Corporate digital preparedness: A case study for a South African Private organization

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Abstract

Digitalization is rapidly advancing and becoming a social and business sensation. Digitalization is stimulating the escalation of 3D printing, artificial intelligence, Internet of things and Big Data, to name a few. This paper establishes the extent to which a South African (SA) private organization is prepared for, or has adopted the digital era, and the challenges that have been experienced by implementing digitalization, which is now becoming a major component of the business environment. The study is also intended to create awareness and prepare the organization as well as its stakeholders for this new digitalization era. A mixed method research approach was adopted. The researcher has selected a simple random sample of 50 employees to complete the research questionnaire. It was established that there were several barriers such as an improper digital strategic plan, stakeholder engagement and lack of communication, which tend to inhibit the digitalization process. Additional concerns at the SA private organization that inhibited the digitalization process was the flow of information among all stakeholders concerned, regarding digital strategy such as employees, suppliers, customers and the management. Digitalization delivers a plethora of benefits and improves the way in which organizations engage with its customers.

Keywords
Digitalization, competitive, digital vortex, private organization

1. Introduction

Digitalization has become a requirement for every organization that wishes to remain competitive in the industry, failure to adopt new digital systems can be a harmful choice for any business entity. The arrival of the digital era has taken many organizations by surprise and whether these organization are prepared or not, they are absorbed in a "digital vortex" (Bradley et al. 2015) which disrupts the organization's systems and structures. This turbulence in the business ecosystem caused by the dawn of the digital era can be so severe to organizations if they do not set structures in place in order to embrace this new style of conducting business. The aim of this research study was to establish whether the SA Private organization was consciously aware of the need to prepare for this digital change. The need to adopt digitalization is not an option for organization doing business in the 21st century due to the string of benefits that will be derived from it. Grishikashvili et al (2014) postulates that there are several benefits that businesses can derive from the adoption of digitalization and these include enhanced collection of quality customer data, the ability to tract buying trends for customers, facilitating instant customer engagement when necessary and implementing effective Customer Relationship Management (CRM).

1.1 Organizational Profile

The SA Private organization was launched in 1999 and its vision was to expand the footprint area and emerge as an industry leader in providing world class services to its clients, creating employment opportunities and contributing positively to the South African community. The Private organization also provides and prepare contingency procedures for anticipated and occurring incidents that are related. It has branches around the SA provinces, with its headquarters located in the Gauteng province. The total staff complement is currently at 2 500 employees. The Private organization has been facing challenges in its operations, such as the abuse of organization cars by its employees, having incidences where guards fall sleep on duty and delays in incidents reporting by guards. These challenges have contradicted its vision and led to an escalation of customer complains. In an effort to correct these challenges, the SA organization introduced a biometric system that is used by guards to report for duty, a call center that is equipped with screens to monitor and receive information from guards. This research, therefore, seeks to assess the digital preparedness of the SA Private organization and establish the soundness of the implementation procedures.

1.2 Problem statement

The business world is moving towards a phase in which they are forced to change their systems in order to embrace the era of digitalization. Conducting business in the 21st century makes it compulsory for all businesses to go digital or go out of business. Despite this reality, some businesses are still in the dark as far as becoming digital compliance is concerned. As indicated by Johnson (2014), only 25% of CEOs surveyed in their study had a digital strategy for their organization. This research seeks to establish whether there is any sound procedures in place towards digitalization at the SA Private organization. If so, the research wishes to uncover the roles that were engaged by change agents, employees and stakeholders, in order to prepare the organization for digitalization.

1.3 Objectives of the study
   a) To determine the importance of digitalization to the SA Organization which leads to awareness.
   b) To establish the barriers and challenges towards digitalization at the SA Organization
   c) To determine the role, of the managers/leaders at the SA Organization with regard to the successful implementation of digitalization

1.4 Rationale of the study

Deloitte (2014) hinted that the arrival of the digital age has enabled many individuals to get an analysis of problems more readily because of the availability of sophisticated digital instruments that allows even individuals without any statistical background to produce comprehensive reports. In light of this, the research seeks to assess the extent to which the SA Private organizations are prepared for the digital era that is becoming a huge component of the business ecosystem? Failure by the SA Private organization to go digital would mean loss of competitiveness and achievement of organizational goals.

