

# Misalignment of Business Software and Bridging the IT Gap in Organizations that Use IT Project Management

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## Abstract:

In today’s environment technology and innovation is the essential component that can give an organization its necessary strategic advantage. Aligning Technology Management to business strategy is a basic variable to expand the organizational stability. Project Management plays a major role to align the business strategy with technology management. Thus the paper named Business software misalignment and bridging the IT gap in organizations using Information technology project management.

This research focuses on the misalignment and underutilisation of software in organisations after the implementation of Information system. The findings demonstrate that a great deal needs to be done because of Information Technology (IT) Gap between Business processes and the Enterprise Resource Planning (ERP) framework. Since the application software package implementation is difficult, a proper understanding is required in regards to the assessment and reengineering of the current business processes of an organization to ensure that the implementation follows through on the goals set toward the beginning of the project. There are numerous factors that might add to the ineffective execution of application software packages. Data collection methodology was employed to extensively get to the bottom of the topic objectives

After broad literature study, this paper proposes to characterize and examine the IT gap, and misalignment that prompts underutilisation of the application software package in organizations. Moreover, the paper presents recommendations for adjusting the business processes with the functionality of the application software to be implemented. If implemented, underutilisation will be limited.

**Keywords —Misalignment, underutilisation, Effectiveness, derivative pressure, normative pressure, misfit, Project, Software Packages Project Alignment Methodology, ITGap.**

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## I. INTRODUCTION

Organizations' profitability is influenced by the effectiveness of their information systems. In fact, the evolution of information technologies determine s how their performance develops. Besides, an

organization needs to have an alignment which is necessary for supporting organizations to increase their visibility and efficiency which helps in staying ahead of the competition.

In terms of the return on investment (ROI), organizations are trapped in the problem of misaligned Application Software Packages and underutilisation.

The software development industry is a generator of misalignment and underutilisation, since they over promise and cannot turn away customers who cannot comprehend the business process.

As a result, they create one size fits all business processes without customizing them to the customer's needs (Khanyisa Real Systems, 2016).

By using software packages, organisations expect to improve their operational efficiency, lower their costs, make better decisions and gain competitive advantages by enabling innovative practices (Mehdi-Souzan Quinsat, Lartigue, Bourdet, 2015).

It is necessary to perform business process analysis before implementing a software package to avoid failure.

In practical terms, misalignment refers to a mismatch between an organization's business processes and the functionality that the application software package can offer to interpret and transform those processes.

### **Research Objective**

An IT gap exists between business process requirements and the end functionality (acceptance criteria) of application software packages supplied by IT dealers. This research project aims at describing and explaining the IT gap.

In most organizations, Misalignment will result in the underutilisation of technology if not properly managed.

### **Research Questions**

- **DESCRIBE HOW IT PROFESSIONALS WORK IN A VARIETY OF ENVIRONMENTS**
- **WHEN DESIGNING INFORMATION SYSTEMS, HOW IMPORTANT IS THE MAPPING STAGE?**
- **TO AVOID MISALIGNMENT, HOW IMPORTANT IS IT TO UNDERSTAND HOW THE STRUCTURES EMBEDDED WITHIN SOFTWARE PACKAGES WORK?**

## **II .LITERATURE REVIEW**

The majority of research projects in the area of ERP application focus on the improvement of system performance or alignment with business needs, but there is still a lot of work to do (Greasley and Wang, 2016)

An application software package implementation can fail due to misalignment of the organisation's business processes.

During the evolution process of the application software package, misalignment is caused by a gap that exists between the business processes of an organisation and its implementation in digital form. An IT gap will result from this.

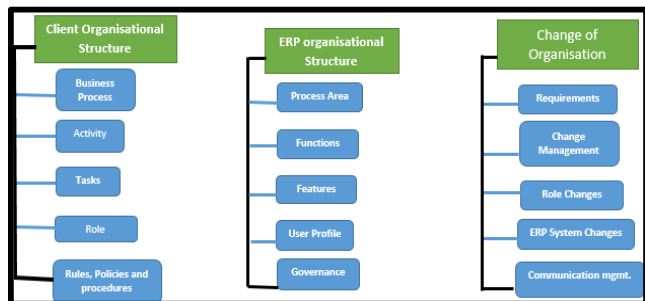


Figure 1: Organisational Fit Gap Analysis

As indicated in the above diagram, a good ERP fit requires evaluating each functional area in a business project or business process. Organisational Change results from combining the Customer Organisational Structure and ERP Organisational Structure. Using Fit-GAP analysis, an organization can accurately determine whether its current software or a planned new system meets its requirements.

Fit/Gap analyses help determine how well a particular organization's current or proposed system meets its day-to-day operational needs (Hvitved, 2009).

The use of numerous technical services, or the use of distinct technologies, providers, locations, and sources, has consequences for the end-to-end dependability, scalability, and fit-for-purpose of these applications to support business operations (Zo, Nazareth, & Jain, , 2012).

From the standpoint of institutional theory, Khuong, Harindranath, and Dyerson (2014) wanted to bring attention to potential sources of misalignment between knowledge management (KM) software and the implementing organization (Zo et al., 2012).

