A Theoretical Perspective on the Relationship between Change Management Strategy and Successful Safety Management System in the Food Industry in Saudi Arabia

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Abstract

This research aims to explore the success factors in change management strategies in order to assurance a successful implementation of an organization's safety management system in the food industry in Saudi Arabia. A wide-ranging literature was reviewed. The results indicate that successful change management strategies   consists of three stages: preparing to change, implementation of change, and evaluating the impact on employee. In the preparing to change phase, organizational leadership should prepare to change the organization culture and structure through watching individuals, organization and culture. Then, in the implementation of changing phase, organizations must apply the following factors: project leadership/team effectiveness factors, end-user communication factor, culture factor, end- user training/involvement factors and development factor. Finally, in measuring the impact on user phase, organizations must measure the impact of change strategy factors on the end-user. Also, organizations should pay attention to feedback in the previous three phases to modify mistakes and develop change strategy.

Keywords: Change Management Strategy, Safety Management System(SMS)

1. Introduction

Due to high market competition in the world and specially in Saudi Arabia in food industries, all enterprises are working hard to improve the safety management system and image of their foodstuffs by change management strategy in order to deliver their clients with highly pleasant, quality and safe supplies. Change does not occur solely at the organizational level, but also at the countries level of the world. For instance, in late 2010 and early 2011 sparked a wave of revolutions and protests throughout the Arab world or to be called Arab spring which aimed to change something in the Arab world systems. The organization kept a constant policy to keep their customers and updated with technology to keep their ability to competition. Therefore, many organizations seek to possession the safety management systems SMS, in addition asserting that a SMSs help the various elements of the organization to share knowledge and information, cut back costs, and improve management of business processes (Aladwani, 2001). Despite the advantages of SMS system, it faces resistance to change when transit to another system (Finney and Corbett, 2007) and it collide in implementation difficulties because of employees' resistance (Aladwani, 2001; Al-Mudimigh et al., 2001; Al-Mashari and Al- Mudimigh, 2003; Jaideep et al., 2002; Kee-Young and Jae-Nam, 2008; Lashunda, 2010; Umble et al., 2003). Leon (2008) mentioned that 13%, 69% and 28% failure rate of the SMS systems as a result of technological issues, people and method respectively. However, Foster et al. (2007) showed that 90% of firms that applied change management to SMS implementations believed that it had a powerful impact on the success of the project.

Nevertheless, SMS implementations are plagued with high failure rates and inability to

understand promised advantages and the failure rate has been estimated as 60-90% (Al-Shamlan and Al-Mudimigh, 2011). The high failure rate within the implementation of SMS are concerns to improve the understanding of the process (Somers and Nelson, 2004). In fact, several cases of the failure to implement SMS can be considered because of cancellations and time overruns have been reported (Ngai et al., 2008). Al-Mashari and Zairi (2000) assert that effective implementation of SMS needs establishing five core competencies that are the utilization of change strategy development, project management, change management techniques, integration of business process re-engineering, and technical aspects to push the infusion of SMS within the workplace. However, change management engages the successful balancing of forces in favour of a change over forces of resistance (Stebel, 1992).Comprehensive income statement is a measure of firm performance. The purpose of issuing this statement is to make firms to disclose some certain elements of financial performance in order to help user groups of financial reports in making better financial performance evaluation. Also, comprehensive income as a basic financial statement, should report in details all the recognized revenues and expenses of the firm. The focus of income statement is on the operating revenues and expenses. User groups of financial reports for decision–making require data related to all revenues and expenses (including gains and losses). Therefore, it is necessary for a basic financial statement to include such items and to show changes in owners' equity related to those items.

