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THE EFFECT OF INTRAPRENEURIAL COMPETENCIES ON INNOVATIVE  
WORK BEHAVIOR AND THE MODERATING ROLE OF HUMAN RESOURCE  
DEVELOPMENT: A CASE STUDY AT UTeM

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Report submitted in fulfilment of the requirements for the Bachelor Degree of  
Technopreneurship

Faculty of Technology Management and Technopreneurship  
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## DECLARATION

“I declare that this project is the result of my own research except as cited in the references. The research project has not been for any degree and is not concurrently submitted in candidature of any other degree.”

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## **DEDICATION**

First, I would like to dedicate the appreciation to my family who supported me from spiritually and financially to encourage me in study and complete my final year project. In addition to, beloved supervisor and panel who guided me throughout the research, and friends that assisted me through the journey of research.

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## ABSTRACT

In today's world, there is increasing attention to innovation, which is a way to respond to the worldwide competition and pressures from the environment. Employees play a crucial role in the innovation process as they are the basis of all ideas. Therefore, innovative work behaviour is of interest when organizations aim on innovation, as is the case for public sector. Due to the fact that decrease in organization innovation capacity, researcher wanted to get more insight in the innovation process. Moreover, since innovation is a strategic pillar, it was anyway of interest to get a better understanding of innovation and the role of employees and human resource development in this context. As a result, this study is to investigate intrapreneurial competencies that foster innovative work behaviour of employees and the way in which human resource development practices are related to intrapreneurial competencies and innovative work behaviour. The research was completed by using quantitative method and there were 60 questionnaires from public officers in UTeM. The analysis method used was regression analysis for hypothesis testing in this research and the results showed that there have significant relationships between intrapreneurial competencies, human resource development and innovative work behavior. It is believed that this research paper will beneficial to the industry practitioners and academicians for future reference.

**Keywords:** Intrapreneurial competencies, human resource development, innovative work behaviour, UTeM

## **ABSTRAK**

*Dalam dunia hari ini, terdapat peningkatan perhatian kepada inovasi, yang merupakan cara untuk bertindak balas kepada pertandingan di seluruh dunia dan tekanan dari persekitaran. Pekerja memainkan peranan penting dalam proses inovasi kerana mereka adalah asas kepada semua idea. Oleh itu, tingkah laku kerja inovatif adalah menarik apabila organisasi bertujuan untuk inovasi, seperti yang berlaku bagi sektor awam. Disebabkan oleh kenyataan bahawa pengurangan dalam kapasiti organisasi inovasi, penyelidik mahu mendapatkan yang lebih ke dalam proses inovasi. Lebih-lebih lagi, kerana inovasi adalah tunggak strategik, ia juga menarik untuk mendapatkan pemahaman yang lebih baik inovasi dan peranan pekerja dan pembangunan sumber manusia dalam konteks ini. Hasilnya, kajian ini adalah untuk menyiasat kompetensi usaha sama yang memupuk tingkah laku kerja inovatif pekerja dan cara di mana amalan pembangunan sumber manusia yang berkaitan dengan kompetensi usaha sama dan tingkah laku kerja inovatif. Kajian ini telah disiapkan dengan menggunakan kaedah kuantitatif dan terdapat 60 soal selidik daripada pegawai pentadbiran di Universiti Teknikal Malaysia Melaka (UTeM). Kaedah analisis yang digunakan ialah analisis regresi untuk ujian hipotesis dalam kajian ini dan keputusan menunjukkan bahawa ada mempunyai hubungan yang signifikan antara kompetensi usaha sama, pembangunan sumber manusia, dan tingkah laku kerja inovatif. Adalah dipercayai bahawa kajian ini kertas akan memberi manfaat kepada pengamal industri dan ahli akademik untuk rujukan masa depan.*

**Kata kunci:** *Kompetensi usaha sama, pembangunan sumber manusia, tingkah laku kerja yang inovatif, UTeM*

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**LIST OF ABBREVIATIONS**

IC	=	Intrapreneurial Competencies
IWB	=	Innovative Work Behaviour
HRD	=	Human Resource Development
MARS	=	Motivation, Ability, Role, Situational
SPSS	=	Statistical Package for Social Science
UTeM	=	Technical University of Malaysia Melaka



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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Introduction**

This chapter provides the introduction of this research project, which consist of several sections. The first section will share the background and view of the research project. Problem statement, research questions, research objectives, scope, limitations, significance of this study as well as conceptual and operational definition can be obtained on the following sections.

