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Digitalization in the Management of African Companies: A Necessity

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Abstract

In an increasingly competitive world, the use of digital technology in business management has become paramount for economic integration. The objective of this study is to highlight the need for digital technology in the management of African companies through a literature review. It emerges from this research that the integration of digitalization into the management of African companies can be a solution to the problem related to accounting and financial practices on the one hand and marketing and human resources practices on the other. The automation of accounting and financial tasks through artificial intelligence, for example, could not only improve the qualitative characteristics of the information produced, but also solve the thorny problem of manipulating accounting figures, of uniqueness of information through the dissemination of objective, unique information available to all stakeholders. The digitization of the Human Resources function would make it possible to carry out objective recruitment, facilitate the continuous training of employees through e-learning and improve their skills. Digital marketing could improve product visibility, build customer loyalty, and increase sales. The integration of big data would reduce the costs and time spent on data analysis. It is therefore necessary and imperative for African companies to migrate from traditional management to digital management qualified as "management 4.0" in order to be competitive on an international scale.

Keywords

Digitalization, business management, Africa, necessity, digital tools

1. Introduction

The world today is increasingly governed by digital tools. The exponential evolution of these technologies leaves no one safe. Companies, organizations and individuals are now connected to digital systems. The digital transformation of management processes has therefore become essential for companies. It makes it possible to digitize traditional processes using new technologies such as cloud computing, artificial intelligence, cyber-physical systems, the Internet of Things, adapted to the daily management of companies (Liu 2011). Just like countries in the rest of the world, African countries have also taken the initiative to put digital transformation at the center of their concerns. According to the African Union (2020), this is the "shift from a physical to digital business model and from a business-based business model to a networking-based business model". Indeed, business management in Africa is an issue that has been anchored by researchers for several decades companies continue to fail (Fansi 2010). The main causes here are of contextual, organizational, legal-economic origin. As a result, the management system of African companies is being called into question.

According to the UNDP (2015), the growth rate in Sub-Saharan Africa is 5%. In addition, only 3 million jobs are created on the continent each year compared to 12 million young people entering the labour market. Nevertheless, the health crisis has led business leaders to highlight their ability to produce goods and services for local consumption.

South Africa, for example, is seizing this opportunity to start producing artificial respirators and masks. Kenya has taken advantage of this to improve the fishing sector by reducing imports of frozen fish from China, which cost them about \$20 million a year. This period was also marked by the knowledge and use of digital technology in several companies in order to continue the management of the latter. The implementation of new forms of work during this period seems to have improved the integration of digital systems into the management of the company. However, several African countries remain fearful about the integration of these technological tools. According to the African Union (2020), the digitalization of businesses in Africa is low. Indeed, the offer of internet data for small and medium-sized African enterprises remains expensive. In addition, microenterprises do not find it necessary to use digital tools in their management system. The objective of this study is to highlight the need for the integration of digital technology in the management of African companies. In addition, why is digitalization in African business management necessary?

1.1 Objective

It is a study and a contribution to the management problem of African companies. The objective is to highlight the need for digitalization in business management. In other words, analyze how digitalization can address persistent management challenges in African enterprises, with a focus on accounting, finance, marketing, and human resource functions. Through a literature review, we will highlight the importance of digitalization as a source of solving problems related to the management practices of African companies.

2. The African Business Management System

Management is a multidisciplinary and multidimensional concept for which it is difficult for researchers to find a consensus on its definition. According to Mintzberg (1998), management is a "process by which those who have formal responsibility for all or part of the organization try to direct it or at least guide it in its activities". For Sharon et al. (2014), "the management process is defined as the set of organizational and management techniques to lead and steer the action of individuals in order to achieve organizational efficiency. However, the management of companies in Africa is influenced by traditional African values (Illa 2012). Kamdem (2000), in his work, describes African management as "ethno-tribal management", which highlights supernatural beliefs and community requirements. Henry (1991) considers these cultural specificities as factors of inertia and counter-productivity of African firms. As a result, in 1998, he suggested an Africanization of the principles of Western management.

