

# Digital Revolution and Management Control Practices: The Impact of Digitalization in Moroccan Private Companies

El Haji Taoufik<sup>1</sup>, Charif Mohamed<sup>2</sup>, Zaam Houria<sup>3</sup>,  
Khadija Ait Karoum<sup>4</sup>

<sup>1,4</sup>Doctoral Researcher, University Abdelmalek Essaadi

<sup>2</sup>Researcher, University Abdelmalek Essaadi

<sup>3</sup>Professor And Vice Dean, University Abdelmalek Essaadi

## Abstract

This paper aims to investigate how digitalization activity influences the management control practices of Moroccan private enterprises. With technologies developing daily, organizations are grappling with how best to utilize these technologies in their MCs, thus the need for development. The main research question of this paper is therefore to: Examine the impact that digital transformation brings to the decision making, performance measurement and resource allocation in private firms in Morocco.

To this end, the current study used both survey and interview questionnaires with managers drawn from different sectors and industries. These results therefore indicate that digitalization indeed increases the level of transparency and flow of daily monitoring information required in the management practices to increase its operational efficiency and overall strategic flexibility. That being said, the study also outlines some of the problematic areas like, resistance to change, training employees to learn how to deal with new tools. In conclusion, thus, despite the opportunities that the new digital reality opens to the approach and development of the management control systems in Moroccan private companies, this new reality poses a number of challenges which have to be met to improve the opportunities fully.

The study adds to the current body of knowledge regarding digitalization of operations and the impact it has on managerial processes and provides recommendations to those practitioners seeking to enhance their effectiveness within the context of digitally enabled business environment.

**Keywords:** Digitalization, Management Control Practices, Moroccan Private Companies, Digital Transformation, Decision-Making Processes, Performance Measurement, Resource Allocation, Digital Technologies, Artificial Intelligence (AI), Big Data Analytics.

## Introduction

Now it is incredibly apparent that digital revolution has become an all-encompassing concept, which changes the ways people live, work, and communicate with others and the surroundings. Examples include the internet, artificial intelligence and big data analytics have revolutionized almost every sector by enhancing ways of conducting businesses by creating higher levels of interconnectivity. This revolution affects everyone; companies, organizations and governments, as well as citizens lose their or-

orientations in the fast moving and growing technological world they have been introduced to. The shift has been not only informational making information more accessible to everyone, but has also redesigned business models. Still, the impact of the industries' digitalization has become tangible all around the world, but what is even more extremely different is the way countries and particularly the emerging ones react to it. Morocco is at the cross roads especially given the current development of its economy and its youthful population. Specific to Moroccan private companies, this study recognizes and fills a previously uncharted area of considerable importance, namely the impact of digitalization on management control practices.

Morocco on the other hand falls in a special category in Arab region where traditional business practice is gradually being replaced by the emerging appetite on tech-based solutions. Analyzing strategies of introducing and implementing digital tools into management processes in such companies gives an insight about underlying trends in the developing markets. This understanding is important not only for the analysis of local business development but also for the prognosis of regional economic development and competitiveness.

This paper seeks to investigate various factors and analyze the threats and possibilities Moroccan private firms experience with digitalization. First, it aims at exploring modification of management control practices due to dissemination of digital technologies, second, at evaluating the diffusion level of such technologies in different sectors and finally, it seeks to establish facilitators and barriers to digital transformation. In doing so, we shall seek to deliver a clear and coherent picture that practitioner and policymakers can use to understand what has to be done to integrate ICTs effectively.

## LITERATURE REVIEW

### Digital Revolution

The term Digital Revolution refers to the deep changes that emerged with the advent of digital technology as a radical change of society, of economies, and cultures. To a large extent, the Digital Revolution means the cross-section of old analog systems and new digital systems everywhere and in everything we do and every business we are involved in.

The digital revolution specifically illustrates the advancement of technology from electronic, analog as well as mechanical devices to digital technology that is available today. The digital revolution is sometimes termed the "Third industrial revolution". The development of the digital revolution basically depends on internet technology. The development of the digital revolution started in 1947 when the first transistor was introduced which influenced the development of advanced digital computers. Computers became familiar during the 1980s and that influenced the idea of digitisation globally. The invention of the world wide web (www) also played a significant role in developing the digital revolution.

Mainstream internet technology became publicly accessible in 1991 which changed the way of industrialization. The growing rate of internet users also helped in the digital revolution and affected the modern world in different ways. In 2005 the total number of internet users worldwide was around 1.2 billion and in 2021 it became 4.9 billion [1]. This growing internet user base influences digitisation along with worldwide developments. Presently, the availability of 5G technology boosts digitisation and influences the digital revolution as well. There are four stages in the digital revolution which include data processing, personal computing, network computing and cloud computing. These phases of the digital revolution help to mobilise the way of digitisation and also helps to improve business and other activities around the world.



