9

Strategy in Digital Business—The East African Perspective

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9.1 Introduction

Digital business entails the integration of digital technology in business practices to generate new value in business models. This integration enhances internal capabilities and business operations and in turn customer experiences. Chaffey et al. (2019) differentiated the term digital business from e-business by arguing that digital business has a broader scope than e-business. Digital business as a terminology was first coined by IBM in 1997. There is a very minimal difference between digital business and traditional information technology (IT). Digital business entails the integration of the buy-side e-commerce, intranet, and sell-side e-commerce. The buy-side entails the supplier value management,

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the intranet entails the organisational processes and functioning units, and the sell-side e-commerce entails the management of the interaction of the customer value chain activities. Therefore, digital business is about applying digital technology and media geared towards improving the competitiveness of the organisation through the optimisation of internal processes with online and traditional channels to market and supply. Converting analogue systems and information from physical to digital systems is called digitisation, whereas the utilisation of digitised data and technologies to influence workflow, transform customers and organisation interaction and engagement, and build better streams of revenue is called digitalisation.

The emergence of digitisation in eastern Africa can be traced to the mid-1980s. It was preceded by the IMF/World Bank initiated changes through structural adjustment programmes (SAPs) and enhanced structural adjustment facilities (ESAF) in the mid-1990s. In its early days, digitisation came to the east African business sphere enveloped as ICT. However, it was not until the mid-2000s when mobile phone affordability and governments' policy frameworks coupled with the growth of telecommunication companies that the need for digitisation was felt in a significant manner. Kenya got connected to the World Wide Web in October 1995, by means of a leased connection line providing internet for the first time at 32 Kbps (Mureithi, 2017). *Celtel* was the first firm to offer mobile telephone services in May 1995 (International Telecommunications Union, 2001). Tanzania was connected in 1995 (Sheriff, 2008) and Rwanda in 1996 (Mlay et al., 2013). The bandwidth of these systems was very low compared to today.

Digitalisation in East Africa by African-owned businesses still lags behind their peers. According to Banga and Velde (2018), there still is a window of opportunity to develop the less automated sectors in Africa. This window, however, may have a short duration. A comparative example in furniture manufacturing is the difference between Kenya and the US. In the US, the use of robots is likely to become cheaper than US labour by the year 2023; the Kenyan inflection point only comes a decade later, that is, in 2034, clearly indicating a window of opportunity, which is approximately ten years later. Robots financing and operating costs in the US are likely to become cheaper than wages

in Kenya in manufacturing by around 2033. Accordingly, the inflection point for Ethiopia would be between 2038 and 2042, indicating a variance in digitalisation adoption and diffusion in different African countries. The African Digital Maturity report (Siemens, 2017), stipulates that African countries are at different levels of digital maturity comparatively. In the report, countries were categorised as emerging, developing, established, and advanced in their level of digitalisation. The difference is a clear indication of specific designs and patterns; and also, levels of digital preparedness or literacy in each country. The enhancement of access for customers to products and services, and suppliers to manufacturers have been quickened by increased broadband and fourth-generation (4G) networks and systems. The comparison of broadband penetration and 4G coverage in Rwanda and Kenya showed that without affordability, access alone does not have any impact. For instance, the rollout of 4G technology in Rwanda is almost 100 per cent compared to that of Kenya at 53 per cent, whereas broadband penetration in Rwanda (11.3 per cent) is less than half of Kenya's (47.8 per cent) (Mkalama & Ndemo, 2020).

It is under digitalisation that the elements of McKinsey 7S model can be appropriated. Abidin et al. (2015) argued that the McKinsey model is divided into seven areas of regions "soft" and "hard" element within the organisation. Strategy, structure, and system are the hard elements whereas staff, skills, shared values, and style are the soft elements. The hard elements are more infrastructural in outlook whereas the soft elements deal more with the human element and may be determined by the kind of people in the organisation. The emergence of business strategies oriented to technology such as business-to-business (B2B), business-to-customer (B2C), business-to-government (B2G), and business-to-employee (B2E) makes it possible to digitalise some aspects of the 7S model. Smartphone applications, e-commerce specialised websites, electronic marketplaces, and online auctions are practically the most exploited kinds of online platforms (Bresciani et al., 2016), which can be anchored on the proposed platformisation model (Adeola et al., 2021).

This chapter discusses the context of digitalisation processes in the East African marketing sector. It addresses the issues of digital value

creation in marketing activities; the roles and challenges of digital business framework; and the importance of understanding a business's competitive landscape. The chapter uses Mckinsey 7S model as its basis and draws a parallel with the traditional strategy processes whose activities are focused on a firm's mission and vision. Finally, it provides recommendations on how organisations can use digitalisation to sustain their market positioning through platformisation and, consequently, deliver optimal services to their stakeholders.

9.2 The Influence of Digital Business on the Existing Marketing Sector

Digital business has had a multifaceted impact not only on the East African marketing front but also on the entire business sector. Shah (2018) argued that digital marketing guarantees a direct interconnection between firms and their consumers. Platforms thereof give appropriate opportunities for organisations' to connect with customers and get instantaneous feedback on the consumer's feelings. These help these organisations improve their overall performance.

The impact of digitalisation on players, resources and activities may be felt by an entire organisations' value chain. Pagani and Pardo (2017) proposed three main types of impacts of digitalisation. These are:

1. *Activity-links-centred digitalisation* when the digital resource optimises existing activities—for instance, the digital transformation centre of Rwanda (The Digital Transformation centre of Rwanda, 2020).
2. *Resource-ties-centred digitalisation* when the digital resource supports the creation of new activities—for instance, the mpesa academy in Kenya (Mpesa Foundation Academy, 2020)
3. *Actor-bonds-centred digitalisation* when the digital resource supports new bonds between actors—for instance, Uganda digital acceleration programme by the World Bank (The World Bank, 2020).

