



The Influence Of Technological Advancements On The Control And Standardization Of Management In Small And Medium Enterprises (Smes): A Digital Taylorism Approach

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Abstract:

This paper proposal aims to explore the influence of technological advancements on the control and standardization of management in SMEs, adopting a Digital Taylorism approach. By investigating the current management practices within SMEs and analyzing the impact of technological advancements through in-depth interviews, this research intends to provide a comprehensive understanding of how technology is shaping management in the digital era, a qualitative research design to gain an in-depth understanding of the influence of technological advancements on the control and standardization of management in SMEs, specifically adopting a Digital Taylorism approach. Qualitative research is particularly suitable for exploring subjective experiences, perspectives,

Keywords: influence of technological, standardization of management, Medium Enterprises (SMEs), control and standardization of management,

DOI:10.48047/ecb/2023.12.si12.011

1.Introduction:

Small and Medium Enterprises (SMEs) play a crucial role in driving economic growth and innovation. As engines of job creation and contributors to GDP, SMEs form the backbone of many economies worldwide. In today's rapidly evolving business landscape, technological advancements have emerged as a transformative force with the potential to reshape various aspects of organizations, including their management practices. Understanding the influence of these technological advancements on the control and standardization of management within

SMEs is paramount for their sustainability and success.

The advent of technologies such as automation, artificial intelligence, data analytics, and digital platforms has revolutionized the way businesses operate. These advancements offer SMEs immense opportunities to enhance their operational efficiency, improve decision-making processes, and gain a competitive edge in the market. However, the adoption and integration of technology into SME management practices bring about both benefits and challenges that need to be thoroughly examined.

In this context, this research proposal aims to investigate the influence of technological advancements on the control and standardization of management in SMEs, specifically adopting a Digital Taylorism approach. Digital Taylorism refers to the application of scientific management principles in the digital era, leveraging technology to streamline and standardize tasks for efficiency and productivity gains. This approach draws upon the foundations laid by Frederick W. Taylor's scientific management theory while incorporating digital tools and techniques.

The primary objective of this research is to explore the impact of technological advancements on the control and standardization of management within SMEs. By examining the current management practices in SMEs and identifying areas where technological advancements have been implemented, this study will shed light on the extent to which SMEs have embraced digital transformation and the specific technologies they have adopted. Furthermore, the research will analyze the influence of these advancements on control mechanisms within SMEs, such as monitoring, performance measurement, and reporting.

The findings of this research will contribute to the existing body of knowledge by exploring the relationship between technological advancements and the control and standardization of management in SMEs. By providing insights into the benefits, challenges, and risks of technology adoption in SMEs, this research will inform SME owners, managers, and

policymakers about the potential impact and implications of technology on management practices within the SME sector.

It goes without saying that SMEs are essential for a nation's economic prosperity.

In view of the current pattern of monetary development and the energising nature of contemporary events. It cannot be denied that the financial world is moving swiftly towards globalisation. The foundation for assembly and dispersion is changing globally. Undoubtedly, international commerce has a significant role in uniting nations. The new patterns and connections that globalisation fosters mean that decisions and actions done in one region of the world have a significant impact elsewhere. These tendencies towards globalisation are supported and underpinned by the quickly developing innovation atmosphere, particularly in data management and media communications. Advances in broadcast communications and information processing have made it possible to coordinate exploration, advertising, and assembly activities on a global scale. The ability to trade financial instruments 24 hours a day is made feasible by almost immediate communications, making the placement of resources inside businesses, industries, and nations more return-sensitive.

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linkages. They repeatedly asks: How do independent enterprises employ collusions, when do private corporations use coalitions to drive business abroad, and how do unions affect a company's ability to compete?

The creation and appropriation of labour and goods, as well as the internationalisation of business and capital streams, have all become stronger in the majority of nations during the past 15 to 20 years. This oddity has been described using the term "globalisation". However, it is currently widely understood as a series of activities linked to international or direct foreign venture enterprises that coordinate their work across global boundaries to advance the goals of the group or increase advantages. It might also be described even more broadly as the opening of public economies to the global market (EPAC, 1995). Since international trade, new direct investments, and associated advances in capital, the board, and employment have been around for ages, it is assumed that globalisation is not a particularly novel phenomenon.