### Digital Revolution. Source (Vectorstock)

Prominent components are improvements in respective computation capabilities, developments in the internet they made, that of the mobile gadgets and abilities to manage large data sets. These changes not only improve production effectiveness and availability, but also create new Industry 4.0 business frameworks. Technological advances enable people to communicate, work and be creative in the networks in real-time; they enable organizations to act fast and seize opportunities. Finally, it can be said that the Digital Revolution is the shift of the paradigm, both in terms of technology and in terms of ideas, activities and relationships.

### Historical Perspective on Management Control Practices

The Management Control practice is the process by which the managers influence the other organization members on the implementation of strategies (Anthony and Govindarajan 1998, p.6). This process is composed by six different activities, such as: Planning, Coordinating, Communicating, Evaluating, Deciding, Influencing. Its concept has been evolving from a strictly financial and accounting view to a more strategic view that ensures that all members within the organization are acting accordingly to the strategy and objectives (Malmi & Brown, 2008).

By analyzing previous research, Malmi & Brown (2008, p. 287) structured Management Control Systems (MCS) as a package around five groups: “planning, cybernetic, reward and compensation, administrative and cultural controls”. The definition of MCS has been described by very different researchers. According to Van der Stede (2007), management control must be separated from strategic control. Also, the authors mention that management control must focus on employees’ behavior. “It is people in the organization who make things happen. Management controls are necessary to guard against the possibilities that people will do something the organization does not want them to do or fail to do something they should do...If all employees could always be relied on to do what is best for the organization, there would be no need for MCS” (Van der Stede, 2007).

Similar to Van der Stede (2007), Malmi & Brown (2008) clarify what must be addressed as a MCS and what may not. For the authors (p. 290, 2008), “Those systems, rules, practices, values and other activities management put in place in order to direct employee behavior should be called management

controls.”, excluding, however, accounting systems that support decision making at an organizational level. The role of Controller has been changing over the past years, essentially due to the technological innovations that allow organizations to change their processes.

According to Jarvenpaa (2007), new technologies allow controllers to free themselves from repetitive tasks and to manage big databases very quickly, generating important reports with more flexibility. Deloitte and the Institute of Management Accountants (IMA) conducted a survey to nearly 800 financial professionals in the controllership function, in order to study the controller function, its main responsibilities and skills. Waelter et. Al (2018), mention that the main roles that controllers play are as “a steward, managing risk and preserving assets, as an operator running an efficient and effective finance operation, as a strategist, influencing the future direction of the company, and as a catalyst, helping to drive execution”.

However, the analysis of the survey results showed that most controllers spend their time on traditional steward and operator roles, rather than spending time on catalyst and strategist roles. Waelter et. Al (2018) concluded that the most important tasks are planning, budgeting, and forecasting. The organizational environment is changing due to the emerging technologies and processes, and controllers may feel its impact on their daily work.

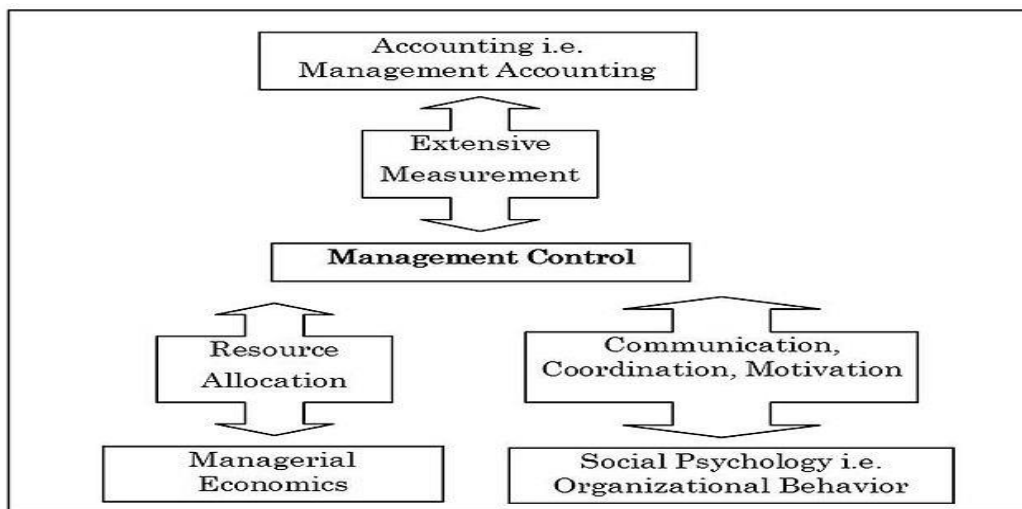
Also, according to Maciariello et al. (1994), management control is concerned with coordination, resource allocation, motivation, and performance measurement. The practice of management control and the design of management control systems draws upon a number of academic disciplines.

Management control involves extensive measurement and it is therefore related to and requires contributions from accounting especially management accounting.

