E-Government Readiness Assessment for Online Company Registration - A Namibian Perspective

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Abstract - **In striving to improve the service delivery, organizations including Governments worldwide have been turning to information technologies. The culture of doing business online has led to an increase in the creation of electronic records, which in turn has brought about the challenges in the easy of doing business in Namibia. This study has reviewed and provides the e-government readiness assessments for online company registration in Namibia. Concerns have been raised from the public that company registration applications are taking longer than expected. The study has focused on the areas that could have significant impact on improving service standards that affect registration of companies in Namibia. The objectives of the research were to find and provides the physical context, e-government readiness assessments status, the easy of doing business registration, including the legal framework, and the implementation of e-government in Namibia. It also looks at the public or citizens' awareness of e-government and company registration processes. This included the review of report and documentation of Namibia fourth National Development Plan (NPD4), E-governance Strategic Action Plan for the Public Service of Namibia (eGSAP), easy of Doing Business raking and the current Harambee Prosperity Plan (HPP).**

The research approach was adopted with questionnaires and interview survey carried out in public service. The findings of the study was able to describe the state of e-Government implementation in Namibia. The research concluded that, Namibia is still at level one of its four-phase e-government implementation strategy and the Republic of Namibia is currently ranked 88th (out of the 189 economies) in the 2015 ease of Doing Business Report by the World Bank.

Keywords – Information technologies, electronic records, e-government, Namibia fourth National Development plan(NPD4), Harambee Prosperity Plan (HPP).

I. INTRODUCTION

According to [1], E-Government refers to the use by government agencies of information technologies (such as Wide Area Networks, the internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. According to [2], Internet telecommunications and information is needed in today's world to ensure efficiency and quality. At the Ministry of Industrialization the employees at the Department of Commerce were using outdated software and computers, the system kept on freezing which led to a backlog, and as a result work piled up on employee's tables and customers got frustrated when they did not received their registered business documents within the waiting time period. In addition, parties interested to register a company have to travel long distances to come and collect registration forms, complete them and submit. Just as this was frustrating to clients, it was also frustrating for the employees at the Ministry.

A review of the reports, plans and documentation obtained from the Namibia Fourth National Development Plan, Electronic Government Strategic Action Plan for the Public Service of Namibia(2014-2018), Harambee Prosperity Plan, Namibia Investment Centre and Trade and Commerce Department from Ministry of Industrialisation Trade SME Development, as well as from World Bank's Doing Business website provided a good understanding of the background of business investor, business registration to the Government's vision and the general investment and infrastructure climate in Namibia. The following sections summarised the details from these documents plan and website [3].

The Namibia Forth National Development Plan (NDP) is from 2013 to 2017 with the theme "Changing Gear towards Vision 2030". In the NDP Report, four economic priority areas have been identified for Namibia's next level of growth. They are: Logistics, tourism, manufacturing and agriculture. The Report also touches on the foundation issues that needs to be addressed and one such issues includes how to make Namibia the preferred investment location in Africa. It is therefore important to align the outcome of the online company registration with the vision 2030 of making the country as the preferred investment location in Africa. It was stated that by 2019, adequate ICT infrastructure will be in place to facilitate economic development and competitiveness

through innovation, research and development: Availability of latest technologies score improves to 6.0 from 5.5 in 2011.

Other study show that Namibia is ranking 88 in the world in 2015 and there are three areas that are glaring and weighing on the raking, such as, starting a business ranking 156, registering a property ranking 174 and trading across the border raking136. While the Study focuses on the first area, to impact the overall ranking, efforts and improvements should be focused on these 3 areas eventually. In addition, 7 out of the 10 indicators have also declined further in the ranking weakening the overall ranking by 8 positions. The following sections examined the areas of easy of doing business online to gain a better understanding of the current situations.

