

A Study on the Impact and Effectiveness of Management Information System Model

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Submitted: 01-06-2022

Revised: 10-06-2022

Accepted: 15-06-2022

ABSTRACT

The present study was conducted to bring attention to the importance of Total Quality Management (TQM) in applying Management Information System (MIS) and their effects on organizational performance, particularly in the IT sector. The main objective of this research is an attempt to investigate the relationship of MIS and organizational performance along with the mediating role of TQM at Pofi Technologies PVT LTD in Coimbatore. The quantitative method applied the questionnaire-survey and structural equation modeling (SEM). A total of 200 questionnaires were distributed and a high rate of return (87.6%) has been achieved. After initial data screening, 200 responses were utilized to analyze the final data. The results revealed that MIS indicators, namely information quality, user satisfaction and net benefits are directly linked with organizational performance. Meanwhile, TQM mediates the relationship between five of the MIS indicators, namely system quality, information quality, use of system, user satisfaction and net benefits with organizational performance. The findings of this study will be useful for the IT sector as it will enhance their organizational performance through the use of appropriate MIS indicators.

Keywords: Management Information Systems, Total Quality Management, TQM, Organizational Performance.

I. INTRODUCTION

Modern time management relies heavily on information to thrive. Nothing changes without information, and in general, it is believed that information is powerful and that its owner has power. Furthermore, many organizations currently suffer from an excess of information. They need to manage all the information they have acquired in order to face the chaos of the digital era left behind by the rapid technological advances and the widespread knowledge dissemination. In this

context, the need for information systems has risen. Therefore, organizations are heavily investing in information systems because they seek to maintain their competitiveness in order to remain in the market. Apart from the accelerated pace of technological developments in the field of production, there has also been an evolution in the means of communication and the transmission of information. Moreover, the researcher believes that dealing with these variables will be important for the Iraqi oil sector because the modern risks associated with the processes of the Iraqi oil industry are enormous. Also, the macroeconomic problems such as the cost of the war on terror, inflation rates, exchange rates, unemployment rates, debt, debt service rates, export and import growth rates, political instability, lack of reliance on MIS in decision making, and poor TQM implementation all negatively affect the performance of the companies operating in the IT field in Coimbatore. It would be of interest to note that the manager's monitor and evaluate the trends in their business environment through available internal and external channels of information which are made accessible to them by using modern IT.

Objectives Of The Study:

1. To examine the relationship between MIS indicators and organizational performance at IT Company.
2. To examine the relationship between MIS indicators and TQM at IT Company.
3. To examine the relationship between TQM and organizational performance at IT Company.
4. To examine the mediating role of TQM in the relationship between MIS indicators and organizational performance at IT Company.

II. REVIEW OF LITERATURE

1. Aferdota Berisha - Shaqiri

Management Information System is flow-processing procedures based on computer data, and integrated with other procedures in order to provide

information in a timely and effective manner to support decision-making and other management functions. This finding is also present when we consider that the number of contemporary business data and information exponential grow, and efficient business decision-making is possible only if the necessary information is fast, accurate and qualitative and managed by adequate staff but for the most cases not appropriate efficiency is the result of a lack of good management information systems

2. MardianaAndarwati ,NaziefNirwanto , JuniantoTjahyoDarsono

This study aims to analyze the effect of system quality and top management support on the satisfaction of SME managements as end users of accounting information. The sample in this research is 118 SME managements. Sample technique used by purposive sampling method and its analysis technique using Structural Equation Model (SEM) is to study the influence of system quality and top management support to satisfaction of SME managements. The result of this research is system quality and top managementsupport have an effect on accounting information end user satisfaction.

