

The Role of Technology in Integrating Product and Service Based SMEs to International Business

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Abstract

The study examines the role of technology in integrating service and product based SMEs to international business, to achieve that the following research objectives and questions were formulated; i) to determine the impact of e-business on international business competitiveness. ii) to analyse the types of technological structures adopted by international business. a) What is the impact of e-business on international business competitiveness? b) What are the types of technological structures adopted by international business? The study used a descriptive survey design through the use of structured questionnaire, personal interviews, five points Likert scale were used Strongly Agree (SA)=5; Agree (A)=4; Disagree (D)=3; Strongly Disagree (SD)=2; Neutral (N)=1. To retrieve information from respondents. data analysed shown that e-business plays a role in integrating product and service SMEs to international business competitiveness. 53.3% of the respondents agree with the assertion that whether e-business plays a role in promoting business international competitiveness. The mean score of 3.43 for question one which is greater than the mean acceptance entry of 3.00. It means that e-business plays a significant role in promoting business international competitiveness. The study arrived at the position from data collected it has been established that technology has significant and positive impact in the integrating of product and service base SMEs to international business. Also, the types of technological structures adopted by international business positively improve its international competitiveness.

Keywords: Technology, product and service based SMEs and international business

INTRODUCTION

1.1 Background to the Study

Technology is a key factor that drives productivity growth and global market competition and defines global value chains. Technological innovation offspring's new businesses and shapes the nature of international competition and international trade.

Light and Holland (2000) opined that Technology is playing an ever-increasing role in supporting business strategies and transformation, with e-business lending new visibility to technology's strategic role. The productivity growth seen in recent years likely represents the benefits of the ongoing diffusion and implementation of succession of technological advances.

For many developing countries, such technological dynamism brings both opportunities and challenges to reach the global world with local made product or service transfer. The Internet and smart phones have enabled the dissemination of information at an unprecedented scale and pace. Today, it is possible for firms and entrepreneurs to discover news or information about the most advanced technologies directly online. The advancement of technology has brought about new ways of doing business, such as electronic commerce, enable individuals and small and medium-sized enterprises to participate more easily in international trade.

1.2 Problem of the Study

The essential prerequisite for global business optimization is an integrated information system (Feeny and Willcocks, 1998). The struggle of local product or services to move to global frontier is a great task for small and medium business. Even though the system allows the business engineers to explore every pathway where value is added within a company and to design a business process that maximizes value while minimizing costs. The transformed role of technology will actualize organizational goal so that management can continuously realign business operations with company objectives (Light et al. 200).

However, the survival of businesses in the global business arena has become a key issue in the international trade. Managing interdependencies between nations is inherently more complex than managing activities within a single nation. Many globalization efforts have failed due to unmet coordination. Therefore, due to this failure, it is critically necessary to design technology driven organizations that can compete efficiently and effectively in the global business area (Light and Holland, 2000).

1.3 Objectives of the Study

The main objective of study is to determine the role of technology in linking product and service based companies to international business.

- i. To determine the impact of e-business on business international competitiveness.
- ii. To analyse the types of technological structures adopted by international business

1.4 Study Questions

- i. What is the impact of e-business on business international competitiveness?
- ii. What are the types of technological structures adopted by international business?

1.5 Significance of the Study

- i. *Contribution to practice*

The overriding search for competitive advantage and markets for locally made and the obstacle to transfer of service to a global market will gain a better strategy approach that will facilitate ease access.

- ii. *Contribution to the pool of knowledge.*

The study of this nature will contribute the pool knowledge particular in the area of gap and the significance of those major gaps. The findings too will serve as vital reference point or information support.

REVIEW OF LITERATURES

2.1 Technology

Ezell (2013), postulate that technologies are revolutionising the economics of global production and trade, together with the prospects of developing countries in the global economy. E-commerce, 3D printing, online payments, the “internet of everything,” and other technologies riding on the internet are empowering businesses of all sizes to cut costs, streamline supply chains, and market products and services worldwide with greater ease than ever before. Some one-half of all the value in the global economy will be created digitally by 2025.

The term technology has been given various definitions by previous literatures. According to Kumar et. al (1999) technology consists of two primary components: 1) a physical component which comprises of items such as products, tooling, equipment's, blueprints, techniques, and processes; and 2) the informational component which consists of know-how in management, marketing, production, quality control, reliability, skilled labor and functional areas. Sahal (1981) declares technology as ‘configuration’, observing that the transfer object (the technology) relies on a subjectively determined but specifiable set of processes and products. International Business encompasses all commercial activities that take place to promote the transfer of goods, services, resources, people, ideas, and technologies across national borders. Jean-Paul (2007)

2.2 Technology and international trade Transaction

According to US International Trade Commission (2014) Trade transactions powered by the internet can usefully be grouped under term “digital trade international trade in which the internet and internet-based technologies play a major role in developing, identifying, ordering, producing, marketing, or delivering products and services. Indeed, digitisation and the internet are redefining goods and services, and their markets.

