

Adoption of e-Marketing and the Competitive Advantage of Telecommunication Companies in the Saudi Market

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Abstract

This paper aims to examine to what extent the telecommunication companies in Saudi Arabia are using e-marketing in service provision, and the association of e-marketing with the companies' competitiveness. The study population is the functional managers of the administrative units in the three telecommunication companies in the Saudi market, namely STC, Mobily, and Zain. The data was collected through a questionnaire distributed to 87 managers with a 100% response rate. The findings of this study demonstrate that the studied telecommunication companies are widely using e-marketing technology. The interactivity of e-marketing is used to develop customer service, to know the customers' views on the company services, and to attain competitiveness. Using e-marketing enabled each company to achieve a competitive advantage and a satisfactory market share, thereby allowing each company to provide competitive prices and quality services. The major recommendation of the study for the telecommunication companies in Saudi Arabia is to use competitive strategies that sustain the company's competitiveness and customer retention, one of which is to apply e-marketing's new technologies and techniques to provide unique value offerings to customers.

Keywords: e-marketing, competitiveness, competitive advantage, telecommunication, services, Saudi Arabia.

1. Introduction

The use of the Internet in electronic business has grown rapidly in recent years. This growth, which is represented by the increasing number of commercial websites, enables businesses to collect information, fulfill requests from subscribers, and deliver their services worldwide. These e-business activities, using digital technologies and information technology organizations, have enhanced the way companies manage relationships with subscribers, develop services, and send interactive messages to customers. This study examines the relationship between using e-marketing and the competitiveness of the telecommunication companies in the Saudi market. This sector has been selected as a field of this study because of the fierce competition among the

three companies, in addition to their usage of e-marketing in providing telecommunication services.

2. Research objectives

The study aims to identify the extent to which telecommunication companies in Saudi Arabia use e-marketing, and the association of providing services electronically with enhancing the companies' competitiveness. Specifically, the research seeks to highlight the nature and essence of the relationship between the independent variable (adoption of e-marketing) and the dependent variable (competitive advantage and its components of service differentiation, price competitiveness, and profitability).

3. Research importance

Saudi Arabia's Ministry of Communications and Information Technology launched a five-year strategy aimed at accelerating the sector's growth by 50 percent and raising its contribution to the GDP by \$13.3 billion. The roadmap of the telecommunications and information technology sector 2019–2023 aims to establish a strong and sophisticated digital structure that contributes to building a digital society and government, a thriving digital economy,

and an innovative future for the Kingdom of Saudi Arabia (Yousif, 2019). This is in line with the Saudi Vision 2030 and the National Transformation Program 2020.

Researchers have argued that more work on marketing is required worldwide, mainly empirical evidence that could be performed from three perspectives, e.g., B2C, B2B, and B2G (Eid and Trueman, 2004; El-Gohary, 2010; Waheed & Jianhua, 2018). The importance of this study comes from the scarcity of studies that dealt with e-marketing and its impact on achieving competitive

advantage in both domestic and regional markets. E-marketing enhanced telecommunication companies' performance. Nevertheless, according to Caylor and Ménard (2016), the USA telecommunication improvement from digitalizations -mainly profit- is far from what was expected and predicted. Saudi telecommunication companies are no different. Realizing the prominent role of telecommunication companies in achieving the objectives of Saudi Arabia's Vision 2030 and the characteristics of the industry such as fierce competition and a lower switching cost to the customer, the importance of applying this research on the telecommunications sector in Saudi Arabia is justified.

4. Literature Review and Research Hypotheses

Research on the relationship between integrating technology and competitive advantage in the electronic marketplace is growing (Tanriverdi & Venkatraman, 2005; Lumpkin & Dess, 2004; Noorbehbahani et al., 2019; Suleman, M., Rashidirad, M., & Firoz Suleman S., 2019). The following review is the most important literature that investigated both e-marketing and competitive advantage as well as the associations of the company's adoption of e-marketing with its competitiveness capabilities.

4.1 Adoption of e-marketing

Electronic marketing (e-marketing) can be perceived through the Internet and other technologies as a new philosophy and modern business activity (El-Gohari, 2010). *E-marketing* refers to how a company markets its services through the Internet to find, attract, win, and retain its customers (Tripathy et al., 2013). However, this definition looks at e-marketing as a promotional tool. On the other hand, Pride and Ferrell (2016) defined *e-marketing* as "the strategic process of distributing, promoting and pricing products, and discovering the desires of customers using digital media and digital marketing." This definition is more functional and includes the main marketing mix elements. E-marketing is also seen as using technologies that enable companies to manage customer relationships, organize resources, and manage their supply chain (Strauss & Frost, 2005; O'Connor et al., 2004). This definition is oriented to the objectives obtained when using e-marketing, such as: managing customer relationships, organizing resources, and managing the supply chain.

On the activity level, *e-marketing* is understood to mean using the Internet by a company as a tool for advertising, ordering, promoting, and communicating with its customers (Bicak, 2005). This definition also deals with e-marketing as a promotional tool. E-marketing is considered to have a broader scope as it relates to digital media such as the Internet, e-mail, and mobile networks, but also includes the management of digital customer information and electronic customer relationship management systems (Chaffey et al., 2009). In the current study, the researchers adopt Pride and Ferrell's definition of *e-marketing* (2016), which reflects the elements of the marketing mix as developed by Boom and Bitner (1981) for services Marketing: product, pricing, promotion, place, people, process, and physical evidence (the 7 Ps).

