

CHANGE MANAGEMENT FOR THE IMPLEMENTATION OF ICT APPLICATIONS IN NIGERIAN CONSTRUCTION INDUSTRY

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ABSTRACT

Information and communication technology is increasingly deployed in enhancing organizational processes for a positive impact on productivity and job satisfaction. Unfortunately, numerous construction organizations focus on the “hard” technology acquisitions in guiding organizational success and ignoring the integration of human system assumed to be the end-user of the invested technologies. The failure of most ICT interventions to effectively integrate employee adoption issues have contributed significantly in abandoning IT initiatives for not meeting their performance objectives. Through an extensive review of academic literatures, this study examines the importance of change management and reflects upon its significance in the larger context of ICT implementation. To do this, the general concept of organizational change management and change models/theories have been discussed along with some important constructs considered in organizational transformation from developing country perspective.

Keywords: Organizational Change Management, ICT, Change, Model, Resistance.

INTRODUCTION

Change management has had an unquantifiable impact on improving organizational processes by altering how work is done. Unfortunately, one of the most difficult challenges organizations face today is dealing with change (Lorenzi *et al*, 2003; Buchanan *et al*, 2005; Christensen, 2000; Kanter, 2003). Change management strategies is essential as organization faces a change in mission, restructuring operations, layoffs, new technologies, mergers, rightsizing and new management to overcome individual resistances, create readiness, commitment and change the mindset and attitudes of change recipients. The impact and consequences of any change initiative on an organization, its employees and

working processes depends on the nature and type of changes, but most importantly according how the changes are managed (Erdogan, 2008; Weick & Quinn, 1999; Kavanagh & Ashkanasy, 2006). Since Information and Communication Technology implementation in organizations distorts administrative and cultural processes, managing its deployment becomes imperative to maximize the benefits, minimize the penalties and ensure a reasonable success in the technology adoption. Information and communication technology architectures are being deployed to organizations without appropriately aligning the hard components – hardwares such as computers and other accessories with the soft components – people, processes and organizational cultures and work practices. Thus, a gap is created between the technical aspects and the end-users. Appropriate and recommended strategies and models should be used since a plethora of academic literatures (Bourne *et al*, 2002; Beer & Nohria, 2000; Chen & Popovich, 2003) argue that as much as 70% of change management efforts have failed to meet their intended result.

There are insufficient literatures on change management in the context of developing countries - more specifically Nigeria and construction organization managers lack adequate insights as to the general concepts, strategies and implementation processes of change management (Santhidran *et al*, 2013). This study examines concepts and aspects of organizational change management in the larger context of ICT implementation in developing countries with specific reference to Nigerian construction industry. To achieve that, the general concept of change management as it affects construction organizations are presented along with its impact on ICT adoption. The final phase of the study concludes and recommends relevant areas for further studies as there are little or no literatures on organizational change management in ICT implementation in the Nigerian construction industry.

THE CONCEPT OF ORGANIZATIONAL CHANGE MANAGEMENT

Altering the behaviour of even a single person in an organizational setting (discontinuing unwanted behaviours and/or initiating new behaviours) is a challenge. That is why even experienced managers encounter difficulties in moving collective behaviours from one state to another. For organization to stay relevant and competitive, change is necessary and since the new normal is continuous change (Jorgensen *et al*, 2009), organizations should adapt and respond to appropriate changes in a timely manner to foster organizational performance. The mere mention of change can generate feelings of nervousness and tension, and as the change begins to take shape, organizational members may feel a sense of uncertainty and confusion. Given such realities, it appears unlikely key organizational leaders could underrate the implications that come with change initiatives (Bernerth,

2004). Various strategies are used in the introduction of organizational change management in construction organizations. According to Erdogan, (2008), organizational change management concept has solid association with human resource management, strategic management, risk management, organizational learning, information technology management and quality management concepts. The author further observed that those concepts overlap with organizational development and organizational dynamics. Business Process Reengineering (BPR) and Total Quality Management (TQM) are examples of some of these changes within construction setting.

ORGANIZATIONAL CHANGE MANAGEMENT MODELS

Researchers have proposed various organizational change management models as a contribution to literature and practical application. Since organizational change management addresses the people side of change, most models reflect management of human behaviour.