According to the comparison of Starting Business indicator and its sub-indicators with some other economies, it is clear from this benchmark that Namibia has the opportunity to reduce the number of procedures and the number of days taken for starting a business. Of these 66 days required to Starting a Business in Namibia, the following three procedures contributed to this long timeframe: Reserve a unique company name (18 days), Register employees with the Social Security Commission (21 days) and Register employees with the Workmen's Compensation Commission (20 days).

In the research, it noted that Namibia already has formulated its e-Government Strategic Action Plan (eGSAP) for the Public Service in place. The vision, the thrust area, strategic goals and objectives have been comprehensively identified. There are about 15 initiatives in the eGSAP proposed in the Report to achieve the objectives.

However, one should note that there are other e-Government implementation models. A typical model cited consists of 4 phases. The 4 phases are:

- Phase 1 – Some basic online information via government websites
- Phase 2 – Some basic form of search capabilities, forms download or simple online transactions
- Phase 3 – Some end-to-end online transactions with cross agencies functions
- Phase 4 – Full integration of online services across different functions and services

However, there are challenges along each phase of the implementation ranging from content availability and management in Phase 1 and progresses to availability of skill and competent resources in Phase 2 to manage the e-Government systems [5]. As it progresses to Phase 3 and Phase 4, the challenges become more complex, for example, business process re-design across agencies, inter-government co-operations and policies changes. Namibia has probably passed Phase 1 and is currently placed between Phase 2 and 3 of a typical e-Government implementation model and there are some challenges which will address it in the next stage of the study.

This plan deals with infrastructure development for the country which include the information communication technology infrastructure. Namibia has been connected to the West Africa Cable System (WACS) since May 2012. This connection is destined to bring increased broadband capacity, boost the uptake of internet-based services and internet access in the country. The Government network backbone infrastructure has been redesigned and is being upgraded to increase the bandwidth capacity of 600 Megabits per second (Mbps) from WACS and enable seamless Government service delivery in all the regions. Such infrastructure will make it possible for the implementation of e-government and facilitate decentralization of services. This means that the registration of company can happen anyway in the country if the system becomes electronic and decentralized [6].

The current company registration process is slow and lacks clarity. This is down to a number of challenges. These challenges include a lack of close coordination between ministries/agencies on key business services to promote investments and business start-ups. For instance, many procedures and levels of approval are required across ministries and agencies to obtain relevant licenses and permits to establish a business or investment. Current legislations or regulations have onerous requirements for ministries and agencies to deliver their services and the public service culture rests heavily on the regulatory mind-set. For example, the extensive form filling in multiple copies and the need to procure revenue stamps add burden and complexity to many services encountered by the business owners and investors. Existing Government information management practices are still paper-based and involved tremendous manual processing and while some information communication technology systems are in place, they are largely designed and conceived in silo. There is a lack of a compressive data governance framework to promote data sharing and compressive database to facilitate process and capability integration across the government [7].

A. *Objectives of the study*

In order to achieve the desired results, the study objectives as outlined below were examined. The objectives of the study were used to guide and direct the research. The main objective of this study is to evaluate if the Ministry of Industrialization, Trade SME Development is ready to embrace e-government and migrate to an online company registration service in Namibia. The study also aims to establish if stakeholders are ready to adopt and use e-government systems. To address the main objective, the following sub-objectives shall be considered:

- To evaluate challenges with the current company registration system.
- To establish if people have skill to use the e-government systems.
- To establish if people have the necessary infrastructure that support e-government.

The whole paper has been outlined as follows; the review of related works have been outlined in Section II. Section III has outlined in detail the methodology that have been used in order to achieve the study objectives. The results of the study were presented in Section IV. The conclusion of the paper has been outlined in Section V.

II.   LITERATURE REVIEW

In striving to achieve good service delivery to the public, many Government institutions worldwide have been moving away from traditional file systems into information technology systems. This is possible due to the increasing in ICT technologies worldwide and the level of education in many countries. According to [4], ICT technologies can improve the efficiency of any business in today's world. The conduct of business online has led to an increase in the creation of electronic records, which in turn has brought both advantages and challenges in the way in which business is done. Worldwide, several Government institutions have already implemented the online company registration systems [4].