In terms of e-marketing adoption components, Abubakar et al. (2016) used four components to express the adoption of e-marketing: perceived usefulness, perceived value, service differentiation, and perceived ease of use. Javalgi et al. (2005) mentioned that the company's website on the Internet must accomplish four strategic objectives in order to assist the firm in gaining competitive advantage: attracting, informing, positioning, and delivering the company's offerings through a website interface. However, the current paper uses many statements to formulate a single variable called "adoption of e-marketing." Those statements reflect using the Internet in promotion, studying

consumer behavior, selling, communicating with customers, studying competitors, knowing business opportunities in global markets, and providing online facilities to function (Shlash et al., 2011).

Shlash et al. (2011) evaluated to which extent companies use e-marketing and found that the usage of e-marketing in Jordanian pharmaceutical companies is medium. Based on this study, the following hypotheses are proposed:

H1: The adoption of e-marketing in the telecommunication companies in Saudi Arabia is not higher than 3.

H2: There is no significant difference in the extent to which telecommunication companies in Saudi Arabia are adopting e-marketing.

4.2 Competitive Advantage

Porter (1986) defines *competitive advantage* as "a direct consequence of the strategies implemented by a firm intended for adding value to customers." The literature suggests a multitude of ways firms can gain competitive advantage (Palmatier & Sridhar, 2017; Palmatier & Crecelius, 2019), mainly via three marketing-based routes: brands, offerings, and relationships. In a competitive business world, each company tries to leverage its competitive advantage in order to enhance its position in the market. Competitive advantage could also be seen as the company's ability to apply production and marketing processes other competing companies cannot copy (Al-Ali, 2000). In more detail, Clark (2006) described competitive advantage as an outstanding characteristic that makes a firm more desirable to consumers than competitors; these include: superior quality, lower price, and better customer service. Competitive advantages' diversity identifies what a successful marketing strategy is (Palmatier, & Crecelius 2019). Competitive advantage gives companies an opportunity to attain continuous profitability compared to competitors (Mursy, 1998). For such reasons, Strauss and Rymond (2003) recommend business firms rely heavily on developing competitive advantages.

To be differentiated in competitive advantage in services, companies need to use different methods of providing services, customer support services, business consulting, integrated services, and operational services. Service providers are not limited to providing customer services. They provide a comprehensive range of services, including product installation, design and construction, valuable solutions, systems integration, or outsourcing (Davies, 2004).

Regarding the components of competitive advantage, Tallud (2014) used three components: profitability, product quality, and price competitiveness. Clark (2006) mentioned superior quality, lower price, and better customer service. Previously, Porter (1998) presented three strategies of competitive advantage: cost leadership, differentiation, and focus. Ismail (2010) used three scales for measuring a company's competitive advantage in e-marketing, which are profitability, cost reduction (price competitiveness), and product differentiation. The current study adopts Ismail's classification of the competitive advantage components.

Shlash et al. (2011) that evaluated to which extent companies are competitive and found that the competitive advantage level in Jordanian pharmaceutical companies is high. Based on this study, the following hypotheses are proposed:

H3: The competitive advantage in the telecommunication companies in Saudi Arabia is higher than 3.

H4: There is no significant difference in competitive advantage among the telecommunication companies in Saudi Arabia.

4.3 Relationship between the adoption of e-marketing and competitive advantage

For many business companies, the adoption of e-marketing activities is essential in creating and maintaining competitive advantage (Pride & Ferrell, 2016). Opening e-business enhances the company and gives it the resources needed to compete in today's competitive marketplace (Tan, 2012). Along the same line, Tallud (2014) mentioned that e-business is crucial in determining the competitive advantage of firms. Usage of information and communication technology (ICT) in marketing activities is considered a source of competitive advantage for a company compared to companies less advanced in ICT (Macik et al., 2012). Many researchers claim that e-business improves business processes (Zhu, 2004; Dadzie et al., 2005; Soto-Acosta & Merono-Cerdan, 2008; & Jensen, 2008). Usage of e-commerce is a tool to develop competitive advantage by providing valuable information, lowering costs, designing new services, and offering a plethora of consumer choices (Lumpkin & Dess, 2004; Porter, 2001). E-marketing leads to several advantages for a company, such as: cost reduction, service quality, allowing customers to compare between products and prices, productivity increase, information exchange with customers, and creation of products and services to meet customers' needs (Awad, 2004). The e-business solution increases the efficiency and effectiveness of various business process, improves the company's internal and external communication, and reduces its operating costs (Chong et al., 2010). All the aforementioned benefits in academic literature are related to competitive advantage (Mooney, 2007; Newbert, 2007; Sila & Dobni, 2012).

Some empirical studies have found a positive relationship between the adoption of e-marketing and competitive advantage. Shlash et al. (2011) found a positive relationship between the usage of e-marketing and competitive advantage in Jordanian pharmaceutical companies. Colgate (1998), Ahmad et al. (2009) and Ongori and Migiro (2010) found a positive relationship between information technology and competitive advantage. Methlie and Nysveen (1999) concluded that e-marketing strategies are one of the main factors of success. Abubakar et al. (2016) revealed that perceived usefulness, perceived value, and service differentiation of e-marketing have a significant relationship with competitive advantage, but not perceived ease of use. Tallud (2014) revealed that companies in e-business are competitive in terms of components of competitive advantage: price, product quality, and profitability. Morag and Shaheed (2001) revealed that hotels that used e-marketing in doing business have more online bookings. Peterson et al. (2001) found that e-marketing plays an essential role in increasing the number of buyers because of the availability of full information about products, features, and prices. This availability facilitates the consumers' process of decision making and encourages them to make purchase decisions.

