

The Role of Technology on Business Strategy Performance in Building Core Competence in Small Medium Enterprises Mogadishu - Somalia

Abdinor Abukar Ahmed

Faculty of Engineering and Computer Science of
Somali International University (Siu)

ABSTRACT

The goal of this research was to look at the effect of technology on business strategy performance in Mogadishu, Somalia. The study focused on the impact of communication technologies on business strategy performance in Mogadishu, Somalia, the impact of digital marketing technologies on business strategy performance in Mogadishu, Somalia, and the significance of business information management technologies on business strategy performance in Mogadishu, Somalia. This study was conducted among a pre-selected group of local small and medium-sized enterprises (SME). The intended audience consisted of business employees and general managers. Staff and general managers were chosen based on their knowledge and expertise in the roles of technology in the attainment of business goals in their respective regions. The study's sample size was 92 respondents from the target population. This is due to the nature of the data to be created, which involves the employment of numerous methodologies to gain a better knowledge of the study issue under consideration. According to Amin, the method is also well-known for enhancing validity and reliability while decreasing biases (2012). Sloven's algorithm was used to estimate the sample size of genuine respondents. To collect data, self-administered questionnaires were used, and these were sent to employees and general managers for replies. This study found that communication technologies have a significant impact on the success of business strategies at small and medium-sized enterprises (SMEs) in Mogadishu, Somalia, although digital marketing and business information management technologies had a minor impact. Business strategy and technology are tightly connected. A business strategy cannot be implemented if a firm lacks technology. Even firms that have successfully linked business and technology strategies fail to recognize the link between effective intellectual capital strategy and both business and technology strategies, so the researcher advised companies to focus on technology as a core competence and continue to benefit from its various strategies such as communication strategies and digital marketing strategies.

Key words: Technology, Business Strategy performance, Communication technologies, Business Information management Technologies and Digital marketing technologies.

INTRODUCTION

The notion of technology has grown greatly over the years, and the number of small and medium-sized businesses is growing. It has become critical for each of these businesses to use

ever-changing technologies and establish stronger business strategies in order to improve their performance and compete in an increasingly competitive business climate.[1].

Small and medium-sized companies (SMEs) play a significant role in developing-country economies. Small and medium-sized enterprises (SMEs) account for a sizable portion of a country's commercial activity. According to the World Bank, they have produced more job opportunities than large corporations[2]. SMEs, on the other hand, are very vulnerable, with a high failure rate, and governments cannot ignore the present difficulties because SMEs contribute to the nation's economy[3]. C. K. Prahalad and Gary Hamel introduced the notion of center competency in management theory. It is characterized as "a well-balanced combination of diverse resources and talents that see a corporation in the context of business"[4]. A middle competency emerges as a result of a certain plan of action of abilities or age procedures that pass on extra motivation to the customer. These employ collaboration to acquire access to a diverse variety of company departments[5].

Because core skills cannot be cheaply copied by other competing firms, they allow a firm to establish a level of market differentiation in comparison to its competitors[6]. A company may build a name for itself as a star in the long run by developing core competencies. Likewise, the core expertise should be capable of being applied in a variety of markets and products[7]. This suggests that the center competence should have a broad market potential. According to Hamel and Prahalad (2009, para, 4), if an organization's core capacity is constrained to a few and small specialist shows, its success will be limited to maintaining significant growth[8]. The concept of center capability also suggests that an organization's long haul aggressiveness is derived from the company's capacity to build up its center skill all the more fast and readily in contrast to its rivals[9]. Furthermore, the capacity of the administration to merge the organization's skills and innovations into capabilities influences an organization's center fitness. [10].

According to Kenya's Vision 2030 development plan, six key sectors have been recognized as having great potential to boost economic growth and development in the country[11]. Among them, the manufacturing sector is seen as one of the crucial areas that will drive Kenya to achieve 10% annual GDP growth and put the country on a road of sustainable growth[12]. The manufacturing sector saw annual average growth of 3.2% over the first phase of the Medium-Term Plan (2008-2012). On average, this generated 9.8 percent of GDP growth[13].