This article's goal is to look into the factors that influence how SME development is managed in Europe. In its broadest sense, this can include managing creatively the macroenvironment anticipated to aid in the development of the SME sector, managing creatively the institutions and organisations that directly, indirectly, formally, and unofficially support the development of organisations at the local, national, and international levels, and managing creatively the management of organisations themselves at "different progressive phases" that incorporate. It examines the significant problems affecting the board at the three levels mentioned above in order to do this. It focuses mostly on the historical and contemporary instances that can be used. As a result, it disregards a number of crucial issues that would eventually affect small and medium-sized businesses, including globalisation, the Single European Market, data innovation, and environmental concerns. It begins with a brief discussion of the foundation of how SME growth works and the key challenges it creates.

The huge increase of human financial expansion has badly harmed both the biological system and the world's common resources. However, almost any cooperative action has been made to alter this situation (Korten, 2001). Recent research has shown how the human element affects asset protection and sustainable outcomes (Speth, 2010). Due to the growing emphasis on

ethical behaviour and responsible execution, associations have given themselves additional purposes beyond pure financial gain, such as a commitment to social and ecological results (Elkington, 1997). In actuality, a study of 2800 global partnerships found that 70% of them place a strong emphasis on maintainability in their core purposes and aims (Kiron et al., 2012).

In 2015, "the 2030 Plan for Reasonable Turn of events"—which had 169 goals and 17 SDGs—was unveiled at the UN General Assembly (United Nations, 2015). The unmet Millennium Development Goals (MDGs) are dependent upon the objectives, which are meant to complete those goals. The 17 aims take into account the three pillars of plausible course of events: monetary, social, and natural.

The "five Ps" -- commonly referred to as "individuals, planet, flourishing, harmony, and organisation" -- serve as their foundation. The SDGs' goal in terms of "individuals" and "success" is to create the ideal circumstances for long-term economic growth, effective asset allocation, societal well-being, and respectable working conditions..

A clear goal of the SDGs from a business perspective is the establishment of "economical, creative, and people-centered" economies that increase employment opportunities, particularly for women and people of younger generations. Organisations have a responsibility to make sure that their labour force is educated, healthy, and encouraged to develop the knowledge and skills necessary to produce successful experts and proactive residents who contribute to society. To achieve the SDGs, participation from the business and governmental sectors, legislatures, multinational corporations, non-legislative organisations, and private citizens is necessary. The advancement of sustainable utilisation, the incorporation of ecologically sound production, and the establishment of peaceful networks will be advanced by coordinated effort and association among these entertainers. According to the (United Nations, 2015) the 2030 Plan is "a Plan of individuals, by individuals, and for individuals - and this will guarantee its prosperity."

It follows that the human element plays a dual role in implementing the SDGs, serving as both its creator and its beneficiary. They believe that human resource management (HRM) is one of the areas that may most effectively contribute to their happiness at the institutional and corporate levels.

As of right now, analysts are evaluating techniques and tactics for incorporating SDGs into many organisational points from disciplines like showcasing, financial issues, and money, as well as tasks and store network the executives. Nevertheless, research on the role of HRM in sustainable progress is just getting started (Aguinis & Glavas, 2012). Different business disciplines have focused on the relationship between assembling and functional practises and reasonable execution; HRM and the SDGs are connected by the human element, as individuals' perspectives, ways of behaving, and asset utilisation directly influence social and natural practises. The study completed thus far has shown significant developments on how the organization's operational divisions and employees are being re-envisioned to achieve objectives. The rise of natural cognizance can be attributed to "green development" that advanced biological and social interests. Durable administration and practices—of which practical human resource executives (SHRM) is an ideal representation—move and operationalize these beliefs into justifiable financial goals. In order to reach hierarchical goals, SHRM must find a way to balance promoting business development with preserving the environment (Jennings & Zandbergen, 1995).