The Government of Singapore has already implemented the online company registration system [4]. According to the Government of Singapore, such an approach has major benefits as it can attract investors. This is because the whole registration process becomes easier. In Singapore, all businesses must be registered with the Accounting & Corporate Regulatory Authority (ACRA) before they can start operations. This includes any individual, firm or corporation that carries out business for a foreign company [8]. A foreign company that wants to set up a branch for its business in Singapore will need to appoint two local agents to act on its behalf. These agents must be Singapore residents, that is, either citizens or permanent residents, or foreigners with employment or dependent passes. Special licenses are needed for some businesses such as banking, insurance and stock broking. Special licenses are also required for the manufacture of goods such as cigars and firecrackers. All this information can be found on the Government of Singapore website making it readily available to everyone throughout the world [9].

South Africa has facilities of registering companies online through the Companies and Intellectual Property Commission (CIPC). An entrepreneur has four different ways to register a company with the CIPC. The most common form of registration, which is counted by the Starting a Business indicator, is through the CIPC website, (www.cipc.co.za). Registration can also be done at the self-service terminals located in Pretoria, Johannesburg and Cape Town; at some banks (FNB so far); and by email. To register a company online, the entrepreneur needs to register as a customer on the CIPC website. All payments to facilitate the registration process have to be done through electronic payment systems. The experiences and developments in Singapore and South Africa shows the possibility of online company registration even within the context of Namibia. The benefits of conducting business online can also be brought and implemented in Namibia. The Namibian Government has already introduced some initiatives aimed at uplifting the Information Technology systems in the country [10].

In an attempt to increase the efficiency and good service delivery, the Namibian Government has already formulated an e-Government Strategic Action Plan (e-GSAP) for the Public Service. The major e-GSAP strategies implemented by the Namibian government are the Harambe Prosperity Plan (HPP) and the Namibia Forth National Development Plan (NDP4) at aimed promoting investments.

There are about 15 initiatives in the e-GSAP proposed in the NDP4 report to achieve the goals of making ICT services available to every citizen of Namibia. The e-GSAP has approximately 4 phases that were identified in order to provide good services to people by making use of ICT. These four phases contribute to Namibia's vision 2030 which anticipates the transformation of the Namibian economy into an industrialized and knowledge-based economy. The phases are as outlined below:

Phase 1 of the e-GSAP is aimed at providing some online information via government websites (Government of Namibia, 2015). It is evident that in Namibia, this phase has already been achieved to some extent since the Government has already an informative website that gives full information to the people. However, not all Ministries have websites so there is still some work to be done for the Government to achieve this phase completely.

The phase 2 of the e-GSAP has aimed at giving some basic form of search capabilities, downloading of different application forms as well as doing some basic transactions online. The MITSMED has already achieved this phase since people are now able to make name searches and company name reservations online through the website of Business and Intellectual Property Authority (BIPA). However, to have the full certificate of incorporation, one has to send the physical company registration forms to the Ministry. The process is not yet fully online but at least a step has already been made, showing that the Government and the people at large are making efforts towards the embracing of the online business registrations.

Phase 3 and 4 is about end-to-end online transactions with cross agencies functions and full integration of online services across different functions and services respectively. This is whereby a new business will be fully registered online from scratch and there is no need to send physical files to the Ministry. This is the future of company registrations that is being aspired by the Government of Namibia and the members of the public at large. The study have reviewed the current systems being used by other government institutions in other countries in order to evaluate the viability of the approach.

The e-Government Strategic Action Plan outlines the high level vision of the government, which is to be the leading networked government providing client-centric, transparent, affordable and efficient services to all. What's more is that the action plan places emphasis on five areas of importance, starting with impact and visibility that will see the state work towards the redesign of extensive business processes and computerization of services from identified offices, ministries and agencies by 2018. The second is collaborations and networking, which aims to create a network of government institutions which share government resources such as data, infrastructure and solutions through a collaborative approach, also by 2018. The third area emphasized consistency and standardization, aims at a standard and consistent approach, interfaces and interactions for developing and implementing solutions and rendering services by 2016. Furthermore, area number four; training, education and research, aims at having experienced employees for rendering e-services as well as willing clients for participation and accessing serviced the e-Government approach. Finally, foundational support is the area through which government will aim to develop relevant laws and policies as well as the establishment of technical committees to drive the e-Government.