Second, it involves resource allocation decisions and is therefore related to and requires contribution from economics especially managerial economics.

Third, it involves communication, and motivation which means it is related to and must draw contributions from social psychology especially organizational behavior.

Anthony and Govindajaran (2007) defined Management Control as the process by which managers influence other members of the organization to implement the organization’s strategies. According to Kaplan, management controls are exercised on the basis of information received by the managers.



**Management Control practices.** Source (Mbasyllabii)

**Behavioral Implications of Management Control Practices**

Control system exerts considerable influence on the behavior of individual in an organization. We have already seen the impact of managerial style on behavior. The impact of control system on human behavior is best illustrated with the help of examining one type of control, say, budgetary control. The budget process affects behavior in three aspects

**Formulation of budgets**

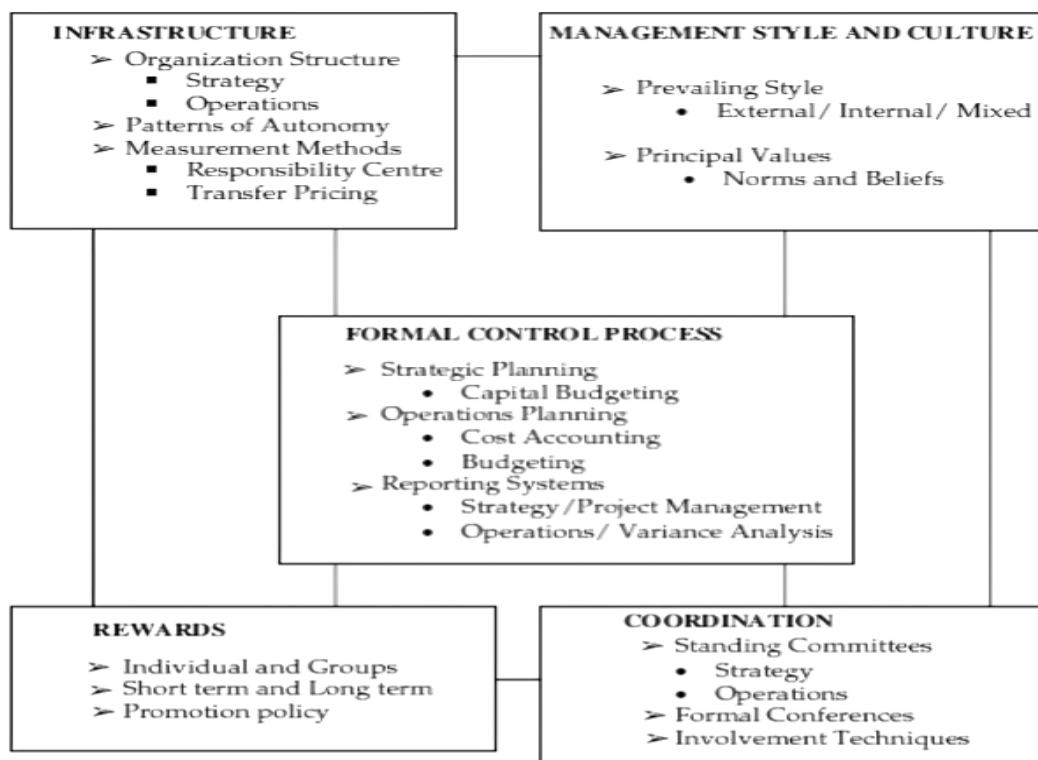
The budgeting process may be top – down, determined wholly by top management. This may engender a feeling of budgets being thrust upon employees who perceive them as pressure devices; as a result, their full enthusiasm may not be forthcoming in implementing it. In case the budget is formulated with a bottom-up approach, involving employees, commitment for meeting the budget can be assured.

**Fixing targets**

Sales production and other targets that are fixed should be challenging but attainable so as to bring out the best efforts of individuals. If targets are so high, as to be unattainable, it may be de-motivate employees: in some cases, it may also lead to manipulation of data to ensure conformity with budget. However, such manipulations will have adverse effects in the long run. A common practice is far sales manager to dump stocks on their dealers at the year end to meet sales targets, perhaps giving unduly long credit.

**Evaluation of Performance**

The evaluation of performance should be done in a constructive manner and not in vindictive style. While variances may be thrown up by the system, the causative factors may not be known readily. Hence it is necessary to analyze the reasons for variance and ensure proper accountability.



**Management Control Practice.** Source: (Joseph A. Maciareillo & Calvin J. Kirby)



In its development, the management control practices within Moroccan organizations have been influenced by both the traditional techniques and the transitional economic environments, as in all other part of the world. At first, practices were mainly compliance-based and operated in a highly centralized approach. The traditional management control systems comprised of planning and control, budgeting and standard cost control, and reporting on results, which were generally done at a set interval; it was more centralized and a basic hierarchy of control.

