

The Mediating Role of Resource Availability and Allocation in Strengthening the Relationship of Change Strategies in the Growth and Development of Entrepreneurial Projects after Covid 19

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ABSTRACT

With limited contemporary examinations investigating interactions between change management strategies and startups and entrepreneurial ventures' growth and development, judgements are bound to be clouded. As a result, the study's main objective is to identify the key challenges faced by startups and entrepreneurial ventures in response to the post-pandemic business landscape. The study is important for providing valuable insights into successful change management practices, offering practical recommendations for business leaders, and contributing to the understanding of post-pandemic resilience and adaptation in the region's entrepreneurial ecosystem. The study formulated 8 hypotheses linking digital transformation, customer-centric, financial restructuring and resource optimization, and resource availability and allocation change management approaches with the growth and development of startups and entrepreneurial ventures. A quantitative method involving a Structural Equation Modelling approach was applied to 326 clustered survey responses collected from CEOs, general managers, finance managers, human resources managers, change management leaders and employees and team members of start-ups and entrepreneurial ventures in Erbil, Kurdistan Region of Iraq. According to the findings, digital transformation significantly enhances resource availability and allocation, and growth and development. While customer-centricity may not directly affect resource availability and allocation post-Covid-19, the study concludes that a customer-centric mindset and strategy remain critical to business resilience. Most importantly, financial restructuring and resource optimization positively and significantly affect resource availability and allocation, as well as growth and development. Lastly, the study upholds that resource availability and allocation's mediating effects are not valid within the context of startups and entrepreneurial ventures in the post-pandemic business landscape.

KEYWORDS: Covid-19, customer focus, customization and growth and development, digital transformation, financial restructuring.

1. INTRODUCTION:

The Covid-19 pandemic has created unprecedented challenges for businesses globally, and startups and entrepreneurial ventures, in particular, face unique difficulties due to their limited resources, agility, and competitive nature. The need to adapt to an evolving fast-paced environment created by the pandemic demands change management strategies. Moreover, the

degree to which change management strategies are highly coveted in the post-Covid-19 landscape gains huge credence when aspects such as increasing efficiency, improving employee engagement, customer focus, innovation and growth and organisational alignment are brought into perspective (Cameron & Green, 2019; Kotter, 2012; Krogerus & Tschäppeler, 2012). As North Iraq's startups and entrepreneurial ventures were not spared by the pandemic's disastrous effects, the empirical and practical weight of such notions cannot be overstated (Ismael et al., 2021). With a severely crippled economic system recovering from decades of political turmoil, the Kurdistan Region of Iraq's startups and entrepreneurial ventures were further plunged into deep growth and development doldrums by the Covid-19 pandemic. Because no alternative funding options exist, resource allocation cannot be optimized and financial strategies cannot be

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reassessed, financial restructuring and resource optimization changes remain very the Kurdistan Region of Iraq's important. Without such a change management strategy, North Iraq's startups and entrepreneurial ventures remain highly constrained. To further compound these there is a lack of customer-centric approaches in the Kurdistan Region of Iraq's post-pandemic landscape. Moreover, Hotha (2023) cites that customer-centricity is essential for understanding customers' behavior and tailoring their offerings accordingly. Thus, when effectively implemented in the post-pandemic landscape, the Kurdistan Region of Iraq's startups and entrepreneurial ventures can exhibit substantial growth and development improvements. Among these change management strategies, the adoption of digital transformation can effectively warrant high growth and development among startups and entrepreneurial ventures in the post-pandemic landscape. This is because leveraging technology and digital tools can enable startups and entrepreneurial ventures to streamline processes, enhance operational efficiency, and expand their market reach (Elia, Margherita & Passiante, 2020; Sutrisno et al., 2023). However, examining these change management strategies in the post-pandemic context of North Iraq's startups and entrepreneurial ventures is still in its infancy.

With numerous related studies being confined to countries such as India (Khurana, Dutta & Ghura, 2022), China (Hansen, 2019; Xiao et al., 2021), and Palestine (Iriqat & Jaradat, 2021), the exclusion of North Iraq in the long-standing startups and entrepreneurship development debate leaves numerous voids to be filled. In an academic context, the identification and examination of the challenges faced by startups and entrepreneurial ventures in North Iraq in the post-pandemic business landscape is a highly coveted phenomenon. Despite studies underscoring that Covid-19 challenges crippled business growth and development (Bryce et al., 2020; Engidaw, 2022), attempts to validate such notions in the post-pandemic landscape are still budding. Hence, much remains to be ascertained as to which exact challenges are affecting the Kurdistan Region of Iraq's startups and entrepreneurial ventures. As inquiries are raised as to which change management strategies these businesses must implement to adapt to the new business environment, the significance of these issues gains huge empirical credibility. Despite their huge theoretical implications, the application of vital post-pandemic landscape change management strategies involving digital transformation, customer-centric approach, and financial restructuring and resource optimization has not been equally matched. With limited contemporary examinations investigating interactions between change management

strategies and startups and entrepreneurial ventures' growth and development, judgements are bound to be clouded. Currently, the researcher believes the exploration of these interactive connections needs to be pursued further as empirical studies have been sidelining such aspects in related debates (Bryce et al., 2020; Engidaw, 2022). Additionally, it remains highly likely that the adoption of change management strategies in the post-pandemic landscape is moderated or mediated by certain variables or conditions such as resource availability and allocation. However, not much has been done to explore these issues in-depth in the post-pandemic landscape. Therefore, the research problem for this study is the need to understand and identify effective change management strategies employed by startups and entrepreneurial ventures in North Iraq. This is to navigate the post-pandemic business landscape. Consequently, it is crucial to explore the strategies they employ to adapt, survive, and thrive in the changing business environment. Amid such discoveries, the objectives of this research are as follows:

- 1) To identify and examine the challenges faced by startups and entrepreneurial ventures in North Iraq in the post-pandemic business landscape.
- 2) To explore the change management strategies implemented by these businesses to adapt to the new business environment. That is, to assess the impacts of digital transformation, customer-centric approach and financial restructuring and resource optimization on startups and entrepreneurial ventures' growth and development.
- 3) To provide practical recommendations for business leaders, policymakers, and stakeholders to effectively manage change and promote resilience in the post-pandemic business landscape.

