



ASSESEMENT OF INFORMATION TECHNOLOGY INVESTMENTS AND BUSINESS STRATEGIES ALIGNMENT OF SMALL AND MEDIUM ENTERPRISES IN NIGERIA

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ABSTRACT

This study assessed Information technology (IT) investment, small and medium enterprises (SMEs) strategic alignment and perceived usefulness of the alignment to SMEs in Oyo state, Nigeria. A total number of 400 SMEs were selected with a five-stage sampling procedure across the study area. Primary data was employed for the study. Frequency distribution tables, bar chart and chi-square analysis were deployed to realize study objective of examining the extent of business strategies alignment to IT investment of SMEs in Nigeria. The result of the study revealed that the extent of alignment is very good and significant. Recommendations were made that Government should create a more flexible policy and work on power sector to support the easy adoption and alignment to IT.

Keywords: *IT Investment, SMEs, Strategic Alignment, Multi-stage sampling*

Introduction

The belief of the research stream that explores the leveraging effect of strategic alignment on IT investment is that one reason for the inability to realize value from IT investments is the lack of alignment between the business and IT strategies (Akanbi and Adewoye, 2021). Strategic alignment of ICT has been defined by different researchers. Broadbent, Morrison & Rosenlalum (1992) defined strategic alignment as the extent to which business strategies are enabled, supported and stimulated by ICT strategies. Luftman (2000) provides a more detailed definition

stating that “Business-IT alignment refers to applying Information Technology in an appropriate and timely way, in harmony with business strategies, goals and needs. This definition of alignment addresses:

1. How IT is aligned with the business and
2. How the business should or could be aligned with IT (Akanbi & Adewoye, 2021).

However, the conceptual definition of strategic alignment for this study is adapted from Akande & Yinus (2013) and Luftman (2000). A number of studies have shown that strategic alignment between IT and the business strategy plays a significant role in explaining business performance

Theories of Competitive Strategy

The theoretical foundations of the strategic potential of IT have been laid by the work of Porter (1980) on competitive strategy, which identifies the generic business strategies: differentiation, cost leadership and focus; also it concludes that organizations use these generic strategies in order to control five basic industry forces which determine their competitive position and profitability: rivalry among existing competitors, bargaining power of suppliers, bargaining power of buyers, threat of substitute products/services and threat of new entrants. Concerning IT, Porter (1980) argues that each of the above strategies requires a different kind of ICT usage in order to be effectively implemented; also, the five forces can be favourably affected by using IT.

Porter (1980) reinforced the foundations of the strategic potential of IT and argued that IT can have a strategic impact, if they are used in order to build barriers against new entrants, build switching costs, change the basis of the competition, generate new products and services and change the balance of power in supplier relationships. Important is the contribution of Loveman (1994) on this topic, who identified three basic ways that IT can affect competition: by altering industry structures, supporting differentiation and cost leadership strategies and also by spawning entirely new businesses; they also argue that IT have strategic potential if they can add value to a product or service in at least one of the primary activities (Inbound logistics, operations, outbound logistics, marketing and sales, after-sales support and services) or one of the

support activities (human resources management, technology development, infrastructure management, procurement) of the value chain.

Lack of awareness could hinder SMEs from understanding the potential benefit associated with new technologies that could enhance their efficiency and increase productivity. Many SME's owner Managers in Nigeria is not familiar with the conceptual basis and potential benefits of adopting IT. Also Kapurubandra and Lawson (2006) grouped the barriers of ICT utilization into internal and external. The authors described characteristics of owner/manager, cost, return on investment and organization characteristics as internal barrier while poor infrastructures and other macro environmental factors are classified as external barriers. Adewoye (2007) grouped challenges facing IT adoption in Nigeria into five and they include: The challenges of sustainable wired and wireless networks; cost of connection; security issues; political instability/policy inconsistent and lack of effective coordination.

Other factors identified by researchers as hindrance to ICT adoption are lack of infrastructural facilities, corruption, cost of implementation, lack of funds, lack of awareness among owners/managers, lack of skills and training, cultural factors, lack of government policies that support ICT adoption in SMEs, electricity constrains among others (Adewoye, 2007). Adewoye (2007) also identified Telecommunication, Land Scale and Electricity Technology dependency as another infrastructural obstacle in Nigeria.

Aim and Objective

The primary aim of this study is to examine the extent of information technology investments and business strategies alignment of small and medium enterprises in Nigeria. While the specific objective is to examine the extent that SMEs align business strategies with IT investment strategy.

Hypothesis

H₀: The extent that SMEs aligns business strategies with IT strategy is positively significant.

H₁: The extent that SMEs aligns business strategies with IT strategy is not positively significant.

