

Adoption of E-Commerce by the Small Scale Farmers in Zimbabwe: An Empirical Analysis

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Abstract

This paper presents some findings from a study researching the adoption of e-commerce by Small scale farmers in the horticulture sector in Zimbabwe. Theoretical and empirical studies have demonstrated the necessity to gain and exploit the positive outcomes of e-commerce adoption and implementation in various organizations. Therefore the aim of this paper is to analyse the literature and data from small scale farmers on the adoption of e-commerce on potential problems and effects of e-commerce on Small Scale farmer's performance and to identify those that could determine business success. Results of this study work confirm that e-commerce has an impact on the improvement of social, political and environment that for best performances it is important to align e-commerce investments with internal capabilities and organizational processes.

Keywords: E-Commerce, Small Scale Farmers, Adoption, Problems, and Solutions

Introduction

As per the Food and Agriculture Organization of the United Nations, the total populace will achieve 9.1 billion by 2050, and to nourish that number of individuals, worldwide sustenance generation should develop by 70%. For Africa, which is foreseen to be home to around 2 billion people by then, develop proficiency must animate at a speedier rate than the overall ordinary to keep up a key separation from continued with mass (Magutu, Onger, & Mwangi, 2009). The current business environment is increasingly competitive. For companies to remain competitive in the domestic and international markets, companies have always strived to improve, creating better ways to meet the needs of their customer's research on data innovation. Narayanasamy, Rasiah, and Tan (2011) Mentioned that up to now research on the appropriation of electronic commerce by SMEs is still little in number and lacking. The adoption procedure and the capability of web-based business in individual SMEs and, as an outcome, its dispersion in the SME segment, all in all, are as yet not surely knew (Rahayu & Day, 2015). Although past examinations have endeavored to explore the components that impact the adoption of electronic commerce, a

considerable lot of these investigations are led fundamentally in developed nations. The survey of the writing regarding the matter demonstrated that there is an absence of experimental proof to clarify the degree of the reception of electronic commerce among organizations in developing nations. The comprehension of what drives electronic commerce between organizations, particularly in developing nations, is restricted by the little and less research (Laudon & Traver, 2016; Narayanasamy et al., 2011)

Nowadays, electronic commerce has been used as a fast vehicle to transform the world into an information society and can significantly affect farmers and their businesses. In companies, companies have demonstrated that the Internet and online business are key variables for conducting business for large companies around the world and small businesses, web-based business innovation speaks of a potential for business development and extension. The present study incorporated an examination of how the reception of web-based business practices can help small scale farmers in Zimbabwe to take advantage of and increase their prosperity or survival and served to characterize the learning and skills required for farmers to enhance their Internet Business Activities. Buyers' practices, for example, an expansion in Internet use to get some answers about the elements or administrations that interest them, including meetings with previous buyers, are evolving (Rahayu & Day, 2015). The current pattern in the buyer's conduct involves a change in the perspective of the business. The focal point of small and medium-sized businesses, small scale farmers, should be how online businesses encourage advancement and offer business opportunities to new markets around the world (Baubonienė & Gulevičiūtė, 2015). However, small-scale farmers are not adopting e-commerce as fast as their larger counterparts because of various adoption barriers. More about small producers are in different products and produce different strategies for e-commerce and have different training needs and support, support (Wang, Pauleen, & Zhang, 2016)

Zimbabwe faces difficulties in infiltrating the web-based business world since 2000. It is not clear whether subsequent disappointments are identified with government strategy, restricted assets, ICTs or corporate governance (Zunguze, 2009). Before 2000, Zimbabwe was known as the granary of Africa. In the middle of that period, the agribusiness represented between 9 and 15% of GDP and between 20 and 33% of the rent of the tariff. In addition, agribusiness contributed more than 60% of raw materials for agribusiness, with more than 70% of Zimbabweans receiving their jobs from the party. The status of the barn has been lost since then, and some research qualifies the low horticultural efficiency for the change in the agrarian structure after the land change program. The Poverty Performance and Consumption Survey (PICES) 2011/2012, a study by the Statistical Agency of Zimbabwe, which reports to 32,248 delegated family units in general, assessed that 76% of families in the countries are poor, with 23 % estimated very poor (Maunganidze, 2013)

