

EFFECTS OF E-MARKETING ON SALES OF HORTICULTURAL PRODUCE IN PERI-URBAN AREAS.

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ABSTRACT

Market system developments have led to significant changes in the sales and purchase of horticultural products in developing countries because of the expansion and integration of the world commodity market through international economic integration and stimulation. As a result the performance of the agricultural market has been dwindling of late in most developing countries due to the volatile, unpredictable and dynamic macroeconomic environment. The horticultural sales downturn has been largely attributed to limited market access.

Keywords: Digital Marketing, Innovation Model, Consumer Purchase Behaviour

INTRODUCTION

The introduction of the Internet as well as fourth industrial revolution was a significant factor for the e-marketing development. The term has been referred to as completing business transactions through the Internet. E-Marketing (Electronic Marketing) is referred to as Internet Marketing, Web Marketing, Digital Marketing, or Online Marketing. E-marketing is the process whereby marketing products or services are being done over the Internet. Electronic marketing does not only consists of marketing being done via the Internet, it also consists marketing being done through email as well as wireless media.

In the developing world, farmers especially small scale producers/growers face challenges in accessing lucrative markets for their horticultural products (FAO, 2017). They end up selling for poor prices because one cannot keep the products since most of them are perishables. . At times the farmers make loses due to lack of proper storage facilities to maintain product quality and avoid having products going bad. Significant amount of research has been done around e-marketing in agriculture for rural farmers and urban farmers (Shija, 2019). However, there is more to be explored in the proliferating peri-urban.

The tremendous development in information and digital technologies in 21st century, has led to the emergence of modern concepts, consisting of electronic marketing (also known as; electronic commerce), which is labelled as the fastest developing as well as transformation means of the world's economy into a digital economy (Abdulqader et al., 2021). E-marketing looks into the social media's ability to promote the products of the company and individual products, activities and services (Alsalihi and AL-Taiy, 2020). The social media platforms that are commonly used include; Facebook, Twitter, LinkedIn and WhatsApp because of the increasing number of these social networks' users (Bansal, 2020).

Empirical evidence have shown that internet access is even higher in peri-urban areas compared to the rural areas and as such it is expected that farmers in the peri-urban areas are

expect to adopt online platforms especially social media such as WhatsApp, Twitter, LinkedIn and Facebook to push their products into the urban market. However, these peri-urban farmers would need help to use e-marketing as much as they should. This research will help to unpack the drivers and barriers to the engagement of e-marketing by peri-urban farmers and promote going forward.

This paper looks at the effects of marketing on the sales of horticultural crops in urban and peri-urban areas of the Midlands Province in Central Zimbabwe. The study seeks to answer the question: What is the relationship between e-marketing and sales of horticultural products in the Midlands Province? The objective is to derive lessons that can inform discussion on the kind of information technology that can best contribute to effective marketing of horticultural crops and reduce post-harvest loss in urban and peri-urban areas of Zimbabwe.

Background

Urban agriculture, just like human civilization, is an old phenomenon, where the agricultural history is intertwined with that of cities (Lee-Smith et al., 2019). Urban and peri-urban farming systems are vital in Africa due to the large numbers involved (which amounts to 40% of urban households), the intensification opportunities of urban smallholder agriculture as well as increasing food security of urban areas, while creating network links between rural and urban (Lee-Smith, et al., 2019). Thus, rapid urban growth becomes the main driver of the farming system. The main market for peri-urban farmers is an urban agricultural market (Maungwe, 2010). Today, peri-urban farmers specialises with horticulture, dairy and other food agribusinesses as they are on demand in local urban areas and they are also exportable to regional and international markets (Lee-Smith, et al., 2019). The fact that there is increasing number of people living in the cities makes horticultural produce a demand. Thus, with scenario at hand, this research looks into how e-marketing can be harnessed in improving sales of horticultural produce for peri-urban farmers.

