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# Help Desk Support Models

A thesis presented in partial fulfilment

of the requirements for the degree of Masters of Information Systems

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## ABSTRACT

In the early 1980s some clerical workers, engineers and a few so-called “leading edge” managers and professionals started to use computers in their daily jobs. This is in contrast to today’s office environment where the computer is the standard desktop equipment in most offices. In response to the increasing demand for support of this desktop equipment, Help Desks were formed. Help Desks have since become an important function of the organisation and have been the subject of much research on topics such as the ratio of Help Desk staff to users, the prescriptions and functions of Help Desks, and user satisfaction with Help Desk support.

This research investigates the efficiency of the Second Level Help Desk Support Models, and user satisfaction rates for these models. This study focused on surveying a large financial organisation in New Zealand in order to find out if the In-house Help Desk Support Model has a higher level of user satisfaction or is more efficient than the Outsourced Help Desk Support Model.

Overall, the results of the survey showed that there is no difference between the In-house and the Outsourced Help Desk Support Model in end user satisfaction and efficiency. Both statistical and qualitative studies supported these conclusions.

As this survey was exploratory in nature, there is opportunity for researchers to explore and expand this research to cover a wider group of end users across different industry types, ranging from large corporations to small or medium-sized companies.

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## CHAPTER 1 INTRODUCTION

This chapter first describes the importance of Help Desk Support and provides the justification for this research. It then states the research objectives and briefly describes the limitations of this study and the research question. Finally it introduces the organisation of this thesis.

### 1.1 The importance of Help Desk Support

Govindarajulu (2002) states that Help Desks have long been the standard source of support for End-User Computing (EUC). Even though they are also known as Information Centres (ICs), Call Centres, and PC support centres, their primary function is to help users help themselves (Govindarajulu, 2002).

According to Lamb and Davidson (2000, p. 259), EUC has emerged as an “insurgent, grass roots action, resited by the Information Systems (IS) department”. As a result, support structures have started to emerge, which are the ICs staffed by users and IS personnel. ICs are a framework that facilitates and manages the computing capabilities of end users. They are fundamentally consulting and service facilities that allow end users to access their own data. They also provide training and guidance for end users to achieve the right mix of hardware and software.

Govindarajulu and Lippert (2002) claim that research has indicated that there are five main support sources available to end users today:

- Help Desks (also known as Information Centres or PC support centres)
- Local MIS staff
- Informal assistance from friends and colleagues
- Online assistance (i.e. the Internet and its various search engines and support groups, e.g. MSDN for Microsoft operating systems, Google and Yahoo search engines).
- Vendor or third party support

A common business decision today is for organisations to outsource either part or all of their IC to a third party vendor as a means of effectively managing their EUC support functions. Selecting an appropriate vendor and preparing a detailed contract (together with a well defined Support Service Level Agreement) are keys to forming a cost-effective and productive partnership that gives both the organisation and the vendor a competitive edge.

## **1.2 Justification of Research**

EUC technology has permeated all aspects of organisations' operations and has a profound impact on the ways that businesses are conducted. In today's corporate world where the personal computer is the standard office equipment and end users are more aware and knowledgeable of computing technologies, the basic support provided by an IC is limiting. According to Wu, Chen and Lin (2004), in today's working environment, knowledge workers are increasingly using more sophisticated tools to develop their own information systems in order to manage their work effectively. EUC acceptance has become one of the critical success factors in achieving business success and advantage; it has become a fundamental part of most organisational plans. EUC therefore deserves to be supported and its success is beneficial to an organisation.

Rivard (1987) supports the principle that users should be made responsible for justifying their consumption of EUC tools and services. As cited by Harris (1992), Gunton (1988) argues that end users should be given full responsibility for justifying their systems and that it is the end users who should advertise the benefits that they have enjoyed in order to continue receiving support for their EUC activities. The IC too should play an active role in this support activity.

As expenditure is channelled into EUC by means of hardware, software, and personnel investments, organisations should ensure that the expenditure does result in worthwhile returns on investment and that the returns are measurable (Harris, 1992). Therefore, the measurement of end user satisfaction is a key concern for management that has authorised and is accountable for the expenditure. Some

researchers have consistently pointed out users' dissatisfaction with the services provided by the ICs (Bergeron, Rivard and Serre, 1990; Rainer and Carr, 1992).

Harris (1992) states that *end user satisfaction* is still a useful instrument for measuring IC effectiveness. Previous researchers have used it, and successive refinements to the instruments often provide more reliable and improved results. It is relatively easy to measure, takes into account intangible returns, and it appeals to a common-sense view of effectiveness. However, end user satisfaction relies on individuals' perceptions that may be flawed or limited, and it does not provide a single yardstick against which different users' experiences can be measured. Yet in the absence of a more reliable means of measuring intangible benefits, end user satisfaction remains a practical measure of IC success.

### **1.3 Research Objectives**

The objective of this research project was to determine if there is a difference in user satisfaction in the In-house Help Desk Support Model and the Outsourced Help Desk support Model. The research project surveyed an organisation in New Zealand where both Help Desk Support Models are used.

### **1.4 Limitations of the Study**

As mentioned previously, in the absence of a more reliable method of measuring Help Desk success, end user satisfaction is by far the most common and practical measure of Help Desk success.

Doll and Torkzadeh (1988) have developed an instrument to measure the "computing satisfaction" of an end user with a specific application. However, as with Mirani and King (1994a), this research project adopted a more general instrument with the intent to measure end users' overall satisfaction with their Help Desk. The survey questionnaire measured the overall success and some factors that may have an impact on the overall success. The list was not exhaustive, and it was only what was deemed appropriate to the organisation that was being surveyed.

The sample size for this study was relatively low. Due to management issues, this survey was narrowed down to study only Second-level support. Hence, the test results from the First-level of support were not analysed, as the First-level of support was outsourced. The majority of the respondents were end users, hence a selection of other categories of end users such as middle management and more senior management would have been beneficial to the study as this may have provided a different view on the Help Desk's effectiveness and its support services.

### **1.5 Research Question**

The research question was to investigate whether an In-house Help Desk Support Model is more effective than an Outsourced Help Desk Support Model in its support services. This was measured using a user satisfaction instrument.

### **1.6 Organisation of the Thesis**

This first chapter of this thesis has introduced the project objectives, and will be followed by the literature review in Chapter 2. The research methodology and design will be detailed in Chapter 3, leading on to Chapter 4 which presents and discusses the results after analysis. Chapter 5, the final chapter, describes the conclusions drawn from the study. It also discusses its implications and gives suggestions for future research.