Therefore, the objective of this study is to fill existing research gaps, establishing empirically a model to explain the social and economic factors that influence the adoption of e-commerce in Zimbabwe. This is prevalently important to improve comprehension of the determinants of internet business selection in a creating nation, explicitly in Zimbabwe. The exploration that develops now is how to reestablish Zimbabwe's status as the breadbasket of Africa and decrease commonplace dejection? In particular, how Zimbabwe becomes a granary once again, but this time in a way that spreads its advantages more generally, particularly for the poor territories of

the countries, as opposed to a defined number of owners and traders? This thought seems to look to illuminate those difficulties. This review seeks to investigate factors that affect the appropriation and use of e-commerce by Small Scale Farmers in Zimbabwe

The aim of this study is to explore and contributions factors influencing the adoption of e-commerce by Small Scale Farmers in Zimbabwe. Thusly, the present examination tends to this hole in the writing and makes hypothetical and reasonable commitments. In the first place, the proposed model prompts a superior comprehension of the determinants of innovation appropriation in a creating economy. Second, past writing on electronic business demonstrated that just a few investigations concentrated on the reception and utilization of electronic trade in SMEs. Hence, this investigation would affirm whether the determinants of electronic trade between SMEs in Malaysia contrast from vast organizations (Moorthy et al., 2012).

Literature and Hypothesis Development

Buying and selling business-to-business has enabled several organizations to present elements to a variety of organizations and has discovered that the Web is not just one view at a time for their articles, but a quick method to get in touch with the timely individuals in an organization (Blut, Evanschitzky, Backhaus, Rudd, & Marck, 2016). However, Consumer to Business is sometimes known as Customer to Business. This e-commerce demonstrates individual clients that offer to offer elements and administrations to organizations that are configured to buy them. The exchanges between the client and the business include commutation switches, which allow the buyer to conduct exchanges (Dube, Asiedu, & Phiri; Narayanasamy et al., 2011)

Small scale farmers play a vital role in in the Zimbabwe economy and are considered to be the backbone of industrial development in the country. Moreover, the innovation acknowledgment show Technology Acceptance Model created by (Harris & Dennis, 2002), proposes that the potential client of online business must not exclusively be persuaded of the relevant preferences of internet business yet additionally have an inspirational demeanor towards it. from a local point of view, fronted that Africa should consolidate the utilization of ICTs and other new advances for there to be a quick acknowledgment of its formative agenda (Lee, 2009; Riemenschneider, Harrison, & Mykytyn Jr, 2003)

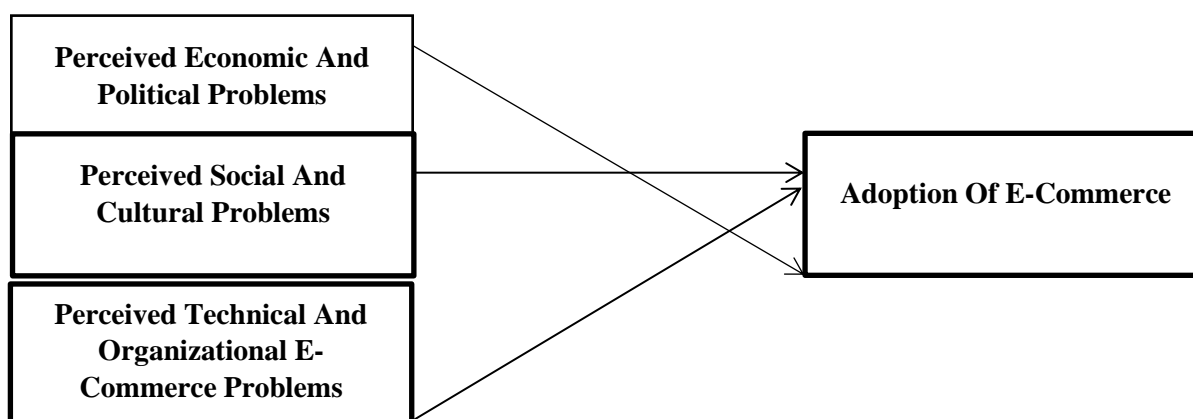
Based on the literature and the previous discussion, this study has hypothesized that the cost of Internet services affects the tendency of SMEs to adopt and use e-commerce in Zimbabwe. Enlivened by before concentrates in dissemination look into, the Diffusion of Innovation Theory (DIT), proposed by (Benhabib, Perla, & Tonetti, 2017; Rogers, 2010), is frequently referred to as one of the key advocates of selection and dispersion in writing. Dissemination is 'the procedure by which development is communicated through different channels after some time among the individuals from the social framework' while Adoption is 'a choice to make full utilization of advancement as the best strategy.' He additionally classified the individual inventiveness from soonest adopters to loafers which subsequently will assist the scientist with knowing the rate of selection of most Small Scale Farmers (Oliveira & Martins, 2011). The technological resources are related to the availability of information technology infrastructure and the sophistication of information technology use in organizations. In most cases, most people who suffer from prostate cancer do not feel satisfied (Laudon & Traver, 2016)