Moreover, understanding SMS project implementation through a balanced perspective can thus forestall any unpleasant surprises, guarantee and guide the change management method to be embedded during an implementation painless fashion (Al-Mudimigh et al., 2001). Also, SMS system is usually related to elementary change for organizational processes that involve totally different stakeholders (Kee-Young and Jae-Nam, 2008). Therefore, attention should be paid well for the stakeholders of change strategy. Moohebat et al. (2010) in their article under the title of "A Comparative Study of Critical Success Factors (CSFs) in Implementation of SMS in Developed and Developing Countries" showed that change management considered to be the most important factor in developed countries to implement SMS in developed and developing countries. Variety of researchers were done to focus on the critical success factors within the implementation of SMS in order to scale back the failure rate of SMS implementation(Finney and Corbett, 2007). This paper discusses the change management strategies that led to success of an SMS system through strategies and processes. The motive of conducting literature review is to find out the impact of change management over the implementation of SMS. The aim of this paper is to analyze the theoretical approaches on the basis of practical derivations. Furthermore, literature review was focused on exploring various theories change management area as well as its relation to safety management system implementation. The supporting of SMS has been studied to achieve organizational goals.

2. The Practices in Change Management Strategies

Aladwani (2001) mentioned that a review of research revealed different strategies for implementing successfully. These strategies are classified into technical, organizational and people strategies. Several of the technical strategies that have been planned to decide system success include technical characteristics of system installation, system complexity, adequacy degree of in-house technical capability, and cost and time of implementation (Al-Mashari and Zairi, 2000; Russo et al., 1999; Sarker and Sarker, 2000). Organizational strategies for supporting system implementation achievement include change strategy growth, change management methods, project management, organizational structure and capital, managerial ideology, coordination, and information system function characteristics (Aladwani, 2001; Al-Mashari and Zairi, 2000; Sarker and Sarker, 2000). People strategies contain employees and top management attitude, user involvement, and education (Amoako-Gyampah, 2005; Russo et al., 1999). There are many change management strategies in previous studies in which some of them present efficient techniques,

approaches and models. Also, others are neither efficient nor practical. This section presents and illustrates most important change management strategies for system implementation.

Zafar et al. (2006) proposed a model for managing user resistance and successful system implementation and is illustrated by the change management model (Figure 1). The model recommends that the organizational resistance is predicted to be negatively associated with: resistance to changes is going to be negatively associated with achievement of predetermined goals, and also resistance to changes is going to be negatively connected to user satisfaction. The change management initiatives like obtaining the staff concerned and creating available support teams can mitigate the impact of resistance to change and enhance implementation success (Zafar et al., 2006). Early user involvement within the design and implementation of latest business processes additionally as extensive top-down and cross-functional communication could generate enthusiasm for system implementation (Stratman and Roth, 2002). The tool of management is leadership, communication, training, planning, and incentive systems. These tools should all be used as levers to get rid of obstacles with minimal effort when applied properly.
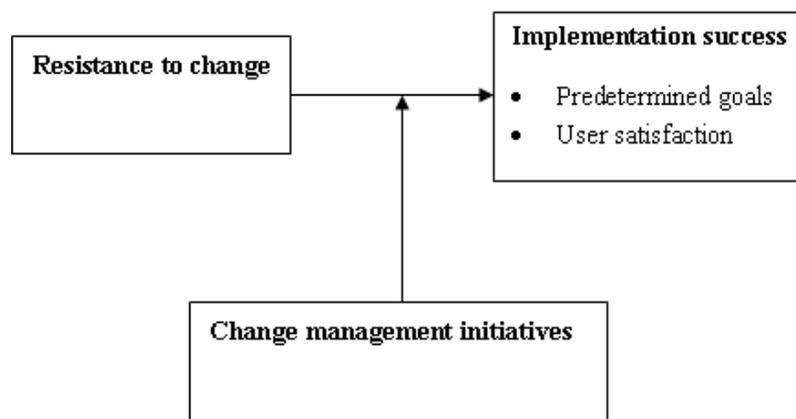

Fig 1. Change Management Model (Zafar et al., 2006)