Grishikasvili, Dibbs and Meadows (2014) suggested that organisations require big data to make important business decisions for the exploitation of new commercial opportunities; To date, the coverage of 4G technology in East Africa is up 70 per cent of the population (OECD-Development Centre, 2021). The impact of digital technology has always varied from one industry to another. Businesses from various sectors and industries have continuously challenged the traditional marketing approaches and models and at the same time disrupting the digital landscape—brands such as Amazon, Airbnb, Netflix, Uber, and Deliveroo—by providing seamless crossover of offline and online activities (Briddle, 2017). East African examples are as *mpesa*, and *masoko* in Kenya, *abanista* and *kaymu* in Uganda, *zudua* in Tanzania, *iduka* in Rwanda, and *kukasoko* in Burundi. Digitalisation has spread its influence on many areas and activities of the business, a few of those areas, such as, costs, training, digital value creation, pricing, and pricing models.

9.3 Influence on Cost

The cost structure of businesses has been impacted by digitalisation and especially through the hard S's of the McKinsey model, i.e., strategy, structure, and system in a firm. Goldfarb and Tucker (2019) believe that digital technology, or the act of presenting information in binary digits or simply bits, has structurally lowered costs in five different cost centres in the marketplace. Felix (2018) corroborated this information when he established that, due to low levels of digitisation in Tanzania, businesses in Tanzania, compared to others in the East African region, had higher costs.

He proposed that both the Tanzania Communication and Regulatory Authority, alongside the private sector and other related stakeholders, could find out ways of promoting digitalisation in the Tanzanian economy. Sridhar and Fang (2019) corroborated this in their seminal paper on marketing strategies and digital environments. In 2020, the United Nations Capital Development Fund in 2016 published a case in Tanzania, which shows that increased digitalisation coupled with

widespread adoption of Person-to-Government (P2G) and Business-to-Government (B2G) payments in Tanzania, focusing on the period from 2012 to 2016 helped reduce costs (United Nations Capital Development Fund, 2020). The five cost centres are:

1. **Information search costs.** The adoption of digital technology has created ease for individual business agents and firms in gathering information faster. For instance, customers can obtain and receive information on products and services at zero to minimal costs. Firms on the other side of the spectrum can also gather information on rivals' prices, at almost zero to no cost, on third-party websites and rivals' websites.
2. **Replication costs or the cost of producing goods.** With the advancement of digital technology, digital goods that have a marginal cost of almost zero have been created, as opposed to all physical goods, that have non-zero cost. For instance, software developers can recreate codes they own with zero direct cost by the use of open-source platforms. Their competitors can also obtain this same code at no cost also from open-source platforms.
3. **Transportation costs or the cost of information transportation and goods/product from one place to another.** As it is clearly evident, there is no physical distance deterrent for obtaining information on digital technology, goods, and products (e.g., physical products), services (e.g., in the hospitality industry), and expertise (e.g., skills of the workforce).
4. **Tracking costs or the costs incurred on obtaining stage/phase-by-stage/phase information on the production, stage of delivery, or readiness for utilisation of goods or services.** With reduced costs on tracking, it has become even easier for firms and industries to carry out activities such as customisation (e.g., of products like computing equipment, etc.), personalisation (e.g., for products like apparels and fashion, etc.), and also continuous customer engagement in the process of customer expectation of service (e.g., vacations, pizza delivery, updates of the stage of delivery, etc.).
5. **Verification costs or the costs incurred when validating the identity, authenticity, and reputation of an agent.** The advancement

of digital technology has significantly reduced the verifying costs of product quality through online reviews and brought down the friction and asymmetry to the paucity of verifiable information in the customer experience process.

9.4 Influence on Training

Through digitalisation, the approach by firms to the application of McKinsey's soft S's: skills, staff style, and shared values is changing. This dynamism has brought in new challenges which many firms struggle with. Some of these challenges are emerging as new customer segments, socio-cultural diversity in the global marketplace, heightened market volatility, unprecedented customer expectations about price, quality, delivery speed, employee turnover and skill maintenance, and the effect of the internet on an organisation's core business (Sousa & Rocha, 2018).

Components of digital business such as artificial intelligence are changing the rate at which dynamism in the industry is happening, particularly in areas that require close interaction and collaboration between computers and people. Big Data is re-orienting how we access, organise, visualise, select, and utilise the information for training purposes. Machine learning and the internet of things have caused significant changes, specifically in the manufacturing industry, aeronautics, as well as the service sector, for example, in the hospitality and health industries. Thanks to nanotechnology, the skill requirements in the computer industry, energy health sectors, and complementary sectors are changing at tremendous speed. Several scholars have argued that these technological effects have led to new business opportunities along with new risks in organisation's value chains and customer expectations (Fan & Zhou, 2011; Hui, 2014; Sun et al., 2012). Porter and Heppelman (2014) believe that the process of integrating digitalisation to training is inextricably transforming work processes through the interactions between machines and people. When combined with other factors, digitised training has seen an increment in the number of youths who are attaining more skills and entering into business in East Africa, particularly Kenya (Andeweg et al., 2020) and Uganda (Wafudu & Kamin, 2021).