As indicated by concentrates done by (Wamuyu & Maharaj, 2011) most innovation selections depend on individual and not associations since the Small Scale Farmers are overseen by their proprietors. Wamuyu and Maharaj (2011) found that internet gets to was significantly dispersed in urban regions along these lines constraining the development of the online organizations to extend broadly, low mindfulness and absence of conveyance framework were likewise talked about in his examination (Santacreu, 2015). A larger part of Small Scale Farmers would choose to execute web-based business if the dimension of reception in the business was sufficiently high E-trade adopters do as such to stay aware of the occasions and with movements in industry rehearses. This is predictable with the hypothesis of the minimum amount, which expresses that appropriation in an industry would act naturally supporting once a specific dimension of selection is reached. Another motivation to receive internet business is for Small Scale Farmers to pick up a key edge over contenders. When adopting electronic-commerce technologies, analyze the role of "governance" in the dissemination of the CB. Organizational governance encompasses a strategic, tactical and operational model that defines the way organizations are structured to establish objectives, allocate resources and shape decisions. The reception and execution distinguished the significance of the apparent advantages of innovation in appropriation. Associations will most likely see the advantages of electronic commerce advances if the capability of innovation to improve their business forms is clear, dangers are reasonable and similarity with current business, procedure and culture needs are kept up (Mavimbela & Dube, 2016; Wang et al., 2016)

H1: *The perceived economic and political problems encountered by the Small Scale Farmers in the adoption of e-commerce horticulture sector in Zimbabwe*

H2: *The perceived social and cultural problems encountered by the Small Scale Farmers in the adoption of e-commerce horticulture sector in Zimbabwe*

H3: *The perceived technical and organizational e-commerce problems encountered by the Small Scale Farmers in the adoption of e-commerce horticulture sector in Zimbabwe*



Methodology

The survey on small scale farmers sample was randomly selected. The small scale farmers that were located to the capital Harare we selected randomly because of their access to internet services and their products that required day to day sales. The target population for this study was small scale farmers within the Zimbabwe horticulture sector. This sector is selected because of its important contribution to the economy of the country and the fact that it is a leader in technology adoption. Selection of Small Scale farmers is based on personal contacts or association with the local university where one of the academic team members was based. Farm owners or managers are selected to complete the survey as they can provide a farming organization-wide view. The questionnaire was "coded" to ensure that there was no redundancy in the same respondents, responding to the questionnaire both by email and by mail. The final usable responses comprise 63 respondents obtained online, 21 were collected by mail (post), while 23 responses were collected personally. Therefore, the total number of usable responses is 107. The present research joined an endeavor to address the running with examination questions using a scale from 1 to 5 to ascertain the level of the problems. 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. The Small Scale Farmers were randomly selected from farmers using e-commerce. The total sample number used in this study was 107 (Ben Mansour, 2016)

Results and Data Analysis

Demographics

Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
male	81	75.7	75.7	75.7
female	26	24.3	24.3	100.0
Total	107	100.0	100.0	

Figure 1:Gender

The findings revealed that most respondents were female 75.7% followed by male who were 24.3% as illustrated on Figure 1. This infers that females like shopping compared to males.