A. The Harambe Prosperity Plan

The Namibian Government has also put in place the Harambe Prosperity Plan (HPP) in an attempt to create a conducive environment for promoting business investments in Namibia. This HPP plan focuses on the provision of the necessary infrastructure aimed at elevating business development in Namibia which includes the provision of Information and Communication Technology infrastructure. Namibia has been connected to the West Africa Cable System (WACS) since May 2012. This connection is destined to bring increased broadband capacity, boost the uptake of internet-based services and internet access in the country. The Government network backbone infrastructure has been redesigned and is being upgraded to increase the bandwidth capacity of 600 Megabits per second (Mbps) from WACS and enable efficient Government service delivery in all the regions. Such infrastructure will make it possible for the implementation of e-government and facilitate decentralization of services. This means that the registration of company can be done anywhere in the country if MITSMED implements an electronic and decentralized company registration system.

B. The Namibia Forth National Development Plan

The Namibia Government proposed a plan named the Namibia Forth National Development Plan (NDP4) for the period 2013 to 2017 aimed at changing the gear towards vision 2030. In the NDP4 Report, four economic priority areas were identified for Namibia's next level of growth. These economic areas include logistics, tourism, manufacturing and agriculture. The Report also touches on the foundation issues that needs to be addressed and one such issues includes how to make Namibia the preferred investment location in Africa. It is therefore important to align the outcome of the online company registration with the vision 2030 of making Namibia a preferred investment location in Africa. It was stated that by 2017, adequate ICT infrastructure will be in place to facilitate economic development and competitiveness through innovation, research and development. According to the Namibian Government (2011), efforts towards improving the ICT infrastructure have been made and have resulted in the availability of latest technologies score improving to 6.0% from 5.5%.

The benefits of conducting business electronically have become clear and the shift towards the electronic delivery of programs and services has been set. There has been an increase in the number of computers in the Namibian Public Service, from 40 personal computers in 1990 to 40 000 in 2010 (Asino, 2010). Furthermore, approximately 40 000 civil servants have e-mail and Internet access (Amutenya, 2011). Government has approximately 200 000 skilled employees. All Government buildings are cabled, computers are networked and all Ministries have computer networks in place, and all ministerial networks are interlinked. The Government of Namibia has one integrated network that is centrally located at the DPSITM.

Thirty-five sites are directly connected to Government of Namibia network (Amutenya, 2011). This study is appropriately placed within the context of e-government. As government implements ICT strategies and initiatives, it is imperative that record keeping requirements be taken into consideration in the respective systems and programmes. Such record keeping requirements will ensure the creation, capturing, maintenance of reliability and authenticity, sharing and preservation of electronic records, thus promoting government's accountability, transparency and effectiveness.

C.   Namibia's e-Government Readiness Model

The government of Namibia developed an e-Government Readiness Model that measures how ready the various levels of government, businesses and communities are in terms of being able to participate in e-government initiatives. The findings of measurements by this model also serve as an input to strategy formulation. The model is tailored to the requirements of the measurement exercise after due consideration of various readiness measurement tools currently being used by governments across the world. The model focuses on five main categories of readiness for e-government, namely Policy, Access, Content, Capability and Willingness. The categories of readiness are as shown below.