Aladwani (2001) suggests approaches on the link between marketing as a change management strategy and is illustrated by the approaches for managing change associated with system (Figure 2). Additionally, he suggests method oriented framework consisting of three phases: knowledge formulation, strategy implementation, and status evaluation. The study assumed that change management and management support ought to absolutely influence system awareness, feelings towards the system, and therefore the intention to adopt that system for users.
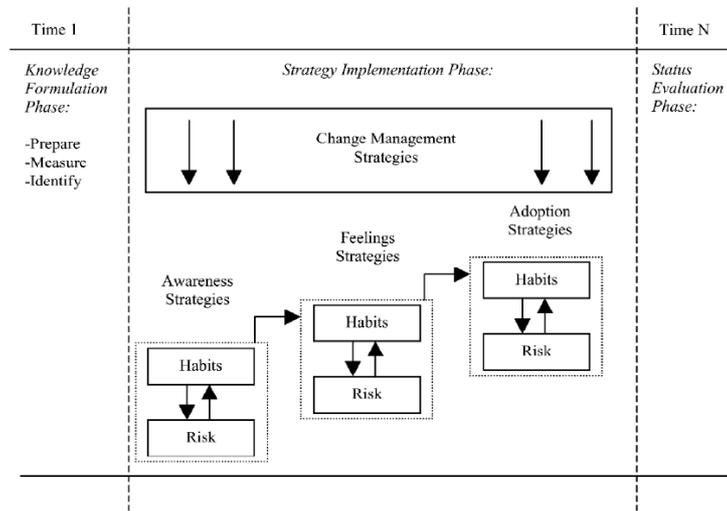
Fig 2. Approaches for Managing Change Associated (Aladwani, 2001)

Kerimoglu and Basoglu, (2006) proposed a model for optimizing change management and implementing SMS system successfully; and recommended the gaps between technology, human and organization ought to be minimized. The purpose surrounded by a dashed circle is the optimal point where the gaps are minimized. There are three places where compatibility is of worry: between organization and technology, between human and technology and between organization and human. Through reaching the optimal purpose utilization of SMS systems are going to be maximized and are illustrated by the actors of SMS project (Figure 3), it suggests an efficient and applicable change management plans ought to be applied for every stage where incompatibilities occur.
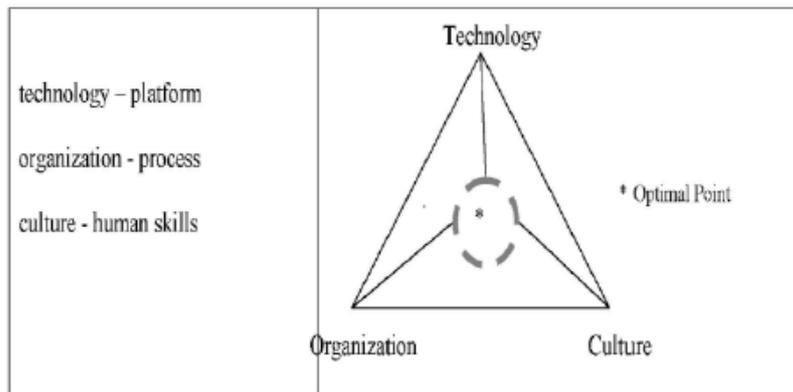

Fig 3. Actors of ERP Project (Kerimoglu and Basoglu, 2006)

Trieu and Kuzic (2010) mentioned that the elements of change management strategies are common to successful system implementations in their study. The common elements identified include: top management support, project champions, effective communication, clear systematic plans and effective training/knowledge transfer. Trieu and Kuzic (2010) model is illustrated in Figure 4.
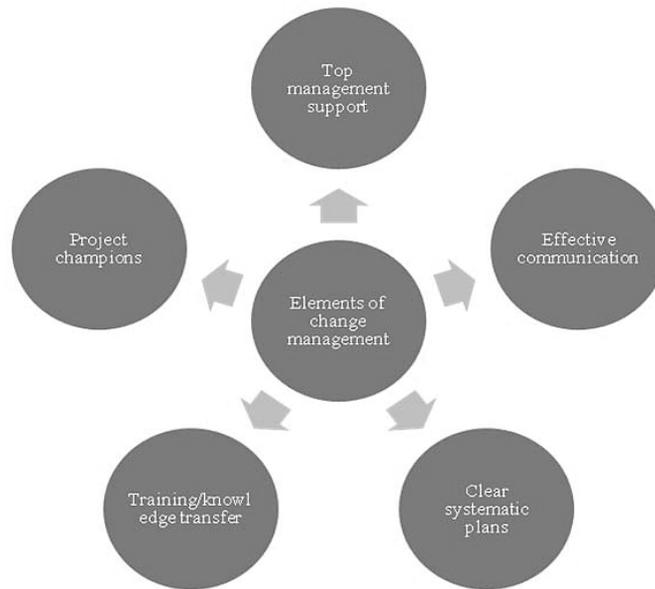
Fig 4. The Elements of Change Management Strategies (Trieu and Kuzic, 2010)