Textile and chemical industries, non-metallic minerals, beverages and tobacco, food processing, refinery, paper, metal-based goods, cement, and glass industries are all part of the manufacturing sector[14]. This industry accounts for more than 10% of Kenya's GDP, according to Kenya Vision 2030. According to the government's Medium-Term Plan (2013-2017) for 2030, medium- and large-scale industries provided more than 60% of GDP in the manufacturing sector, small and micro-enterprises accounted for almost 95% of all firms, and manufacturing contributed just 20% of GDP[15].

A business strategy is a long-term plan of action that a corporation can use to attain its objectives. Technology policy encapsulates the decisions that businesses make about purchasing, developing, and deploying technology to assist them achieve the goals of their business plan[16]. The literature underlines the need of aligning company strategy and technology policy. Fit means that corporate strategy and technology decisions will be

complimentary, complementing one another. The bulk of prior papers on the topic of business strategy-technology have been written in English[17].

MATERIALS AND METHODS

This study was conducted among a pre-selected group of local small and medium-sized enterprises (SME). Employees and general managers from the firm were the intended audience. Staff and general managers were picked for their knowledge and skill in the roles of technology in the achievement of business plans in their respective locations.

The sample size for the study was 92 respondents from the target audience. This is owing to the nature of the data to be generated, which necessitates the use of multiple approaches in order to acquire a better understanding of the study topic under discussion. According to Amin, the approach is also well-known for increasing validity and reliability while also reducing biases (2012).

The study will use Sloven's formula to determine the sample size of the actual respondents. Sloven's;

$$n = N / (1 + N \left[\left(\alpha \right) \right]^2)$$

where formula states: n = sample size, N=target population; and $\alpha=0.05$ level of significance

$$n = 120 / (1 + 120 \left[\left(0.05 \right) \right]^2)$$

$$n = 120 / (1 + 120 \left[\left(0.0025 \right) \right]^2)$$

$$n = 120 / (1 + 0.3)$$

$$n = 92$$

Self-administered questionnaires were utilized to collect data, and responses were delivered to employees and general managers. For objectives one and two, data was analyzed using the statistical package for social science (SPSS) tools mean and standard deviation, and the Pearson linear correlation co-efficient analysis was used to evaluate the connection between variables in objective three.

RESULTS AND DISCUSSION**Table 1 Mean and standard deviation of Communication Technologies on Business Strategy Performance**

Statements	Mean	Std. Deviation	Interpretation
Communications technology is a must for any SMEs, especially for businesses who serve consumers directly.	3.1304	1.20637	Very Good
Even cutting-edge technology like cloud computing are being leveraged to enable firms to operate internationally without losing security or limiting user access.	2.2717	1.23238	Poor
The collaboration of information has helped business cut down the workforce needed in the process of communication.	2.7609	1.26985	Very Good
The progress of cellphones has also greatly expanded the types of corporate operations that may be carried out while away from the office, increasing productivity and extending the workday.	2.6413	1.21873	Very Good
By connecting essential workers in distant branches to exchange ideas and information, teleconferencing may save considerable sums of money that would otherwise be spent on travel.	2.7717	1.20533	Very Good
<u>Total Average Mean</u>	<u>2.71</u>	<u>1.22</u>	<u>Very Good</u>

According to the above table 4.11 presented that the level impact of Communication technologies on business strategy performance, was scored Average mean (M=2.71) overall and Standard deviation (M=1.22) overall and this result indicates that the overall result was very good. First statement which about communication technologies on Business strategies performance: that was “Communications technology is a must for any SMEs, especially for businesses who serve consumers directly”, this statement has scored mean of 3.1304 which indicated very good. Second statement which about communication technologies on Business strategies performance: that was “Even the latest technologies, such as cloud computing, are being used to allow businesses to operate globally without sacrificing security or limiting user access.”, this statement has scored mean of 2.2717 which indicated Poor.

