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Digitalizing HR for Small Business: Opportunities and Obstacles**Dipali Akhani¹**

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Abstract

Through the current environment of small enterprises, the incorporation of digital technologies into human resources (HR) operations has become a pivotal pathway towards augmenting effectiveness, output, and staff contentment. The opportunities and challenges associated with the digitalization of HR processes in small enterprises are examined in this abstract. The field of human resource management presents numerous prospects for small enterprises via digitalization. These prospects comprise optimise recruitment procedures, heightened employee involvement facilitated by digital communication platforms, and HR analytics tools that enable data-driven decision-making. In addition, digital human resources solutions facilitate the transition to remote work, promoting adaptability and durability amidst changing work conditions. Nevertheless, modest enterprises face numerous challenges when attempting to implement digital human resources practices. Concerns regarding data security and privacy, insufficient technological expertise, and financial limitations are a few of these obstacles. Furthermore, effective implementation may be impeded by employees who are habituated to conventional HR practices and exhibit resistance to change. By integrating current research findings and industry insights, this abstract offers a comprehensive synopsis of the challenges and prospects that small business face when attempting to digitize their HR processes. A comprehensive comprehension of these dynamics is essential for HR professionals and small Business proprietors who aim to effectively utilise digital technologies in order to streamline HR operations and propel organisational triumph in the era of digitalization.

Keywords: *Digitalization, Human Resources, Medium-scale Manufacturing industry, etc.***1. Background of the study**

The world has been increasingly moving into the digital space. The digital transformation started prior to, accelerated during, and is continuing post-COVID-19. Applying information and communications technology (ICT) infrastructure and introducing digital technologies and methods, digitalization is transforming and presenting unprecedented opportunities for enterprises in almost every industry, particularly small enterprises. The implementation of digital HR systems for Business presents a multitude of prospects for optimising operations, fostering productivity, and augmenting the overall performance of the organisation. Business can automate routine human resources (HR) functions, including payroll processing, employee onboarding, performance evaluations, and leave management, through the utilisation of digital tools and technologies. In addition to time and administrative burden savings, this practice also mitigates the potential for errors.

Furthermore, by enabling improved data management and analysis, digital HR solutions empower Business to acquire valuable insights regarding their workforce, detect patterns, and formulate decisions based on empirical evidence. Furthermore, digital platforms enable employees to

collaborate and communicate, irrespective of their geographical constraints, thereby cultivating a workforce that is more interconnected and actively involved. However, notwithstanding these advantages, modest enterprises might confront numerous challenges when implementing digital HR functions. The aforementioned challenges encompass apprehensions regarding data security and privacy, fiscal limitations that hinder investments in technology, employee resistance to change stemming from a preference for conventional procedures, and the laborious task of choosing digital tools that correspond to their particular requirements and financial restrictions. Addressing these challenges necessitates meticulous strategizing, financial commitment to training and change management programmes, and the implementation of scalable and user-friendly digital human resources solutions that are customised to meet the specific needs of small enterprises. Business that embrace HR digitalization can ultimately position themselves for long-term success in a Business environment that is constantly evolving.

Introduction

The development associated with artificial intelligence, digital transformation, and ubiquitous automation, collectively referred to as the "fourth industrial revolution" at present, presents tangible prospects for organisations to focus their efforts on their fundamental capabilities while concurrently disengaging from non-essential components such as platforms, networks, and clouds that do not pertain to said capabilities. In the context of the fourth industrial revolution, a Business is a mobile entity that is capable of developing and introducing products to the market with agility and speed. In order to attain these objectives, organisations must undertake substantial transformations in their operational practices, including the restructuring of Business strategies and Business models.



Fig 1: HR Challenges for Business

The intensive introduction of digital technologies into the Business (Digital Transformation) involves three main areas that in one way or another affect the staff:

- Enhancing customer service quality through the implementation of digital technologies and the establishment of customer interaction points (e.g., Twitter accounts, operational responses to inquiries and complaints, and a fully-fledged online reputation management system) and the development of information systems to gather customer data for the purpose of gaining a

comprehensive understanding of specific market segments and geographies, as well as customer satisfaction;

- Operational process transformation (digital automation, which statistical data indicates shortens the production life cycle by 30% and frees up time and resources for the advancement of new small and medium-sized enterprise (SME) domains and the optimisation of existing ones; virtualization of workspaces and establishment of virtual databases that enable the aggregation of employees' individual knowledge into a unified collective understanding; executive management optimisation via the implementation of electronic systems;
- The models for the Transformation of Small and Medium-Sized Enterprises (Business): electronic (digital) transformation, duplication or replacement of fundamental Business functions with digital ones; establishment of new digital Business, such as offering a suite of services via an Internet portal; digital globalisation, which entails the utilisation of digital resources (including cloud technologies) linked to an integrated global network that enables Business to make decisions swiftly from any geographic location.