The findings provide valuable insights into successful change management practices, offer practical recommendations for business leaders, and contribute to the understanding of post-pandemic resilience and adaptation in the region's entrepreneurial ecosystem. Practically, the findings demand that start-ups and entrepreneurial ventures continue to invest in customer insights and market research to stay attuned to changing customer dynamics. Theoretically, the findings highlight the importance of learning, experimentation, and adaptation in driving growth and development. Subsequently, the next sections of the study focus on the literature review, research methodology and data analysis with the end goal of providing theoretical and practical suggestions.

2. LITERATURE REVIEW

2.1 The contingency and organizational learning theoretical approaches to change management and business growth

Ever since the pandemic inflicted social and business systems with numerous complexities and challenges; there has been an insatiable demand for strategies fitting the business context. The prevalence of these unprecedented challenges and uncertainties is well documented in academic studies (Engidaw, 2022; Fairlie & Fossen, 2021; Gorzelany-Dziadkowiec, 2021) and continues to pose challenges to business ventures in the post-Covid-19 era. Therefore, to foster and promote business growth and development among startups and entrepreneurial ventures in the post-Covid-19 era, specific change management strategies are crucial. In response to such demands, the current study upholds that the contingency theory is fit for application in this context. According to Abba, Yahaya and Suleiman (2018), the contingency theory opines that there could not be “one best way” or “Best fit” for all leadership styles or organizing. As a result, the contingency theory upholds that the optimal course of action is contingent (dependent) on the internal and external situation (Abba, Yahaya & Suleiman, 2018). Within the context of the pandemic, this study argues that startups and entrepreneurial ventures need to assess their specific context, including the impact of the pandemic on their internal operations, customers and industry. In light of this, change management strategies should be customized to address the unique circumstances and needs arising as a result of the pandemic. Furthermore, by applying contingency theory to the Covid-19 context, the study highlights the importance of stressing the significance of effective leadership and decision-making strategies. In this regard, startups and entrepreneurial venture managers must analyze the contingencies associated with the pandemic, make informed decisions, and communicate effectively to guide their organizations through change. Additionally, they should exhibit agility, resilience, and the ability to adapt their change strategies in response to evolving circumstances. Amid such observations, this study argues that startups and entrepreneurial ventures that demonstrate strong change management capabilities can navigate the challenges posed by the pandemic effectively. This aids in enhancing startup and entrepreneurial growth and development.

To further buttress the current study's theoretical contributions, the organizational learning theory's propositions were also integrated into the change

management and business growth debate in the post-Covid-19 era. Besides, the pandemic introduced numerous distinct contingency situations that startups and entrepreneurial ventures need to consider. These encompass the agility of the organization to respond to Covid-19's unprecedented challenges and uncertainties (Bryce et al., 2020), the unavailability of resources to foster resilience (Beninger & Francis, 2022) and the severity of the impact on the industry (Roy, 2020).

The Covid-19 pandemic has necessitated both single-loop and double-loop learning. Liggett-Nichols (2013) asserts that single-loop learning involves making immediate adjustments to adapt to the crisis, such as implementing health and safety protocols or transitioning to remote work. Liggett-Nichols (2013) says double-loop learning involves questioning underlying assumptions and norms to innovate and transform. Thus, startups and entrepreneurial ventures that embrace double-loop learning during the pandemic can identify new opportunities, develop creative solutions, and adapt their strategies to drive growth and development. In response to the pandemic, change management practices should facilitate effective knowledge sharing, collaboration and communication among external partners, stakeholders and employees. This is because Covid-19 has created a need for organizations to acquire and disseminate knowledge rapidly. In this way, startups and entrepreneurial ventures can gain knowledge from best practices, emerging research, and experiences that will enhance their resilience in the face of pandemics. Lastly, by applying organizational theory, the current study argues that the adoption of change management practices should encourage a learning-oriented culture that iterates on strategies, learns from mistakes and embraces experimentation. Therefore, startups and entrepreneurial ventures' adopting a growth mindset and viewing the pandemic as an opportunity for learning and improvement can navigate the crisis more effectively, identify new growth avenues, and foster development even in challenging times.

2.2 Gaps in the existing literature: businesses challenges and change management in the post-pandemic era

The inevitable nature of challenges posed by the pandemic is widely documented in academic studies. As such, their documentation serves as proof of the ever-rising demand for change management strategies to boost business development and growth among business corporations. With the high advent of Covid-19 unprecedented challenges and uncertainties, the effective ability of startups and entrepreneurial ventures to grow and develop in the post-pandemic business landscape remains highly threatened. Accordingly, this

section examines related studies to identify challenges posed by the pandemic and demonstrate how they hinder the growth and development of startups and entrepreneurial ventures in the post-pandemic business environment.

Thambusamy and Bekiroğulları's (2020) exploration of virtual leadership in small businesses during the Covid-19 pandemic uncovers both possibilities and challenges. Their findings outline that unfamiliarity with the technology used for face-to-face interaction imposes unique challenges on small businesses. Based on the circumstances of the global economy and the challenges faced by business corporations in terms of resource constraints, their findings tend to be empirically supported. As a solution to this problem, they proposed that corporations adopt strategies to ensure that employees' productivity levels remain the same or improve. This is accomplishable by applying change management strategies as they are well posed to deal with adverse individual behaviours and attitudes triggering high employees turnover intentions (McCartney, Chi In & Pinto, 2022), a decline in sales (Fairlie & Fossen, 2021) and heavy business losses and financial distress (Younas & Kassim, 2022).

