retention within IT organizations in Malaysia. A quantitative study was deployed. The research instrument involved comprised of a self-administered questionnaire. A convenience sampling technique was used for this research. A total of 581 respondents responded valid questionnaires and it gives an average response rate of 77 % for the study. Data gathered were initially analysed using SPSS version 20.0. The findings of based on Pearson correlation analysis indicate talent management practices (managerial support, employee career development and rewards and recognitions) have positive correlation with employee engagement. It was also found that employee engagement has positive correlation with employee retention. The results of hierarchical regression analysis on determining the mediating effect of a mediator (employee engagement) indicate employee engagement mediated the relationship between talent management practice (employee career development and rewards and recognition) and employee retention individually.

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**Keywords:** Talent Management Practices, Employee Engagement, Employee Retention, IT organizations, Turnover

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## I. Introduction

It is reported that the transformative use of Information, Communication and Technology (ICT) sector has been recognized as the main driver to accelerate the achievement of Malaysia's 2020 aspirations (Economic Planning Unit, 2010, 2012). The ICT sector is targeted as one of the vital areas for engendering the Malaysia's economic growth and becomes a very important industry due to its role in stimulating expansion for other industries in Malaysia (Prime Minister Department, 2012). The ICT sector in Malaysia accounted for 9.8% of GDP in 2009 and it is targeted to increase to 10.2% by 2015 (Economic Planning Unit, 2010). In conjunction to this, the government has recognized the human capital development in this sector represents a critical component to the Malaysia's economic growth. In order to achieve the goal is through enhancing the human capital capabilities and addressing their needs. Thus, one of the initiatives to develop this type of human capital is by strengthening the talent management practices in entire organizations in Malaysia (Bux et al., 2009; Bux & Othman, 2010; Syed Abd Nasir et al., 2012). This shown that the government clearly acknowledges the retention of employees in Information and Technology (IT) sector is crucial and critical to attain economic growth. Hence, both Malaysia's public and private organizations in ICT sector must devise strategic initiatives of talent management practices not only to attract employee talents but also to enhance commitment in engaging and retaining them.

Although the nature of this relationship is interesting, there is no study has analysed the relationships between the three (3) constructs of talent management practices, employee engagement and employee retention in Asian's setting and particularly in the Malaysia's IT industry. Hence, new chapter unfolds whereby engagement and retention of employee talents becomes critical to the organization and economic. Therefore, scholars and researchers believe the needs to focus on talent management practices influence to employee engagement and, employee engagement influence to employee retention of human capital is crucial. After extent review of the workplace talent research literatures, the author sets out to design a testable hypothesized model linking between talent management practices, employee engagement and employee retention.

This paper seeks to address the gap in knowledge field by determining the relationship between talent management practices (managerial support, employee career development and rewards and recognitions), employee engagement and employee retention in the selected IT organizations in Selangor.

## **II. Turnover Issue**

IT industries globally have been characterized by a high rate of employee turnover (Tham et al., 2008; Westlund & Hannon, 2008) and this critical phenomenon has emerged since 1990s (Acton & Golden, 2002; Naggiar, 2001). As a matter of facts, Malaysia's IT organizations are also facing the same issue in retaining their employees. This is reported from surveys conducted by the Malaysian Employers Federation (MEF) (2012) and Ministry of Human Resource (MoHR) (2013), the data reveal ICT sector facing the highest employee turnover rate in Malaysia (Goh, 2012; Ministry of Human Resource, 2013). In addition, according to the data obtained from the Retrenchment Unit, Department of Labour (JTK), Malaysia, on employee turnover rate within ICT organizations across main states in Malaysia, it reveals Selangor is facing the highest voluntary turnover rate in 2010 and 2011 with 50 and 18 cases were reported. Manifestly, it can be seen, IT industries globally and locally are facing this critical phenomenon of high employee turnover. Hence, this become a threat to the industry and economic growth.