#### **1.2 Background of Study**

Innovation is being emphasised for Malaysians to respond to the worldwide competition and pressures form the environment (Hilmi, Pawanchik, Mustapha, & Mahmud, 2012). Malaysians have been urged to be innovative and creative in conjunction with Challenge Six of Vision 2020 which refers to the formation of innovation as a means to move forward (Khar Kheng, June, & Mahmood, 2013). Individual innovative behaviour contributes to high performance organization (Carmeli, Meitar, & Weisberg, 2006; Shih & Susanto, 2011). As a result, innovation has been identified as the crucial factor driving Malaysia into becoming an advanced and high income nation.

Annual Report of the Human Resources Development Fund (HRDF) (2011) reported that only 28% of the total workers in Malaysia are skilled workers. Therefore, the need to retrain and upgrade the skills of the workforce has been one of the main agenda of the country. The government aims to achieve up to 50% of workers being skilled workers in 2020. This is the main agenda of the country and has always being given attention in every Malaysia Plan. Supporting this views, Reio & Ghosh (2009) has argued that skilled human capital development is crucial for Malaysian to contribute towards innovation. The importance of skills was also stressed by Leiponen (2005) to influence innovation process in firms and the innovation success could bring profit to the firms.

However, scholars studying the process of individual innovation within the public sector found that innovative work behaviour is restrained by more obstacles in the public sector compared to the private sector (Borins, 2001; Damanpour, F., & Schneider, 2009; Fernandez & Moldogaziev, 2012; Rainey, 2009). In general, one of those barriers is the public sectors lack competitive pressures with reference to private sectors (Verhoest, Verschuere, & Bouckaert, 2007). This is because high general fear of public sector failure, strict central agency controls induced to minimize corruption consequently public processes run smoothly.

According to Walsh & Lee (2015), bureaucratized, formalized and hierarchical organized systems, characterized by several formal mechanisms, a high adoption of rules and regulations and the usage of budget-based control systems created due to the lack of internal and external pressures for innovation and improvement. Thus, public sector unable to adapt to their dynamic environments and to deliver their services efficiently and effectively. Hence, these barriers to innovation may cause severe problems for the future performance and survival of public organizations especially in a world in which continuous improvement and innovation is becoming more and more important (Decramer, Smolders, & Vanderstraeten, 2013; Grimmelikhuijsen & Knies, 2015).

People play an important role by developing, carrying, reacting to and modifying ideas (A. H. Van De Ven, 1986) regarding the innovative performance of organizations since ideas are the basis of innovation. It is then can be served as the

foundation for new and enhanced products, services and work processes (J. P. J. De Jong & Hartog, 2007). Therefore, people are an organization's key assets. The workforce of public sector is of hence, prominence in achieving innovation. Besides, diverse scholars stress that employees' creative act is significant in the organizational innovation process, consequently for attaining competitive advantage (Devanna & Tichy, 1990; Dunegan, Tierney, & Duchon, 1992; Shalley, 1995). Thus, this study focuses on the individual level of innovation and highlights the role of human resource development in moderating the relationship between intrapreneurial competencies and innovative work behaviour of employees.

Innovative work behaviour is becoming a facet that requires continuous consideration (J. de Jong & den Hartog, 2010; Janssen, 2000; Scott & Bruce, 1994) in contrary to prior approaches of work behaviours where employees were not really encouraged to contribute in an innovative manner (George & Brief, 1992). In addition, employees must retain certain competences corresponding with organizational goals (J. C. Hayton & Kelley, 2006). Wright, McMahan, & McWilliams (1994) in their study argued that competences are necessary in order to reveal selective behaviours.