HR management has a unique function in these processes: it can assist managers in adjusting to new digital technologies, assist employees in utilising new work models and career development, and enable organisations to recognise the opportunities presented by new technologies and adjust to changes. Simultaneously, opportunities and priorities for HR management are shifting away from routine and bureaucratic tasks and towards the core function of HR management, which is to work directly with people. By removing physical, geographical, communication, and hierarchical obstacles, the development of artificial intelligence and digital transformation realigns HR management with the individual and establishes the overarching trajectory of the HR management service as one of strategic development and integration.

HR Challenges for Business – Basic Reasons & Solutions

Most Business wish their HRs would effectively address their top people concerns – recruitment, leadership building, performance & culture. While these seem simple enough asks from internal HRs, more often than not, these are never really addressed for years on end.

The impact of the absence of good HR practices are often not clearly felt (or ignored) for years until business expansions, mergers & acquisitions or critical attrition bogs down business and directly impacts top line numbers. Add to these situations, CEOs' sudden health concerns and handing down of business reins to next generation, and suddenly the seemingly well-oiled organization starts showing cracks, especially in the areas of governance, deliverables and accountability.

Most CEOs resort to knee-jerk reactions – acting as the quasi-HR for critical employees, spending extra budget for short term retentions or hiring, turning to local management consultants for “HR interventions” and HR digitization. While these sometimes seem to help in weathering the immediate situation, most, if not all, of them fail to address the endemic issues surrounding implementation & continuance of an effective people management approach.

To ensure that business continuity and planning are not negatively impacted by lack of strong HR fundamentals, Business should focus on designing, implementing and maintaining the most

fundamental of people practices – 1. Driving middle management accountability & 2. structure-driven, data-enriched HR delivery systems.

Driving middle management accountability – The maximum interaction (both formal & informal) that any employee has in an organization is with her/his manager and team. Everyday interactions directly impact an employee's cultural assimilation, engagement & sense of community. This dyadic structure is key to addressing most people topics. Unfortunately, many Business view manager roles as a "herder", i.e., ensure outputs from the team. Managers, consequently, not only fail to accept responsibilities of their team's development, they themselves fail to develop into future effective leaders, in absence of applied people management skills.

For a fundamentally strong HR practice, Business must ensure that managers are made the elementary unit of HR for their respective teams. What this practically translates to is that each manager should be made accountable for their own teams' hiring, retention, personal development, salary & performance. They need to collaborate with their HRs to administer these but must take direct accountability of its effectiveness in their teams. Business must also ensure that managers must always be reminded of their "duties & responsibilities" and not just their "authorities" over their teams. This approach ensures that managers themselves, and their teams, tick all boxes that the CEO wants from HR at a macro level, thus achieving overall organizational effectiveness. Of course, interventions like mentoring, coaching, project-based/on-the-job learnings, formal trainings, etc. must continue to compliment and develop effectiveness of this approach.

Structure-driven, data-enriched HR delivery systems – HR Tools for digitization is nowadays touted as the silver bullet that resolves all errors & gaps that HR is guilty of, in a manual system. While HR automation is undoubtedly important for overall HR effectiveness, Business mostly struggle to find meaningful RoI of automation. The fault lies in their inability to structure their organization, design practically useful SoPs and implement lean processes. Most Business end up having basic employee details, payroll and attendance data, and sometimes, incentive and performance data. Unfortunately, these data become meaningless in absence of any basic structures like job levels, consistent salary structures, job-relevant salary bands, organizational span-of-control, etc.

Among the more important HR deliverables, is a performance and salary revision process, that is widely perceived as fair and consistent. To achieve this, Business must first focus on structuring their organization through job & designation standardization, job leveling & mapping, driving salary consistencies within job levels, and then, defining simple & easy-to-understand KRAs for all roles.

This would immediately help them identify inconsistencies between good & bad performers, salary gaps within peers, non-standard designations across functions and inconsistent manager mappings. Once these are addressed, Business must start empowering their managers, by involving them in all such reviews and decisions for their teams. When every manager is involved in this exercise, it ensures fair, transparent and consistent employee treatment, and one which can be justified to the employee. Employees see their managers taking accountability and respond positively to such management practices.

