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IT Strategic Alignment Maturity levels in Kenya

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Abstract

Strategic alignment focuses on the activities that management performs to achieve cohesive goals across the IT (Information Technology) and other functional organisations (e.g., finance, marketing, H/R, research, manufacturing). Therefore, alignment addresses both how IT is in harmony with the business, and how the business should, or could be in harmony with IT. Alignment evolves into a relationship where the function of IT and other business functions adapt their strategies together. Achieving alignment is evolutionary and dynamic. It is a process that requires strong support from senior management, good working relationships, strong leadership, appropriate prioritization, trust, and effective communication, as well as a thorough understanding of the business and technical environments. Achieving and sustaining alignment demands focusing on maximizing the enablers and minimizing the inhibitors that impact alignment. Once the maturity of IT business alignment is understood, an organisation should be able to identify opportunities for enhancing the harmonious relationship of business and IT.

Keywords

IT strategic alignment, strategic alignment model, strategic alignment maturity levels

1. Introduction

Business-IT alignment refers to applying Information Technology (IT) in an appropriate and timely way, in harmony with business strategies, goals, and needs. It has been a fundamental concern of business and IT executives since the 1970's. This definition of alignment addresses:

(1) How IT is aligned with the business

(2) How the business should or could be aligned with IT.

Mature alignment evolves into a relationship in which IT and other business functions adapt their strategies together. When discussing business-IT alignment, terms such as harmony, linkage, fusion, converged, and integration are frequently used synonymously with the term alignment. It does not matter whether one considers alignment from either a business-driven perspective (IT enabled) or from an IT-driven perspective; the objective is to ensure that the organisational strategies adapt harmoniously. The evidence that IT has the power to transform whole industries and markets is strong.

Important questions that need to be addressed include the following:

- How can organisations assess alignment?
- How can organisations improve alignment?
- How can organisations achieve mature alignment?

1.1 Why Alignment Is Important

Alignment‘s importance has been well known and well documented since the late 1970’s. Over the years, it has persisted among the top-ranked concerns of business executives. IT and business alignment was the second highest-ranked issue in the recent trends survey of IT leaders from 362 global organisations. Alignment seems more important as companies strive to integrate technology and business in light of dynamic business strategies and the continuously evolving technologies. In addition to the importance of alignment, what has not been clear is how to achieve and sustain this harmony between business and IT, how to assess the maturity of alignment, and what the impact of misalignment might be on the firm. To achieve and sustain this synergistic relationship is anything but easy.

There are several reasons why attaining IT-business alignment has been so elusive.

The first reason is that the definition of alignment is frequently focused only on how IT is aligned (e.g., converged, in harmony, integrated, linked, synchronized) with the business. Alignment must also address how the business is aligned with IT. Alignment must focus on how IT and the business are aligned with each other; IT can both enable and drive business change.

The second reason is that organisations have often looked for a silver bullet. Originally, some thought the right technology (e.g., infrastructure, applications) was the answer. While important, it is not enough. Likewise, improved communications between IT and the business help, but are not enough. Similarly, establishing a partnership is not enough nor is balanced metrics that combine appropriate business and technical measurements. Clearly, mature alignment cannot be attained without effective and efficient execution and demonstration of value, but this alone is insufficient. More recently, governance has been touted as the answer to identify and prioritize projects, resources, and risks. Today, we also recognize the importance of having the appropriate skills to execute and support the environment. Luftman. J. (1996) found that all six of these components must be addressed to improve alignment.

The third reason IT-business alignment has been elusive is that there has not been an effective tool to gauge the maturity of IT-business alignment. There is need for a tool that can provide both a descriptive assessment and a prescriptive roadmap on how to improve. As you will see the insights from the alignment maturity benchmarking provides extensive insights to this longstanding conundrum.

The fourth reason that IT-business alignment has been so difficult to achieve is that there is a tendency in many organisations (even ones where the importance of alignment is recognized) to focus their attention on IT infrastructure considerations. This unbalanced approach can often lead to missed opportunities to identify elements of the business infrastructure that are in need of improvements.

Finally, the fifth reason that the advancement of IT-business alignment has been stalled involves semantic differences in how to refer to it. Disagreements regarding alignment terminology (linked

vs.converged and integrated vs. harmonized) have ironically become a barrier to alignment itself.

Jerry luftman's research suggests that while there is no silver bullet for achieving alignment, progress has been made. In fact, the research demonstrates that a line has been drawn. When organisations cross it, they have identified and addressed ways to enhance IT-business alignment. The alignment maturity model is thus both descriptive and prescriptive. CIO's can use it to identify their organisation's alignment maturity and identify means to enhance it. Yet, that line is dynamic and continually evolving. So alignment can always be improved.

From measuring the six components in organisations in the United States, Latin America, Europe, and India, Luftman's research found that most organisations today are in Level 3 of a five-level maturity assessment model. The six components cited in Strategic Alignment Maturity Model (SAMM) by Jerry Luftman (Luftman, 2000) are communication, skills, value metrics, scope/architecture, partnership and governance. The pronouncement of the death of alignment‖ is premature; there is still a long way to go in the journey for aligning IT and business.

