



**UNIVERSITI PUTRA MALAYSIA**

**INFORMATION TECHNOLOGY USAGE AND ITS RELATIONSHIP  
WITH JOB CHARACTERISTICS AMONG ADMINISTRATIVE  
SUPPORT PERSONNEL IN THE MALAYSIAN SERVICE INDUSTRY**

**RAJA MUNIRAH BT. RAJA MUSTAPHA**

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**By**

**RAJA MUNIRAH BT. RAJA MUSTAPHA**

**Thesis Submitted to the School of Graduate Studies, Universiti Putra  
Malaysia, in Fulfillment of the Requirement for the Degree of Doctor of  
Philosophy**

**October 2002**



## DEDICATION

I dedicate this dissertation to my beloved father, Allahyarham Raja Mustapha bin Raja Ahmad. His love and words of wisdom have given me courage, strength, and determination to persevere and live life at its fullest. My accomplishments today would be more meaningful if my father was here to share them with me. This dissertation is also dedicated to the six young people in my life: my children, Megat Zahrullail bin Hazman Shah and Wan Nurin Hannani bt. Hazman Shah, my nieces and nephew, Raja Khaireen Nur, Raja Nur Wahida Adleen, Raja Fadzleen Nur, and Raja Ahmad Husairi bin Raja Munir Shah. May the achievements of others inspire and motivate you to succeed in life.

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Doctor of Philosophy

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**Chairman: Professor Dr. Othman Dato' Haji Mohamed**

**Faculty: Educational Studies**

Information technologies have fostered changes in job responsibilities, task content, and human interactions. The changing tools, methods and strategies of businesses compel workers worldwide in all capacities to re-examine and re-evaluate their skills and knowledge. Consequently, this change has also resulted in a need to re-evaluate and redesign office jobs systematically.

This study examines the relationship between information technology and the job of the administrative support personnel captured through their use of information processing technologies. An empirical survey involving 506 administrative support personnel from service industries was carried out via a structured mail questionnaire. Results indicated that respondents used elementary to intermediate levels of both technical and non-technical skills with most information technologies. A major conclusion is that administrative support personnel are not assuming greater responsibility for

performing high-level tasks, such as managerial tasks, that involved the use of non-text handling technologies. This is contrary to reports and claims made by management that administrative support personnel were operating in an administrative capacity, performing tasks at a managerial level, and assuming greater responsibility.

Findings in this study have also indicated that information technology skill levels affect support workers' perception of the job characteristics. However, it was concluded that the more skilled administrative support personnel are in using information technologies, the higher their perceptions of internal work motivation. This study is aimed at providing input in designing and redesigning of office jobs that are both meaningful to the workers as well as the employers and for educators to deliver curricula that are relevant and competitive. Therefore, management must redesign administrative support jobs to take advantage of information technologies to perform higher-levels administrative and managerial tasks so as to enhance workers' job satisfaction levels. More importantly, office management educators must provide students with higher and advanced information technologies knowledge and skills so that they are able to accept new challenges and excel in their profession upon entering the job market.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia  
sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**PENGUNAAN TEKNOLOGI MAKLUMAT DAN HUBUNGANNYA  
DENGAN CIRI-CIRI KERJA DI KALANGAN  
KAKITANGAN SOKONGAN PENTADBIRAN  
DALAM INDUSTRI PERKHIDMATAN MALAYSIA**

**Oleh**

**RAJA MUNIRAH RAJA MUSTAPHA**

**Oktober 2002**

**Pengerusi:           Profesor Dr. Othman Dato' Haji Mohamed**

**Fakulti:             Pengajian Pendidikan**

Teknologi maklumat telah membawa beberapa perubahan dalam tanggungjawab kerja, bidang tugas, dan perhubungan antara manusia. Perubahan-perubahan dalam jenis peralatan, cara dan strategi perniagaan mendesak pekerja-pekerja mengkaji dan menilai semula kemahiran dan pengetahuan mereka. Perubahan ini selanjutnya memerlukan penilaian dan rekaan semula pekerjaan pejabat secara sistematik.