“Buy low, sell high” logic leads economists to comparative advantage theory. Comparative advantage David Ricardo (1817) states “country can produce a good or service at a lower opportunity cost than another.” This means the comparison of relative price differences between nations to explain the pattern of trade. For example, compare the relative price of wheat in terms of cheese at home to the same relative price in the

foreign economy in a hypothetical equilibrium with no trade (autarky) or with restricted trade. The country with the lower relative price of wheat is said to have a comparative advantage in wheat while the other country has, symmetrically, a comparative advantage in cheese. Buy low, sell high logic predicts that a country will export the good in which it has a comparative advantage.

METHODOLOGY

3.1 Study Design

The study used a descriptive survey design which entails factual information that explains the phenomenon. In all, sixty (60) samples were collected through a simple random sampling method of data collection from the target population of (120) employees in the area of study comprises of three international businesses chosen as our object of analysis.

The International businesses chosen are Coca-Cola Company, Total Oil, and MTN

The Target population of the study are the employees in the selected Business of the sampling frame as shown in the table below

Organization	No. Of Employees
TSU Printing Press	37
Tanadi table water	26
Pneosusan Rice	57
Total	120

The study makes use of structured questionnaire, personal interviews, inspection of business premises where necessary all for the purpose of extracting information on the two sections namely, the demographic characteristics of the population which comprises of age, gender, marital status and professional status. While, the second section bothers on the vital role of e-business on business international competitiveness, the types of technological structures adopted by international business using Likert scale-five scaling points namely Strongly Agree (SA)=5; Agree (A)=4; Disagree (D)=3; Strongly Disagree (SD)=2; Neutral (N)=1. Likert scale produce ordinal data that is data that can be ranked from 1 to 5 which makes it easy for our work in this paper.

There are 60 respondents in all and all of them, that is 100% are employees of the selected international business. Male employees constitute 60% of the population while female employees constitute 40% of the population of study. Their age ranges from 25-50 with a mean age of 38 years.

A cut off point was determined by finding the means of the nominal values assigned to the responses. Thus $5 + 4 + 3 + 2 + 1 = 15/5 = 3.00$. For decision to be reached, mean scores of 3.00 and above were regarded as agreed statement while mean scores below 3.00 were regarded as disagreed statement.

Sampling Frame for the Study

Sampling frame for the Study	No. Of Respondents
TSU Printing Press	20
Tanadi table water	20
Pneosusan Rice	20
Total	60

DATA ANALYSIS

RESULTS AND DISCUSSION

Does e-business play a role in the promotion business international competitiveness?

S/No	Question	SA	A	DA	SD	N	MEAN
1	E-business plays a role in linking product and service based business to international competitiveness	20 (33.3)	12 (20)	10 (16.6)	10 (16.6)	8 (13.3)	3.43

Source: Field Survey 2019

The table above shown an analysis whether e-business plays a role in liking product and service business to international competitiveness. 53.3% of the respondents agree with the assertion that whether e-business plays a role in promoting business international competitiveness.

The mean score of 3.43 for question one which is greater than the mean acceptance entry of 3.00. It means that e-business plays a significant role in promoting business international competitiveness.

- i. Do technological structures adopted by international business enhance connective with product and service based companies?

S/No	Question	SA	A	DA	SD	N	MEAN
1	Specific type technology structures for use in international business	24 (40%)	16 (26.6%)	8 (13.3%)	8 (13.3%)	6 (10%)	3.83

Source: Field Survey 2019

MAJOR FINDINGS

From the analysis of data collected it has been established that technology has significant and positive impact in the integrating of product and service base SMEs to international business. Also, the types of technological structures adopted by international business positively improve its international competitiveness.

CONCLUSION

The study found out that integration of technological components and application into global business platforms can enrich and enhance global business as they compete for leadership in the market place. Virtual organization as a strategic organizational structure is a solution for globalization.

Technology, especially the web is revolutionizing the international business platform. This study proposed that technology should be incorporated in the structural design of transactional organizations.

RECOMMENDATIONS

- International business should digitize their operations to be able to withstand the changing electronic world. This will enable global manufacturers to lower the total cost in the supply chain process, thereby shortening the throughput time.
- There is need for organizational business process as a strategy for competitiveness since the benchmark for success is the attainment of average return and sustainability of return on investment.

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