Indeed, management practices in Africa are influenced by external factors to the logic economic of the company (Bakengla and Levian 2014) and organizational factors (Boukar 2009; Ngok Evina 2014). The West has tried to propose a management style to Africans, based on principles and values. But the specificities of the African context have led to the failure of this model. Although most African leaders are still clinging to their value and customs to steer companies, it is imperative for them to get out of this traditional management zone to align themselves with the new era of management that we would call "management 4.0"

3. Digitalization as a necessity in management in African companies

One of the difficulties encountered by African companies in their management is the production of information that reflects the real image of the company. Studies on the qualitative characteristics of accounting information conveyed by African companies have revealed the increased existence of the manipulation of accounting figures. Studies by Ngantchou and Elle (2018) found that figures were manipulated in African companies. In view of agency conflicts between the company and the tax authorities due to their divergence of interests, managers manipulate accounting figures in order to pay less tax (Ndjetcheu 2020). In the same vein, Degos and Souleymanou (2018) point out that the impertinence of the information disseminated by African companies results from the maximization of shareholder wealth, thus neglecting other stakeholders. In addition, there is also a discrepancy between the figures produced by companies when applying for a loan and those held by bankers. These multiple accounting manipulations damage the company's image and repel potential investors.

Digitalization is defined as the dissemination and use of digital technologies (internet, mobile phones, and other tools and systems) to collect, store, analyze, and digitally exchange information (World Bank 2016). Westernman et al (2014) define digital transformation as the use of technologies to radically improve the performance or reach of companies. According to Dudezert (2018), it is a global process of transformation of the company that leads it to review its methods of collaboration with its customers, its internal processes and sometimes its business model. The use of digital tools has become imperative for the management of African companies in order to be competitive on an

international scale. These tools are used not only in accounting and financial practices but also in marketing and human resources functions as illustrated by the table below.

Table 1. contribution of Digitalization in management practices

	Contribution	Authors
Accounting and financial practices	Increased profitability, increased output/input ratio, reduced costs, improved performance (effectiveness and efficiency)	Ngassam (2011), Teng et al. (2022), peng and Tao, (2022), Chouaibi et al (2022), wang et al. (2021), Flores (2012), Gul (2025)
	Automation of tasks Reduction of time, accuracy of financial forecasts, strengthening of data quality, relevance of financial reporting	Granlund and Mouritsen (2003), Gartner (2021) KMG (2021) ACCA (2019), Mckinsey (2017), Ecim et al. (2025)
Marketing function	Improved communication with the public, customization of orders, customer knowledge and improvement of customer relations, increased sales	Xu et al (2015), Chaffey (2015), Lefebure and Venturi (2005), Wedel et Knnan (2016)
Human Resources Function	Automation of processes, reduction of administrative costs, reduction of errors, increase of productivity	Mosca et al. (2020), Nabil (2024), Minbaeva (2017)
	Objective recruitment, performance evaluation, improvement of talent management, development of an inclusive and innovative corporate culture, improvement of the quality of life of employees	Bergeron (2019), Dupont (2017)
Environment	Reduction of paper printing, participation in the protection and preservation of the environment, promotion of ecological habits and culture of environmental responsibility	Chahdi et al. (2025), Khurjekar et al. (2024)

Source: Authors

This table highlights studies (non-exhaustive) on the contribution of digitalization to business management practices which will be detailed in the following paragraphs.

3.1 Digitization of accounting and financial practices

One of the significant contributions of digitalization in the company's accounting and financial practices is the automation of tasks. The integration of automated accounting software helps to reduce accounting costs, improves transparency and reliability of information. ERP by example reduces accounting errors, eliminates duplication and flags anomalies. Automating tasks reduces inefficiencies, increases productivity, and saves time. Indeed, accounting digitization software is full of algorithms that make it possible to distinguish the key elements in the establishment and recording of accounting documents. Repetitive tasks such as data collection, data processing, bank reconciliation are replaced by an automated system that also reduces the archiving and handling of paper documents. One of the main features of the digitization of accounting and financial practices is the time saving, it intersects both the movement of funds, payroll, and the management of purchases and sales. Combined with artificial intelligence, the digitization of processes allows professionals to analyze large amounts of data to detect trends, anticipate future scenarios and make more informed decisions.

