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RESEARCH COUNCIL OF ZIMBABWE



Leadership, Innovation and Development

POTRAZ – RCZ FUNDED PROJECT

Tapping Into E-commerce Business Opportunities Through Leveraging On E-commerce Adoption In Zimbabwe Focusing On ZIMPOST



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ACRONYMS.

CFA	Confirmatory Factor Analysis
COD	Cash on Delivery
E-Commerce	Electronic Commerce
ICT	Information and Communication Technology
IP	Internet Protocol
ISP	Internet service providers
IT	Information technology
ITG	Information Technology Governance
NDS	National Development Strategy
ODK	Open Data Kit
POP	Proof of Payment
POTRAZ	Postal and Telecommunications Regulatory Authority of Zimbabwe
RCZ	Research Council of Zimbabwe
RTGS	Real Time Gross Settlement
SCAUE	Social Commerce Acceptance, Usage and Effect
SEM	Structural Equation Modelling
SPSS	Statistical Products and Services Solutions
TAM	Technology Acceptance Model
TRA or ToRA	Theory of Reasoned Action
UNCTAD	United Nations Conference of Trade and Development
UPU	Universal Postal Union
USA	United States of America
USD	United States Dollars
UTAUT	Unified Theory of Acceptance and Use of Technology
UZ	University of Zimbabwe
VUCA	Volatile, Uncertain, Complex and Ambiguous

Abstract

The aim of the research was to assess and recommend e-commerce adoption strategies in Zimbabwe, with particular focus on ZIMPOST. To attain the research project's objectives, the research team designed a conceptual framework for e-commerce business adoption and opportunities. The conceptual framework borrowed information from several theories and underpinning concepts. Empirical research to understand adoption of e-commerce in Zimbabwe favoured the Social Commerce Acceptance, Usage and Effect (SCAUE) model with key contributors including Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA or ToRA) and Unified Theory of Acceptance and Use of Technology model (UTAUT). These previous theories indicate that information technology (IT) acceptance or adoption is determined by the end-users' acceptance behaviour. The SCAUE model has five social commerce acceptance drivers namely (utility driver, simplicity driver, intrinsic driver, social driver and infrastructure driver) in line with the literature. The study also offered new contribution by examining the association that exists between intention and adoption and e-commerce business potential in Zimbabwe. A sample of one thousand three hundred and twenty (1320) participants was determined by the research team based on 138 connected ZIMPOST branches that were ready for e-commerce countrywide. Furthermore, a sampling frame of 74 branches was selected using purposive sampling. The sample size of (1320) was distributed between corporate customers and individual customers of ZIMPOST. An additional ten (10) internal interviews were targeted for internal ZIMPOST employees at regional level and provincial main branches. The sample sizes were representative; hence, the findings can be generalised. Purposive sampling method was used to select respondents at the ZIMPOST branches that are connected and ready for e-commerce. Data was gathered from customers and employees in all the ten provinces in Zimbabwe. Structured and researcher-administered pre-tested questionnaires targeting customers were used. Furthermore, an interview guide was used to collect data from key internal and external stakeholders. A total of 1031 respondents from the targeted sample of 1320 customers participated in the research survey giving a response rate of 78.11%. Furthermore, seven (7) interviews were

conducted with key internal employees at regional and provincial post offices. The survey participants were drawn from the 10 provinces and across the 5 regions within ZIMPOST in Zimbabwe. Manicaland province had the majority of respondents (17.07%), followed by Midlands province (16.59%). Most respondents were males (695=67.4%) and the age range of 36 to 45 years recorded the highest distribution (29.4%). Most respondents (38.51%) reported that high school education was their highest academic qualification. In terms of location, majority of respondents (57.03%) were urban dwellers, while 42.97% came from rural areas. The study uncovered that the majority, about 97%, have never used ZIMPOST's e-commerce services in the past year. Only about 3% had previously used ZIMPOST's e-commerce platforms. ZIMPOST's e-commerce usage rate is 3.39%, which means that only 3.39% of the entire sample size used ZIMPOST e-commerce services at least once in the past year. Given that a frequency of 650 respondents use e-commerce platforms in general, yet only a frequency of 35 are using ZIMPOST's e-commerce services; this shows that there is great potential for ZIMPOST to offer e-commerce services to the ready market which is already connected. The major barrier of e-commerce adoption and usage at ZIMPOST was lack of awareness of the services of ZIMPOST (mean 4.54; n = 1031). Most of the respondents who never used ZIMPOST services, indicated that they did not know that ZIMPOST has online services. They have never been exposed to ZIMPOST's commercials and corporate communications creating awareness of such services. Respondents also indicated that they do not trust online business because of its intangibility aspects (mean 3.13; n = 1031). The third barrier of e-commerce is security fears (mean 2.98; n = 1031). Preference for traditional methods over e-commerce is another notable barrier which recorded a mean score above 2.5 (mean 2.77; n = 1031). Thus, it shows that in Zimbabwe, most customers still have a preference towards offline business interactions, and that draws back interests in e-commerce. Lack of skill in e-business proved to be another significant barrier of e-commerce (mean = 2.6; n = 1031). Ignorance of ecommerce itself was also found to be a barrier (mean 2.51; n = 1031). Although the study had posited that absence of a digital gadget could be a barrier, the findings from this study disconfirmed that, as a mean score of 1.85 (n = 1031) shows the respondents disagreed that they did not have digital gadgets. This further shows that most Zimbabweans now own smartphones, which are e-commerce enabled. That presents a ready market for e-commerce

business opportunities. The interviewees indicated that the major barriers that people/firms encounter when trying to adopt ZIMPOST e-commerce services are lack of confidence and trust to the brand. Customers are not getting the services they need from ZIMPOST due to lack of resources and inadequate infrastructure. Furthermore, the interviews brought out barriers that confirmed the quantitative barriers such as lack of marketing of the ZIMPOST services and lack of confidence and trust to the ZIMPOST brand. Moreover, critical resources like delivery vehicles are not available which takes away the confidence in customers to adopt ZIMPOST ecommerce services. Customers are not getting the services they need from ZIMPOST due to lack of resources and inadequate infrastructure that covers the networks, systems and hardware. Poor turnaround time and staff motivation was cited by interviewees as other key barriers to the initiative of ecommerce adoption in ZIMPOST. The social driver recorded the highest mean score of 3.81 with a standard deviation of 1.170, this means that significant members of the society have a greater influence in motivating others to use electronic commerce. Thus, the greatest social influence was coming from peers, superiors, family, workmates/ school mates and community. Digital literacy recorded the second highest influence with a mean score of 3.45 (SD = 1.356) followed by the infrastructural driver with a mean score of 3.38 (SD = 1.328). Utility driver with a mean score of 3.04 (SD = 1.366) shows that the benefits of using e-commerce are still middling and respondents do not see or feel the major benefits of buying or selling using ZIMPOST's e-commerce platform. Simplicity driver has the lowest mean score of 2.67 (SD = 1.277), showing that the e-commerce platforms themselves are not easy to use for the ZIMPOST customers. There need to simplify navigation, language, visuals, web designs, page discoverability, online payment and access. The strategies to address the barriers that are being encountered in ecommerce adoption from the interviewees include marketing of the ZIMPOST in all media platforms to improve visibility and brand image. Moreover, the provision of backup services to the post offices to improve customer confidence and trust in the services being offered. Networks and systems must be up to date to embrace ecommerce in ZIMPOST. Reliable transport for collection and delivery of parcels must be considered as major strategy because the competitors are offering services beyond the capacity of ZIMPOST as they have running fleets of vehicles. Additionally, the vehicles must be well serviced to be efficient and a timetable must be

provided on routes to know and track clients parcels in real time. On the other hand, the issues to do with staff motivation (staff involvement, transparency and approach) that creates positive attitudes towards the work culture must be rapidly worked on to allow the smooth flow of ecommerce adoption within the ZIMPOST staff members. The results show that through e-commerce usage, ZIMPOST can regain lost market share and revive its business significantly by a factor of (34.18%). E-commerce also presents an opportunity for business expansion in the digital era as more and more businesses digitize. Costs can be significantly reduced, and geographical spatiality and boundaries will be eliminated thereby allowing ubiquitous delivery of products and services around and beyond national boundaries. Thus, there is great opportunity for global business reach and pressing harder on courier players on international levels. Opportunities that were found ripe in ZIMPOST for current business expansion are in, parcel/mail delivery services, money transfer business and Insurance services. Through e-commerce, ZIMPOST can further diversify its business and offer services in different sectors. A ready market for the following services was obtained, Stationery business, commercialization of internet services and digital gaming services. Adoption of e-commerce by ZIMPOST and its customers further presents an array of opportunities to the ZIMPOST customers themselves. Chief among these are potential opportunities for growth of their businesses through provision of online markets. Specific business opportunities which are of interest to ZIMPOST customers are, opportunities for agents' business, digital seamless networking of customers with ZIMPOST, global linkages and restoration of lost brand trust and image. The study recommended the marketing of ZIMPOST services, redesigning of digital services delivery platforms, improvement of internet connectivity, employee motivation to improve service delivery, revival of courier and postal services, use of alternative power sources and implementation of Information Technology Governance systems.

Key words:

E-commerce, E-commerce adoption, E-business, E-commerce adoption drivers, E-commerce business opportunities

RESEARCH PROBLEM

The Zimbabwean business environment is increasingly becoming volatile owing to a combination of macro and competitive factors. To remain afloat, ZIMPOST and other businesses had to embrace internet technologies and e-commerce. The government and other private players also contributed immensely towards the creation of an enabling business environment for e-commerce business. However, there was poor e-commerce adoption at ZIMPOST. Very few ZIMPOST customers used ZIMPOST's e-commerce services. This was worrisome considering significant investments done by ZIMPOST and the government of Zimbabwe to promote e-commerce. Poor adoption of ZIMPOST's e-commerce also affects its ability to remain viable and competitive in this digital age.

PROJECT OBJECTIVES

Overall Objective

The study sought to identify gaps and augment e-commerce business opportunities at ZIMPOST through leveraging on e-commerce adoption in Zimbabwe.

Specific Objectives

The specific objectives of the e-commerce adoption research were as follows:

1 To analyse the scope of e-commerce adoption at ZIMPOST.

3 To analyse the drivers of e-commerce adoption at ZIMPOST.

2 To examine barriers to e-commerce adoption at ZIMPOST.

4 To examine the e-commerce business opportunities for ZIMPOST.

METHODOLOGY

The study targeted ZIMPOST customers (individual and corporate customers), who acted as e-commerce users, aged from 18 years and above. Prior usage of e-commerce platforms was not a prerequisite for one to qualify as a respondent. That was because the study sought to even target those who had never used ZIMPOST e-commerce and to appreciate the drivers which would motivate them to unfreeze their status quo in favour of ZIMPOST e-commerce activities. The study also targeted both the urban and the rural community. This follows the need to have a nationwide understanding of e-commerce regardless of the social standing of respondents. The whole country was clustered using ZIMPOST's business regions and national provinces. ZIMPOST has 5 geographical regions namely Harare, Northern, Manicaland, Central and Matabeleland. Thus, from each cluster, the rural and the urban corporate and individual customers of ZIMPOST were considered. A sample size of 13 responses was obtained using

person administered survey. Research questionnaires and in-depth interviews were the data collection tools used.

Framework of E-Commerce Adoption Drivers

Theory remains the main guiding principle in the development of knowledge. Technology adoption is informed by several theories and underpinning concepts. Empirical research done to understand adoption of e-commerce in Zimbabwe favored the Social Commerce Acceptance, Usage and Effect (SCAUE) model (Makudza, Sandada & Madzikanda, 2021). The SCAUE model combines the contributions of nine previously known theories of technology acceptance and adoption. Key contributors to the SCAUE model include the Technology Acceptance Model (TAM) (Davies, 1986), Theory of Reasoned Action (TRA or ToRA) (Fishbein and Ajzen, 1967), Unified Theory of Acceptance and Use of Technology model (UTAUT) (Venkatesh et al., 2003). These previous theories actually indicate that information technology (IT) acceptance or adoption is determined by the end-users' acceptance behaviour. The SCAUE model has five e-commerce adoption drivers namely utility, simplicity, utility, social and infrastructure.

Utility driver refers to the motivating or discouraging perception by consumers of the value or benefits they will enjoy from using e-commerce. In this case, consumers would adopt e-commerce if they perceive that its use presents some value to them.

Simplicity driver refers to the degree of easiness or difficulty associated with using ecommerce. This relates to the perceived degree of friendliness of s-commerce platforms. The SCAUE model postulates that complicated systems which are tasking for consumers to use deter effective adoption.

Digital literacy driver refers to the judgment and attitude of one's ability and drive towards using e-commerce to accomplish a particular job or task. It is an individual's overall affective reaction to using a system and reflects the feelings of favourableness or unfavourableness regarding using the technology.

The social driver refers to the degree to which an individual's behaviour to use e-commerce is affected by others and the environment. It is the individual's perception of the role of the society, community and culture towards s-commerce usage. This driver of social commerce has all to do with the influence that the significant others have on consumers.

Infrastructural driver is the degree of availability and affordability of hardware and software aspects of e-commerce. Availability of smartphones, reliable internet connectivity and social support promote easy acceptance of e-commerce by consumers. Infrastructural driver also encompasses the perception that consumers have regarding technical support from companies that run digital platforms.

DATA COLLECTION METHODS

The study targeted ZIMPOST customers (individual and corporate customers), who act as e-commerce users, aged from 18 years and above. Prior usage of e-commerce platforms was not a prerequisite for one to qualify as a respondent. That was because the study sought to even target those who had never used ZIMPOST e-commerce and to appreciate the drivers which would motivate them to unfreeze their status quo in favour of ZIMPOST e-commerce activities. The study also targeted both the urban and the rural community. This follows the need to have a nationwide understanding of e-commerce regardless of the social standing of respondents. The whole country was clustered using ZIMPOST's business regions and national provinces. ZIMPOST has 5 geographical regions namely Harare, Northern, Manicaland, Central and Matabeleland. Thus, from each cluster, the rural and the urban corporate and individual customers of ZIMPOST were considered.