Regarding the product differentiation component of competitive advantage, Okiro and Jndungu (2016) mentioned that, with e-marketing, the product and services of a company can reach the intended market and consumers. At the same time, companies with e-business can offer more brands, including hard-to-find and imported ones, than most of the other stores (SEO Advantage Inc., 2013). In line with this, Ferguson (2010) found that e-business can maximize product availability by enabling faster analysis and recognition of demand trends. Tallud (2014) mentioned that, through e-business, firms can provide a broader range of products and services to their customers and offer best-

selling items and better quality of products and services. In the same context, Sharma & Krishnan (2002) indicated that an Internet store can provide a larger volume of products, quality products, and customer service, enabling consumers to better select what is suitable to their needs and wants.

Regarding the price competitiveness component of competitive advantage, many companies use e-business to cut marketing costs and reduce product prices to stay competitive in the market (Yoruk et al., 2011). Moving to e-marketing reduces the costs of marketing communications and also allows for easier assessment of the efficiency of performing actions (Brodie et al., 2007). With e-business, companies can position products or services at different price ranges in response to their competitors and manage price changes to enhance their added value to customers (Tallud, 2014). Mack (2002) revealed the importance of e-marketing in reducing the budget of marketing research because of the direct contact with customers on the Internet, which enabled prompt feedback from customers.

Regarding the profitability component of competitive advantage, Tallud (2014) disclosed that companies doing e-business are competitive in profitability because e-business enables companies to sell a greater volume of products and services. Christensen and Methlie (2003) found that e-business has a significant positive impact on sales, profits, and return on investment. At the same time, Zhu (2004) found a positive relationship between e-business capabilities and the company's improved financial performance (cost reduction and profit). Despite the studies that confirmed a positive relationship between e-business adoption and a firm's profitability, e-business benefits do not necessarily lead to increased profits, hence, the association between e-business with competitive advantage should be made with caution (Pilinkiene et al., 2013).

Although the abovementioned studies have confirmed the positive relationship between e-marketing and firms' competitive advantage and its components, e-business benefits, according to another study, do not necessarily lead to increased sales and profits, because its impact on the improved financial performance of the company is not obvious. Thus, the association between e-business value and a company's competitive advantage should be made with caution (Pilinkiene et al., 2013). Previously, Christensen and Methlie (2003) argued that e-business in most cases had no significant impact on a firm's financial and economic indicators. Based on the above previous research review, the following hypotheses are proposed:

H5: There is no relationship between the extent to which the telecommunication companies in Saudi Arabia adopt e-marketing and competitive advantage.

H5. a There is no relationship between the extent to which the telecommunication companies in Saudi Arabia adopt e-marketing and product differentiation.

H5. b There is no relationship between the extent to which the telecommunication companies in Saudi Arabia adopt e-marketing and price competitiveness

H5. c There is no relationship between the extent to which the telecommunication companies in Saudi Arabia adopt e-marketing and profitability.

5. Research Methodology

Because this research is used for describing the market dimensions of telecommunication businesses in Saudi Arabia, the research was planned to be a descriptive research. A quantitative survey method using a self-administered questionnaire had been adopted for data collection of the research variables.

5.1 Measurement Scales

The measurement scales used in this research were developed based on a review of the literature. The study constructs are adoption of e-marketing and competitive advantages. The scale of Shlash et al. (2011) was used to measure the two constructs: adoption of e-marketing (17 items) and competitive advantages (10 items—6 for product differentiation, 2 for price competitiveness, and 2 for profitability). The constructs were operationalized using multi-item scales of a 5-point Likert type. An Arabic version of the survey was used for collecting data. Content validity was performed with the aid of some academic reviewers. Accordingly, some items were paraphrased to match the scope of the study and at the same time make it easier for respondents to answer. The nominal variables included in the survey for the purpose of classification and sample description are company's name, respondent's department, and respondent's education.

5.2 Research Sample

The study population was the functional managers of the administrative units in the three telecommunications companies working in the Saudi market (i.e., STC, Mobily, and Zain). A purposeful sample of managers had been taken because of the difficulty of obtaining a probability sample. The data was collected through a questionnaire distributed to 87 managers with a 100% response rate. The characteristics of a total of 87 valid questionnaires are shown in table 1. The table shows frequencies and percentages of study sample characteristics, telecommunication service providers, and the respondents' department and education as nominal variables. A percentage of 39.1% of the sample are managers of STC, 16.1% of Mobily, and 44.8% of Zain. Around 60% of the study samples are respondents who work in the fields of marketing and finance. Regarding education, the managers with bachelor's degrees represented 89.7% while those who had taken post-graduate studies represented only 10.3%.

Table 1. Characteristics of the sample

Demographics		Frequencies	%
Telecom service provider	STC	34	39.1
	Mobily	14	16.1
	Zain	39	44.8
	Total	87	100
Respondent's department	Top management	7	8.0
	Information technology	15	17.2
	Operations	4	4.6
	Human resources	7	8.0
	Marketing and sales	26	29.9
	Finance	26	29.9
	R&D	2	2.3
	Total	87	100
Respondent's education	Bachelor	78	89.7
	Master's	8	9.2
	PhD	1	1.1
	Total	87	100

5.3 Adequacy of Study Sample

Data analysis showed the results of the KMO measure as 0.788, which is acceptable for further analysis. Bartlett's test revealed a significance at a level of 0.000. These two tests reflected that the study sample is adequate for further analysis, starting with the factor analysis for construct validity testing of the measurement scales.

5.4 Validity and Reliability Testing

Factor analysis was used to identify the validity of each variable's related items as shown in table 2, using SPSS 21. Exploratory Factor Analysis (EFA) was conducted, using

the principal component method and Varimax rotation. The factor loading of all the items of the measures exceeded the threshold of 0.6 (Hair et al., 2006). In the same line, the Average Variance Extracted (AVE) of the mentioned factors exceeded the acceptable threshold of 0.5 (Hair et al., 2006). The Composite Reliabilities (CR) of the factors are higher than the acceptable 0.7 threshold (Hair et al., 2006). The Cronbach's Alpha coefficients are also above the acceptable threshold of 0.6 (Malhotra, 2007). All these indices reflected valid and reliable scales of the current study.

