

ENTERPRISE SYSTEM, COVID-19 AND ORGANISATIONAL CHANGE MANAGEMENT: A CASE STUDY OF PUBLIC UNIVERSITIES IN RIVERS STATE.

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Abstract

This paper aims at identifying the causes, effects and probable solutions to the organisational change management failure brought about by the external impact of covid-19 in public universities in Rivers State. While public universities in Rivers state were slowly building their way to an entire Enterprise Resource Planning system (ERP), the sudden pandemic impact meant a sudden upscale to achieve its essential functions. A case study method was employed by interviewing 15 academic staff from the three public universities in Rivers state. The transcripts from the interviews were analysed using Nvivo 10.0 and compared to models on organisational change. This paper used organisational metaphors to identify how the university works. A review of the metaphor established that the university is predominately a political organisation; hence models with a political undertone were used to identify causes and proffer solutions. Among the answers were the importance of informal political groups, forming a coalition, controlling the agenda, keeping a long-term view by rethinking and redesign, and being reactive as situations develop.

Keywords: Enterprise resource planning, Covid-19, organisational change management, enterprise system, enterprise resource tools, public universities.

Introduction

The promised value of enterprise resource planning systems (ERPs) in operational, managerial and strategic dimensions has seen

exponential demand and usage growth in the last decade. (Guo & Wang 2015, Osei-Bryson, Dong, Ngwenyama, 2008; Woo, 2007). With advances in cloud technology (Gartner, 2012) and the scalability of its service, it is attractive to even higher institutions across the globe. However, lack of infrastructure and requisite skills in developing nations are the major obstacle to any technology advancement in the public sector.

This study focuses on the nature of public organisations, how organisations implement technological changes and react to external environmental threats, its willingness and structure that enable organisational change management.

Before the end of 2019, information technology, globalisation, changing workforce, and competitive pressure were the three main drives of organisational change management (Stouten and Rousseau 2016). However, the covid-19 global impact is set to be a significant disruption to the way of life, and no organisation will be left out. The global lockdown experienced in all the world's major cities meant that organisations needed to rethink their processes to survive. Public universities in Rivers state were not spared from national and state lockdowns. As with other disruptions, technology, in this case, information technology came to the fore. The use of ERP systems and Zoom for meetings became a global phenomenon. Despite this, public universities could not carry out their primary activities, even after training and official zoom accounts were purchased, coupled with ERP systems investment

over the years. While it is clear that lack of basic infrastructure is the primary cause of this failure, the study aims at identifying other factors that may have been the root cause of the inability to go virtual.

The literature on organisational change mostly centred on organisational change management models and how these models dictate the discussions on organisational change management irrespective of the change agent, be it in information technology, globalisation, a changing workforce or a pandemic. A significant aspect of organisational change is the behavioural aspect. Those in academics, of course, exhibit specific behaviour as against employees in other organisations. While most literature on organisational change centres on employees in profit-making organisations, this paper shall look at academic characteristics regarding their behaviour. Their education and experience in learning and research naturally make them averse to change while suggesting methods, based on literature and interviews, on how organisational change can occur in public universities.

Based on the following, this paper shall be answering the following research questions. First, what factors were responsible for the failure to carry out academic activities during the lockdown? What are the particular challenges faced in academics against those in other organisations regarding organisational change management? The aim is to build solid principles and processes on organisational change peculiar to the Nigerian environment.

Organisational Change:

To understand how organisational change occurs, Cameron and Green (2012) suggest that we identify, first, how organisations work. Secondly, the different models and approaches to organisational change and conclusions, based on the metaphors and assumptions inherent in the organisations.

How do organisations work?

Typically, we look at assumptions in terms of metaphors that are most regularly used to describe them. The advantage is knowledge of this range of beliefs shapes attitudes and understanding of organisations. It opens different possibilities and ways of understanding how people in organisations view the world. Morgan (1986) work on organisational metaphors and describe

metaphors as what allows us to stretch our thinking and deepen our understanding, enabling us to understand things in new ways and acts in new ways. However, metaphors do create distortions too. Therefore, the need to accept that any theory or perspective used in studying organisation and management can make valuable insights and be incomplete, biased, and potentially misleading.