3. Critical Success Factors for Change Management Strategy

In the 2005 change management success factors survey from Deloitte (2005) information from twenty nine different firms was reviewed to look at the critical factors for change management strategy that play an important role in system implementation success. The distribution of the survey perceived in Figure 5. This illustrates that the area of change management success factors has common components.
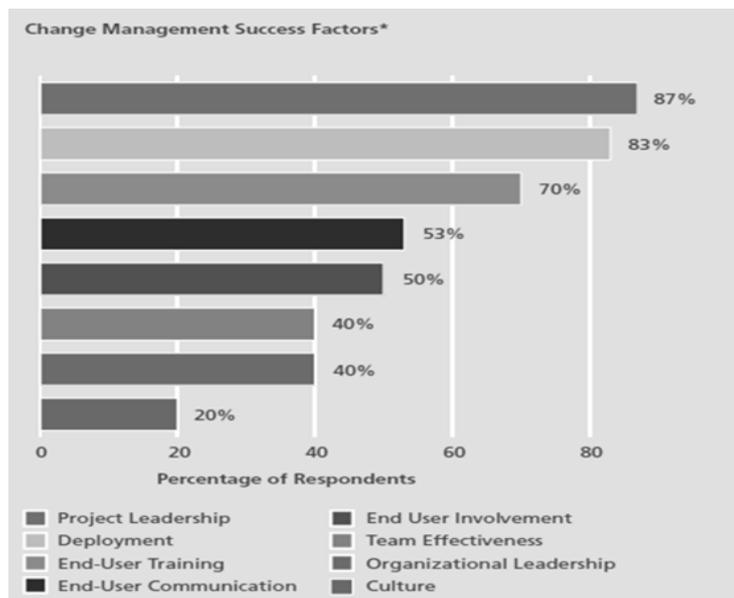

Fig 5. Change Management Success Factors (Deloitte, 2005)

The change management factor contributing to the success of system implementations was the involvement and support of project leadership (87%). Ensuing most important success factor was a spotlight on deployment (83%), followed by End-User training (70%). Deployment activities embody using Super Users/Power Users to roll out the system resolution and providing end-user support when the system implementation. Surprisingly, just (40%) of respondents felt that the involvement of organizational leadership was an important success factor, a similar level as team effectiveness. Finally, just (20%) of respondents attributed success to the culture of the organization.

4.1. Project Leadership

Responsibilities of tasks must be assigned to group or individual of individuals to attain success in project leadership. Project scope must be clearly outlined and restricted. It needs the involvement of business units and quantity of current systems implemented and BPR (Rosario, 2000). Needs should be analyzed against the advantages of organizations wants, if potential implement it at later stage. Also, time constraint must be in read when proposed changes are going to be done (Wee, 2000). Project milestones should be outlined, important methods must be determined and selections ought to be deadlines, taken, budget, and schedule must be maintained properly. Also, involvement of HR department is needed actively to resolve conflicts that emerge whereas achieving projects or plans milestones. Budget check, tracking of schedules, and focus results against fascinating outcome should be checked   properly. Project leadership from project leader is thorough out the lifecycle of implementation somebody should be obtainable who run through the project in case of illness of project leader (Sarker and Lee, 2003).

4.2. Development

To facilitate avoid reconfiguration at each stage of implementation, system design must be established consistent with needs of the organization. Testing and troubleshooting are important stages for system implementation (Wee, 2000). Project team must work as teamwork to resolve the bugs of the system. They must work with patiently and diligently to resolve the matter. Testing must be completed in chunks since it is essential to implementation. Rosario (2000) claimed that acceptable techniques, tools, and ability will help in system success.