Kurt Lewin's 3-Step Model. This is the earliest model of organizational change management aimed at overcoming employees' resistance and pushing them in the desired direction. The Lewin's three step change model comprises of freezing, transition and refreezing. The freezing stage tries to minimise the forces that are struggling to maintain the status quo and changing the current mind set. This is usually done by presenting a challenging problem to get employees realise the need for change and to search for new solutions. The second phase of the model which is transition is basically an attempt at developing new behaviours, values and attitudes in line with the intended change initiative. The last phase of the model entails adapting the new behaviours by form of refreezing the already design attitudes and processes. Without refreezing, the organization may return to old ways of doing things.

Lippitt's Change Theory. In 1958, Lippitt, Watson and Westley extend Kurt Lewin's model by creating a 7-step theory that focuses specifically on the role of the change agent and not the evolution of the change itself. The model guarantees an exchange of information throughout the process. The model's phases are: (1) Diagnose the problem (2) Assess the motivation and capacity for change (3) Assess the resources and motivation of the change agent (4) Choose progressive change objects (5) Clearly define the roles of the change agents (6) Maintain the change through communication and feedback (7) Gradually terminate from the helping relationship. The basic argument behind Lippitt's model is that changes are more likely to be stable if it spread around all affected systems (Kristonis, 2004).

John Kotter (1996) 8-Step Change Model. In 1996, John Kotter looked at what successful people do in transforming their organizations and recommended an eight steps model to help managers deal effectively with transformational change. The first step is creating a sense of urgency such that people start telling each other “we need to change things”. The second step is pulling together a guiding team strong enough to see the change through. The next step is creating clear, simple and uplifting visions and setting adequate strategies. This step is followed by communicating the visions through simple and heart felt messages sent through various channels so that people begin to buy-in to the change. The fifth step is empowering people by removing obstacles to the vision. Step six is aimed at creating short term wins that offer momentum. The seventh step deals with maintaining the previously created momentum and the last step is making the change permanent by nurturing the new culture.

Kritsonis (2005) compare the above change models and a host a host of other change models and deduced that all the models identified a process where the organization has to establish a reason and need for change.

Organizational change management is wide and affects almost all disciplines. To fully understand the concept, researchers have examined various constructs of change such as resistance to change, readiness for change, commitment to change and openness to change.

RESISTANCE TO ORGANIZATIONAL CHANGE

Early conceptualization of resistance to organizational change can be traced back to Kurt Lewin’s (1947) ground-breaking studies of force-field analysis in the organizational development literature Bhattacharjee and Hikmet, (2007). Lewin discovered that social system has a tendency to maintain status quo by resisting change and returning back to the initial state. Consequently, Lewin suggested three inter-related steps of overcoming organizational resistance through unfreezing – creating the motivation and readiness to change, Changing – helping the change recipients to see, judge, feel and reacts to things differently, based on a new point of view and Refreezing – helping the change recipients to integrate the new point of view into the organization as well as the individual personality. Resistance stems not only from employees but from both top and middle managers as well Palmer *et al.* (2006) and the six resistance over-coming strategies recommended in extant literatures (Kotter & Schlesinger, 2008; Lunenburg, 2010; Agboola & Salawu, 2011) are essential for all organizations undergoing a change process. They are: (1) Education and/or

Communication (2) Participation (3) Facilitation and Support (4) Negotiation (5) Co-optation (6) Manipulation and (7) Coercion.

Resistance is an obstacle to organizational development and one of the key reasons of change management failures.

READINESS FOR CHANGE

Creation of readiness among employees is the first step in organizational change implementation. Readiness is an opposite end of resistance to change (Bernerth, 2004) and it entails building positive expectations. According to Vakola, (2013), the term ‘readiness’ reflects three different concepts: individual readiness to change such as confidence in one’s abilities; perceived organizational readiness to change, such as confidence in organizational ability to initiate and manage the change; and the actual organizational readiness to change, which is the organization’s ability to implement change. Similarly, Armenakis *et al.* (1999), suggested readiness for change is best described as a ‘change message’ consisting of five components: Discrepancy, Appropriateness, Efficacy, Principal Support and Personal Valence. Discrepancy deals with sentiment regarding the need for change. This is demonstrated by examining how organization’s performance differs from the desired performance. In essence, change recipients must believe that something is wrong and some things need to change. Appropriateness deals with the right kind of change strategy to be adopted. Employees may see and understand the need for change but they may not agree to the proposed change type. Efficacy addresses sentiments with regard to confidence in one’s ability to succeed. Success in organizational transformation depends, to some extent, on individual, group and general confidence of organizational members. Principal support is top management commitments, seriousness and provision of adequate resources to carry out a change programme. Employees need to be sure that the intended change initiative has full backings of management and all needed supports are provided by the change agents. The last change message is personal valence which addresses “what’s in it for me?”. Employees should clearly see the benefits of the change initiative to them. What they stand to gain and how. A change effort accompanied by a salary increase (even with increase in responsibilities) may be easily appreciated and supported. The above five readiness creation strategies therefore highlight the importance of changing the organization in a step-by-step basis and not enforcing a different way of doing things. Readiness creation also ensures that the organization is capable of undergoing the proposed change effectively.