Sampling procedure

ZIMPOST population of e-sellers was 82 and e-commerce orders was 177 (ZIMPOST Reports, 24 July 2023). The population of 177 e-commerce orders includes internal staff emails and repeated emails indicating that the orders were from few customers. Krejcie and Morgan (1970) was used to calculate the sample size for a given population and it provided a minimum sample size of 191 participants out of the given population of 259 e-sellers and e-commerce orders. With this information, the researchers found it noble to extend the study to all Zimpost

customers, even to those who have not been exposed to e-commerce platforms. Table 1 below provided the ZIMPOST branch network and connectivity that was used to select the sampling frame for e-commerce adoption.

Table 1: ZIMPOST Branch Network and connectivity.

REGION	POST OFFICES	FRANCHISES	OFF COUNTERS	SPOs	VCICs	POSTAL AGENCIES	TOTAL
HARARE	19	3	13	0	0	0	35
MATABELELAND	18	3	19	14	4	0	58
MASHONALAND	17	4	22	3	9	0	55
MANICALAND	8	1	18	3	5	1	36
MIDLANDS	7	0	9	1	2	0	19
MASVINGO	8	0	9	1	3	0	21
TOTALS	77	11	90	22	23	1	224

Source: ZIMPOST Communications (2023).

From the information in table 1 above, Community Village Information Centres (CVICs) which are containerized information centre without a nearby post office and were not included in the sampling frame as they were information centres that do not participate in ZIMPOST activities, moreover, they are not e-commerce enabled for ZIMPOST. A further analysis of the sampling frame was done using the connected branches as provided in table 2 below.

Table 2: ZIMPOST Branch Connectivity

Regions	WAN CONNECTED	LAN CONNECTED	CIC CONNECTED	NOT CONNECTED
Harare	39	43	28	8
Manicaland and Mashonaland	41	43	51	27
Midlands	22	22	33	33
Matebeleland	36	36	32	18
SUB TOTALS	138	144	144	86
Not Connected	86	80	80	
TOTALS	224	224	224	86

Source: ZIMPOST Communications (2023): See attached appendix 1

Based on the branch connectivity of 138 branches that are e-commerce enabled, the researchers used a formular of unknown population to determine the minimum sample that can provide meaningful analysis for inferences. Because of the large and unsurmountable size of the targeted group, the study did not employ a census approach. Rather, a clustered sampling

strategy was employed in which the rural and the urban population was treated as heterogenous groups for the purposes of data collection. In essence, the infrastructural environments for the rural setup in Zimbabwe is clearly different from the one in urban settlements, hence, the need to treat these two groups as heterogenous. The whole country was further clustered based on national provinces. Zimbabwe has 10 official provinces, which presents the study with 10 clusters. From each provincial cluster, both the rural and the urban respondents were considered. From each cluster, the rural and the urban corporate and individual customers of ZIMPOST were considered. Simple random sampling was used to select the study participants.

Sample size determination

Statistical formulae for unknown population have been adopted to sample ZIMPOST customers for the purposes of this e-commerce adoption study.

$$n = \frac{Z^2 \times p(1-p)}{e^2}$$

Where:

n = sample size

Z = Z-score at given confidence interval (2.17)

p= standard deviation (0.5)

e = margin of error (0.03)

The standard deviation of unknown population is usually given at 50% of the large population. Researchers used 97% confidence interval.

$$\begin{aligned} n &= \frac{(2.17)^2 \times 0.5(1-0.5)}{(0.03)^2} \\ &= 1,308.0278 \end{aligned}$$

A minimum sample size of one thousand three hundred and eight was computed from the statistical formulae, thus using the distributions provided in table 2.1 below one thousand three hundred and twenty (1320) participants were sampled based on 138 branches that are connected to the networks of ZIMPOST across the country. The sample size was justified because it was based on a scientifically proven formulae by The Cochran (1963) formula which allows the

researchers to calculate an ideal sample size given a desired level of precision, desired confidence level, and the estimated proportion of the attribute present in the population. Cochran's formula is considered especially appropriate in situations with large populations. A sample of any given size provides more information about a smaller population than a larger one, so there's a 'correction' through which the number given by Cochran's formula can be reduced if the whole population is relatively small. and it was large enough to allow for the generalisations of the results. The distribution of the sample by provinces is as reflected in table 2.1 below.

Table 0.1: Provincial sample sizes distribution

Province	Urban	Rural	Total
Bulawayo	80	0	80
Harare	200	0	200
Manicaland	96	64	160
Mashonaland Central	84	56	140
Mashonaland East	72	48	120
Mashonaland West	108	72	180
Masvingo	84	56	140
Matabeleland North	36	24	60
Matabeleland South	48	32	80
Midlands	96	64	160
Total	791	529	1320

Data collection instruments

The researchers developed structured questionnaires and interviews guide with both structured and unstructured sections. The use of semi structured questionnaires was to enhance the study to test the proposed model quantitatively whilst exhausting all potential barriers and opportunities of e-commerce in Zimbabwe. The questionnaire was developed to cover questions that relate to the scope, intention to adopt, adoption and opportunities of e-commerce. Measurement scales for e-commerce adoption and intention to adopt was informed by Makudza, Sandada and Madzikanda (2021)'s SCAUE framework. The questionnaires had seven (7) sections. Section A consisted of closed-ended demographic questions, Section B covered the preliminary information on e-commerce usage. Section C was about the e-commerce barriers, Section D was for e-commerce drivers consisting of (utility, simplicity, intrinsic, social and infrastructural) drivers. Section E covered the e-commerce

adoption intention. Section F was for the actual e-commerce adoption of ZIMPOST services by customers. Then section G consisted of statements and open-ended questions on e-commerce business potential and opportunities to both customers and ZIMPOST. The e-commerce adoption dimensions of questionnaires were anchored on the 5-point Likert scale ranging from 1 (representing Strongly Disagree) to 5 (representing Strongly Agree). The last questions on the questionnaires were open-ended and solicited respondents to expand on points that they thought were important and needed more clarification, especially on barriers, and opportunities arising from using the ZIMPOST e-commerce. For the qualitative part, the conceptual framework proposed by the research team guided the development of the semi-structured interview guide covering five (50 main preconceived themes which were in line with the study specific objectives. The questionnaire was digitised, that is, transformed into forms that enable them to be uploaded to mobile devices or tablets with an open-source software suite called Open Data Kit (ODK), which enabled data to be gathered in near real-time. The tablets and smart phones were used to collect data for the survey and the ODK software enabled researchers to send completed questionnaires to a central server. ODK software did not only enable gathering data in near real-time but also recording of the exact locations of where data was collected, and this was a critical aspect in quality control of surveys compared to paper-based surveys.

Recruitment and Training of Research Assistants

Research assistants were recruited and selected to gather data during the survey. Most of the research assistants had first degrees or higher and experience in similar assignments with University of Zimbabwe and other research agencies in Zimbabwe. After being appointed, the research assistants were trained on how to collect data using the approved questionnaires. The training entailed taking the research assistants through the questionnaires, teaching research ethics and data collection using mobile devices. This process was also another validation opportunity as variables were interrogated.



Pre-testing of questionnaires

Following the training, all research assistants and their team leaders pretested the questionnaires in Harare at selected ZIMPOST branches. The pre-test helped in removing some irrelevant questions and merging similar questions. The exercise resulted in polished instruments and hence subsequently used in the main study.

Fieldwork quality control procedures

The research team planned to establish daily communication with research assistants in the field (working in separate provinces). Each team had a team leader/supervisor who coordinated daily activities and reported progress, problems, and received instructions from the Principal Investigator (PI).

The team leaders/supervisors continued to train research assistants via hands-on supervision after deployment to the field. Team leaders attended interviews which were conducted by research assistants in the early days of fieldwork. This guaranteed that every research assistant knew how to implement the sample and questionnaire correctly. Among other quality control issues, the team leader:



Conducted systematic spot checks



Monitored research assistants' performance



Observed selected interviews.

The Principal Investigator and the data manager provided their supervision for all teams. These monitored the research teams in randomly selected areas to confirm survey protocols on walk patterns and respondent selection procedure. Monitoring of fieldwork was also synchronised with the cross-checking of the completed interviews on the real time data provided through the Open Data Kit software. Team leaders went through the completed questions and quickly communicated with all the field teams (and with the data management team) to be alert and attend to identified common errors.

Data Cleaning and Analysis

After data collection, quantitative data was cleaned and analysed using Statistical Products and services Solutions former Statistical Package for Social Sciences (SPSS Version 26). Qualitative data from in-depth interviews was transcribed and analysed using NVIVO 14. Descriptive data analysis statistics was used to analyse preliminary data and demographic information. Descriptive statistics were also applied in analysing the scope and trend of e-commerce adoption in ZIMPOST in terms of the barriers, and opportunities in Zimbabwe. Inferential statistics were further be used to analysed for causality among the e-commerce adoption drivers, intention, adoption and potential.

Validity and Reliability of the Survey

Validity refers to the extent to which a questionnaire measures what it is intended to measure. Thus a valid questionnaire is one that accurately measures the concepts it is supposed to measure, in the case, e-commerce adoption in ZIMPOST. Validity was ensured by adapting previously validated models and questionnaires for e-commerce adoption i.e., the SCAUE framework (2021). Thereafter, ZIMPOST reviewed the instruments and proposed changes that were adopted by the research team. Reliability is the ability of a questionnaire to produce similar results whenever it is used in a similar study. The verification of a questionnaire’s reliability is important to any study as it guarantees the truthfulness of the findings. There are many ways of measuring the reliability of a questionnaire one of which is the Cronbach’s alpha coefficient. This coefficient ranges between 0 (meaning no reliability) and 1 (meaning perfect reliability). A questionnaire is reliable if its Cronbach’s alpha statistic is at least 0.7 (Zikmund, Babin, Carr & Griffin, 2013; Hair, Black, Babin & Anderson, 2010) although a value close to 1 is preferable. Table 2.2 below shows the reliability statistics of the questionnaire to measure e-commerce adoption in ZIMPOST as provided through the Cronbach’s alpha coefficients.

Table 2.2: Reliability of the Questionnaire for E-Commerce Adoption

Key Construct	Dimension	No. of Items	Cronbach's Alpha
E-Commerce Adoption	Utility driver	5	0.952
	Simplicity driver	4	0.934
	Social driver	6	0.948
	Infrastructure driver	5	0.761
	Digital literacy driver	5	0.884

In terms of Cronbach's alpha values provided in Table 2.2, the research questionnaire for e-commerce adoption was reliable because the constructs' reliability values were above the minimum threshold value of 0.7.

Limitations

The following limitations were encountered during the study; hence, the mitigation strategies were employed to reduce the impact of the limitations.

Delayed Access to Information

Delayed access to key information and communication from ZIMPOST head office was one of the limitations. The research team managed to make follow ups regularly with the ZIMPOST senior management and a consensus was reached to sign the Non-Disclosure Agreement as the facilitating factor for unlocking the key information.

Delayed disbursement of funds

The disbursements of the project funds were delayed as the project was expected to be done in three (3) calendar months from January to March 2023. There was lapse of planned timelines and the project coinciding with other key University calendar schedules like Examinations and Workshops. Planning was done when the proof of payment was received from RCZ to avoid cancellations of planned activities.



Currency/Exchange rate volatility

The movements in exchange rates affected the value of the project and the research team was failing to fund travel, subsistence and workshops resulting in delays or disruptions of project. However, the team managed to work with the available budget per milestone as payments and cost tracking was done in a stable US\$ currency.

Departure of key team members

The University and the project had some key members leaving the institution and some received secondment to other projects and Government Programmes. The research team had to work with the available key experts to continue with the study regardless of departure of some key project staff.

Low respondent traffic in branches and branch closure

Low customer traffic at ZIMPOST offices in several stations due to power outage as the clients knew that Zimpost will not be offering services due to lack power backup at those stations. Furthermore, one team found a branch closed as it the norm to close the branch every last day of the month. The team leaders were available to quickly re-strategize and move to the next station then do enumeration when there was service provision. Moreover, the team had to increase the number of days during field work to be able to attain a satisfactory response rate.

Customers failure to respond to questions

Customers failing to respond to some questions as ZIMPOST has no functional e-commerce system was one of the limitations in most rural ZIMPOST branches. The research team had to focus on the customers' intention to adopt, as well as opportunities which ZIMPOST may pursue if customers adopt e-commerce.



Ethical considerations

The following ethical considerations were observed during the entire course of the study. Proper training of enumerators was done before engaging in fieldwork. Informed consent and voluntary participation were sought from the study participants before interviewing, taking pictures and recording interviews during the e-commerce adoption field work. All interviews were conducted during the normal working hours of ZIMPOST offices from 08:00 hours to 16:00 hours. All the information collected from field work remains the property of ZIMPOST/RCZ/POTRAZ and cannot be published without the knowledge of each other. Anonymity and Confidentiality of the study participants was considered as no names or personal information was solicited from the study participants.

PROJECT ACTIVITIES

The project activities were classified into four milestones as shown in the table below.



In implementing and managing this project, the team of researchers involved learnt that:

- ▶ Validating instruments of the study through pilot and expert consultations helped in collecting authentic and validated data which informs decision making.
- ▶ It is important to train research enumerators prior to data collection. Training research enumerators in this study helped to standardize data collection in different parts of the country.
- ▶ All stages of the research project complement each other, with no prominence to any specific stage. However, the study learnt that more resources should be channeled towards data collection. The study was a nationwide survey and thus required logistical issues relating to traveling, enumeration, food sustenance and health safety.

PROJECT OUTPUTS

- ▶ The study would publish two journal articles in referred journals. The submissions to the journal would be made in the first quarter of 2024.
- ▶ The study would conceptualize a model of e-commerce adoption, barriers and opportunities, which would act as the key output of the study.