Gorzelany-Dziadkowiec (2021) used the CAWI technique to collect survey responses on Covid-19 business innovation challenges. With the findings uncovering that the Covid-19 pandemic has affected business readiness and innovation, startups and entrepreneurial ventures' ability to effectively grow in the post-pandemic business environment remains brisk. By applying Lewin's three-step model, the importance of creating a sense of urgency and establishing the need for change is highly coveted in this context. Due to this, startups and entrepreneurial ventures must recognize existing processes and systems' inefficiencies and limitations, in addition to digital technologies' potential benefits. At this stage, however, it is crucial that resistance to change is broken down and that an open-minded attitude is fostered to prepare for digital transformation.

Fairlie and Fossen (2021) conducted a study aimed at analysing the early impacts of the covid-19 pandemic on business sales. As highlighted in prior examinations, problems such as the massive shutdown of businesses in the second quarter of 2020 were also noted (Fairlie & Fossen, 2021; Gorzelany-Dziadkowiec, 2021). According to their findings, businesses affected by mandatory lockdowns suffered the greatest sales losses, including accommodation businesses, which lost 91% of their sales. With such severity standing as a major obstacle to startups and entrepreneurial ventures, an urgent call to effect change management strategies is a huge necessity. However, proper and relevant change management strategies must be effectively deployed if startups and

entrepreneurial ventures are to observe meaningful growth and development improvements. Such calls are inhibited by the lack of empirical coverage in this context as studies in this field are still in their infancy stages.

Younas and Kassim's (2022) examination highlights the Covid-19 pandemic's opportunities and challenges in terms of businesses' role in safeguarding society and ensuring sustainability. In their diverse economic and business nature, business discontinuity, heavy business losses, mental distress, unethical business practices, financial distress, low consumption of goods and services and unemployment challenges were identified. With the prevalence of these challenges remaining high in the post-Covid-19 business landscape (Freze et al., 2023; Hassan, Rabbani & Ali, 2020; Nguyen et al., 2021), one can underscore that to mitigate such challenges, change management strategies must be implemented.

Multiple empirical findings have been presented to shed light on the significance of Covid-19 challenges undermining startup and entrepreneurial venture growth. For instance, Moosavi, Fathollahi-Fard and Dulebenets (2022) listed potential disruption management strategies and supply chain disruption challenges. According to Moyo et al. (2022), the pandemic led to organizational dysfunction, such as dissatisfaction, low motivation, and low morale among employees due to dissatisfaction, lack of commitment, and poor performance. In another related instance, Magableh (2021) opines that production capacity and manufacturing capability decreased amid a surge in Covid-19 cases. Other challenges like a rise in retail employees' turnover intentions in the hospitality industry (McCartney, Chi In & Pinto, 2022), a decline in sales (Fairlie & Fossen, 2021), heavy business losses and financial distress (Younas & Kassim, 2022) were uncovered. Many of these problems have been observed in large corporations, but their severity is a major force to be reckoned with in startups and entrepreneurship. Furthermore, this compounds the inevitable demand for change management strategies. However, with a limited examination in this context, judgements on which strategies can be effectively applied to boost startups' and entrepreneurial ventures' growth and development in the post-Covid-19 landscape are bound to be clouded. As a result, this study contributes to the existing Covid-19 and change management debate by providing insights into the probable change management strategies applicable within the context of startups and entrepreneurial ventures in the post-Covid-19 landscape.

Despite the unprecedented challenges and uncertainties created by the pandemic, there are emerging ideas highlighting potential opportunities presented by the advent of the pandemic. For instance, Younas and

Kassim (2022) assert that businesses must actively use opportunities to overcome or minimize Covid-19 challenges. Gneiting, Lusiani and Tamir (2020) underscore that Covid-19 should be the catalyst for radically reining corporate power, restructuring business models with purpose and rewarding all those who work with profits, creating an economy for all. According to He and Harris (2020), the Covid-19 pandemic offers businesses a great opportunity to genuinely engage in corporate social responsibility and contribute to urgent global social and environmental problems. As a conclusion, Carvalhaes et al. (2020) outlined that Covid-19-related challenges represent a call for a major rethinking of how we approach infrastructure and Covid-19 presents a window of opportunity for change. Hence, change management strategies must be aligned with small businesses and ventures' attempts to mitigate risks and maximize performance. This is to ensure long-term and sustainable business growth and development.

Concerning change management strategies, much needs to be explored in this context to promote startup and entrepreneurial growth and development. Panaitescu and Renea (2020) assert that the situation we are in, especially the one we want to reach, requires urgent and radical measures. In response to the Covid-19 pandemic, Junnaid, Miralam, and Jeet (2020) reiterated the importance of leadership and change management. In another instance, Bryce et al. (2020) underscore the importance of building resilience in the face of uncertainty by drawing early lessons from the Covid-19 pandemic. Meanwhile, Beninger and Francis' (2022) contemporary community-centric approach emphasizes the importance of resources for business resilience in a Covid-19 world. To reflect such a proposition, the vitality of digital transformation, customer-centric approach, and financial restructuring and resource optimization strategies is highly significant. In a study by Ugwu et al. (2020) change management is viewed as having a positive effect on firm performance of selected deposit money banks in Imo State, Nigeria. However, with no specific examinations linked to digital transformation, a customer-centric approach, and financial restructuring and resource optimization strategies, this current study develops these notions further.

Hypotheses development: Change management strategies in the post-pandemic era

The significance of change management strategies is attached to a key number of critical benefits. With the pandemic imposing a severe rise in retail employees' turnover intentions (McCartney, Chi In & Pinto, 2022), a decline in sales (Fairlie & Fossen, 2021) and heavy business losses and financial distress (Younas & Kassim,

2022), the significance of change management strategies remains relatively high. However, the importance of devising applicable and relevant change management strategies in the post-pandemic landscape is of huge importance to startups and entrepreneurial ventures to achieve solid growth and development levels. It is in this regard that this section explores the existing change management strategies with the intention of choosing strategies applicable within the context of North Iraq.

In the context of startups and entrepreneurial ventures in North Iraq navigating the post-pandemic business landscape, several change management strategies can be applied. These strategies aim to help these businesses adapt, innovate, and thrive in the face of challenges. Foremost, an agile and iterative approach can be applied in this context. Referencing Attar and Abdul-Kareem (2020), embracing an agile methodology can help organizations such as startups and entrepreneurial ventures quickly respond to changes and uncertainties. To accomplish this, larger goals are broken down into smaller, manageable tasks or sprints. This allows for continuous learning, experimentation, and adaptation as the goals are achieved.