3. Ahmed Abdulatef MashliAina, Wang Hu, Al-Nakib Noofal Ahmed Mohsen Mohammed

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4. Yaser Hasan Al-Mamarya , Alina Shamsuddina , A.H. Nor Aziati

Management information systems play a key role in the life of organizations; it provides the appropriate information in right time as needed to support the management activities. In the telecommunication companies in Yemen, management information systems enable to compilation, processing and storage of the

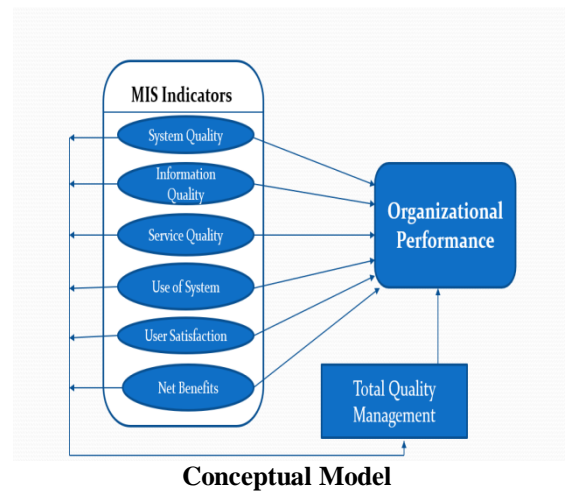
Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	32.863 ^a	20	.035

information; with overall purpose to make that information available on demand in the required format.

III. RESEARCH METHODOLOGY

The research is a descriptive research, The survey questionnaire used in this research consists of two parts. Part A the respondents' demographic data is collected on their gender, age, education, length of job position, and number of years of experience in the organization . Part B of the questionnaire consists of the measurement items for MIS indicators, TQM, Organizational Performance. The sample size of this research about 200 responses from employees of junior, senior, management staff in organization.



Chi-Square Test:

Table 1: Table of Using my company's MIS helps improve productivity. My company uses a variety of methods to measure customer satisfaction.

H0 – There is no significance relation between Using my company's MIS helps improve productivity. My company uses a variety of methods to measure customer satisfaction.

H1 - There is a significance relation between There is no significance relation between Using my company's MIS helps improve productivity. My company uses a variety of methods to measure customer satisfaction.

Likelihood Ratio	23.410	20	.269
Linear-by-Linear Association	4.348	1	.037
N of Valid Cases	200		

a. 18 cells (60.0%) have expected count less than 5. The minimum expected count is .01.

Inference:

From the above table the Calculated table the calculated sum value is .035 which was below the

level of 0.05%. Hence the Hypothesis of H1 is truly fit and it is acceptable.

Table 2: Table of Using the MIS in my company will improve my job performance. My company conducts ongoing training programmes to develop staff capabilities including jobs planning.

H0 – There is no significance relation between Using the MIS in my company will improve my job performance. My company conducts ongoing training programmes to develop staff capabilities including jobs planning.

H1 - There is a significance relation between Using the MIS in my company will improve my job performance. My company conducts ongoing training programmes to develop staff capabilities including jobs planning.

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	10.948 ^a	15	.756
Likelihood Ratio	10.880	15	.761
Linear-by-Linear Association	2.555	1	.110
N of Valid Cases	200		

a. 12 cells (50.0%) have expected count less than 5. The minimum expected count is .18.

Inference:

From the above table the Calculated table the calculated sum value is .756 which was below the level of 0.05%. Hence the Hypothesis of H0 is truly fit and it is acceptable.

feedback is more important to the organization and its tries its level best to satisfy its customers with the services like after sales services and makes improvement in the product based on customer feedback.

IV. SUGGESTIONS

All the 200 respondents show their response to answer the required questions from all the organizations. The Analysis shows that independent variable as Management information system and performance as dependent variable shows positive results. When an organization is creating enough profit then it tries to make its product more useful and powerful as compared to market availabilities. Then it decite to by innovative to become market leader of that specified product. They invest more in the research & development to make it more powerful and useful. When a company uses research & development process then it is able to become an innovator. When an organization is become the innovator then its growth process starts from there. As and when the growth process starts it gives its customers value added services like online information system web based and customers

V. CONCLUSION

The main conclusions are as the following: There are several factors affecting acceptance of management information systems in IT companies, namely: system quality, information quality, service quality, Use of system, User satisfaction, Net benefits, The Practices of leadership, HRM, Strategic Planning, Process management, Information&Analysis, Financial Perspective, Customer Perspective, Learning & Growth perspective. The subsequent phase of this study will be the empirical testing of the research model.

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