CAPACITY

- ▶ The study assisted with the training of team leaders, project supervisors and data collection assistants in e-commerce adoption.
- ▶ The team of researchers has managed to create a network with ZIMPST employees and management, Research Council of Zimbabwe and POTRAZ team.
- ▶ The Adoption of e-commerce in ZIMPOST has great potential on the sustainability of increased institutional capacities, and on contributions to capacity building of women or marginalized social groups.

POLICY & PRACTICE

- ▶ There is need to change marketing policy for ZIMPOST. The company should embrace above the line marketing strategy so as to create awareness of the ZIMPOST ecommerce services.
- ▶ The study informs review of IT governance at ZIMPOST
- ▶ There is also need to revise the ZIMPOST IT policy so as to factor in simplicity, utility and societal drivers of e-commerce adoption.
- ▶ Policy framework on employee motivation should also be revised to factor the recommendations made in this study.



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FINDINGS

DEMOGRAPHIC AND PRELIMINARY PROFILING
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Distribution by province

The study was conducted in all ten provinces of the country. Figure 3.1 shows the distribution of individual responses by province.

Figure 3.1: Distribution by province

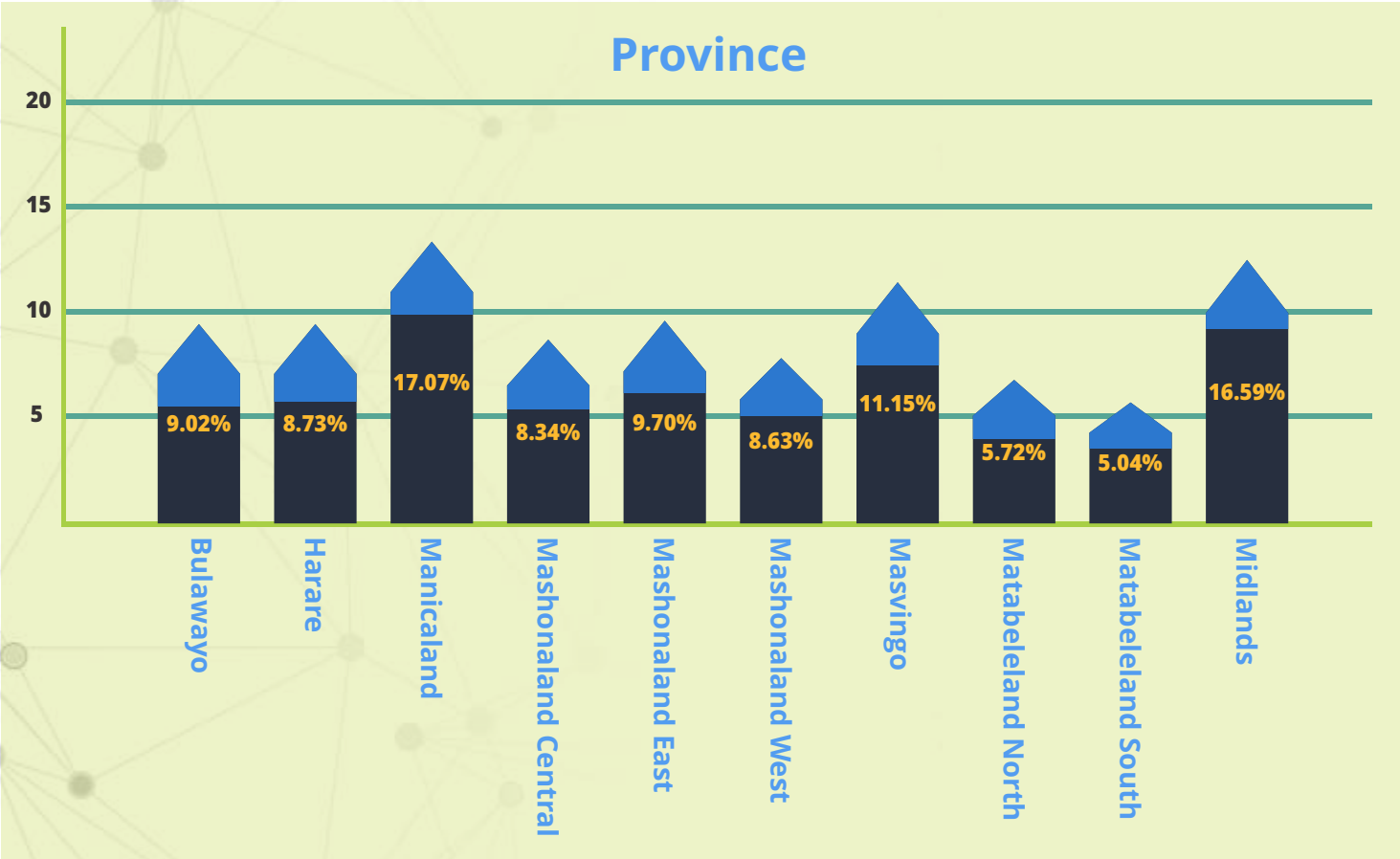


Figure 3.1 shows the number of individual respondents from each of the ten provinces in Zimbabwe. The majority of individual responses came from Manicaland and Midlands Provinces, whilst the least representation was recorded for Matabeleland North and South, with 5.27% and 5.04% representation, respectively. Variations in provincial representations owed to variations in respondent traffic among provinces during data collection. Given that randomisation was effected and equal coverage was extended to each province, that gives an indication that ZIMPOST has low market share in provinces where response rate was relatively lower. Appendix 1 shows the coverage map of all the provinces enumerated in this current study.

Distribution by gender

The study attracted both males and females and Figure 3.2 presents the distribution by gender

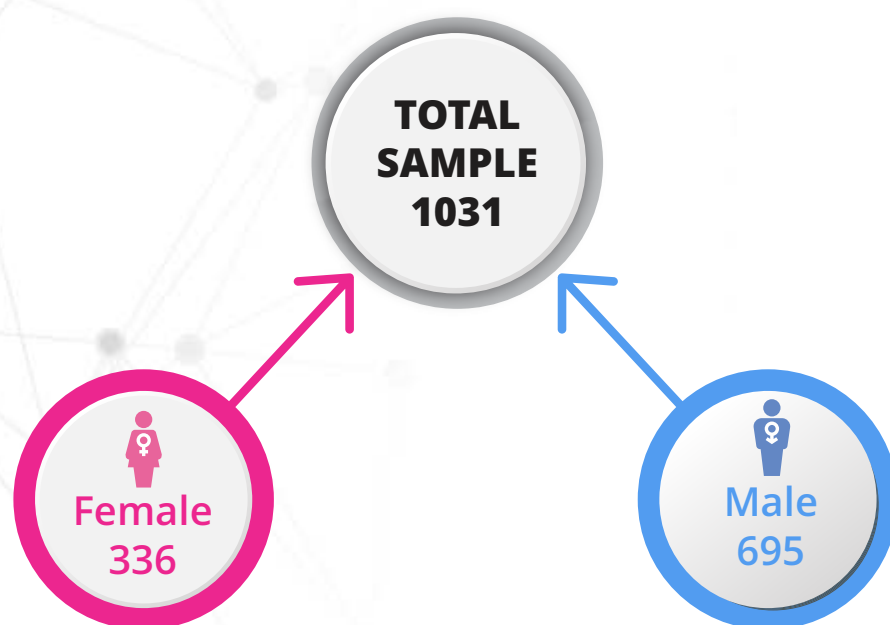
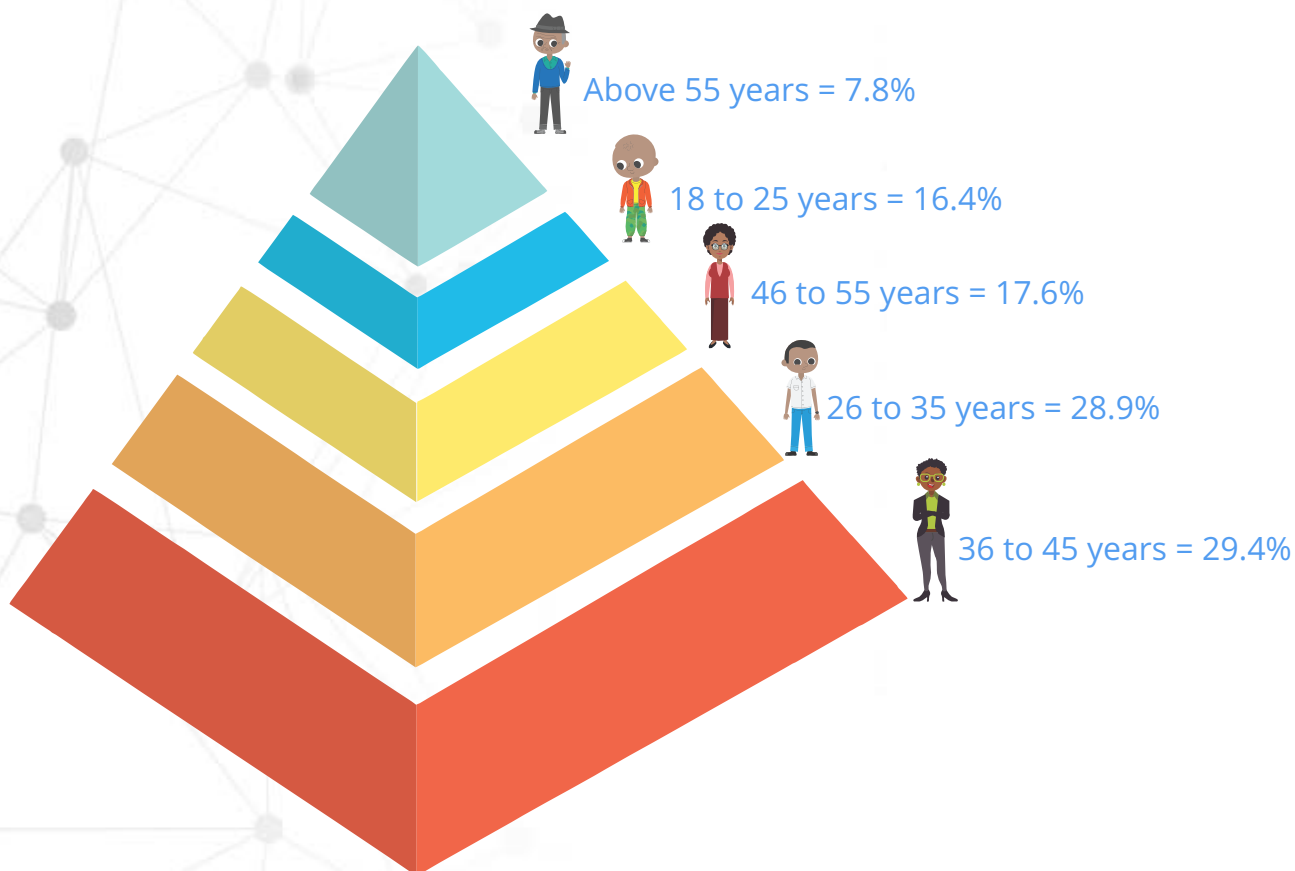


Figure 3.2 shows that female representation was 32.6% whilst male representation was 67.4%. Based on randomisation in data collection, the study inferred that the majority of ZIMPOST customers are males. This was also further attributed to the discovery that most ZIMPOST customers visit the ZIMPOST branches mainly for car insurance business; and most men are motorists.

Distribution by age

Only respondents aged 18 years and above were eligible to participate. Minors below the age of 18 years were excluded from the study because of ethical reasons and dependency in buying decision making. Figure 3.3 shows the distribution by age.

Figure 3.3: Distribution by age

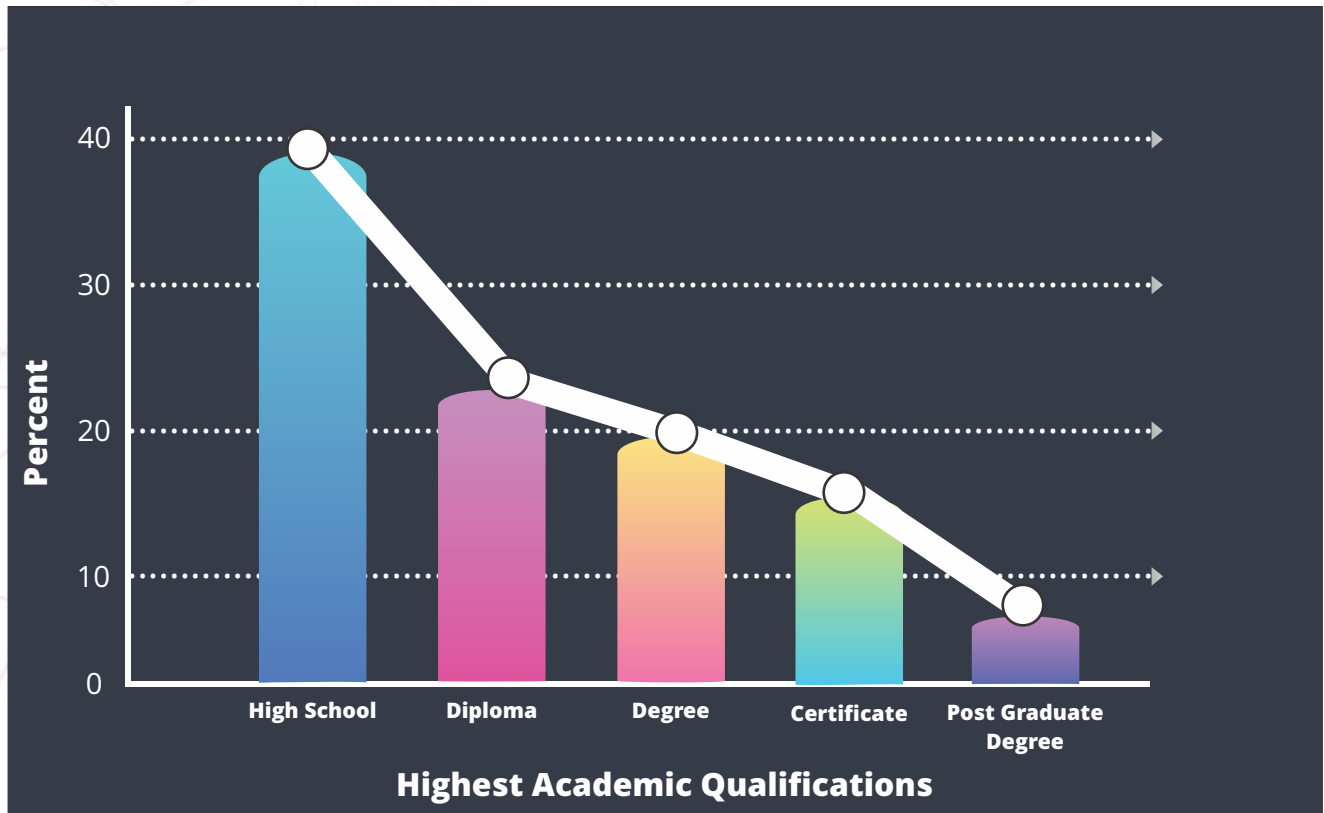


The age pyramid in Figure 3.3 shows that the base was anchored by the age category of 36 to 45 years, which recorded the highest frequency of 29.4%. In essence, young-adults and mature adults formulated the bulk of the sample. The elderly and the young were least represented. The frequency results herein give an idea of ZIMPOST being a company which mainly attracts the middle aged. This presents an opportunity for e-commerce development based on age demographics, because most digital customers are young adults.