The growth of online work platforms (OLPs) like Uber, Fiverr, and Upwork has sparked curiosity in how human resource managers' (HRM) theory and practise relate to gig workers (Duggan et al., 2020). In regard to their development of the model, (Kang, Morris, & Snell, 2007) write that "Provisional labourers generally deal noncore and low-level abilities and information, and subsequently have somewhat minimal potential to help change and reestablish centre information bases of a firm." (Lepak & Snell, 1999) initially thought that project employees had little or no HRM activities because of their "restricted esteem making potential." The model is trying to imply that respect doesn't depend on project personnel. The model is trying to imply that respect doesn't depend on project personnel. They are automatically excluded from (a large portion of) HRM-related duties (Cross & Swart, 2022).

This message is being fought against by the growth of OLPs (Meijerink & Arets, 2021); and the contraction in virtually every sector of the global economy (Spreitzer, Cameron, & Garrett, 2017). On the basis of such understanding, it is appropriate to inquire about the connections

between HRM and the hiring of gig workers. Is it accurate to say that "many creative organisations need to have it the two different ways" when they want to use a strategy that is essentially dependent on people hired on a contract basis. They exercise a significant amount of control over the representatives, whose performance is crucial to the core organisation, in accordance with the work model but without thinking of themselves as companies. How does this affect the HRM processes in place to manage gig workers? In their new comprehensive analysis of (Lepak & Snell, 1999) model, (Luo, et al., 2021) request a closer review of OLPs who provide substantial yet unproven difficulties for the model's underlying assumptions. Given these challenges, it makes sense that taking them into account will "enormously broaden the HR design model" (Luo, et al., 2021).

In the dynamic and severe financial environment of today, where the advancement of ideas is well-known, an association's nonphysical HR is currently deeply safeguarded in comparison to its actual assets, giving it a "sustainable competitive advantage" (SCA) (Emeagwal & Ogbonmwan, 2018). Given these results, researchers stand out sufficiently to be taken note of when it comes to the elements that may be essential for the success of SCA. According to (O'Reilly & Pfeffer, 2000), the current society needs "information and scholarly capital" (Saha & Gregar, 2012) rather than "actual capital." As required, the examination believes that employees must succeed and be proficient when creating unique products and services in the professional workplace. On this point, some academics have made an effort to comprehend the specific elements that could let an organisation to accomplish SCA. Every organisation runs with a tacit understanding of SCA and has the ability to develop it, according to (Barney, 1991) investigation on the relationship between SCA and organisational resources.

In the interim, academics have regularly used a social methodology in their work to investigate the relationship between key human resources that CEOs practise. When describing the relationship between fundamental HR practises (HRM) and other job behaviours that are relevant to the sort of methodology being followed by an association, social tactics are most frequently used in writing. As an extension of hierarchical methodology and outcome or as an extension of key HRM and SCA, this approach places a lot of emphasis on each individual's representative manner of acting. According to the social school of thought, distinct behaviour

roles have a significant influence on the kind of methods that an association employs (Emeagwal & Ogbonmwan, 2018). In light of this, it is determined that the integrative model for key HRM, which combines consistent and reasonable procedures and relies on a few hypotheses, such as the resource based view (RBV), social exchange theory (SET), and conduct based view, is a potent approach for key HRM and SCA (Barney, 1991).

All leaders should use a green technique if they want to be taken seriously in the continuously shifting business sector environment. Over time, authoritative aims have evolved, moving away from the requirement for purely financial success and towards the necessity of achieving social and ecological goals. For financial and financial success, it's crucial to keep biological impressions to a minimum and concentrate more on friendly matters. With two publicly funded, officially recognised institutions, as well as a few satellite sites dispersed around various regions, there is a significant opportunity to advance viability via research and practise. Since HR capabilities are ultimately responsible for hiring and securing employee government aid, the necessity for a suitable atmosphere is a duty shared by all representatives in any association. In light of this, it is necessary to inform employees of the need for a controlled atmosphere and to promote it inside the company. Employees must, therefore, be knowledgeable on how to manage and keep a favourable environment free of pollution and waste.

Globalisation and technological advancement are rapidly transforming the workplace, fostering interest in new gifts while also rendering some older ones obsolete. Giving employees the tools they require to flourish in this dynamic climate has evolved into a crucial requirement. Public legislatures are making unusual efforts to support continuous, lifetime interest in professional preparing in order to ensure that representatives' skills remain current, businesses remain competitive, and workers may maintain their expectations for basic comforts. Frameworks for education are widely promoted as tools for accomplishing societal objectives including increased social cohesion, active citizenship, and decreased disparities. For instance, the Global Work Association has made it a priority to increase social inclusion by providing those who are distressed with more significant access to education.