9.5 On Digital Value Creation

Shared values, a key component of McKinsey's model, addresses culture, core values, and firm's cohesion. This is likely to lead organisations to embrace digital innovation, resulting in new processes, service, and products offerings. Regardless of whether they are interacting with their stakeholders physically or through web-based technology, many firms use digital technologies to create, sustain, and add value, hence providing great significance and benefits to the entire value chain (Yoo et al., 2010). Studies suggest that the adoption of digital business through innovation may alter not only specific business operations and the business models but also the entire innovation ecosystems (Adner & Kapoor, 2009; Loebbecke & Picot, 2015). On the dimension of digital innovation, firms create value from their activities and interactions with stakeholders; this is referred to as co-creation of value. This interplay happens within the context of digital innovation ecosystems of the specific regulatory, market, and other external environmental contexts such as industry technology absorption and levels of competition under which the firms operate as established by Jelassi and Martínez-López (2020) in the Kenyan market.

In their seminal paper, Ahmad and Osama (2015) argued that digital application marketplaces are continuously becoming significant to digital platform owners working towards gaining the benefits of distribution, brokerage, and applications by third-party developers. Two critical goals drive the owners of those marketplaces: to address the needs and requirements of heterogeneity of end-users and captivate the attention of third-party developers. Accommodating organisational goals is vital for value creation.

In Rwanda, Kirabo et al. (2020) established that businesses respond to the change brought about by digitalisation of business by focusing on the creation and development of digital service capacities and capabilities, which makes firms maintain better relationships and connections with their customers, therefore contributing to value creation. Research suggests that digital service capacities and capabilities are harnessed from the critical interaction between similar to value creation processes and service components: technology, people, information, and business

resources (Chuang & Lin, 2015; Maglio et al., 2009; Spohrer et al., 2007). In their framework of value creation and the multi-dimensionality of value-creating practices in the digital innovation ecosystem, Susenoa et al. (2018) proposed that the creation of value from digital innovation can be elaborated through new ways distinguish different categories of value.

As indicated by Sweeny and Souter (2001), value can be looked at from the dimension of it being functional, emotional, and social. The functional value essentially deals with the quality perceptions or performance of the product and/or service delivery or how the product or service satisfies the needs of the firm's customers. Furthermore, functional value is specifically the utility derived from the use of such product and/or service offering, that is, whether the product and /or service is value for consumers' or customers' money. On the other hand, social value is related to the utility received from the "ability or capacity" of the product and/or service to enhance the user's self-concept and worth vis-à-vis the society. Emotional value is more psychological; it is explained as the way the product or service offering meets the customers' inner feelings. The customer perceptions of functional, emotional, and social value significantly indicate the qualitative aspects borne by the product and/or service offerings in the eyes of consumers. Mathwick et al. (2001) further explained the importance of experiential value, which is based on a combination of both intrinsic values such as playfulness and aesthetics and extrinsic value such as customer return on investment and service excellence. In addition, indicated value is based on utilitarian value (which may include price savings and time savings), whereas experiential value includes entertainment, visual experience, and interaction (Lee & Overby, 2004). According to Mesich (2018), the *N-Frnds mAgri* digital platform in Rwanda to date has benefited more than 15,000 Irish potato farmers with its value-added features.

9.6 Influence on Pricing

The digitalisation of the strategy component in the McKinsey's model can partly be related to the pricing process. Its effect is seen in the

form of determination of the appropriate pricing strategies, policies and actual prices. Krämer and Kalka (2017) opined that technological changes (internet availability, production digitisation, and innovation of products) usually influence the environment of a firm and can be the basis for pricing improvements and changes, a good case in example is safaricoms' *mpesa* in Kenya (Bhimani, 2021). In this process, organisations can conduct an analysis of relevant data and process information which subsequently would lead to price optimisation. However, the changes leading to price optimisation may cause unprecedented competitive responses and reactions in the entire industry. Changes in consumer behaviour as a result of easy and cheap online availability of information, numerous search engines, and several price robots always go a long way in helping find the best offers. Due to the digitalisation process, market structures become fragile, resulting in lowered market entry barriers. Cannibalisation of traditional products is also likely to happen as replicated in the Ugandan service sector (Kayemba, 2020).

In addition, Andeweg et al. (2020) find that digitalisation not only helped in establishing strong links between cooperative societies, traders, and processors but it also promoted value chain collaboration and enhanced transparency in pricing mechanisms leading to risk avoidance and reduction in Tanzania.

Pricing strategy of many firms has undergone a total rethink; this has led to changes in the types of pricing models and strategies used in the digital era. Some of these pricing models, thanks to digitalisation have made it possible to offer services and products for free to the user, for instance, google and Facebook, and further to this, new revenue streams have emerged like advertising on these platforms. Freemium models, which are very popular with start-ups, have also come up. These do not charge anything for their basic services but charge for upgrades, where they promise to offer a full range of features with no ads. Good examples of freemium models pricing models are Dropbox, Spotify, and LinkedIn. Others are like *Tigo* and *Bima* in the Tanzanian insurance sector, *Mkopa* in the Kenyan, Ugandan and Nigerian finance sector, etc. Keeping in mind that production costs generally reduce when digitisation is the basis of new business models, subscription models such as Netflix, Blue Apron, and Hellofresh have gained more traction.