Distribution by academic qualifications

Being literate or not was a prerequisite for this study. However, literacy level gives an insight on ability to self-use e-commerce platforms. Figure 3.4 presents the distribution by frequency.

Figure 3.4: Distribution by frequency

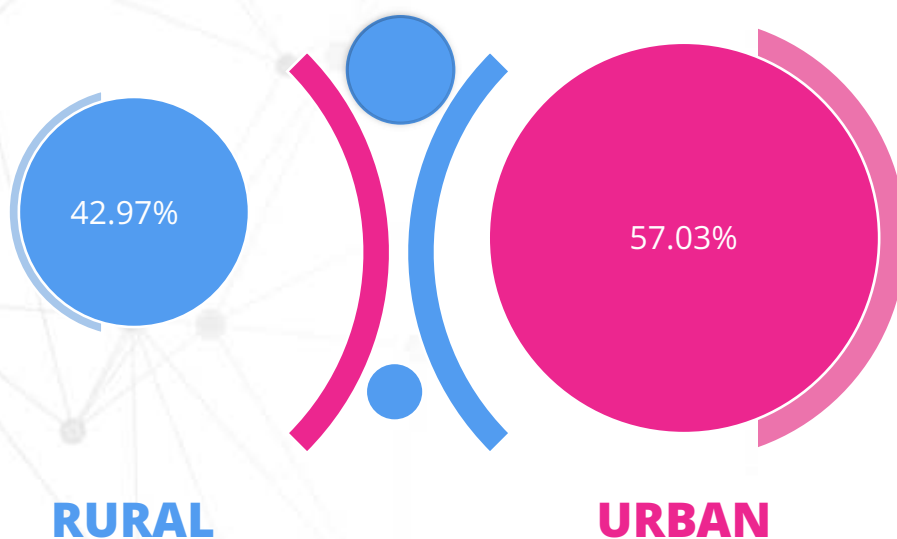


Most respondents (38.51%) reported that high school education was their highest academic qualification. There was a fair representation of diploma, degree and certificate holders. Respondents with post graduate qualifications were least represented with a frequency of only 3.98%. These reports inform that the majority of ZIMPOST customers are well educated with over 61% of them reporting an above high school qualification. This further informs that customers are literate, which is an opportunity for ZIMPOST e-commerce platforms because customers have the basic knowledge needed for them to read, type and comprehend ecommerce messages on e-commerce platforms.



Distribution by settlement

Data was collected from the rural and urban settlements, and the distribution by settlement is presented in Figure 3.5 below.



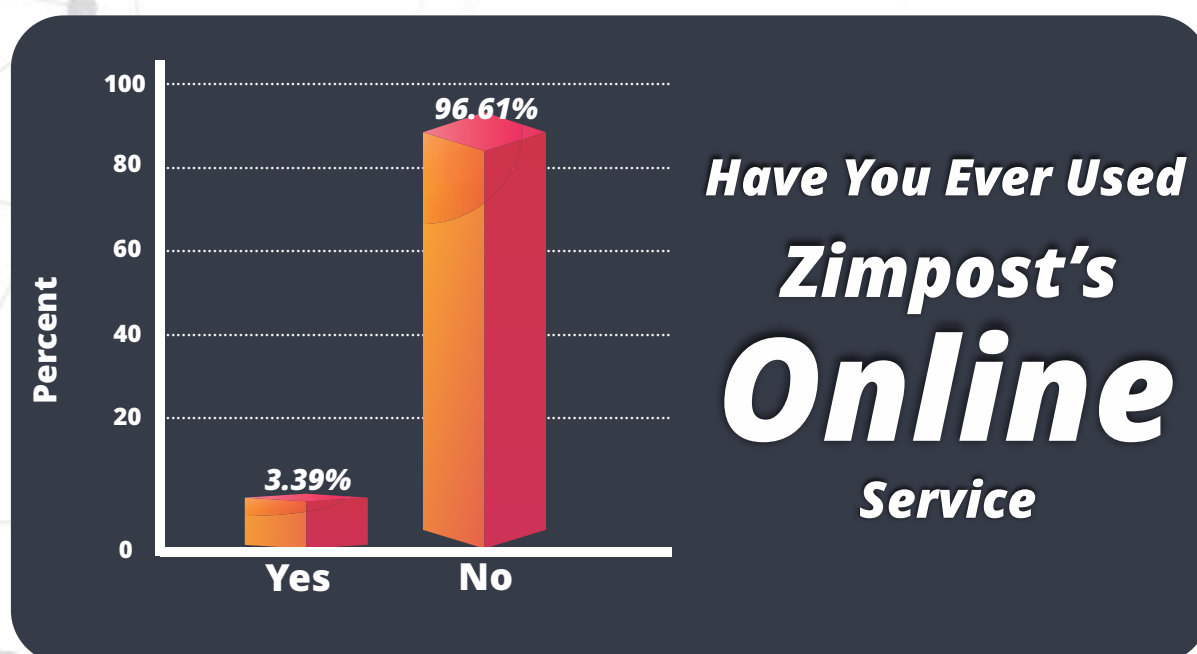
The urban settlement attracted more respondents. 57% of the data was obtained from urban dwellers, with 43% coming from rural areas. The results further present an opportunity for expansion given that even the rural populace are also active customers of ZIMPOST. However, it also shows that there are some disparities in customer base and patronage. There is need to boost rural customer retention such that rural ZIMPOST rural branches have more traction and patronage.



THE SCOPE OF E-COMMERCE ADOPTION AT ZIMPOST

E-commerce usage rate at ZIMPOST

The study uncovered that the majority, about 97%, have never used ZIMPOST's e-commerce services in the past year. Only about 3% had previously used ZIMPOST's e-commerce platforms. Figure 3.7 presents the findings.



ZIMPOST's e-commerce usage rate is 3.39%, which means that only 3.39% of the entire sample size used ZIMPOST e-commerce services at least once in the past year. Given that a frequency of 650 respondents use e-commerce platforms in general, yet only a frequency of 35 are using ZIMPOST's e-commerce services; this shows that there is great potential for ZIMPOST to offer e-commerce services to the ready market which is already connected. With a population of more than 1.2 billion people, Africa is the second most populous continent on the planet behind Asia. However, according to a 2018 UNCTAD report, the region's online shoppers (at 21 million in 2017) accounted for only 2 percent of the global e-commerce customers, meaning there is considerable potential for expansion.

E-commerce adoption intention at ZIMPOST

This section focusses on those respondents who had never adopted the ZIMPOST's e-commerce platforms so as to measure their intention behaviour to adopt e-commerce. The study measured the adoption intention behaviour of ZIMPOST customers, results are in Table 3.1.

Table 3.1: E-commerce adoption intention at ZIMPOST

Descriptive Statistics					
Scale Items	N	Mini	Maxi	Std. Dev.	Mean
I intent to use ZIMPOST's online services	1031	1	5	1.124	4.05
I intent to encourage others to use ZIMPOST's online services.	1031	1	5	1.121	4.01
I intent to do business online with ZIMPOST online services	1031	1	5	1.146	3.98
I intent to upgrade my skills in online business	1031	1	5	1.030	4.17
E-COMMERCE ADOPTION INTENTION COMPOSITE MEAN SCORE					4.05

Table 3.1 shows that the composite mean score for e-commerce adoption intention behaviour is 4.05. Given that data was collected using a five-point Likert scale, this informs that respondents *agreed* that they have an e-commerce adoption intention behaviour. This means that they are keen to use e-commerce for ZIMPOST. This shows a high propensity of customers to use ZIMPOST e-commerce services if the existing barriers and challenges are addressed.

The effectiveness of the ZIMPOST's website

Using a few responses of respondents who indicated that they had prior exposure to ZIMPOST's website, the study analysed the scope and satisfaction of respondents with the site.

Descriptive results of the findings are presented in Figure 3.8.

Figure 3.8: Effectiveness of ZIMPOST website



Figure 3.8 above shows how the effectiveness of the website, the key e-commerce platform for ZIMPOST, was measured. The overall effectiveness of the website as an e-commerce platform was 60%, which shows that the ZIMPOST website was rather mediocre as an e-commerce platform. Key attributes which the ZIMPOST website is failing to address are:

01

The website is static, without a payment gateway, hence, customers get stuck when making payments.

02

The parcel tracking system is very poor, and most customers could not remember whether they ever saw the 'track parcel' plug in.

03

The website was found to be complicated in navigating when searching for specific services.

However, the design, aesthetics, visuals and content of the website were highly rated and deemed effective. These results thus present the need for the ZIMPOST website to be revamped to augment user attention. At the same time the results give an indication of a poorly structured website which acts as an e-commerce adoption barrier.



E-commerce Scope based on customer classification

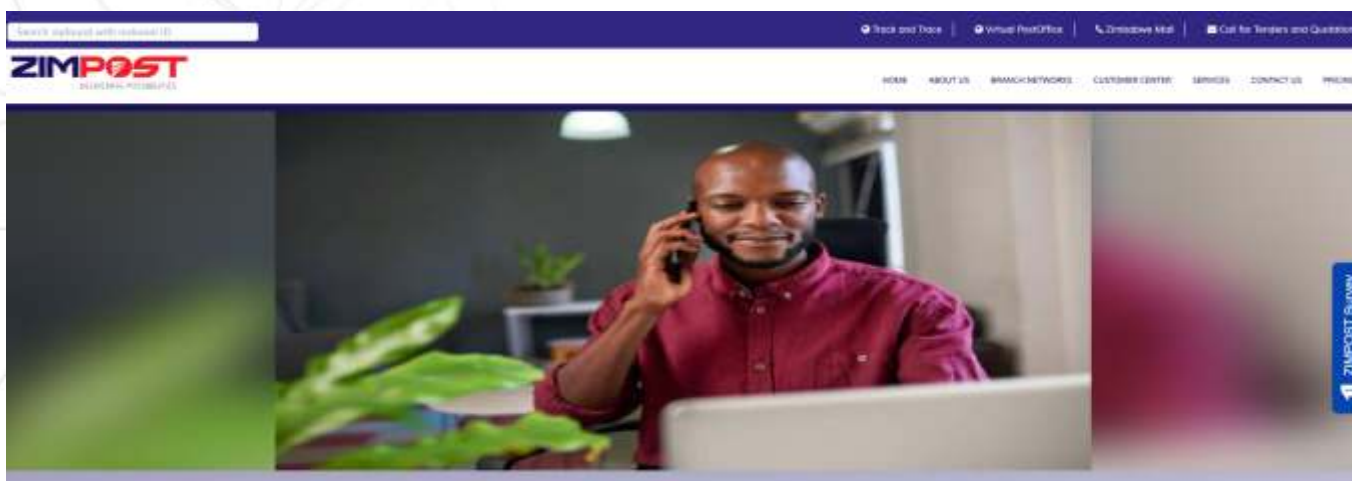
Customer life time value

Table 3.2. E-commerce scope based on customer classification

The Table 3.2 presents statistics about customer life time values, conventionally and digitally.

Descriptive Statistics					
Scale Items	N	Mini	Maxi	Mean	Std. Dev.
For how long have you been a ZIMPOST customer?	35	1	23	5.43	5.863
For how long have you been using ZIMPOST's online services?	35	1	15	2.37	2.556
Valid N (listwise)	35				

Of the respondents who have had a chance to use ZIMPOST's e-commerce, some have been loyal to the brand for a maximum period of 24 years and a minimum period of 1 year was recorded. Loyalty with ZIMPOST services has a mean year of 5.43, which means that the majority of customers have been accessing ZIMPOST's general services (*not specifically e-commerce*) for about 5 years. Considering that ZIMPOST has about 23 years in existence and over 130 years of postal services in Zimbabwe, the customer life time value for its customers is very short. This further gives an indication of high customer attrition and churning behaviour. When it comes to e-commerce services, the mean number of years of using ZIMPOST's online services is 2.37, which means that the average customer has been using ZIMPOST's online services for about 2 years. This proves low adoption and poor customer life time value for e-commerce services.



Customers' devices

Data was collected to understand the scope of e-commerce usage at ZIMPOST by analysing the gadgets that customers use to access ZIMPOST services.