4.3. End User Training

Sufficient budget must be allotted on users within the training sessions and system design process (James, 2004). Their objectives must be clear to grasp the system (Umble et al., 2003). According to Wee (2000), support organization is essential to satisfy user's requirements when installation.

4.4. End User Communication

Al-Mashari et al (2003) Conclude that effective communication is important to system implementation. It must be communicated at each level of system project life cycle. Importance must be given invariably to user input for his or her requirements, reactions, comments, and approval (Mandal and Gunasegaram, 2003). Project progress ought to be presented in front of organizational committee and managers to indicate the present status of system project. Any modification within the objectives, activities, updates, must be mentioned with staff (Mandal and Gunasekaran, 2003).

4.5. End User Involvement

End-user involvement is seen as the fraction of change management. User should be involved in planning and implementing there-business processes of the system (Umble et al., 2003). Special training programs to teach them must be performed (Mandal and Gunasekaran, 2003). James (2004) stated that separate budget ought to be fastened on various types of training and education.

4.6. Team Effectiveness

Researchers focused on safety management system project life-cycle running. Based on Rosario (2000) system project team must consist of the finest employees in the organization. However, Sumner (2000) declared that team ought to consist of mixed employees: specialists, project managers, and skilled internal employees so they know how to develop technical skills for implementation and design. Structuring a cross- functional team also helps and has a very important role. Technical and business knowledge are necessary for the achievement of system implementation (Sumner, 2000). Wee (2000) stated that team staff need to be allocated full-time to for running and must be co-located as one to smooth the progress of working together. Regarding to Rosario (2000) and Wee (2000), teams should be familiar with the total arrangement of the managerial processes so they know what requirements to be done in handling business risks. Also, partnership expected between organizations is very important and managed often with performing meetings (Wee, 2000).

4.7. Culture

Organization with an understanding culture would have higher understanding of information management, application functionality, and a lot of accepting systems. In other words, staff's attitudes in the direction of computers and organizational confidence on computers play a vital role for ERP implementation (Huang and Palvia, 2001).

4.8. Organizational Leadership

Improvement change management strategy in safety management system implementation involves change. Internal client is important for a company to avoid the difficulties related to this change (Al-Mashari and Zairi, 2000; Aladwani, 2001). Change management strategy is vital within the entire life cycle of the ERP implementation. Rosario (2000) declared that change enterprise culture and structure ought to be managed by watching three factors: individuals, culture and organization. Winning system implementation needs robust readiness to simply accept modification with quality and computing ability, and commitment management and implementation efforts for using the system. Regular communication, operating with company culture, recognising job aids for end-users and making friendly surroundings will result in successful implementation (Al-Mashari and Zairi, 2000).

4. Research Methodology

Initially, Bogdan and Taylor (1975) stated that two main theoretical perspectives have dominated social science. Positivism traces its origins to the great social theorists of the nineteenth and early twentieth centuries. The positivist seeks the facts or causes of social phenomena with little regard for the subjective states of individuals. The second theoretical perspective is interpretivism, in which tradition the theorist is concerned with understanding human behavior from the agent's own frame of reference. Furthermore, according to the positivist paradigm, researchers usually use a deductive procedure in which theory is explained by searching for cause and effect associations between

observations. However, interpretivists use an inductive technique in which the data gathered or the researchers' observations produce grounded theory (Crotty, 2007).   Qualitative and quantitative methods are rooted to the 20th century, in which researchers aimed to discover reality (Perry et al, 1999). Smith (1983) stated that quantitative research is associated with the traditional, positivist, experimental or empiricist paradigm, whereas qualitative research is associated with the constructivist approach, or the naturalistic, the interpretative, humanism, and post-modern perspectives.

Creswell (1994, p. 1-2) defined quantitative research as "an inquiry into a social or human problem, based on testing a theory composed of variables, measured with numbers, and analyzed with statistical procedures, in order to determine whether the predictive generalizations of the theory hold true"; whereas a qualitative study is "an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting". In addition, Strauss and Corbin (1990, p. 17) argued that qualitative research is in general any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification. Whereas quantitative researchers seek causal determination, prediction, and generalization of findings, qualitative researchers seek instead illumination, understanding, and extrapolation of similar situations.