9.7 Role of Digital Business Framework

Both digitisation and digitalisation of business have ushered in new synergistic value creation grids and networks such as digital business ecosystems (DBE). Digital business ecosystems can be explained as a socio-technical network of organisations, individuals, and technologies that collectively co-create value. The digital business ecosystems have become the new business frameworks; these systems are connecting the entire value chain of organisations for effectiveness and efficiency. As per Stanley and Brisco (2010), DBE has two tiers; the digital (ecosystem) and the business (ecosystem). This ecosystem stands for a virtual environment that is populated by digital concerns and entities, such as hardware, software applications, and processes (Nachira et al., 2007). The systems work on a peer-to-peer dispersed technology infrastructure that makes, disseminates, and interconnects digital services over the internet.

These business ecosystems can be considered as economic communities of organisations and individuals and that conduct their business outside their traditional industry boundaries (Moore, 1993). Therefore, DBE can be called a business framework. It entails a socio-technical environment where you find machines, equipment, and individuals, firms, and digital technologies bearing collaborative, complementary, and also competitive relationships to enhance the co-creation of value by means of shared digital platforms. For example, within the East African countries of Kenya, Uganda, Rwanda, and Tanzania, telecommunication companies, individual entrepreneurs, and other ICT-based firms have invented and provided several services in the form of mobile phone applications, which generally have formed a network of relationships easing business operations. These applications are for different stakeholders on different platforms. Some of these are; *iCow* targeting the Kenyan farmer, invented by Su Kahumbu in Kenya; *Vet Africa* by a Scotland-based tech company—Cojengo, founded by Craig Taylor and Iain Collins in partnership with Microsoft offering veterinary services in Kenya, Ethiopia, Uganda, and Tanzania; *M-Farm* for use by farmers in Kenya and Ghana ensuring to price transparency developed by Linda Kwamboka, Susan Oguya, and Jamila Abass; *Agri-wallet* offered by Dodore Kenya Ltd. founded by Ad Rietberg and Sijmen, which is a smallholder farmers

purse to manage their finances; *Kilimo Salama* developed by Syngenta Foundation for Sustainable Agriculture and Safaricom Ltd., which gives up-to-date climate and weather information to farmers for sustainable agricultural practices in Kenya etc. (Emeana et al., 2020). The above is specific to the agro-business sector, and different sectors have specific applications targeted at them.

Digital business ecosystems include digital content marketing (DCM), which is aimed at fostering brand engagement and trust with consumers. The definition of DCM covers several aspects of the process of serving and understanding the consumer appropriately. It is referred to as the "management process responsible for identifying, anticipating, and satisfying customer requirements profitably" through relevant digital content (Rowley, 2008, p. 522). It is, therefore, a critical relationship marketing tool. It has been further proposed as an aid to the development of consumer interconnectivity and attachment to brands, eventually bearing a positive contribution to the firm's performance (Carranza, 2017; Kakkar, 2017).

The advantages of an organisational-based DCM include a more engaged target audience at a reduced marketing cost, which consequently may diminish the need for carrying out advertising or personal selling activity (Pulizzi, 2010). Furthermore, Bicks (2016) reveals that content marketing is likely to cost 62 per cent less than traditional marketing efforts, and likely to generate three times as many [sales] leads at the same time. For buyers and consumers, DCM is likely to improve access to the content which is most relevant to their requirement and personal needs, which may include the offering of opportunities for entertainment, brand-related learning, or heightened convenience (e.g., through time savings), leading to greater value (Lieb, 2011).

9.8 Challenges of Digital Business Framework

Some of the major challenges under this context may include systems inter-operability bottlenecks of the McKinsey model in a digital framework with its technological, semantic, and organisational facets (Chen

et al., 2008). IT incompatibility, for instance, the architectural framework, the infrastructure, or the frameworks, thereof, maybe another hindrance. In East African countries, for instance, mobile connectivity index (MCI), rules for data exchange, and use in addition to digital interfaces may still be in the early stages of development and are varied (Heaphy, 2021).

Person-related challenges may also be there; for instance, individual managers, consumers, or customers may have their roles unfulfilled as a result of a dearth of required competencies or equipment. Individuals may not be in a position to cope with the dynamics, heterogeneity, opportunities, and complexity involved in value co-creation (Lenkenhoff et al., 2018).

Firms fased hurdles like having different structures and use of non-identical logics of organising in terms of responsibilities, decision-making, and autonomy. Chen et al. (2008) argued that the coherency between decision-making principles could be the main prerequisite for the evolving of ecosystems. This coherency seems to be important for a balanced exchange relationship and a minimum amount of trust between autonomous partners (Tsujimoto et al., 2017). However, this coherence may be lacking in most cases.

9.9 The Strategic Management Requirements for a Successful Digital Business

In the contemporary business environment, the success of the strategic management process in relation to digitisation and digitalisation of the process is necessary. Strategic management activities, strategy formulation, strategy implementation, strategy evaluation, and control, can be digitalised to a certain extent. Brorström (2020) has argued that, in the contemporary dynamic business scenario, both digitalisation and digitisation are core to operations. In the process of strategic management, the McKinsey 7S framework as a concept of a firm's internal business environment designing is very critical. The relationship between each of the

7Ss elements may be used to determine the strengths or the weaknesses of a firm, and the dimensions can be fused to a firm's digital transformation process (Demir & Kocauglu, 2019).

Starik et al. (2012) proposed a framework called the Strategic Environmental Management (SEM) framework through mapping the McKinsey 7Ss to identify critical characteristics of company's environmental sustainability profiles. Some scholars like Sekera and Stimel (2011) researched (eco)-sustainability and found out that the McKinsey's 7S model addresses largely operational and tactical levels, instead of strategic level. Teh (2013) posited that the McKinsey model could be a functional tool at a strategic level, where firms create and implement their (eco)-sustainability policy and strategy. As a result, in his proposal, Teh (2013) used the McKinsey 7Ss framework as a basis to build an assessment metric to measure the extent of adoption of sustainability policy and strategy and appraise an organisational eco-sustainability performance with the metrics. It is, therefore, on the basis of such a foundation that the McKinsey's 7S framework and its applicability to platformisation can be considered.