Most peri-urban farmers have been used to the traditional marketing approaches of selling to urban horticultural central markets, for example, Mbare Musika, selling at farm gate, rural service centres and road side marketing (Mukarumbwa, 2018) and some are seen at night selling their produce in city streets. If e-marketing was being engaged as much, farmers would not struggle to bring their products to the urban Centre. They could be getting clients online, create demand online and have a bargaining power on pricing. However, now the so called middlemen "makoronyera" are ripping them off because they don't have access to the market especially through the digital means. All this points to the fact that e-marketing has the potential to change the way horticultural produce are marketed in peri-urban farming. E-marketing is a process of marketing a product or service using the internet. E-marketing not only include marketing through the email, web marketing ,digital marketing ,online marketing and wireless Other sectors example small and medium scale enterprises have taken up e marketing or internet marketing expanding outreach to customers beyond their conventional shopping places. Farmers can use internet on many possible ways to sell their products. Using internet as a way of selling agricultural products

LITERATURE REVIEW

This study adopts the Technology Adoption Model which was chosen because the ease with which the farmers feel they can utilize social media to market their products and the usefulness of social media marketing to the attainment of their marketing goals will influence adoption of social media in the marketing of their products. Network marketing is carried through internet and helps the farmers decrease the selling cost of the agricultural products, increase effective competitiveness and also helps the farmers to raise their income (Bao & Liu, 2014). Consumers' inclination towards online marketing is low in the study area and most of them wish to purchase yam flour and livestock products like skimmed milk, eggs and live chickens online. Due to limitations like, risk of fraud, poor network infrastructure and supply of inferior products they are not ready to go for online purchasing of products (Badiru & Afolabi, 2016).

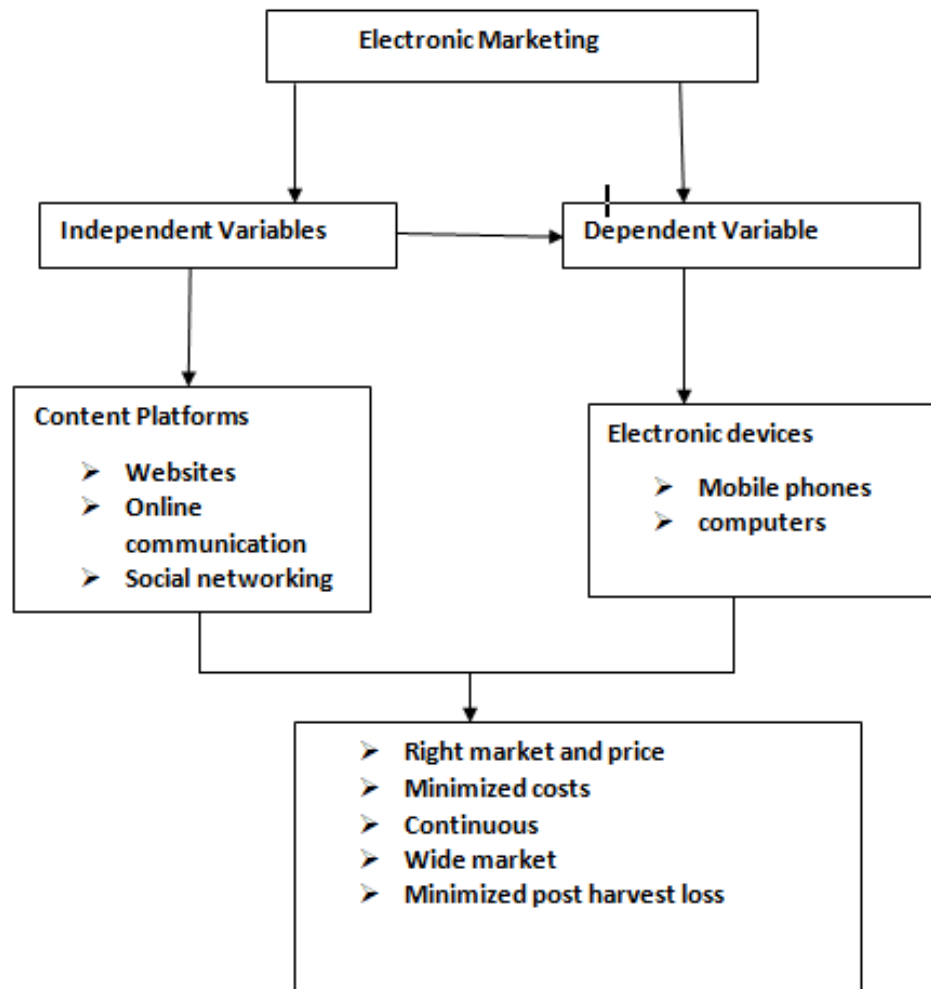
Online marketing helps the customers to find substitutes for their products within a click and also it offers immense opportunities for the companies too. Consumers behave in the same way whether it is online or offline (Chitra et al., 2017). The use of e-marketing is gaining popularity for products and services for a variety of reasons including them having lower transaction costs, faster information transmission, a larger scale of spread, the elimination of intermediaries, a greater degree of market access, an improved profitability (Faradillah et al., 2019). All of these advantages accrue not only for the sellers (farmers), but also for the consumers. The consumers of agricultural products gain from using e-marketing because, among other things, it offers cheaper costs, a wider selection of items, a simple mode of access to them, and an increased accessibility to the goods (Alkahtani et al., 2021).