This is a static approach, which frequently meant that Synergy was less efficient, and unable to adapt effectively to changes happening on the markets. Management control has also been subject to cultural factors, for instance in Moroccan environment individuals' trust and reliance on relationships has not been ignored. Nevertheless, as the globalization process and advance in technology arising from it reached Morocco and applied pressure on the activities of Moroccan businesses, the requirement for altered, effective control practices were recognized. However, this type of static models is gradually replaced by much more active one, which involve quantitative indicators and real-time data analysis.

### **Impact of Digitalization on Management Control Practices**

Digitalization affects management control (MC). It leads to changes in the way MC activities are organized, performed and analyzed. Companies of all industries, locations and sizes have to adapt their MC to digital circumstances, starting with the understanding and delimitation of MC tasks, through the modified application of MC instruments and the consideration of behavioral aspects of MC, to the organization of the MC function within the company.

The research has already identified the effects of digitalization on management control practices in numerous studies. Literature review points out that digital technologies transform the management control system by making them more mobile, relevant and comprehensive. For instance, organization deployed with Enterprise Resource Planning (ERP) systems have enjoyed improved accuracy in financial reporting as well as improved control of operations. Global and regional research have substantiated such claims, suggesting that firms that deploy digital platforms can predict developing trends in a market and adapt to them quickly to retain sustaining competitive edges.

It is evidenced in areas such as the Middle East and North Africa especially in Morocco in the incorporation of digital management dashboards, control performance and even KPIs as an open part of regular management practices. By way of these innovations, traditional approaches to controls have transformed from being authoritative and autocratic to being open; from being authoritarian to democratic; and from being authoritative to participatory, the overall effect being enhanced business performance. When studying the changes in the management control practices as an outcome of digitization efforts, some theories are particularly beneficial.

The theoretical framework of this research is the Technology Acceptance Model (TAM), which identifies perceived ease of use and subjective norms as critical elements that determine how users adopt a technology. This model reveals that 'human factor' is critical in the process of adopting digital technology at workplaces. Further, Contingency Theory presupposes that there is no universally appropriate managerial model to apply; rather, the utility of managerial strategies depends upon organizational and external contexts respectively.

Moroccan conditions and culture are then seen to affect the way organizations adopt digitalization and this puts this theory into focus in Morocco. In this way, applying the presented theories, it is possible to

state that they can be synthesized to form a solid theoretical foundation for future research and practice in the case of the impacts of digitalization on management control.

## Digitalization Trends in Moroccan Private Companies

### Overview of Digital Technologies Adopted

Digital technology application is the process of using digital technologies including internet, big data and analytics, cloud, mobile, and social media to reinvent the traditional business processes. More specifically, a digital adoption platform DAP is a software solution encompassing all educational processes turning learners with no knowledge of technology into informed users ready to unleash the full potential of digital technology.

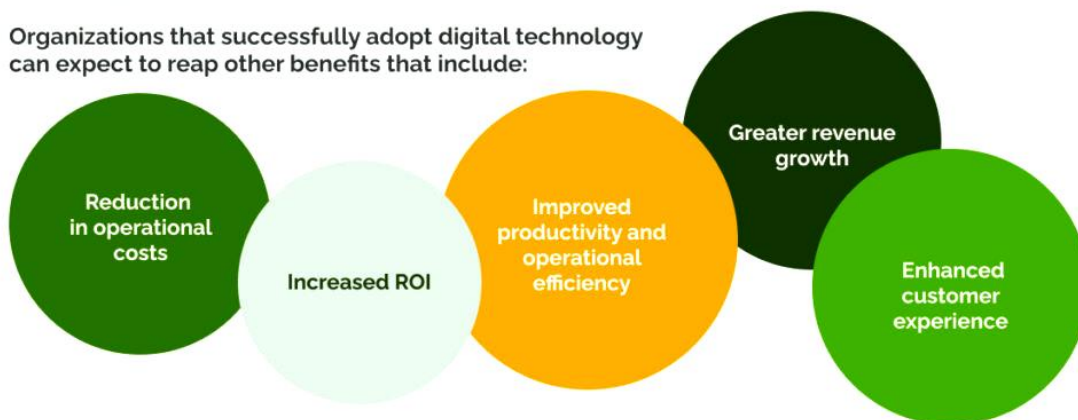
Digital adoption is important because with it technology penetration occurs at a much faster rate and the user is in a position to reap all the benefits that come with adoption of the particular technology. To be precise, digitization enhances output, effectiveness as well as creativity in all business activities. Thus, digitalization has been gradually established as a key driver of strategic development in Moroccan private enterprises. Among the trending technologies we have; “Artificial Intelligence (AI)”. Corporate uses of AI comprise of service support robots, decision-making on predictive analysis data, streamlining of supply chain among others.