Enhanced firms' performance may be driven by several factors for such as how human resources are managed, policies, compensation, and leadership. The human resources (HR) function plays an actively critical and productive role in realising a firm's goals. The four soft Ss of the McKinsey's model tends to be skewed to the human element in an organisation. This, therefore, may mean that the entire human element can be engineered by the use of the McKinsey model (Zincir & Tunç, 2017). McKinsey's hard and soft Ss should be taken up as precedents for the optimal realisation of a firm's digitalisation process. Once these are founded appropriately on the right form of digital platformisation, then the firm's survival would be guaranteed (Adeola et al., 2021).

9.10 Discussion and Conclusion

From the accessed literature, it is evident that digitisation and digitalisation as processes guaranteeing good business performance in East Africa, are still in their infancy. The business sectors in all East African countries

are at different levels of preparedness, infusion, and adoption of digital framework. Several authors and scholars have researched on digitalisation of various aspects of business, including Kaivo-Oja Roth and Westerlund (2017), who wrote on the major trends in the digital transformation across different scenarios, Shpak et al. (2016), who examined models of marketing diversification, Chaffey and Ellis-Chadwick (2016) explicated the expediency of using electronic communication technologies, Patil, (2018) on the influence of the trend of marketing digitalisation on consumers, and digital transformation technologies for large companies (Sebastian et al., 2017). In the meantime, other researchers have also concentrated on the use of digitalisation application. For instance, Reis and Melao (2019) examined the digital networkings of Portuguese companies, Holmlund et al. (2017) researched on digitalisation on banking, Hanninen et al. (2017) conducted his research on the problem of digitalisation in the retail trade. Shubham and Renu (2016) researched the change of marketing approaches to the consumer through the lens of digitalisation of marketing activity. Louw and Nieuwenhuizen (2020) opined that African firms introduce mobile-optimisation services first, then other forms of digitalisation later. This highlights the place of a 'mobile-first approach' not only to traditional brick and mortar but also digital-based firms. Few researchers have researched on digitisation of the East African business context.

As organisations seek to attain efficiencies through digitalisation of the McKinsey model, platformisation in key (Adeola et al., 2021). Robots, automation, and computers have existed in the industry for some time; however, the advancement of internet and the electronic highway have revolutionised their use. This revolution has brought up efficiencies in cost, material inputs, labour, and time. These enhanced efficiencies have made it possible to monitor the activities with ease, seamlessness in operation and processes of machines, materials, workforce, and even service and products themselves, simultaneous data collection, analysis, and utilisation of real-time decision-making.

In the contemporary business world, organisations need to survive and to successfully compete. In order to do this, they need to increasingly create a dependence on their use of information technology and their knowledge capabilities to constantly keep on innovating. Alavi and

Leidner (2001) stated that the importance of information technology (IT) in supporting knowledge management initiatives and fostering innovation cannot be discounted. IT as a component of platformisation facilitates the creation, dissemination, and utilisation of knowledge (Davenport et al., 2008), thus greatly increasing and enabling organisations' knowledge capacity and capabilities. Digitalisation has aided in the augmentation, building, and buttressing firms' knowledge capabilities. It has become a critical success factor in today's business environment (Sambamurthy & Subramani, 2004). Leonard-Barton (1995) emphasised the connection between firm innovation and the knowledge capabilities of an organisation. For digital business technologies to assist in supporting knowledge acquisition in the business environment and the assimilation and use of the same for decision-making, the concept of anchoring McKinsey's framework on platformisation is essential.

The contemporary global marketplace has become very complicated, as exemplified by the fast-changing consumer preferences, increasing competitive challenges, reduced product life cycles, and unsustainable competitive advantage. Fast response and continuous innovation are basic sources of sustainable advantage (Distanont & Khongmalai, 2018). As part of understanding their business's competitive landscape, the firms' dynamic capacity and capabilities, its agility and innovativeness will enable it to respond to unprecedented events, cope with unanticipated challenges, and raise its competitive edge. Business agility is defined as the firms' ability to operate effectively in a dynamic environment with much uncertainty and instability (Sahin, 2000). Story (2021) posits that McKinsey's 7S model is an important framework firms can use to review their marketing capabilities. It is also a business-wide construct that entails logistics processes, organisational structures, information systems, and in particular mindsets of both the management and workforce (Hartványi & Nagy, 2008). Organisations that understand their business environment can combine such understanding with their agility to better take advantage of changes in the environment since such environmental dynamism bring forth opportunities.

Braunscheidel and Suresh (2009) suggest that with mounting competitive pressures and a combination of high levels of turbulence and uncertainty, firms require agility, the use of McKinsey model can

inform the organisation of its capacity. Furthermore, agility can enhance the organisations financial, non-financial, and operational performance: profitability, sales, market share, speed to market, and customer satisfaction. Research in competitive dynamics of the business environment has widely examined the patterns of competitive actions (e.g., strategic actions, responses, or a series of actions, etc.) (Ferrier, 2001) and their antecedents and consequences (Smith et al., 2001). Baum and Korn (1996) further examined specific types of competitive actions, such as market entry and exit strategies. The competitive actions, among others like patent inventions, new service and product introductions promotions, use of technology have a great potential towards the disruption of the competitive status quo within the business environment and cause dis-equilibrium within the market. As organisations seek to satisfy various customer needs, Jílková (2020) argues that the digital revolution has restructured the conventional customer behaviour model and brought some new perspectives to handle business-to-customer (B2C), business-to-business (B2B), business-to-government (B2G), and business-to-employees (B2E) in a data-driven society. Due to technological dynamism, the entire customer configuration has taken new dimensions never known before.