2. Literature Review

2.1 The digital era

Digitalization process is a useful tool for organizations that can hatch significant benefits and allows for organizations to come up with processes and systems that suit their organizational and customer needs. According to Ernest and Young (2011), digitalization is a process of transforming analogue data into digital state. The introduction of digitalized capabilities makes it easy to convert every event of our life into some digital record enhancing the level of interconnectedness of activities and occasions in our existence. At global level, this will facilitate speedy real-time information exchange between individuals, organizations and governments via interconnected gadgets such as laptops and mobile phones. Goods and services in these digital markets are traded or exchanged using digital tools, also known as electronic commerce. "The digital economy is a vital sector, driving very substantial growth". Furthermore, the impact of the digital economy extends beyond information goods and services to other areas of the economy as well as lifestyles more generally" (OECD 2016). The digital capabilities of economies and organizations alike has been sharpened by the introduction of mobile devices that makes it effortless to connect with every member of society via the internet. These developments have also brought in fresh dimensions of organizational competition and their capability to outperform their rivalry. The digital era within the business ecosystem has therefore emerged as a huge shocking dimension of the business environment within which businesses exist.

Bradley et al (2015) stated that the dawn of the digital era is best described as a digital vortex where digital disruptions occur at the highest velocity rate coupled with immense shocks that businesses will be subjected to. The digital chaos and shocks brought about because of digital change makes it very complex and unpredictable for businesses to correctly and timeously predict the possible impact of digital change to their business functions, argued Bradley et al. (2015).   Strydom et al. (2016) identified the digital change in the business environment as a technological factor which occur in the macro-environment. The macro-environment is much broader in scope and exist outside the business itself making it difficult for businesses to take charge of such changes. In fact, businesses have no control of changes in the macro-environment and the best they can do is to interpret the changes and realign the business processes in order to adapt. The technological environment (digitalization) is considered one of the most volatile variables in the business environment (Strydom et al., 2016).

The digital era has become a game changer at a time when organizations are overwhelmed with Big Data which entails timeous interpretation and application in order for the organization to efficiently achieve its objective. Walters (2014) argued that it is important for organization's employees and management to develop mind sets that are digitally aligned. Kaganer et al (2014) posit that present day management in organizations should have the term digital on their tongues and minds. Their presence and participation should be felt on all digital platforms such as the social media and the cloud. There is therefore a significant need for leadership and management in organizations to develop fresh mindsets in order to lead their teams into the digital era. The more the organization discuss about digitalization, the more they embrace the digital culture and even co-opt it with the mission and vision of the organization. The digital phase that is at play within the ecosystem does to only impact the industry on its own, but also carries huge implications to individual businesses. Failure by businesses to define, classify and interpret digitalization poses a huge risk to the competitiveness and existence of any organization, irrespective of the industry it operates in. In this regard, the SA Private organization can be digitally compliant or can smoothly adopt digitalization when there is commitment from management to follow digital trends in the industry and appropriately develop a digital strategy to facilitate its inception.

2.2 The importance of digitalization

Kane et al (2015) stated that companies throughout the world make use of digital technology in order to enhance the service level delivered to their customers and the efficiency and effectiveness of their business. However, some organizations, especially those that attain high maturity tend to distinguish themselves from ordinary entities and their competitors through applying digital systems and technologies. This becomes more beneficial to organizations that are capable of collecting and connecting digital tool to the mission and vision of the organization. Information is key to both businesses and consumers. To the business, handling, processing and interpreting Big Data becomes less frustrating, and to the consumers, more product information is at their disposal like never before. Deloitte (2014) further argued that the arrival of the digital age has enabled many individuals to get an analysis of problems more readily available because of the availability of sophisticated digital instruments allowing even individuals without any statistical background to produce comprehensive reports. The digital era enables even less educated individuals to perform certain functions that they may fail to do without the digital aids, argued Deloitte (2014). This advantage will equip managers with multi-abilities when it comes to the monitoring of all the divisions within the organization even though they may lack specialized skills in the particular department.   The arrival of the digital era in organizations has brought a multiple benefits that includes cost minimization, enhanced customer experience and service, multiple customer behavioral data bases and competitor trends. The SA Private Organization clearly stands to benefit from the benefits that are associated with the emergence of digitalization. The major question here is whether the SA Private Organization has systems in place or intends to put measures in place to smoothly adopt digitalization. This research, therefore, seek to establish the preparedness or the extent to which digitalization has been adopted at the SA Private Organization.