The low cost, high dispensability, wide coverage, and the fast and accurate flow of information makes e-marketing a leading choice for marketers. Despite the researchers' various viewpoints on the effects of e-marketing, there is a general agreement on its positive influence on boosting profitability, managing marketing initiatives, and on sales activities (Eid & El-Gohary, 2013). Farmers will profit from having a successful e-marketing system since it will help them get the best price for their produce and increase their revenues by cutting their expenditures. There is no estimated number of websites that are dedicated to agriculture e-marketing in Saudi Arabia, and these websites are the network platform to create e-marketing.

Conceptual Framework

The conceptual framework in (Figure 1) represents the study concept based on the literature review and research hypothesis.

In this conceptual framework, the independent variables are the content platforms which includes websites, online communication and social networking while mobile phones and computes represent the depend variables.



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Figure 1
CONCEPTUAL FRAMEWORK ON EFFECT OF E-MARKETING ON SALES OF HORTICULTURAL PRODUCTS

Materials and Methods

An online survey was done using a self-administered structured questionnaire on horticultural farmers around Midlands urban and peri-urban, Zimbabwe. The questionnaire was developed and administered in English from November and December 2022. Agriculture being the primary livelihood there will be numerous farmers in the district, the study is informed by field research. A sample of 100 participants (65 consumers and 35 farmers) was chosen using systematic random sampling. The farmers were identified through the Urban Agriculture Retail Association who kept a register of farmers. This is a statistically representative sample, covering a diversity of experiences and provides a good basis for deriving lessons about the real affected the marketing of horticultural products among urban and peri urban farmers. The finding from the

study were analysed thematically, based on the various themes introduced in the focus groups and interviews. Quantitative data from the individual farmer interviews were analysed for frequency distribution using SPSS statistical package version 19. Using the empirical evidence, the study conducted a regression analysis to determine the influence of e-marketing on horticultural sales volume. The study applied the following regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu$$

Where Y is sales volumes, X_1 =social media, X_2 =online marketing, X_3 is email marketing

Study Findings

The main themes identified from the review are presented in this section and include the drivers of marketing usage by farmers and the effects of marketing on the sale of horticultural products.

The Drivers to the Usage of E-Marketing by Farmers

Of the 100 respondents, the researcher wanted to find out the driver that has led to the adoption of e-marketing within the peri-urban farms.