Table 1: Categories of readiness for e-government Source: (Government, 2011)

CATEGORY	DESCRIPTION
Policy	*Policy* includes all attributes that lay the foundation of an enabling environment in which the e-government reform process can succeed. It encompasses the legal framework, policy pronouncements for e-government, strategies to translate policies into action, and national/regional programmes rolled out to implement strategies.
Access	*Access* measures readiness in respect of the availability of basic means to communities, businesses and government entities. It includes the network infrastructure and availability of channels and devices of access to communities across socio-economic and geographically dispersed strata of society.
Content	*Content* measures availability of information and services over appropriate ICT platforms which communities would use for individual and collective benefits.
Capability	*Capability* measures availability of skill sets within the GRN to avail information and services electronically, economic capacities to own devices of access, and basic capability of communities and businesses to benefit from e-government services.
Willingness	*Willingness* maps inclinations and preferences among different socio-economic classes for ICT-enabled information and services.

The overall e-government readiness score for Namibia is at 2.2 out of 4 possible points (see Figure 1). This score rates the country as being of average readiness. The rating is computed by aggregating the indices for the various categories making up the e-Government Readiness Index, namely Policy (2.11), Access (2.71), Content (1.95), Capability (2.21) and Willingness (2.05).
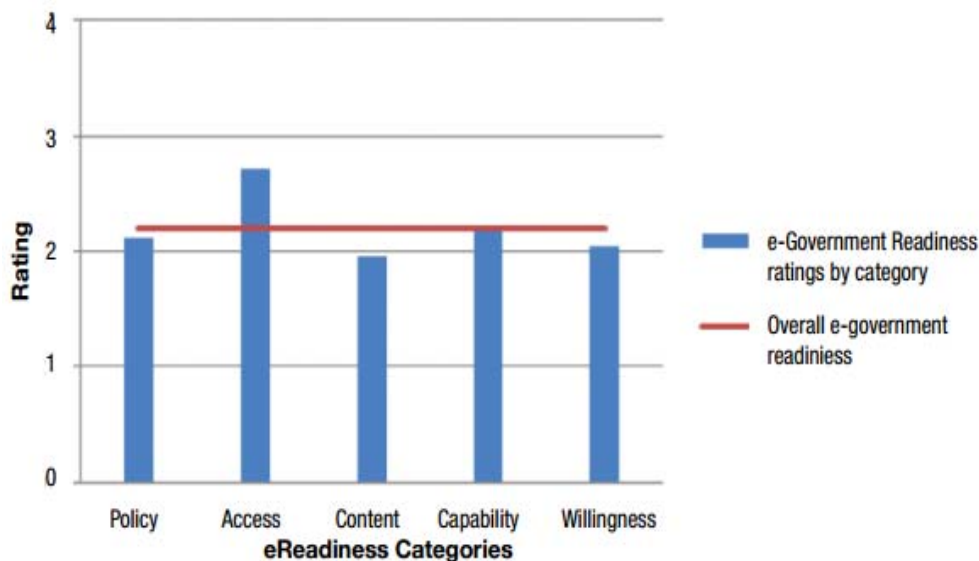

Figure 1: E-Government readiness ratings, by category source:

Namibia scored an average of 2.11 out of 4 in respect of its readiness on a policy level. The finding that Namibia's readiness score of 2.11 shows that implementation has fallen short in some respects. For example, e-government laws are in different stages of development, and still need to be approved by Cabinet. Another deficit is the institutional arrangement for e-government where a more holistic treatment is required.

The Namibian Government scored 2.71 out of 4 in respect of being ready to offer access to its services via e-Government platforms. The findings also reveal that access to government services is skewed towards urban environments, with large areas in the rural hinterland were residents are excluded from participation.

Since Namibia has a high level of economic inequality, providing adequate access to all would necessitate reaching out via resource centres appropriately located throughout the country. People have challenges in accessing government information as some of them are not good in English language yet all government websites are written in English. Also, some places are located in remote area where internet is not available so easily. Some people can only access internet via the mobile phones which may be a challenge when opening government websites that are not compatible to mobile phones. From a Content perspective, Namibia scored 1.95 out of 4. The findings show that online Government information and services have not yet touched the lives of many Namibians; ICT-associated development and exposure are concentrated in urban areas. This means although the Government have been trying to get information to the public by making use of various strategies, they are still to put more effort. However, it can be seen that a considerable number of people have been reached by the Government.