Table 2. Validity and reliability testing

Measurement Items	Factor Loading	AVE	CR	Alpha
Adoption of e-marketing		0.516	0.93	0.892
The company uses the Internet to advertise its services	0.762			
The company has competent staff who manage the e-marketing activities	0.699			
The company performs selling transactions through the Internet	0.623			
The company uses the Internet for promotion activities	0.657			
The company uses the Internet to know the consumers' characteristics	0.757			
The company uses emails to contact consumers	0.616			
Through the Internet, the company is given feedback on consumers' views regarding services	0.807			
The company depends on the Internet databases to keep in touch with consumers	0.623			

The company uses the Internet to study its competitors	0.615			
The company uses electronic systems to increase its sales	0.660			
The company uses the Internet to study consumers' tastes	0.823			
The company uses the Internet to break into global markets	0.665			
The company has a website that is easy to access and deal with	0.747			
The company has a department for e-marketing	0.747			
The company uses the Internet to downsize its intermediaries	0.715			
Consumers use credit cards to easily perform a purchase with the company	0.762			
The company has an effective system to perform its e-marketing activities	0.866			
Competitive advantage		0.539	0.73	0.933
The company continuously develops new services for its customers	0.644			
The company produces services that are competitive in the global market	0.646			
The new communication technology enabled the company to provide its service at high speed	0.770			
The company applies recent trends in total quality management	0.801			
The company provides its service at a competitive speed	0.732			
Speed is a part of the service that is provided by the company	0.741			
The company sells its services at lower prices than its competitors in the local market	0.704			
The company sells its services at lower prices than its competitors in the global market	0.652			
The company has a competitive market share in the market	0.758			
The company is continuously doing its best to increase its profitability	0.673			
Product Differentiation		0.504	0.81	0.895
The company continuously develops new services for its customers	0.863			
The company produces services that are competitive in the global market	0.692			
The new communication technology enabled the company to provide its service at high speed	0.629			
The company applies recent trends in total quality management	0.672			
The company provides its service at a competitive speed	0.638			
Speed is a part of the service that is provided by the company	0.740			
Price Competitiveness		0.564	0.76	0.743
The company sells its services at lower prices than its competitors in the local market	0.783			
The company sells its services at lower prices than its competitors in the global market	0.718			
Profitability		0.650	0.74	0.695
The company has a competitive market share in the market	0.906			
The company is continuously doing its best to increase its profitability	0.693			

Discriminant validity was conducted using a comparison between the square root of AVE shown in the diagonals of each construct and the correlations. The square root of AVE must be higher than the correlation values (Hair et al., 2016; John & Benet-Martinez, 2000), and each of the square root of AVE is greater than the correlations of constructs

presented in rows and columns. Thus, as shown in table 3, the measures are well discriminant. The scales can be considered as reliable in measuring their intended dimensions as well; we can rest assured that the construct validity has not been violated. We now proceed to test hypotheses of the study using regression analysis.

Table 3. Discriminant Validity

	E-marketing	Product differentiation	Price competitiveness	Profitability
E-marketing	.719			
Product differentiation	.681**	.710		
Price competitiveness	.623**	.705**	.739	
Profitability	.462**	.414**	.661**	.806

*P-value < 0.05***

Note: Diagonals represent the square root of the AVE, while the off-diagonals represent the correlation

5.5 Testing of Hypotheses

5.5.1 Testing of H1

Table 4 does not demonstrate a support of the proposed null H1. It indicates that the Mean of the measured adoption

of e-marketing (3.76) is above Mean 3 (75% of the maximum value of the scale, which is 5). The P-value of the One-sample *t*-test is 0.000 of significance levels, illustrating that the telecommunication companies in Saudi Arabia have a high adoption of e-marketing. Thus H1 is not upheld.

Table 4. H1 Testing (One-sample t-Test)

Variables	Mean	SD	Df	t-value	P-value
Adoption of e-marketing	3.756	0.58	86	12.101	0.000**

** Marginally significant at the $p \leq 0.05$ levels.

5.5.2 Testing of H2

Table 5 states no statistical difference between companies in adopting e-marketing, as $F = 0.053$ ($p =$

0.949). All companies are somehow similar in adopting e-marketing activities. The researchers attribute this finding to the fierce competition among the companies. Thus, H2 is not upheld.

Table 5. H2 testing (One-way ANOVA)

Company	Mean	SD	Df	F-value	P-value
A	3.78	0.536	2,84	0.053	0.949
B	3.73	0.630			
C	3.74	0.618			

Dependent variable measure: Adoption of e-marketing

P-value is marginally significant at the $p \leq 0.05$ levels

5.5.3 Testing of H3

Table 6 demonstrates a support of the proposed positive H3. It indicates that the Mean of the measured competitive advantage (3.97) is above Mean 3 (79% of the maximum value of the scale, which is 5). The P-value of the One-

sample t-test is 0.000 of significance levels, illustrating that the telecommunication companies in Saudi Arabia have a high competitive advantage. Thus, H3 is upheld.

Table 6. H3 Testing (one Sample t-Test)

Variables	Mean	SD	Df	t-value	P-value
Competitive advantage	3.969	0.66	86	13.608	0.000**

** Marginally significant at the $p \leq 0.05$ levels

5.5.4 Testing of H4

Table 7 states no statistical difference between companies in competitiveness capabilities, as $F = 0.306$ ($p = 0.737$). This can be attributed to the fierce competition

among the three companies in terms of market share and consumer retention. Accordingly, it is expected that each company will work in their competitive advantages to be differentiated from the others. Thus, H4 is not upheld.