For the platformisation process to succeed, the presence of factors like digital technology adoption and adaptation, digital literacy, and government input in some cases cannot be discounted. It is, therefore, recommended that mechanisms to lower both digitisation and digitalisation costs, enhance adoption and adaptation, increase technology literacy have to be put in place to spur the business growth and survival.

References

Abidin, R., Osman, N. H., Zahari, F. M., & Nordin, N. (2015). Determining critical elements in strengthening the organisations: A study on the public sector. *Journal of Business Management and Accounting,* 155–169.

Adeola, O., Edeh, J., Hinson, R. E., & Netswera, F. (2021). *Digital service delivery in Africa—A platformisation perspective*. Palgrave Macmillan.

Adner, R., & Kapoor, R. (2009). Value creation in innovation ecosystems: How the structure of technological interdependence affects firm performance in new technology generations. *Strategic Management Journal*, 306–333.

Ahmad, G., & Osama, M. (2015). Value creation in digital application marketplaces: A developers' perspective. In *Thirty Sixth International Conference on Information Systems*. Association for Information Systems (AIS).

Alavi, M. D., & Leidner, E. (2001). Knowledge management and research issues. *MIS Quarterly, 25*(1), 107–136.

Andeweg, K., Lee, J. v., & Bashuna, S. D. (2020). *Youth as an asset for dairy development-What have we learned from youth-led dairy in East Africa*. Wagenigen University and Research.

Banga, K., & te Velde, W. D. (2018). *Digitalisation and the future of manufacturing in Africa*. Supporting Economic Transformation (Odi).

Baum, J. A., & Korn, H. J. (1996). Competitive dynamics of interfirm rivalry. *Academy of Management Journal,* 255–291.

Bhimani, A. (2021). *Accounting disrupted: How digitalization is changing finance*. Wiley.

Bicks, B. (2016, October 7). *All you need to know about content marketing vs traditional marketing*. https://ozcontent.com/blog/content-marketingvs-traditional-marketing.

Braunscheidel, M., & Suresh, N. (2009). The organizational antecedents of a firm's supply chain agility for risk mitigation and response. *Journal of Operations Management,* 119–140.

Bresciani, S., Ferraris, A., & Santoro, N. G. (2016). Wine sector: Companies' performance and green economy as a means of societal marketing. *Journal of Promotion Management, 22*(2), 251–267.

Briddle, F. (2017). The impact of digital marketing disruption on the localisation industry. *Multilingual,* 44–47.

Brorström, S. (2020). The strategy process as a result of learning, questioning, and performing in a city organization. *International Public Management Journal,* 611–630.

Carranza, A. (2017, October 7). *The importance of content marketing in 2017 and beyond*. Retrieved from Business 2 Community: https://www.business2community.com/content-marketing/importance-content-marketing-2017-beyond-01861200.

Chaffey, D., & Ellis-Chadwick, F. (2016). *Digital marketing*. Pearson.

Chaffey, D., Hemphill, T., & Edmundson-Bird. (2019). *Digital Business and Commerce Management.* New York: pearson.

Chen, D., Vallespir, B., & Daclin, N. (2008). An approach for enterprise interoperability measurement. *MoDISE-EUS,* 1–12.

Chuang, S., & Lin, H. (2015). Co-creating e-service innovations: Theory, practice, and impact on. *International Journal of Information Management,* 277–291.

Davenport, T. H., Prusak, L., & Strong, B. (2008, October 10). *Putting ideas to work: Knowledge management can make a difference—But it needs to be more pragmatic.* Retrieved from Wall Street Journal: https://www.wsj.com/articles/SB120468033433412107.

Demir, E., & Kocauglu, B. (2019). The use of Mckinsey's 7s framework as a strategic planning and economic assestment tool in the process of digital transformation. *PressAcademia Procedia*, 114–119.

Distanont, A., & Khongmalai, O. (2018). The role of innovation in creating a competitive advantage. *Kasetsart Journal of Social Sciences,* 15–21.

Emeana, E. M., Trenchard, L., & Dehnen-Schmutz, K. (2020). The revolution of mobile phone-enabled services for agricultural development (m-Agri Services) in Africa: The challenges for sustainability. *Sustainability,* 485–501.

Fan, P., & Zhou, G. (2011). Analysis of the business model innovation of the technology of internet of things in postal logistics. In *IEEE 18th International Conference on Industrial Engineering and Engineering Management* (pp. 532–536). IEEE.

Felix, J. C. (2018). The impact of digital marketing on business performances in online food marketing and telecommunication industries. *Business Education Journal,* 12.

Ferrier, W. J. (2001). Navigating the competitive landscape: The drivers and consequences of competitive aggressiveness. *Academy of Management Journal,* 858–877.

Goldfarb, A., & Tucker, C. (2019). Digital economics. *Journal of Economic Literature,* 3–43.

Grishikasvili, K., Dibbs, S., & Meadows, M. (2014). An investigation into big data impact on digital marketing. *Online Journal of Communication and Media Technologies,* 146–150.