Methodology

This study focused on registered SMEs in Oyo State. Multi-stage sampling technique was adopted to selected from a cross-section of Oyo state

geographical zones (table 1), covering virtually all forms of manufacturing food and beverages and service rendering industries (wine, bakery, biscuits, cake, beans product, soya milk, candy, canned food, canned fruit, chocolate ingredient, cooking oil, dried food, fast food, flavor enhancers and carbonated drinks and service rendering organization). Among the sampled SMEs, only 400 SMEs that fulfilled the condition of registered SMEs were visited. Results from the questionnaires were sorted using IBM SPSS v.21 worksheet, charts. Data was summarized and described using statistical tools of frequency, percentage and Bar charts. Inferential statistics of Chi-square was employed for inference.

Table 1 Oyo state Zone

S/N	Zone	Size
1	Ibadan	200
2	Saki/ Iseyin	50
3	Eruwa	50
4	Oyo town	50
5	Ogbomoso	50

Results and Discussions

Socio-Economic Characteristics of the selected SMEs

The socio-economic characteristics of the SMEs selected were presented in Table 2.

Table 2: Socio Economic characteristics

S/N	Description	Characteristics	Frequency (F)	Percentage (%)
1	Factory location	Ogbomoso	50	12.5
		Oyo	50	12.5
		Ibadan	200	50.0
		Saki/Iseyin	50	12.5
		Eruwa	50	12.5
		Ogbomoso	50	12.5
		Total		400

2	Factory sector	Agriculture	11	2.8
		Industry	13	3.3
		Building	29	7.3
		Trading	252	63.0
		Service	95	23.8
		Total	400	100
3	Respondent Post held	Manager	103	25.8
		owner	246	61.5
		senior staff	50	12.5
		Total	400	100
4	Respondent gender	Male	353	88.3
		Female	39	9.8
		Total	400	100
5	Respondent age	Less than 25	0	0.0
		25-29	2	0.5
		30-39	73	18.3
		40-49	324	81.0
		50-59	1	0.3
		60 and above	0	0.0
		Total	400	100
6	Respondent highest qualification	None	0	0.0
		Primary	12	3.0
		Secondary	1	0.3
		Tertiary	307	76.8
		Others specify	80	20.0
7	Factory Ownership	Sole proprietorship	191	47.8
		Partnership factories	177	44.3
		Others	32	8.0
		Total	400	100
8	Company size	Small	210	52.5
		Medium	190	47.5

	Total	400	100
9	Company capital base	Less than #150 million	223
		#150 million and above	177
	Total	400	100
10	Company investment in ICT	Yes	327
		No	73
11	Does your company align business strategy before ICT investment?	Yes	343
		No	57
	Total	400	100
12	Extent to which company aligns business strategy with IT investment startegy	Poor	17
		Fair	13
		Good	26
		Very Good	109
		Excellent	237
	Total	400	100

Source: Author’s compilation (2021)