Identifying an organisation's alignment maturity provides an excellent vehicle for understanding and improving the business-IT alignment. Alignment maturity focuses on six important areas. All must be simultaneously addressed to improve the harmony among IT and business. Too frequently consultants and practitioners, looking for the silver bullet, focused their attention on only one or a subset of these important considerations. As companies strive to link technology and business they must address both

- Doing the right things (effectiveness)
- Doing things right (efficiency).

Alignment maturity evolves into a relationship in which the function of IT and other business functions adapt their strategies together. Achieving alignment is evolutionary and dynamic. IT requires strong support from senior management, good working relationships, strong leadership, appropriate prioritization, trust, and effective communication, as well as a thorough understanding of the business and technical environments. Achieving and sustaining alignment demands focusing on maximizing the enablers and minimizing the inhibitors that cultivate the integration of IT and business.

Alignment of IT strategy and the organisation's business strategy is a fundamental principle advocated for several decades. IT investment has been increasing since its inception, as managers look for ways to manage IT successfully and to integrate it into the organisation's strategies. As a result, IT managers need to:

- Be knowledgeable about how the new IT technologies can be integrated into the business, and with existing/emerging technologies
- Be privy to senior management's tactical and strategic plans
- Be present when corporate strategies are discussed
- Understand the strengths and weaknesses of the technologies in question and the corporate-wide implications

2. Strategic Alignment Maturity

Strategic Alignment Maturity model involves the following five conceptual levels of strategic alignment maturity:

(1) Initial/Ad Hoc Process – business and IT are not aligned or harmonized

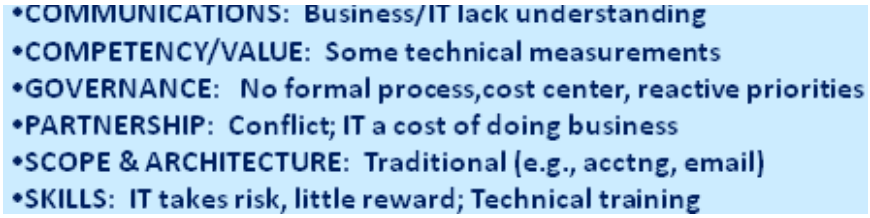
(2) Committed Process – the organisation has committed to becoming aligned

(3) Established Focused Process – Strategic Alignment Maturity established and focused on business objectives

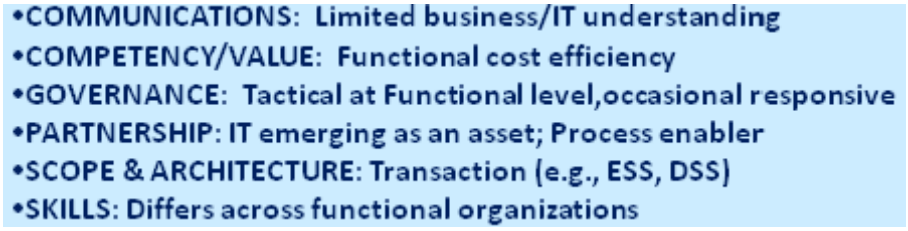
(4) Improved/Managed Process – Reinforcing the concept of IT as a Value Centre

(5) Optimized Process – Integrated and co-adaptive business and IT strategic planning

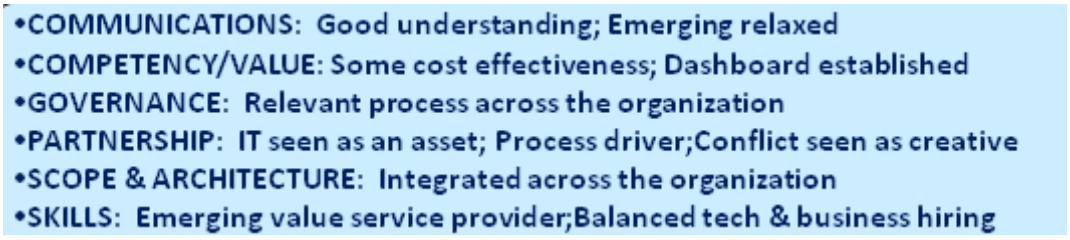
Level 1, Initial/ ad-hoc process



Level 2, Committed process



Level 3, Established focussed process



Level 4, Improved, managed process

Level 5, Optimized process

- **COMMUNICATIONS: Informal, pervasive**
- **COMPETENCY/VALUE: Extended to external partners**
- **GOVERNANCE: Integrated across the org & partners**
- **PARTNERSHIP: IT-business co-adaptive/improvisational**
- **SCOPE & ARCHITECTURE: Evolve with partners**
- **SKILLS: Education/careers/rewards across the organization**

Figure adaptedfrom Luftman, J., managing information technology resources, 3rd edition page 133.