Age

	Frequency	Percent	Valid Percent	Cumulative Percent
20-30	40	37.4	37.4	37.4
30-40	52	48.6	48.6	86.0
40+	15	14.0	14.0	100.0
Total	107	100.0	100.0	

Figure 2:Age

The results show that 37.4 % of the respondents are between the ages of 20- 30 years of age, 48.6% between 30-40 years , and 15% 40+ years

Education

	Frequency	Percent	Valid Percent	Cumulative Percent
high school	10	9.3	9.3	9.3
diploma	65	60.7	60.7	70.1
bachelors	32	29.9	29.9	100.0
Total	107	100.0	100.0	

Figure 3: Education

The findings revealed that 9.3% of the respondents were high school, followed by 60.7% diploma holders, and bachelors 32 % respectively

Income

	Frequency	Percent	Valid Percent	Cumulative Percent
0-200	4	3.7	3.7	3.7
200-400	26	24.3	24.3	28.0
400-600	55	51.4	51.4	79.4
600+	22	20.6	20.6	100.0
Total	107	100.0	100.0	

Figure 4: Income

The results indicate that 3.7% have a monthly house income of \$0- \$200 per month, 24.3% between \$200-\$400 per month, 51.4 % between \$400-\$600 per month, 20.6% and \$600+per month

Correlations

		social culture	and political	Economic and technology
social and culture	Pearson Correlation	1	.954**	.954**
	Sig. (2-tailed)		.000	.000
	N	107	107	107
Economic and political	Pearson Correlation	.954**	1	1.000**
	Sig. (2-tailed)	.000		.000
	N	107	107	107
technology	Pearson Correlation	.954**	1.000**	1
	Sig. (2-tailed)	.000	.000	
	N	107	107	107

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

Guzman (2012) depicted business maintainability as the capacity of a firm to proceed in an unaltered way, consequently holding its capacity to exist later on. Internet business innovation speaks to a potential for business development and extension, which can identify with business maintainability. The significance of the factors that influence social and cultural barriers to the adoption of e-commerce by small scale farmers. This means that there is a strong relationship between your three variables. This means that changes in one variable are strongly correlated with changes in the second variable. In our example, Pearson's r is 0.954. This number is very close to 1. For this reason, we can conclude that there is a strong relationship between the economic factors ,social and tecchincal variables. However, we cannot make any other conclusions about this relationship, based on this number.

Fisher, Craig, and Bentley (2007) presented the methodology of a business internet website procedure that comprises of a business site to direct organizations over the Internet. Fisher et al. demonstrated after the leaders of a business have a verbalized business e-commerce, they are near making an online business. (Clemes, Gan, & Zhang, 2014) asserted the Small Scale Farmers of all potential web-based business organizations must build up an e-methodology to empower the business to satisfy future desires. E-commerce methodologies are dependent on the plan of action. Economically, it has been shown that the costs of innovation and rapid technological challenges are a challenge for organizations that use e-commerce in Zimbabwe. The results indicate that the low level of readiness among government institutions contributes to the barrier of e-commerce. The study found the lack of an appropriate legal environment to apply e-commerce to be the problem faced by the small scale farmers using e-Commerce in Zimbabwe. E-commerce leaders require similar information and range of abilities as the Small Scale Farmers s in block and-concrete or customary organizations. The present examination included investigating Small Scale Farmers with fruitful web-based business rehearses and what set of online business Small Scale Farmers qualities they have to deal with their organizations effectively. Business Small Scale Farmers must think and act uniquely in contrast to Small Scale

Farmers of customary organizations and must consider e-business systems and the significance of taking an interest continuously over systems and the Internet

Discussion

Small Scale Farmers suggested solutions in the adoption of e-commerce

The results of this study indicate that there is a significant relationship of factors in the adoption of new technologies, we observed a significant difference for all the variables studied perceived economic and political, social and cultural and technical and organization. Mohanna, Yaghoubi, Motlaq, and Motlaq (2011) we recommend that social obstructions be maintained to improve the condition of online business in the country. This can be achieved through mass training to understand and recognize new developments, including IT and web-based businesses. This can be achieved through the use of mass media for a more notable scope to increase the dimension of mindfulness and decrease misinterpretations of business on the Internet socially and socially. Financially similar organizations should consider working favorably toward web business. This will restrict the cost of using and maintaining web business experts similar to the costs of maintaining the system through cost-sharing between cooperating organizations. On the contrary, organizations should consider using reliably without trying to hide professional online business centers to reduce costs. In addition, organizations should consider using South Africa's online business service providers as the technology is created additionally in their country.