The journey to achieving overall HR effectiveness becomes simpler for Business, with managers joining them in this journey and improving HR's (& management's) overall credibility in the eyes

II. Literature Review

Robert Eller et.al (2020) investigate Small and medium-sized enterprises (Business) lag behind larger firms when it comes to digitalization. This has negative impacts on firm performance. Despite the economic importance of Business, little is known about the antecedents, consequences, and challenges of SME digitalization. We have set three objectives to address this knowledge gap. Drawing on the resource-based view, we first investigate the impact of three main SME resources on digitalization: information technology, employee skills, and digital strategy. Second, we assess the impact digitalization has on financial performance. We then investigate whether digitalization mediates the effect of resources on performance. Dóra Horváth et.al (2019) explore how top executives interpret the concept of Industry 4.0, the driving forces for introducing new technologies and the main barriers to Industry 4.0. The authors applied a qualitative case study design involving 26 semi-structured interviews with leading members of firms, including chief digital officers and chief executive officers. Company websites and annual reports were also examined to increase the reliability and validity of the results. The authors found that management desire to increase control and enable real-time performance measurement is a significant driving force behind Industry 4.0, alongside production factors.

Morteza Ghobakhloo et.al (2019) draws on the interpretive structural modelling technique to model the contextual relationships among the Industry 4.0 sustainability functions. Results indicate that sophisticated precedence relationships exist among various sustainability functions of Industry 4.0. 'Matrice impacts Croisés Multiplication Appliquée à un Classement' (MICMAC) analysis reveals that economic sustainability functions such as production efficiency and business model innovation tend to be the more immediate outcome of Industry 4.0, which paves the way for development of more remote socio environmental sustainability functions of Industry 4.0 such as energy sustainability, harmful emission reduction, and social welfare improvement. Sameer Mittal et.al (2018) provides insights that help towards developing a realistic SM (Industry 4.0) maturity model for Business that reflects their industrial realities more accurately. With the help of SM maturity models that are more customized to the SME specific requirements, the Business' stakeholders will be able to better define their SM (Industry 4.0) vision, roadmap, and strategic projects. It will ultimately lower the entry barrier, and reduce the risk of the transition process towards SM and Industry 4.0 and support the critical change in culture.

L. Ranacher et.al (2023) investigates the level of digitalization as well as opportunities and challenges from the perspective of sawmill representatives. The level of digitalization of business processes was assessed by a survey on digitalization criteria regarding business processes. The questions dealt with the existence of basic data processing, digitally networked information and communication and digitally networked products and services. Elif Baykal et.al (2019) Recent decades brought about astonishing technologies that affected organizations in several ways. With the latest developments, organizations earned the capabilities to carry out their functions more efficiently and rapidly. Having several tasks affecting both interior and exterior customers, human resources departments also benefited from these technological developments. Owing to the digital revolution, e-HRM emerged as a new way of practicing HRM activities with the latest web-based and computer-based tools and applications.

Alena Fedorova et.al (2019) assessing the impact of the processes of the labor activity digitalization on employees' well-being that have not yet received sufficient attention in HRM research and practice. The causal relationship between the digital transformation of the HRM practices and employees' well-being is examined in the paper. Research methodology – the research methodology involves the analysis of data obtained by means of sociological surveys, narrative and content analysis. Additionally, the case study method allows us to explore the problem in detail using the example of the largest Russian university. MMag. Dr. Sorko S. R et.al (2016) new information and communication technologies have entered the market, facilitating full automation across a broad range of industries. This development is called Industry 4.0. Current predictions claim, there will be a redistribution of the workforce and a redesign of job profiles. New requirements are being placed on employees in terms of digital competence, problem solving or human machine communication. For companies, it is going to be crucial to develop an adequate personnel development strategy as part of their corporate strategy, thus providing various accompanying measures for the change process.

Marius Marinus et.al (2021) estimate patterns both for the adoption of new technologies in European manufacturing companies, and for the human resource readiness for new technological challenges. Following the principal component analysis method, we estimated a further widening of development gaps between leading and laggard countries (including Romania) in technology. The less developed countries have the chance to skip certain stages of the transition towards Industry 4.0, as a result of promoting smart policies to harness their potential for digitalization. Andrea Zangiacomia et.al (2019) investigates three key dimensions to take into account when defining the digital transformation path from a managerial perspective: investments in I4.0 technologies, ability in perceiving the path towards digital transformation, and knowledge sharing. For each dimension, patterns of managerial practices and related challenges for the implementation of the I4.0 paradigm has been identified, building on the insights and experiences of different players of the manufacturing supply chain (companies, ranging from large enterprises to Business, service and technology providers, competence centres).