Kajian ini meninjau hubungan teknologi maklumat dengan kerja yang dilakukan oleh pekerja sokongan/pembantu pentadbiran melalui penggunaan teknologi pemrosesan maklumat. Seramai 506 orang pekerja sokongan dari industri perkhidmatan telah terlibat dalam bancian ini yang telah dijalankan dalam bentuk soal selidik. Hasil kajian menunjukkan bahawa tahap penggunaan teknologi maklumat responden adalah di peringkat elementari dan intermediate untuk kemahiran teknikal dan bukan-teknikal. Pekerja-pekerja

sokongan ini didapati tidak memikul tanggungjawab yang lebih dalam melakukan pekerjaan atasan (tugas pengurusan) yang memerlukan mereka menggunakan teknologi bukan-teks. Dapatan ini adalah bertentangan dengan laporan dan tuntutan pihak pengurusan yang menyatakan bahawa pekerja sokongan melakukan kerja pentadbiran, pengurusan, dan memikul lebih banyak tanggungjawab.

Hasil kajian ini juga menunjukkan bahawa tahap kemahiran penggunaan teknologi maklumat memberi kesan ke atas persepsi pekerja sokongan tentang ciri-ciri pekerjaan. Adalah dirumuskan bahawa lebih tinggi kemahiran penggunaan teknologi maklumat di kalangan pekerja sokongan, maka lebih tinggilah persepsi mereka tentang motivasi kerja dalaman mereka. Kajian ini bertujuan untuk memberi input tentang rekabentuk semula kerja pejabat yang akan membawa lebih makna kepada pekerja dan majikan dan juga untuk pendidik merangka kurikulum yang relevan dan berdaya saing. Oleh itu, pihak pengurusan hendaklah merekabentuk semula kerja-kerja kakitangan sokongan pentadbiran dengan menggunakan teknologi maklumat dalam mengerjakan tugas-tugas pentadbiran dan pengurusan yang lebih tinggi supaya tahap kepuasan kerja dapat ditingkatkan lagi. Lebih penting lagi, pendidik-pendidik bidang pengurusan pejabat hendaklah menyiapkan pelajar-pelajar dengan pengetahuan dan kemahiran teknologi maklumat yang lebih tinggi agar mereka boleh menerima cabaran-cabaran baru dan berjaya dalam bidang pekerjaan mereka.

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# **CHAPTER I**

## **INTRODUCTION**

### **Background of the Study**

Socio-technical changes in this decade has created many new job titles and redesigned jobs in almost all fields. Fresh creativity, new competencies, and a broad and dynamic view of roles of workers are required in the workplace. Major forces like global competition and rapid technological advances have profoundly changed, and will continue to change the nature and content of work (Bassi, Benson, & Cheney, 1997). Businesses find they must incorporate many of the new technological procedures, processes, policies, hardware, and software into their environment to remain competitive. One of the greatest impacts from these technological advances has been on the workers themselves, and the challenge of training and preparing to remain abreast in today's workforce is tremendous (Gonzenbach, 2002). This challenge, which is faced by the workers, is something educators and employers cannot afford to ignore.

The field of information systems is constantly changing, and these changes are impacting the way workers think, the processes and procedures used to accomplish work, and the tools used to accomplish goals needed to be competitive in the workforce (Norris & Yin, 2002). In today's work environment "trends such as the globalization of the economy and the

evolution of e-commerce are changing the very nature of work” and “success in the workplace of tomorrow belongs to those who can find, understand, process, and integrate information to solve a variety of problems’ (Glenn, 2001).

With the advent of information technology, some jobs had not only disappeared, it also resulted in the upgrading of other jobs and the emergence of previously unknown occupations (Kruk, 1996). The role of office professionals such as traditional secretaries and administrative assistants has changed significantly in the last few years due to corporate downsizing, the economy, politics, workplace diversity and most importantly—technology. The changing tools, methods and strategies of businesses compel workers worldwide in all capacities to re-examine and re-evaluate their skills and knowledge. The new office environment requires an understanding of the changes in technology, office organizations, and the nature of office work itself (Wagoner & Ruprecht, 1984; Long, 1987; Glenn, 2001).