On the one hand, quantitative research test theory deductively from existing knowledge, through developing hypothesized relationships and proposed outcomes to produce a legitimate scientific answer. As a result, hard data and action are generated and changes take place (Melia, 1982). On the other hand, qualitative research is a philosophical approach that can generate more soft science than quantitative research (Burns and Grove, 1997). Qualitative methods have been used for a long time in the social sciences (Mays and Pope, 1996) and are valuable for research questions concerning experiences, thoughts, perceptions, expectations, motives, and attitudes. Qualitative research can therefore be utilized for the improvement of concepts that assist in understanding social or other subjective phenomena in natural settings, and giving more attention to the meanings, experiences, and views of all participants.

Since both single methodology approaches (i.e. qualitative and quantitative) have strengths and weaknesses, the combination between such approaches (i.e. employing different methods such as observations, interviews, and survey questionnaires) could be used to strengthen the validity of research (Nau, 1995). Indeed, Jick (1979) defined triangulation as a vehicle for cross validation, when two or more different methods are found to be congruent, and yield new ideas and comparable data. Also, Das (1983), Yin (1994, 2009), and Patton (2002) highlighted triangulation as a combination of methodologies in studying a similar phenomenon. Moreover, Denzin and Lincoln (1998) stated that no single method always adequately solves the problem of rival causal factors; and because each method reveals dissimilar aspects of empirical reality, multiple methods of observation must be employed. Indeed, research is defined as "the systematic process of collecting and analyzing information in order to increase our understanding of the phenomenon about which we are concerned or interested" (Leedy and Ormrod, 2005, p.4). The main issue in this definition is that this study will follow a systematic methodology to achieve its goals. Methodology has been defined as "the steps that will be taken in order to derive reliable and valid answers to those questions and … defines the appropriateness of a given research tool" (Ellis and Levy, 2008, p.21). Therefore, this study mainly will use quantitative data supplemented by a qualitative survey. Firstly, the quantitative research will be used to examine the hypotheses of the study derived from the literature review, and from the conceptual framework. After that, qualitative research will be commenced by employing semi-structured interviews, to understand in depth the relationship between the variables in KSA public companies. Further, the researcher will explain in great details the philosophical basis and design of the research, and the ways in which the study will be executed. This is by explaining the research population and sample frame, the adequacy of the sample size, the

development of the research variables and piloting study, the survey questionnaires translation, and data collection methods in terms of survey completing, and complementary qualitative interviews.

5. Conclusion

Change management strategies are extremely well-known for the sustainability of an organization. Adopting safety management system through change management will add a lot of success to a in the food companies in Saudi Arabia. But to deem the surroundings and other people as the major tools are the basic that would like for the total system to work well. Also, there is the necessity to induce a preparation for any kind of hurdle that comes. Handling complicated beneath efficient leadership is that the core matter of pains for a sleek ride of safety management system. A need into the planned and pre-implemented strategy followed by implementation and post- implementation consequences will bring in views for achieving organizational goals. In addition, based on the preceding review on the explored literature of change management of safety management system implementations, change management becomes a crucial topic within the safety management system implementation. Moreover, a collection of articles addresses the change management by explaining why it is necessary within the safety management system implementation, the way to do it effectively, the best practices, the successful experiences, and therefore the appropriate change management strategies.

This study found that the change management strategies critical success factor fall beneath one of eight main categories, namely Project Leadership, Development, End User Training, End User Communication, End User Involvement, Team Effectiveness, Culture and Organizational Leadership. However, based on previous studies conducted in the study area from 2000 to 2011, the change management strategy, one among the foremost widely cited critical success factors in system Implementation. Also, the most important and citation studies of change management strategies on system implementation, as follows: change management model (Zafar et al., 2006); approaches for managing change associated (Aladwani, 2001); actors of system project (Kerimoglu and Basoglu, 2006); the elements of change management strategies (Trieu and Kuzic, 2010), and change management model (Calvert, 2006).

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