A Framework to Evaluate and Overcome User Anticipations and Concerns from New IT System

Mahmood Ali, University of Business and Technology, Jeddah, Saudi Arabia

ABSTRACT

The introduction of new technology presents a unique set of challenges which are unlike from any other change process. It brings itself changes which directly impacts user’s performance and their day to day activities. Due to its profound impact on the user, they tend to have certain anticipations and concerns from the new technology which influence the acceptance of new technology. Adopting key informants interview methodology, user anticipations and concerns arising from the new technology are identified. The findings suggest that generally users’ expectations and concerns are drawn from their previous experience with the IT system and they tend to view a new implementation as what is in there for them. The paper concludes by providing a framework overcoming the resistance to the new system by incorporating key factors relating to the user anticipation and concern, and suggesting strategies to improve successful adoption and to increase user involvement.

KEYWORDS

IT Implementation Strategy, IT Systems, IT Users, New IT Implementation, User Resistance

INTRODUCTION

The adoption of a new technology in the organisation brings in a new set of challenges which are different from any other organisational change process. One of the main issues commonly observed in IT implementation across the organisation is how the users will perceive new technology and what are their anticipations. There are numerous studies conducted over understanding the theory behind the user’s resistance, however, there is a lack of research which focuses on the user’s anticipation and fears resulting from the introduction of the new technology. Since users are the key players in making an implementation successful or complete failure. It is generally observed that users are mostly affected by the implementation of new technology. The introduction of new technology with the perception of the changes it will bring creates a major anxiety among the future users. Generally, users have different levels of anticipation and fears from new technology. The anticipations and fear are generally a by-product of the uncertainty which is associated with changes which are part of new technology adoption.

Literature review suggests several reasons which often results in the increase in fear level such as uncertainty (Jiang et al., 2000; Krovi 1983), and fear itself (Joshi, 1991; Lapointe & Rivard, 2005; Marakas & Hornick, 1996). Among these, uncertainty is recognised as a critical factor. Hirschheim

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and Newman (1988) concluded that uncertainty provokes fear in the individual since employees may see change as a threat and poses a fear of losing their jobs, being transferred away from their friends, being unable to acquire the new needed skills, and losing status and prestige.

The work of Dickson and Simmons (1970) essentially covers the spectrum of the anticipation and fears of the users. They categorised the resulting behaviour of the users under three headings: aggression, projection and avoidance. Aggression results in harming the object causing change while projection is behaviour exhibited when a person blames the system for causing difficulties. Avoidance is concerned with person avoiding the new system.

According to technology acceptance model (TAM) proposed by Davis (1989), whether or not user will accept an innovation, such as new technology or system, is determined primarily by two types of perception: whether using the system will enhance the user’s job performance (perceived usefulness), and whether the system will be easy to use (perceived ease of use). The TAM suggests that these two perceptions exert substantial effects on people’s attitude and behavioural intentions relating to the system. Kanter (2013) identified negative factors that influence user’s performance including loss of control, uncertainty, concern about competence and increased workload. Therefore, it is important to understand the user’s anticipation and fears (which affect the acceptance rate) from new technology so as to make it successful.

By involving the user in the decision-making process and convincing them with the benefits the new system will bring in, Sanders (1974) suggested that user’s fears from the new system can be reduced by. Further, user’s performance is very often influenced by the anticipation of future redistribution of resources. This can also include departmental budgets, equipment, staff and territory; and individual authority, status, salary and role, etc.

Studying the role of users is vitally important. Nevertheless, it is noted that there is little research with an in-depth analysis of the anticipations of the users from the perspective of new technology and also the concerns resulting from its introduction. This research studies the user anticipation and concerns from the new technology inside an organisation and proposes a framework of the key factors involved in successful adoption and increase user involvement.

**RESEARCH METHOD**

We adopt a qualitative research approach through conducting three case studies since it is more apt for answering ‘why’ and ‘how’ questions. Further, Yin (2003) suggests that such an approach is an ideal method when a ‘how’ and ‘why’ question is being asked about a set of events over which the investigator has little or no control. ‘How’ questions are usually associated with describing relationships, while ‘why’ questions tend to explain the reasons why those relationships exist (Yin, 2003).

In this research three organisations were selected on the basis of their recent new IT system implementation to obtain detailed and real-life data. The selected organisations implemented different IT systems in their organisational structure and daily operations and were selected based on convenience sampling. During the selection process, several organisations were contacted to take part in the study and here only the three organisations were presented due to information saturation for more case studies.

For the interview process, two sets of questions were designed and developed through training and extensive literature review. The first set, called the ‘warm-up’, was structured and designed to collect basic information about the participants, organisations and implemented system. The warm-up questions were sent to the participants in advance before the main interviews.

For the main interview, the second set of questions was designed in a semi-structured interview format (see Appendix). In semi-structured interviews, the researchers had a list of themes and questions to be covered. The interviewees were given opportunities to talk freely about the events and behaviour. This is also called as an informant interview since it is the interviewee’s perception that guides the conduct of the interview. This semi-structured format is suitable for this research since
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