

Influence of Strategic Technological Alignment on Organization's Performance in Selected Companies Listed in Nairobi Securities Exchange in Kenya

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Abstract

In the contemporary world today, top managers of businesses and companies are continuously making strategic decision to improve or outperform their competitors. The success of an organization depends on how well managers strategically allocate and use resources at their disposal. The degree of technological advancement of an organization has is a key resource influencing the performance of businesses. This study sought to determine how strategic technological alignment influences the performance of business firms listed in NSE. The study employed an exploratory research design and collected data from top managers of firms listed in NSE. The study pursued a stratified random sampling to select the respondents of the study. The sample size of the study was 100. The data was analyzed using descriptive and inferential statistics. From the findings, the study revealed that different firms had aligned strategically technologically. Some firms had developed liberal plans of spending and plans for acquiring information, technology, information technology programmes and innovation as well as manipulation of the existing equipment to keep abreast with the changing technological environment. Others had made alignments to ensure there was adequate number of IT staff, upheld systems that fortified customer benefits, made administration efficient and bolstered client use as a way of enhancing product offering. The regression test showed that effect of the technological alignment had positive significant influence and contributed towards performance of the firm listed in NSE.

Keywords: Strategic, Technological alignments, NSE, performance

1. Introduction

Strategic management and strategy implementation entails matching skills and resources that are available to the existing opportunities presented in the external organization environment. Top managers within the organization are tasked with designing strategies that are able to contend with change in the business setting, which are then implemented by operational level managers (Kangueehi, 2005). Yukl (2006) state that leadership entails influencing others through a process in order to appreciate how important things should be done. It also involves enabling individual and groups to attain mutual goals. Therefore, resource at strategic level is the ability of an organization to envisage and sustain flexibility through enabling others to build or construct a plan that is feasible for the organization's future (Kjelin, 2009). Yazdani (2009) reiterate that strategic management is a noticeable resource style that has an effective role in making competitive advantage. Alignment occurs when organizations resource enables individuals and groups move in the same direction and collaborate with each other (Khadem, 2008). Strategic resource and alignment are critical for attaining and sustaining organizational strategic business competitiveness in the modern and first changing 21st century (Elenkov, Judge & Wright, 2005).

The extent to which strategic resource influences on strategy is fundamental to scholarly understanding. Strategic Resource Alignment is a standout amongst the most perceived issues confronting organizations in today's common setting of intermittent and quick environmental change. A quickly changing environmental requires the need for another way to deal with strategic resource alignment of contemporary organizations. These are the choices leaders make to achieve greater organizational performance. As Lear (2012) state, it is not a matter of sheer luck to produce results. Therefore, the superiority of individual resource matters (McFarland & Kleiner, 2007). According to Marzec (2007), strategic leader is visionary, influences, puts more attention on its people, puts the vision into use, is reliable, emphasizes high performance on its employees, is an agent of change and ensures objectives are met. Daft (2011) reiterate that strategic resource entails the ability to expect and picture the future, sustain potential adjustments, reason tactically and implement change that will results in an organization having good competitive advantage. Strategic resource is progressively becoming the main focus for business and academia (Narayanan & Zane, 2009) for several reasons: competitive advantage, good financial measure, greater employee and customer satisfaction. Extant literature (Fourie, 2007; Safarzadeh, Hoveyda, Parvizi, Pazireh and Pouraskari, 2015) lately supports the noble idea of strategic resource for the 21st century organizations.

1.1 Problem Statement

Strategic alignment is significant to organization in overcoming competition (Avison, 2014); however, strategic alignment has an effect on organization performance and Information technology effectiveness. In the competitive environment, organization must engage in different positioning strategies to overcome competitors' barriers (Miller, & Friesen, 2013). There are 12 sectors in the NSE. Their performance has depended on how well they align their strategies. For a number of years the companies listed in the Nairobi Securities Exchange have had to struggle to maintain and improve performance. Britam Insurance group for example recorded a 20% reduction in profitability in 2013, but gained profitability in 2014 before the company dived into lossmaking in 2015 with a 77 per cent drop in profits. According to Financial Times, 2016; Kenyan Wall Street Report, 2016, Safaricom revenues grew at 19.78%. The revenues grew up to 195.69bn from 163.36bn while the final amount of profits improved to 38.10bn from 31.87bn in 2015. The above scenarios of listed companies question the role that strategic alignment plays in listed companies. While some are making supernormal profits, others are the worst ever loss makers. There is no known study that has been done to look into the role of technological resource alignment on organizations performance. This study purposed to fill the existing gap by analyzing resource alignments' influence on the performance of the listed companies.

1.2 Objective of the Study

This study sought to determine the influence of strategic technological alignment on the performance of the selected firms in NSE.

1.3 Hypothesis of the Study

H₀: There is no significant relationship between technology alignments with organization performance in selected companies in NSE.

H_a: There is a significant relationship between technology alignments with organization performance in selected companies in NSE.

1.4 Conceptual Framework

The hypothesized relationship between technical strategic alignment and the performance of the organization was as shown in figure 1.