Digital transformation strategies:

When considered as part of single-loop and double-loop learning as suggested by the organizational learning approach (Liggett-Nichols, 2013), digitalising operations is a learning outcome devised to address Covid-19 challenges. Drawing further, digital transformation strategies can also be applied as part of businesses' change management strategies to adapt to the new operating environment and improve performance. According to Khurana, Dutta and Ghura (2022), leveraging digital tools and technology can enable SMEs to streamline processes, enhance resource availability and allocation, boost operational efficiency, and expand their market reach. Dibrell et al. (2008) and King and Burgess (2006) primarily stressed the critical role of digital technology in generating novel innovations as they can moderate many aspects of the process of bringing new problem-solving ideas. In this context, startups and entrepreneurial ventures can adopt automation, data analytics, e-commerce platforms and cloud-based solutions to optimize resource availability and allocation, and operations and provide innovative products or services. With numerous companies having digitalized, startups and entrepreneurial ventures are strongly encouraged to adopt similar approaches to reduce competitive threats and enhance their effectiveness in the post-pandemic landscape. This can enhance their growth and development and Scuotto et al.'s (2021) findings mirrored such propositions by denoting a significantly positive connection between digital transformation and 2,156,360 European SME's

growth. Such a strategy is essential for overcoming challenges posed by the pandemic and harnessing market and industry opportunities resulting in growth and development. As a contribution to existing literature, the adoption of digital transformation strategies will be examined in the context of startups and entrepreneurial ventures' growth and development. Hence, the following hypotheses were proposed in that regard:

Hypothesis 1: The digital transformation change management approach has a significantly positive impact on the growth and development of startups and entrepreneurial ventures.

Hypothesis 2: A digital transformation change management approach has a significantly positive impact on resource availability and allocation.

A customer-centric approach

Having observed the need to safeguard existing customer bases and lure customers from competitors before (Gupta & Ramachandran, 2021) and during the pandemic (Tuominen et al., 2022), one can underscore that adopting a customer-centric approach is essential for startups and entrepreneurial ventures. Amid such discoveries, prioritizing customer needs and preferences is crucial in the post-pandemic landscape. Therefore, startups and entrepreneurial ventures must adopt customer-centric strategies like collecting feedback, conducting market research and leveraging data analytics to understand customer behaviour and tailor their offerings accordingly. With studies emphasizing the importance of such an approach, this current study builds on these notions to test their validity in the context of the Kurdistan Region of Iraq's startups and entrepreneurial ventures.

- **Hypothesis 3:** The customer-centric approach has a significantly positive impact on resource availability and allocation.

Financial restructuring and resource optimization:

Irrespective of the business landscape being in the Covid-19 or post-Covid-19 era, the importance of financial restructuring and resource optimization still continues to be one of the most viable and vital business strategies. In line with Knight's (2001) earlier propositions, the current study opines that startups and entrepreneurial ventures may need to reassess their financial strategies, optimize resource allocation, and explore alternative funding options. This may include exploring crowdfunding, subsidies, grants, or revising their business models to align with the changing market conditions. It is in this regard that this will be examined in the context of startups and entrepreneurial ventures' growth and development.

- **Hypothesis 4:** A financial restructuring and

resource optimization change management approach has a significantly positive impact on resource availability and allocation.

- **Hypothesis 5:** A financial restructuring and resource optimization change management approach has a significantly positive impact on the growth and development of startups and entrepreneurial ventures.

Resource availability and allocation

Subject matters involving resource availability and allocation's impact on organizational performance are still in their infancy stages. As such, not much is known as to the nature and magnitude of impact on organizational performance. Additionally, this also encompasses their mediating effects. Hence, as a novel suggestion, resource availability and allocation's direct and indirect effects will be tested in the context of manufacturing companies. To aid such examinations, the following hypotheses will be tested:

- **Hypothesis 6:** Resource availability and allocation have a significantly positive impact on startups' and entrepreneurial ventures' growth and development.
- **Hypothesis 7:** Resource availability and allocation have a mediating effect on the relationship between digital transformation and startups and entrepreneurial ventures' growth and development.
- **Hypothesis 8:** Resource availability and allocation have a mediating effect on the relationship between financial restructuring and resource optimization, and startups and entrepreneurial ventures' growth and development.

Meanwhile, there is a wide array of strategies startups and entrepreneurial ventures can utilize to boost their growth and development levels. For instance, investing in the reskilling and upskilling of employees using mentoring sessions, workshops, or training programs can help startups and entrepreneurial ventures build a more adaptable and skilled workforce. In this regard, other studies recommend continuous learning and knowledge-sharing strategies (Liggett-Nichols, 2013; Secundo et al., 2021). That is, encouraging a culture of continuous learning and knowledge sharing within the organization can foster innovation and adaptability. This can involve promoting collaboration, organizing internal workshops or seminars, and providing platforms for employees to share insights, best practices, and lessons learned. In some cases, transparent communication and stakeholder engagement are recommended (Ojiagu, Nzewi & Arachie, 2020). Transparent and effective communication with internal and external stakeholders

is vital during times of change. Hence, startups and entrepreneurial ventures should proactively communicate their change challenges, initiatives and progress to investors, customers, employees and other relevant stakeholders. Engaging stakeholders and seeking their input can help build trust, gather valuable insights, and gain support for the change process.

Amid the above-provided insights, the current study bears in mind that the specific change management strategies adopted by startups and entrepreneurial ventures in North Iraq can vary depending on their market dynamics, resources and industry size. Therefore, digital transformation, customer-centric approach, and financial restructuring and resource optimization strategies can be tailored to the specific context and needs of each business, considering the local market conditions and available resources. In light of these initiatives, their implications on startups and entrepreneurial ventures' growth and levels will be tested.