Hänninen, M., Smedlund, A., & Mitronen, L. (2017). Digitalization in retailing: multi-sided platforms as drivers of industry transformation. *Baltic Journal of Management, 13*(2), 152–168. https://doi.org/10.1108/bjm-04-2017-0109

Hartványi, T., & Nagy, Z. (2008). Agility in supply chains. *Acta Technica Jaurinensis,* 315–323.

Heaphy, E. (2021, June 8). *Mobile for development*. Retrieved from GSMA Web Site: https://www.gsma.com/mobilefordevelopment/english/reducing-divide-digital-literacy-innovators-east-africa/.

Holmlund, M., Strandvik, T., & Lähteenmäki, I. (2017). Digitalization challenging institutional logics: Top executive sensemaking of service business change. *Journal of Theory and Practice,* 219–236.

Hui, G. (2014, October 1). *How the internet of things changes business models.* Retrieved from Harvard Business Review: https://hbr.org/2014/07/how-the-internet-of-things-changes-business-models.

International Telecommunications Union. (2001). *The internet in an African LDC: Uganda case study*. International Telecommunications Union.

Jelassi, T., & Martínez-López, F. J. (2020). *Digital business transformation in Silicon Savannah: How M-PESA changed Safaricom (Kenya) in: Strategies for e-Business. Classroom companion.* Springer.

Jílková, P., & Králová, P. (2020). Digital Trends and New Payment Models in B2C E-Commerce Context. In *Proceedings of the "New silk road: Business cooperation and prospective of economic development"(NSRBCPED 2019).* Published. https://doi.org/10.2991/aebmr.k.200324.117

Kaivo-Oja, J., Roth, S., & Westerlund, L. (2017). Futures of robotics. Human work in digital transformation. *International Journal of Technology Management,* 176.

Kakkar, G. (2017, October 7). *Top 10 reasons behind growing importance of content marketing*. Retrieved from Digital Vidya: http://www.digitalvidya.com.

Kayemba, J. (2020, October 14). Retrieved from Africa Portal: https://www.africaportal.org/publications/timely-decision-businesses-uganda-adopt-modern-technology-new-world-setting/.

Kirabo, J., Namusonge, G. S., & Iravo, M. A. (2020). Strategic innovation, a contemporary management practice on. *International Journal of Social Sciences and Technology,* 81–93.

Krämer, A., & Kalka, R. (2017). How digital disruption changes pricing strategies and price models. In A. Khare, B. Stewart, & R. Schatz, *Phantom ex machina* (pp. 87–103). Springer.

Lee, E.-J., & Overby, J. (2004). Creating valiue for online shoppers: Implications for satisfaction and loyalty. *Journal of Customer Satisfaction, Dissatisfaction and Complaining Behaviour,* 54–67.

Lenkenhoff, K., Wilkens, U., Zheng, M., Süße, T., Kuhlenkötter, B., & Ming, X. (2018). Key challenges of digital business ecosystem development and how to cope with them. *Procedia CIRP,* 167–172.

Leonard-Barton, D. (1995). *Wellsprings of knowledge: Building and sustaining the source of innovation*. Harvard Business School Press.

Lieb, R. (2011). *Content marketing: Think like a publisher-how to use content to market online and in social media*. Que Publisher.

Loebbecke, C., & Picot, A. (2015). Reflections on societal and business model transformation arising from digitization and big data analytics: A research agenda. *The Journal of Strategic Information Systems,* 149–157.

Louw, C., & Nieuwenhuizen, C. (2020). Digitalisation strategies in a South African banking context: A consumer services analysis. *South African Journal of Information Management,* 8.

Maglio, P., Vargo, S., Caswell, N., & Spohrer, J. (2009). The service system is the basic abstraction of service science. *Information Systems and E-Business Management,* 395–406.

Mathwick, C., Malhotra, N., & Rigdon, E. (2001). Experiential value: Conceptualization, measurement and application in the catalog and Internet shopping environment. *Journal of Retailing,* 39–56.

Mesich, A. (2018). *Bringing value chain-based financial services to Irish potato farmers in Rwanda*. Medium.com.

Mkalama, B., & Ndemo, B. (2020, December 10). *Orchestrating smart cities, new disruptive business models and informal enterprises*. Retrieved from Intechopen: https://www.intechopen.com.

Mlay, S., Ariel, N., Mbarika, V. W., Vegah, G., Moya, Musa, B., & Balunywa, L. (2013). Global diffusion of the internet, the internet in Rwanda. *The African Journal of Information and Communication,* 45–61.

Moore, J. F. (1993, October 7). Predators and prey: A new ecology of competition. *Harvard Business Review,* 75–83.

Mpesa Foundation Academy. (2020, October 14). Retrieved from mpesa foundation academy: https://mpesafoundationacademy.ac.ke/.

Mureithi, M. (2017). The internet journey for Kenya: The interplay of disruptive innovation and entrepreneurship in fueling rapid growth. In B. Ndemo, & T. Weiss, *Digital Kenya. Palgrave Studies of Entrepreneurship in Africa* (pp. 27–53). Palgrave MacMillan.

Nachira, F., Dini, P., & Nicolai, A. (2007). *A network of digital ecosystems for Europe: Roots, processes and perspectives*. European Commission.

OECD-Development Centre. (2021). Digital transformation for youth employment and agenda 2063 in East Africa. In OECD, *Africa development dynamic: Digital transformation for quality jobs* (pp. 163–187). AUC.

Pagani, M., & Pardo, C. (2017). The impact of digital technology on relationships in a business network. *Industrial Marketing Management,* 185–192.