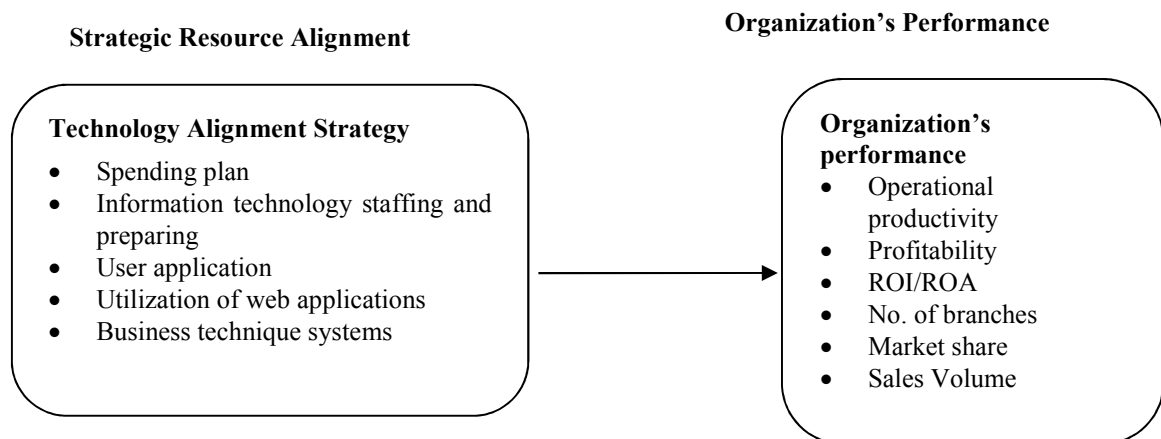


Figure 1: Conceptual Framework

1.5 Scope of the Study

The study dealt with listed companies at the NSE. According to Hitt, Ireland and Hoskisson (2007), although sole responsibility rests with the top organizational managers, managers in each and every level in the organization should be a strategic leader in some way. This research relied on responses from top managers/ CEOs, directors and supervisors from six departments of 12 companies selected from each sector of companies listed Nairobi Securities Exchange (NSE).

2.0 Literature Review

The review of literature covered theoretical background which highlights the study concepts and supporting theories and empirical reviews which highlights studies done on technical strategic

2.1. Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a hypothetical model that discloses how clients come to

acknowledge/embrace and utilize an innovation. Unique TAM was proposed by Davis in 1989. To come with the model, its originators adjusted the Theory of Reasoned Action (TRA), a general social-mental/behavioral hypothesis that had been demonstrated helpful for understanding an assortment of practices, for example, voting, exercise, and condom utilize. As was standard for adjusting such hypothesis to new settings, a preparatory report occurred to figure out what might be the proper factors to incorporate into request to comprehend IT utilize conduct. The most proximal predecessor to IT utilize is behavioral aim to utilize it (BI), and this is presently ordinarily what is implied when one alludes to acknowledgment, albeit another regular conceptualization of acknowledgment is end-client fulfillment.

The model proposes that when a client is given another innovation, various variables impact their choice with respect to how and when they will utilize it. This incorporates its apparent convenience (PU) and its apparent usability (PEOU). Be that as it may, the TAM does not represent the impact and individual control factors on conduct. Different factors, for example, financial variables, outside impacts from providers, clients and contenders are likewise not considered by the TAM (van Akkeren and Harker, 2003).

This model receives entrenched causal chain of "convictions, state of mind, expectation, genuine conduct", which was created from the hypothesis of contemplated activity by social clinicians. In Davis' investigation, two essential builds are distinguished; seen convenience and saw usability (Davis, Foxall and Pallister, 2002). These recognitions anticipate states of mind toward the framework reception. At that point the demeanor builds up the aims to utilize and the expectations cause genuine framework use.

In numerous current examinations with respect to innovation, TAM is received widely. Hat was embraced and demonstrated that it adds to the forecast of individual use of innovation, (Fishbein and Ajzen, 2010). Cap expect that apparent value (the much a man assumes that using a particular system would overhaul his or her execution) and saw comfort (how much a man assumes that using a particular structure would be free of effort) with the impact of prior outside factors being the essential determinants for appropriation of another innovation. Seen convenience directly affects saw handiness and both decide a person's state of mind toward utilize, which prompts behavioral goal to utilize a framework and real utilization of the framework (Davis, Foxall and Pallister, 2002). Hat is custom-made to IS settings, and was intended to foresee data innovation acknowledgment and utilization at work. Hat hypothesis is significant in that it clarifies the kind of innovation the organizations apply their equipment and programming that makes them satisfactory by the client or easy to understand.

The Technology Acceptance Model gives a succinct approach to display the effect of outside factors on one's convictions, states of mind, and expectations. Outer factors can be anything that is outside of the person. For instance, an outer variable like preparing gave by the association may emphatically impact a person's apparent simplicity of utilization of another bit of innovation with the idea that the instructional course helped the new client setup and explore the new gadget. As another case, outer elements like the quality or number of alternatives of one programming program contrasted with a practically comparative program may impact saw handiness in light of the fact that on the off chance that one measurable programming gives more choices to examination or charts, it might be evaluated higher on PU contrasted with another, similarly simple to utilize, program. Next, saw value is shown as "how much a man trusts that utilizing a specific framework would upgrade his or her employment execution" (Davis, 1989, p. 320). It is a psychological assessment of how embracing another bit of innovation will impact one's occupation execution.

PU impacts one's state of mind toward utilizing another bit of innovation since individuals frame inspirational demeanors toward new innovation that they accept will decidedly influence their employment execution. What's more, seen convenience straightforwardly impacts behavioral goal to utilize the innovation since individuals shape aims to utilize a gadget that they accept will build their occupation execution, paying little mind to their own emotions (i.e., PEOU) at the innovation, since individuals are roused to get execution unexpected prizes (e.g., advancements, raises). Seen usability alludes to "how much a man trusts that utilizing a specific framework would be free of exertion" (Davis, 1989, p. 320). It is proposed to impact one's state of mind toward utilizing the new innovation. In the model, Davis et al. (1989) propose systems by which PEOU impacts both disposition and PU. Initial, a framework that is less demanding to utilize impacts the client's feeling of self-adequacy (Bandura, 1982) to do the means required to work the framework. A man with high self-viability in regards to the new gadget has a solid confidence in his or her capacity to utilize the gadget. The outcome is more inspirational disposition toward the innovation.