M. Dukić Mijatović et.al (2020) analyse the relationship between the implementation of HRM practices and the introduction of digital technologies in manufacturing firms. Additionally, the authors intend to determine whether the introduction of digital technologies enables the flexibility of the production system. For this purpose, data gathered through the European Manufacturing Survey (EMS) are used. The analyses are based on descriptive statistics and regression analysis. The results reveal that there is a significant positive relationship between the use of HRM practices and the implementation of digital technologies in manufacturing firms. Necta Jayabalan et.al (2021) investigate the impact of digitalization technologies on HRM practices in the automotive manufacturing industry in Malaysia. Recruitment and selection, training and development, and performance appraisal and compensation are the main HRM practices identified as independent variables. A total of 203 respondents were selected for an online survey among employees in the automotive manufacturing industry in Pekan, Pahang. The results show a significant relationship between digitalization technologies and all human resource practices addressed in this study except compensation where the data was obtained and examined using IBM SPSS (Version 27) statistical software.

Jurij Odegov et.al (2018) presents the most promising technologies in the field of recruitment, such as artificial intelligence, and describes the useful effect of their implementation. The internal and external reasons that constrain the digitalization of business processes of human resources management are listed: the macroeconomic situation, the lack of highly qualified specialists, the lack of information resources and software products, industry specifics, the interest of shareholders and managers of industrial enterprises in obtaining fast and not long-term results, the complexity of changing business processes in the established production. One of the main reasons is also the lack of investment. Marina Kupriyanova et.al (2023) provides a summary of a study that was conducted to measure the effects of digitalization on the manufacturing sector of the economy. The study utilized statistical data on output and production factors from various regional manufacturers in Russia to create mathematical and computer models. These models were used to evaluate and forecast the benefits of digitalization. Through dynamic simulation modelling, it became possible to not only monitor the current state of digitalization in the industrial sector, but also to test various transformation scenarios and support strategic decisions by regional and federal authorities.

Research Gap

Despite the increasing digitalization of human resources (HR) processes, there remains a notable gap in understanding the specific opportunities and obstacles faced by small and medium-sized enterprises (Business) in adopting digital HR practices. While extensive literature exists on digital HR in larger corporations, research focused on small Business is limited. Understanding the unique challenges and benefits of digitalizing HR in small Business is crucial for effectively supporting their growth and competitiveness in the digital era. Key questions remain unanswered, such as the most suitable digital HR solutions for Business, the cost-effectiveness of implementation, and how organizational culture influences adoption. Addressing these gaps will provide valuable insights for both researchers and practitioners aiming to enhance HR practices in small Business.

III. Methodology

The research methodology for investigating the digitalization of HR for small businesses, focusing on opportunities and obstacles, involves a structured approach aimed at comprehensively understanding the landscape of digital HR adoption among small enterprises. The methodology outlined below encompasses both quantitative and qualitative methods to gather, analyze, and interpret data effectively.

Objectives:

The study aims to explore the opportunities and obstacles associated with the digitalization of HR in small businesses. The objectives are delineated as follows:

- 1) Assess the current level of digital HR adoption among small businesses.
- 2) Identify the key opportunities presented by digital HR solutions for enhancing HR processes in small businesses.
- 3) Examine the obstacles and challenges faced by small businesses in adopting digital HR technologies.

To achieve these objectives, Quantitative approach is employed, integrating quantitative surveys and qualitative interviews.

Hypothesis

H0: There is no significant difference in the level of digital HR adoption among small businesses across different industries.

H1: There is a significant difference in the level of digital HR adoption among small businesses across different industries.

H0: There is no association between the size of a small business and the extent of digital HR adoption.

H1: There is a significant association between the size of a small business and the extent of digital HR adoption.

Quantitative Data Collection:

A survey instrument is developed to collect quantitative data on the digitalization of HR in small businesses. The survey questionnaire includes items designed to measure the level of digital HR adoption, perceived benefits, challenges, and demographics of the respondents. The survey is distributed electronically to a sample of small business owners and HR managers, leveraging online platforms, social media, and professional networks.