2.3 Digitalization challenges

Given the advantages associated with digitalization in organizations, one will be drawn to consider that corporations are destined for a smooth journey with regard to digitalization. However, the downside of digitalization requires every manager and business leader to identify such challenges and then develop relevant mitigatory measures in order to transform the barriers into opportunities. There are also challenges that are associated with digital change that organizations are forced to take into consideration. Ernest and Young (2011) stated that organizations are bound to experience the impact of change in the form of loss of control their relationships with customers, suppliers,

employees, partners and other stakeholders if they fail to adopt digitalization. This impact essentially implies that a business that fails to embrace digitalization has high chances of losing market competitiveness. In extreme cases, business profitability can become highly compromised resulting in total staling of business activities.   Lance (2016) discussed that it will be difficult to effect change in organizations that are characterized by a very strong culture. The attempt by management to implement change may face resistance from employees or may fail to take off because of poor communication, lack of leadership skills and failure to train staff of digital change. Lance (2016) hinted that "the challenges of digitalization services are multiple; however, the benefits are considerable if successful". Management and leaders in organizations should correctly identify potential challenges in order to come up with adequate measures to counter them.

2.4 Barriers associated with digitalization
The following barriers have been identified by Irish Group (2015) and Mimani (2016) as:

a) *Lack of management resources* – management are too busy with their daily operations to focus on the importance of resources for implementation of digitalization.
b) *Capital and high market prices* – new technologies are extremely costly to purchase and set up. Prices after implementation, are also very high.
c) *Margin expectations* – the margins on new services were either difficult to calculate or expected to be low until the services scaled-up, they experienced difficulties to compete for investment with higher margin but lower growth products.
d) *Performance expectations* - Successful digitization requires information sharing and cross-functional collaboration however, while senior managers might produce a instruction about how important digital initiatives are, the strict objectives and timelines they set up for their employees often discourage them from collaborating toward a common objective.

3. Methodology
A mixed research method approach was used in this research study. This is a method that combines both qualitative and quantitative research styles. Quinlan *et al.* (2015) stated that the use of qualitative and quantitative research methods provide a rich fountain of research information allowing the researcher to investigate the research the research problem from different perspectives. The method will also enable the researcher to develop skills in both quantitative and qualitative research. This study uses both the quantitative and quantitative research method. Bell et al (1996) stated that quantitative research methods follow a more descriptive approach, using surveys and questionnaires to gather the primary data for the research from the research sample for representation of the whole population. The figures that connects to the research variables to the hypothesis of the research are analyzed using tools of statistics to ascertain the relationship between these hypotheses and the research outcomes (Cooper and Schindler, 2005).

3.1   Population
The population under consideration for this research study is all the management and employees at the SA Private Organization.   A research sample will be drawn from this identified population. Currently, the SA Private Organization has a total of 5650 employees and 36 Managers. This research makes use of the case study research design, given that data was gathered from the SA Private Organization in order to establish the extent to which it has embraced digitalization. The data is collected from one single entity that is geographically located in the Gauteng province of South Africa.

3.2   Sample size
The extent of digitalization at the SA Private Organization, if any, is established through the selection of employees and management using the simple random sampling method. For academic research purposes, this research selected a sample of 50 employees to complete the research questionnaire.

3.3   Data collection
Questionnaires were used to collected quantitative data whereas interviews were used to gather qualitative information.

3.4   Data presentation

The data was analyzed using the Statistical Package for Social Scientists (SPSS) Version 22.0. The analysis, in general, mainly took the form of descriptive statistics to address the objectives of the research study. In particular, the reliability of the research instrument and consequently the validity of the study were examined.

4.   Analysis of results

4.1   Reliability of the study

Table 1 – Cronbach's Alpha Coefficient

	Cronbach's Alpha	No. of Items
Questionnaire	0.762	10

The overall Cronbach's Alpha coefficient of reliability for the data collection instrument is 0.762. This means the questionnaire is consistent and measures what it is supposed to measure adequately. This questionnaire will yield the same results in different occasions and will produce similar observations when administered on different assertions. The data collection instrument is 76% accurate and there is only a 24% measurement error on the items. The data collection instrument has very high internal consistency. According to DeVillis (2003), the Cronbach Alpha Coefficient of a questionnaire should be at least 0.70, for the questionnaire to be considered reliable.