Second, when a framework is seen as simple to utilize, it impacts a man's execution (i.e., PU) on the grounds that the new innovation empowers the individual to fulfill the errand with less exertion, enabling the spared push to be utilized for other business related undertakings. In light of the TRA, the Technology Acceptance Model sets a connection from state of mind to behavioral goal and behavioral expectation to real utilize. This causal chain of builds infers that a more positive (negative) state of mind toward the framework makes a more grounded (weaker) behavioral aim toward utilizing the framework. Also, when a worker trusts that an IT framework will emphatically affect his or her work execution (PU), they shape a more grounded behavioral expectation to utilize the gadget. At last, a more grounded (weaker) behavioral goal to utilize the

innovation tends to bring about progressively (less) genuine mechanical utilize. Cap develops the Theory of Reasoned Action by proposing particular individual convictions (PU and PEOU) that effect one's disposition toward an IT framework. The distinguishing proof of PU and PEOU from a thorough writing indexed lists in a more closefisted arrangement of convictions over Fishbein and Ajzen's (1975) proposal of utilizing meetings to evoke in the vicinity of 5 and 9 convictions. Moreover, the two key convictions in TAM give more noteworthy generalizability crosswise over various settings and innovations contrasted with isolated conviction elicitation interviews for every remarkable setting or potentially innovation with the TRA display.

The determination of individual convictions empowers one to analyze the relative significance of individual convictions by looking at beta weights on one's state of mind instead of duplicating every conviction by its fitting assessment and additively joining the items into a general attitudinal build as in the Theory of Reasoned Action (Fishbein and Ajzen, 1975). Further, by looking at convictions independently, it is conceivable to follow the effect of outer factors on every conviction. This is for all intents and purposes imperative since it empowers individuals to control outside factors to enhance convictions (PU and PEOU) and eventually real utilize. What's more, TAM places a causal connection amongst PEOU and PU; in correlation, the Theory of Planned Behavior does not indicate any connections between convictions. At last, the first conceptualization of TAM rejected the subjective standard build proposed in the Theory of Reasoned Action. Be that as it may, this theory was later incorporated into an overhauled show, the Technology Acceptance Model-2 (TAM2; Venkatesh and Davis, 2000).

TAM2 expands on TAM by demonstrating the determinants of saw value. The extended model incorporates subjective standard as a causal predecessor of saw handiness and as an indicator of goal to utilize an innovation framework. Notwithstanding subjective standard, TAM2 sets two other social powers (intentionality and picture) that impact saw handiness and behavioral expectation (Ajzen, 2002). Also, TAM2 proposes four subjective instrumental procedures (work importance, yield quality, result evidence, and saw convenience), that impact saw handiness. At long last, TAM2 bars state of mind toward use as a forerunner of behavioral goal (Venkatesh and Davis, 2000). For the social procedures, subjective standard is characterized as "the individual's recognition that a great many people who are imperative to him think he ought to or ought not to play out the conduct being referred to" (Fishbein and Ajzen, 1975, p. 302).

Venkatesh and Davis (2000) incorporate a connection between subjective standard and behavioral expectation since they reason that individuals may choose to play out a conduct not withstanding when they don't have constructive sentiments toward the conduct if essential referent individuals trust they ought to play out the conduct (i.e., consistence with a required strategy). The specialists conjecture a connection between subjective standard and saw handiness in light of disguise (Kelman, 1958). Disguise alludes to when an individual accepts essential individuals in the association need him or her to utilize the framework and he or she joins (disguises) the imperative individual's conviction into his or her conviction structure. For instance, if a man feels that a director trusts an innovation is helpful, the worker may begin to trust it is valuable too.

Second, intentionality is characterized as the degree to which individuals trust a selection choice is non-required. Willfulness is proposed to be a mediator of the connection between subjective standard and behavioral goal in view of past research by Hartwick and Barki (1994) who found that when a framework was required, there was a noteworthy connection between subjective standard and behavioral goal contrasted with when a framework was intentional. That is, when utilize was required, person's expectations to receive a framework were all the more intensely dictated by vital others like directors who anticipated that representatives would utilize another innovation. On the other hand, when appropriation was willful, behavioral expectation to selection another innovation was all the more emphatically controlled by one's states of mind like PEOU and PU contrasted with subjective standards. What's more, TAM2 proposes framework encounter as an arbitrator of the connection between subjective standard with saw value and behavioral goal. Venkatesh and Davis (2000) reason that the connection between subjective standard and behavioral aim/saw handiness will be weaker after some time. It is trusted that individuals must depend on other individuals' suppositions (i.e., subjective standards) when they shape introductory convictions or aims toward a framework. In any case, once the individual has more involvement with utilizing the framework and has recognized the qualities and shortcomings of the framework, the impact of the referent person's feeling diminishes.

The last social process, picture, is characterized as the degree to which a man trusts the innovation upgrades one's status in the association. Picture is speculated to be decidedly impacted by social standards (connect from subjective standard to picture) in light of the fact that if vital authoritative individuals have faith in a framework, at that point framework utilize will improve one's status in the association. The expression for this sort of social impact is alluded to as recognizable proof (Kelman, 1958). Moreover, picture will straightforwardly impact saw value. It is suggested that if a man trusts framework utilize will lift his or her status in the association, it will empower one to expand profitability since the individual has more power and impact to finish undertakings – therefore enhancing saw handiness.

TAM2 proposes four subjective instrumental procedures: work pertinence, yield quality, result certifiability,

and saw convenience as determinants of saw value. Venkatesh and Davis' (2000) all-encompassing reason for the psychological procedures depends on hypothetical work of activity hypothesis (Fishbein and Ajzen, 1975), hope hypothesis (Vroom, 1964), and behavioral choice hypothesis (Beach and Mitchell, 1996). The normal view among the three hypotheses is that individuals choose to play out specific practices in light of "a mental portrayal connecting instrumental practices to more elevated amount objectives" (Venkatesh and Davis, 2000, p. 191). That is, individuals perform particular practices in light of an understanding that they will prompt attractive outcomes. To begin with, work importance is characterized as a person's impression of how pertinent the innovation is to one's occupation. It is one's assessment of how well another framework underpins basic business related errands.