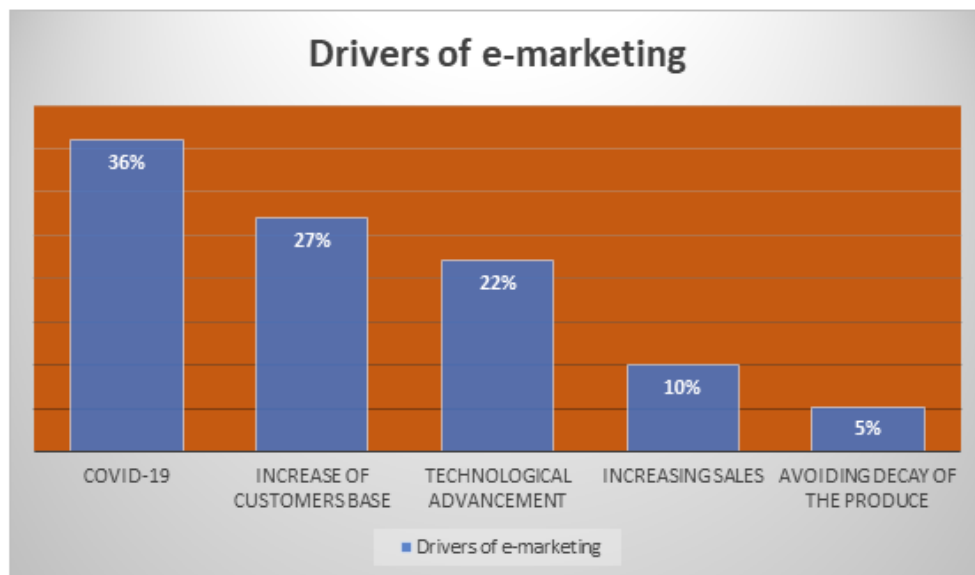


Figure 2

DRIVERS OF E-MARKETING WITHIN MIDLANDS'S PERI-URBAN FARMERS

Source: Primary (2022)

Figure 2 showed that farmers adopt marketing in responds to changing macroeconomic environment such as economy, technology, and environmental aspects, which has become one of the drivers of the adoption of e-marketing. Farmers experience losses due to inadequate and ineffective storage facilities for perishables like vegetables when they go for weeks before making sales, and following the establishment of e-marketing, farmers' sales performance in the

market has been better than that of traders (Cornish, & Lawrence, 2011). Most farmers use remarketing to access their customers with easy and efficiently as some farmers even use couriers to deliver their tomatoes, pepper bells, onions, and lettuce to supermarkets and restaurants. 27% of the respondents revealed that in order to increase a customer base, e-marketing has become their new norm due to the globalized villages we are living in.

Technology was indicated with 22% as one of the major drivers that have led peri-urban farmers in the province to utilize e-marketing as the majority of the farmers are making use of smart phones and social media as a customer communication platform. An increase in sales was indicated by 10% of the respondents as they stated that e-marketing has become the new market for the day-to-day operation of agricultural products were as a frequency of 5% indicated that online marketing allows them to make sure they sell produce being left out after they sale to their existing customers, and they mainly do it as a way of avoiding the highly perishable goods from decaying. According to a study conducted by (Nolan, 2019), increasing customer retention and sales are some of the motivating factors for farmers in East Asia who have adopted e-marketing. Hence one can note that the above drivers immensely led to the effective adaptability and adoption of e-marketing within peri-urban farmers.

Effects of E-Marketing on Sales within Peri-Urban Areas

The study established that marketing have great benefits and benefits on the sales of horticultural products. The results showed that marketing has the following benefits: (Figure 3)

- New market acquisition
- Increased demand for horticultural production.
- Increased sales and opening of new markets
- Business growth and increased revenue