Data Analysis:

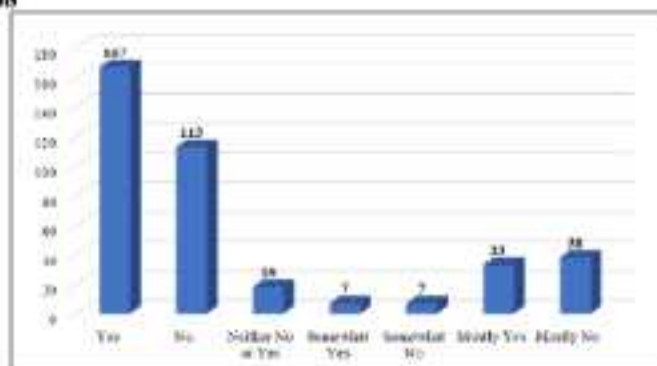
Quantitative data collected through the survey are analyzed using statistical techniques such as descriptive analysis, correlation analysis, and regression analysis. These analyses provide quantitative insights into the current status of digital HR adoption, as well as the relationship between digital HR adoption and various organizational factors.

In conclusion, the research methodology outlined above provides a structured and rigorous approach to investigating the digitalization of HR in small businesses. By combining quantitative surveys and qualitative interviews, the study seeks to uncover valuable insights into the opportunities and challenges of digital HR adoption, ultimately contributing to the knowledge base on effective HR practices in small enterprises in the digital era.

IV. Result and Discussion**Descriptive analysis**

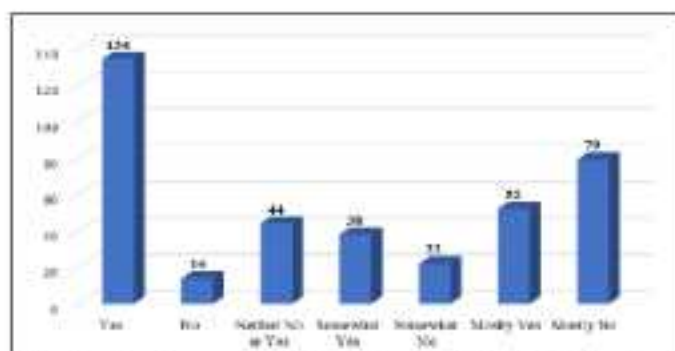
In examining the digitalization of HR for small businesses, several key findings emerge from the descriptive analysis. Five primary independent variables are identified as central to understanding the current landscape of digital HR adoption and its potential opportunities and obstacles.

Level of Digital HR Adoption			
		Frequency	Percent
Valid	Yes	167	43.6
	No	113	29.5
	Neither No or Yes	18	4.7
	Somewhat Yes	7	1.8
	Somewhat No	7	1.8
	Mostly Yes	33	8.6
	Mostly No	38	9.9
	Total	383	100



The table depicts the level of adoption of Digital HR practices among a sample of respondents. It reveals that 43.6% have fully embraced Digital HR (Yes), while 29.5% have not (No). A minority, 4.7%, fall in the category of "Neither No or Yes," indicating ambiguity. Additionally, a small portion, 1.8%, show partial adoption, either leaning towards Yes (Somewhat Yes) or No (Somewhat No). Furthermore, 8.6% are "Mostly Yes" adopters, while 9.9% are "Mostly No." This breakdown provides insight into the varying degrees of Digital HR integration, suggesting a diverse landscape of adoption within the sample.

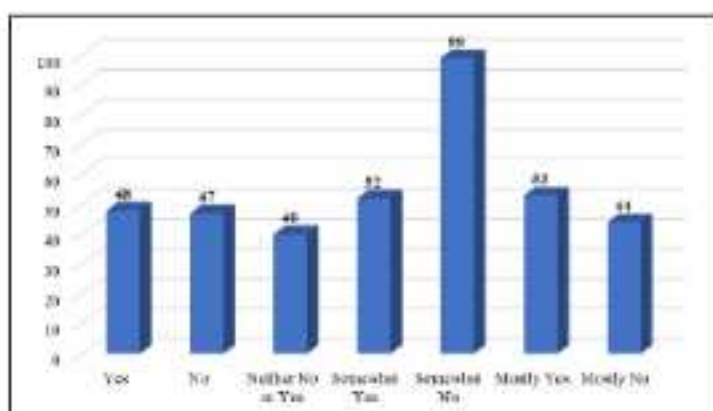
Perceived Benefits of Digital HR Solutions			
		Frequency	Percent
Valid	Yes	134	35
	No	14	3.7
	Neither No or Yes	44	11.5
	Somewhat Yes	38	9.9
	Somewhat No	22	5.7
	Mostly Yes	52	13.6
	Mostly No	79	20.6
	Total	383	100