Table 7. H4 testing (One-way ANOVA)

Company	Mean	SD	Df	F-value	P-value
A	3.944	0.68507	2,84	0.306	0.737
B	3.873	081166			
C	4.025	059914			

Dependent variable measure: competitiveness capabilities

P-value is marginally significant at the $p \leq 0.05$ levels

5.5.5 Testing of H5

H5 states an insignificant relationship between the extent to which the company adopts e-marketing and its competitiveness in the market. To test this hypothesis, a simple linear regression has been used as shown in table 8. The table shows R^2 with a value of 0.50, which implies that the company's use of e-marketing explains 50% of the change in the company's competitiveness in the market. The table also shows that F-value equals 84.974 with significance level of 0.00. As the significance level is less

than 0.05 and B (the slope of the company's use of e-marketing is positive), this indicates the significant positive association of the company's adoption of e-marketing with its competitiveness in the market. Thus, the null hypothesis H5—As the use of e-marketing increases, the company's competitiveness in the market increases—is rejected. This result matches the results of Shlash et al. (2011), Ongori & Migiro (2010), Ahmad et al. (2009), and Colgate (1998).

Table 8. H5 Testing (Simple regression)

Model	R	R ²	Df	F	B	P-value
The extent to which the company adopts e-marketing	0.707	.50	1,85	84.974	0.806	0.000**

** Marginally significant at the $p \leq 0.05$ levels.

5.5.5.1 Testing H5. A

To test the relationship between adoption of e-marketing and product differentiation (the first component of the competitive advantage variable), a simple linear regression has been used as shown in table 9. The table shows R^2 with a value of 0.46, which implies that the company's use of e-marketing explains 46% of the change in the company's product differentiation. The table also shows that F-value equals 73.455 with a significance level

of 0.00. As the significance level is less than 0.05 and B (the slope of the company's use of e-marketing is positive), this indicates the significant positive association of the company's adoption of e-marketing with its product differentiation in the market. Thus, the null hypothesis H5.a—As the use of e-marketing increases, the company's product differentiation increases—is rejected. This result matches the results of Okiro & Jndungu (2016), Tallud (2014), Ferguson (2010), and Sharma and Krishnan (2002).

Table 9. H5. a Testing (Simple regression)

Model	R	R ²	Df	F	B	P-value
The extent to which the company adopts e-marketing	0.681	.464	1,85	73.455	0.810	0.000**

** Marginally significant at the $p \leq 0.05$ levels.

5.5.5.2 Testing H5. B

To test the relationship between adoption of e-marketing and price competitiveness (the second component of the competitive advantage variable), a simple linear regression has been used as shown in table 10. The table shows R^2 with a value of 0.388, which implies that the company's use of e-marketing explains 39% of the change in the company's price competitiveness. The table also shows that F-value equals 53.857 with significance level of 0.00. As the significance level is less than 0.05 and

B (the slope of the company's use of e-marketing is positive), this indicates the significant positive association of the company's adoption of e-marketing with its price competitiveness in the market. Thus, the null hypothesis H5.b—As the use of e-marketing increases, the company's price competitiveness increases—is rejected. This result matches the results of Tallud (2014) and Yoruk et al. (2011).

Table 10. H5. b Testing (Simple regression)

Model	R	R ²	Df	F	B	P-value
The extent to which the company adopts e-marketing	0.565	.388	1,85	53.857	0.857	0.000**

** Marginally significant at the $p \leq 0.05$ levels.

5.5.5.3 Testing H5. c

To test the relationship between adoption of e-marketing and profitability (the third component of the competitive advantage variable), a simple linear regression has been used as shown in table 11. The table shows R^2 with a value of 0.21, which implies that the company's use of e-marketing explains 21% of the change in the company's profitability. The table also shows that F-value

equals 23.099 with a significance level of 0.00. As the significance level is less than 0.05 and B (the slope of the company's use of e-marketing is positive), this indicates the significant positive association of the company's adoption of e-marketing with its profitability. Thus, the null hypothesis H5.c—As the use of e-marketing increases, the company's profitability increases—is rejected. This result matches the results of Tallud (2014), Pilinkiene et al. (2013), Zhu (2004), and Christensen & Methlie (2003).

Table 11. H5. c Testing (Simple regression)

Model	R	R ²	Df	F	B	P-value
The extent to which the company adopts e-marketing	0.462	.21	1,85	23.099	0.577	0.000**

** Marginally significant at the $p \leq 0.05$ levels.

6. Discussion

The average value of the adoption of e-marketing for the three telecom companies in Saudi Arabia is higher than (3)—the average value of the five-point scale used to measure this variable. The actual average reached 3.756, representing 75% of the maximum of the scale value (5). Similarly, the average value of all competitive advantage items was 3.969, which is higher than (3), indicating that the level of competitiveness capabilities in the companies is high. There is also no significant difference among companies in the levels of both adopting e-marketing and the competitiveness capabilities. This could be attributed to the fierce competition among companies in adopting the new technology in performance and enhancing its competitiveness to retain customers in the saturated Saudi market where customers become more powerful in getting information and product evaluations, especially through the companies' website and social media networks, to compare the companies' offers. In such a market, attracting new customers or even retaining existing ones becomes hard, especially with the boundary of various segments such as end consumers, business customers, and other service providers. No doubt the company that will make more of an effective application of electronic marketing than others may achieve competitive advantages as a means of profitability, cost reduction (price competitiveness), and product differentiation.