Basically, it is one's view of the similarity between work requests and mechanical capacities. Employment importance is proposed to decidedly affect saw handiness since when a framework bolsters many key occupation undertakings, at that point the individual is probably going to trust that his or her execution will increment. Second, yield quality is characterized as one's impression of how well a framework plays out the errands it was intended to fulfill. Yield quality is unmistakable from work pertinence since given a correlation between two frameworks that are similarly work applicable; an individual will pick the framework with the higher yield quality. For instance, if two frameworks play out the same measurable examinations however one programming program has a less unpredictable yield, at that point that framework will have a higher yield quality.

In this manner, yield quality is proposed to positively affect saw convenience. Third, result certifiability is characterized as how effortlessly a client can straightforwardly credit execution increments to framework utilize. The creators contend for this connection in view of the occupation attributes display (Hackman and Oldham, 1976), which proposes information of real outcomes as a basic mental state for work inspiration. Results certifiability is thoughtfully like this mental state in that if individuals can undoubtedly watch the effect of innovation utilize, at that point they will see the framework to be more valuable. Along these lines, TAM2 proposes a positive connection between result obviousness and saw value. At last, TAM2 keeps a similar conceptualization of saw convenience and alternate develops (PU, behavioral expectation, and genuine use) from TAM (Davis, 1986). In the first model, a framework that has higher PEOU will emphatically affect behavioral aim and PU.

At long last, contrasted with the mediators proposed between the social procedure subjective standard and behavioral expectation/saw handiness, the psychological instrumental procedures are accepted to anticipate seen convenience after some time paying little heed to factors like understanding and intentionality. In outline, TAM (Davis, 1986) and TAM2 (Venkatesh and Davis, 2000) give relevant models to anticipate innovation appropriation in associations in light of individual, intellectual, and hierarchical factors. Hat and TAM2 utilize the Theory of Reasoned Action, from social brain research, as an establishment (Fishbein and Ajzen, 1975). TAM2 expands the essential TAM system of PU and PEOU by proposing three social powers and four psychological instrumental procedures and PEOU which impact saw helpfulness and behavioral aim. What's more, TAM2 proposes two arbitrators: encounter and intentionality. Various examinations have experimentally analyzed the recommendations of these two models with for the most part good outcomes.

2.2 Concept of Technology/Business Alignment

Business IT arrangement is seen as an extension that connections IT to various perspectives on different spaces of an association and its condition (Avila, Goepf, and Kiefer, 2009). Arrangement of IT occurs in case a company association's objectives and exercises are in agreement with the data frameworks that help them. Boss data officers (CIOs) have reliably thought of it as arrangement with business procedure a best need. Any prerequisites for an association's IT ought to be in arrangement with its operations methodology. It is imperative that the necessities examination catch both an association's vital business goals and the exercises and procedures by which those targets are to be accomplished (Bleistein et al., 2005, 2007) contended that associations need to comprehend that by getting prerequisites right, they can get arrangement right; at the same time, the issues of business system and vital arrangement are overlooked in necessities designing exploration writing.

Bleistein et al. (2005) proposed an approach that joins an express comprehension of business technique inside prerequisites designing action as a methods for guaranteeing arrangement between framework necessities and the business methodology that it is planned to help. Greater parts of earlier research have concentrated on authoritative and administrative components influencing IT Business arrangement. These incorporate absence of best administration bolster (Luftman, 2000, 1999), poor prioritization of IT, multifaceted nature of authoritative structures (Bush et al., 2009), disappointment of IT staff to comprehend business concerns, relationship administration issues (Evans, 2004; Hu and Huang, 2006), and absence of a supporting administration structure (Smith et al., 2007).

A few examinations have demonstrated that associations can't accomplish an aggressive edge and long-term survival in the event that they neglect to adjust their IT and business techniques. Inability to adjust business and IT procedures could result to an extensive variety of suggestions most particularly seeking after a business

methodology, objectives and destinations that are not good with and upheld by the IT technique, and clashing objectives from IT and business experts (Benko and McFarlan, 2003; Bush et al; 2009). IT and business arrangement remains perpetually difficult given that business and IT methodologies advance to meet with the dynamic dangers and openings posture by the business condition (Luftman, 2003).

2.3 Practices of Technology Alignment Strategy

Technology alignment activities include the activities that business entities design and implement to achieve competitiveness in the market. They can be derived from the four phases of IT-Business alignment (Nugent, 2004). These activities are planning, modeling, managing and measuring. Planning is translating business objectives into measurable IS services. Activities done here are closing the crevice between what business supervisors require and expect and what IS conveys. Demonstrating is planning framework to improve business esteem. It distinguishes assets expected to convey IS administrations at conferred benefit levels. Demonstrating stage includes mapping IT resources, procedures, and assets back to IT benefits, at that point organizing and arranging assets that help those business basic administrations. Overseeing stage includes driving outcomes through solidified administration bolster. The overseeing stage empowers the IT staff to convey guaranteed levels of administration. Measuring is confirming responsibilities and enhances operations. It enhances cross organization perceivability into operations and administration level responsibilities (Nugent, 2004).

On the other hand, Cochrane (2009) puts alignment of business and IT activities into four basic steps. These are 1) finishing a business and IT technique with portrayal from key regions of the organization, 2) arranging the activities required to execute the system 3) distinguishing key execution pointers and connections between the results and practices, and 4) building up an estimation program that ceaselessly measures the conduct markers and results so circumstances and end results connections will be perceived and proactive administration can happen.