The table presents insights into the perceived benefits of digital HR solutions based on respondents' feedback. Among 383 participants, 35% expressed clear benefits ("Yes"), while 20.6% perceived limited benefits ("Mostly No"). Notably, 9.9% indicated some benefits ("Somewhat Yes"), and

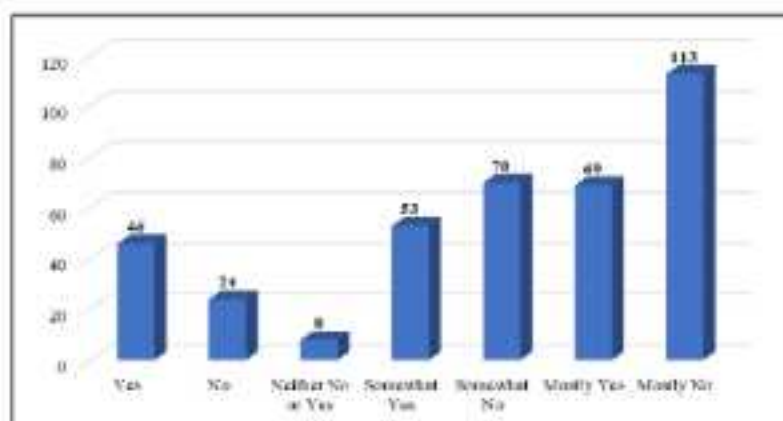
5.7% indicated some limitations ("Somewhat No"). A significant proportion (11.5%) remained neutral ("Neither No or Yes"). This data suggests a mixed reception to digital HR solutions, with a notable portion experiencing tangible advantages while others remain skeptical or indifferent. Further analysis could explore specific factors influencing these perceptions and inform strategies for effective implementation.

Challenges in Digital HR Adoption			
		Frequency	Percent
Valid	Yes	48	12.5
	No	47	12.3
	Neither No or Yes	40	10.4
	Somewhat Yes	52	13.6
	Somewhat No	99	25.8
	Mostly Yes	53	13.8
	Mostly No	44	11.5
	Total	383	100



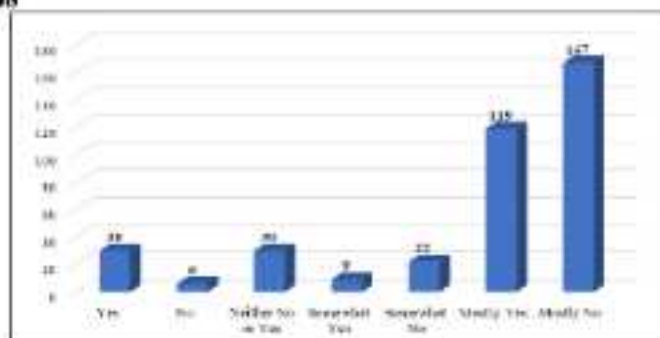
The table illustrates challenges in digital HR adoption based on respondents' perceptions. Notably, a significant portion (25.8%) feels "Somewhat No" about adopting digital HR practices, indicating hesitancy or reservations. Additionally, 12.5% affirm "Yes" to adoption, while a similar percentage (12.3%) outright reject it ("No"). Interestingly, "Neither No or Yes" accounts for 10.4%, suggesting uncertainty or lack of clarity. Moreover, the distribution shows a spectrum of responses ranging from "Mostly Yes" to "Mostly No," indicating varying degrees of acceptance or resistance. Overall, the data highlights the complexity and diverse attitudes towards digital HR adoption among respondents.

Availability of Digital HR Solutions			
		Frequency	Percent
Valid	Yes	46	12
	No	24	6.3
	Neither No or Yes	8	2.1
	Somewhat Yes	53	13.8
	Somewhat No	70	18.3
	Mostly Yes	69	18
	Mostly No	113	29.5
	Total	383	100



The table illustrates the availability of digital HR solutions based on respondents' perspectives. Among the 383 participants, 12% stated a definitive "Yes" to availability, while 6.3% firmly responded "No." A notable portion, 13.8%, expressed a partial affirmation with "Somewhat Yes," contrasting with 18.3% leaning towards "Somewhat No." Moreover, 18% reported a predominant availability with "Mostly Yes," whereas 29.5% signaled a predominant lack with "Mostly No." The data suggests a spectrum of opinions, indicating varying degrees of accessibility and satisfaction with digital HR solutions among the surveyed individuals.