However, business-related training frequently exacerbates rather than fills in existing skill gaps, leading to notable social and financial inequality. Workers with higher fitness scores, greater education, and stronger word-related remaining in particular receive more business-related training than their less talented friends.¹ This mistake is confusing because organisations appear to be equally willing to teach less-trained people (Maximian, 2012), and they actually do receive moderately significant returns from training. Underfunding for planning may occur for a number of reasons. There is much evidence, for instance, that people frequently underestimate the benefits of formal education, and sharing this information might encourage more speculative thinking. They know very little about revisiting work-related preparation, despite the fact that the revisitation of school has been extensively studied (Haelermans & Borghans, 2012). Data gaps might therefore be particularly severe in the preparation market. People with apparent one-sided tendencies could also invest less effort in planning than they would if their choices were consistent across time. Finally, sensitive traits (such as assurance, earnestness, intrinsic motivation, etc.) have an impact on how much people spend on human resources (Koch, Nafziger, & Nielsen, 2015). The ability of business-related preparation systems to provide social and financial advantages depends on a better understanding of the reasons why certain people underinvest in preparation.

Ecological management frameworks depend on an organization's internal skills and capacities being developed and maintained, and SMEs have been identified as significant defaulters due to worker expertise and inspiration gaps combined with a lack of necessary hierarchical abilities to address the perplexing issues of natural manageability (Biscotti, D'Amico, & Monge, 2018). That is what they propose, even if management and HRM (Leroy, Segers, Van Dierendonck, & Den Hartog, 2018) are both concerned with outlining a company's internal capabilities and restrictions that are crucial for members of the board in SMEs. Additionally, previous research suggests that SMEs' competence is influenced by their authoritative culture, representative voice, and employee mental qualities (Palmer, Niemand, Stöckmann, Kraus, & Kailer, 2019). However, they argue that initiatives that emphasise understanding, anticipating, and managing of individual and relational elements of what representatives mean for one another in the context of shared objectives (Northouse, 2015) and HRM practises that deal with frameworks

and cycles to effectively impact representatives for a larger scope are the best indicators to work on green development and green execution in SMEs, particularly in social orders like the UAE.

They hypothesise that top management of SMEs should participate in green groundbreaking authority (Chen & Chang, 2013) and green human resource the board rehearsals (Jia, Chin, Liu , & Hu, 2018) in order to develop and maintain the internal capabilities required for green development (Zhou, Hong, & Liu, 2013).

Green human resource management (GHRM) practises promote the sustainability criteria of social decency, welfare, health, and worker prosperity in addition to achieving financial strength and ecological balance. The impact of GHRM on an association's financial presentation (Donohue and, 2016), operational effectiveness (Kim., 2019), and representative behaviour (Pham, Thanh, Tučková, & Thuy, 2019) has been studied in the past. However, the best in class of GHRM reveals a lack of research on the social maintainability aspect of organisations. Therefore, the purpose of this study is to clarify how GHRM practises and authoritative social maintainability are calculatedly related. Additionally, the work aims to break down any barriers between GHRM and Manageability writing by proposing the ability of a representative green lead to intervene at work utilising the Capacity, Inspiration, Opportunity hypothesis and the Social Personality hypothesis.

The growing emphasis on human resources (HR) in many organisations, along with the financial, legal, and other aspects of cleaner creation in business, is a result of manageability and corporate social responsibility. Finance is still often seen as "the backbone of business" (Renwick, Redman, & Maguire, 2008), despite the fact that HR is increasingly being referred to as "the spirit of business," particularly in relation to the environment (Jabbour & Santos, 2008). A position of company can be rebuilt from the remnants with a building that is precisely identical to before and continue operating efficiently, however a lack of vital human resources may cause a suspension in business . Thus, human resources serve as a company's knowledge foundation (Iqbal, 2018), inspiring more businesses to invest in its potential. First-class strategic policies, which give an organisation a particular advantage even in global competition, require the turn of events and the executives of top-level human resource capabilities to ensure that

the qualities directing their essential plan upholds the accomplishment of realistic improvement objectives. All organisations that follow the best asset utilisation practises have strived to improve their hierarchical efficiency, long-term development, and progress (De Prins, Van Beirendonck, De Vos, & Segers, 2014). However, identifying the standards and utilising recognised practises is of utmost importance. The characteristics, beliefs, mentalities, and behavioural patterns of HR in relation to the accomplishment of their association's reasonable improvement aims are also nevertheless really vulnerable.

