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**THE PERCEPTION OF PROFESSIONALS  
AND MANAGEMENT PERSONNEL ON THE  
VIRTUAL ORGANIZATION**

**BY  
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## ABSTRACT OF THE THESIS

This study investigated and analyzed awareness of the virtual organization and the extent of its use by professionals and management personnel. It tried to find out the specific purposes for which the virtual organization is used and to determine the perception of a sector of professionals about its effect on their professions and personal development. The study also tried to identify the perception of the users as to whether dealing with this type of organization would conflict with any moral and ethical values.

The data for this study hinged on a survey questionnaire. Data were analyzed and a descriptive statistical summary outlines the profile of users. Percentage was used to identify the level of knowledge of the virtual organization. Frequency analysis measured the level of perception and attitudes of respondents on the virtual organization.

The study found a positive trend toward the use of the virtual organization among professionals and management personnel. Most of the respondents indicated that they are aware of the existence of the virtual organization and value it as important and advantageous to their professional careers. The majority of the respondents expressed concern about security in online transactions, but few expressed concerns about the moral and ethical aspects of virtual communication. The results of the study indicated that more than 73% of the respondents regarded that using the virtual organization would not conflict with any moral and ethical values.

## ملخص البحث

تستقصي هذه الدراسة، وتحلل مستوى الوعي والمعرفة عن (المنشأة الافتراضية) وسط عينة من جمهور الموظفين المتخصصين في مجال الإدارة. وتحاول الدراسة معرفة مدى استعمال أفراد العينة للمنشأة الافتراضية، وأغراض استعمالها، بالإضافة إلى تحديد فهمهم لأثرها على وظائفهم ولعى تطورهم الذاتي. وتحاول الدراسة أن تستقصي فهم العينة لمردود التعامل مع المنشأة الافتراضية على الجوانب الأخلاقية والقيمية المتصلة بالمجتمع المسلم.

وتعتمد الدراسة على الاستبيان كمصدر أول لجمع المعلومات. ولكنها تستخدم أيضا المصادر الثانوية، كالكتب، والدوريات المتخصصة، والدوريات الإلكترونية. وقد تم تحليل المعلومات باستعمال مختلف الأساليب الإحصائية، حيث استعمل الإحصاء الوظيفي لتحديد معالم العينة المستخدمة للمنشأة الافتراضية. بينما استعملت النسب المئوية لمعرفة مستويات المعرفة لدى أفراد العينة ولقياس اتجاهاتهم وآرائهم حولها.

وقد وجدت الدراسة اتجاهها إيجابيا حول المنشأة الافتراضية بين الموظفين في مجالات الإدارة. إذ أشار معظمهم لوعيهم بالمنشأة الافتراضية، فيما عبرت نسبة منخفضة عن قلقها تجاه المردود الأخلاقي والقيمي للتعامل مع المنشأة الافتراضية، إذ تظن غالبية العينة أن الجوانب القيمة يمكن إحكامها من خلال التنشئة والتربية السليمة.

## APPROVAL PAGE

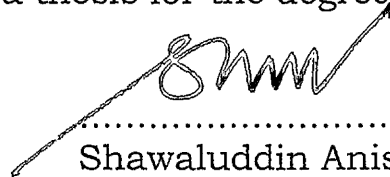
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Date: 19/2/2000

# DECLARATION

I hereby declare that this thesis is the result of my own investigations, except where otherwise stated. Other sources are acknowledged by giving explicit references and a bibliography is appended.

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**DEDICATED**  
**TO**  
**MY BELOVED PARENTS**

**MD. NAZRUL ISLAM TALUKDER**

**And**

**Ms. ANWARA BEGUM**



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# CHAPTER ONE

## INTRODUCTION

The profound technological developments in computer applications in recent years have created a new concept of organizational reality. The new information and communication technologies such as Internet, electronic mail, electronic data interchange (EDI) and videoconferencing have helped organizations develop innovative business methods, which have enabled those organizations to reduce cost, enhance coordination and improve interaction with customers (Angell and Heslop, 1995). This study investigated the concept of the virtual organization, its origin, features, and the economic and technological determinants of its development. The study measured professionals and management personnel's awareness about the virtual organizations, and evaluated the current use of the virtual organization and their perception about its benefits and challenges. The study also provided information about the future significance of the virtual organization in the global marketplace.