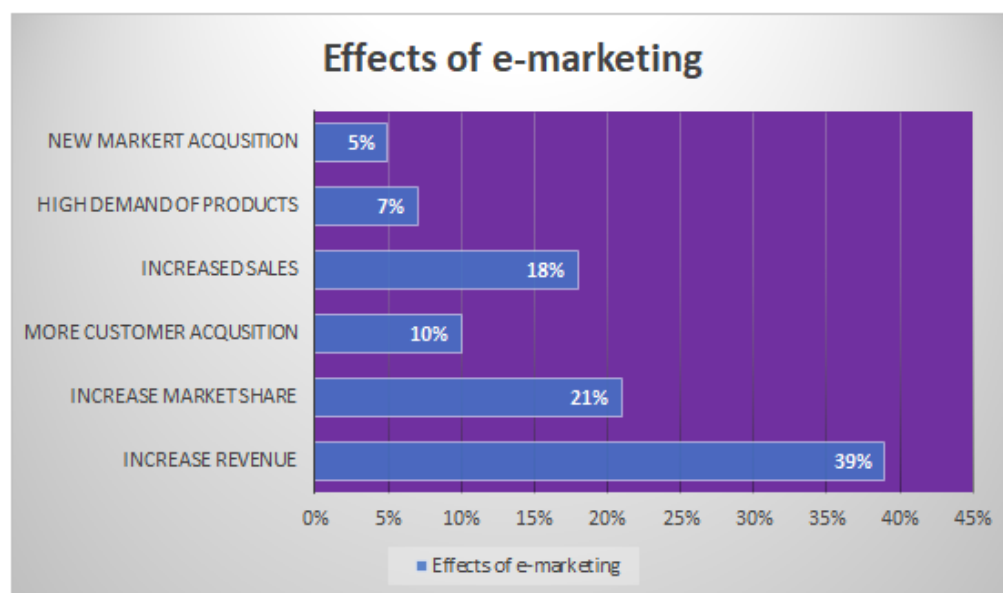


Figure 3 **EFFECTS OF E-MARKETING ON HORTICULTURAL PRODUCT SALES**

Source: primary (2022)

According to the findings, social media, emails, and online advertising have had a greater impact on sales performance within peri-urban farmers in the midlands province. This is consistent with the conceptual framework that reveals the relationship between e-marketing and sales performance, which was also revealed in this study. (Pearce, 2011) believes that the diffusion of innovation theory is a theoretical orientation for mobile phone adoption based on the diffusion theory. Thus, in order for e-marketing to take place, mobile phones must be integrated into business activities.

The results highlighted that digital marketing adds to the marketing mix by connecting with customers and generating leads for new business opportunities. Digital marketing creates opportunities for businesses to connect with and engage their target customers more efficiently and effectively. As a result of the findings, one can conclude that e-marketing improves sales performance in the horticultural environment in peri-urban farming areas.

Increased Sales and Reduced Costs of Doing Business

The findings above indicate a positive effect of e-marketing on horticultural products sales. The researcher also observed that the participants were happy due to the cost reduction that has been brought about by e-marketing. The findings presented are related to secondary data by (Andreopoulou, 2018). Peri-urban farmers aim to participate in the internet society since the electronic systems provide them with many benefits such as being ready to serve customers across the world within 24 hours per day 7 days a week, this has led to a decrease in business costs. These results are in line with the finding of (Fazia, 2018) who found out that the use of digital marketing platforms in advertising, promotion, and responding to customer queries has led to higher sales within the horticultural industry in Tanzania. The research finding postulated that e-marketing creates brand and product awareness, leading to better sales networks and market share. Hence one can note that e-marketing leads to positive effects on sales performance.

The adoption of emarketing by farmers resulted in the creating and opening of new markets and distribution channels. Among the measures that the farmers put in place was the coordinated and combined distribution to the same markets. These measures enabled movements which enables customers in various parts of the province to access the commodity markets to purchase goods and services. The results showed that approximately 25% of the customers had increased access and proximity to the markets to buy or sell their goods. Increased access to markets saw most of the farmers reducing post-harvest losses of their perishables.

Table 1					
ANOVA RESULTS					
Model	Sum of squares	Degrees of freedom	Mean square	F-test	Significance
Regression	1176.64	3	392.21	10.954	0
Residual	1038.338	29	35.805		

Total	2214.988	32			
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The ANOVA results in table 1 showed that the overall regression model was significant with a p-value of 0.000 indicating that at least one variable significantly influence horticultural sales volume in the Midlands province.

Model	Coefficient	Standard error	Significance
Constant	1.733	3.13	0.427
Social media	0.369	0.246	0.003***
Online marketing	0.62	0.192	0.000***
Email marketing	0.862	0.529	0.002***

The results of Table 2 indicated that the coefficient of social media 0.369 (0.003) online marketing 0.620 (0.000) and email marketing 0.862 (0.002), which this means that there is a positive relationship between (Electronic Marketing) and (horticultural sales). Based on the results findings it can be noted that Electronic marketing has become today a leading strategy in the business world, which is characterized by reducing the costs for the organizations in general. The results are in line with the findings of (Sheikh, Shahzad & Ishaq, 2017) which indicated that E-Marketing has positive effects that appear through increasing sales volume.

CONCLUSION

The study finding indicated that the adoption and development of e-commerce is an innovative way of influencing sales and market access for smallholders. Market access for smallholders is a long-term topic in business and economics literature, and e-commerce is an eye-opening experience and revolutionary change for smallholders, since it could disinter mediate middlemen including traders, distributors, and retailers removing information asymmetry.

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