The research revealed a strong positive association of the companies' adoption of e-marketing with competitive advantage. E-marketing adoption explains 50% of the variance in the competitive advantages. Accordingly, the adoption of e-marketing is expected to lead companies to achieve significant competitiveness capabilities that enable the companies to increase product differentiation, price competitiveness, and profitability. Thus, the telecommunication companies in Saudi Arabia need to expand the use of electronic marketing to present unique value offerings to their customers. As the three telecom companies are close in their competitive advantages, the company that will be aware of the new marketing and e-marketing practices is expected to be top of the market. This result is in line with the results of Shlash et al. (2011), who concluded that the use of Internet technology in marketing (e-marketing), as part of the company's marketing strategy, may be reflecting positively and enhancing the competitive capabilities of the companies, both locally and globally. Digitization offers the opportunity for telecom companies to strengthen their market positions, develop their business systems, and create innovative offerings for customers. Most executives see digitization as one of their top priorities.

7. Recommendations

For each of the telecommunication companies in Saudi Arabia, the major recommendation of the study is to use competitive strategies that will sustain the company's competitiveness and customer retentions. One of these strategies is to apply e-marketing's new technologies to present unique value offerings to customers. The company that will make more of an effective application of electronic marketing than others may achieve differentiation in competitive advantage. In this regard, the companies should try to benefit from the successful experiences of the global companies in applying e-marketing and to follow up the latest developments in this field and reach customers through the latest electronic methods to gain the expected impact of achieving competitiveness capabilities. Companies should focus on designing their websites to make them easy to use, more attractive and informative to consumers, communicate the positioning of the company and its services, and facilitate the delivery of their offerings to customers. They should make sure that the adopted e-marketing technology provides customers with the value

they expect, enhance customer engagement, and give much concern on the service recovery process, which is one important issue for providing services online.

Telecommunication companies in Saudi Arabia are in the early years of developing their digital-services portfolios, offering a limited set of services. Using new digital methods can allow these companies to obtain the desired effect on the achievement of each company's competitiveness in the face of other companies. Innovative offerings usually involve partnership with third parties that bring specialist expertise to complement the telecommunication companies' strong customer relationships and broad reach. The telecom companies in Saudi Arabia should try to benefit from the global companies in implementing marketing strategies to increase positive brand recognition, follow up the latest trends in this field, and meet consumers' demand. The use of the latest technology such as smart speakers as a marketing channel has a world of growth opportunities. A great deal of these opportunities comes from spreading into non-English-speaking countries.

Accordingly, the telecommunication companies in Saudi Arabia are required to focus on the whole customer experience, starting with building relationships across every touchpoint, deepening audience engagement, and ending with developing compelling brand narratives that are in synergy with customers' personal values. Content marketing and social media marketing are both key in this regard. Further, great customer journeys through Omni channel necessitates superiority in every interaction, clear pathways of cross-channel, and seamless customer experience. Moreover, the companies' migration to extensive e-care reduces call volumes and operating expenses and increases customer satisfaction. Today, telecom companies in Saudi Arabia need to achieve easy-to-use digital channel interface and invest in building effective customer relationship management systems to track customers' digital footprints, reduce costs, boost customer satisfaction, and improve brand advocacy and differentiation. Digital touchpoints such as websites and mobile apps now influence customers' preferences across the whole decision journey. Moreover, telecommunication companies in Saudi Arabia need to be able to use real-time 360-degree data on individual customers to personalize promotion campaigns and service interventions along the entire customer journey to create real value for customers and remain competitive.

8. Research Limitations

The study examined the extent to which telecommunication companies in Saudi Arabia use e-marketing from the staff point of view. The sample did not include the customers of these companies. Furthermore, because the research theme is a relatively new academic field in the e-marketing arena, particularly in Arabian countries and Saudi Arabia, the researchers found it difficult to reach sufficient previous studies in these regions. Finally, data were collected through an electronic questionnaire, which may lead to uncertainty of the input accuracy. Hence, the study findings should be taken within these limits.

9. Directions for Future Research

This study focused on the company perspective. Future research is proposed to study the impact of e-marketing on the company's competitiveness from the customer perspective. It is preferable to conduct a comparative study to illustrate the differences between the customers and staff towards the relationship between the adoption of e-marketing and the company's competitive capabilities.

References

- Abubakar, S., Ahmad, A., & Umar, M. (2016). E-marketing adoption and competitive advantage:

- Study of commercial banks in Nigeria. Proceedings of ISER 27th International Conference, Riyadh, Saudi Arabia, 12th April 2016. http://www.worldresearchlibrary.org/up_proc/pdf/261-14613905451-6.pdf
- Ahmad, A., Ahmad, H. & Nyager, S. (2009). Technology Strategy and Competitiveness in Developing Nations: Exploratory evidence from Nigerian Telecommunication Market, *Journal of International Business and Entrepreneurship*, 14(1), 1-6. https://www.researchgate.net/profile/Aminu_Ahmad4/publication/313902274
- Al-Ali, A. (2006). *Production and Operations Management: Quantitative Approach*, 2nd Ed.
- Awad, Elias (2004). *Electronic Commerce: From Vision to Fulfillment*, Pearson Prentice Hall, Upper Saddle River, New York.
- Bicak, K. (2005). *International Knowledge Transfer Management: Models, Concepts and Solutions for Facilitating Knowledge Transfer Process in a Multilingual and Multicultural Business Environment*. <http://d-nb.info/975733540/04>
- Booms, B., and Bitner, M. (1981). Marketing Strategies and Organisation Structures for Service Firms, In *Marketing of Services: 1981 Special Educators' Conference Proceedings*, James Donnelly and William George, (Eds), Chicago, American Marketing Association, 46-51.
- Brodie, R., Winklhofer, H., Coviello, N., & Johnston, W. (2007). Is e-Marketing Coming of Age? An Examination of the Penetration of e-Marketing and Firm Performance, *Journal of Interactive Marketing*, 21(1), 2-21. DOI: 10.1002/dir.20071
- Caylar, P. L., & Ménard, A. (2016). How telecom companies can win in the digital revolution. Digital McKinsey, McKinsey & Company. Retrieved from: <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/how-telecom-companies-can-win-in-the-digital-revolution>
- Chaffey, D., Ellis-Chadwick, F., Johnston, K. & Mayer, R., (2006). *Internet marketing: Strategy, implementation and practice*. Third edition, Prentice Hall. <https://books.mec.biz/tmp/books/5G7BGE3Z6KNWFOHBFCWN.pdf>
- Chong, W., Shafaghi, M., Woollaston, Ch., & Lui, V. (2010). B2B e-Marketplace: An e-Marketing Framework for B2B commerce. *Marketing Intelligence & Planning*, 28(3), 310-329. <https://doi.org/10.1108/02634501011041444>
- Christensen, E. & Methlie, L. (2003). Value Creation in e-business: Exploring the impacts of Internal-Enabled Business Conduct, 16th Bled e-Commerce Conference: E-Transformation, Bled, Slovenia, June 9-11.
- Colgate, M. (1998). Creating Sustainable Competitive Advantage through Marketing Information System Technology. *Journal of Bank Marketing University Press*, 16 (2). <https://doi.org/10.1108/02652329810206734>
- Dadzie, K., Chelariu, Ch., & Winston, E. (2005). Consumer Service in the Internet-enabled Logistics Supply Chain: Website Design Antecedents and Loyalty Effects. *Journal of Business Logistics*, 26(1), 53-78. DOI: 10.1002/j.2158-1592.2005.tb00194.x
- Davies, A. (2004). Moving base into high-value integrated solutions: A value stream approach. *Industrial and Corporate Change*, 13(5), 727-756.
- Eid, R., & Trueman, M. (2004). Factors affecting the success of business-to-business international Internet marketing (B-to-B IIM): An empirical study of UK companies. *Industrial Management & Data Systems*, 104(1), 16-30. <https://www.emerald.com/insight/content/doi/10.1108/02635570410514061/full/html>
- El-Gohary, H. (2010). E-Marketing-A Literature Review from a Small Businesses Perspective. *International journal of business and social science*, 1(1), 214-244. <http://ijbssnet.com/journals/20.pdf>
- Ferguson, N. (2010). e-Commerce-e-Business Cost, benefit remarkable idea Ltd., New Zealand.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis*, 6th Ed., Prentice Hall, Upper Saddle River, NJ.
- Hair Jr, J., Hult, G., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.
- Ismail, Sh. (2010) Electronic Banking and Competitive Advantage of the Jordanian Banks, *Journal of Human Sciences*, (45), 1-27. WWW.ULUM.NL
- Javalgi, R., Scherer, R., Pendleton, G., & Radulovich, L. (2005). Sustainable Competitive Advantage of Internet Firms, *International Marketing Review*, 22(6), 657-672. doi:10.1108/02651330510630276
- Jensen, M. (2008). Online Marketing Communications Potential: Priorities in Danish Firms and Advertising Agencies. *European Journal of Marketing*, 42(3/4), 502-525. <https://doi.org/10.1108/03090560810853039>
- John, O. P., & Benet-Martinez, V. (2000). Measurement: Reliability, construct validation, and scale construction. *Handbook of research methods in social and personality psychology*. Cambridge: Cambridge University Press.
- Lumpkin, D. & Dess, G. (2004). E-Business Strategies and Internet Business Models: How the Internet Adds Value, *Organizational Dynamics*, 33(2), 161-173. DOI: 10.1016/j.orgdyn.2004.01.004
- Macik, R., Jozwik, B., & Nalewajek, M. (2012). E-Marketing Activities and Perceived Competitive Advantage in the Context of Globalization-Study of Luban Region Firms. *Management, Knowledge, and Learning International Conference*.
- Mack, T. (2002). *The Growth of Electronic Marketing, USA Today*.
- Malhotra, N. K. (2007). *Marketing research: An applied orientation*. Pearson Prentice Hall. [http://dx.doi.org/10.1108/S1548-6435\(2007\)3](http://dx.doi.org/10.1108/S1548-6435(2007)3)
- Methlie, L. & Nysveen, H. (1999). Loyalty of Online Bank Customers. *Journal of Information Technology*, 14(4), 375. DOI: 10.1080/026839699344485
- Money, A. (2007). Core competence, Distinctive Competence, and Competitive Advantage: What is the difference? *Journal of Education for Business*, 83(8), 110-115.
- Morag, S. & Shaheed, Y. (2001). A Content Analysis of the Web Sites of the Top 300 Hotel Corporations, a paper submitted for the Decision Sciences Institute 6th international conferences.
- Mursy, N. (1998). *Competitive advantage in Business*, Alexandrian Book Centre, Alexandria.
- Newbert, S. (2007). Empirical research on the Resource-based View of the Firm: An assessment and Suggestions for Future Research. *Strategic Management Journal*, 28, 121-146. DOI: 10.1002/smj.573
- Noorbehbahani, F., Salehi, F. & Jafar Zadeh, R. (2019). "A systematic mapping study on gamification applied to e-marketing", *Journal of Research in Interactive Marketing*, Vol. 13 No. 3, pp. 392-410. <https://doi.org/10.1108/JRIM-08-2018-0103>