Activities undertaken are meant to ensure that IT strategy is supposed to support as well as it is supported by the organizational goals (Tallon and Kraemer, 2008). Without a powerful arrangement amongst business and IT, huge IT ventures would not make maintainable upper hand or enhance business execution (Tallon and Kraemer, 2008). There is a general laxity in the extent of alignment of IT-Business strategy although the extent of alignment is context dependent across various economic sectors.

Accomplishing arrangement amongst business and IT techniques is a subtle undertaking for associations in different parts. In numerous associations there is a missing connection between IT venture and business execution. Despite the fact that IT and business techniques are frequently treated independently, arrangement that is IT driven may not understand this objective, while arrangement that is exclusively business centered may not make IT settlements that innovation alone can't make (Tallon and Kraemer, 2008).

Another challenge is lack of consensus and clarity whereby different groups pursue different agendas. People are a major part of strategy alignment in an organization so if not involved then there is a barrier in strategy alignment. There is also resource barrier in which strategy is not linked to resource allocation (Cochrane, 2009). Most organizations have separate process for budgeting and strategic planning. This also goes hand in hand with management barrier where there is absence of criticism on how the procedure is being actualized and whether it is working is a challenge. The management needs to fully support the process for success (Tallon and Kraemer, 2008). Most administration frameworks today give input just about here and now, operational execution, following by money related measures.

Business and IS need to go hand in hand in order to achieve alignment at its best. Where senior executives do not support IS, then IS does not demonstrate leadership. If this becomes the case, strategy alignment fails as this is a major barrier that blocks strategy alignment (Cochrane, 2009). When IS management lacks leadership it means there are not well prioritized IT efforts. IT has to have leadership in management in order to align well with the business strategy of an organization hence strategy alignment.

2.4 Technology Alignment Strategy Processes

Technology alignment strategy process has been characterized by Luftman and Brier (2005). It incorporates defining of objectives and setting up a group. It additionally includes guaranteeing that there is an official business support and champion for the evaluation. Next, it is occupied with doling out a group of both business and IT pioneers. Getting proper agents from the real business useful associations is basic to the achievement of the evaluation. The motivation behind the group is to assess the development of the business-IT arrangement. Once the development is comprehended, the group is required to characterize open doors for upgrading the symphonious relationship of business and IT.

The procedure additionally includes understanding the business-IT linkage. A prepared facilitator can be significant in controlling the critical talks. Next, break down and organize holes. Perceive that the diverse feelings raised by the members are demonstrative of the arrangement openings that exist. Comprehend the exercises important to enhance the business-IT linkage. The crevice between where the association is today and

where the group trusts it should be are the holes that should be organized. Determine the activities (extend management). Naturally; knowing where the association is as to arrangement development will drive what particular activities are fitting to upgrade IT-business arrangement. Appoint particular therapeutic errands with unmistakably characterized expectations, possession, time spans, assets, dangers, and estimations to each of the organized holes. Pick and assess achievement criteria. This progression requires returning to the objectives and routinely talking about the estimation criteria distinguished to assess the usage of the venture designs. The audit of the estimations should fill in as a learning vehicle to see how and why the goals are or are not being met.

A few issues just won't leave. Getting IT-business arrangement is a troublesome assignment. This last stride in the process is regularly the most troublesome. To manage the advantage from IT, an "arrangement conduct" must be created and developed. By receiving these practices, organizations can build their potential for a more develop arrangement evaluation and enhance their capacity to pick up business esteem from interests in IT. Henceforth, the proceeded with concentrate on understanding the arrangement development for an association and making the vital move to enhance the IT-business congruity is a noteworthy concern (Luftman and Brier, 2005).

2.5 Determinants of Technology Arrangement

Arrangement requires forms, structures, capacities, connections (Khadem, 2008) and procedures. In view of the segments of the key arrangement model and his examination in empowering agents and inhibitors of business IT arrangement, Luftman perceives six criteria for, or building squares of, the development of arrangement of IT and business (Luftman, 2000). This include:

2.5.1 Correspondence

Viable correspondence is a key component of arrangement. Kaplan and Norton (2004) watch that an association can be considered as "adjusted when all representatives have shared trait of reason, a mutual vision, and a comprehension of how their own parts bolster the general technique." Sharing and shared characteristic of perspectives amongst business and IT administration and representatives must be set up by dynamic correspondence of each other's needs, vision, qualities, objectives and techniques (Segars and Grover, 2008).

2.5.2 Esteem Estimation

Arrangement should pay-off and pays off. A few creators affirm that associations that effectively adjust business and IT outflank their neutral. A few studies demonstrate that the issue of measuring advantages of IT ventures is a worry in numerous associations (Walter et al, 2013). In view of this idea, scientists and experts have made various models and valuation techniques to catch this esteem (Frisk, 2007). IT can be a driver of significant worth, yet authoritative change is required if any advantages are to be acknowledged (Stefanou, 2001).

2.5.3 Administration

IT Governance is gone for guaranteeing that IT speculations and utilize are lined up with business procedure and in consistence with principles and controls. Van Grembergen and De Haes (2008) characterize IT Governance as "the hierarchical limit practiced by the board, official administration and IT administration to control the plan and execution of IT technique and along these lines guaranteeing the combination of business and IT".

2.5.4 Partnership

Organization covers the mutual dreams, observations and objectives of business and IT officials. A conventional exchange in arrangement explore is whether arrangement is one-path, IT to business, or two-route, with IT and business commonly affecting each other. A more all-encompassing perspective on arrangement can be found with Henderson and Venkatraman (2003) and Poels (2006). This perspective of a shared impact amongst business and IT wins in the present pondering Business IT arrangement. Chan and Huff (2003) express that it is fundamental for IT to challenge the business, not just execute its vision.