The score of 2.21 for capability supports the findings that the foundations for e-Government are strong as far as the levels of numeracy, basic literacy in English and local languages in the country are concerned. However, the gains to be achieved from these capabilities have not been fully exploited. This shows that to a greater extent, the Government of Namibia is capable to successfully implement an e-Government system. All it need is cooperation from members of the public as well.

The Willingness to provide information and services electronically scores a rating of 2.05 or average, both in terms of supply and demand. On the supply side, if Government officials show minimal preference and confidence in providing services over the Internet and mobile phones, particularly with regard to payments, citizens on the demand side will conversely show minimal willingness to access such services over the Internet for reasons relating to their affordability, coverage and content. Willingness from the community's point of view depends on the value they would see in investing their time, effort and resources into something they have so far done without. Thus, the more online services provide a direct benefit to them, the more willing the community would be to engage such services online.

D. Challenge in e-government implementation

Namibia currently ranks eighth on the United Nations e-Government index survey of 2014, which is an improvement from the previous position of tenth in 2012. Namibia is well on its way to the top of these rankings with the launch of the Strategic Action Plan. However, there is need to take caution that the success of the action plan depends on awareness and skills development at all levels, enhancement of ICT infrastructure to all corners of the country, expansion of the national grid to include all schools and constituencies, nation-wide support to make use of technology, finalization of relevant policies and laws, and above all an adequate budget that will enable the achievement of the goals in the plan.

III. METHODOLOGY

This study uses a case study approach to address the research questions. The Khomas region, Windhoek, Namibia was the focus in this case study. According to Namibia Statistics Agency (2011), Windhoek has an estimated total population of 380,000 and thus the target population in our study. In particular, the study focused on people who are residing in Windhoek and who has registered companies within the last six months. This was done in order to reduce the sample sized to be used. In addition, selected staff members at the Ministry was engaged during data collection. The sample frame was limited only to the people who have knowledge on company registration procedures in Namibia. These respondents would help the researcher in evaluating the readiness of the government in adopting online company registration in Namibia. The sample frame helped the researcher to narrow down the research to the desired respondents given the great variability in the population.

A total sample of 10 respondents was used in the study. Of these respondents, 8 people were given questionnaires and 2 people were interviewed. Simple random sampling method was used so that everyone in the target population had an equal chance of being selected. Furthermore, simple random sampling was used because it is easy to use and is less costly. Simple random sampling is also not time consuming as no complicated procedures are involved.

The researcher used data collection instruments that took into account the nature of the study and respondents. Closed ended questionnaires and structured interviews were used by the researcher to gather the required data from the respondents. The researcher used closed ended questionnaires because there was some specific information that the study wanted to gather. If the questionnaires are open ended then the respondents would give

different views and give the researcher the information which might not be of much importance to the study. Thus the study used the closed ended questionnaires. Structured interviews was also done so that the researcher will not waste time of the people as he/she would know already what to ask. People were so busy and to get time of interviewing people was a big challenge. The researcher had to structure the questions so that the interview sessions would be short and precise.

It was assumed that all respondents are knowledgeable about company registration in Namibia. All interviews were recorded on USB and compact discs. The interviews which were done in other languages other than English was transcribed and translated to English. The researcher gave questionnaires to random individuals who are between the age group of 15 to 90 years. These questionnaires were collected immediately after completion by the respondent so that they do not get lost or teared off.

IV. RESULTS ANALYSIS

A total of eight (8) questionnaires were distributed to various people around Windhoek, who have registered companies in the past six months. All the questionnaires given to people were returned resulting in a 100% response rate. Furthermore, two (2) supervisors at the Ministry of Industrialization, Trade and SME Development were interviewed. This adds up to a 100% response rate on interviews as all identified potential participants were interviewed and results collected. Table 2 below shows the detailed respondents and the response rate.