Their research reveals such misalignments as a result of the various institutional environments in which technology creators and adopters function (Khuong et al., 2014). Institutional forces, on the other hand, influence the implementation project and provide lessons for organizations with a lot of high-value text-based knowledge to make decisions, according to Khuong et al. (2014).

Greasley and Wang (2016, pp. 69–81) investigate the resilience of applications constructed using a service-oriented architecture. Greasley and Wang (2016) went on to create a metric for determining end-to-end application reliability, as well as a

model to aid in the selection of relevant services for business process tasks.

Chen and Wells (1990 & 1999) discuss how organizations can maximize the ROI of Email Marketing Strategies as early as 1990 because it is an underutilized resource. According to Lui (2016), when compared to other marketing channels, email marketing methods are one of the most effective.

The following are the key three characteristics of underutilized, misaligned, or misfit software in organizations (Attfield, 2011; Khanyisa Real Systems, 2016):

- One-size-fits-all
- Customization without regard for the needs of the consumer
- There is a lack of clarity in the objectives

#### ***The Importance of Alignment***

According to Ullah and Lai (2013), alignment is defined as a match between the business and IT strategies, as well as a match between the business and IT structures. According to Chan and Reich (2007), alignment is defined as the link between business goals and objectives and IT plans and objectives.

Process and Project Alignment Technique is a methodology they suggest for defining, evaluating, and improving an organization's software development process (ProPAM).

According to Kruger & Rudman (2013), misalignment of an organization's business processes with the capabilities of an application software package is widespread, and it must be rectified if the organization wishes to achieve a competitive advantage. Their research looked into whether PRINCE2 adds to the misalignment of an

organization's business processes and the functioning of the application software package.

### ***Defining the IT Gap***

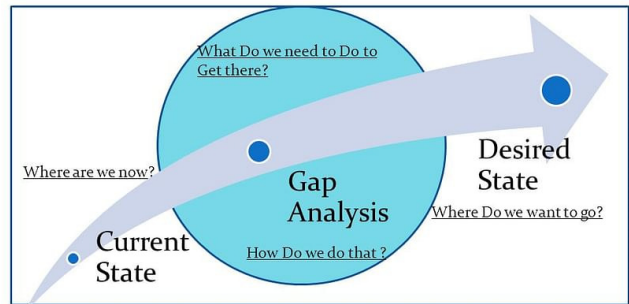
In today's modern world, everyone is competing to achieve their target, but there is a gap between their target & achievement.

When implementing and configuring an application software package, the IT gap is the gap that exists between business processes and the end functionality the application software package has to offer in translating the intended organization business operations into digital form (Kruger, 2011). According to Stapelberg (1994), there is a disconnect between business requirements and IT programmers when it comes to interpreting business process requirements. It is the responsibility of decision management to fully comprehend the IT gap and close it by aligning business processes and IT project strategy in order to achieve business performance improvements. Velcu (2010)

The use of gap analysis in project management is self-evident. As a project manager, you're tasked with overseeing a variety of operations within a project, each of which may require different approaches. What is the most effective strategy for achieving project success? Gap analysis comes into play in this situation. It aids in determining what has to be done while fulfilling the goals and objectives of your company and project.

A Gap Analysis helps an organization to understand what they want to be, the gap between where they are now and where they want to be and hence, what steps should be taken to close the gap

## **Basic Process for GAP Analysis**



### **III.METHODOLOGY**

In this study, a historical analysis of the literature was conducted, which was utilised to help define and explain the IT gap that exists between the business processes of an organisation and the functionality of the application software package implemented.

The data for the study was gathered through both primary and secondary data gathering approaches. Primary data was collected through observations, while secondary data was gathered through an extensive literature review to describe and explain the IT gap that occurs between many organizations' business processes and the nature of the application software packages that must be adopted. An effective review of earlier, relevant material, according to Webster and Watson (2002) and Fink cited in Okoli & Schabram (2010), "creates a robust platform for increasing knowledge." 'It facilitates theory creation, shuts places where there is an excess of study, and unearths areas where research is needed,' they noted.

## **IV FINDINGS AND DISCUSSIONS**

This section summarizes the findings from the observations and literature review in relation to the research topics or questions.

According to Nielsen (1986), business professionals' employment of integrated business software has resulted in various aspects of the real-world situation leading to under-utilization of integrated software and importance for its human components. This is due to misalignment and mismatch. IT Strategic alignment can be thought of as a relationship between IT and various perspectives on other aspects of an organization and its environment (Avila, Goepf, & Kiefer, 2009). Business strategy, IT strategy, organizational infrastructure and procedures, and IT infrastructure and processes are all aligned through the strategic alignment process. When a business organization's goals and actions are in sync with the information systems that support them, this is known as IT alignment. CIOs (Chief Information Officers) of companies should think about IT on a regular basis.