Figure 3.9: User scope based on devices used

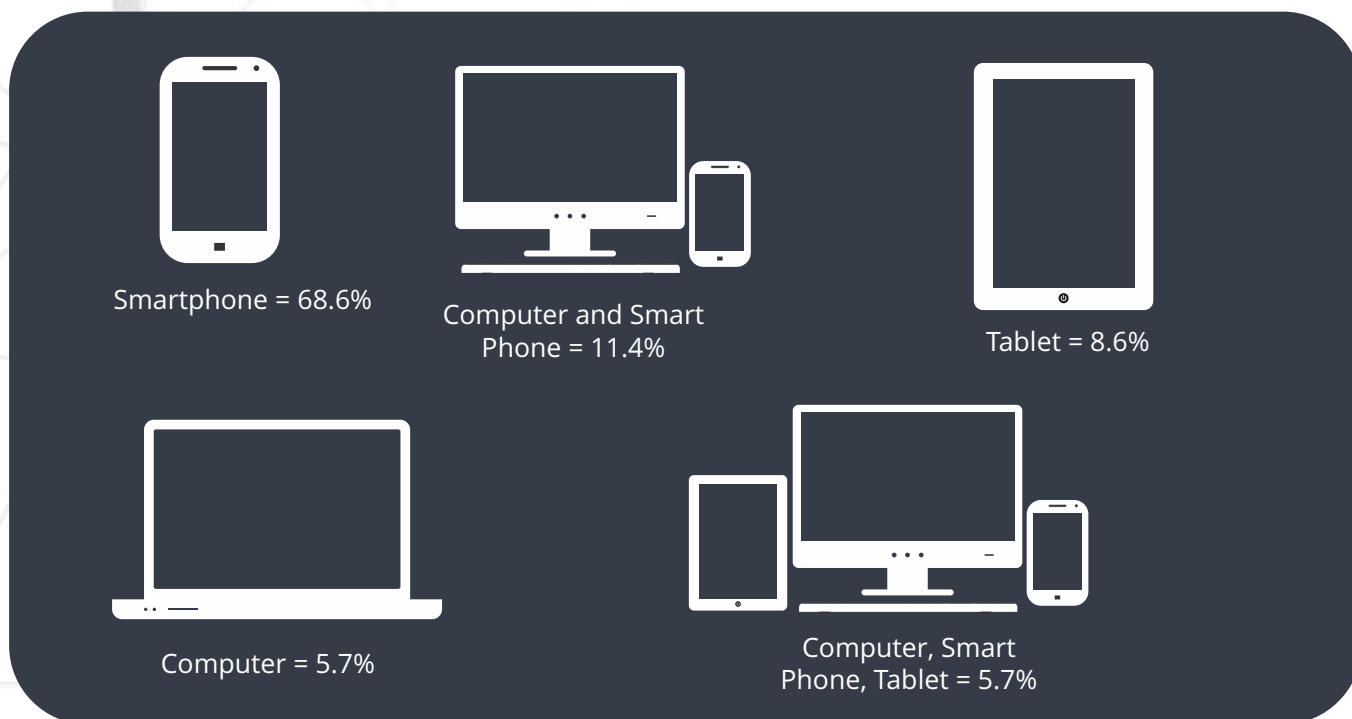


Figure 3.9 shows that smartphones, computers and tablets are the devices used by ZIMPOST customers to access their online system. 68.6% of all respondents use smartphones to access online services for ZIMPOST this shows that smartphones are widely used device for ecommerce purposes. Tablet users were 8.6% whilst those who access ZIMPOST services using laptops recorded a frequency of 5.7%. Some respondents, however, used a combination of devices, with 11.4% agreeing to using both computers and smartphones, whilst 5.7% have a computer, smartphone and a tablet. In light of the foregoing, it is imperative for ZIMPOST to develop smartphone-friendly e-commerce systems since the majority of ZIMPOST customers have smartphones. This is because smartphones are more affordable, mobile and portable. Also, most e-commerce platforms are smartphone friendly. On the other hand, laptops require technical skill and knowledge to use, which probably explains why they have low usage. High proliferation of smartphones over all other gadgets resulted in higher usage of smartphones to access online services by respondents

Scope of ZIMPOST e-commerce: The qualitative approach

The study also collected qualitative in-depth data about the scope of ZIMPOST's e-commerce. Respondents, who were ZIMPOST employees, were asked to indicate what they feel regarding the use of e-commerce at ZIMPOST. Through thematic content analysis, table 3.3 presents the findings.

Table 3.3 Thematic analysis of Scope of ZIMPOST e-commerce

In your view, what is the current situation regarding the adoption of ZIMPOST's e-commerce services by people/firms?

Main Theme	Direct Quotes	Sub themes
Scope of ZIMPOST e-commerce	R1, "E-commerce in ZIMPOST is nonexistent, we cannot talk of E-commerce without the network and proper infrastructure." R2, "We do not have E-commerce at the moment because we are doing our work manually always." R3, "E-commerce is not yet available, we just heard of smart post office which is not yet introduced to all stations." R4, "People and firms are not aware of the ZIMPOST e-commerce services, we have no running e-commerce facility now. If truth be said, there is zero service delivery in most post office stations." R5, "Nothing to talk about as you see we are over relying on this brick-and-mortar way of doing business." R6, "We are using the traditional methods to do business." R7, "Non-existing."	E-commerce is Non existing

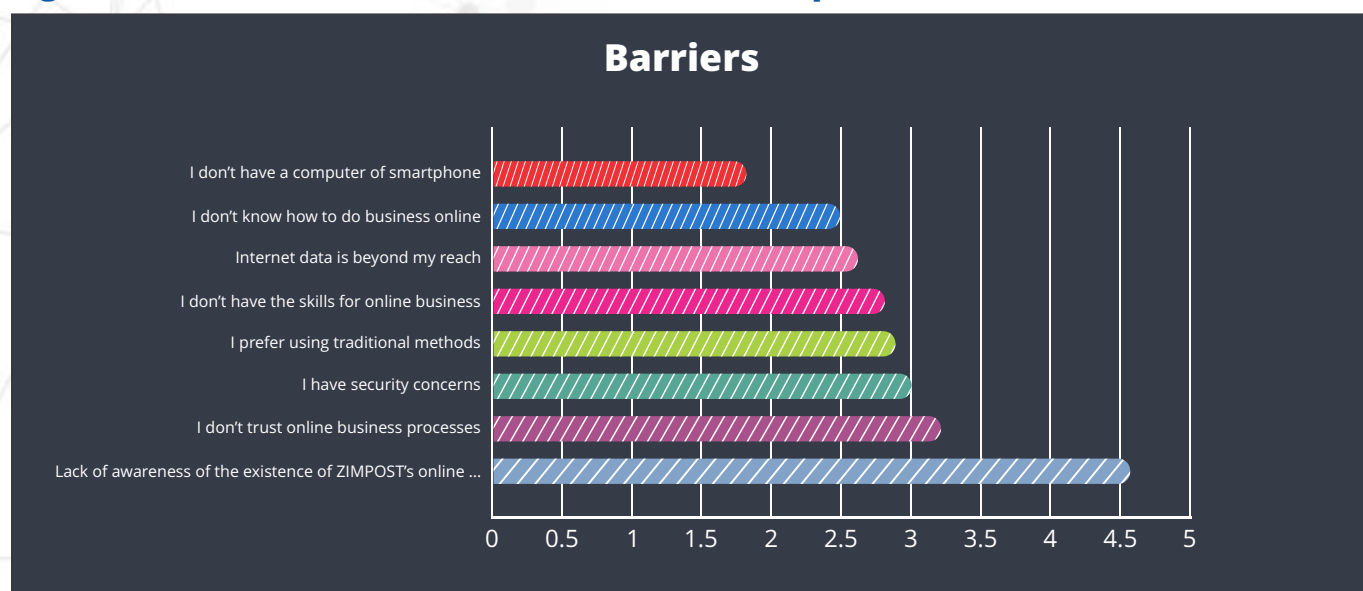
The current situation regarding the ZIMPOST's e-commerce services by people or firms is non existing. All the respondents concurred that there is no e-commerce at ZIMPOST now though it was highlighted that issues to do with smart post office were introduced and not yet fully embraced by the ZIMPOST.

BARRIERS OF E-COMMERCE ADOPTION AT ZIMPOST

Barriers to e-commerce adoption

The study examined the barriers which ZIMPOST customers were facing in accessing e-commerce services. Results are presented in Figure 3.10.

Figure 3.10 Barriers to ZIMPOST E-Commerce Adoption



The study quantified the barriers of e-commerce adoption. The major barrier of e-commerce adoption and usage at ZIMPOST was lack of awareness of the services of ZIMPOST (mean 4.54; n = 1031). All most all respondents who never used ZIMPOST services, indicated that they did not know that ZIMPOST has online services. They have never been exposed to ZIMPOST's commercials and corporate communications creating awareness of such services. A significant number of respondents also indicated that they do not trust online business because of its intangibility aspects (mean 3.13; n = 1031). They find it hard to pay for products/ services online without human interaction. Trusting online business was rooted in conventional business culture which favours over the counter in-person selling. The third barrier of ecommerce is security fears (mean 2.98; n = 1031). The majority of respondents were afraid of e-commerce interactions. Some of these have never been scammed online, it is just e-commerce phobia. Preference for traditional methods over e-commerce is another notable barrier which recorded a mean score above 2.5 (mean 2.77; n = 1031). Thus, it shows that in Zimbabwe, the

majority of customers still have a preference towards offline business interactions, and that draws back interests in e-commerce.

Lack of skill in e-business proved to be another significant barrier of e-commerce with a mean score of 2.7 (n = 1031). Affordability of internet data is another barrier of e-commerce (mean = 2.6; n = 1031). Given that the mean score surpassed the 2.5 mean score mark, this shows that a significant number of respondents found internet data a bit expensive for them. However, the mean score was just above 2.5, which also shows that many more people can now afford internet data. Thus, the impact of internet data affordability on e-commerce adoption is moderately fair or neutral. Ignorance of e-commerce itself was also found to be a barrier (mean 2.51; n = 1031). However, the mean score was 2.51, which validates that the effect of e-commerce ignorance is rather moderate, as the majority were neutral. Although the study had posited that absence of a digital gadget could be a barrier, the findings from this study disconfirmed that, as a mean score of 1.85 (n = 1031) shows that respondents disagreed that they did not have digital gadgets. This further shows that the majority of Zimbabweans now own smartphones, which are e-commerce enabled. That presents a ready market for e-commerce business opportunities.

Thematic barriers to e-commerce adoption: A qualitative approach

The study also thematises e-commerce adoption from interviewees. Table 3.4 presents the findings.



Table 3.4: Thematic Analysis of E-Commerce Barriers

What barriers do you think people/firms encounter in adopting ZIMPOST's ecommerce services?		
Main Theme	Direct Quotes	Sub themes
Barriers to adopting ZIMPOST's Ecommerce	R1, "The systems are poor, network is nonexistent. Customers no longer have confidence in ZIMPOST which reduces the ZIMPOST visibility to communities. Parcels are being returned to the originator because communities are not able to receive the post parcel as the boxes are closed. Moreover, transport is affecting us as ZIMPOST, we do not have trucks or vehicles for delivery of parcels, staff motivation and morale is low which hinders the progress of Ecommerce adoption or smart post office initiative." R2, "The guys at this station are computer shy that is a major barrier, if you introduce a new product that deals with the computers some of the employees will say this is not mine. ZIMPOST is not capacitated at regions and branches in terms of networks and outlook of infrastructure does not give a good image to potential and current clients. Lastly staff motivation is low." R3, "Backup/Power system: Clients are taking a lot of time seated on the bench waiting for the service and they become frustrated to the extent that they phone the sender or either money or parcel to use our competitors or to withdraw back the money so that they can use other service providers. Moreover, lack of float for ZINARA and ZESA, we end up telling clients that we do not have network, yet it's the issue to do with the float system. Currently clients are saying we do not go to ZIMPOST for Utilities because they always lack network, though it's not true, it's the issue to do with the float availability. Small stationery items that must be stocked are out of stock that will negatively impact the business because customers know that we are always out of stock. If resources are available staff will be motivated, we don't want to come home and spend the day seated at	- Systems - Network - Lack of confidence - Unreliable deliveries or transport system - Poor staff motivation and morale - Staff training - Staff training - Infrastructure - No backup power - Turnaround time - Lack of essential resources - Outdated computers - Lack of trust in ZIMPOST services

Table 3.4: Thematic Analysis of E-Commerce Barriers

What barriers do you think people/firms encounter in adopting ZIMPOST's ecommerce services?		
Main Theme	Direct Quotes	Sub themes
	<i>the office. Give us resources and make follow ups to why we did not meet the targets as it gives employees the power to do more than becoming frustrated with the system."</i> R4, <i>"Transport is major challenge. How do you run a courier business without transportation? Our competitors are riding on our weaknesses. We do not have vehicle for delivery and even for visibility. No network for the EMS or Courier business, networks cover issues like ZESA, Internet, System of Track and Trace is poor. System not delivering messages to clients for example our ZIPCASH system. If we compare with ACCESS Forex, our system does not deliver the message and most of these runners they want the message which is instant to the Sender and the customer. So, they end up looking for those who provide prompt messages to them. To tell you more, we end up using our personal text messages to create the messages to send to both the client and the sender the codes. Reversals of transactions are too much, dozens and dozens of reversals requests in the corporate group, it's a sign of poor system and clients will be frustrated, and they end up sharing their grievances to potential clients. Even in groups that we belong to in the society, the clients talk of ZIMPOST, and they will be painting a bad picture of the corporate which reduces the clients from adopting the ZIMPOST ecommerce services. Lack of trust with post office services as some clients leave their parcels at the post office and later during</i>	

Table 3.4: Thematic Analysis of E-Commerce Barriers

What barriers do you think people/firms encounter in adopting ZIMPOST's ecommerce services?		
Main Theme	Direct Quotes	Sub themes
	<i>the day they meet with our staff at the bus stations as we will be trying to send the parcels with the fastest means possible because the customer requires an overnight business. It's pathetic that we opt to use other means to send the parcels to other stations and the customer may be at the same place which renders the post office unreliable. Comparing two customers who came together to get money from ACCESS FOREX and the other on ZIPCASH, those for ACCESS FOREX gets instant service but our internal system can take more than 30 minutes to get connected and serve the customer. Next time the customer will not approve any ZIMPOST services."</i> R5, "Gadgets are no longer supporting the e-commerce system and they are ineffective; they are outdated, and we are working with those gadgets, yet no efforts are being done to have efficient service provision. We end up using our personal cellphones to serve the customers on the online platforms to cover up the company's weaknesses."	