Table 2: Questionnaire and interviews response categories

	No. of questionnaires	No. of Interviews
No. of questionnaires sent out	8	2
Questionnaires returned	8	2
Response rate	100%	100%

Table 2 above shows that there was an overall response rate of 100% on both questionnaires and interviews. This high response rate was because the researcher was personally distributing the questionnaires to minimize the number of questionnaires getting lost hence reducing response rate. In addition, the researcher is an employee of the Ministry under investigation which made it easy to secure interviews and questionnaire with participants. Interviews were held face to face allowing every respondent a chance to explain. Generally the response was good enough to render the results of the research valid and representative.

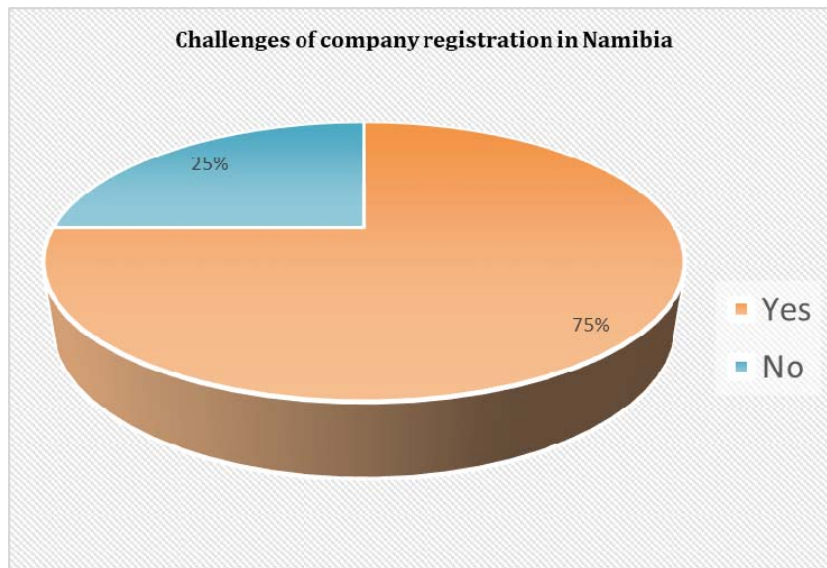A. *Current challenges in company registration*

Figure 2. Challenges of company registration in Namibia.

The results showed that approximately 75% of the respondents confirmed that the current company registration system in Namibia has a challenge. Only 25% of the respondents confirmed that there is no challenge in the current system of company registration. The results are also in line with the results obtained from the two supervisors who were interviewed. Both of them confirmed that there is a serious challenge in the current company registration system in Namibia. The results clearly indicate the need for a new registration system in Namibia in order to improve the way companies are registered. Failure to do so might have a negative impact on the economy of the country as investors may not come into the country.

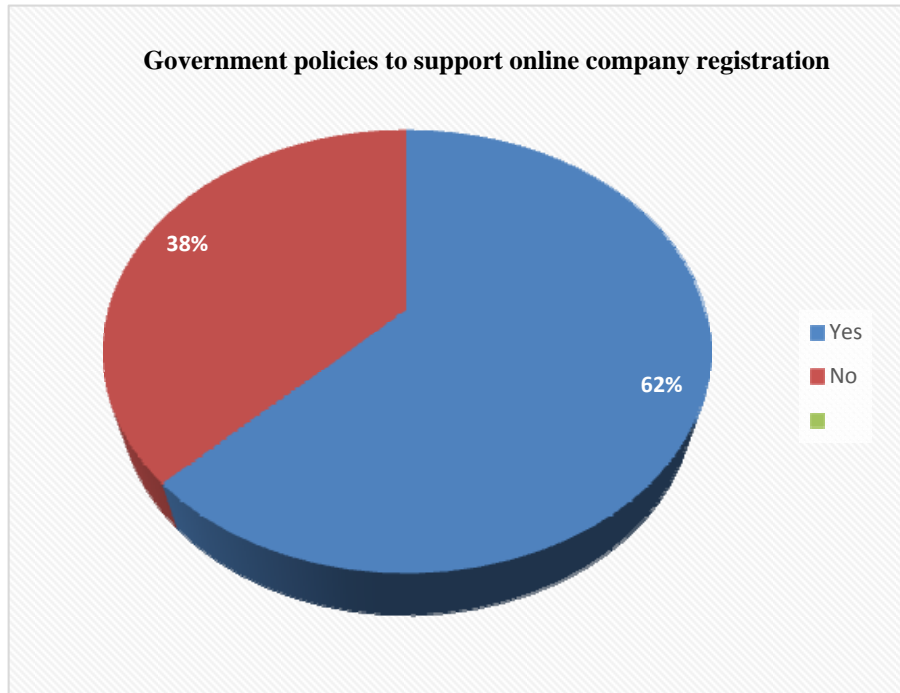*B.   Availability of government policies*