The third statement which about communication technologies on Business strategies performance: that was “The collaboration of information has helped business cut down the workforce needed in the process of communication.”, this statement has scored mean of 2.7609 which indicated very good. The Fourth statement which about communication technologies on Business strategies performance: that was “The development of smartphones has also greatly expanded the types of business activities you can transact when out of the office, increasing productivity and extending the workday.”, this statement has scored mean of 2.6413 which indicated very good. The final statement which about communication technologies on Business strategies performance: that was “Teleconferencing can save substantial amounts of money otherwise spent on travel by connecting important employees in far-flung branches together to

share ideas and information.”, this statement has scored mean of 2.7717 which indicated very good.

Table 2 Mean and standard deviation Digital marketing Technologies on Business Strategy performance

Statements	Mean	Std. Deviation	Interpretation
Digital media has become so ubiquitous in the previous decade that customers now have practically immediate access to information.	2.5674	1.14307	Very Good
The promotion of products or brands using electronic media is known as digital marketing.	2.5326	1.14307	Very Good
Because social networks allow users to communicate, share, and exchange information, they give a tremendous chance for advertisers to reach new audiences.	2.7065	1.21834	Very Good
Firms may profit from social networks because they allow them to directly contact existing and new customers, exchange information and build trust.	2.4565	1.22621	Poor
Many social networks also include sponsored advertising, which gives users access to certain groups of individuals who are only available to those who have paid for their membership..	2.5978	1.23199	Very Good
<u>Total Average Mean</u>	<u>2.56</u>	<u>1.18</u>	<u>Very Good</u>

According to the above table 4.17 presented that the level impact of Digital marketing technologies on business strategy performance, was scored Average mean (M=2.56) overall and Standard deviation (M=1.18) overall and this result indicates that the overall result was very good. First statement which about Digital marketing technologies on Business strategies performance: that was “Since the last decade digital media has become so prevalent that consumers have easy access to information almost instantly.”, this statement has scored mean of 2.5674 which indicated very good.

Second statement which about Digital marketing technologies on Business strategies performance: that was “Digital marketing is the promotion of products or brands via electronic media.”, this statement has scored mean of 2.5326 which indicated Very good.

The third statement which about Digital marketing technologies on Business strategies performance: that was “Social networks are present in the lives of internet users on a daily basis, and for companies, they are an excellent opportunity of advertising as they allow users to interact, share and exchange information. this statement has scored mean of 2.7065 which indicated very good.

"Social networks may be a fantastic tool for enterprises since they are platforms that can directly contact existing and new consumers, exchange information, engage in dialogues, create trust, reach more people, improve impact, and better understand clients," said the fourth statement. This statement had a mean score of 2.4565, indicating a poor performance.

The final statement which about Digital marketing technologies on Business strategies performance: that was “Many social networks also offer paid advertising that allows access to specific groups of users and direct advertising to users of these groups because it is more likely for them to become clients than the broader, uninterested audience.”, this statement has scored mean of 2.5978 which indicated very good.

Table 3 Mean and standard deviation Business Information Management On Business Strategy Performance

Statements	Mean	Std. Deviation	Interpretation
Management information system approaches existed to provide managers with information that would allow them to plan and oversee their business operations.	2.6522	1.19922	Very Good
Management information system approaches are a collection of linked technologies used to gather, process, categorize, store, and distribute data to enhance decision making and control.	2.4783	1.20874	Poor
The business management system comprises information on important people, places, and objects inside the company and institution, as well as the environment in which they operate.	2.6739	1.14938	Very Good
A management information system gives data about a company's true economic value. Investment in information systems, such as buildings, machinery, land, and other assets, will be a better bet.	2.6196	1.42846	Very Good
A business management system provides information that may be utilized to effectively and efficiently manage businesses and organizations.	2.5761	1.11171	Very Good
<u>Total Average Mean</u>	<u>2.58</u>	<u>1.21</u>	<u>Very Good</u>

According to the above table 4.23 presented that the level impact of Business information system technologies on business strategy performance, was scored Average mean (M=2.56) overall and Standard deviation (M=1.18) overall and this result indicates that the overall result was very good.