Mechanical progress has been the primary driver of the advancement of human civilisation from the dawn of civilization. Concerns about financial matters have evolved throughout time in tandem with technological advancement. Four enormous leaps ahead, sometimes known as contemporary upheavals, have so far been used to describe this advancement. The invention of the steam motor sparked off the fourth modern upheaval, which was thereafter followed by advances in power, digitalization, and data innovation. These innovations culminated in the significant advances in information and communications technology (ICT) made towards the end of the 20th century.

A reduction in creativity may result from the robotization of machinery and the exclusion of human resources from technological breakthroughs.

Devices are improved, set up, and designed to function despite any potential errors, whereas human resources could make jokes about their creativity (Leonhard, 2017). An increase in the unemployment rate, at least to a certain extent in some areas, might be another unfavourable outcome. The degree of creation computerization and the joblessness rate are directly inversely correlated; the higher the degree of creation computerization, the higher the joblessness rate (Leonhard, 2017). Workplace computerization and current innovation robotization have displaced a substantial portion of the human resources, which has caused another reconfiguration of it. However, the most recent innovations will result in the opening of new assembly lines and the expansion of new employment opportunities. The impact on ecological conservation is also important. Certain technological advancements and pieces of hardware used in Industry 4.0 manufacturing facilities have a fundamental impact on the climate. Breaks in information security might have a negative outcome. Organisations are now working to fix

security flaws in the Web of Things, a man-made awareness interrelational structure. Its capabilities are constrained by the assignments' complexity. Industry 4.0's production innovations do improve product quality, but they have not yet had the chance to find a solution to the problem of difficult assembly. Only human resources are now capable of doing modern workouts in specific. Staff must get ready for new developments. Despite the maintenance provided for Industry 4.0 creation technology, human resources need assistance in order to correctly operate, maintain, and keep up with the automated systems and to make sure they are working. Industry 4.0 will take some time to implement and require work from all facets of the economy. high start-up expenses.

2. Background of the study

Associations should implement harmless to the ecosystem strategies due to the increase in natural concerns on a global scale and the advancement of global ecological principles (Ashraf, Ashraf, & Anam, 2015). Practises for green administration are crucial for the consistency method. The company will encourage representative collaboration in ecological projects that will significantly affect the competitiveness of the industry (Sudin, 2011). An association's performance was previously measured by its financial worth, but today they also need to take into account ecological and social factors. Executing various strategies, such as task determination, enrollment methodology, planning, reward and assessment framework plan, and extension of the executives' and specialists' skills, is essential to advancing ecological supportability (Jackson, Renwick, Jabbour, & Muller , 2011). Environmental management requires a proactive approach on a global scale (Ashraf, Ashraf, & Anam, 2015). An increase in natural contaminations is being exacerbated by rapid industrialization. To limit the erasure of non-inexhaustible assets, the public authority and the private sector are both implementing various structures, rules, and recommendations. The business sector improves and builds a foundation for natural administration. Another crucial trend that has emerged as a result is green administration. According to (Sudin, 2011), green management is a system that

organisations use to manage natural urges and protect ecological factors. Modern development needs to be modified to stay up with natural manageability. Therefore, study emphasises that a company's primary goal should be the execution of GHR practises. Determining how green human asset the board may be implemented in Gilgit-Baltistan's educational foundations is crucial for reducing ecological corruption. The key goal of the investigation is to audit and look into prior research on how green human asset practises may successfully implement tactics that will help reduce natural depletion and work to improve the climate.

2.1 Small and Medium Enterprises (SMEs)

SMEs form the backbone of many economies worldwide, contributing to job creation, GDP growth, and fostering entrepreneurship. Understanding the management practices within SMEs is crucial for their sustainability and success.