Morgan (1986) identifies eight organisational metaphors: machines, organisms; brains; cultures; political systems; psychic prisons, flux and transformation, and instruments of domination. Cameron and Green (2017) review literature and consultancy and identify the four most used metaphors organisations use. This paper considered the four commonly used metaphors: organisations as machines, organisations as organisms, organisations as political systems and organisations as flux and transformation.

The machine metaphor is widely used. This metaphor sees organisations as rational enterprises designed and structured to achieve predetermined ends. Here, organisations are seen as routine operations, well-defined structures, and job roles. The limitation of organisations as machine metaphor has the mechanistic view. This approach works well in a stable environment. Change when approached with these assumptions is consequently hard work. It will necessitate intense management action, inspirational vision, and control from the top down. While having some mechanistic characterises, public universities fall short of this metaphor in their description. It operates in a slightly less stable environment, and its leadership structure is less than that described above, lacking solid management actions.

Organisations, as an organism metaphor, see the organisation as an adaptive living system. Here organisations adapt to their respective environment. That is, in a rigid environment, a bureaucratic method of organisation would prosper than in a fluid, changing environment where a less structured organisation would most likely thrive and survive. Hence organisations are seen as an open system, interrelated sub-systems designed to balance the requirements of the environment with the internal needs of groups and individuals. However, though there are aspects of organisations as an organism with what is obtainable in public universities, this metaphor

falls short in describing the power structure and influence of the environment on public universities in Rivers state.

Organisations as flux and transformation refer to complexity, chaos, and paradox associated with the organisation as they coexist with the environment. This view sees the organisation as part of the environment, with a capacity to self-organise, change and self-renew in line with a desire to have a specific identity. This metaphor sheds light on how change happens in a turbulent world. Because order emerges as you go along, it can lead to a disheartening sense of powerlessness but probably realistic. However, the relationship with the environment falls short of describing the university in terms of how it works, power brokers, structures, and interrelating with the entire system.

Organisations as political systems refer to the style of power rule used in the organisations. The usefulness of the political metaphor lies in recognising that power-play, competing interests and conflicts in organisational life as politics is part and parcel of all forms of life and interactions. The key tenets of these assumptions are that to build support for your approach to succeed. For that to happen, organisational leaders/managers must identify the different groups, formal or informal, their leadership, build coalitions, allocate resources while bargaining, negotiate, and vying for positions. The description of organisations as a political system adequately describe public universities. The appointment of the Vice-Chancellor (VC), principal members of the governing council, and the Pro-Chancellor, rotational department heads are all based on politics. Even the nature of academics and the responsibility of taught courses give a sense of autonomy to each lecturer, making them act as politicians in dispensing their commitment.

Models of and Approaches to Organisational Change

Cameron and Green (2017) identify five (5) models that view organisations as a political metaphor. Kotter, eight steps; Nadler and Tushman, congruence model, Carnall, change management model, Senge, systemic model and Stacey and Shaw, complex responsive processes.

Kotter (1995) eight steps model: This model has machine, organism and political systems metaphors. It highlights eight key lessons

converted to practical steps that address power issues in making change happen. The importance of organisational change and communication including the vision throughout the entire process. The eight steps model are: to establish a sense of urgency, forming a powerful guiding coalition, creating a vision, communicating the vision, empowering others to act on the vision, planning for and creating short term wins, consolidating improvements and producing more change and finally, institutionalising new approaches.

Nadler and Tushman (1997) congruence model: The model looks at factors influencing the success of the change process. It helps managers understand the different dynamics that change brings to an organisation (Nadler and Tushman 1997; Cameron and Green 2017). This model assumes that the organisation is seen as interacting sub-systems that scan and sense changes in the external environment. It adopts the open systems school of thought used in organism metaphor and has the political metaphor in its informal organisation, one of its four sub-systems. The congruence model is principally a tool used to organised managerial thinking (Nadler 1997). The informal sector in the model consists of all the unplanned, unwritten activities that emerge over time, such as power, influence, values and norms. It is in the informal sector that the political metaphor comes to play. Managers must understand the unplanned and unwritten activities, power brokers and influencers, values, and norms to build coalitions, allocate scarce resources, and align team members towards the desired change. While all four components must be aligned for a successful transition, the informal sector holds equal reverence.