The major barriers that people/firms encounter when trying to adopt ZIMPOST ecommerce services are lack of confidence and trust to the brand. Customers are not getting the services they need from ZIMPOST due to lack of resources and inadequate infrastructure that covers the networks, systems and hardware. Furthermore, critical resources like delivery vehicles are not available which takes away the confidence in customers to adopt ZIMPOST e-commerce services. Poor turnaround time and staff motivation was cited by most respondents as the other key barriers to the initiative of ecommerce adoption in ZIMPOST.

Strategies to overcome barriers to e-commerce adoption

A follow up question was asked to respondents so that they offer perceived solutions to the highlighted barriers. Results are thematically presented in Table 3.5.

Table 3.5: Thematic Analysis of strategies to overcome barriers

Could you proffer strategies to address the barriers you highlighted above?		
Main Theme	Transcriptions	Sub themes
Strategies to E-commerce Adoption Barriers	R1, "Major improvement from network service providers. Allowing subscriptions for boxes to be done even online and the schools to serve the communities so that parcels will be delivered to the recipients. The government can cheap in and provide vehicles for Zimpost stations or at regional level because most of the people nowadays they are using buses to transfer parcels which has high risks though the parcel can be delivered in a single day. Zimpost will have a single vehicle moving around only one once a week." R2, "Training and awareness of staff members to fully embrace the e-commerce adoption. Sound network is required so that we get results from the system. Additionally, we need improvement on outlook of the post offices and improve on staff motivation (staff involvement, transparency, approach) that creates positive attitudes towards the work culture." R3, "Backup is critical to all this initiative, work on solar system that is sustainable going forward than the generators that require fuel. Marketing of services is required urgently and use the bottom-up system to counter the challenges than forcing the top-down approach that is not applicable to Zimpost system, some of the challenges are station based and they have to be listened to." R4, "Have reliable vehicles/transport for goods and EMS delivery. Reliable in terms of timetable and reliable in terms of efficiency. Our vehicles are not well serviced, they required topping up oil along the journey which is pathetic to the business. Training and development of employees must be done, in a proper manner and train employees on computer usage. The system must be solved to be instant to deliver of messages to the sender and the client. Moreover, float system must be resolved to allow person to use a single currency like the USD facility because our system requires RTGS which clients are not willing to convert their forex. Have the infrastructure repaired regularly or make sure an artisan is employed per region, the infrastructure needs repairs both within and outside the buildings."	-Robust marketing -Delivery vehicles -Training of staff to fully embrace e-commerce. -Backup power -Sound networks -Reliable transport (timetable & efficiency) -Infrastructure upgrade and repairs

Table 3.5: Thematic Analysis of strategies to overcome barriers

Could you proffer strategies to address the barriers you highlighted above?		
Main Theme	Transcriptions	Sub themes
	R5, "Adequate networks that are fast and reliable together with training and support of the principals. Currently product knowledge is not cascaded to all stakeholders (Mostly employees) because at times we hear of the product from the public or customers who will come to enquire yet us who are within we will be unaware of the new developments. Installation of a solar system will encounter the challenge of power or backup system. Employee welfare must be reconsidered to uplift the employee spirit at work. There is a lot of communication gap between ground floor and top management. This results in poor motivation levels that will affect the new business model. Also increase in." R6, "Increase the network bandwidth for all branches plus capacitation of employees and improving on motivation levels results in the effective service provision. We must start using solar which is less expensive, as the generator may require fuel every day, and requesting for fuel daily may not be feasible because the approval process is too long and delayed." R7, "Have delivery vehicles in place. We are talking of e-commerce; we need machines that are compatible with ecommerce and not outdated. Let's move with time and technology advancement. Backup of solar is required, we have a small generator that does not power all gadgets at one goal."	

The strategies to address the barriers that are being encountered in ecommerce adoption from interviewees include marketing of the ZIMPOST in all media platforms to improve visibility and brand image. Marketing is at the low end as indicated by all interviewees. Moreover, the provision of backup services to the post offices to improve customer confidence and trust in the services being offered. Networks and systems must be up to date to embrace ecommerce in ZIMPOST, now the systems are on the low end and some of the post offices are still offline that does not allow the full adoption of ecommerce across the country. Reliable transport for collection and delivery of parcels must be considered as major strategy because the competitors are offering services beyond the capacity of ZIMPOST as they have running fleets of vehicles. Additionally, the vehicles must be well serviced to be efficient and a timetable must be provided on routes to know and track clients parcels in real time. On the other hand, the issues to do with staff motivation (staff involvement, transparency and approach) that creates positive attitudes towards the work culture must be rapidly worked on to allow the smooth flow of e-commerce adoption with the ZIMPOST staff members.

DRIVERS OF E-COMMERCE ADOPTION AT ZIMPOST

Drivers of e-commerce

The study examined the validity of five drivers of e-commerce. These drivers were informed by literature, and indicated that for e-commerce technology to be adopted by customers, it should:

- *be easy to use (simplicity driver);*
- *presents benefits to the user (utility driver);*
- *be supported by the significant members of the society (social driver);*
- *be supported by the existence of hardware, software and support services (infrastructural driver);*
- *be in line with the user's personal abilities (digital literacy driver).*

To validate the reliability of the drivers, descriptive test results are presented in table 3.6 below.

Table 3.6: Descriptive and reliability test for the drivers of e-commerce adoption

E-commerce Adoption Drivers	Mean	Standard Deviation	No. of Items	N
Utility	3.04	1.366	5	1031
Simplicity	2.67	1.277	4	1031
Social	3.81	1.170	6	1031
Infrastructure	3.38	1.328	5	1031
Digital literacy	3.45	1.356	5	1031



Zimbabweans are mainly driven by the society towards using e-commerce. The social driver recorded the highest mean score, with an acceptable standard deviation of 1.170, (SD < 2.0). This means that significant members of the society have a greater influence in motivating others to use electronic commerce. The greatest social influence was coming from peers, superiors, family, workmates/ school mates and community; in that order. Digital literacy recorded the second highest influence, with a mean score of 3.45 (SD = 1.356). This means that ZIMPOST customers have the ability to use digital platforms. There is high digital literacy among ZIMPOST customers, which presents a ready pool of customers to cling on e-commerce systems, should barriers to e-commerce adoption are eliminated. The third driver which influences adoption of e-commerce is the infrastructural driver. This driver relates to the availability of hardware, software and support services. Availability of a smartphone gadget and internet access proved to be the highest contributors of this driver. Analysis of this driver further proved that ZIMPOST has a very poor online support services (least mean of 2.60). Thus, to drive users towards e-commerce, there is a strong need for ZIMPOST to have a strong online support system. A mediocre mean score for Utility of 3.04 (SD = 1.366) shows that the benefits of using e-commerce are still middling. Respondents do not see or feel the major benefits of buying or selling using ZIMPOST's e-commerce platform. This presents the need for ZIMPOST to promote its online services highlighting the benefits of the e-commerce platforms. A low mean score for simplicity of 2.67 (SD = 1.277) shows that the e-commerce platforms themselves are not easy to use for the ZIMPOST customers, hence, the need to simplify navigation, language, visuals, web designs, page discoverability, online payment and access.

Drivers of e-commerce: A qualitative approach

Interviewees were asked to highlight factors that drive e-commerce adoption at ZIMPOST.

Table 3.7 below presents the findings.

Table 3.7 Thematic Analysis of E-Commerce Drivers

What Factors Would You Say Drive People/firms To Adopt E-commerce Services Offered By Zimpost?		
Main Theme	Direct Quotes	Sub themes
Drivers to adopt Ecommerce services offered by ZIMPOST	R1, "Marketing must be done at all levels including the road shows and engaging the school heads to assist in marketing the services to the communities." R3, "Marketing of services as other players are doing mostly in the money transfer facilities." R4, "At the moment no adoption is taking place as the customers are sharing information about our failures and opting out for the competitors." R5, "Marketing with provision for improvement in the services offered. Not too much relying on the agency business. Customers would like to know what Zimpost offer compared to being an agent of other businesses." R6, "Currently nothing to offer the clients in terms of ecommerce adoption, so the driving factors are not yet available as we do not have the infrastructure or networks for the ecommerce. No reliable power or backup and we do not have the drivers for adoption." R7, "Proper systems and networks that are reliable convince the customers to adopt the e-commerce."	-Marketing of services. -Improvement of current products/services offered by Zimpost. -Infrastructure -Networks -Reliable power or backup power.

The key issues from the respondents on the drivers for people/firms to adopt ecommerce services offered by ZIMPOST are marketing of the services that are offered and product improvements. Moreover, infrastructure must be provided that include the proper systems, networks and backup power that will assist in restoration of customer confidence

THE RELATIONSHIP BETWEEN E-COMMERCE ADOPTION DRIVERS AND E-COMMERCE ADOPTION INTENTION AT ZIMPOST

The study validated the five drivers of e-commerce adoption as simplicity, social, infrastructure, utility and digital literacy. These five drivers were tested for association with ecommerce adoption intention. The study used adoption intention variable instead of actual adoption variable because the majority of respondents had not adopted ZIMPOST's ecommerce, hence the need to relate adoption drivers to e-commerce adoption intention.

Table Correlations

Correlations		
		E-commerce Adoption intention
<i>Simplicity driver</i>	<i>Pearson Correlation</i>	.475**
	<i>Sig. (2-tailed)</i>	.000
	<i>N</i>	1031
<i>Social driver</i>	<i>Pearson Correlation</i>	.386**
	<i>Sig. (2-tailed)</i>	.000
	<i>N</i>	1031
<i>Infrastructure driver</i>	<i>Pearson Correlation</i>	.503**
	<i>Sig. (2-tailed)</i>	.000
	<i>N</i>	1031
<i>Utility driver</i>	<i>Pearson Correlation</i>	.553**
	<i>Sig. (2-tailed)</i>	.000
	<i>N</i>	1031
<i>Digital Literacy driver</i>	<i>Pearson Correlation</i>	.296**
	<i>Sig. (2-tailed)</i>	.000
	<i>N</i>	1031
<i>Adoption intention</i>	<i>Pearson Correlation</i>	1
	<i>Sig. (2-tailed)</i>	
	<i>N</i>	1031
**. Correlation is significant at the 0.01 level (2-tailed).		

Utility driver recorded the highest association with e-commerce adoption intention ($r = 0.553$; $P = 0.00$; $n = 1031$). This shows that when customers are aware of the utility (value or benefits

of ZIMPOST's e-commerce services, their propensity to use e-commerce services for ZIMPOST are augmented. In other words, ZIMPOST should crystalize the benefits of using e-commerce services through marketing communications so as to drive user intention behaviour. The second highest association was found between the infrastructural driver and e-commerce adoption intention ($r = 0.503$; $P = 0.00$ $n = 1031$). This shows that there is a strong, positive and statistically significant relationship between e-commerce infrastructure and e-commerce adoption intention behaviour. Availability of hardware, software and support services are the infrastructural aspects which drive e-commerce adoption intention behaviour. Simplicity driver ($r = 0.475$; $P = 0.00$ $n = 1031$) and social driver ($r = 0.386$; $P = 0.00$ $n = 1031$) recorded moderate, positive and significant associations with e-commerce adoption intention behaviour. This shows that ZIMPOST's e-commerce platform should be simple to use and acceptable by the society. The simpler the e-commerce platform, the higher the e-commerce adoption intention behaviour. Conversely, when significant members of the society support the use of e-commerce business, the propensity to adopt e-commerce is enhanced. Digital literacy recorded the least association with e-commerce adoption intention ($r = 0.296$, $P = 0.00$, $n = 1031$). This association confirms that the more knowledgeable customers are with digital technologies, the higher the chance of developing an intention to use e-commerce systems. Overall, the study managed to confirm that all e-commerce adoption drivers tested in this study have significant correlations with e-commerce adoption intention behaviour. This goes to indicate the needed drivers that ZIMPOST should tweak for it to improve its usage rate of e-commerce services.