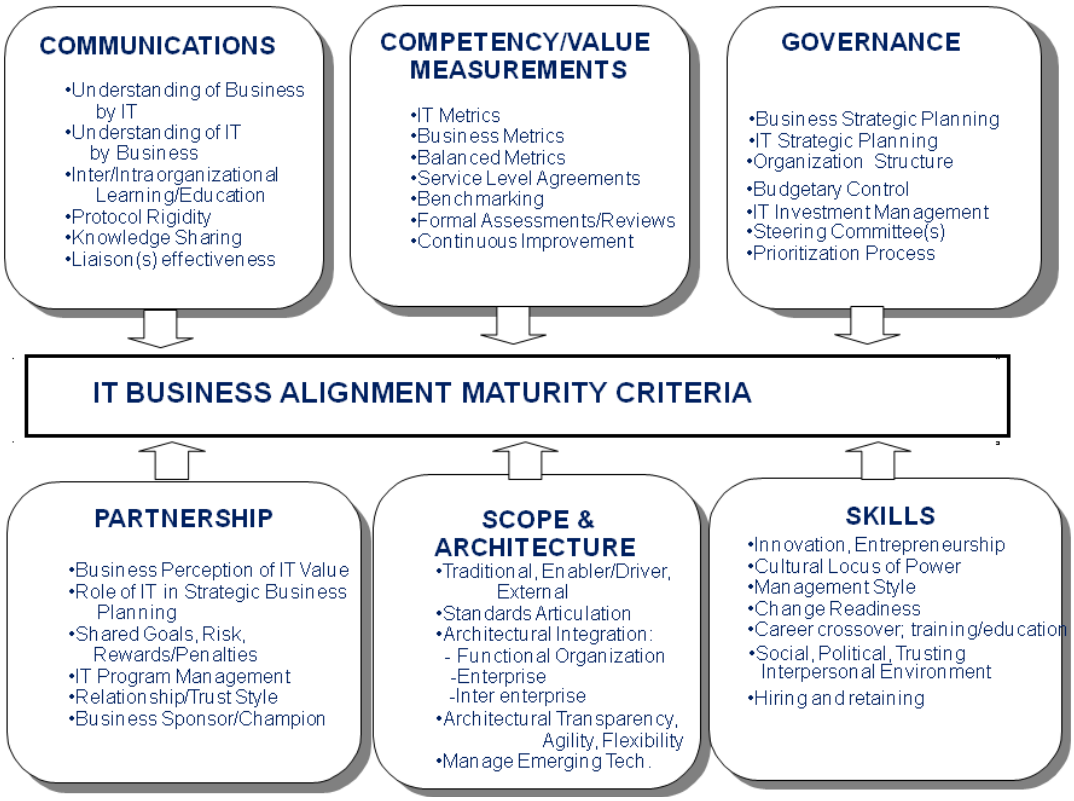


Figure 1.Alignment Maturity Criteria

Figure adapted from Luftman, J., managing information technology resources, 3rd edition page 134.

The six IT-business alignment criteria are shown above. All six must be addressed to ensure mature alignment; looking for a single silver bullet answer, will just not do it.

These six criteria are:

(1) Communications Maturity - ensuring effective ongoing knowledge sharing across organizations

(2) Competency/Value Measurement Maturity - demonstrating the value of IT in terms of contribution to the business

(3) Governance Maturity - ensuring that the appropriate business and IT participants formally discuss and review the priorities and allocations of IT resources

(4) Partnership Maturity - how each organization perceives the contribution of the other, the trust that

develops among the participants and the sharing of risks and rewards

(5) Scope & Architecture Maturity - The extent to which IT is able to:

- Go beyond the back office and into the front office of the organization to directly impact customers/clients and strategic partners
- Assume a role supporting a flexible infrastructure that is transparent to all business partners and customers
- Evaluate and apply emerging technologies effectively
- Enable or drive business processes and strategies as a true standard
- Provide solutions customizable to customer needs

(6) Skills Maturity - Human resource considerations such as training, salary, performance feedback, and career opportunities are assessed to identify how to enhance the organization‘s cultural and social environment as a component of organizational effectiveness

Organisations have often looked for a silver bullet to improve the alignment of IT-business. Some thought the right technology (e.g., infrastructure, applications) was the answer. While important, it is not enough. Likewise, improved communications between IT and the business help, but are not enough. Similarly, establishing a partnership is not enough, nor is balanced metrics that combine appropriate business and technical measurements. More recently, governance has been touted as the answer. This is the process to identify and prioritize projects, resources, and risks. Today, we also recognize the importance of having the appropriate skills to execute and support the environment. Research has found that all six of these components must be addressed to improve alignment.

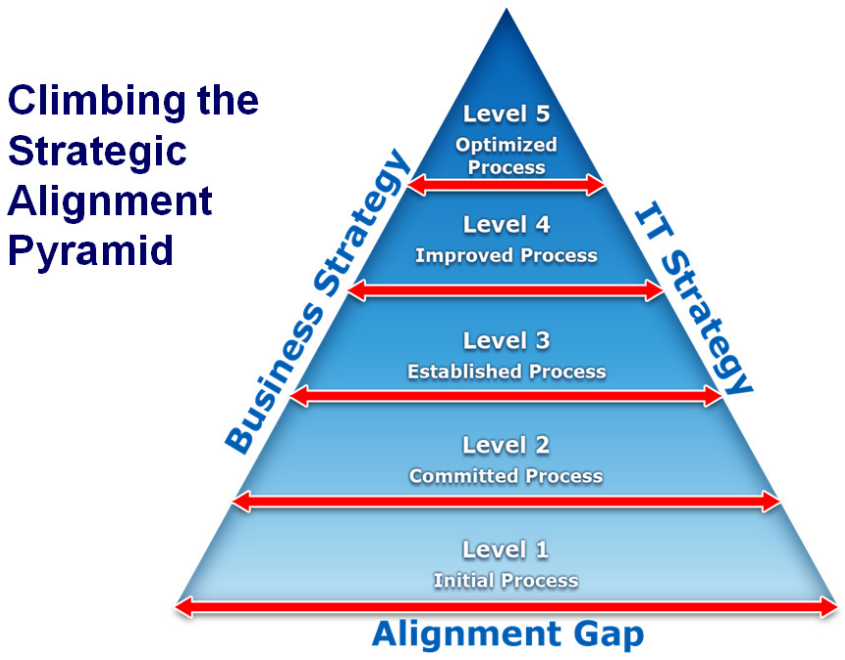


Figure 2.Climbing the Alignment Maturity Pyramid

Figure adapted from Luftman, J., managing information technology resources, 3rd edition page 135.