Carnall (1990), Change management model: Carnall (1990) suggested that management requires managing transition, dealing with organisational cultures, and managing organisational politics to manage change effectively. Carnall (1990) refers to helping employees learn as they change and create openness and risk-taking by managing the transition. Finally, managing corporate politics is the understanding and recognition of different fractions and different agendas. Corporate politics requires utilising and recognising various political tactics such as building coalitions, using outside experts and controlling the agenda. According to Carnall (1990), having skills in all three areas

would create an environment where creativity, risk-taking, and performance can be achieved.

Senge (1999) systemic model: Is based on sustaining change in an organisation, thereby avoiding homeostatic returning to its previous state after experiencing change. Senge (1999) suggest managers need to think more like biologist to sustain change. Senge gave four guidelines: start small, grow steadily, do not plan the whole thing, and expect challenges. Organisations are view as systems with different forces at play. These forces take time to play out their effects fully, hence the four guidelines to guide the change process in the long term. The model examines the challenges of initiating, sustaining and redesigning and rethinking change. It considered how to balance the forces of equilibrium in organisational systems. This balancing involves giving much support to employees in terms of time, new skills and mindsets, coaching, conviction on the need for change, new behaviours from management, pilot group/study. These pilot groups are to become an evangelist of the new system.

Stacey and Shaw (2002), Complex responsive processes: This model assumes that change will emerge naturally and that managers are part of the whole environment. Shaw (2002) addressed the question of 'how do we manage change'? With the question, 'how do we participate in the ways things change over time?' Shaw (2002) asserts that interactions are constantly evolving in uncontrollable or unpredictable ways in the longer term, no matter how sophisticated our planning tools are. Their point is, we cannot predict or control change in a long time. Predicting change is valid with technological advancement and uncertainty occasioned by the covid-19 pandemic. Not only are we in an unprecedented period in the history of humanity, but the direction of technology is also such that it is difficult, if not impossible, to ignore, yet essential to the survival of businesses in today's world.

Methodology

Case Study Research

The recent nature of the covid-19 pandemic meant limited literature on its effects on organisational change management in public universities in Rivers state. Hence we employ case study methodology to conduct our research. Case study approach is considered appropriate when questions involving the 'how' and 'why' of a focal

phenomenon that the researchers have little or no control over (Guo & Wang 2015; Yin, 2009). In this study, we are interested in how the five (5) models of organisational change management with political metaphors affect the success of ERP in a pandemic era. The use of the case study method for examining organisational change has been strongly recommended (Yin, 2009). Hence, the case study method is appropriate for this study.

We followed the general guidelines for conducting our case study as presented in the literature (Yin, 2009; Dubé & Paré, 2003). A case study protocol was first developed based on an extensive literature search that included the scope and objectives of the research, the characteristics of the target firms, interviewees; the initial set of interview questions; and confidentiality agreement.

To help ensure the validity and reliability of the research, we confirmed that public universities had used some form of enterprise system software for at least one year; additionally, the research team interviewed the staff at different levels to ensure the organisational change model. As a result, the senior academic staff talked about the organisational change from the point of the overall organisation, while the employees described their perceived organisational change. For confidentiality, the three public universities are A, B, and C in this paper. The actual interview was conducted in late July with the research team. The interview took 20-40 minutes. With the agreement of the participants, all interviews were digitally recorded. The recorded interviews were transcribed verbatim into text documents

Data Coding and Analysis

All interviews were audiotaped and transcribed. Content analysis is employed to identify the organisational change model of each university's using NVivo 10.0, which is a user-friendly software package for coding data around themes. Content analysis is a methodology that falls midway between quantitative survey and qualitative interviews, and it is a formal procedure for classifying the qualitative information contained in written and oral materials (Schneider, Wheeler, and Cox, 1992). A content analysis classification scheme consists of categories, classification rules, and units assigned to the categories (Insch, Moore, and Murphy, 1997). This study uses political metaphor and the

five models of organisational change, the basis for defining categories of organisational change model. The unit of analysis, or recording unit, is the basic unit of text to be classified, such as word, word sentence or phrase, sentence, paragraph, and document (Insch et al., 1997). This study specifies sentences as the unit of analysis. The researchers coded each sentence as one sub-dimension and further one type of organisational culture using NVivo 10.0.