### **Background of the Problem**

Information and communication technology dramatically changed the world scenario in the last three decades of the 20<sup>th</sup> century. The new millennium signals the dawn of an exciting electronic information and communication era, brought about by the rapid advances in

communication and information technology. The revolution of communication technology has created the “global village” and affected the way we live and work (McLuhan, 1989). Technological advances have opened new and exciting avenues that challenged the traditional ways of interacting, communicating and doing business (Kushairi, 1999). As the world scenario changes with the development of new technologies, time and speed become important in our daily life (King, 1994). Series of technological advances have made possible the rapid processing and instant delivery of information and services throughout the world and this in turn, has led to the restructuring of the global economic environment and placed new demands on corporate activities, thus giving rise to new styles of administration and management (Cushman and King, 1994).

Communication for business and other organizational purposes in the 21<sup>st</sup> century will be different from communication models of the industrial age. A new organizational communication model that continuously adapts, adjusts and innovates will be essential. In this 21<sup>st</sup> century, perhaps one of the several ways to face market challenges is to continue to reinvent and ensure the best means of communicating with customers (Ismail, 1999). Quality, flexibility and responsiveness are the important issues of today’s corporate organizations; organizations which do not recognize this new discipline, may decline and eventually disappear (Cushman and King,



1994). To survive in this environment, organizations must learn to be flexible and responsive to customers' needs.

As the market demands short response time and flexible adaptation to customers' needs, a new concept of flexible network organizations has emerged. The virtual organization is an example of a flexible network organization that meets the customer's needs. Byrane (1993) states that the virtual organization is a temporary, or permanent, network of independent companies linked by information and communication technology to share skills, costs and access to one another's market. The virtual organization is a new phenomenon in organizational design and the corporate model of the future. However, the concept of the virtual organization is not sufficiently clear to business organizations who are unfamiliar with conducting business and sharing resources over the networked corporation.

### **Objectives of the Study**

The study attempted to achieve the following objectives:

- (1) To investigate the level of awareness about the concept of the virtual organization among professionals and management personnel.
- (2) To analyze the extent of use of the virtual organization sites by the professionals and management personnel.

- (3) To find out the specific purposes for using the virtual organization.
- (4) To determine the level of perceptions of professionals and management personnel about the virtual organization concerning its benefits and effects on their professions and personal development.
- (5) To identify the perceptions of the professionals and management personnel on the virtual organization as to whether dealing with this type of organization would conflict with any Islamic or moral and ethical values.

## **Research Questions**

This study attempted to answer the following questions:

- (1) What is the level of awareness about the concept of the virtual organization among professionals and management personnel?
- (2) To what extent do these professionals and management personnel use the virtual organization sites?
- (3) For what specific purposes do the professionals and management personnel use the virtual organization?
- (4) What is the perception of professionals and management personnel about the virtual organization concerning its benefits and effects on their professions and personal development?

- (5) What is the perception of professionals and management personnel as to whether dealing with virtual organization would lead to conflict with Islamic or moral and ethical values?

## **Definition of Important Terms and Concepts**

**Competitive Advantage:** A competitive advantage means that the company has found better ways of serving customers and winning new ones through the use of information technology. New management information technologies employ computer-aided and telecommunication-linked decision support, operational research, artificial intelligence, and group technology systems to integrate, coordinate, and control management processes in order to create competitive advantage.

**Core Competency:** The unique professional and technical capabilities that an organization possesses.

**Electronic Data Interchange (EDI):** The exchange of commercial information between customer and supplier in digital form, directly between their respective computers, or via an intermediate third party computer service.

**File Transfer Protocol:** System used to transfer files between computers linked to the Internet.

**High-Speed Management:** High-speed management is a new theory of organizational communication. It is the effective communication system employed by well-managed companies. The goal of high speed

management is the use of the new information technologies and human communication process to rapidly develop, test and produce a steady flow of low cost, high quality, easily serviced, high value products which meet customers' needs and to quickly get these products to market before one's competition in an effort to achieve market penetration and large profits.