Conclusion and Recommendation

Concerning the Small scale, agriculturists study provides an integrated view on e-commerce adoption for the small scale farmers Zimbabwe anyway the element of use of these applications is still in its beginning. This is paying little heed to the Government of Zimbabwe's procedure position on Small scale agriculturists which among various issues attempts to embed information and correspondence advancement information technology into the exercises of Small Scale Farmers similarly as building up a culture of web business which makes business straightforward, smart and fiscally sagacious among Small Scale Farmers. This study explores the impact of small scale farmers preparation on the adoption of e-commerce by Small Scale Farmers, which has been largely neglected in the e-commerce literature. The study also demonstrates the importance of context, particularly the specific e-commerce barriers being investigated, in understanding the factors that affect the adoption process (Bambore & Singla, 2017)

This study comprises a substantial contribution by being the initiator in building the conceptual model based on a theoretical foundation appropriate with the Small Scale farmer's adoption towards e-commerce. It is additionally worth demonstrating that (Benhabib, Perla, & Tonetti, 2017; Rogers, 2010) experimentally inspected the legitimacy of Diffusion of Innovation Theory (DIT) to clarify the acknowledgment of e-commerce business benefits in Hong Kong, an exceptionally created nation. Therefore, this study is one of the bleeding edge contemplates broadening the appropriateness of Diffusion of Innovation Theory (DIT) by analyzing new technologies e-commerce in a new context in unique circumstance (banking industry) in creating nations (Jordan). The Legislature of Zimbabwe must consider the organization of a legitimate and administrative system to track and strengthen e-commerce business exercises in the country. This will expand the dimension of certainty and the improvement of trust, guaranteeing the

decency of businessmen and clients in their businesses. In the same way, organizations that use web-based businesses must mold a delegate body to talk about their problems that arise to the government, instead of trusting that the government will react to changes since it accepts longer periods in comparison with the government. fast change and fast, innovative change.

This paper adds to the methodical writing survey and meta-investigation look into online business, specifically, the technology adoption literature. Researchers have called for meta-examination investigate in Information Systems in light of the fact that they trust that the meta-investigation strategy is under-used for evaluating the idea of conflicting quantitative experimental discoveries on basically a similar research questions.

Our findings contribute to the e-commerce adoption literature by bringing conceptual and empirical clarity to the factors affecting e-commerce for small scale farmers adoption and illustrating the distinction between them as well as their nomological relations based on the adoption stage of online banking the pre- and post-adoption of e-commerce. Regarding theoretical implications, we can argue that studies on e-commerce developed in various periods ought to be contrasted and care. Some contrasts presented by past studies may exist because of the stage in which the innovation is in every condition, and not really because of the respondent's attributes. Furthermore, the view of variables identified with e-commerce appropriation appears to change after some time; subsequently, further research can investigate the behavior of the relationship between e-commerce and its determinants over a long time.

Recommendation

The results of the study suggest that factors related to social, economic, political and technological factors that influence the adoption of electronic commerce in a developing country, such as Zimbabwe. These results further develop the assertion of the advancement of information, returning to the speculative database, concentrating on the collection of small-scale electronics companies, not as past examinations, mainly around the choice of the online business client (Dube et al.). The consequences of the research on coordinates revealed that most of the assemblies redesign standard online channels with compact open advances (Novak, 2014)Technological movements through dynamically secure offers traditions that compromise partnerships to provide more security for flexible customers. Small Scale Farmers of a free organization can now deal better with the use of adaptable businesses to interact with their clients, especially with individual buyers (Gilpin, 2016).

This study improved existing e-commerce research, considering factors to small-scale farmers in Zimbabwe. The Business Small Scale Farmers appears to not be so willing to use a convenient exchange with various associations as their clients. This example may be the result of the buyer's growing enthusiasm for a more remarkable ability to interact with associations at any point and anywhere with their cell phones that may not be of great importance to the various associations that are acting in the procurement activity. the clients. Individual customers will use business on the internet and e-commerce without emotions attached to their satisfaction for things with features that electronic businesses limit better than compact exchange capabilities (Xiaochen, Phiri, Tahseen, & Dube, 2018).

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