Case Analyses, Findings, Discussion and Implications

Based on Kotter (1995) model, all three universities established urgency from the interviews conducted. Unfortunately, however, they failed to form a powerful coalition. While the vision was greeted and communicated, empowering others to act failed due to other powerful alliances within the universities. In all three universities, the appointment of the VC was not embraced by the power coalition which was in place before his arrival, making it difficult, if not impossible, to form the needed coalition.

Transcripts from the interview suggested the existing coalition were neglected by the changing principal, who instead, try to forge his informal sector to drive the need for change. Such a decision led to the slow movement of the change. While it was suggested that establishing or forming an informal sector that will be 'loyal' to the change was the only perceived action by management, as most power brokers were already against the shift, considering two of the three VCs were from other universities.

Using Carnall (1990) change management model to analyse transcripts from the interviews, it seems to suggest two of the three VCs has previous knowledge in managing change. Hence, the management of the universities was knowledgeable in managing transitions and willing to help employees build an adaptable culture. However, the transcript suggests a failure in managing organisational politics, especially as it has to do with managing and controlling the agenda. The idea of vendetta against opposition led the agenda and offered less support for the change management sought. As great as the change was, public opinion was against A and B, leading to more resistance and eventually ran out of time.

Applying Serge (1999) systematic model to our case highlights a clearer vision of why the move toward a fully integrated web system failed. In contrast, the initiating guidelines were followed by a small pilot group, moving the finances and payment models to the integrated system. Transcript suggested the development of the required skills, coaching, mindset and conviction of the change were lacking. Failure to comprehensively follow the guidelines from the Serge model leads to loss. Also, the long term strategy of redesigning and rethinking the entire change to deal with conflicts and help win others to the change management was lacking.

Applying Stacey and Shaw (2002) complex responsive model to our planned change, the transcript suggested that all three universities didn't embrace the ERP systems before the pandemic. It is inevitable that universities embrace the advantages and ease of management ICT offers. Such benefits cannot be overlooked, and failure to embark on it will not necessarily lead to loss of management but failed to carry out its core activities. The failure was experienced during the lockdown. The enterprise resource planning platform's loss meant that sudden movement toward it during the pandemic failed to materialise, leading to the inability to carry out its core activities. Such failure shows the importance of an enterprise resource in an unstable world. The change agent in the universities can be seen as adopting the model of uncertainty and unpredictability from Stacey and Shaw (2002). Being reactive instead of proactive after initiating the change, means that the change's direction may be unpredictable.

Conclusion and Recommendations

This paper aims to identify the causes of the organisational change failure in Rivers state public universities' ambition to move to a wholly integrated enterprise system during the covid-19 pandemic. For analysis, interviews were conducted, and transcripts from the interviews using NVivo 10.0 were compared to models on organisational change. To ensure that this model is applied to the university's situation, organisational metaphors were used to identify how the university works. A review of the metaphor established that the university is predominately a political organisation. Hence models with a political undertone were used to identify causes proffer solutions.

Five models, namely Kotter(1995), eight steps; Nadler and Tushman(1997), congruence model, Carnall (1990), change management model, Senge (1999), systemic model and Stacey and Shaw(2002), complex responsive processes were analysed with a transcript of the interview. As a result, the following causes were identified. While the changed principals identified the workings of the informal political groups, they failed to build the right coalition instead chose to form theirs, undermining the collective will of the opposition. The changing principals failed to drive the agenda and its narrative to the other side world; hence the opposition could spread their side of the story, poisoning the heart of those far from management. The changed principal was unwilling to rethinking and redesign his strategy, thus, failing to win more persons to his side. The changed principal reactions were not quick and adaptive to the changing circumstances, giving the complex responsive processes that organisational change requires.

Based on this, the following recommendations were made:

- (i) That while change is natural, predominantly technology-driven changes, therefore, there is a need to build the right coalitions and do the best to bring in as many people as one can.
- (ii) That controlling the narrative is as important as the change itself. Failure to handle that may lead to loss.
- (iii) That the informal, political groups are compelling and influential. Hence careful and diligent plans should be made to win as many as possible over that organisational change, initiating, redesigning and rethinking processes are all part and parcel of the change process. Everyone should be willing to change their stance to accommodate the much-needed change.
- (iv) That organisational change cannot be predicted or controlled completely, so there is a need for reactive management during the change process.

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