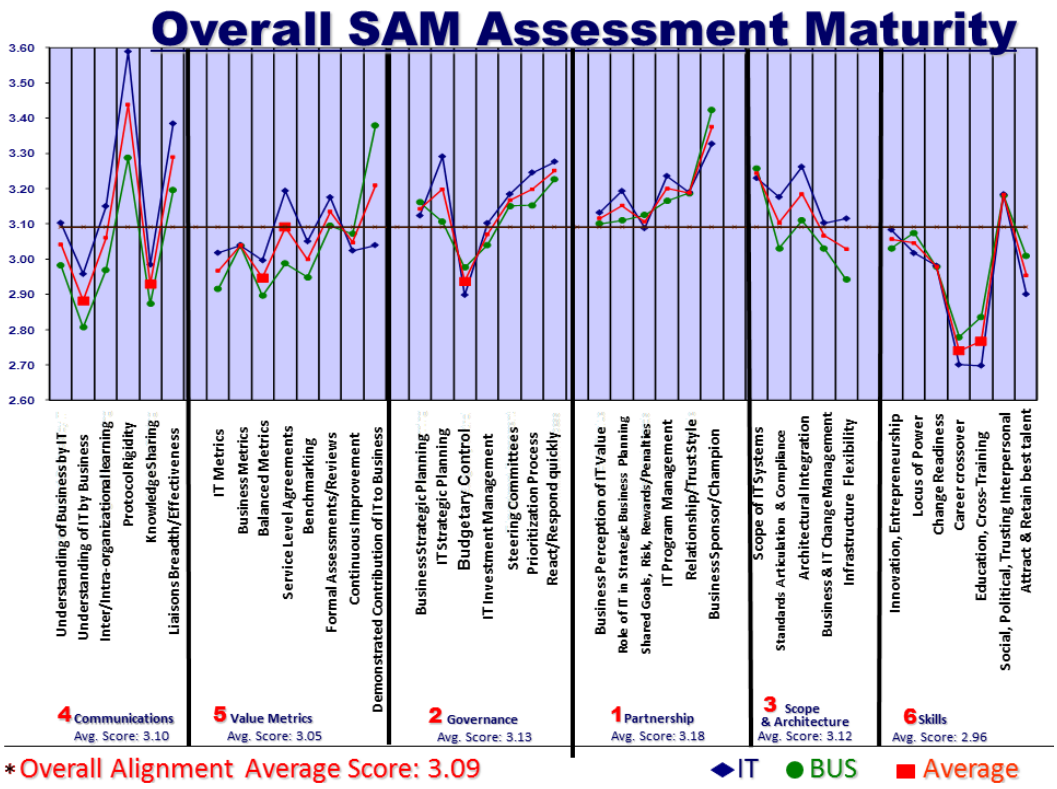


Figure 3.Overall SAM assessment

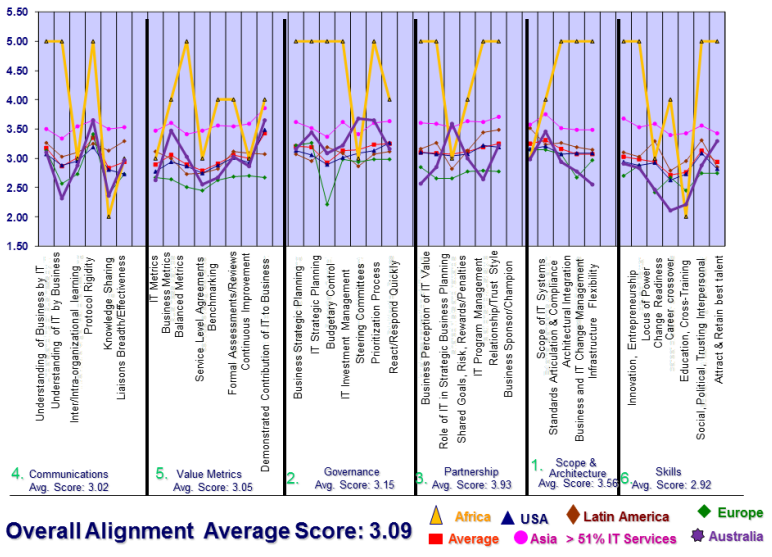


Figure 4.Geographical SAM Summary

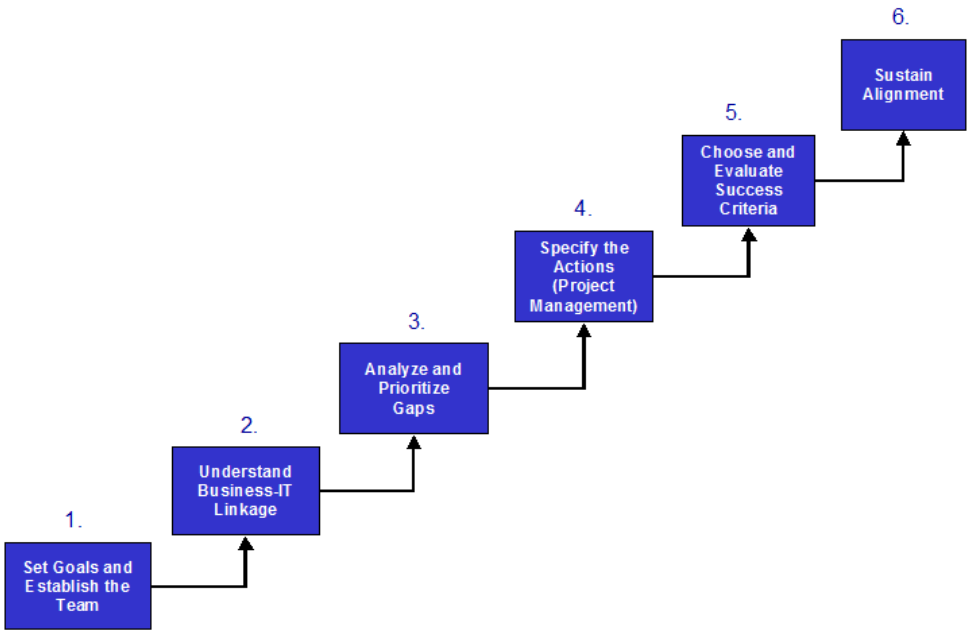


Figure 5.Strategic alignment as a process

Figure adapted from Luftman, J., Managing Information Technology Resources, 3rd edition page 152

(1) Set the goals and establish a team. Ensure that there is an executive business sponsor and champion for the assessment. Next, assign a team of both business and IT leaders. Obtaining appropriate representatives from the major business functional organisations (e.g., Marketing, Finance, R&D, and Operations) is critical to the success of the assessment. The purpose of the team is to evaluate the maturity of the business-IT alignment. Once the maturity is understood, the team is expected to define opportunities for enhancing the harmonious relationship of business and IT. Assessments range from three to twelve half-day sessions. The time demanded depends on the number of participants, the degree of consensus required, and the detail of the recommendations to carry out.

(2) Understand the business-IT linkage. The Strategic Alignment Maturity Assessment is an important tool in understanding the business-IT linkage. The team evaluates each of the six criteria. This can be done via executive interviews, group discussion, a questionnaire, or a combination. A trained facilitator can be valuable in guiding the important discussions.

(3) Analyse and prioritize gaps. Recognize that the different opinions raised by the participants are indicative of the alignment opportunities that exist. Once understood, the group needs to converge on a maturity level. The team must remember that the purpose of this step is to understand the activities necessary to improve the business-IT linkage. The gaps between where the organisation is today and where the team believes it needs to be are the gaps that need to be prioritized. Apply the next higher level of maturity as a roadmap to identify what can be done next.

(4) Specify the actions (project management). Knowing where the organisation is with regards to alignment maturity will drive what specific actions are appropriate to enhance IT-business alignment.

Assign specific remedial tasks with clearly defined deliverables, ownership, timeframes, resources, risks, and measurements to each of the prioritized gaps.

(5) Choose and evaluate success criteria. This step necessitates revisiting the goals and regularly discussing the measurement criteria identified to evaluate the implementation of the project plans. The review of the measurements should serve as a learning vehicle to understand how and why the objectives are or are not being met.