First statement which about Business information system technologies on Business strategies performance: that was “Management information system techniques were in existence to supply managers with the information that would permit them to plan and control their business operations.”, this statement has scored mean of 2.6522 which indicated very good.

Second statement which about Business information system technologies on Business strategies performance: that was “Management information system techniques are set of integrated technology that collect, process, classify, store and distribute information to support decision making and control.”, this statement has scored mean of 2.4783 which indicated Poor. The third statement which about Business information system technologies on Business strategies performance: that was “The business management system contains information

about crucial people, places and things within the organization and institution or the environment surrounding around it.” this statement has scored mean of 2.6739 which indicated very good.

The Fourth statement which about Business information system technologies on Business strategies performance: that was “Management information system provides information about the real economic value to the business. Investment in information system will be better investment like other investment in building, machines, land and other assets.”, this statement has scored mean of 2.6196 which indicated Very good.

The final statement which about Business information system technologies on Business strategies performance: that was “Business management system provides information which is useful to manage organizations and institutions efficiently and effectively.”, this statement has scored mean of 2.5761 which indicated very good.

Table 1 Correlation between Technologies and business strategy performance in small and medium business in Mogadishu Somalia

Technology		Business Strategy performance
Communication Technologies	Pearson Correlation	0.652
	Sig. (2-tailed)	0.000
	N	92
Digital Marketing Technologies	Pearson Correlation	0.465
	Sig. (2-tailed)	0.001
	N	92
Business Information System Technologies	Pearson Correlation	0.452
	Sig. (2-tailed)	0.001
	N	92

****.** Correlation is significant at the 0.01 level (2-tailed).

A Pearson correlation analysis was conducted to investigate whether there is relationship between the dependent variable (Business strategy performance) and the independent variables; Communication Technologies, Digital Marketing Technologies and Business Information Management Technologies. The analysis revealed that there was a positive relationship between the Business strategy Performance and all the independent variables (Communication Technologies, Digital Marketing Technologies and Business Information Management Technologies).

The analysis results show that there was a high correlation between Communication Technologies and Business Strategy performance at 0.001 level of significance with ($r=0.652$, $p=0.00$). The analysis results further shown that the employee performance was moderately correlated with both the Digital marketing and the Business information management technologies at 0.001 level of confidence with ($r=0.465$, $p=0.001$) and ($r=0.452$, $p=0.001$) respectively.

CONCLUSIONS

This study found that communication technologies have a significant impact on the success of business strategies at small and medium-sized enterprises (SMEs) in Mogadishu, Somalia, although digital marketing and business information management technologies had a minor impact.

RECOMMENDATION

Corporate strategy and technology are tightly connected. A business strategy cannot be implemented if a firm lacks the necessary technologies. Even companies that have successfully integrated business and technology strategies fail to see the link between solid intellectual capital strategy and both business and technology strategy, so that the researcher recommended that the companies should focus the technology as a core competence and they must sustain taking advantage by its different strategies like communication strategies and Digital marketing strategies.