**Homepage:** The first page of a Web site and the starting point for users to navigate the World Wide Web.

**Hyperlink:** A way to connect two Internet resources via a simple word or phrase on which a user can click to start the connection.

**Internet:** Millions of computers linked together to form a global network allowing users to transfer information between any two computers connected to the Internet. No one person or company controls the Internet.

**Network:** A communication system that links two or more computers. It can be as simple as a cable strung between two computers a few feet apart or as complex as hundreds of thousands of computers around the world linked through fiber-optic cable, phone lines and satellites.

**Real Time:** The transfer of data that returns results so rapidly in actual time that the process appears to be instantaneous to the users.

**Video Conferencing:** Using video transmissions, computers, and telephones to enable people to communicate with each other over long distances without the need to travel to a central location.

**Virtual Organization:** Virtual organization is a temporary or permanent network of independent companies linked by information and communication technologies to share skills, costs and access to one another's markets. It refers to an organization that aims to supply goods and services by means of its staff, equipment and information technology to pursue maximum profit. The purposes of this new form of organizations are dependent on intensification of team work and sharing organizational knowledge to provide quality products and better services for the customers. It is highly dependent on information and communication technologies.

**World Wide Web:** The collection of the millions of Web sites and Web pages that together form the Web of information that allows a user to download files, listen to sounds, view video files, and jump to other documents or Internet sites by using hypertext.

### **Limitations of the Study**

This study is intended to identify the perception of professionals and management personnel on the concept of the virtual organization, their extent and purpose of use, and their perception about its effect and benefits. The study was limited to a sample of professionals and management personnel at the Information Resource Management Division (IRMD), Petronas. This is a relatively homogenous group of personnel consisting of 32 males and 28 females. The results of the study should be not be generalized except with due caution.

Since the participants are professionals concerned with the development of the modern information and communication technology infrastructure in Petronas, their perception and attitudes may have been colored by this concern, thus some of their responses may not represent the real attitude and perceptions of all people regarding the virtual organization. The individuals were identified as being knowledgeable in the field of advanced information and communication technology and their applications.

### **Significance of the Study**

The virtual organization is a new model of the organization which is able to provide easy access of information, speedy delivery of the products and services, and fast communication with the customers. Although the virtual organization is a new phenomenon in the organizational setting, it is becoming increasingly popular among business organizations, professionals and management personnel. However, until recently, people and business organizations had little knowledge about the virtual organization. Literature on the concept is sparse, but has started to grow as electronic networking surged with the evolution of the Internet. Few books and articles address the potentials of the virtual organization, thus limiting further general knowledge about issues, challenges and benefits involved in the virtual organization. It is therefore, essential to study this new trend in

organizational communication and to analyze the perception of professionals and management personnel on the issues related to it.

This study investigated the perception of the professionals and management personnel on virtual organization. The findings of the study will contribute to the existing knowledge concerning the virtual organization. The results of the study may help to understand the effects of the virtual organization on professionals and management personnel. The finding of the study will also provide insights into the perceptions of professionals and management personnel on the importance and benefits of the virtual organization. The findings of the study may also be helpful for Muslims to establish guiding principles to deal with the virtual organization.

This chapter has provided a background of the research problem, research questions, research objectives and significance of the study. The chapter also discussed the limitations of the study and definition of important terms and concepts. Chapter two will review various studies dealing with different aspects covered by this study.

# CHAPTER TWO

## LITERATURE REVIEW

The purpose of this chapter is to present a review of related literature on the issue of the virtual organization. The chapter provides an overview of the virtual organization, outlines the major communication technologies necessary to operate the virtual organization, and discusses the features of several existing virtual organizations. The chapter also provides some insights into the future prospects and the challenges that might face the virtual organization.

### **Definitions and Characteristics of the Virtual Organization**

The concept of the virtual office, the virtual classroom or the virtual corporation is a recent phenomenon (Shao, Liao and Wang, 1998). The concept of the virtual organization has emerged when working at home became possible through the help of information and communication technologies. Numerous definitions of the virtual organization are found. Byrne (1993, p. 37) for example, defines it as a “temporary or permanent network of independent companies linked by information and communication technologies to share skills, costs and access to one another's markets. The companies can quickly unite to exploit specific opportunities and may disappear afterwards.” The virtual organization is highly dependent on information and communication