2.5.5 Scope and Architecture

Galliers et al. (2014), Maeset al. (2000) and Goedvolk et al. (2007) examine the part of models in arrangement. The general finish of these works is that a building approach towards the plan of business forms, data frameworks and IT structures is instrumental in the acknowledgment of arrangement of business and IT. Luftman (2007) recognizes this vision, yet in addition takes note of that design alone is insufficient. Another part of this building square of Business IT arrangement is the extent of these models. This involves the limits that are considered while adjusting business and IT.

2.5.6 Skills

The capacity to execute incorporates the abilities and capabilities of both the association in general and the individual experts, to perform and convey. The significance of information in the arrangement of business and IT is affirmed by Basselier and Benbasat (2007). A present day IT proficient likewise needs social abilities and business information, keeping in mind the end goal to have the capacity to keep on adding an incentive to the matter of his or her association. Morneau (2006) expressed that the changing scene of data innovation and security is calling for IT experts with a solid blend of business and mechanical intuition." A comparable advancement is distinguished by Silvius and Batenburg (2009), for a particular gathering of experts, extend

chiefs. Duedahl et al. (2005) explained on this investigation and developed a model of the capabilities a business director needs for a superior comprehension of IT.

2.6 Challenges of Technology Strategy Alignment

Alignment of technology strategy with business procedure has been positioned as a standout amongst the most important issues confronted by business and IT officials. Arrangement has been characterized as the degree to which the IT mission, goals and plans bolster and are upheld by their business partners (Reich and Benbasat, 2000). Further, IT-business arrangement concerns the level of correspondence of an association's IT technique and IT foundation with the association's key business destinations and framework. Since the late 1980s, arrangement has been a critical worry to the business group as it not just makes a difference firms understand the potential advantages from interests in IT (Tallon et al., 2000), yet in addition upgrades business execution through adjusting the authoritative and innovative foundations (Croteau et al., 2001). The after variables challenge IS Business arrangement:

Absence of accord and clearness whereby diverse gatherings seek after various motivations. In procedure arrangement different gatherings are included and on the off chance that they don't have a similar motivation at that point they give a boundary to it. This runs as an inseparable unit with individuals boundary in which system is not connected to departmental, group or individual objective. Individuals are a noteworthy piece of system arrangement in an association so if not included at that point there is a boundary in technique arrangement.

There is the asset boundary in which procedure is not connected to asset designation. Most of time, vitality, and cash are not dispensed to those things that are basic to the association (Tallon et al., 2000). Most associations have isolate process for planning furthermore, key arranging. In administration boundary there is absence of input on how the system is being executed and whether it is working. Most administration frameworks today give criticism just about here and now, operational execution, following by money related measures (Croteau et al., 2001). Organizations have no chance to get of getting input on their system. What's more, without criticism they have no real way to test and find out about their system.

IT might neglect to accomplish key objectives and this is a hindrance to procedure arrangement. IT technique should bolster and in addition it is upheld by the hierarchical objectives (Tallon and Kraemer, 2008). IT may likewise neglect to comprehend business. This implies there is no steady business-IT association which is a basic factor in technique arrangement. Business what's more, IT has to go as an inseparable unit keeping in mind the end goal to accomplish arrangement getting it done.

Where senior officials don't bolster IT, at that point IT doesn't show initiative. In the event that this turns into the case, system arrangement bombs as this is a noteworthy obstruction that pieces system arrangement. When IT administration needs initiative it implies there are not well organized IT endeavors. IT needs to have administration in administration so as to adjust well to the business system of an association (Tallon et al., 2000).

2.7 Empirical Review on Technology Alignment

Information Technology (IT) reception changes the way organizations oversee organizations and thusly their performance (Jean, Sinkovics, and Kim, 2008). While building up a reasonable model of IT intervened connections in universal production network connections, incorporating exchange cost financial aspects and asset based hypothesis points of view, the previously mentioned scientists prove that IT abilities contribute straightforwardly to enhanced hierarchical process, for example, coordination, exchange particular venture, absorptive limit and checking. These in turn add to key and operational performance results (Jean et al., 2008). Nonetheless, moderate innovation reception brings about the operations of outdated plant and hardware whose support expenses are high and obtainment of extras costly and hard to discover (Mwanaongoro and Imbambi, 2014).

A study by Melville, Kraemer, & Gurbaxani, (2004) on IT and organizational performance showed that IT is valuable, however, the study pointed out that internal and external factors affect the extent complement organizations resources of the firm and its partners as well as macro environment and competitiveness. Integrated technology improves productivity. Gagnon and Dragon (n.d.) study linked IT with performance of municipal performance. Irwin, Hoffman and Geiger (2008) conducted a study within the context of hospital industry to provide guidance to managers who must make decisions regarding the adoption of technological innovations. The results indicated that while adoption of technological innovations may lead to increased performance however, technology may be a 'no-win' situation. Failure to adopt technology may result in the loss of patient-customers, but adoption may result in increased costs that cannot be recovered due to underutilization (Irwin et al., 2008).

Information technology (IT) is changing the way organizations work, the way toward making items and administrations for their clients, and the route in which they contend (Armbrust et al., 2009). A few examinations (Chan et al., 2007; Irani, 2002; Kearns and Lederer, 2003; Alter, 2005; Byrd et al., 2006; Luftman et al., 2008), offer help for the speculation that "associations that effectively adjust their business system to their IT procedure

will outflank those that don't" (Chan and Reich, 2007a). Penetrate (2002) inspected the connections between business procedure, IT system, vital arrangement, return on IT speculation, and corporate execution and gave experimental confirmation to the impact of arrangement amongst business and IT methodologies by measuring return on IT venture and corporate execution. Tallon and Kraemer (2003), utilizing the hypothesis of dynamic capacities, analyzed the connections between IT adaptability, vital arrangement, and IT business incentive to survey whether abilities around adaptability can empower organizations to acknowledge more prominent settlements from IT venture.