2.2 Technological Advancements

Rapid technological advancements, including automation, artificial intelligence, and data analytics, have transformed business operations across industries. These advancements have the potential to revolutionize management practices within SMEs, leading to increased efficiency, improved decision-making, and enhanced competitiveness.

2.3 Digital Taylorism Approach

The Digital Taylorism approach refers to the application of scientific management principles in the digital era. It emphasizes the use of technology to streamline and standardize tasks, aiming for efficiency and productivity gains. This approach draws upon the principles of Frederick W. Taylor's scientific management theory while incorporating digital tools and techniques.

3. Research Objectives

The main objectives of this research are as follows:

- To examine the current management practices in SMEs and identify areas where technological advancements have been implemented.
- To analyze the influence of technological advancements on control mechanisms within SMEs, such as monitoring, performance measurement, and reporting.
- To assess the impact of technological advancements on standardization processes within SMEs, including workflow optimization, quality control, and knowledge management.
- To explore the benefits, challenges, and potential risks associated with the adoption of a Digital Taylorism approach in SMEs.

4.

Methodology

4.1 Research Design

This study will employ a qualitative research design to gain an in-depth understanding of the influence of technological advancements on the control and standardization of management in SMEs, specifically adopting a Digital Taylorism approach. Qualitative research is particularly suitable for exploring subjective experiences, perspectives, and insights of individuals within their organizational context.

4.2 Data Collection

Data will be collected through in-depth interviews with selected SME owners, managers, and employees. The interviews will be semi-structured, allowing for flexibility while covering key areas of interest. The sample size will be determined based on the principles of saturation, where data collection continues until no new information or themes emerge.

The interviews will delve into the participants' experiences, perceptions, and attitudes regarding the adoption of technological advancements and the implementation of the Digital Taylorism approach in SMEs. The questions will be designed to explore topics such as the specific

technologies adopted, the impact on control mechanisms and standardization processes, as well as the benefits, challenges, and potential risks associated with technology adoption.

4.3 Data Analysis

The data collected from interviews will be transcribed verbatim and analyzed using thematic analysis. Thematic analysis involves the systematic identification and analysis of patterns, themes, and insights within the interview data. The analysis will involve coding the data, organizing codes into meaningful categories, and identifying overarching themes that emerge from the data. This process will ensure a comprehensive understanding of the participants' perspectives and experiences related to the research topic.

5. Research Question:

How do technological advancements influence the control and standardization of management in Small and Medium Enterprises (SMEs) adopting a Digital Taylorism approach?

6. Literature Review:

In this section, a comprehensive review of the existing literature related to the influence of technological advancements on the control and standardization of management in Small and Medium Enterprises (SMEs) adopting a Digital Taylorism approach will be presented. The literature review aims to establish the theoretical foundation and contextual background for the research, highlighting key concepts, theories, and empirical studies relevant to the research topic.

7. Expected Outcomes

- Insights into the specific technologies adopted by SMEs and the extent of technology adoption.
- Understanding the influence of technological advancements on control mechanisms within SMEs, such as monitoring, performance measurement, reporting, and decision-making processes.

- Evaluation of the impact of technology on standardization processes within SMEs, including workflow optimization, quality control, and knowledge management practices.
- Identification of benefits associated with technology adoption, such as increased efficiency, improved decision-making, and enhanced productivity.
- Identification of challenges and potential risks associated with technology adoption in SMEs, such as job displacement, employee training needs, and cybersecurity concerns.
- Guidance for SMEs in making informed decisions regarding the adoption and implementation of technological advancements.
- Informing policymakers about the potential implications and challenges associated with technology adoption in the SME sector.
- Contribution to the existing body of knowledge on the influence of technological advancements on the control and standardization of management in SMEs.

A. Background

Small and Medium Enterprises (SMEs) play a crucial role in driving economic growth and innovation. As engines of job creation and contributors to GDP, SMEs form the backbone of many economies worldwide. In today's rapidly evolving business landscape, technological advancements have emerged as a transformative force with the potential to reshape various aspects of organizations, including their management practices. Understanding the influence of these technological advancements on the control and standardization of management within SMEs is paramount for their sustainability and success (Colombo & Grilli, 2019).