(6) Sustain alignment. Some problems just won't go away. Why are so many of the inhibitors IT related? Obtaining IT-business alignment is a difficult task. This last step in the process is often the most difficult. To sustain the benefit from IT, an "alignment behaviour" must be developed and cultivated. The criteria described to assess alignment maturity provides characteristics of organisations that link IT and business strategies. By adopting these behaviours, companies can increase their potential for a more mature alignment assessment and improve their ability to gain business value from investments in IT. Hence, the continued focus on understanding the alignment maturity for an organisation and taking the necessary action to improve the IT

Fundamental to the effective use of the Strategic Alignment Maturity assessment is to not only measure the maturity level of IT-business alignment but also to identify the problem/opportunity areas; and more important use the model as a roadmap to define specific initiatives for improvement. Repeating the assessment periodically can be insightful.

3. Strategic Alignment Maturity and Business Performance

The concept of performance underlies a lot of the research in strategic management and information science. A broader conceptualization of business performance would include emphasis on indicators of operational performance in addition to indicators of financial performance. Under this conceptualization, it would be logical to treat measurements such as market-share, new product introduction, product quality, marketing effectiveness, manufacturing value-added, and other measurements of technological efficiency within the domain of business performance.

Research done by Luftman, et al., validated the contribution of Strategic Alignment Maturity (SAM) to company performance based on the data gathered from 362 global organisations across four continents. The research identified that the six SAM components (Communications, IT Governance, Value, Partnership, Technology Scope, and Skills) have approximately equal contribution to form the overall SAM score and they are strongly correlated to each other, Regarding the relationship of SAM and company performance, the regression weight (.34) for SAM in the prediction of Performance is significant, hence this proves the contribution of strategic alignment maturity as a major contributor to a company's performance. This relationship was found to be valid across all industry types, cultures, and geographic locations.