4.2   Descriptive analysis

4.2.1   Digitalization is important to the SA Organization

Kane et al (2015), stipulated the importance of digitalization with regard to efficiency and effectiveness for the organization, as well as deliver superior quality goods and services to customers. Therefore, figure 1 indicates the importance of digitalization to this SA Organization. The majority of the respondents (agree and strongly agree 67% + 27% = 94%) said digitalization is important to the SA Organization and only 3% thought otherwise. In generating the importance of digitalization in the SA Organization, this has created much awareness in the organization to determine the importance of being prepared for the new digital era which most organizations are now facing. This analysis has satisfied the requirements, and has achieved objective (a) indicated in section 1.3.
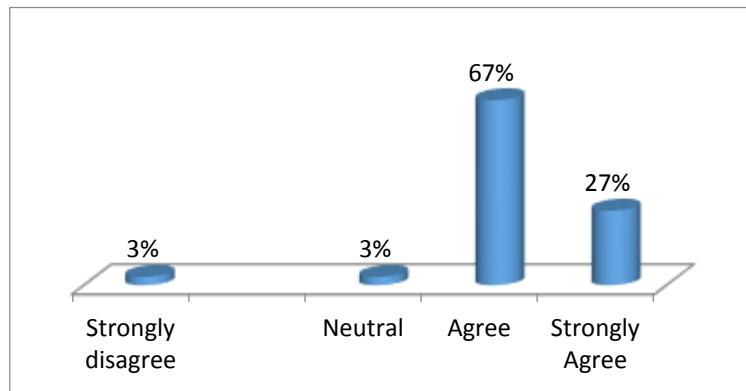

Figure 1 – Importance of digitalization

4.2.2   Barriers to digitalization in the South African organization
In accordance to the barriers which were identified by Irish Group (2015) and Mimani (2016), the following figure 2, illustrates that these barriers to digitalization to SA Organization do exist and this has hindered the

implementation of digitalization in most organizations. Quite a significant percentage of the respondents (93%) agreed that barriers to digitalization are existent in the SA Organization. This analysis has satisfied the requirements, and has achieved objective (b) indicated in section 1.3.
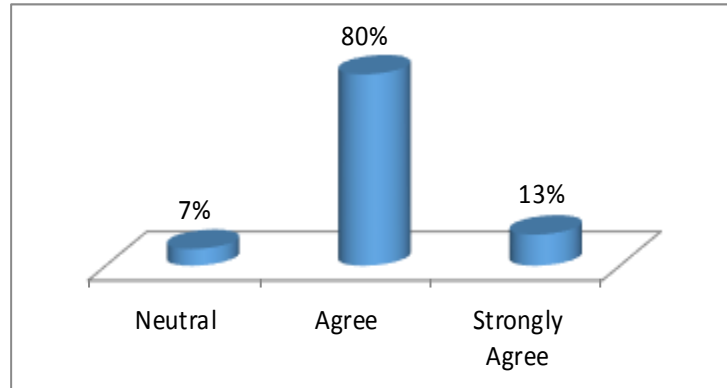
Figure 2 – Barriers to digitalization

4.2.3   Management has provided leadership roles in facilitating digitalization.

The respondents were also asked whether management at the SA Organization provided leadership roles in facilitating digitalization. According to Lance (2016) management and leaders in organizations should correctly identify potential challenges of implementing digitalization in order to develop adequate measures to counter them. A significant percentage of the respondents (40%) were neutral, 37% said the management provided leadership roles whilst 23% disagreed. This in turn indicates that leaders should take more roles and responsibilities in facilitating the initiative for implementing digitalization. This analysis has satisfied the requirements, and has achieved objective (c) indicated in section 1.3.
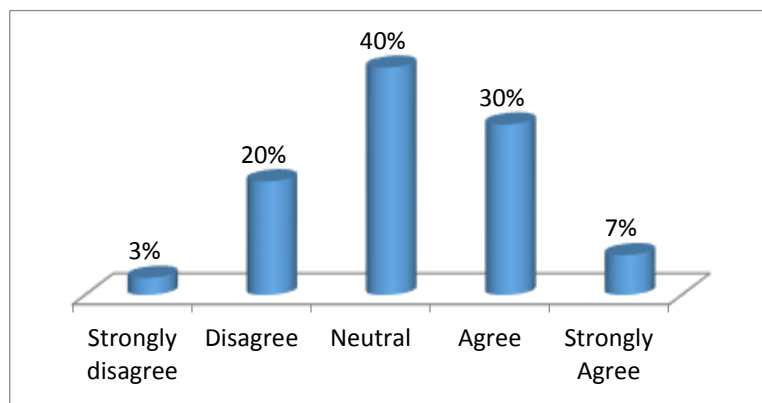
Figure 3 – Leaders role in facilitating digitalization