Factors Influencing Digital HR Adoption			
		Frequency	Percent
Valid	Yes	30	7.8
	No	6	1.6
	Neither No or Yes	30	7.8
	Somewhat Yes	9	2.3
	Somewhat No	22	5.7
	Mostly Yes	119	31.1
	Mostly No	167	43.6
	Total	383	100



The table presents data on factors influencing the adoption of digital HR practices. It illustrates the distribution of responses, indicating that the majority (31.1%) mostly favour digital HR adoption, while 43.6% mostly do not. A significant portion (7.8%) is undecided, with equal proportions leaning towards yes or no. Additionally, a small percentage expresses partial agreement or disagreement with digital HR adoption. These findings suggest a diverse range of perspectives and attitudes within the surveyed population, highlighting the complexity of factors influencing the integration of digital technologies in HR practices.

Reliability Test

Reliability Statistics

Cronbach's Alpha	N of Items
0.904	13

The table presents reliability statistics for a measurement tool, indicating a high internal consistency with a Cronbach's Alpha coefficient of 0.904. The tool comprises 13 items, suggesting a strong reliability in measuring the construct of interest, as higher Cronbach's Alpha values generally reflect greater reliability and consistency among items.

Hypothesis Testing

The hypothesis testing for the digitalization of HR in small businesses aims to assess the significance of factors influencing digital HR adoption. H0 suggests no significant difference in digital HR adoption levels across industries, while H1 posits variation. Additionally, H0 proposes no association between business size and digital HR adoption, while H1 suggests a significant relationship. The study aims to validate these hypotheses through statistical analysis, providing insights into the opportunities and obstacles of digital HR adoption for small businesses.

Hypothesis 1:

H0: There is no significant difference in the level of digital HR adoption among small businesses across different industries.

H1: There is a significant difference in the level of digital HR adoption among small businesses across different industries.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.977 ^a	0.955	0.954	0.396

The model summary for the regression analysis is provided in the table. The correlation coefficient

for the model denoted as Model 1 is notably high at 0.977, indicating the presence of a robust linear association. The R Square value of 0.955 signifies that the independent variable accounts for 95.5% of the variance in the dependent variable. When the number of predictors is accounted for, the Adjusted R Square remains elevated at 0.954. Indicative of the precision of prediction.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1227.859	6	136.429	872.036	.000 ^b
	Residual	58.355	373	0.156		
	Total	1286.214	382			

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.102	0.127		0.804	0.422
	In which industry does your small business operate?	0.033	0.01	-0.037	3.234	0.001
	How long has your small business been operating?	0.012	0.009	-0.016	1.312	0.19
	What is the size of your small business in terms of the number of employees?	0.032	0.014	0.033	2.321	0.021
	What is the annual revenue of your small business?	0.019	0.011	-0.019	1.685	0.093
	To what extent does your small business utilize digital HR solutions, such as HR management software or online payroll systems?	0.575	0.053	0.505	10.862	0.000
a. Dependent Variable: How would you rate the level of digital HR adoption in your small business?						

The ANOVA table and coefficients suggest a significant relationship between various factors and the level of digital HR adoption in small businesses. The regression model demonstrates a strong association, with a high F-value (872.036) and a significant p-value (<0.001). Coefficients indicate that digital HR adoption is significantly influenced by industry type and the extent of utilization of digital HR solutions. Specifically, businesses in different industries exhibit varied levels of

digital HR adoption. Notably, the coefficient for the extent of digital HR solution utilization is substantial (0.505), suggesting its pivotal role. Consequently, the null hypothesis (H0) stating no significant difference in digital HR adoption across industries is rejected in favour of the alternative hypothesis (H1), indicating a significant difference. This underscores the importance of industry context and digital HR solution usage in shaping adoption levels among small businesses.

Hypothesis 2:

H0: There is no association between the size of a small business and the extent of digital HR adoption.