## **III. Employee Retention**

Employee retention is an important dimension in strategic human resource management (HRM) to sustain a competitive advantage for companies, particularly in IT industries in today's global market (Mohlala et al., 2012; Tseng, 2010). Studies on the benefits of retaining employees in IT companies have significantly indicated that IT companies can gain a higher operating performance, higher returns on assets and higher returns on capital employed (Kumar, 2012). In contrast, the loss of employees is expensive and may thus be detrimental to IT companies (Lockwood & Ansari, 1999; Tham et al., 2008). Further, the effect of losing employees has significantly impacted on the performance of IT companies, loss of knowledge, experience, and know-how of companies and thus results in loss of profits (Tseng, 2010). Therefore, IT companies must understand the serious impacts of the loss of their employees and find a way to retain them. This is the focus of this study.

#### **IV. Employee Engagement**

Employee engagement has become a very important dimension in HRM functions. Employee engagement is becoming an issue of concern for organizations since and during the 1990's and early 2000's (Kahn, 1990; Rothbard, 2001). It is shown that, employee's commitment exist before and they decide to stay in the organization. It means, improves employee engagement will therefore improve employee retention (Mustafa et al., 2011; Wegner, 2011). Further, it is found that employee engagement is related to outcomes of individual's attitudes, behaviours and intentions (Saks, 2006; Ram and Prabhakar, 2011). To date, academic attention has been diverted the focus upon "antecedent and consequences of employee engagement" (Clifford, 2010; Saks, 2006). Nevertheless, research deals with antecedents of employee engagement have been converted to the implementation of talent management practices on employee engagement and hence on employee retention (Bhatnagar, 2007; Hughes & Rog, 2008). Currently, a number of researches have emerged to curbed the issue of employee turnover by performing the talent management practices that could significantly contribute to employee engagement and therefore employee retention.

#### **V. Relationship between Talent Management Practice and Employee Engagement**

Talent management practices that demonstrate commitment to manage the human resources result in more engaged employees and lower turnover rate (Corporate Leadership Council, 2004). In contributing to the effective implementation, an organization's talent management should also contribute to employee engagement (Piansoongnern et al., 2011). Organizations that can fully engage their employees through effective talent management practice will clearly have a competitive advantage (Yapp, 2009). Effective employee engagement fosters an environment of stimulation, such as satisfactory provide development and learning, support, rewards and recognitions in their talent management program (Glen, 2006; Lockwood, 2007). Improved outcomes in winning the employee talents' heart will only come to those organizations that learn to master talent management practices (Sweem, 2009). Therefore, organizations need to rethink their approaches to talent management and how it affects employee engagement (Grossman, 2007). A. Talent Management Practice (Managerial Support) and Employee Engagement

The role of a manager is a key component to engage employee. Supports from them enable employee commitment to the job and the organization. Managers also are an important key in practicing effective talent management in engaging and retaining employees (Ellehuus, 2012). Further, managers need to create the environment where employees feel more passionate about their work and exhibit the behaviors that organizations need to drive better results, not only for the organizations, but also for employees as individuals (Piansoongnern et al., 2011). Hence, managerial support is a very important predictor of talent management strategy in engaging employee talent. However, Tymon Jr. et al. (2010, p. 111) state "a large empirical study in a developing country is lacking". Further, managerial support for employees also plays an important role in organizational effectiveness (Riccio, 2010). Therefore, it is hypothesized that,

Hypothesis 1 (H1): There is significant relationship between talent management practice (managerial support) and employee engagement.