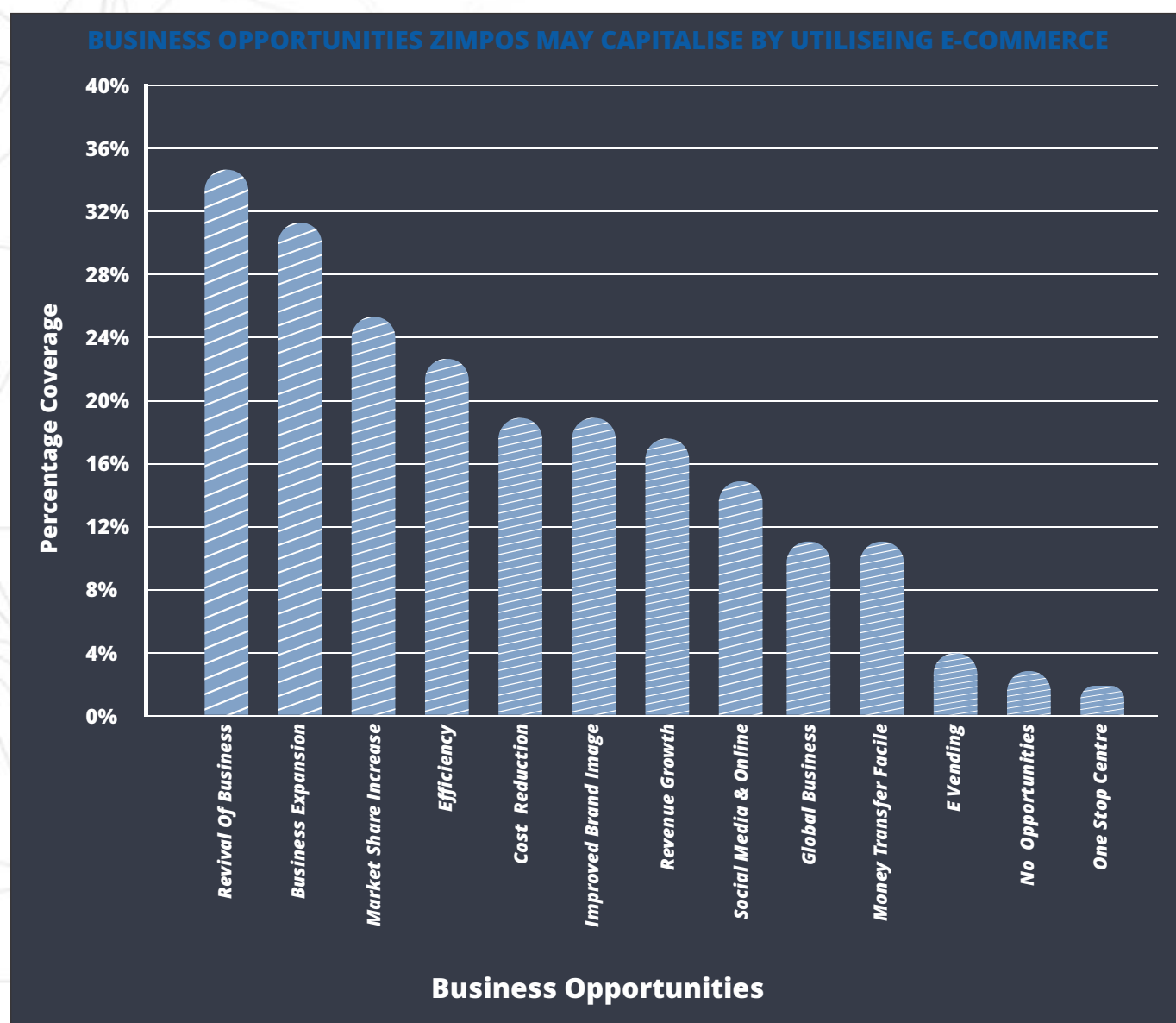
E-COMMERCE BUSINESS OPPORTUNITIES

This section of the study presents an analysis of the e-commerce business opportunities that ZIMPOST may tap into. The study further analysed opportunities which customers may also enjoy should ZIMPOST fully embrace e-commerce.

ZIMPOST E-commerce Business Opportunities

Figure 3.11 presents the ZIMPOST opportunities which emanate from e-commerce adoption. Information was compiled from 953 references with 13 themes for the business opportunities that may arise to ZIMPOST if they tap into ecommerce.

Figure 3.11: ZIMPOST business opportunities



The major opportunity was revival of the business (34.81%). The respondents were indicating that ZIMPOST has lost much of its business to competitors, and they must revive it first to gain customer confidence and loyalty; which can be done through e-commerce. Business expansion (31.67%) as ZIMPOST could diversify its business and offer services from different sectors. Market share (25.28%) followed by efficiency (22.61%) then cost reduction (19.22%), improved brand image (19.09%), revenue growth (17.41%), social media and online marketing (15.18%), global business (6.86%), money transfer facilities (6.80%), E-Vending (3.92%), those who did not anticipate opportunities (2.47%) and lastly one stop centre (1.92%).

ZIMPOST e-commerce business opportunities: an in-depth approach

The study further analysed the e-commerce business opportunities which ZIMPOST may enjoy from an in-depth point of view. Through thematic analysis, Table 3.8 Presents the transcriptions and emerging themes.



Table 3.8: Thematic Analysis of ZIMPOST business opportunities

What business opportunities do you think ZIMPOST can capitalize by using ecommerce?		
Main Theme	Direct Quotes	Sub themes
Business opportunities ZIMPOST can capitalize by using E-commerce	R1, "Online buying and selling of goods and services that are requirement by communities, for example stationery for schools and learners. Those in town can buy for their relatives in the rural areas through the post services. Money transfers business opportunities, we are the ones who gave business to Ecocash, they started the business through our shops, and we became their agent. They had to override on our weaknesses and then today they the leading mobile money transfer, yet Zimpost is nonexistent. Courier services restoration. Zimpost has let the business go to other players due to lack of those facilities like e-commerce and adequate transport services. If e-commerce is introduced properly, we will be able to compete with SWIFT, as for now they have overtaken us left, right and center." R2, "Customers will start to have confidence in us, many customers do not know that Zimpost is in existence. Last month I addressed the school heads and I felt out of place as we are not modernized, our competitors are doing more than us. We need to retain the business of parcel deliver around the country." existence. Last month I addressed the school heads and I felt out of place as we are not modernized, our competitors are doing more than us. We need to retain the business of parcel deliver around the country." R3, "Restoration of customer confidence that will trigger huge business growth in Zimpost services. Timely delivery of mails and parcels will attract more customers and the customers will start believing in the brand. Our image will grow more than it is now." R4, "We have great business potential but the only issue we have in Zimpost is becoming clueless when the business starts to flourish. Sort out the issue being raised, and business is there, and people are waiting to be served. Opportunities are available in ZINARA, ZESA and Insurance. Clients are willing to pay any amount competitive if the system is available. Just have reliable network which is faster because the bandwidth is very slow. More products can be provided like laptops, earphones and other accessories."	-Parcel/mail delivery services -Branch network expansion -Business growth -Increased revenues base -Money transfer business -Insurance services -Stationery business -Commercialize internet provision for better internet quality in CISs

Table 3.8: Thematic Analysis of ZIMPOST business opportunities

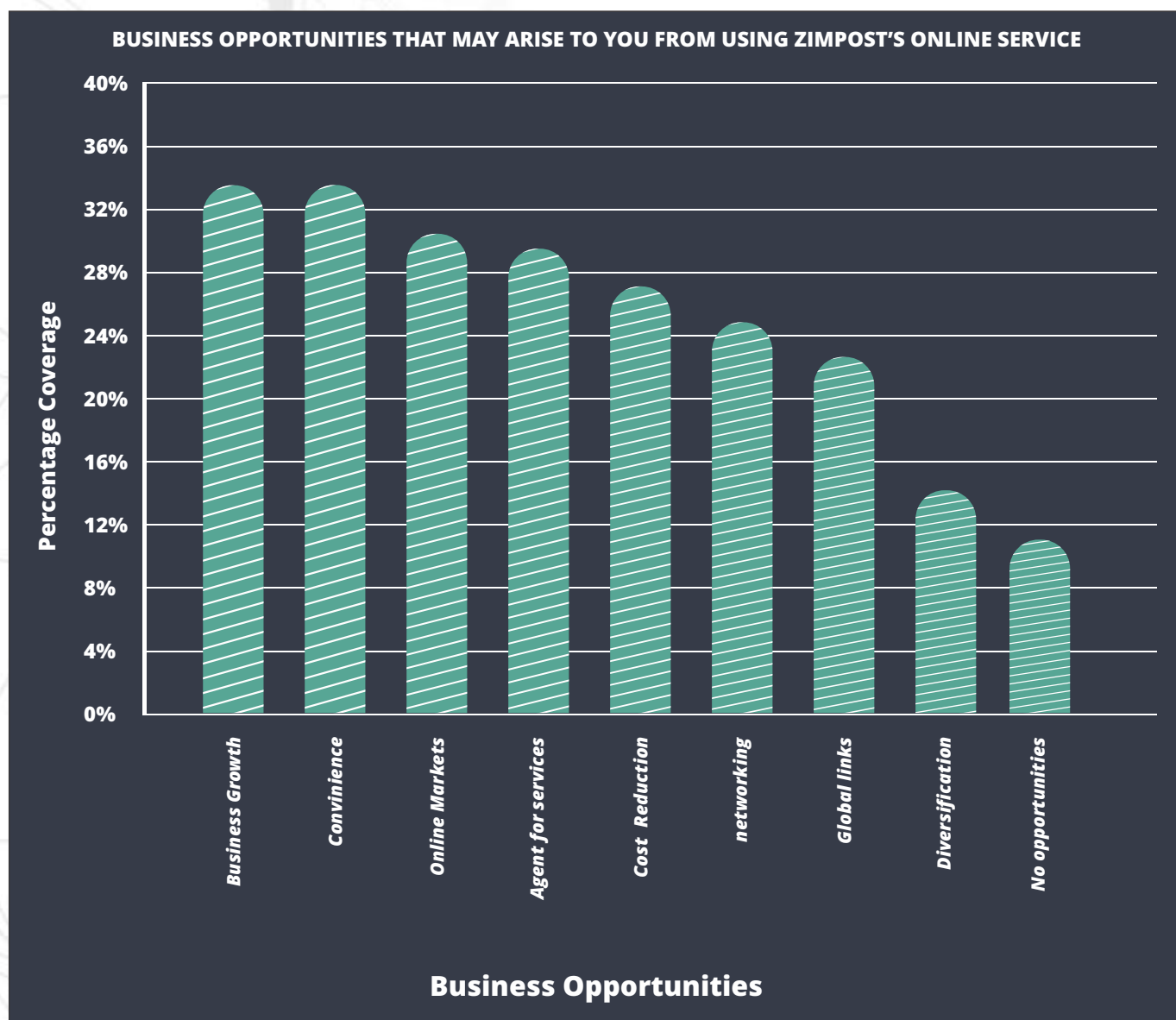
What business opportunities do you think ZIMPOST can capitalize by using ecommerce?		
Main Theme	Direct Quotes	Sub themes
	R5, "Supply of back to school commodities in our communities. We don't have to talk of new business. Can you support what is there. Zimpost is not taking care of its business. In addition, there is need for expansion of the business to growth points around the regions that are not currently serviced by Zimpost." R6, "Opportunities like branch network expansion and technological advancement of the community will make them be at par with other cities that results in social development of the community." R7, "Restoration of the lost businesses key opportunity in Zimpost and the EMS business will be top notch as we were the leading brand."	

The major business opportunities coming out from interviewees are parcel/mail delivery services, branch network expansion that increase business growth and revenues. Money transfer business opportunities and Insurance services are among the business opportunities for ZIMPOST. The individual and corporate customers were asked of other business opportunities that may arise to them from using ZIMPOST's online services as well as the business opportunities that ZIMPOST may capitalize on by utilising e-commerce. The analysis of the two questions is provided below.

Customer based e-commerce opportunities

Should ZIMPOST effectively implement e-commerce activities, its customers also have an array of opportunities that they also tap into and enjoy. Figure 3.12 presents the findings. Data was collected from 613 references and 9 themes were generated from business opportunities that may arise to people/firms from using the ZIMPOST online services. The information is presented in Figure 3.12 of the business opportunities to customers.

Figure 3.12: Customers' Business Opportunities



Most of the respondents indicated business growth (33.61%) as the major opportunity they will get from ZIMPOST online service followed by convenience (33.45%) in terms of time saving and ability to transact from any place. Online markets (30.76%) is another opportunity arising to people or firms as they will be able to do online marketing, buying and selling various goods and services online. Some indicated that they would tap into Agent business (30.15%) these involve becoming a ZIMPOST agent in different markets and assisting collection/delivery of parcels, money transfers and other services offered by ZIMPOST. Other mentioned opportunities are cost reduction (27.59%), Networking (25.15%), Global links/

International markets (22.91%), diversification (14.13%) and those who did not have opportunities (10.81%) as they had no confidence in ZIMPOST services.

OVERALL ASSESSMENT AND CONCLUSIONS

The scope of e-commerce adoption at ZIMPOST

Only 3.39% of ZIMPOST customers enumerated indicated that they have once used ZIMPOST e-commerce services in the past year. ZIMPOST employees who were interviewed supported the same conclusion that e-commerce at ZIMPOST is non-existent, and needs to be revived. Regardless of the poor adoption of ZIMPOST's services, the study found that customers have a high adoption intention behaviour for ZIMPOST's e-commerce services. 81% of all respondents indicated that they are keen to use ZIMPOST's e-commerce services if the existing barriers and challenges are addressed. For the few who have used ZIMPOST's ecommerce services, the study concludes that the platform is not very effective with an overall effectiveness score of 60%, which shows mediocrity as an e-commerce platform. Most customers who use ZIMPOST services mainly access the platform using smartphones (68.6%). Others however use a combination of more than one device, yet smartphones are almost part of the universal set. A significant number of respondents are loyal to ZIMPOST's services, especially in rural communities. However, the majority of them are not using ZIMPOST's digital services.

Barriers to e-commerce adoption at ZIMPOST

The study concludes that barriers to e-commerce adoption are two-fold: internal barriers and external barriers. Internal barriers emanate from ZIMPOST itself. These are poor marketing strategy to promote

the digital platforms of the company (*not even a single customer was ever exposed to ZIMPOST marketing stimuli*), failure to upgrade network systems, poor staff motivation and morale, absents of staff training and retraining, outdated infrastructure (physical evidence) which erodes customer confidence in IT infrastructure, poor power backup plan, lack of essential resources, absence of a user-friendly payment gateway. External barriers are presented by forces outside ZIMPOST. Key among these being customerbased barriers. These include distrust with online business processes, online security fears, preference for traditional methods, poor online business skills, unaffordability of Interestingly, the study concludes that customers have e-commerce compatible gadgets, hence gadget availability is not a barrier

Drivers of e-commerce adoption at ZIMPOST

The study concludes Zimbabweans are mainly driven by the society towards using e-commerce. The greatest social influence was coming from peers, superiors, family, workmates/ school mates and community; in that order. The greater the social influence, the higher the probability of e-commerce adoption. Digital literacy, one's abilities in using technological systems, is another driver. The higher the digital literacy, the greater the chance of e-commerce adoption. The study further concludes that availability of digital infrastructure (hardware, software and support services) significantly drives e-commerce adoption. The study however concludes that ZIMPOST has a very poor online support service. Customers can also be drawn to using ZIMPOST's e-commerce services through crystalizing the benefits of the e-commerce platforms (utility driver). There is also greater need to simplify navigation, language, visuals, web designs, page discoverability, online payment and access towards driving online usage behaviour. Other key drivers of ZIMPOST's e-commerce adoption are improving marketing and communication services, improving network infrastructure, power supply and broadening product mix depth and breadth.