These systems help organizations to work more effectively and deliver better satisfaction to customers which ultimately lead to increased customer loyalty. Another main actor in this digitalization context is “Big data”. Moroccan firms are utilizing large data to derive reasonable actions. Therefore, by studying consumers’ spending patterns and trends, and firm operation and performance, it is possible to search for new opportunities and avoid threats. For example, big retailers in Morocco are using data analytics to enhance replenishment and availability to effectively stock products which consumers demand.

“Automation” is also slowing picking up the pace. That is why many private organizations have been gradually adopting robotic process automation (RPA) technologies for repetitive work. Not only does this type of shift minimize possible human mistakes, but it also helps to release many staff to perform more high-level tasks. For example, in manufacturing and logistics, automation is increasing its efficiency in the manner in which processes are being accomplished.

### THE VALUE OF DIGITAL ADOPTION

Organizations that successfully adopt digital technology can expect to reap other benefits that include:



**The value of digital Technology adoption.** Source (Internet researcher)

### **Adoption Of Digital Technology Rates in Moroccan Private Companies**

The analysis of the present status with regards to digital technologies adoption in Moroccan private companies show an increasing trend. The report prepared by the Moroccan Ministry of Digital Transition (MMDT) in 2021 shows that over 60% of Small and Medium-sized Enterprises (SME) have adopted digital tools. Some of the noticeable ones are Maroc Telecom, the company has developed new technologies and modernized the buildings to enhance good services offering and customers relations. Also, Ciments du Maroc, the domestic cement manufacturer, is among those who use predictive maintenance solutions so that the equipment's downtime and operation's disruptions do not affect the overall performance dramatically. POS data enlighten that 'startups in the Fintech sector have taken the lead as pioneers of going digital such as HiPay and Jumia Pay. These solutions have brought about changes in the way that payments and finances are handled through improved efficiency that is visible in the two domains for the consumers and the businesses. The increasing growth amongst these companies reflect this micro-story for the Morocco narrative and that is: the Moroccan private sector is more than ready for digitalization.

### **Challenges Faced**

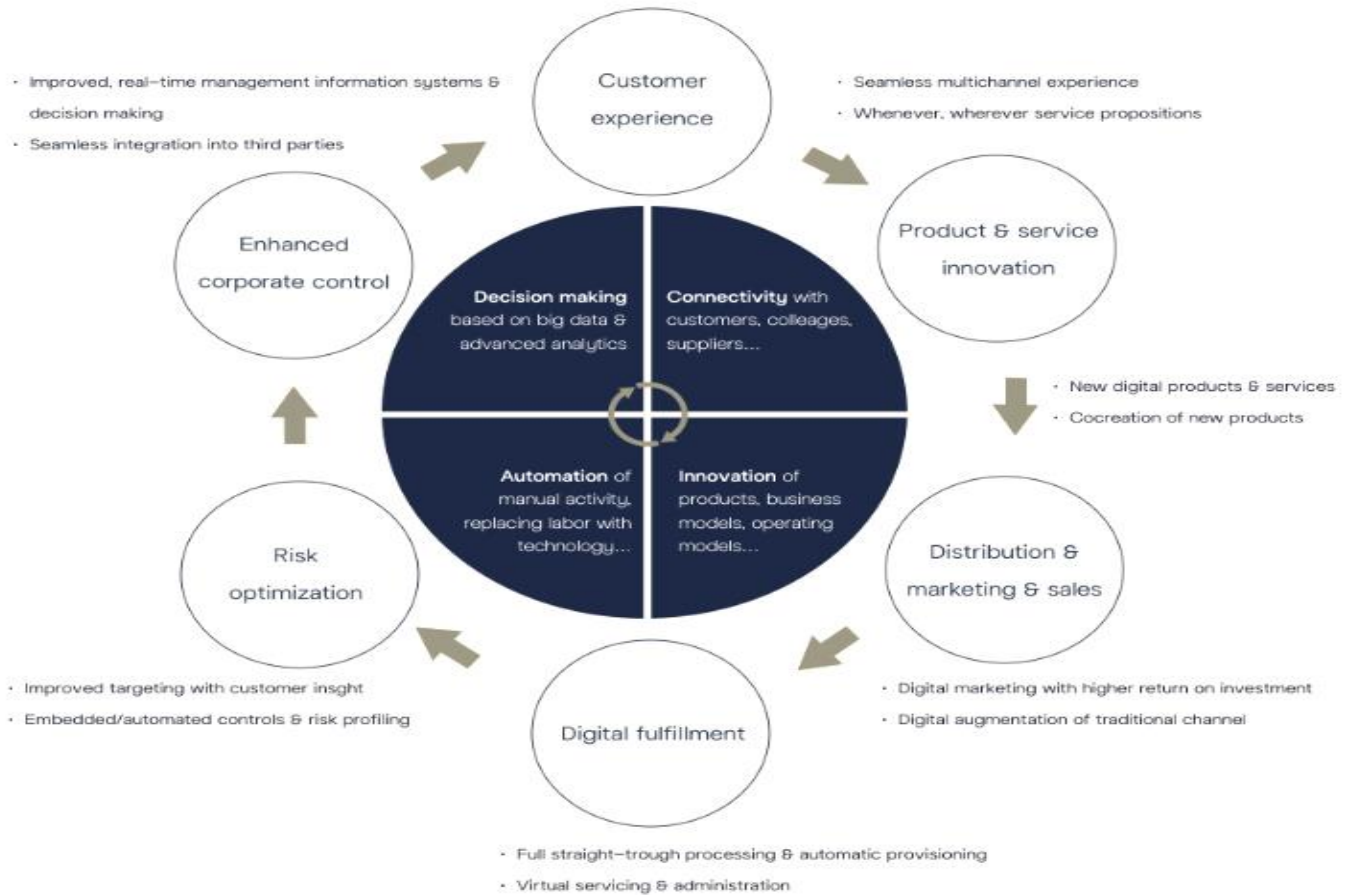
Nonetheless, several hurdles hamper optimal exploitation of digital possibilities in Morocco. Of course, one of the most obvious challenges here is that of infrastructure. While urban centers have better access to physical networks digital technologies are still restricted by lack of internet connectivity and instability in power in rural areas. However, there is a certain disparity regarding skills in the existing work force. Little of today's employees possess the required competencies to embrace the new complex technologies such as AI and data analytics. This is usually blamed to the difference between the education sector and the current market needs making it difficult to get personnel. The following are the three major barriers of change:

Resistance to change; A number of firms are still reluctant to leave linear business paradigms behind or turn to expensive digital tools. This is especially the case with older organizations that may develop certain risks of innovation, or there is no belief in their profits.

### **Impact of digitalization on management control practices**

This paper sought to establish how digitalization has affected the practices in management control and it is evident that it has drastically. It has revolutionized the way that organizations conceptualize and approach the management of performance, resource, and strategies. This section extends the discussion to include specific effects of digitalization on MCS, decision making and business operations as evidenced in Moroccan firms.





**Impact of digitalization on management control. Source (M&BD)**

### Changes in Management Control Systems

In recent years technological change has revolutionized the tool and technique of MCS, providing organizations with a new way of designing and developing them. Past MCS used conventional quantitative figures incorporated in hardcopies, manual collection of data and slow feedback reporting systems to the managers which made it difficult for the managers to respond flexibly to new market conditions. Digital media mean that data can be gathered continuously while reports can also be produced and delivered automatically. A case in cloud-based applications is an integrated conception of performance management that enables smooth information exchange across organizational departments. These platforms allow for co-decision making and hence increases on transparency and accountability. From the managers' perspective, having KPIs in the form of dashboards simplifies the process of getting real-time information and hence, helps them to note trends, and problems more promptly than before. Furthermore, the global situation that led to remote or partially remote working has created the need for digital management of these measures. Managers can now install functional based systems that enable them to monitor performance indicators without regard to geographic location of other employees. That flexibility is a new development that distinguishes the direction of control structures from the ones that have been much more clearly defined in the past.

### Enhanced Decision-Making

New technologies in digitalization have made data driven methods efficient than conventional approach-

es to decision making. With the help of Big Data and analytics, an organization can gain useful insights from mountains of information available to it. And the use of tools to analyze historical information and predict what is likely to happen is possible, which means that managers can confidently make decisions to reduce potential risks and increase potential gains.

While notions on how to go about it may be arrived at through general thinking as opposed to being driven by data and evidence, the process has an added layer of credibility. Managers are able to develop different action plans and assess the possible consequences; therefore, shedding more light on the presentation of coherent action strategies. Besides, it increases the quality of decisions; it also ensures that organizational decision-making processes are integrated with organizational strategies. Moreover, coupled with AI decision making provides the opportunity to run through numbers a possible course of action with key parameters adjustable in real time. Such capability aids in flexibility in a competitive market as responsiveness is key determinants of success and failure.

### **Efficiency and Effectiveness**

Digitalization leads to significant improvements on the outcomes of operation efficiency and effectiveness. By automating common tasks such as data entry and generating report, organizations make good use of the employees' time that would usually be spent on other unproductive tasks. This is especially important in management control where having the right data and figures is very vital.

Technology means that it is very easy for the system to work properly without making many mistakes that are usually emitted in manual means. For example, by applying project management software, other teams can be useful in keeping cohesiveness or working towards the same aims and objectives of the organization besides providing for better tracking of the program. It not only escalates productivity, but also cultivates a culture of responsivity among teams since the different elements work hand in hand. Furthermore, digitalization fosters constant tracking of any one's performance, which can be adapted in line with current conditions. This flexibility if granted make organizations experiences better results and most importantly have a competitive advantage over the other. For this reason, managers are able to compare the success of the steps taken by them in relation to the organizational goals and make adjustments when necessary.