Intrapreneurial competencies are deeply rooted in a person's background that can be acquired at work or through human resource management (Keating & Olivares, 2007). Successively, awareness regarding intrapreneurial competencies that stimulate innovative work behaviour of employees is valuable for public sector especially. Furthermore, human resource management plays role since employees' behaviour that have a vital influence on innovation. This is due to an increasing stream of collected works of human resource influence on employee attitudes and behaviours that prove human resource practices as innovation forecasters (Huselid, 1995; Laursen & Foss, 2003; Shipton, West, Dawson, Birdi, & Patterson, 2006; Wright et al., 1994). Human resource development as a major human resource management function train and develop human capital has a reputation for valuing employees, consequently increase the quantity and quality of candidates (Uddin, Naher, Bulbul, Ahmad, 2016).

In a nutshell, in overcoming the challenges that take place in the contemporary rapidly evolving environment, innovation is a fundamental solution. Employees highly influence the innovation performance of organizations due to their intimate relation in

the innovation process. With regard to that, human resource department is responsible in the creation of a personnel with innovative competencies. Human resource development become of interest for the purpose of encouraging employees to actually show innovative work behaviour. Thus, for public sector, it is valuable to get more insight in the intrapreneurial competencies that encourage innovative work behaviour and the moderating role of human resource development take place in this relationship.

### **1.3 Problem Statement**

According to Ikeda et al (2016), an organization provides advanced clear focus on innovation. Innovation is seen as a critical business processes, driving energy that is competitive and as an important cultural. There are many studies that show the importance of innovation in organizations like (Gumushoghu & Ilsev, 2009; Luoma-Aho et al., 2012; Sarros et al., 2006; Soltani et al., 2011). However, studies that focus on innovation at the individual level is still given less attention. The lack of studies on innovation at the individual level will be the initial focus in this study (Vargo & Lusch, 2004). Thus, the innovative work behaviour was introduced in this study. Amabile (1995), Anderson et al. (2004) and George (2007) states that innovation at the individual level is the foundation of innovation success at the enterprise level. In addition, Odoardi (2015) stated that the pro-innovation strategy of the organization should stimulate employees towards professionalism in the workplace.

McShane & Von Glinow (2015) has proposed a MARS Model (Motivation, Ability, Role, Situational) as a conceptual framework model for understanding the factors that drive the behaviour of individuals and how someone makes a decision. This model proved to be relevant when the study has found that the employee's performance is influenced by internal and external factors such as motivation, ability and environment (McShane & Von Glinow, 2015). In order to maintain or improve work performance, four factors (motivation, ability, perception of roles, situational factors) that need to be stimulated through appropriate behaviour (McShane & Von Glinow, 2005). MARS model is an extension of this, the researcher will use this model to support MARS as significance, empirically. MARS model is chosen based on the

comprehensive touch on the four factors simultaneously compared with the study of the behaviour before which only focuses on only a single perspective (Tsay, 2015). Based on the four factors in the model above MARS, in this study, intrapreneurial competencies taken into account as an ability factor. Next, the human resource development is introduced as the situation while the innovative work behaviour as the behaviour or decision.

Past researchers emphasizes on public sector innovation at policy level (Osborne & Brown, 2011), organization level (Terry, 1998; Walker, 2008), programme level, and project level (Thomas, 2000). Nevertheless, there is very little research on individuals' innovative behaviour in public organizations in Malaysia. For instance, Damanpour, F., & Schneider (2009) who study the influence of leaders on innovation seen individual innovative behaviour as a variable explaining innovation at higher levels and lacking about the innovative behaviour of public sector employees (Rainey, 1999). Scholars have focused on public sector challenges and barriers with regard to innovative behaviour. However, studies explicitly determining factors and practices concerning how to stimulate such behaviour as well as how to ensure that it is not restrained within the public sector are inadequate.