### **Present Office Management Curriculum**

This changing and complex global environment poses a challenge not only to companies and individuals who comprise these organizations, but also to educational institutions. Businesses are reengineering themselves to remain competitive in today’s society, and as these changes occur, increased demands are put on educational institutions to prepare students to face the rigors of a more complex and diverse work environment (McGrew, 2001; Gonzenbach,

2002). These changes suggest that business educators should keep abreast with changing societal needs. A market survey conducted by the Faculty of Office Management and Technology, Universiti Teknologi MARA (1997) revealed that employers were not quite satisfied with the performance of secretaries at entry-level especially of students who have undergone a 12-month training programme.

In a dialogue between human resource managers and educators in the Faculty of Office Management and Technology, UiTM (1997), it was concluded that besides having minimum information technology technical skills, secretaries who had undergone short intensive training programmes lack knowledge in mathematical skills, organizational skills, language skills and other business skills which are essential requirements in working in the electronic office. The combination of increasing competition in both domestic and international markets and changes in how the workplace is organized has altered the skills needed in business. It appears that educational institutions are no longer able to keep pace with rapid changes in the workplace.

Therefore, some businesses are designing their own “curriculum” in a belief that it is the best way to fill the gap between what is taught in educational institutions and what corporations require from the employees (Charp, 1997). However, most organizations, especially small ones, feel it too costly to provide further training for entry-level positions (Bassi et al., 1997). Employers are searching for workers who are job-ready and this type of workers are short in supply (Norlida, 1998; Solak, 1998; Lewis, 2001; Bryant,

2001). The task of providing a source of skilled office workers is, therefore, a challenge faced by those involved in designing the office/business education curriculum. Major educational institutions which provide administrative support training for example, Universiti Teknologi MARA, Polytechnics, Stamford, SAL, Goon, Systematics, and others, incorporate the teaching of information processing technology skills in the curriculum, but the levels of knowledge and skills taught are very basic (Appendix R). Personal interviews made between the researcher and the authorities in some of the educational institutions disclosed that given the time constraints and following the objectives of the training programme, the students will definitely need on-the-job training to improve their information technology knowledge and skills (Aida, personal communication, 2000). The graduates are, therefore, not job-ready and unable to meet the demands of the workforce.

Rapid technological innovations have made it difficult for educational institutions to introduce new curricula to keep pace with the changing world of work (Glenn, 2001; Lewis, 2001). Consequently, training programmes should be viewed as open-ended and ongoing rather than terminal. Development and revision of curriculum, and technological change go hand in hand (Davis, 1997; Gonzenbach, 2002). Educators must be concerned with preparing office workers who are versatile and who possess the readiness and capacity for a lifetime of learning and relearning of job skills (James, 1996; Head, 1999). Vocational institutions have traditionally relied upon labour market information derived from graduate follow-ups and the counsel of advisory committees to make curriculum and planning decisions. While

data derived from this source are still of value, it is imperative that these approaches be expanded to include proactive, workplace-based inquiry that provides first hand insight and multiple perspectives regarding technological impact (Lewis & Konare, 1993). The first step in developing a new, or modifying existing curriculum, is to compile a validated list of information technology processing competencies needed by today's office worker. There are numerous references in the literature related to the importance and purpose of establishing such a list. It is imperative that educators prepare students who are able to utilize technology as effectively as the business world demands (Bryant, 2001). The goal of all computer-related programmes in educational institutions is to remain abreast of the many changes, challenges, and trends occurring in the information technology environment and to offer a curriculum that encompasses the requirements of the current workforce. This researcher hopes to accomplish this task, which serves as one of the objectives of this study.

### **Job Design Issues in the Secretarial Profession**

The Eighth Malaysia Plan 2000 - 2005 places strong emphasis on the use of Information Technology (IT) on organizational structure and operations. According to the plan, greater use of Information Technology in organizations is expected to result in the increasing demand for workers with computer and information management skills. A sum of RM5.2 billion was allocated to ministries and agencies to invest in Information Technology-related programmes and projects (National Economic Policy, 2000). A person