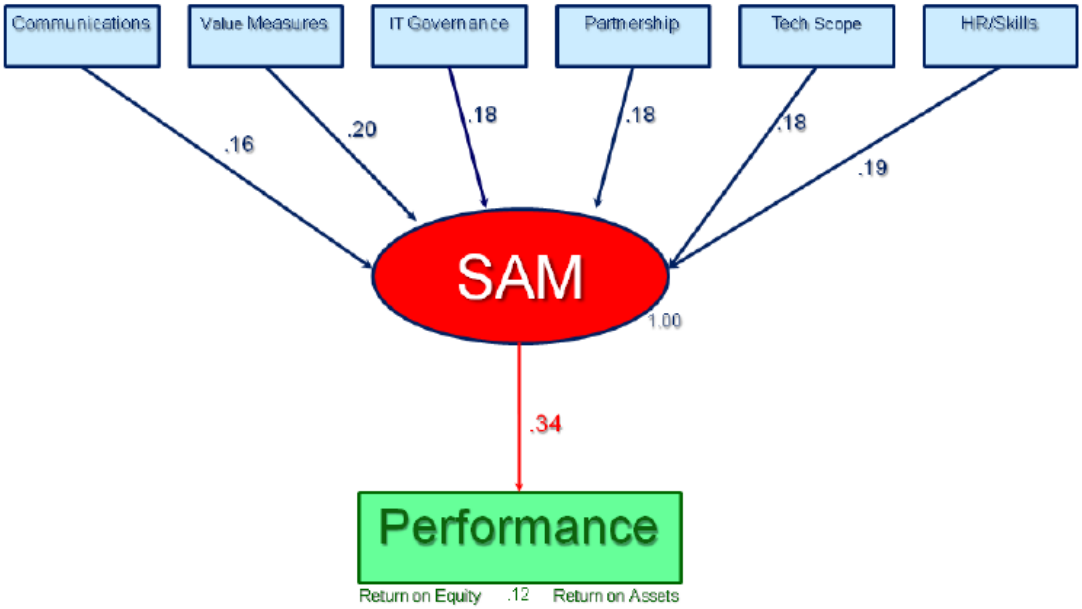


Figure 6.Structural Equation Model Validation

Source: Rajkumar M. Kempaiah

This relationship also supports the contention that achieving alignment is not a matter of addressing a single magic bullet issue. If IT-business alignment leads to better performing organisations, then the implication is inescapable. An organisation that fixates on one component at the expense of others is all but certain to be an underperforming organisation.

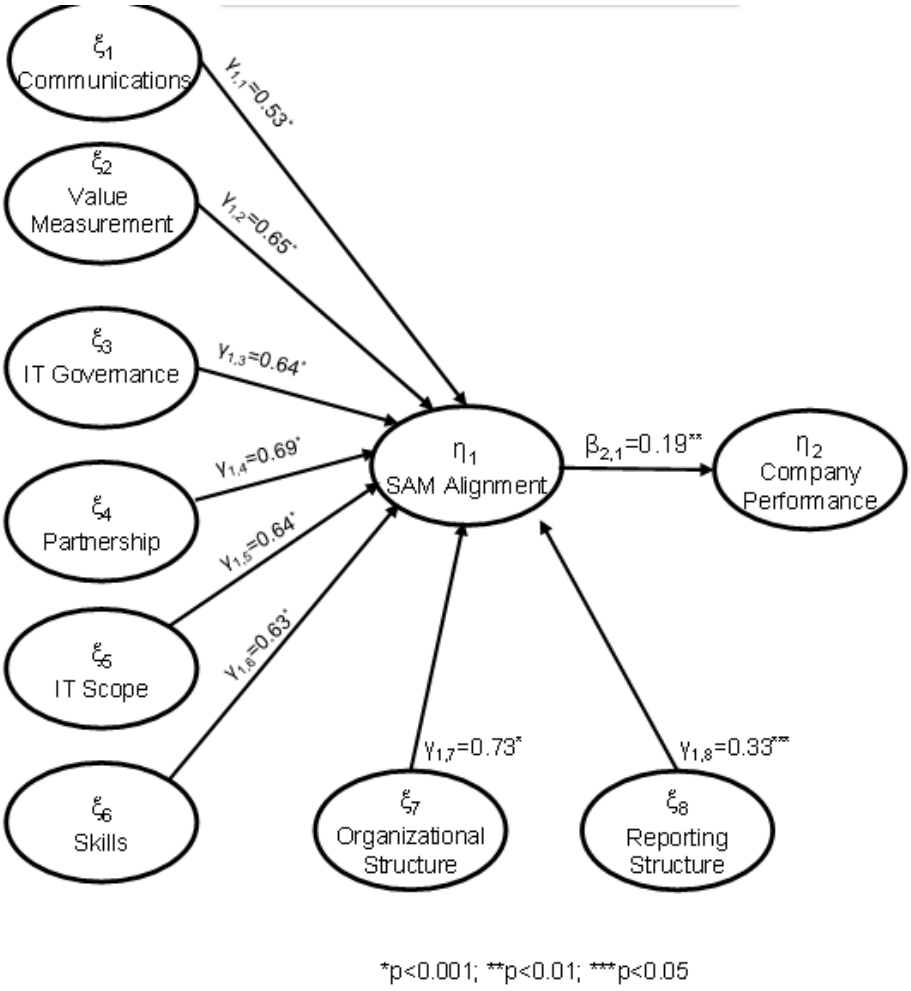


Figure 7.Structural Equation Model Validation with organisation and reporting structure

Source: Rajkumar M. Kempaiah

4. Conclusions on the IT-business Strategic Alignment Maturity (SAM)

Achieving and sustaining IT-business alignment continues to be a major issue. Experience shows that no single activity will enable a firm to attain and sustain alignment. There are no silver bullets. The technology and business environments are too dynamic. The research to derive the business-IT alignment maturity assessment has just begun and the tools and processes are still being refined.

