

**UNIVERSITI TEKNOLOGI MARA**

**THE RELATIONSHIP BETWEEN  
OVERALL QUALITY, INTERNET  
USAGE, USER SATISFACTION,  
TASK-TECHNOLOGY FIT, AND  
PERFORMANCE IMPACT AMONG  
EMPLOYEES WITHIN PUBLIC  
SECTOR IN YEMEN**

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Dissertation submitted in fulfilment  
of the requirements for the degree of  
**Doctorate Business Administration**

**Arshad Ayub Graduate Business School**

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## AUTHOR'S DECLARATION

I declare that the work in this dissertation was carried out in accordance with the regulations of University Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledge as reference work. This report has not been submitted to any other academic institution or non-academic institution for any other degree of qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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## ABSTRACT

The internet/World Wide Web (WWW) has become increasingly indispensable in the daily life of most individuals and has significantly impacted every facet of operations in organizations. It is, therefore, critical to understand its actual use in an organization because of its facility to be a platform for knowledge management and capability to transform knowledge acquisition, improve task efficiency, enhance communication quality, and strengthen decision quality. Yet, despite its importance and world-wide reach, internet usage in Yemen is one of the lowest among the world's countries. Organizations around the world are looking for the development and keep up to date with emerging technology. One of the sectors that are affected by the growth of Internet technology is the public sector. Many researchers have studied and proposed theories and models of technology usage in order to predict and explain user behavior with technology to account for the rapid change in both technologies and their environments. Based on three well-known topics in information technology; Technology Acceptance, Task-Technology Fit and Information Systems Success within five well-known theories and models (TAM, UTAUT, TTF, DMISM and Wang & Lai model), this study developed and validated a multi-dimensional model, Quality of Technology Usage Model (QTUM), to better understand internet usage among employees within public sector from an integrated perspective of technological, individual, social and organizational. Furthermore, proposed and validated two second-order Models within the full model; overall quality which contains seven first-order constructs (system quality, information quality, service quality, task quality, individual quality, social quality and top management quality) and performance impact which contains four first-order constructs (process, knowledge acquisition, communication quality and decision quality). A survey questionnaire was used to collect primary data from 530 employees within all thirty government ministries-institutions in Yemen. The data analysis starts with initial exploratory factor analysis (EFA), followed by confirmatory factor analysis (CFA) and lastly structural equation modelling (SEM) via AMOS. The research proposed model developed with five core constructs; overall quality as an independent variable, performance impact as the dependent variable, user satisfaction, actual usage and task-technology fit as mediator variables. The research proposed model evidenced by the goodness of fit of the model to the data, explained 81% of the variance in performance impact. The results from the descriptive analysis show that employees strongly agreed that using the Internet helped to improve task process, enhance knowledge acquisition, improve communication quality, and moderately agreed that Internet helped to improve decision quality. Results also show that the majority of employees surveyed have the awareness of the quality of internet information, are dissatisfied with service and top management quality, have the confidence to browse the WWW, use a search engine and send an e-mail, but do not have the confidence to download and upload files. They did agree with the notion that family, friends, and coworkers think that using the internet is a good idea. Although employees find the internet easy to use, flexible, useful and enjoyable, they consider its speed to be very low, it is not secure, and its subscription is not reasonably priced. The findings of the multivariate analysis demonstrate three main results. First, overall quality has a strong positive impact on user satisfaction, actual usage, and task-technology fit. Second, user satisfaction, actual usage, and task-technology fit have great influence on performance impact. Third, user satisfaction and task-technology fit mediate the relationship between overall quality and performance impact. The result of this study will be able to provide insights into what are the factors that influence successful implementation of internet and human performance in Yemen's government organizations. Findings provide significant benefits not only for individual employees but also to the Yemeni public sector as well as the country if they utilize this information technology. A number of practical implications were found for this study such as promoting employees to make full use of the Internet in their work and improving professional practice, professional development and quality of work. Significantly, the implications of using the proposed integrated model will help promote Internet usage within government ministries and may be applied to all public sector in Yemen.

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