Ness (2005) analyzed the connections between IT adaptability, vital arrangement, and IT viability to give observational confirmation on the quality of these connections and attested with prove that IT adaptability has more prominent impact on IT adequacy than does key arrangement on bigger IT associations. Chebrolu (2010) analyzed the connections between cloud reception, vital arrangement, and IT viability to decide the strength and need of these two develops on IT adequacy on all IT associations paying little respect to their size and sort.

This examination is an augmentation of Chebrolu's (2010) investigate, boring down to ponder the effect of individual vital arrangement and it's develop components on IT viability overall and on the individual parts of IT adequacy. Earlier research was utilized as the reason for certain build components, measures, and instrumentation as methods for measuring and deciding develops dependability, legitimacy, and relationship. Concentrates from Ness (2005), Tallon and Kraemer (2003), and Pierce (2002), alongside their overview groups, were utilized as a way to accomplish build estimation and instrumentation. Luftman and Kempiahs investigation of 197 associations positions instruction as the least scoring industry segment on arrangement development. This position is stressing a result of the open door IT offers in educating and learning (Luftman, 2000).

3.0 Research Methodology

The study employed explanatory research design which encompassed both qualitative and quantitative data. The data was collected from Heads of department, CEOs, and senior managers from Production, Research and Development (R&D), ICT, Marketing, Human Resource Management and Accounting and Finance of all the firms listed at NSE. The total population was 156 (NSE, 2014). The sample size was determined by the formula given below:

$$n = N / (1 + Ne^2) \text{ where}$$

n = Number of samples,

N = Total population and

e = Error tolerance

Assuming margin error (e) of 0.05, and N = 156, n is obtained as n = 112 which gives sample size as below table 1.

Table 1: Sample Size

Category	Population	Sample	Percentage (%)
CEO/TMTs	12	12	10
Directors/HOD (Production, Research and Development (R&D), ICT, Marketing, Human Resource Management and Accounting & Finance)	72	50	45
Supervisor (Production, Research and Development (R&D), ICT, Marketing, Human Resource Management and Accounting & Finance)	72	50	45
Total	156	112	100

Source: Author (2017)

The study employed stratified random sampling to collect the data since the objective population was classified in sub groups. The data was collected through questionnaires which had both open-ended and closed-ended questions. The questionnaires were administered to the respondents by the research assistants through drop and pick method to give the respondents ample time to respond to the questions. Secondary data was collected from financial reports and organizations bulletins. The data was analyzed through descriptive and inferential statistics.

4.0 Results and Interpretation

This section presents data analysis procedures and results of the study.

4.1 Type of The Sector

This part of the study highlights some of the sectors represented in the NSE and the percentage of firms from the sector compared to other sectors.

Table 2: Type of the sector

Sector	Percent
Banking	16%
Commercial and services	16%
Energy and petroleum	15%
Agricultural	12%
Manufacturing and Allied	12%
Insurance	10%
Automobiles and Accessories	7%
Construction and Allied	6%
Investment	5%
Investment services	2%
Total	100%

Table 4.2 shows that there were more firms from banking (16%), commercial & services (16%) and energy & petroleum (15%). Other sectors whose representation also large enough included agricultural, manufacturing and allied and insurance. The least number of firms were from investment services which had only NSE.

4.2 Technology Alignment

This section presents the results and discussion on technology alignment and how it relates with the performance of the firms listed in NSE.

4.2.1 Descriptive Tests

This section presents the descriptive tests results of the technological alignment of the firms listed in NSE. The tests have done include frequencies, mediana, mode and skewness.

Table 3: Descriptive Statistics-Technological alignment

Technological aspect	SD	D	NAD	A	SA	Md	M	SK
Our organization has allocated a liberal spending plan for acquiring information technology innovation and manipulation equipment	0.0	7.2	21.7	48.2	22.9	4	4	-0.5
Our organization has apportioned a liberal spending plan for obtaining information technology programmes	0.0	9.6	28.9	51.8	9.6	4	4	-0.4
Our organization has underscored information technology staffing and preparing	2.4	4.8	19.3	60.2	13.3	4	4	-1.1
Our organization has grasped utilization of web applications	2.4	4.8	22.9	27.7	42.2	4	5	-0.9
Our information technology ability has upheld business systems that fortify client benefit	0.0	2.5	0.0	60.8	36.7	4	4	-1.0
Our programming applications have upheld business techniques to enhance and properly handle good administration	0.0	0	1.2	44.6	54.2	5	5	-0.4
Our equipment have been implemented in consistence with business procedures	0.0	0	4.8	45.8	49.4	4	5	-0.5
Our information technology applications have bolstered client application to enhance product/service offerings	0.0	5	15	53.8	26.3	4	4	-0.7

Key: SD=Strongly Disagree, D=Disagree, NAD=Neither Agree nor Disagree, A=Agree, SA=Strongly Agree, Md=Median, M=Mode, SK=Skewness

According to the results shown in table 3, majority of the participants agreed (48.2% agreed and 22.9% strongly agreed) that their organizations allocated liberalized spending plan for acquiring information technology innovation and manipulation equipment. The median and modal values were 4 indicating that the main segment of the participants agreed their organizations had liberal spending plans on information technology. Also a sizeable proportion of the respondents (51.8%) agreed that their firms had liberal plans for obtaining information technology programmes. The values of skewness and median were equally consistent with the results.

Most of the respondents agreed (42.2% strongly agreed and 27.7% agreed) that they had web applications in their organization. This shows that majority of the firms were utilizing web applications. A big number of participants (60.8%) indicated that they had upheld business systems that fortify client benefits through information technology. The value of skewness was -1.0 showing that the distribution of the responses was normal.