Much work still needs to be done to refine hypotheses around Strategic Alignment Maturity and to measure its impact on organisations and their ability to execute strategy.

Research conducted over the course of a decade clearly shows that companies are getting better at aligning their business and IT; albeit alignment is still a pervasive and persistent problem. Overall maturity scores have increased from 2.99 in 2000-2003 to 3.17 for 2009-2010. There is evidence that higher levels of alignment have positive effects on company performance regardless of industry type or organisation structure. However, results from the assessment of 362 Global 1,000 companies demonstrates that some industries clearly do a better job of aligning their IT and business operations

than others, Additional studies have linked high alignment maturity levels with better company performance measures, including sales, productivity, ROI, ROA, ROE, and NPM.

The research by Luftman et al also indicates that there are differences by region. This suggests that the strategic alignment of a company may depend both on industry norms as well as local factors.

Achieving significantly higher levels of IT-business alignment across a wider range of organisations is a long-term journey. The journey in each organisation begins with a complete assessment of how business views IT, and how IT views business. The journey continues with how business and IT executives work together to close the gaps and improve the performance of the organisation. And in the quest for continuous improvement within a dynamic global environment, the journey may never end.

5. IT Strategic Alignment Maturity in Kenyan companies

Most Kenyan companies and the wide Africa have not assessed their business IT Strategic Alignment Maturity (SAM).This is because most Kenyan companies are still in the initial stages of alignment due to pressures of poor infrastructure and skills. The priority for most Kenya companies is in installing adequate capacity to the Internet and on local networks. The priority is to install robust local area and wide area networks to ensure connectivity to the wider world. The preoccupation is to receive and deliver email services and to access the Internet. It is only a few companies that have started investing in revenue generating IT ventures like mobile money. A good example is M-PESA service from Safaricom. M-pesa is a mobile money transfer service with a cover of about 18 million customers in Kenya.

Banks have started to roll, out revenue generating IT ventures like mobile wallet. Safaricom's mobile bank account M-Shwari customers are depositing an average Sh200 million daily.

M-Shwari which is a product operated by the mobile phone service firm in partnership with Commercial Bank of Africa (CBA) records an average 450,000 transactions per day and has reached six million accounts.

Total loans disbursed through the service are over Sh7.8 billion.

Other companies have started investing in innovative and entrepreneurial projects like Enterprise Resource Planning (ERP), Customer relationship management (CRM) and business intelligence systems. Savannah Cement, Bamburi cement, East African Breweries Limited (EABL), Kengen, Kenya Power and Bidco Oil have invested heavily on the SAP ERP in order to enhance process and operations efficiency. Most companies especially in the service industry like banks and airlines have invested in customer relationship management systems in order to enhance customer intimacy, engagement and experience.

Some few IT service companies like Dimension Data, Seven Seas Technologies and Copy Cat are rolling out IT governance frameworks like COBIT and ITIL to help with service delivery. Some other IT service companies in Kenya are now rolling out quality tools like ISO 27001, ISO 9001, SEI Capability Maturity Model (CMM)and Lean Six Sigma. Global IT service companies like PWC, Ernst

& Young, Deloitte, Wipro, Mckinsey and Accenture are already operating in Kenya and have employed global standards for quality service delivery.

Safaricom has rolled out enterprise architecture tools like Service Oriented Architecture (SOA) to help with business-IT alignment and data integration. E-commerce portals and business to business (B2B) tools have also been rolled out by some few companies namely Jumia, Pigiame and OLX.

From the above experiences on IT investments in Kenya, it is not hard to deduce that most Kenya IT companies are in the stage 2 of the maturity levels where the utility projects are the norm. Very few have reached levels 3 or higher. At level 3or higher level of maturity, communication between business and IT is effective, skills in IT are business oriented, IT metrics like CMM level 5 and ISO 9001 are adopted. At this higher level of maturity, IT governance is officially the mandate of the board and the scope of IT architecture covers full spectrum of partners and customers. Due to all these factors Safaricom has attained Strategic Alignment Maturity (SAM) level of 3 or higher.

6. IT Process Archetype for Co-Operative Bank of Kenya

A recent IT Process Institute Strategic Alignment performance study indicates that there is no such thing as generic IT. What the business needs from IT is different at different businesses. However there are three primary types of IT organisations based on basic attributes of how IT serves the business.

Utility Provider - primary purpose is to provide common infrastructure and information management services.

Process Optimizer – has two primary purposes; provide a common infrastructure and information management, as well as help optimize business processes and enable business-unit-specific objectives.

Revenue Enabler – has three primary purposes; common information management services, business process optimization, as well as enable customer-facing products and services.