Indeed, according to Boukar and Ngassam (2011), digitalization influences efficiency and effectiveness. Efficiency here aims to increase the output/input ratio, while effectiveness concerns the degree to which the expected objectives

are achieved. Several studies (Teng et al. 2022; Peng and Tao 2022; Chouaibi et al. 2022; wang et al. 2021) have confirmed that the integration of digital technology positively influences the performance of the company. According to Flores (2012), digitalization increases the profitability of the company by simplifying processes and interactions through automation. For Granlund and Mouritsen (2003), the automation of processes strengthens data quality, accelerates accounting cycles, and provides real-time financial reports for informed decision-making. Digitalization also allows for the improvement of management information systems by taking into account extra-financial information to optimize internal decision-making and reassure stakeholders (Ecim et al. 2025). According to the work of Gul (2025), integrated reporting generated by digital transformation allows for the evaluation of capital elements in an efficient and detailed manner, also facilitating decision-making. In addition, the digitization of accounting practices aims to improve the relevance of financial reporting, simplify exchanges between the company and stakeholders, making decisions more fluid.

According to Gartner (2021), the use of big data in accounting can improve the accuracy of financial forecasts by 20% to 30% compared to traditional methods, allowing companies to have competitive advantages. In addition, a study by KMG (2021) highlights that companies that have integrated cloud computing into their systems have significantly reduced their infrastructure costs. In the same vein, the Association of Chatered Certified Accountants (ACCA 2019) points out that dematerialization not only reduces storage costs but also strengthens compliance with current requirements. Digitalization thus proves to be a catalyst for achieving sustainable results (Adekomaya 2024). Mckinsey (2017) in one of his reports points out that by 2030, 50% of traditional accounting tasks could be automated, leading to a significant decrease in the number of positions dedicated to these functions. Accounting professionals should therefore adapt to this change through continuous retraining not only in empowerment but in digital technologies in general.

3.2 Digitization of the marketing function

The American Marketing Association defines digital marketing as "the set of activities and procedures facilitated by digital technology to create, deliver and deliver value to customers and partners" (Kannan et al. 2016). In addition, it is a question of using modern communication tools developed by new technologies to create value. However, the adoption of this type of technology remains a mystery for most African companies. According to Yu Jie et al. (1017), managers have this tendency to consider digital marketing as a set of new tools (email, display, etc.) rather than a new way of promoting marketing strategies. Dussart (2012) in his comments underlines that: "traditional marketing and digital marketing are so different in nature that their need for integration is a real headache. The demand for digital marketing is strong but it is not well filled." Indeed, the success of a digital platform depends on its quality and speed and this must also meet customer expectations at the risk of suffering a conversion failure. The digitization of the marketing function offers opportunities to exchange directly with the customer and get their opinion on a brand. This form of online survey also makes it possible to improve the product and/or service offer in order to anticipate the figures.

The use of digital technology in the marketing function improves the accuracy of sales forecasts. Through websites, companies can disseminate business information to customers, business partners and all stakeholders. According to Xu et al (2015), electronic transactions require the fulfillment of online orders. Indeed, the automation of the marketing function makes it possible to communicate with the public via automatic answering machines and email notifications (Chaffey 2015). Digital marketing also makes it possible to hold virtual exhibitions and merchandising to allow customers to place personalized orders. Customer relationship management is essential to boost the company's figures. According to Lefébure and Venturi (2005), it is a strategy for managing interactions with current and potential customers. In addition, social networks also play an important role. They not only strengthen customer relations but also build customer loyalty by meeting their various needs. According to Wedel and Knnan (2016), the data collected by social networks makes it possible to know the customer and improve his relationship with the company.

3.3 Digitization of the human resources function

One of the functions benefiting from the tools of the new technology is the human resources function. The digitalization of human resources, also known as e-HR, aims to optimize and automate human resources processes. It highlights talent management, training, staff recruitment and performance evaluation (Mosca et al. 2020). Digital tools such as AI and Big-data make it possible to automate administrative tasks, personalize the employee experience, promote engagement and develop a more inclusive and innovative corporate culture (Nabil 2024).