Some Moroccan firm are already pioneering the application of digital technologies in their management control systems which has increased effectiveness, responsibility, and adaptability. In this section examples of significant Moroccan organizations will be provided combined with the description of the effects of the company's digitalization concerning performance management, strategic planning, risk management and internal controls.

### **Enhanced Performance Management: Case Study of Attijariwafa Bank**

A case study is the Attijariwafa Bank, one of the largest banks in Morocco that has gone for massive investment on digitalization of its management control practices such as;

Real-Time Data Analytics; The bank has effectively established highly sophisticated analytical tools to capture information on financial performance and Customer activities in real-time. This helps the managers to track regularly KPIs and possibly make necessary changes at appropriate times.

Performance Dashboards; It is used by Attijariwafa Bank where display screens or application interfaces show the performance of an organization, department or activity in real time. These dashboards enable timely decisions and promote the desired organizational culture by holding the employees accountable.

By the use of digital tools, Attijariwafa Bank has been able to increase its performance and customer satisfaction thus gaining market share and profitability.

### **Strategic Planning and Agility:** Case Study of Maroc Telecom

Maroc Telecom is one of the largest telecommunication firms operating in Morocco and which has integrated the concept of digitalization in its strategic planning activities;

Global Scenario Planning; the company employs complex software for creating various global scenarios, which allows the organization to predict future shifts in the global market as well as customers' needs. It means that using big data from different sources, the company can analyze possible scenarios and choose the most appropriate action plan.

Digital Communication Tools; Communication tools that adopted by Maroc telecom include digital collaboration platforms as a tool that helps different teams in working on different strategies. This promotes the understanding of one executive committee for administrative coordination and a second executive committee for operating coordination to correspond with strategic planning.

This has made Maroc Telecom capable to maintain a competitive angle by providing new promising services in the company to adopt to the changing market trends.

### **Risk Management Innovations:** Case Study of Société Générale Maroc

Risk management in Societe Generale Maroc has benefited from digital transformation as outlined below;

Automated Risk Assessment Tools; an actual use of digital solutions for the assessment of risk in banking and other operations is used through real time control. It means that the company can effectively determine an exposure to potential risks and study ways to avoid them.

Regulation and control; Société Générale Maroc Leverage use of digital tools in meeting compliance regulation needs. For compliance purposes the bank has put into place automated reporting system to collect and analyze data which is required for compliance thereby minimizing on cases for errors and penalties.

Fortified risk management of the bank have added strength to its unimpeachable strength and reassurance to both the regulator and the customer thus empowering the bank to deal with challenges.

### **Strengthened Internal Controls:** Case Study of Ciment du Maroc

Ciment du Maroc, a cement producer, provides an insight how improvement of internal control mechanisms may be complemented by digitalization in the following ways; The company has also undergone digitization of monitoring processes such as monitoring of production processes as well as inventory through the use of digital monitoring systems. This creates an opportunity to quickly identify areas of variance together with other operational problems.

Audit Trails and Transparency; Through digitized processes, systems contain very revealing audit trails of all forms of transactions, easing the internal audit processes. This is especially desirable in an industry that is heavily dependent on laws and standards that govern environmental and safety conditions.

Increased operational efficiency and decreased risk of fraud at Ciment du Maroc have bolstered the position of the company on ethical ground making for a sustainable business outfit.

### **Embracing Cloud Technologies: Case Study of Sefrou Electronics**

Sefrou Electronics, an Electronics Manufacturing company, has integrated cloud technologies in the enhancement of its management control systems.

**Cloud-Based ERP Systems:** It has already acquired and used the cloud-based Enterprise Resource Planning (ERP) systems that allow linking different functions of a company like Finance, Supply Chain, and Production. This integration improves the current visibility and also aids in decision making throughout the organization.

**Scalability and Flexibility:** Use of cloud solutions is acknowledged by Sefrou Electronics as one of the best ways of meeting a fluctuating market situation that requires the company to deliver solutions but without necessarily developing more infrastructure. This flexibility enables the company to meet customer requirements as and when they happen. Thus, the use of cloud technologies in Sefrou Electronics has increased its operational flexibility and decreased the cost, creating conditions for its competition with foreign companies.

### **Cultural Transformation and Skills Development in Moroccan Companies**

As we discuss Moroccan companies' digital transformation, it is evident that cultural transformation and skills development are core factors for implementing the strategy. The general adaptation to digital technologies involves acquiring new tools and new culture within an organization and creating a workforce where professionals have the adequate tools skills. Digital culture change is a key component of the Moroccan experience for companies that underpins the digitalization process due to the fundamental mind-set and practice change needed. A strategy of creativity and aiming at producing new products and services must be supported; companies should accept risk-taking and understand that risk is the road to success. Firms such as the OCP Group are good examples of organizations that seek to achieve this through setting up innovation spaces where practitioners are free to venture around and incubate ideas and solutions. This cultural change also requires cross functionality and interaction between departments. Using the collaboration tools like Teams or Slack, it is possible to avoid the problem of silos and provide the specialists with the means to communicate rapidly that will eventually enhance their cooperation. The examples of cultural changes also include improved productivity of the organizational members and active participation of the employees in the digital change process.