Conceptual model

In light of the formulated hypotheses, a conceptual framework presented in Figure 1 was developed. Arrows spanning resource availability and allocation denote the effects of digital transformation (H2), customer-centric approach (H3) and financial restructuring and resource optimization (H4). When analyzed in relation to growth and development the effects of digital transformation are denoted by H1 and that of digital transformation, and financial restructuring and resource optimization by H5 and H6. It is from this conceptual framework that an SEM approach was devised. Therefore, the next section of the study dwells on the estimation procedures and methods used to test these hypotheses.

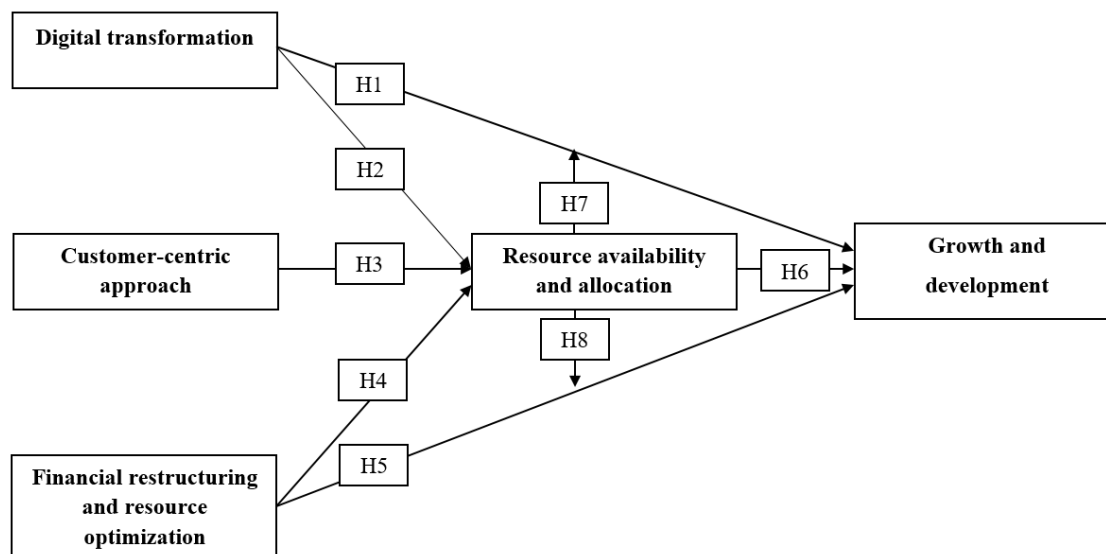


Fig. 1. Conceptual Model

3. METHODOLOGY

With limited contemporary examinations investigating interactions between change management strategies and startups and entrepreneurial ventures' growth and development, judgements are bound to be clouded. As a result, the study's main objective is to identify the key challenges faced by startups and entrepreneurial ventures in response to the post-pandemic business landscape. The study is important for providing valuable insights into successful change management practices, offering practical recommendations for business leaders, and contributing to the understanding of post-pandemic resilience and adaptation in the region's

entrepreneurial ecosystem. The Kurdistan region has witnessed the emergence of innovative pilot projects in various domains such as technology, agriculture, renewable energy, and healthcare. These pilot projects serve as testbeds for new technologies, business models, and sustainable practices. They play a vital role in shaping the region's entrepreneurial landscape by showcasing innovative approaches and providing valuable insights for the broader entrepreneurial community. By conducting this research and addressing the outlined aspects, we aim to contribute to a deeper understanding of the post-pandemic entrepreneurial landscape in the Kurdistan region and pave the way for informed strategies that foster sustainable growth and development

Following attempts to examine the effective change management strategies in the post-pandemic business landscape in the Kurdistan region of Iraq

(See Figure 1), a survey was utilized. Subsequently, an SEM approach was deployed. By applying an SEM methodology, the study was able to conduct a multidimensional analysis of business growth and change management strategies and their interrelationships. As a result, the study was able to comprehensively analyse their complex dynamics and explain the phenomena under investigation. Secondly, it is to the researcher's knowledge the current study is the first of its kind to apply the SEM approach to explain the change management strategies and business growth phenomena in the Kurdistan Region of Iraq's post-pandemic business landscape. Related studies are characterized by the application of methods such as the sales analysis method (Fairlie & Fossen, 2021), simple regression method (Ugwu et al., 2020) and systematic literature review (Junnaid, Miralam & Jeet, 2020). Thirdly, by applying an SEM approach, the study offered insights into the moderating effects influencing change management strategies and business growth interrelationships. The results of this study provide insights into when and for whom certain change management methods are most effective.

3.1 Study participants and sampling methods

Investigating change management strategies in fast-paced, innovative environments, where agility and adaptability are crucial for survival and growth. In that regard, the study draws its focus on startups and entrepreneurial ventures. Related examinations excluded startups and entrepreneurial ventures as empirical traces are found in Nigeria's deposit money banks (Ugwu et al., 2020) and the tourism sector (Panaitescu & Renea, 2020). As such, the Kurdistan region of Iraq has been sidelined in such debates.

The population in this study would consist of entrepreneurial projects and ventures operating in the Kurdistan region of Iraq. This includes startups, SMEs, and other business entities across various sectors that have been impacted by the Covid-19 pandemic. Given the convenience sampling approach, determining an exact sample size can be somewhat flexible (Emerson, 2021). Gravetter and Forzano (2018) hold that for a study aiming to provide a reasonable representation of the population, a sample size of approximately 100 to 150. However, to enhance validity, a sample size of 350 CEOs, general managers, finance managers, human resources managers, change management leaders and employees and team members of entrepreneurial projects were targeted. This sample size is chosen based on the accessibility and willingness of these projects to participate in the study, while keeping in mind the need for a diverse

representation across different sectors (Emerson, 2021).

