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Analysing ERP Implementations from Organizational Change Perspective: An Exploratory Study

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Abstract. This study examines the impact of organisational change management on the outcome of digital transformation initiatives such as ERP implementation. The organisation's processes change to align with the best practices being brought on by the ERP system. The study examines the initiatives taken to manage such organisational changes during digital transformation and its impact on success of the project. A review of literature in the area of organisation change and digital transformation was conducted to explore the theoretical background. Further in-depth interviews of organisation leaders and industry practitioners involved in digital transformation were collected. Analysis of the data shows that organisations need to plan for continuous evaluation of the need for managing change for a successful digital transformation. A structured approach to the assessment of benefits before and after the change is essential. Implications for change practitioners and ERP implementation managers are discussed.

Keywords: ERP Implementation, Digital transformation, Organizational change management, Project management.

1 Introduction

Business organisations are transforming and improving their processes into digital formats to gain competitive advantage. The top companies in the industry frontier are at the forefront of their competition in their digital transformation journey.

Enterprise resource planning (ERP) deployment is the preliminary step for an organisation on their digital transformation journey. Digital transformations such as ERP implementation helps organisations automate the mundane manual tasks, improve the quality by avoiding human errors, reduce the cycle time and gain efficiencies to provide quick turnarounds and increase customer satisfaction level.

It is widely observed in ERP consulting that managing and driving organisational change as part of ERP implementation is the last area to be considered, and almost in

every case it is a reactive measure rather than proactively planning and managing the manage. "People" aspects are left aside or assumed to be easily manageable, left to the client and line managers to handle them. The organisational change intervention assumed as a natural outcome and is left to each function heads to figure out the impact on organisational changes in a reactive manner.

Organisation change management is one of the five categories in critical success factors contributing to the success of ERP implementations [3].

2 Literature Review

A keyword search was conducted based on the title by two primary search criteria, it must contain the keyword of "Organisation Change" and the keyword of "ERP".

2.1 Enterprise Resource Planning

ERP systems emerged in 1990s as an application integrating all functions in the organization starting from sales operations at the front end to manufacturing and planning operations at backend including the support functions of finance, accounts receivable and accounts payable. [4]. ERP started out as a standalone island application, has now evolved into fully integrated solution touching all areas of Information Systems in the organisation.

ERP defined as "An ERP system is a set of business applications or modules, which links various business units of an organisation such as financial, accounting, manufacturing and human resources into a tightly integrated single system with a common platform for flow of information across the entire business" [8]. With the evolution of internet, ERP have now moved over to cloud. This has become more imminent with the current COVID19 situation, organisations are seriously considering moving all IT operations to cloud and this may entail moving to a cloud-based ERP. The important goal of ERP system is to provide current, accurate data. The cloud (internet) enables ERP systems to provide access to operational and financial data in hands of managers on demand for making strategic business decisions in a timely manner about their competitive position [8]. It is evident that an appropriate form of ERP system is a basic hygiene for organisation of all size and all types to be competitive in the market.

2.2 ERP Implementation Issues

It is observed that businesses started using digital transformation as a tool to drive strategic changes through business process re-engineering (BPR) [11]. The BPR school of thought did not consider the organisational change implications that lead to several failed ERP projects [11]. It is further important to note that studies have shown that business process re-engineering is not directly resulting in competitive advantage [10]. However, ERP empowers the organisation to achieve competitive advantage.

There is a significant change when we compare the relationships in an organisation before and after an ERP. New dotted and solid lines of relationships are established across various functions and even across continents [5]. This effect further compounds several times when combined with the prevalent internet technologies for communication, due to this team members are expected to decide, respond, coordinate with their colleagues across multiple functions and countries [5].

The improvements in technology raise organisational change a whole new level which reinforces the finding that organisational change the 2nd ranked challenge in cloud-based ERP implementation [9]. Organisation change continues to remain one of the top concerns for managers when it comes to successful implementation and utilisation of ERP [3]. Organisation change ranks 2nd in the challenges perceived in implementation of cloud ERP [9]. These observations were based on a study of several representatives from small and medium enterprises (SME's). These findings make logical sense considering that the SME's are the ones who do not have deep pockets to engage organisation change management consultants to run their change management programs.

2.3 ERP Implementation and Organizational Change

It is observed that the perception of a change and whether it is positive or negative plays a vital role in embracing the change. The understanding of the change varies between different levels of employees in an organisation. For example, senior executives may consider ERP as a positive change as the report is generated instantly or nowadays readily available on a dashboard. The operational manager and end-user may consider ERP as an additional overhead because now they must record the data in the software in addition to executing the job [1], [2].

3 Methodology

We adopted a qualitative methodology to understand the association between organisation change and digital transformation. We collected data through in-depth interviews of industry practitioners to gain knowledge from their experiences in digital transformation initiatives in their organisations. Interviewees are selected from multiple backgrounds to provide insights from multiple facets in ERP industry.

4 Discussion

4.1 Change Management Imperative

In our interview, a CIO cites change management as a necessity and is something beyond question. A principal and founder of ERP consulting firm explained the successful outcome of ERP implementation which had organization change management built into the ERP roll out strategy.

Lack of proactive change management leads to lack of ownership leading to losing the support of employees in making the ERP implementation successful. This is in line with the conclusion that the degree of resistance to change is inversely proportional to the level of involvement in change management activities [1].

4.2 Leadership Engagement

In our interview, a CIO cites a few critical factors for the success of ERP. (1) Strong Leadership to champion and lead, and (2) management of organisational change. A similar observation was explained by the principal and founder of ERP consulting firm.

4.3 Leadership Commitment

In addition to involvement, leadership commitment is more important. The leader should have faith and trust in the outcome of the implementation. The CIO expects undeterred trust from organisation leaders in the expected benefits of the implementation.

4.4 IT – Business Synergy

There is an increasing belief among analysts that human factors affect the success of an ERP project more than technical or economic factors [7]. It was found that users who are not motivated enough to use the ERP find innovative ways to circumvent the ERP [6]. These users were motivated through three groups in the organisation, the project lead, the power users and peers.

An ERP implementation must consider the inputs from all levels of employees to detect the need for managing a change.

5 Implications

We derive the following implications from our findings:

- Organisation leader's involvement in digital transformation is a critical factor.

Business leader should be part of the project. This is essential. The business leader needs to have clarity on what is being done, why.

- Change management must be implemented properly for a successful ERP implementation.

Organizational leaders need to be educated about the need for change management and its importance for digital transformation.

- Digital transformation is a corporate project.

Digital transformation projects impacting the entire organization such as an ERP implementation needs to be driven as a corporate project and not an IT project.

- Managing the cultural dynamics in an ERP implementation.

Managing the cultural dynamics of organization is important during an ERP implementation. This could have been avoided by managing the interpersonal dynamics arising out of the perceived cultural misfit.

- ERP implementation timeline is a key determinant.

Determining a realistic timeline to deploy the ERP is an important factor. It was identified that the outcome of ERP implementation was not up to the target level in several projects participated by the interviewees due to lack of adequate time.

6 Conclusion

Organization change management during digital transformation is a complex process and might be difficult to address through a textbook approach. Typically, there are unique challenges due to the involvement of human element in organizational change, so every digital transformation needs to be carefully analysed for such pertinent issues. There is scope for practitioners to further this study by applying these learnings in their next digital transformation projects.

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