COMMITMENT TO CHANGE

Commitment to change is an essential ingredient of a successful organizational change management. Organizational managers who effectively and successfully get their subordinates committed to organizational goals, policies and procedures have upper hand in imbedding new changes in to the organization. Commitment is not the same as interest. When one is interested in doing something, he does it only when circumstances permit. When one is committed to something, he accepts no excuses, only results. To get employees commitment to a change initiative, adequate communication demonstrating the purpose and value of the change programme should be designed and channelled appropriately. A three component model of commitment to change developed by Meyer and Allen, (1991) explains that commitment to an organization is a psychological state... Similarly, charismatic leadership is perceived to greatly influence followers' commitment to change during a change Nohe *et al.* (2013) in addition to commitment to change's influence on quality of social relationships and work outcomes. Therefore, the success of any large-scale change programme such as ICT implementation is highly dependent on presence of employees with high level of affective commitment to change.

OPENNESS TO CHANGE

Openness to change in a particular organization refers to willingness to be open to changes that could increase the efficiency of the organization. It generally entails willingness to try new ideas perceived to be beneficial to the organization i.e. change acceptance and positive view of changes. A high level of openness to change is critical in creating subordinate readiness for organizational change Armenakis *et al.* (1993). A longitudinal study conducted by Wanberg and Banas (2000) examined the predictors and outcomes of employee openness to a series of work-related changes. The study reveals that personal resilience (a component of self-esteem, optimism and perceived control) was highly related to higher levels of change acceptance. Additionally, some context-specific variables such as information received about the changes, self-efficacy for coping with the changes and participation in the change decision process were predictive of higher levels of employee openness to the changes. This implies that lower level of change acceptance negatively affects employee job satisfaction as evidenced in the study. Thus organizations need CEO/Top Managers that are open to change and influence employees to follow suit. Organizational managers should note that to change is not to eliminate existing operational culture or all the difficulties that the organization have but rather to plan to innovate and improve efficiency considering internal and external challenges.

CONCLUSION

The concept of change management in ICT implementation is new to construction industry in Nigeria. This study highlights the concept and strategies in organizational change management literatures drawing from extant literatures from both developed and developing countries. Considering the importance of ICT in construction industry, construction organization managers need to fully examine and identify the likely sources of resistance from their employees when applying ICT facilities in their work processes. Additionally, readiness creation in form of top management support should be emphasized. These enhance a complete buy-in from subordinates and subsequent long term adoption for improved output. Insistence from managers to attaining organizational goals in form of absolute commitment is also important in organizational transformation. The study highlights the importance of aligning the soft and hard components in ICT implementation. Construction managers should not over emphasize the provision of computer accessories and other ICT facilities in their organizations. More emphasis and attention also need to be given to the end-users in terms of adequate training and managerial support. This study has gone some way towards enhancing our understanding of organizational change management concept as it affects construction industry in developing countries. It contributes, theoretically, on the general idea of organizational change in Nigerian construction industry and provides a basis on which subsequent theories on organizational change management can be built upon by researchers. On practical implication, the study serves as a guide to Nigerian construction organization managers on the concept and appropriate strategies to be followed during organizational transformations.

It is recommended that further research be undertaken to examine, individually, the discussed organizational change management constructs as they affect ICT implementation in Nigerian construction organizations. Furthermore, an empirical study needs to be carried out to understand the level of readiness, resistance and commitment and propose a model to aid in handling organizational change management issues as they apply to Nigerian construction organizations.

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