One of the major competency requirements of today's organizations is flexibility and the ability to respond quickly to the ever-changing market environment. Their organizational structure must be highly responsive so as to enable organizations to be adaptive in organizations and operational responsibilities. This empowers employees to assume some responsibilities and thus act independently because they own those responsibilities, and in the process introduce flexibility to fit new situations. An agile culture is the culture of fast and flexible reactions to the changes in the market, which is very important given the current trends in the business world. When Moroccan actors choose to develop a culture that embraces changes, organizations stand to benefit from employees able to meet current expectations and future expectations that may come with evolving technology or changing consumer habits.

### **Skills Development Initiatives**

In order to achieve and sustain their cultural change program, companies in Morocco are directing a lot of resources towards skills development. One of the reasons behind this is the need for updating knowledge, skill and practice with emerging trends in digital environment. Wave-making firms now

appreciate the value of batch training for ongoing programs centered on digital enabler instruments and systems. For instance, Maroc Telecom has extensive training programs it undertakes in order to address enduring areas such as data analytics, Customer Relationship Management techniques and cybersecurity. These programs guarantee that the employees have the required competencies in the usage of these tools thus improving on personal and organizational performance. Moreover, cooperation with local universities and technical institutes also allows the companies to create an effective training programs system, focused on the key areas of shortages, in order to equip the workforce to meet demands of a digital economy. Presently, internship programs are equally useful in the development of human capital as well as building the knowledge of young talent within a digital setting. Through partnerships with educational establishments, organizations can provide internships where learners can learn how theoretical concepts can be implemented in practice to eliminate the existing difference between learning establishments and working organizations.

Furthermore, the use of e-learning platforms offers organization a chance to train their employees, and this is done at the convenience of the employee. Besides, it motivates participation in acquisition of certain skills besides addressing the principle of right to reasonable access to training by providing for different learning styles. Some firms use online learning platforms that include virtually every training module – from business acumen to technical competencies and leadership and communication skills as seen in Société Générale Maroc.

### **Change Management Strategies**

Therefore, proper strategies for the management of change are essential when it comes to creating culture change and capability development. Consistent and clear strategic direction is required from executives and therefore leaders should come up with clear strategies to drive the digital transformation including demonstrating the right culture. Such a commitment from the top stretches the employee's imagination further while at the same time creating responsibility line. Another key approach used in the transformation effort is to include employees in the process.

Through staff consultations, it becomes easy to have them feel that the change is their own idea and thus have them accept the change. Another way to speed up such a change is to identify those people in the organization who would embrace change and actively push the organization in the direction of digital transformation processes and new practices. Encouraging top performances and valuing and rewarding the effort, time and skills that employees invest for digital projects are critical for the continuance of high levels of motivation. Recognizing achievements and promotions in digital transformation professionalizes in the organizational culture and ensures that both innovation and teamwork are valued. This forces companies' management to work towards creating a favorable environment for its employees with intention of getting their commitment towards change because the employees will feel special plus valued. These change management strategies will hence prove vital as Moroccan firms press on with their digitalization agenda to enhance the impact of cultural changes and skill enhancement programs. By these efforts, organizations are placed on the right path more so in the future as the world becomes more digitalized.

### **CONCLUSION**

Several important findings were as a result of this study in establishing the current status of digital usage among the Moroccan firms. First, it identified gaps on level of technology adoption among SMEs as one



of the most important areas. Much larger organizations have now started adopting newer more complex digital tools, but small organizations are still using old-fashioned techniques. This situation inhibits their development and ability to contend for markets both in the regional and global markets.

Secondly, it emerged that the workforce itself has a more diverse level of digital literacy. Actually, many employees have core competencies, but due to the absence of general training initiatives, they have not been able to properly implement digital tools. This halts creativity and productivity – keys to success – in the constantly changing technological environment.

Besides, the study revealed how policies stand as key determinants of the digital environment in the context of the government. It is a significant concern that despite the attempt to push for these digital initiatives the current laws are a mixed bag in most jurisdictions. Some of the things that came out included wishes from companies for more guidelines and policy backing to aid their transformation processes go digital.

Moreover, the research also suggested that the current Moroccan consumers are gradually adopting e-commerce due to changing global trends in shopping. Companies that can capitalize on this trend will be hugely rewarded especially the those with operations in social networks and/or mobile commerce. Lastly, digitalization has a remarkable and complex effect on management control practices of Moroccan private firms. Almost all large organizations in Morocco such as Attijariwafa Bank, Maroc Telecom, Société Générale Maroc, Ciment du Maroc, and Sefrou Electronics have testified that digital tools can actually boost

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