#### B. Talent Management Practice (Employee Career Development) and Employee Engagement

Learning is no longer solely associated with education and is no longer viewed as a pre-career affair. There has been a shift from job security and lifelong employment to lifelong learning, employability, and talent management (Nilsson & Ellström, 2012). Moreover, Riccio (2010) outlines his professional experience which illustrates his passion for employee career development and for institutions to incorporate a holistic talent management initiative for individuals at all level of the organization. This is to ensure the bright opportunities for employees to further grow in future times. Further, the main purposes of employers nowadays in implementing employee career development programs are not only to support the employees in developing career but also use the initiatives to engage and retain their potential employees (Mustafa Kamil et al., 2011). Therefore, it is hypothesized that, Hypothesis 2 (H2): There is significant relationship between talent management practice (employee career development) and employee engagement. C. Talent Management Practice (Rewards and Recognitions) and Employee Engagement.

Maslach et al. (2001) concept of engagement has also suggested that while a lack of rewards and recognitions can lead to burnout, hence, appropriate rewards and recognition is important for engaging employees (Maslach et al., 2001). These include satisfactory talent management practice of compensation, company benefits, and company location (Tymon Jr., et al., 2010). Talent management practice of extrinsic rewards also called as hygiene factors, tend to result in an increase in intrinsic motivation when they were expected and linked to a set of standards. Research has shown recognitions to be associated with a number of desirable work outcomes. These include engagement to the job: work competence and work progress or performance (Liden et al., 2000). Tymon Jr. et al. (2010) found intrinsic rewards (recognitions) have indirect effect to employee engagement. Therefore, it is hypothesized that, Hypothesis 3 (H3): There is significant relationship between talent management practice (rewards and recognitions) and employee engagement.

## **VI. Relationship between Employee Engagement and Employee Retention**

Employee engagement is related to individual's attitudes, intentions, and behaviors (Ram & Prabhakar, 2011). Employee engagement has a substantial impact on organizational outcomes, employee productivity, and ease of recruitment and employee retention (Bhatnagar, 2007). Lockwood (2007) states "In a global survey of the engagement levels of 50,000 employees in 27 countries, research by the Corporate Leadership Council emphasizes the link of engagement to business success and its direct impact on employee performance and retention" (p. 9). Further, the Tower Perrin Global Workforce Study (2007-2008, p. 6) also concludes the same thing that "It is certainly true that the more engaged employees are also more likely to stay with an organization". However, research that investigates the degree to which employee engagement in their work might influence retention is sparse (Tymon Jr. et al., 2010). Therefore, it is hypothesized that, Hypothesis 4 (H4): There is significant relationship between employee engagement and employee retention.

## **VII. The Mediating Effects of Employee Engagement**

According to Baron & Kenny (1986) and Preacher & Hayes (2004), there are 3 prior conditions must be met to establish mediation. Condition 1, the independent variable (talent management practices) is directly related to dependent variable (employee retention). Condition 2, the independent variable (talent management practices) is directly related to mediating variable (employee engagement).

Condition 3, the mediating variable (employee engagement) is directly related to dependent variable (employee retention). A significant relationship between the independent variable (talent management practices) and dependent variable (employee retention) will be reduced (partial mediation) or no longer be significant (full mediation) when controlling for the mediator (employee engagement) (Baron & Kenny, 1986; Preacher & Hayes, 2004).

Previous studies have indicated that there are significant relationship between antecedents of employee engagement and employee engagement (Saks, 2006; Clifford, 2010), and significant relationship between employee engagement and consequences of employee engagement (Schaufeli & Bakker, 2004). Further, employee engagement has been researched and found as a mediating variable in previous studies (Ram & Prabhakar, 2011; Saks, 2006). However, few empirical studies on employee engagement as a mediator on the relationship between talent management practices and employee retention makes it particularly valuable to extend the body of evidence in this field (Bhatnagar, 2007; Mustafa Kamil et al., 2011).

Thus, this study seeks to analyze whether employee engagement mediates the relationship between talent management practices (managerial support, employee career development and rewards and recognitions) and employee retention. Therefore, it is hypothesized that,

Hypothesis 5 (H5): Employee engagement mediates the relationship between talent management practices (managerial support) and employee retention.

Hypothesis 6 (H6): Employee engagement mediates the relationship between talent management practices (employee career development) and employee retention.