E-commerce business opportunities

The study concludes that there are many opportunities which ZIMPOST can tap into through e-commerce. Through e-commerce usage, ZIMPOST can regain lost market share and revive its business significantly by a factor of 34.18%. E-commerce also presents an opportunity for business expansion in the digital era as more and more businesses digitize. Costs can be significantly reduced and geographical spatiality and boundaries will be eliminated thereby allowing ubiquitous delivery of products and services around and beyond national boundaries. Thus, there is great opportunity for global business reach and pressing harder on courier players on international levels. Opportunities that were found ripe for current business expansion are in:

- ▶ Parcel/mail delivery services
- ▶ Money transfer business
- ▶ Insurance services

Through e-commerce, ZIMPOST can further diversify its business and offer services in different sectors. A ready market for the following services was obtained:

- ▶ Stationery business
- ▶ Commercialization of internet services
- ▶ Digital gaming services

Adoption of e-commerce by ZIMPOST and its customers further presents an array of opportunities to the ZIMPOST customers themselves. Chief among these are potential opportunities for growth of their businesses through provision of online markets. Specific business opportunities which are of interest to ZIMPOST are: opportunities for agents' business, opportunities for digital seamless networking of customers with ZIMPOST, global linkages and restoration of lost brand trust and image

RECOMMENDATIONS



The greatest driver of e-commerce adoption driver which promotes adoption of e-commerce adoption was found to be the utility driver. Hence, ZIMPOST should have a strong marketing team which is vibrant and well versed in digital marketing so as to crystalise the benefits of ZIMPOST's e-commerce systems. Aggressive mass media marketing campaign is critical to concertise customers of the existence of digital services at ZIMPOST. The objective of the campaign should be to create awareness of the e-commerce services and to substantiate the benefits of e-commerce. Merely using digital marketing only may not yield the desired results in some remote communities with poor connectivity, yet it is a useful strategy in urban and peri urban centres; hence the need for integrated marketing communications. Communication should also allay consumer fears and distrust for e-commerce platforms, which were found to be barriers of e-commerce adoption. The importance of the society was found to be significantly related to e-commerce adoption. Hence, the study recommends targeting customers' e-commerce behaviour through social influencers and reference groups. This entails brand endorsing by a known social figure with significant positive influence. It also includes targeting social reference groups such as religious groups, institutions and social media groupings. ZIMPOST should also revamp the existing e-commerce systems through augmenting customer experience at each digital touch point along the digital customer journey. This recommendation entails using a user-friendly payment gateway which are compatible with many Zimbabweans such as mobile money, ZIPIT services and cash on delivery (COD). It also informs redesigning systems that are more compatible with smartphones than computers, given that more users use smartphones. There is also need to design a mobile phone application, downloadable on Play store or App store. Such a mobile based system eliminates some barriers identified; and to design website which is easy to navigate, allows customers to track parcels and with few clicks to get to the last page. ZIMPOST should further capitalise on the existing general e-commerce adoption rates by engaging with customers on social networks, hence, the need for chatbot business as a communication moth piece of the company. It should also Develop an application which is multilingual for the benefit of many who do not prefer English language. Further, there is need to design system which is friendly to the visually impaired segment though voiceovers. The company should seek to motivate employees to improve digital services. This can be done through employee training and retraining, offering incentives for e-commerce development.

For instance, allowing employees to grow with their e-commerce idea. That is, if an employee suggests a way to market or introduce a new digital product, such an employee should be allowed to manage and spearhead the project. The perception of e-commerce business for ZIMPOST is also affected by the perception of the ZIMPOST's offline business, hence, the study recommends the revival of the courier and postal services and other services done in the banking halls. These can be done through ensuring that each branch has enough RTGS and USD float for agency business related services. Eliminate direct competition from insurance brokers through denying them access into the ZIMPOST premises or nearby areas. The study found that in some instance, these insurance brokers are housed within ZIMPOST and do not meet variable costs such as electricity. That evidently affects business performance. Train boundary spanners (front line employees) on good customer service. ZIMPOST should also embrace effective IT governance systems. The company should periodically conduct IT system audits to enhance its relevance given time. There is need for top management support in seriously considering IT governance as a strategic goal of the company and the need for it to be a key result area (KRA). There is also need for information security management and IT risk management audit. In some cases, the study found that ZIMPOST's network for ZIMPOST boundary-spanners was down, which indicates the need for assessment of such risk, causes and threats through IT governance



Appendix 1:

ZIMPOST Network Summary



	WAN	LAN	CIC's Connected
Harare			
Avondale	✓	✓	x
Borrowdale	✓	✓	x
Causeway	✓	✓	✓
Chisipite	✓	✓	x
Chitungwiza	✓	✓	x
Dzivarasekwa	✓	✓	✓
Glen View	✓	✓	✓
Glendale	✓	✓	✓
Graniteside	✓	✓	x
Greendale	✓	✓	x
Harare Main	✓	✓	✓
Hatfield	✓	✓	✓
Highfield	✓	✓	✓
Highlands	✓	✓	x
Mabelreign	✓	✓	✓
Mbare Musika	✓	✓	x
Mt Pleasant	✓	✓	✓
Mubayira	✓	✓	✓
Mufakose	✓	✓	x
Norton	✓	✓	✓
Ruwa	✓	✓	✓
Seke	✓	✓	✓
Southerton	✓	✓	✓
Tafara	✓	✓	x
Waterfalls	✓	✓	✓
Zengeza	✓	✓	✓
Off Counters			
Amby	✓	✓	✓
Cranborne	✓	✓	✓
Airport	x	✓	x
Beatrice	✓	✓	✓
BromleyOff	✓	✓	✓
Goromonzi	x	✓	x
Kopje	✓	✓	x
Arcturus	✓	✓	x
Concession	✓	✓	✓
Franchised Offices			
Banket	✓	✓	✓
Belvedere	✓	✓	✓

	WAN	LAN	CIC's Connected
Epworth		√	√
Glen Norah		√	√
Juru		√	√
Kambuzuma		√	√
Marlborough		√	×
Sub Post Office			
Emerald HillSub		√	√
HowardSub		×	×
Mbare Stodart		×	×
Nzvimbo		×	×
Tariro Matongorere		×	×
Mashonaland			
Birchenough Bridge		√	√
Bindura		√	√
Centenary		√	√
Chegutu		√	√
Chimanimani		√	√
Chinhoyi		√	√
Chipinge		√	√
Hauna		√	√
Kariba		√	√
Karoi		√	√
Marondera		√	√
Mt Darwin		√	√
Mudzi		√	√
Murambinda		√	×
Murewa		√	√
Murombedzi		√	√
Mutare		√	√
Mutoko		√	√
Mvurwi		√	√
Nyanga		√	√
Nyazura		√	√
Rusape		√	√
Shamva		√	√
wedza		√	√
Off Counters			
Birchenough Msika		×	×
Checheche – off counter Chimanimani		√	√
Chibuwe – off counter Chimanimani		×	√
Chirundu – Off-Counter for Karoi		√	√
Dangamvura – Off Counter for Mutare		√	×
Dorowa – Off Counter Murambinda		×	×

	WAN	LAN	CIC's Connected
Guruve – Off Counter Mvurwi	√	√	√
Headlands – Off-Counter for Rusape	√	√	√
Juliasdale – Off-Counter for Nyanha	√	√	√
Magunje – Off-Counter for Karoi	x	√	√
Marange – Off-Counter for Mutare	x	x	√
Mhangura – Off-Counter for Chinhoyi	√	√	√
Mutasa – Off Counter for Mutare	x	x	√
Mutawatawa – Off Counter Murewa	x	x	√
Mutorashanga - Off Counter Mvurwi	x	x	x
Muzarabani – Off Counter Centenary	x	x	√
Nhedziwa – Off-Counter for Chimanimani	x	x	√
Nyamaropa – Off-Counter for Nyanga	x	x	√
Nyanyadzi – Off-Counter for Birchenough Bridge	x	x	√
Nyazura – Off-Counter for Rusape	√	√	√
Odzi – Off Counter for Mutare	√	√	√
Raffingora – Off-Counter for Chinhoyi	x	x	√
Rushinga – Off Counter Mt Darwin	x	√	√
Sakubva – Off-Counter for Mutare	√	√	√
Selous – Off Counter Chegutu	√	√	√
Watsomba – Off-Counter for Hauna	x	x	x
Franchised Offices			
Sadza	√	√	√
Buhera	x	x	x
Macheke	√	√	√
Nyamhunga	√	√	x
Paulington	√	√	√
Penhalonga	√	√	√
Sub Post Office			
Biriiri – Sub-Post Office for Chimanimani	x	x	x
Craigmore – Sub-Post Office for Chipinge	x	x	x
Darwendale – Sub-Post Office for Chinhoyi	x	x	√
Gawa – Sub-Post Office for Kariba	x	x	x
Mazoe – Sub-Post Office for Bindura	√	√	√
Musengezi – Sub-Post Office for Chegutu	x	x	x
Muzarabani – Sub-Post Office for centenary	x	x	x
Rimbi – Sub-Post Office for Chipinge	x	x	x
Rusitu – Sub-Post Office for Chimanimani	x	x	x
Ruwangwe – Sub-Post Office for Nyanga	x	x	x
Tengwe – Sub-Post Office for Karoi	x	x	x
Trelawney – Sub-Post Office for Chinhoyi	x	x	√
Midlands			
Chiredzi	√	√	√
Chivhu	√	√	√

	WAN	LAN	CIC's Connected
Gokwe	✓	✓	✓
Gweru	✓	✓	✓
Jerera	×	×	✓
Kadoma	✓	✓	✓
Kwekwe	✓	✓	✓
Masvingo	✓	✓	×
Mupandawana	✓	✓	×
Mvuma	✓	✓	×
Nyika	✓	✓	✓
Renco Mine	×	×	✓
Rutenga	×	×	✓
Shurugwi	✓	✓	✓
Zvishavane	✓	✓	✓
Off Counters			
Charandura	×	×	✓
Chikato	✓	✓	✓
Chikombedzi	×	×	✓
Chivi	✓	✓	✓
Donga	×	×	✓
Manoti	×	×	✓
Mashava	✓	✓	✓
Mataga	×	×	✓
Mberengwa	✓	✓	✓
Mbizo	✓	✓	✓
Mkoba	✓	✓	✓
Nembudziya	×	×	
Ngundu	✓	✓	✓
Redcliff	✓	✓	✓
Rimuka	×	×	✓
Sanyati	×	×	✓
Shangani	✓	✓	✓
Triangle	✓	✓	✓
Zhombe	×	×	✓
Franchised Offices			
Chakari	×	×	✓
Mwenezi	×	×	×
Sub Post Office			
Battlefields	×	×	✓
Chatsworth	×	×	×
Crossroads	×	×	×
Gunde	×	×	×
Holycross	×	×	×
Jeka	×	×	×

	WAN	LAN	CIC's Connected
Lalapanzi	x	x	x
Makuvatsine	x	x	x
Malipati	x	x	x
Masase	x	x	x
Mashoko	x	x	x
Mhlanguleni	x	x	x
Morgenster	x	x	x
Munyati	x	x	x
Neshuro	x	x	x
Nyikavanhu	x	x	x
Silveira	x	x	x
Siyahokwe	x	x	x
Somabhula	x	x	x
Matebeleland			
Beitbridge	√	√	√
Belmont	√	√	√
Binga	√	√	√
Bulawayo	√	√	√
Famona	√	√	x
Gwanda	√	√	√
Hillside	√	√	√
Hwange	√	√	√
Lupane	√	√	√
Luveve	√	√	√
Mpopoma	√	√	√
Maphisa	√	√	√
Nkayi	√	√	√
Nkulumane	√	√	√
Parcels	√	√	x
Plumtree	√	√	√
Tsholotsho	√	√	√
Victoria Falls	√	√	x
Off Counters			
Chinotimba	√	√	√
Colleen Bawn	√	√	√
Dete	√	√	√
Entumbane	√	√	x
Esigodini	√	√	√
Filabusi	√	√	√
Lusulu	x	x	x
Magwegwe	√	√	√
Matabisa	√	√	√
Pumula	√	√	√

	WAN	LAN	CIC's Connected
Raylton	√	√	×
Tshabalala	×	×	×
Turkmine	√	√	√
West Nich	×	×	√
Franchised Offices			
Morningside	√	√	√
Llewellin Barracks	√	√	√
Mzilikazi	√	√	×
Northennd	√	√	√
Queens Park	√	√	√
Sub Post Office			
Bingale	×	×	×
Cross Dete	√	√	√
Empandeni	×	×	×
Figtree	×	×	×
Guyu	×	×	×
Kariyangwe	×	×	×
Kenmaur	×	×	×
Kezi	×	×	×
Mbamba	×	×	×
Nhwali	×	×	×
Ntepe	×	×	×
Nyamandlovu	√	√	√
Siabuwa	×	×	×
Sipepa	×	×	×
Solusi	×	×	×
Tshelanyemba	×	×	×
Zezani	×	×	√

Summary

Total number of offices	224
Connected	138
Not connected	86