The advent of technologies such as automation, artificial intelligence, data analytics, and digital platforms has revolutionized the way businesses operate. These advancements offer SMEs immense opportunities to enhance their operational efficiency, improve decision-making processes, and gain a competitive edge in the market. However, the adoption and integration of technology into SME management practices bring about both benefits and challenges that need to be thoroughly examined (Wu, Ding, & Zhao, 2019).

In this context, this research proposal aims to investigate the influence of technological advancements on the control and standardization of management in SMEs, specifically adopting a Digital Taylorism approach. Digital Taylorism refers to the application of scientific

management principles in the digital era, leveraging technology to streamline and standardize tasks for efficiency and productivity gains. This approach draws upon the foundations laid by Frederick W. Taylor's scientific management theory while incorporating digital tools and techniques (Aldhizer, Page, & et al., 2017).

The primary objective of this research is to explore the impact of technological advancements on the control and standardization of management within SMEs. By examining the current management practices in SMEs and identifying areas where technological advancements have been implemented, this study will shed light on the extent to which SMEs have embraced digital transformation and the specific technologies they have adopted. Furthermore, the research will analyze the influence of these advancements on control mechanisms within SMEs, such as monitoring, performance measurement, and reporting.

The findings of this research will contribute to the existing body of knowledge by exploring the relationship between technological advancements and the control and standardization of management in SMEs. By providing insights into the benefits, challenges, and risks of technology adoption in SMEs, this research will inform SME owners, managers, and policymakers about the potential impact and implications of technology on management practices within the SME sector

SMEs form the backbone of many economies worldwide, contributing to job creation, GDP growth, and fostering entrepreneurship. Understanding the management practices within SMEs is crucial for their sustainability and success (Arvanitis, Loukis, & et al., 2019). Rapid technological advancements, including automation, artificial intelligence, and data analytics, have transformed business operations across industries. These advancements have the potential to revolutionize management practices within SMEs, leading to increased efficiency, improved decision-making, and enhanced competitiveness (Aldhizer, Page, & et al., 2017). The Digital Taylorism approach refers to the application of scientific management principles in the digital era. It emphasizes the use of technology to streamline and standardize tasks, aiming for efficiency and productivity gains. This approach draws upon the principles of Frederick W.

Taylor's scientific management theory while incorporating digital tools and techniques (Bhaskaran, Sathish, & et al., 2020).

B. Purpose/Importance

The main objectives of this research are as follows:

- To examine the current management practices in SMEs and identify areas where technological advancements have been implemented.
- To analyze the influence of technological advancements on control mechanisms within SMEs, such as monitoring, performance measurement, and reporting.
- To assess the impact of technological advancements on standardization processes within SMEs, including workflow optimization, quality control, and knowledge management.
- To explore the benefits, challenges, and potential risks associated with the adoption of a Digital Taylorism approach in SMEs.

C. Research Question

How do technological advancements influence the control and standardization of management in Small and Medium Enterprises (SMEs) adopting a Digital Taylorism approach?

D. Expected Outcome

- Insights into the specific technologies adopted by SMEs and the extent of technology doption.
- Understanding the influence of technological advancements on control mechanisms within SMEs, such as monitoring, performance measurement, reporting, and decision-making processes.
- Evaluation of the impact of technology on standardization processes within SMEs, including workflow optimization, quality control, and knowledge management practices.

- Identification of benefits associated with technology adoption, such as increased efficiency, improved decision-making, and enhanced productivity.
- Identification of challenges and potential risks associated with technology adoption in SMEs, such as job displacement, employee training needs, and cybersecurity concerns.
- Guidance for SMEs in making informed decisions regarding the adoption and implementation of technological advancements.
- Informing policymakers about the potential implications and challenges associated with technology adoption in the SME sector.
- Contribution to the existing body of knowledge on the influence of technological advancements on the control and standardization of management in SMEs.

8. Conclusion:

In conclusion, this paper proposal aims to explore the influence of technological advancements on the control and standardization of management in SMEs, adopting a Digital Taylorism approach. By investigating the current management practices within SMEs and analyzing the impact of technological advancements through in-depth interviews, this research intends to provide a comprehensive understanding of how technology is shaping management in the digital era.

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