326 individuals responded and this equated to a response rate of 93.14% and Table 1 shows that there were 175 males and 151 females, of which 53.37% were employees and team members. A notable feature is that the number of individuals possessing a tertiary qualification is relatively low and does not surpass 23%. 46.01% of respondents indicated that their related start-ups and entrepreneurial ventures had been operational for less than 1 year. Their insights and experiences can provide valuable perspectives on strategy formulation, implementation challenges, and lessons learned. Employees and team members across different levels and departments within organizations that have undergone significant changes were also surveyed. This helped capture their perceptions, experiences, and challenges related to change management processes. Among the study participants, the study engaged with professionals specializing in change management. This was to gain expert insights, industry best practices, and case studies from their experience working with various businesses.

Variable	Description	Count	Percentage
Gender	Male	175	53.68%
	Female	151	46.32%
	Total	326	100
Position	CEOs	8	2.45%
	General manager	14	4.29%
	Finance manager	24	7.36%
	Human resources manager	24	7.36%
	Change management leaders	82	25.15%
	Employees and team members	174	53.37%
	Total	326	100
Academic qualification	High school	114	34.97%
	Diploma	92	28.22%
	Bachelor's degree	74	22.70%
	Master's degree	44	13.50%
	PhD degree	2	0.61%
Total	326	100	
Years of experience	Less than 1 year	150	46.01%
	1-3 years	135	41.41%
	4-6 years	38	11.66%
	7 years and above	3	0.92%
	Total	326	100

3.2 Data collection

A survey was used as part of the data collection process, through which information was obtained regarding the challenges faced by startups and entrepreneurial ventures in North Iraq following the pandemic. Similarly, this facilitated the obtaining and testing of change management strategies implemented by these businesses to adapt to the changing business environment. As it stands, there were no existing data collection instruments on digital transformation, a customer-centric approach, financial restructuring and resource optimization, and startups'

and entrepreneurial ventures' growth and development. Hence, the current study's novelty is in the development of novel constructs whose validity to explain related study issues can be tested in different contexts. The questionnaire comprised 8 digital transformation, 10 customer-centric approach, 12 financial restructuring and resource optimization, 6 resource availability and allocation, and 12 startups and entrepreneurial ventures' growth and development constructs. The constructs of both variables were measured on a Likert scale of 1 (strongly disagree) to 5 (strongly agree).

TABLE 2

Variable Constructs' Factor Loadings

Variable	Abbreviation	Factor loadings	Variable	Abbreviation	Factor loadings
Digital transformation	DT2	0.681	Customer-centric approach and	CC1	0.542
	DT3	0.745		CC2	0.655
	DT4	0.789		CC3	0.698
	DT6	0.693		CC5	0.722
	DT7	0.800		CC6	0.736
	DT8	0.788		CC8	0.744
	-	-		CC9	0.756
Financial	FRRO3	0.801		GD1	0.633
	FRRO4	0.812		GD2	0.815
	FRRO5	0.800		GD4	0.823

restructuring and resource optimization	FRRO5	0.816		Growth and development	GD5	0.719
	FRRO6	0.794			GD6	0.656
	FRRO10	0.807			GD8	0.708
	FRRO11	0.813			GD9	0.818
	FRRO12	0.822			GD11	0.712
Resource availability and allocation,	RAA1	0.744		-	-	
	RAA2	0.786		-	-	
	RAA3	0.704		-	-	
	RAA4	0.710		-	-	

The questionnaire was validated using a focus group of 1 senior executive, 2 employees and 2 team members across different levels and departments within organizations that have undergone significant changes were also surveyed. It is upon successful validity tests that questionnaires were distributed and collected by hand between the 3rd of May to the 26th of June 2023. To estimate the proposed SEM, constructs presented in Table 2 were selected using a criterion of selecting constructs with factor loadings of at least 0.60 (Hair et al., 2021).

Validity and reliability tests

In order to validate the study findings, discriminant validity and convergent validity tests were assessed by deploying the Fornell Larcker method (Wong, 2019) and the Average Variance Explained (AVE) approach (Hair et al., 2021), respectively. The latter requires AVE values to be at least 0.50 for convergent validity to be established (Hair et al., 2021). A cut-off point of 0.70 was used in assessing the variables' Cronbach's alpha and composite reliability measures (Hair et al., 2021; Wong, 2019). A Normed Fit Index (NFI) of more than 0.95 together with a significant chi-square value and a Standardized Root Mean Square Residual (SRMR) of

less than 0.08 were used in assessing the estimated model's fitness (Hair et al., 2021).

4. RESULTS AND ANALYSIS

The study findings were derived from the examination of a clustered sample of 326 start-ups and entrepreneurial ventures in Erbil, Kurdistan Region of Iraq. As such, the findings are presented as follows:

4.1 Challenges faced by startups and entrepreneurial ventures in the post-pandemic business landscape

To answer the first research question, descriptive statistics were computed to rank the challenges faced by startups and entrepreneurial ventures in the post-pandemic business landscape. According to the presented Table 3 findings, there were high indications among the respondents that operational and capacity challenges (mean=4.27; standard deviation=1.023), funding challenges (mean=4.25; standard deviation=1.019) and customer behaviour shifts (mean=4.24; standard deviation=0.890) were the three major challenges affecting the start-ups and entrepreneurial ventures.

TABLE 3
Challenges faced by startups and entrepreneurial ventures in the post-pandemic business landscape

Rank	Challenges	Mean	Standard deviation
1	Operational and capacity challenges	4.27	1.023
2	Funding challenges	4.25	1.019
3	Customer behavior shifts	4.24	0.890
4	Supply chains and distribution channels-related challenges	4.22	0.912
5	Talent acquisition and retention	4.17	0.904
6	Market and industry disruptions	4.11	1.050
7	Economic uncertainty	4.03	1.005

The severity of such problems cannot be underestimated amidst the changing business landscape (Freze et al., 2023; Hassan, Rabbani & Ali, 2020), high-risk averse and cautiousness approach by investors (Fassas, 2020) and changes in consumer

behavior and preferences (Orindaru et al., 2021). The advent of supply chains and distribution channels-related challenges (mean=4.22; standard deviation=0.912), talent acquisition and retention (mean=4.17; standard deviation=0.904), market and

industry disruptions (mean=4.11; standard deviation=1.050) and economic uncertainty (mean=4.03; standard deviation=1.005) challenges was not dismissed. This entails that the prevalence of these challenges had a high impact on start-ups and entrepreneurial ventures.