Hypothesis 7 (H7): Employee engagement mediates the relationship between talent management practices (rewards and recognitions) and employee retention.

## **VIII. Methodology**

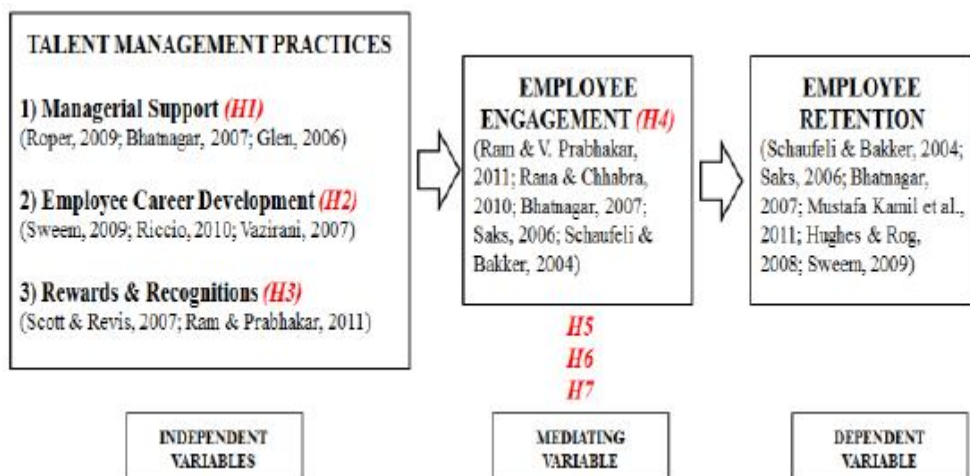
### **A. Research Design**

A research design embodies the design and plans employed in gathering, analyzing and interpreting data. It comprehends the basic structure of the study. This is a quantitative study.

It incorporates a scientific research inquiry designed to study the relationship between the independent, mediating and dependent variables. The research instruments comprise of self-administered questionnaires (primary source). A set of questionnaire using Likert type scale (1-5) were administered to respondents by the researcher. The Cronbach alpha values at the pre-test and actual test are above 0.8. It is found that the cronbach's alpha value for this study is reliable where it is above 0.8. Data collected were analyzed using SPSS software (version 20.0).

## B. Research Framework

The variables of this study are talent management practices: managerial support, employee career development and rewards and recognitions (independent variables), employee engagement (mediating variable) and employee retention (dependent variable). These are depicted in the research framework in Figure 1:



**Fig. 1: Research Framework**

## C. Sampling

The sample of target population was drawn from executives and above who work in IT companies in Selangor. This study conveniently selected three (3) IT companies in Selangor and there were 840 employees from a convenience sampling. The unit of analysis of the study were executives and above level from various departments of the selected IT companies.



## D. Data Analysis

In order to test the relationship between variables, Pearson correlation analysis is performed to determine the associations between variables and test the hypotheses. Finally, in order to test for a mediation model, Hierarchical regression analyses were conducted to analyse the significant indirect effect of a mediator.

## IX. Results

A. The Relationship between Talent Management Practices (Managerial Support, Employee Career Development and Rewards and Recognitions) and Employee Engagement

In this section, the nature and strength of correlation between each independent variable and mediating variable were analyzed. There are three (3) hypotheses pertaining to the correlation between independent variables and mediating variable, H1, H2, and H3.

**Table I. Pearson Product Moment Correlation Table between Talent Management Practices and Employee Engagement**

		Correlations			
		Managerial support	Employee career development	Rewards & recognitions	Employee engagement
Managerial support	Pearson Correlation	1	.648**	.541**	.445**
Employee career development	Pearson Correlation	.648**	1	.683**	.544**
Rewards & recognitions	Pearson Correlation	.541**	.683**	1	.658**
Employee engagement	Pearson Correlation	.445**	.544**	.658**	1

\*\* . Correlation is significant at the 0.01 level (1-tailed).