In respect to innovative work behaviour, researcher is interested in using competencies as independent variables affecting innovative work behaviour. Hence, the intrapreneurial competencies are selected as variables in this study. These elections refers to the prevalence of the researchers conducting the study, which focuses on entrepreneurship in business only as a study by Hazlina Ahmad et al., (2010) and Mitchelmore & Rowley, (2010, 2013) consequently the lack of research on the aspects of employees intrapreneurial competencies in public organizations ( Boon et. al, 2013) attracted interest of researcher towards this topic. Intrapreneurial competencies is the ability to be powered by an employee to rejuvenate existing organizations (Dunlap-Hinkler et al., 2010), competitive and successful (Antoncic & Hisrich, 2004; Covin & Slevin, 1991; Lumpkin & Dess, 1996) in addition to increase business performance (Amo & Kolvereid, 2005; Antoncic & Prodan, 2008; Romero-Martinez et al., 2010).

In addition, the overall moderator, human resource development was chosen as the situation for their effect on the intrapreneurial competencies relationship to

innovative work behaviour. human resource development is the primary function of human resource management which includes activities such as training, education, development, career planning, management and organizational development and performance evaluation (Mondy & Mondy, 2010). Among the scholars who conducted the survey between human resource development and innovation are Golja et al. (2015), Ma Pilar Perez-Prieto & Santana (2014) as well as Maura Sheehan et al. (2013). Meanwhile the studies done between the development of human resources and entrepreneurial competencies, for instances, Cheraghi et al. (2014) and Rezaei-Zadeh et al. (2014).

In the context of the higher education industry, Malaysia aims to be an international hub for world class education in its bid to be a big player in the attractive regional education scene by 2020 (Rahman, 2016). This trend of globalization, liberalization and reforms to the educational system to improve the ranking of the universities brings many challenges on developing ways to improve staff commitment to universities (Lew, 2009a). This is because a team of committed staffs at the public higher education institutions play complimentary roles with their counterparts in the public higher education institutions to assist the government to develop the human capital who are smart, well-educated and have a first class mentality required to achieve Vision 2020. (Lew, 2009b). Meanwhile, the public universities has to justify whether their HR practices will influence the administrative staffs' desirable attitudes and behaviours due to budget constraints.

Therefore, the current study will be executed in Technical University of Malaysia Malacca (UTeM) which is a public university located at Durian Tunggal, Alor Gajah, Malacca, Malaysia. It is the pioneer in the use of the "Practice and Application Oriented" teaching and learning method for tertiary level technical education in Malaysia. This is in accordance with the government's decision to cater for high technical-skilled human resource needs of Malaysia's industries. Innovation is necessary for UTeM because of several reasons like increased competition, the technological revolution and preventing deterioration. Therefore, innovation is part of the mission, vision and strategy of UTeM. (UTeM Statagic Plan 2012-2020, n.d)

It is anyway valuable for the innovative organization to get more insight in the innovation process and especially the role of the employees' intrapreneurial competencies, which automatically leads to the involvement of human resource development.

#### **1.4 Research Questions**

A central research question with related sub questions can be communicated pertaining to the research problem and purpose of the study that guide the study at UTeM:-

*What are the relationship between intrapreneurial competencies and innovative work behavior of employees and how is human resource development related to intrapreneurial competencies and innovative work behavior?*

- i. What is the level of innovative work behaviour at UTeM?
- ii. What is the relationship between intrapreneurial competencies and innovative work behavior?
- iii. How does human resource development influence the relationship between intrapreneurial competencies and innovative work behavior?

#### **1.5 Research Objectives**

As the result, the purpose of this study is threefold and the research objectives of this study are as following:-

- i. To study the level of innovative work behaviour at UTeM
- ii. To examine the relationship between intrapreneurial competencies and innovative work behaviour