4.2 Change management strategies implemented by these businesses

In an attempt to determine and assess the change

management strategies implemented in the post-Covid-19 landscape, digital transformation, customer-centric approach, and financial restructuring and resource optimization strategies were identified. Along such lines, their correlation was examined in relation to start-ups and entrepreneurial ventures' growth and development. As indicated in Table 4, all the implemented change management strategies are significantly correlated with each other.

TABLE 4
Correlation coefficient test

Variable	GD	DT	RAA	CCA	FRRO
GD	-				
DT	0.266*	-			
RAA	0.314*	0.269*	-		
CCA	0.045*	0.475*	0.124*	-	
FRRO	0.127*	0.383*	0.087*	0.154*	-

GD: Growth and development; **DT:** Digital transformation; **RAA:** Resource availability and allocation; **CCA:** Customer-centric approach & **FRRO:** Financial restructuring and resource optimization. * Correlation significant at 0.01 level.

This potentially indicates complementary effects suggesting that the implementation of one change management strategy reinforces the effectiveness of the other change management strategies. Furthermore, it can be uncovered that the implementation of DT, RAA, CCA, and FRRO strategies significantly mirrors improvements in start-ups and entrepreneurial ventures' growth and development by 0.266, 0.314, 0.045 and 0.127, respectively. Such results tend to depict the importance of implementing change management strategies in the post covid-19 business landscape.

4.3 Outcomes and impacts of the change management strategies

Validity tests

Validity tests were undertaken as part of the procedures carried out to determine the outcomes and impacts of change management strategies on start-ups and entrepreneurial ventures' growth and development. In line with the attempts, the Fornell and Larcker method was applied and the diagonal values exceeded their underlying values. This indicates that discriminant validity was established (Wong, 2019).

TABLE 5
Fornell and Larcker Results

	DT	RAA	CCA	FRRO
DT	0.688			
RAA	0.619	0.626		
CCA	0.545	0.607	0.635	
FRRO	0.473	0.498	0.542	0.579

GD: Growth and development; **DT:** Digital transformation; **RAA:** Resource availability and allocation; **CCA:** Customer-centric approach & **FRRO:** Financial restructuring and resource optimization

After establishing discriminant validity, the study proceeded to investigate the prevalence of convergent validity. To demonstrate this, the AVE values presented in Table 6 exceeded 0.50 indicating convergent validity was

established (Hair et al., 2021).

TABLE 6
Convergent Validity, Internal Consistency and Composite Reliability Results

	AVE	Cronbach's alpha	Rho_A	Composite reliability
GD	0.736	0.746	0.811	0.822
DT	0.618	0.792	0.835	0.844
RAA	0.736	0.827	0.840	0.865
CCA	0.693	0.806	0.833	0.857
FRRO	0.808	0.814	0.856	0.862

GD: Growth and development; DT: Digital transformation; RAA: Resource availability and allocation; CCA: Customer-centric approach & FRRP: Financial restructuring and resource optimization.

Concerning the variables' reliability, Cronbach's alpha, Rho_A and composite reliability measure values surpassed 0.70 (Hair et al., 2021; Wong, 2019). Hence, the current study upholds that the variables GD, DT, RAA, CCA and FRRO are highly reliable in explaining the research issues at hand. In light of these findings, the study went further to assess the estimated model's fitness.

4.3.2 Model fitness tests

In validation of the estimated model's fitness, the SRMR is less than 0.08 while the NFI is more than 0.95 and the χ^2 value of 103.847 is significant at 0.01 level (Hair et al., 2021). Furthermore, the D_G (0.792) and D_ULS (1.421) values are less than their confidence interval values. It is at this juncture that the study proceeded to interpret the estimated SEM results.

TABLE 7
Model Fitness Tests Results

	SRMR	NFI	χ^2	D_G	D_ULS
Estimated model	0.065	0.968	103.847*	0.792	1.421
Saturated model	0.065	0.968	103.847*	0.792	1.421

4.3.2 SEM model estimation

A specific focus of this section is on testing the determined change management strategies' (DT, RAA, CCA and FRRP) effects on start-ups and entrepreneurial ventures. As per Table 8 findings, digital transformation's direct positive effects on start-ups and entrepreneurial ventures' growth and development ($\beta=0.048$; $p=0.000$) and resource availability and allocation ($\beta=0.245$; $p=0.002$) were supported.

TABLE 8
SEM Model Results

	Estimate	p-value	Impact	Decision
DT -> DG	0.048	0.000	Significant	H ₁ : Supported
DT -> RAA	0.245	0.002	Significant	H ₂ : Supported
CAA -> RAA	0.331	0.968	Insignificant	H ₃ : Supported
FRRO -> RAA	0.184	0.000	Significant	H ₄ : Supported
FRRO -> DG	0.609	0.000	Significant	H ₅ : Supported
RAA -> DG	0.473	0.001	Significant	H ₆ : Supported
Mediating effects				
DT -> RAA -> DG	0.521	0.074	Insignificant	H ₇ : Not supported
FRRO -> RAA -> DG	0.585	0.108	Insignificant	H ₈ : Not supported

GD: Growth and development; DT: Digital transformation; RAA: Resource availability and allocation; CCA: Customer-centric approach & FRRP: Financial restructuring and resource optimization.

The implementation of a customer-centric approach was shown to have an insignificant positive effect on resource availability and allocation ($\beta=0.331$; $p=0.968$). This entails that hypotheses 1 and 2 were accepted while hypothesis 3 was rejected. Hypotheses 4, 5 and

6 were supported. This led to inferences being drawn that financial restructuring and resource optimization have direct positive effects on resource availability and allocation ($\beta=0.184$; $p=0.000$) and growth and development ($\beta=0.609$; $p=0.000$). Along similar lines,

resource availability and allocation's significant and direct effects on growth and development were validated ($\beta=0.473$; $p=0.001$).