According to Kruger and Rudman (2013), there is a step of mapping while creating an information system (Or Paper Selection). It entails fine-tuning the original item selection based on reoccurring themes. 'Alignment/misalignment of information systems and/or application software packages,' 'application package failures/successes,' 'information technology gap,' and 're-engineering of business processes' were among the reoccurring topics in their research (Kruger & Rudman, 2013). Misalignment will be reduced or eliminated with this method.

According to IBM (2014), integrating software with SAP means avoiding spending money on old, ineffective data security systems and focusing on incremental upgrades and modernization that can have a major influence on the value data protection offers. The 10 methods IBM recommends using data protection solutions to help organize files while tackling modern data security challenges are

listed below. This is one approach to show that companies aren't getting the most out of their software by operating it without being integrated.

Many software integration companies, such as SAP Solution Manager version 7.1 and 7.2, can comprehend all system requirements and combine them into a single user interface. To compete effectively, an organization must compare itself to these leaders or peers by getting best practices from information suppliers. Because the nature of knowledge and information is quite volatile, SAP can assist in the repair of many ERP systems. Business operations controlling knowledge in the business portal might be even more complex and dynamic. Even if the information is not out-of-date, knowledge users may challenge its interpretation due to changes in the external business environment (Maholtra, 2005).

## **V. RECOMMENDATIONS**

The following recommendations are offered:

- To avoid misalignment the life cycle by Law & Jogaratnam (2005) should be followed:
  - a) Definition of the Process.
  - b) Project definition using a process model as a foundation
  - c) Project management and coordination
  - d) Depending on the sort of firm, a process improvement assessment.
- Using licensed and authorized software reduces the risk of external security risks.
- An effective software asset management program is critical for preserving IT security within organizations, and businesses must improve software asset management by following industry norms and practices.



- Ensure that software license and usage management is audited. If software is properly managed and utilized, organizations will not waste thousands of dollars on non-compliant and underutilized software licenses (Lui, 2016).

## VI. CONCLUSION

to achieve strategic alignment, the first step is to understand the business processes and capabilities of the application software package, as well as to evaluate how the business processes may be improved efficiently. this will result in better alignment, fewer implementation problems, and more successful implementations of application software packages

Organizations are losing a lot of money due to underutilization, misfit, and misalignment, all of which may be fixed and improved the efficiency with which users can achieve critical goals using current awareness information in a professional work environment. There are numerous difficulties to be explored in this area in order to achieve a complete revolution in order to avoid misalignment and follow a strategy that is appropriate for purpose. It also stems from a knowledge of the business process and environment for innovation, creativity, and reactions, which forces organizations to use and enhance expertise and experience, as well as strengthen 'networking' or collaboration.

However, in order to have a successful application software deployment project, business processes must be strategically aligned with all of the features of the program.

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## REFERENCES

1. Avila, O., Goepp, V., & Kiefer, F. (2009). Understanding and classifying information system alignment approaches. *The Journal of Computer Information Systems*, 50, 2.

2. Babar, A., Cox, K., Bleistein, S., & Verner, J. (2007). Towards evolution of strategic IT requirements.
3. Chan, Y., & Reich, B. 2007. State of the art: What have we learned? *Journal of Information and Technology*, 22 (4), pp.297–315.
4. Chen, C.C., Law, C.C.H. & Yang, S.C. 2009. Managing ERP implementation failure: A project management prospective. *IEEE Transactions on Engineering Management*, 56 (1): 157–170.
5. Chen, Q. and Wells, W.D., 1999. Attitude toward the site. *Journal of advertising research*, 39(5), pp.27-38.
6. Greasley, A., Wang, Y. 2016. Building the hybrid organisation through ERP and enterprise social software. *Computers in Industry*. 82 (11) pp. 69–81.
7. Hvitved, T. 2009. Architectural analysis of Microsoft Dynamics NAV [Online]. Available: <http://3gerp.iwvi.uni-koblenz.de/docs/hvitved09nav.pdf> [21 March 2017].
8. IBM. 2014. Education Unlocks Your Technology Investments. Available: <https://www.hpe.com/za/en/services/it-education-training.html>. Last accessed 19th June 2016.
9. Johansson, H.J. 1993. Business process reengineering: Breakpoint strategies for market dominance. Wiley.
10. Khuong, L., Harindranath, G., Dyerson, R. 2014. Understanding knowledge management software-organisation misalignments from an institutional perspective: A case study of a global IT-management consultancy firm. *International Journal of Information Management*. 34, (2). pp. 226–247.
11. Khanyisa Real Systems. 2016. Agile software development. Available: <http://krs.co.za/agile/>. Last accessed 20th Jun 2016.
12. Kruger, W. 2011. Addressing application software package project failure: Bridging the information technology gap by aligning business processes and package functionality. Unpublished mini thesis. Stellenbosch: Stellenbosch University.
13. Kruger, W. and Rudman, R. 2013. Strategic alignment of application software packages and business processes using PRINCE2. *The International Business & Economics Research Journal (Online)*, 12(10), p.1239.
14. Kruger, W; Rudman, R. 2013. Strategic alignment of application software packages and business processes using prince2. Available: <http://scholar.sun.ac.za/handle/10019.1/85449>. Last accessed 2nd Jul 2016.