Co-operative Bank Profile

The Co-operative bank of Kenya has a process optimizer archetype.

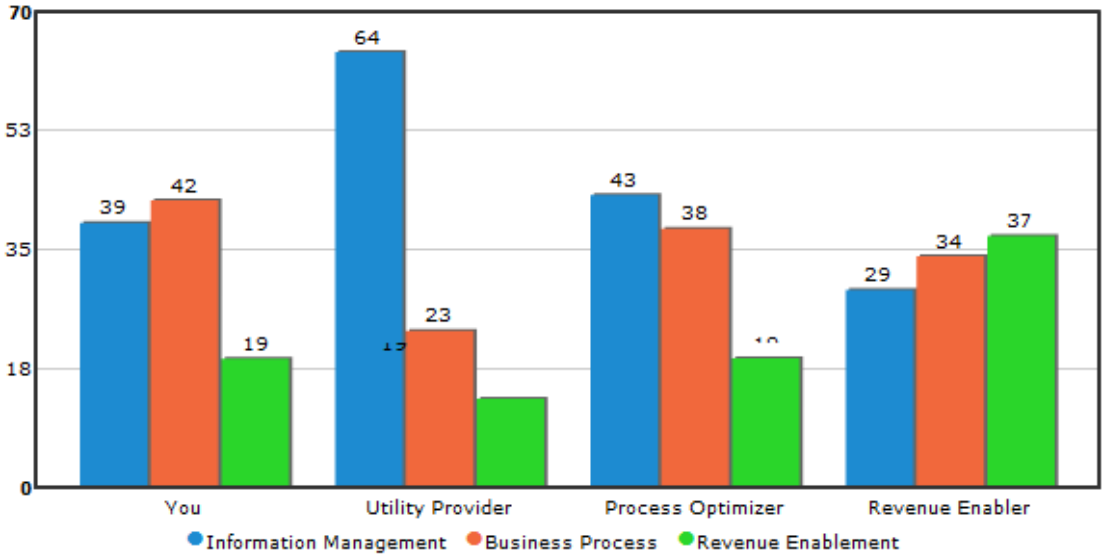


Figure 8. Archetype Group averages for each pillar in model

The Process Optimizer archetype group has the following attributes:

- **Primary purpose**—The primary purpose of IT is to provide a common infrastructure and information management, as well as enable business-unit-specific objectives.
- **CIO**—The CIO most likely reports to the CEO or a business unit executive, and primary roles of the CIO are operations manager and business manager. IT executives collaborate with business unit executives to help set business goals.
- Competitive position—The IT organisation improves the company's competitive position by using IT to achieve cost reduction and efficiency gains, and by optimizing business functions.
- **Funding source**—Budgets are funded primarily by business unit and secondarily by enterprise planning.
- **Investment justification**—A Process Optimizer justifies IT investments primarily by cost reduction potential, and secondarily by business unit requirements and revenue gains from existing products.
- **IT success**—A Process Optimizer measures IT success primarily by business unit executive satisfaction and secondarily by meeting operating performance SLAs.

Alignment challenges for Process Optimizers include:

- Balancing standardization and centralization (that is, the Utility Provider focus) with meeting unique business requirements.
- Establishing IT-to-business touch points at the manager and executive levels, building IT awareness of key business success factors, and getting IT to think and speak in business terms instead of technology terms.
- Key performance drivers predict improved alignment (from greatest to least impact):

- Actively identifies opportunities to use emerging technology to meet objectives.
- Develops and enforces enterprise infrastructure standards.
- Justifies IT investments primarily by business process optimization that enables competitive advantage.
- Understands business needs, and this understanding is pervasive at the IT executive and manager levels.

To shift from Process Optimizer to become a Revenue Enabler, the bank needs to focus on:

- Shift the CIO role to be an executive team member and active participant in setting business-unit-level strategy and goals and objectives.
- Proactively educate all IT personnel on business objectives, so that everyone in IT has a visceral understanding of their business purpose.
- Utilize a portfolio management approach to invest in IT initiatives that optimize the mix across shared services, business process optimization, and technology-enabled products and services.
- Increase IT agility and improve IT's ability to ramp up and or kill projects on a business timeline.
- Research both the competitors' use of technology, as well as emerging technologies, to recommend product and service innovation to the executive team.
- Integrate the IT budget process with the business unit and enterprise budget cycle.
- Formalize a process for assessing the changing needs of the business.

7. The Kenya National Broadband Strategy

The vision of this Broadband Strategy is to transform Kenya to a knowledge based society driven by a high capacity nationwide broadband network. This Broadband Strategy is critical to the achievement of Vision 2030 that seeks to provide Kenyan citizens with a lifestyle that is equivalent to the experience that a newly industrialized country provides. Kenya's Vision 2030 recognizes the enabling role of ICTs and anchors some of its key aspirations upon them availability and adoption of broadband technologies. Kenya, therefore, needs a very clear roadmap towards the realization of a connected and knowledge–based economy. This strategy provides such a roadmap.

The overall objective of this Strategy is to provide quality broadband services to all citizens. The broadband definition for Kenya for the period 2013 - 2017 is as follows: "Broadband connectivity that is always on and that delivers a minimum of 5mbps to homes and businesses for high speed access to voice, data, video and applications for development."

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