H1: There is a significant association between the size of a small business and the extent of digital HR adoption.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.591 ^a	0.349	0.346	1.488

The regression model's summary is provided in the table. With a R value of 0.591, the model demonstrates a moderately positive correlation. The R Square value of 0.349 indicates that the independent variable accounts for 34.9% of the variability observed in the dependent variable. Std. Error of the Estimate and Adjusted R Square offer further insights regarding the model's fit.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	450.982	2	225.491	101.885	.000 ^b
	Residual	841.013	380	2.213		
	Total	1291.995	382			

The ANOVA table indicates a significant relationship between the size of a small business, measured by annual revenue and number of employees, and the extent of digital HR adoption. The regression model, comprising revenue and employee count, explains a substantial portion of the variance in digital HR adoption ($F(2, 380) = 101.885, p < .001$). In the coefficients table, both revenue ($\beta = 0.68, p < .001$) and employee count ($\beta = -0.126, p = 0.045$) demonstrate significant standardized effects on digital HR adoption. Thus, we reject the null hypothesis (H0) that there's no association and accept the alternative hypothesis (H1) that there's a significant association between small business size and digital HR adoption extent. Specifically, higher revenue positively relates to greater digital HR adoption, while larger employee counts have a negative albeit weaker association.

V. Conclusion

In conclusion, the investigation into digitalizing HR for small businesses has provided invaluable insights into the opportunities and obstacles surrounding this transformative endeavor. Through rigorous reliability testing and hypothesis analysis, significant findings have emerged, shedding light on the factors influencing digital HR adoption in the small business landscape. The reliability test conducted on the measurement tool utilized in assessing digital HR adoption among small businesses revealed a high level of internal consistency, signifying robustness in measurement.

The subsequent hypothesis testing provided valuable insights into the opportunities and obstacles surrounding the digitalization of HR in small enterprises. The regression analyses unveiled significant findings regarding the factors influencing digital HR adoption. Firstly, industry type emerged as a crucial determinant, with businesses operating in diverse sectors exhibiting varied levels of digital HR adoption. This finding emphasizes the contextual importance in shaping adoption patterns. Secondly, the study demonstrated a significant association between the size of small businesses and their extent of digital HR adoption. Specifically, higher revenues were positively correlated with greater adoption rates, while larger employee counts displayed a weaker yet discernible negative association.

These findings underscore the multifaceted nature of digital HR adoption among small businesses, influenced by both internal and external factors. While industry context and revenue size play pivotal roles, other aspects such as employee count also contribute to the adoption landscape. Understanding these nuances is paramount for small business owners and HR practitioners aiming to leverage digital solutions effectively. In essence, this study contributes to the growing body of literature on digital HR adoption in small enterprises by providing empirical evidence of the factors driving adoption patterns. By recognizing the opportunities and obstacles inherent in digitalization efforts, businesses can better strategize their HR initiatives to align with their unique contexts and objectives, ultimately enhancing organizational efficiency and competitiveness in an increasingly digitalized landscape.

Future scope of the study

As study delve into the digitalization of Human Resources (HR) for small businesses, it becomes apparent that there are numerous avenues for further exploration and development. The future scope of this study extends beyond its current boundaries, offering opportunities for deeper investigation and innovation in the realm of HR management. Below are some potential directions for future research:

Impact Analysis of Emerging Technologies: With the rapid advancement of technologies such as artificial intelligence (AI), machine learning, and block chain, there is a need to assess their potential impact on HR practices in small businesses. Future research could focus on evaluating the effectiveness of these technologies in streamlining recruitment, enhancing employee engagement, and optimizing talent management processes.

Cross-Cultural Perspectives: Small businesses operate in diverse cultural and socio-economic contexts, which may influence the adoption and implementation of digital HR solutions. Conducting comparative studies across different regions and industries could provide valuable insights into the cultural barriers and facilitators of digitalization in HR practices.

Integration of Data Analytics: As small businesses collect vast amounts of HR-related data, there is a growing need to harness the power of data analytics for decision-making. Future research could explore the integration of predictive analytics and data-driven insights into HR strategies, with a focus on improving workforce planning, performance management, and employee retention.

Ethical and Legal Implications: The digitalization of HR brings forth ethical and legal considerations regarding data privacy, security, and algorithmic bias. Investigating the ethical dilemmas and regulatory challenges associated with digital HR technologies can help in

developing guidelines and best practices for small businesses to ensure compliance and uphold ethical standards.

In conclusion, the future scope of the study on digitalizing HR for small businesses is vast and multifaceted. By exploring these avenues for further research, scholars, practitioners, and policymakers can contribute to advancing knowledge and innovation in HR management, ultimately enabling small businesses to thrive in an increasingly digitalized world.

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