- O'Connor, J., Galvin, E., & Evans, M. (2004). *Electronic Marketing: Theory and Practice for the 21st Century*, Financial Times Prentice-Hall, Harlow.
- Okiro, K. & Ndungu, J. (2016). The impact of Mobile and Internet Banking on Performance of Financial Institutions in Kenya, *European Scientific Journal*, 9(13), 146–161.
https://profiles.uonbi.ac.ke/kennedyokiro/files/the_impact_of_mobile_and_internet_banking_on_performance_of_financial_institutions_in_kenya.pdf
- Ongori, H. & Migiro, S. (2010). Information and Communication Technology Adoption in SMEs: Literature Review, *Journal of Chinese Entrepreneurship*, 2(1), 93–104. DOI 10.1108/17561391011019041
- Palmatier, R. W., & Crecelius, A. T. (2019). The “first principles” of marketing strategy. *AMS Review*, 9(1-2), 5–26.
<https://link.springer.com/article/10.1007/s13162-019-00134-y>
- Palmatier, R. W., & Sridhar, S. (2017). *Marketing strategy: Based on first principles and data analytics*. London: Palgrave Macmillan
- Peterson, R., Balasubramanian, S., & Bronnenberg, B. (2001). Exploring the implication of Internet for Customer Marketing, *Journal of Academy of Marketing Science*, 25(4).
- Pilinkiene, V., Kurschus, R. & Auskalnyte, G. (2013). E-business as a source of competitive advantage, *Economics and Management*, 18(1), 77–85. DOI: <http://dx.doi.org/10.5755/j01.em.18.1.3669>
- Porter, M. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*, New York, The Free Press.
- Porter, M. (1998). *Competition in Global Industries: A Conceptual Framework* (Ed), Harvard Business School Press: Boston, MA.
- Porter, M. (2001). *Strategy and the Internet*, Harvard Business Review, 79(3), 527–553.
- Pride, W. & Ferrell, O. (2016). *Marketing*. Cengage Learning, Boston, USA.
- SEO Advantage, Inc. (2013). *Why Would Someone Buy from the Website*.
<https://www.brandingpersonality.com/why-would-someone-buy-from-you/>
- Sharma, A. & Krishnan, R. (2002). Clicks Only, Clicks and Bricks, and Bricks Only: Are Retail Sales People an Important Factor in Choice? *Journal of Marketing Management*, 18(3–4), 317–336.
<http://dx.doi.org/10.1362/0267257022872479>
- Shilash, A., Al-Houri, S., & Al-Shoura, M. (2011). The Impact of E-marketing on Achieving Competitive Advantage by the Jordanian Pharmaceutical Firms: A field study. *Studies, Administrative Sciences*, 38 (1), 143–160.
<https://journals.ju.edu.jo/old/index.php/DirasatAdmin/article/viewFile/2337/6240>
- Sila, I. & Dobni, D. (2012). Patterns of B2B e-Commerce Usage in SMEs. *Industrial Management and Data Systems*, 112(8), 1255–1271. DOI: 10.1108/02635571211264654
- Soto-Acosta, P. & Merono-Cerdan, A. (2005). Analyzing e-business Value Creation from a Resource-based Perspective. *International Journal of information Management*, 28(1), 49–60.
- Strauss, J., El. Ansari A., Forst, R. (2003). *E-mail Marketing*, 26(16), 83-83.
- Strauss, J. & Forst, R. (2005). *E-Marketing*, Prentice-Hall, London.
- Suleman, M. F., Rashidirad, M. & Suleman, S. F. (2019). The applicability of Porter’s generic strategies in pure online firms: A case study approach. *Strategic Change*, 28(3), 167–176.
<https://onlinelibrary.wiley.com/doi/full/10.1002/jsc.2258>
- Tallud, F. (2014). *E-business and SME’s Competitive Advantage*, a paper presented at DLSU Research Congress, De la Salle University, Manila, Philippines.
http://www.dlsu.edu.ph/conferences/dlsu_research_congress/2014/pdf/proceedings/EBM-I-003-FT.pdf
- Tan, G. (2012). *E-business and its advantage form online business*. <https://www.volusion.com/blog/e-business-advantages/>
- Tanriverdi, H. & Venkataraman, V. (2005). Knowledge Relatedness & the Performance of Multibusiness Firms, *Strategic Management Journal*, 26(2), 97–119. DOI: 10.1002/smj.435
- Tripathy, P., Kantha, R. & Singh, B. (2013). E-marketing, a Marketing Tool for Sustainable Competitive Advantage, *Vishleshak Driems Journal of Management*, 2, 93-100.
<http://www.driems.ac.in/mba/VISHLESHAK>
- Waheed, A., & Jianhua, Y. (2018). Achieving consumers’ attention through emerging technologies: The linkage between e-marketing and consumers’ exploratory buying behavior tendencies. *Baltic journal of management*, 13(2), 209–235.
<https://doi.org/10.1108/BJM-04-2017-0126>
- Yoruk, D., Dundar, S., Moga, L. & Neculita, M. (2011). Drivers and Attitudes towards Online Shopping: Comparison of the Turkey with Romania, *BIMA Publishing, Communications of the IBIMA*, vol. 2011, 1–13. DOI: 10.5171/2011.575361
- Yousif, F. (2019, August 29). *Saudi Arabia Reveals Strategy to Accelerate Telecom Growth by 50%*, Asharq Al-Awast, Retrieved from: <https://aawsat.com/english/home/article/1876401/saudi-arabia-reveals-strategy-accelerate-telecom-growth-50>
- Zhu, K. (2004). The Complementarity of Information Technology Infrastructure and e-commerce Capability: A Resource-based Assessment of their Business Value, *Journal of Management Information Systems*, 21(1), 167–202. DOI: 10.1002/smj.435