Patil, A. (2018). The trend of digitalization in marketing and its impact on the customers. In *International Conference on Digital Economy and its Impact on Business and Industry* (pp. 13–22). Sangli, India. International Journal of Trend in Scientific Research and Development.

Porter, M., & Heppelman, J. (2014, October 1). How smart, connected products are transforming competition. *Harvard Business Review*, 1–10. https://hbr.org/2014/11/how-smart-connected-products-are-transforming-competition.

Pulizzi, J. A. (2010). *Get content get customers: Turn prospects into buyers with content marketing*. Tata McGraw Hill Education Private Limited.

Reis, J., & Melao, N. (2019). The path to digital transformation: Overcoming prejudice in the digital era with service operations. *International Journal of Servces Operations Management,* 20–32.

Rowley, J. (2008). Understanding digital content marketing. *Journal of Marketing Management,* 517–540.

Sahin, F. (2000). Manufacturing competitiveness: Different systems to achieve the same results. *Production and Inventory Management Journal,* 56–65.

Sambamurthy, V., & Subramani, M. R. (2004). Special issue on information technologies and knowledge management. *MIS Quarterly,* 1–7.

Sebastian, I., Moloney, K., Ross, J., Fonstad, N., Beath, C., & Mocker, M. (2017). How big old companies navigate digital transformation. *MIS Quarterly Executive,* 197–213.

Sekera, L. E., & Stimel, D. (2011). How durable is sustainable enterprise? Ecological sustainability meets the reality of tough economic. *Business Horizons,* 115–124.

Shah, J. M. (2018). Impact of Digital Marketing in Business and Politics. *International Journal of Scientific & Engineering Research, 9*(12).

Sheriff, S. (2008). *Access to infrastructure*. Global Information Society Watch (GISWatch).

Shpak, N., Kyrylych, T., & Greblikaite, J. (2016). Diversification models of sales activity for steady development of an Enterprise. *Sustainability,* 393.

Shubham, S., & Renu, S. (2016). Literature review on ethical issues in digital marketing. *International Journal of Scientific & Engineering Research,* 91–93.

Siemens. (2017). *Africa digital maturity*. scribd.com.

Smith, K. G., Ferrier, W. J., & Ndofor, J. (2001). The effects of organizational differences and trust on the effectiveness of selling partner relationships. In M. A. Hitt, R. Freeman, & J. S. Harrison (Eds.), *Handbook of strategic management* (pp. 315–361). Blackwell.

Sousa, M., & Rocha, Á. (2018). Skills for disruptive digital business. *Journal of Business Research*, 257–263.

Spohrer, J., Maglio, P., Bailey, J., & Gruhl, D. (2007). Steps toward a science of service systems. *Computer,* 71–77.

Sridhar, S., & Fang, E. (2019). New vistas for marketing strategy: digital, data-rich, and developing market (D3) environments. *Journal of the Academy of Marketing Science,* 977–985.

Stanley, J., & Brisco, G. (2010). The ABC of digital business systems: Communications law. *Journal of Communcation, Media and Telecommunications Law,* 1–24.

Starik, M., Holliday, S., & Paton, B. (2012). Strategic environmental sustainability management: Highlighting the need and opportunities to recognize environmentally-hidden economic sectors. *International Journal of Business Insights and Transformation,* 8–15.

Story, J. (2021, June 8). *How to use the McKinsey 7s model in marketing*. Retrieved from Smart Insights: https://www.smartinsights.com/marketing-planning/marketing-models/mckinsey-7s-model/.

Sun, Y., Yan, H., Luc, C., Bie, R., & Thomas, P. (2012). A holistic approach to visualising business models for internet of things. *Communicatons in Mobile Computing,* 1–7.

Susenoa, Y., Laurell, C., & Sick, N. (2018). Assessing value creation in digital innovation ecosystems: A Social Media Analytics approach. *Journal of Strategic Information Systems,* 335–349.

Sweeny, J. C., & Souter, G. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing,* 203–220.

Teh, D. (2013). *Strategic implementation of organizational eco-sustainability policy and strategy-a McKinsey seven S's approach*. Royal Melbourne Institute of Technology University.

The Digital Transformation Centre of Rwanda. (2020, October 14). https://digicenter.rw/.

The World Bank. (2020, October 12). *What we do -Projects and Operation.* Retrieved from The World Bank: https://projects.worldbank.org/en/projects-operations/project-detail/P171305.

Tsujimoto, M., Kajikawa, Y., Tomita, J., & Matsumoto, Y. (2017). A review of the ecosystem concept—Towards coherent ecosystem design. *Technological Forecasting and Social Change,* 49–58.

United Nations Capital Development Fund. (2020, December 10). *Better than cash alliance-research.* Retrieved from Beeter than Cash Alliance: https://www.betterthancash.org/.

Wafudu, S. J., & Kamin, B. Y. (2021). Realistic quality assurance for technical vocational education and training towards enhanced productivity: Literature review. *İlköğretim Online*, 858–869.

Yoo, Y., Henfridsson, O., & Lyytinen, K. (2010). Research commentary—The new organizing logic of digital innovation: An agenda for information systems research. *Information Systems Research,* 724–735.

Zincir, O., & Tunç, A. Ö. (2017). An imagination of organizations in the future: Rethinking McKinsey's 7S model. In R. Batko & A. Szopa (Eds.), *Strategic imperatives and core competencies in the era of robotics and artificial intelligence* (pp. 1010–1125). IGI- Global.