Indeed, the automation of administrative tasks is one of the most significant contributions of the digitization of human resources. Automated payroll management reduces errors, significantly reduces time, and provides data accurately (Minbaeva 2017). It makes it possible to store, organize and facilitate the updating of employee information because the data is centered and access becomes easier. Digital personnel data management reduces administrative costs and burdens related to physical documents, such as archiving. In addition, the digitalization of the human resources function makes it possible to manage leave requests online by also approving them through the same channel. This new technology also improves the quality of life of employees, makes communication more fluid and transparent, and improves work-life balance, thereby increasing productivity Bergeron (2019).

The digitization of the human resources function makes it possible to ensure the continuous training of employees based on digital tools such as e-learning in order to improve skills and facilitate their ability to adapt to changes. Indeed, according to Dupont (2017), "modern e-learning platforms use artificial intelligence algorithms to adopt the content and pace of training to the specific needs of employees". As a result, it improves the effectiveness of learning and increases the motivation of employees to develop their skills. Skills are also evolving through the recruitment of new profiles such as data scientists capable of interpreting vast amounts of data generated by human resources management software. In addition, the use of artificial intelligence in the recruitment process makes it possible to quickly analyze a large number of candidates and facilitates the choice of the profile for the position.

3.4 Digitalization of Management Practices for Sustainable Development

The digitalization of management practices is not only limited to improving business management practices; it also contributes to environmental protection. The use of digital technology for advertising and promoting products and services on social media, the e-marketplace, and invoicing for online purchases and sales helps reduce paper printing and traditional advertising campaigns (Chahdi et al. 2025). In this case, it helps protect and preserve the environment. Furthermore, digital marketing strategies are specifically used to support sustainable development by reducing the environmental impact of traditional marketing processes with a view to also promoting sustainable behaviors. According to Khurjekar et al. (2024), targeted communication with customers helps promote green products and habits, creating a culture of environmental responsibility. Furthermore, online marketing helps reduce energy consumption by reducing CO2 emissions, thus contributing to the fight against climate change. By combining digital technology with sustainability objectives, companies contribute to reducing their impact on the environment and facilitate long-term development (Chahdi 2025).

3.5 Secure data for optimal performance

As Lozova et al. (2025) emphasizes, digital transformation helps bring urban and rural areas closer together, create jobs, and strengthen economic resilience. Market flexibility requires a long-term government commitment to develop infrastructure and optimally allocate resources to create an environment conducive to business prosperity (Abozeid et al. 2025). Similarly, Cherrafi et al. (2025) emphasize that operational excellence in emerging economies is based not only on digitalization, but also on leadership commitment, skills improvement, and employee empowerment. However, one of the main concerns of leaders lies in data security because, as Ruml (2025) points out, ensuring data security and confidentiality is essential to building a robust digital economy. Moreover, the level of practice in terms of digital data security is still insufficient in some African countries (Gebeyew et al. 2025). It should be noted, however, that some countries such as South Africa, Ghana, and Kenya have already taken a lead in this area by creating data protection laws.

3.5 Proposal for improvement

This study focused only on accounting, finance, marketing and human resources practices in the company. We will be able to extend it to other functions such as: production and logistics. This work focused on a literature review, and another research on the need for digital technology in business management could be done through an empirical study.

4. Conclusion

The objective of this study was to highlight the need for digital technology in the management of African companies. Digitalization can be a solution to the unemployment problem that most African countries are suffering from. The digitization of the human resources function will not only improve the living conditions of staff but will also increase their productivity and skills, digital tools will make it possible to carry out an increasingly objective and selective recruitment, which replaces recruitment based on family, ethnic and subjective ties that is experienced in most African companies. The automation of accounting and financial tasks through artificial intelligence could not only improve the qualitative characteristics of the information produced, but also solve the thorny problem of manipulating

accounting figures, asymmetry of information through the dissemination of objective information, unique and available to all stakeholders. Digitalization in the management of companies is no longer just a necessity but an emergency because the economic integration of Africa can also be done through digital language. However, to fully benefit from the contribution of these new technologies, it will be necessary to take into account the socio-economic context, the cultural aspect and the internal (qualified personnel) and external (infrastructures, electricity, internet) factors likely to create resistance to change.

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