4.3   Hypotheses

The hypothesis listed below were tested and the corresponding results are indicated. A binomial Logistic Regression was conducted to test the following hypotheses:

Table 2 – Results of Hypotheses which represent the factors hindering digitalization

Research Hypothesis	Decision
H_0 1: There are low levels of digital adoption at the SA Private Organization	Failed to reject H_0 1
H_0 2: There are no measures being put in place at the SA Private Organization to optimize digital adoption.	H_0 2 was rejected
H_0 3: Several barriers inhibit digital adoption at the SA Private Organization.	Failed to reject H_0 3
H_0 4: The leadership and management at the SA Private Organization are not doing enough to enhance digital adoption.	Failed to reject H_0 4
H_0 5: Stakeholders are not being fully engaged on digital matters at the SA Private Organization.	Failed to reject H_0 5
H_0 6 There are no measures being put in place at the SA Private Organization to optimize digital adoption.	Failed to reject H_0 5

5   Conclusions

The importance of digitalizing the SA Private Organization is not a subject of debate as employees and management were in agreement of the need for such a development at the organization. Despite the importance of digitalizing the organization, several barriers such as a proper digital strategic plan, stakeholder engagement and lack of communication tend to inhibit the digitalization process. While some measures are said to be in place at the SA Private Organization, there is a worrying concern that these measures are not being brought to life as the digital strategy is only existing on paper. This unfortunate outcome could be attributed to the lack of leadership in executing the digital strategy at the SA Private Organization. Additional concerns at the SA Private Organization that inhibited the digitalization process is the flow of information among all stakeholders concerned regarding digital strategy such as employees, suppliers, customers and the management.

6   Recommendations based on the study

In view of the research findings above, the following recommendations are provided:

There is need for an urgent establishment of a digitalization committee at the SA Private Organization. This committee will spearhead the process of creating the right environment, the right tools and skills that are ideal for the digitalization process. This recommendation should be implemented by the Chief Executive Officer (CEO) at the SA Private Organization as soon as possible. The CEO at the SA Private Organization should set up a budget dedicated to the digital process. The budget should be established as a matter of urgency to avail resources that are required for this initiative. The CEO and the digital committee at the SA Private Organization should nominate a digital champion as soon as possible. The digital champion will assume the role of providing leadership to the organization on all digital matters. The establishment of a digitalization committee and the digital champion should be used as a gateway to stakeholder consultation. This initiative should be implemented by the CEO once a digital committee and a digital champion is nominated. Digitalization should be implemented in the interest of customers, employees, suppliers and shareholders for the SA Private Organization to achieve its business objective.

7.   Proposed framework for future research.

7.1   Assessing the level of digital skills in organizations
Future research can be conducted on assessing the level of digital skills among private companies that seek to adopt digital technology or that have already adopted the technology. The goal will be to spot possible skills gaps that can be closed by recommending appropriate training programs.

7.2   Establishing the effectiveness of adopted digital tools
The process of digitalization cannot be adopted for the sake of copying what other organizations are doing, given that different organizations have different needs, systems and goals. Likewise, conducting a research on whether the adopted technologies is effective will be important. This can be measured by carrying out a before and after situational analysis.

7.3   Cost benefit analysis of digitalization
Future researchers can also seek to conduct a research on cost benefit analysis of digital adoption. The research can weigh the benefits accruing to the organization against the costs associated with digitalization.

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Biographies

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Mujinga B. Mulombo is currently an international student at the University of Johannesburg completing her Bachelor of Technology degree in the field of Quality Management. She is a Congolese resident whom has completed her Matriculation in the Democratic Republic of Congo at Balou High School. She arrived in South Africa six years ago and graduated from Damelin in Randburg where she obtained a Degree in Human Resources Management. Mujinga has been assisting her father to improve his car dealership business, which has lacked a proper quality management system. This has led to her interest and studies in the Quality and Operations Management field.