Figure 3. Government policies to support online company registration

Approximately 62% of the respondents confirmed that there are policies in place to support online company registration. Only 38% of the respondents suggested that there are no policies in place to support such an e-government initiative. This may mean that some people need education to know which policies are in place about online company registration in Namibia. Awareness campaigns have to be conducted in order to disseminate information to all parts of the country.

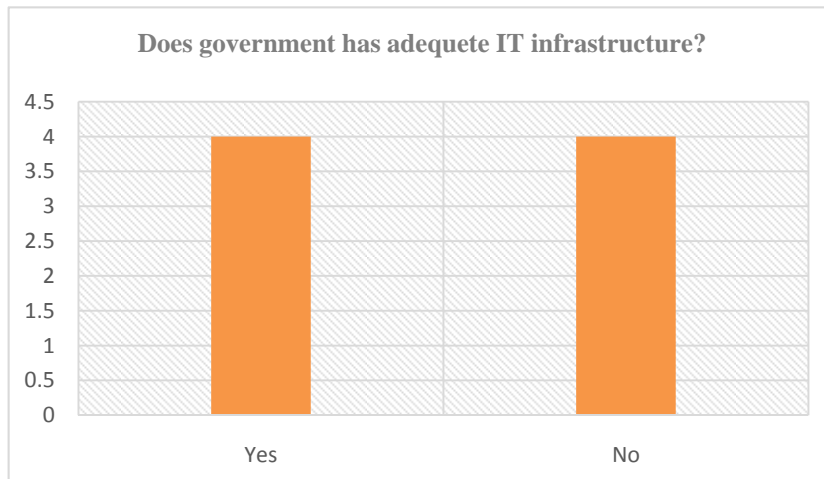*C.   Government and IT Infrastructure*

Figure 4. Does government has adequate IT infrastructure

From the results obtained, 4 people confirmed that there is enough IT infrastructure in place to support the online company registration in Namibia. On the other hand, another 4 people noted that there is no proper IT infrastructure in place to support the online company registration in Namibia. These results showed that the government has to make sure they setup proper infrastructure if online company registration is to be a success in Namibia. However, the interviewed supervisors confirmed that there is adequate IT infrastructure to support the online company registration in Namibia. As a result, it may be true that people from outside the Ministry have little knowledge about the IT infrastructure in the government.

V.   CONCLUSION

The results obtained confirmed that the current company registration system in Namibia is a challenge. The results clearly indicate the need for a new registration system in Namibia in order to improve the way companies are registered. This maybe because the government is still using outdated systems in the registration of companies or the government is employing poor and incompetent employees. This is a serious matter and the government has to put measures in place to improve the efficiency of the company registration in Namibia. The results obtained indicated that a lot of people who participated in the research questionnaires have degrees. There was only one person who was a student. This shows that there is a lot of well-educated people in Namibia. With this information, one can safely conclude that the people have competent skills to use the e-government systems. The results confirmed that there is enough IT infrastructure in place to support the e-government systems. However, another half of the people argued that the infrastructure in place is still not yet adequate to support the online company registration system in Namibia. These results showed that the government has to make sure they setup proper infrastructure if online company registration is to be a success in Namibia.

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