According to the respondents, their firms had programming applications which had upheld business techniques which in turn enhanced and properly handled good administration. Also most of the respondents (49.4%) agreed that they had equipment which worked consistently with business procedures. This implied that there were good efforts to streamline equipment with the procedures and processes. Lastly, majority of the respondents (53.8%) indicated that their firms had information technology applications which bolstered client application to enhance product/service offering. The results show that most of the firms which took part in this study had advanced technologies and applied new technological advances in their business procedures and processes.

4.2.2 Hypothesis Testing

This sub-section presents a discussion of the results on second hypothesis of the study. The hypothesis was acted as

H₀₋₂: There is no significant influence of technology alignment on organizational performance in selected companies in NSE.

H_{a-2}: There is a significant effect of technology alignment on organizational performance in selected companies in NSE.

The test was done at a 95% level of confidence and the alpha value for making the decision rule on the hypothesis was 0.05. The hypothesis was tested through a simple linear regression discussed in the following sub-sections.

Table 4: Model Summary-Technological Alignment

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.546	.298	.289	.39778

Table 4 shows a R value of 0.546 and a R Square value of 0.298. The R value represents the correlation between technological alignment and performance of the firms. In this case, there exists strong positive correlation between technological alignment and performance of the firms listed in NSE. The R square means that technological alignment accounted for 29.8% of the variation of the performance. This meant that the remaining 70.2% was accounted for by other factors which were not in the model.

Table 5 : ANOVA-Technological Alignment

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.438	1	5.438	34.367	.000 ^b
	Residual	12.817	81	.158		
	Total	18.254	82			

The ANOVA test was used to test goodness of fit of the model. According to table 5, the F statistic F (1, 81) = 34.367, p<0.001 was significant indicating that technological alignment was a significant predictor of performance of the firms listed in NSE. A coefficient table is shown in table 6 to show the actual effect of technological alignment on the performance of the firms.

Table 6: Coefficients-Technological alignment on performance

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	1.376	.454		3.029	.003
Technology alignment	.645	.110	.546	5.862	.000

Table 6 shows that technological alignment had significant effect on performance. As shown by the value of p (p<0.001). The resulting regression equation was given as:

$$P = 1.376 + 0.645TA$$

Where p= performance and TA was Technological Alignment.

The result indicates that when all other factors are held constant, the firms would do 1.376 units. After considering technological alignment, when all other factors are held constant, a unit increase in technological alignment increases the performance of the firms listed in NSE by 0.645 units and the vice versa. This shows that aligning technological processes with the firm activities influences the performance of the firms significantly.

5.0 Discussion of the Findings

Technology has become a critical part of any establishment and processes. Advancement in technology has brought about efficiency and effectiveness in most of the firm processes. According to Foss (1993) Dynamic capacities are abilities of the organizations to arrange, shape, alter, and reconfigure the inward and external aptitudes to counter changing environment. These capacities are mostly technological. Business IT alignment is viewed as a bridge that links IT to different viewpoints on other domains of an organization and its environment (Avila, Goepf, and Kiefer, 2009). In this study, most of the companies listed in NSE had developed a liberal spending plan to guide on how to acquire information technology innovation and manipulation equipment. Similarly, most of the firms had apportioned a liberalized spending plan for obtaining information technology programmes. This spending plan on acquisition of information technology innovations was a good alignment of

the firm's technological resources towards achieving the overall strategic objective. Nugent (2004) recognized planning as an activity designed to improve competitiveness on the market thus having a spending plan helps to strategic build on strengths and capacity of the firms.

The study found that most of the companies listed in NSE had prioritized staffing of information technology. However, there were other firms which had not listed recruitment of IT staff as a priority as shown by the value of the skewness. The results agree with the views of Tallon and Kraemer (1998) who held that there existed general laxity in the extent of alignment of IT-Business strategy. The authors further warned that without effective alignment between business and IT, tremendous IT investments would not create sustainable competitive advantage or improve business performance.

The results further shows some of the companies listed in NSE had embarked on utilization of web applications to enjoy the benefits of new technologies and fast delivery of services to the customers. Nugent (2004) had argued that it was critical to design infrastructure that optimize business value by mapping IT assets, processes, and resources back to IT services, then prioritizing and planning resources that support those business critical services. Thus development of web applications was a key step in making use of opportunities brought by technological advancements.

Other alignment the firms listed in NSE engaged in included developing IT system which upheld business systems that fortified the benefits of the clients. Also some of the firms had acquired programming applications which enhanced effectiveness of the administrative duties. This was broadly defined by Nugent (2004) as managing phase of IT alignment which involved enabling IT staff to deliver promised levels of service. In this study, it can be seen that firms listed in NSE had invested in IT systems which take care of the interest of their customers and improve the efficiency and effectiveness of the administration and general management of the companies.

More findings reveal that in most of the companies listed in NSE, IT equipment had been bought and installed in consistent with the processes and procedures of the companies which in turn had bolstered client application to improve the quality of product and service offering to the clients. The results showed most of the firms listed in NSE had embraced technology in their processes and client application based platforms to improve their overall quality of product and services they offer to their customers and the entire market. However, although the systems had been installed, organizational change was required if benefits of the new technologies were to be realized as suggested by Stefanoue (2001).

Further, the findings revealed that aligning technological resources was a key and significant factor affecting the performance. An improvement on how the technological resources were aligned to the company objectives was key in affecting the performance of the companies. Similar results were obtained by Irwin, Hoffman and Geiger (1998) who found that adoption of technological innovations lead to increased performance in hospital industry.

6.0 Conclusions of the Study

Technological alignment is an important undertaking in a company. The study found that some technological activities such as developing liberalized spending plan for acquiring information technology innovations and programmes utilization of web applications among others plays a critical role on how a company runs her activities.

The study concludes that technology needs to be streamlined to uphold and maintain systems which fortify client benefits, enhance efficiency of administrative duties as well as those consistent with business procedures. Also having in place those applications which bolster client interactions is a major step in improving the performance of the companies listed in NSE.

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