According to TABLE I, talent management practices (managerial support, employee career development and rewards and recognitions) have positive and significant correlation with employee engagement. Therefore, H1, H2 and H3 were supported. There are significant relationships between talent management practices (managerial support, employee career development and rewards and recognitions) and employee engagement.

#### B. The Relationship between Employee Engagement and Employee Retention

Table II: Pearson Product Moment Correlation Table between Employee Engagement and Employee Retention

<b>Correlations</b>			
		Employee engagement	Employee retention
Employee engagement	Pearson Correlation	1	.691**
Employee retention	Pearson Correlation	.691**	1
** . Correlation is significant at the 0.01 level (1-tailed).			

The result in TABLE II shows a positive and significant relationship between employee engagement and employee retention. Therefore, H4 was also supported.

There is significant relationship between employee engagement and employee retention.

#### C. The Mediating Effects of Employee Engagement on the Relationship between Talent Management Practices and Employee Retention

1) A significant direct effect of the predictor variables to the outcome variable (path a) There are three (3) prior conditions of direct effect that must be fulfilled before conducting further mediation analyses. There are; (1) X significantly predicts Y (path a), (2) X significantly predicts M (path b), and, (3) M significantly predicts Y (path c).

**Table III: Multiple Regression Results between Talent Management Practices and Employee Retention**

Model	Coefficients <sup>a</sup>				t	Sig.	
	Unstandardized Coefficients		Standardized Coefficients	Beta			
	B	Std. Error					
(Constant)	.758	.550			1.377	.169	
1	Managerial support	.092	.034	.097		2.723	.007
	Employee career development	.360	.044	.337		8.237	.000
	Rewards and recognitions	.387	.034	.428		11.533	.000

a. Predictors: (Constant), Rewards and Recognitions, Managerial Support, Employee Career Development

b. Dependent Variable: Employee Retention

As presented in TABLE III, talent management practice: managerial support does not make a significant contribution towards employee retention.

While, talent management practice (employee career development and rewards and recognitions) show significant contribution toward employee retention. As a result, this shows the significant direct effect between X (talent management practices: employee career development and rewards and recognitions) to Y (employee retention) (path a) were significant. Thus, these predictor variables are allowed for further mediation analyses.

2) A significant direct effect of the predictor variables to the mediator variable (path b)

**Table IV: Multiple Regression Results between Talent Management Practices and Employee Engagement**

Coefficients <sup>a</sup>						
1	Model	Unstandard	Standardized B	T Std. Error	Sig. Beta	
	(Constant)	9.166	1.116		8.216	.000
	Employee career development	.263	.089	.141	2.970	.003
	Rewards an	.833	.068	525	12.238	.000
a. Predictors: (Constant), Rewards and Recognitions, Managerial Support, Employee Career Development						
b. Dependent Variable: Employee Engagement						

Individually, the results in TABLE IV revealed that talent management practice (employee career development and rewards and recognitions) show significant contribution toward employee engagement. As a result, direct effect between X (talent management practices: employee career development and rewards and recognitions) to M (employee engagement) (path b) were significant. Hence, these independent variables can be further analyzed for mediation analysis.

### 3) A significant direct effect of the mediator to the outcome variable (path c)

As presented in TABLE V, the result confirm that employee engagement has significant contribution towards employee retention. Hence, this also confirms that further mediation analyses could be conducted.

Further, the findings for step 1, 2 and 3 (path a, b and c) confirm the direct effect between talent management practices (employee career development and rewards and recognitions) – employee engagement - employee retention were significantly found.