Reference

- [1] B. Donat, "Impact of Technology on the Business Strategy Performance Relationship in Building Core Competence in Uganda Small Medium Enterprises (SME's)," *7th Int. Conf. Innov. Manag.*, pp. 39–43, 2007, [Online]. Available: [http://www.pucsp.br/icim/ingles/downloads/papers_2010/part_1/Impact of Technology on the Business Strategy Performance.pdf](http://www.pucsp.br/icim/ingles/downloads/papers_2010/part_1/Impact%20of%20Technology%20on%20the%20Business%20Strategy%20Performance.pdf).
- [2] T. Durai and R. King, "Impact of Digital Marketing on the Growth of Consumerism," *SSRN Electron. J.*, no. May 2018, 2019, doi: 10.2139/ssrn.3344421.
- [3] M. Ištvanić, D. C. Milić, and Z. Krpić, "Digital marketing in the business environment," *Int. J. Electr. Comput. Eng. Syst.*, vol. 8, no. 2, pp. 67–75, 2017, doi: 10.32985/ijeces.8.2.4.
- [4] H. Bouwman, S. Nikou, F. J. Molina-Castillo, and M. de Reuver, "The impact of digitalization on business models," *Digit. Policy, Regul. Gov.*, vol. 20, no. 2, pp. 105–124, 2018, doi: 10.1108/DPRG-07-2017-0039.
- [5] W. B. Moody, "Beyond computation," *Arith. Teach.*, vol. 22, no. 1, pp. 22–26, 2020, doi: 10.5951/at.22.1.0022.
- [6] C. H. Organ, "The impact of technology on surgery," *Arch. Surg.*, vol. 140, no. 11, pp. 1058–1060, 2005, doi: 10.1001/archsurg.140.11.1058.
- [7] A. Sharma and S. Khanna, "Role of management information system in telecom agency," *Int. J. Comput. Appl. Inf. Technol.*, vol. 1, no. 1, 2012.
- [8] M. Vernet and M. R. Arasti, "Linking business strategy to technology strategies: a prerequisite to the R&D priorities determination," *Int. J. Technol. Manag.*, vol. 18, no. 3–4, pp. 293–307, 1999, doi: 10.1504/ijtm.1999.002776.
- [9] J. H. Dempster, "Business Management and Control," *Acta Hort.*, no. 77, pp. 167–182, 1978, doi: 10.17660/actahortic.1978.77.18.
- [10] O. J. Omondi, "Impact of Digital Marketing On Sales Growth of Small and Medium Enterprises in Nairobi, Kenya," pp. 1–57, 2017, [Online]. Available: shorturl.at/wzADT.
- [11] E. Psomas, "Determining the impact of service quality on citizens' satisfaction and the role of citizens' demographics. The case of the Greek citizen's service centers," *TQM J.*, vol. 28, no. 1, pp. 168–174, 2020, doi: 10.1108/TQM-12-2019-0274.
- [12] S. Devaraj and R. Kohli, "Performance impacts of information technology: Is actual usage the missing link?," *Manag. Sci.*, vol. 49, no. 3, pp. 273–289, 2003, doi: 10.1287/mnsc.49.3.273.12736.
- [13] J. Luftman, K. Lyytinen, and T. Ben Zvi, "Enhancing the measurement of information technology (IT) business alignment and its influence on company performance," *J. Inf. Technol.*, vol. 32, no. 1, pp. 26–46, 2017, doi: 10.1057/jit.2015.23.

- [14] M. G. Yang, P. Hong, and S. B. Modi, "Impact of lean manufacturing and environmental management on business performance: An empirical study of manufacturing firms," *Int. J. Prod. Econ.*, vol. 129, no. 2, pp. 251–261, 2011, doi: 10.1016/j.ijpe.2010.10.017.
- [15] H. Sulistyo and S. Ayuni, "Competitive advantages of SMEs: The roles of innovation capability, entrepreneurial orientation, and social capital," *Contaduria y Adm.*, vol. 65, no. 1, pp. 1–18, 2020, doi: 10.22201/FCA.24488410E.2020.1983.
- [16] F. Wu, V. Mahajan, and S. Balasubramanian, "An Analysis of E-Business Adoption and Its Impact on Business Performance," *J. Acad. Mark. Sci.*, vol. 31, no. 4, pp. 425–447, 2003, doi: 10.1177/0092070303255379.
- [17] L. Karltrap, "Digital transformation strategies in small businesses: A case study in the Swedish manufacturing industry," *Int. Bus. Sch.*, pp. 2–61, 2017, [Online]. Available: <http://www.diva-portal.org/smash/get/diva2:1115635/FULLTEXT01.pdf>.