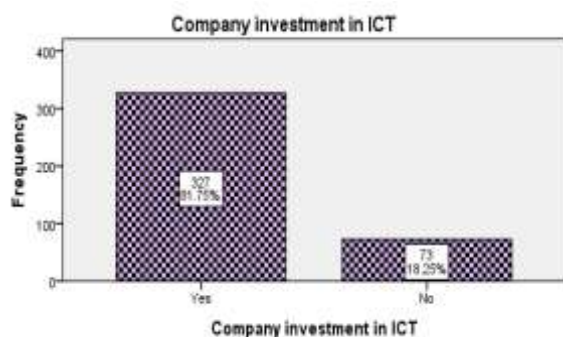


Fig. 1: Investment in ICT

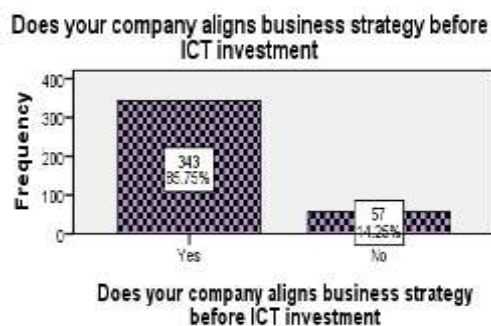


Fig.2: Company alignments

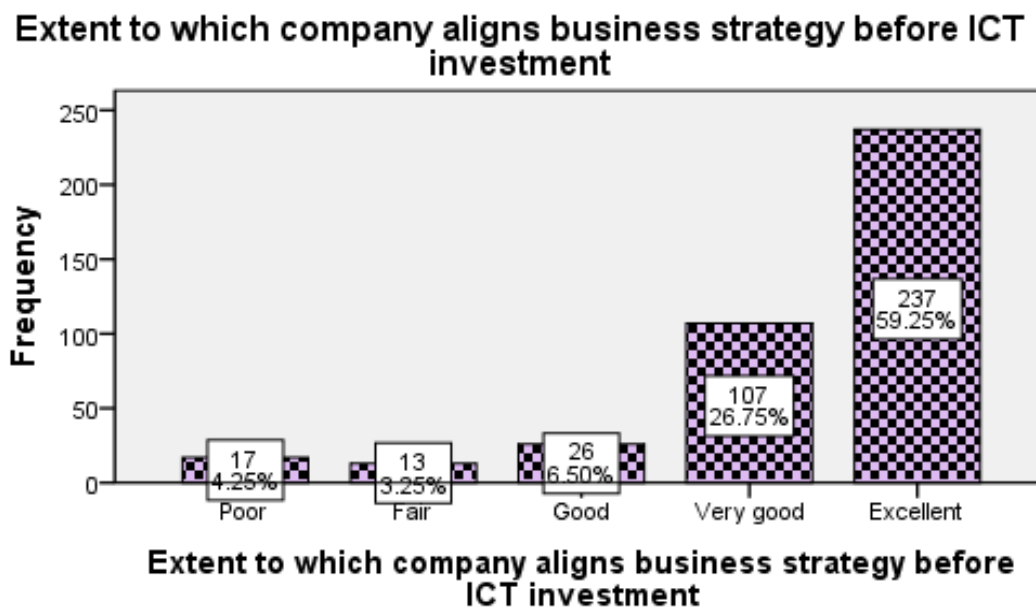


Fig. 3: Extent of alignments

Comments:

As indicated in Table 2, out of 400 questionnaires administered, 50 (12.5%) respondents each were chosen from each 5 geo-political zones of Oyo state except Ibadan city of 200 (50%) chosen due to its relative population density and peculiarity as the state capital. The information gathered spread across sectors of Agriculture 11(2.8%), Industry 13 (3.3%), Building 29 (7.3%), Services 95 (23.8%) while the lion share went to Trading 252 (63.0%) being the commonest SME engaged in, since too much technicalities are not associated with it.

In responses, 103 (25.8%) managers, 246 (61.5%) owners and 50 (12.5%) senior staffs attended to the data collectors, out of which 353 (88.3%) are male. Majority of the respondents 324 (81.0%) are between the ages of 40-49 years followed by 30-39 years old 73 (18.5%) while age less than 25 and 60 & above have no representation which justify the maturity and retirement age in Nigeria. 307 (76.8%) are graduate. In term of factory ownership 191 out of 400 are sole proprietorship, 177 are in partnership and others form 32 (8.0%). Small and medium enterprises are respectively 210 and 190 represented in the research with 223 (55.8%) less than #150 million capital base and 177 (44.3%) have capital base of more than #150 million. Majority 327 (81.8%) of the visited

enterprises said they invested in ICT (Fig.1 and Fig.2) and 343 (85.8%) have aligned their business strategy even before ICT investment (Fig. 3).

Hypothesis testing

Hypothesis

H₀: The extent that SMEs aligns business strategies with IT strategy is positively significant.

H₁: The extent that SMEs aligns business strategies with IT strategy is not positively significant.

Table 3: Extent to which company aligns business strategy before ICT investment

	Observed N	Expected N	Residual
Poor	17	80.0	-63.0
Fair	13	80.0	-67.0
Good	26	80.0	-54.0
Very good	107	80.0	27.0
Excellent	237	80.0	157.0
Total	400		

Table 4: Test Statistics

	Extent to which company aligns business strategy before ICT investment
Chi-Square	459.400 ^a
Df	4
Asymp. Sig.	.000

Decision: The p-value= 000 which is less than 0.05 level of significance. H₁ is thereby accepted and conclude that the extent of alignment is excellent and significant.

Conclusion

Information technologies (ICT) have had a powerful impact on business in the past three decades. That impact has been reflected in the high volume of

academic papers on the adoption and use of IT in firms that has charted the many benefits ICT can bring as regards efficiency, effectiveness, innovation and competitiveness. Nevertheless, this study have mainly focused on assessment of IT investment, small and medium enterprises (SMEs) strategic alignment and perceive usefulness of the alignment to SMEs in Oyo state, Nigeria. A total number of 400 SMEs were selected with a five-stage sampling procedure across the study area. Findings from the study revealed that the extent of alignment is very good and significant.

Recommendations

In view of the findings of the study, the following recommendations are made to enhance SMEs growth in Nigeria:

- i. Government should create a more flexible policy that will support the easy adoption of IT.
- ii. There is the urgent and dire need for the government to revamp the SME sector of the economy on order to redress the growing unemployment rate in the country, reduce poverty level, enhance standard of living and stimulate economic growth and development by provide funds for SMEs to invest in IT to enhance their performance and market expansion.
- iii. SMEs' owners should strategically align complementary factors such as (SMEs type, SMEs size, SMEs capital, SMEs IT perception and business strategy) with IT investment so that it can have a positive effect on their performance.
- iv. Government should work on the power sector to provide enough power that will promote regular usage of IT.

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