

**THE RELATIONSHIP BETWEEN INFORMATION SYSTEMS RESOURCES AND  
INFORMATION SECURITY**



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## 2. Letter of Offer (Research Grant)

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### KELULUSAN PERMOHONAN DANA KECEMERLANGAN 01/2011

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Dengan hormatnya perkara di atas adalah dirujuk.

2. Sukacita dimaklumkan pihak Universiti telah meluluskan cadangan penyelidikan Y. Brs Prof./tuan/puan untuk membiayai projek penyelidikan di bawah Dana Kecemerlangan UiTM.

3. Bagi pihak Universiti kami mengucapkan tahniah kepada Y. Brs. Prof./tuan/puan kerana kejayaan ini dan seterusnya diharapkan berjaya menyiapkan projek ini dengan cemerlang.

4. Peruntukan kewangan akan disalurkan melalui tiga (3) peringkat berdasarkan kepada laporan kemajuan serta kewangan yang mencapai perbelanjaan lebih kurang 50% dari peruntukan yang diterima.

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5. Untuk tujuan mengemaskini, pihak Y. Brs. Prof./tuan/puan adalah diminta untuk melengkapkan semula kertas cadangan penyelidikan sekiranya perlu, mengisi borang setuju terima projek penyelidikan dan menyusun perancangan semula bajet yang baru seperti yang diluluskan. Sila lihat lampiran bagi talacara tambahan untuk pengurusan projek.

Sekian, harap maklum.

**"SELAMAT MENJALANKAN PENYELIDIKAN DENGAN JAYANYA"**

Yang benar

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## 5. Report

### 5.1 Proposed Executive Summary

Information systems (IS) is an organized combination of people, hardware, software, procedure and data that collects, transforms, and disseminates data and or information in an organization. Information security is where organizations data and information is open from disclose and or modify by unauthorized user. Accordingly, various models have been proposed to evaluate the relationship between information systems resources and information security. *However, this paper attempts to provide a conceptual understanding on the effect of mediating factors on information security.* The proposed model extends asserts of a firm's IS resources are related to the level of information security developed by Chang and Wang (2010). This study will adopt a single method which is the survey method among MSC status companies located in Klang Valley and Cyberjaya. The study is expected to contribute to the body of knowledge form three perspectives namely empirical evidence, theoretical based frameworks and development of instrument measuring the relationship between information systems resources and information security and its corresponding determinants. The developed theoretical framework provides opportunity of other information security researcher to investigate the relationship between information systems resources and information security and its corresponding antecedents in diverse information security settings. The developed instrument can be used by information security practitioners to measure the level of the relationship between information systems resources and information security in their companies.

### 5.3 Introduction

Over the last decades, studies on Information Systems Resources and Information Security have been very rigorous among information systems (IS) researchers and scholars. Generally, previous studies have defined and identified Information Systems Resource as either a single entity or a composite entity made of several components. According to Chang and Wang (2010), Information Systems Resources can be divided into three categories which are information technology resources (ITR) (e.g., information systems expertise and skills), relationship resources (RR) (e.g., collaboration with other functional units) and IS infrastructure resources (IIS) (e.g., collection of IT assets). Ross et al. (1996) however, divided Information Systems Resources into three IT assets which are human assets (e.g., hardware and software skills, business understanding, operation-solving orientation), technology assets (e.g., IT hardware assets, hardware and software platforms, databases, architectures, standards) and relationship assets (e.g., collaboration with other divisions or functional units, internal and external client relationships, share holders, shared risk and responsibility).

Mining the literature unveiled that there are many studies that have been done to investigate the relationship between Information Systems Resources and information securities within organizations. Gerber et al. (2001) described Information Security as a cycle which involves securing and controlling data and or information from any editing, changes, deleting or viewing activities by protecting and also controlling those data and or information from unauthorized personnel across department in an organization. . Among the various studies that have explored the connection between information systems resources and information systems securities are Ross et al. (1996); Byrd et al. (2004); Ravichandran & Lertwongsatien (2005); Flowerday & von Solms (2005); Chang & Ho (2006); Livari & Huisman (2007) Paschke et al., (2008); and Chang & Wang (2010). All of these studies have apparently developed models or framework that illustrates the connection or relationship between Information Systems Resources and Information Security.