**Table V. Multiple Regression Results between Employee Engagement and Employee Retention**

		Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.259	.543		6.006	.000
	Employee engagement	.394	.017	.691	23.020	.000

a. Predictors: (Constant), Employee Engagement

b. Dependent Variable: Employee Retention

As mentioned above, should any one of the above condition not be fulfilled, then there exists no mediator and the variable is therefore is not a mediator variable (Baron & Kenny, 1986; Preacher & Hayes, 2004). In conjunction of this, it is found that there is no significant direct effect of talent management practice: managerial support toward employee retention and employee engagement. Therefore, employee engagement is not a mediator variable between predictor variable (talent management practice: managerial support) and outcome variable (employee retention). Therefore, H5 of the study was not supported.

There are only two (2) predictor variables talent management practices: employee career development and rewards and recognitions were preceded to step 4 of mediation analysis; (4) the indirect effect of M (employee engagement) between X (talent management practices: employee career development and rewards and recognitions) to Y (employee retention) (path c').

Further analyses by Preacher and Hayes (2004) were performed to determine the significant indirect effect of employee engagement on the relationship between talent management practices: employee career development and rewards and recognitions and employee retention. Regression-based approaches using bootstrapping by Andrew Hayes matrix were explained further.

#### 4) Estimating indirect effect of employee engagement using SPSS procedures (path c')

In analyzing the significant indirect effect of a mediator, X (talent management practices: employee career development and rewards and recognitions) affects Y (employee retention) indirectly through M (employee engagement) (path c'), Preacher & Hayes (2004) have provided and estimated indirect effects in simple mediation models, they provide SPSS macros that facilitate estimation of the indirect effect with a normal theory approach and a bootstrap approach to obtaining confidence intervals (see also Mackinnon et al., 2007). Below are the analyses of mediator that were analyzed. The results were analyzed and explained individually below.

According to Preacher & Hayes (2004), in order to ensure the significant indirect effect of mediator variable, the significant value must be above zero or positive value ( $> 0$  / + value). Further, to ensure the significant of indirect effect of mediator, the bootstrap upper and lower value, must also be above zero or positive value ( $> 0$  / + value). In other words, the population value of indirect effect of mediator variable must lie somewhere at above zero value or positive value ( $> 0$  / + value).

The output from regression-based approaches using bootstrapping by Andrew Hayes matrix found that, the significant indirect effect of employee engagement on the relationship of talent management practice (employee career development) and employee retention was significant at 0.2598. Further, the population value of indirect effect is also significant where it lies somewhere at between 0.2 and 0.3. It was also found that, the significant indirect effect of employee engagement on the relationship of talent management practice (rewards and recognitions) and employee retention was significant at 0.2349. The population value of indirect effect is also significant where it lies somewhere at between 0.2 and 0.3. It can be concluded that there is an indirect effect of mediator variable of employee engagement on the relationship between talent management practice (employee career development and rewards and recognitions) and employee retention.

Therefore, H6 and H7 was also supported. Employee engagement is mediated the relationship between talent management practice (rewards and recognitions) and employee retention.

## **X. Discussion and Conclusion**

The findings provide new insight to the field of study of talent management, employee engagement and employee retention. Previous researches placed emphasis on predictors and outcomes of employee engagement (Glen, 2006; Oehley & Theron, 2010; Scott & Revis, 2008). Talent management practices, employee engagement and employee retention constructs were a neglected area of study. Studies about employee engagement were more focused on effecting turnover intention, turnover rate and intention to quit as consequences of employee engagement (Saks, 2006; Bhatnagar, 2007; Schaufeli & Bakker, 2004). The need to identify and investigate employee engagement influence to employee retention is still sparse (Bhatnagar, 2007; Kumudha & Senthilkumar, 2012; Tymon Jr. et al., 2010), and the need to study on the three (3) main constructs: talent management practices (as independent variables), employee engagement (as mediating variable) and employee retention (as dependent variable) was also remained unexplored, thus these posing a gap in knowledge in this field. Generally, the findings of the study also explained, when employees being provided with satisfactory talent management practices (managerial support, employee career development and rewards and recognitions), they will be more engaged with the job and organization, and therefore, they tend to remain in the same organization for a long run.

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