Lastly, the findings demonstrate that resource availability and allocation do not mediate relations between digital transformation and growth and development, and between financial restructuring and resource optimization and growth and development. Therefore, hypotheses 7 ($p=0.074$) and 8 ($p=0.108$) were refuted. Amid these discoveries, the next study discusses the implications of these findings.

Discussion

In comparison, the current study uncovers significant positive effects of 0.048 (hypothesis 1) and 0.245 (hypothesis 2). These effects span from digital transformation to start-ups and entrepreneurial ventures' growth and development as well as resource availability and allocation. Scuotto et al.'s (2021) related examinations reveal a significantly higher impact of 8.905 to further reinforce the importance of digital transformation on 2,156,360 European SMEs' growth. Having learned from the Covid-19 pandemic using single-loop and double-loop learning methods, the significance of the organizational learning theory in supporting the adoption of digital transformation strategies is highly justified in this context (Liggett-Nichols, 2013). Furthermore, such results are a reflection of the contingency theory's propositions denoting that an optimal course of action (digital transformation) is contingent on the internal and external situation (Abba, Yahaya & Suleiman, 2018). To reinforce this notion, Khurana, Dutta and Ghura (2022) underscored that leveraging digital tools and technology can enable Indian SMEs to streamline processes, enhance resource availability and allocation, boost operational efficiency, and expand their market reach. Also, Dibrell et al. (2008) and King and Burgess (2006) primarily stressed the critical role of digital technology in generating novel innovations. This is because it moderates many aspects of the process of bringing new problem-solving ideas. Furthermore, by adopting automation, data analytics, e-commerce platforms and cloud-based solutions to optimize resource availability and allocation as well as operations, startups and entrepreneurial ventures can provide innovative products or services. Such a strategy is essential for overcoming challenges posed by the pandemic and harnessing market and industry opportunities resulting in growth and development.

Considering hypothesis 3, Liggett-Nichols' (2013) organizational learning theory helps challenge assumptions and norms as part of innovation and

transformation in the post-Covid-19 era, which recommends double-loop learning. Terho et al. (2012) posit that customer-centric approaches go beyond the value of product attributes and components. In support of such notions, the current study uncovers that a customer-centric approach's implementation has an insignificant positive effect of 0.331 on resource availability and allocation. Opinions provided by Stoppel and Roth (2017) on German executive managers revealed that a customer-centric approach is essential for restructuring goals, risk allocations, responsibilities, and costs between customers and providers. While the direct impact of a customer-centric approach on resource availability and allocation may be insignificant after the Covid-19 pandemic, a customer-centered mindset and strategy remain crucial for business resilience and growth. In Italy, Tuominen et al. (2022) disclosed that a customer-centric strategy drives innovation and business growth in 778 Italian firms' international markets. Gupta and Ramachandran (2021) discovered that transitioning from a product-focused to a customer-centric approach plays a chief role in enhancing retail sales in Brazil, Russia, India and China. Upon such discoveries, change management initiatives aimed at boosting start-up and entrepreneurial ventures' growth and development in the post-Covid-19 era are solidified.

As indicated by the current study, FRRO has significantly positive effects on resource availability and allocation, and growth and development of 0.184 (hypothesis 4) and 0.609 (hypothesis 5), respectively. Such establishments have not been covered in prior examinations and hence, this insight contributes to the budding change management research in the post-Covid-19 era. Drawing further, these insights mirror the need to develop contingencies capable of addressing some of the prevalent Covid-19 challenges imposed on business ventures as suggested by the contingency theory (Abba, Yahaya and Suleiman, 2018). It is through such strategies that business ventures will be able to improve their financial stability in the post-Covid-19 era. Thus, by financial restructuring business ventures can improve their financial position by optimizing their capital structure, managing debt, and ensuring adequate liquidity. In support of these ideas, Altman, Hotchkiss and Wang (2019) disclosed that financial restructuring plays a pivotal role in dealing with USA'S corporate financial distress, restructuring, and bankruptcy challenges. Though this subject is currently budding, benefits such as increased resource pool, strategic resource allocation, and agility and adaptability are highly conceivable from such initiatives. Consequently, this highlights and supports resource

availability and allocation's established significant positive impact of 0.473 on the business ventures' growth and development as presented in the study (hypothesis 6).

Among the novel findings of this study are those indicating that resource availability and allocation do not mediate any interaction between digital transformation, financial restructuring, and resource optimization on business ventures' growth. Though not addressed in related studies, the implications of such findings are worthy of consideration. For instance, Junnaid, Miralam and Jeet's (2020) systematic literature review reiterates the importance of leadership and change management. Bryce et al. (2020) underscore the importance of building resilience in the United Kingdom in the face of uncertainty by drawing early lessons from the Covid-19 pandemic. Despite this, the current study indicates the need to refocus on change management strategies, emphasize strategic alignment and strengthen leadership and change capabilities. Amid such discoveries, the findings provide novel suggestions that add to the existing change management literature.

Conclusion

The study aimed to identify the key challenges faced by startups and entrepreneurial ventures in North Iraq in response to the post-pandemic business landscape. Along similar lines, the strategies implemented to adapt and thrive in the changing environment, and their outcomes on their growth and development were analyzed. It is through the accomplishment of such objectives that the findings provide valuable insights into successful change management practices, offer practical recommendations for business leaders, and contribute to the understanding of post-pandemic resilience and adaptation in the region's entrepreneurial ecosystem. Foremost, as conclusions, the study upholds that:

- The Kurdistan Region of Iraq's post-pandemic business landscape has been mainly riddled with operational and capacity, funding and customer behaviour shift challenges. Consequently, with these looming challenges at hand, the demand for (1) digital transformation, (2) resource availability and allocation, (3) customer-centric approach, and (4) financial restructuring and resource optimization change management strategies is highly unmatched. Hence, when effectively implemented, start-ups and entrepreneurial ventures are bound to register substantial growth and development levels.

- The adoption of digital transformation strategies in the post-Covid-19 era is significantly beneficial as it facilitates the implementation of single-loop and double-loop learning initiatives, as well as the establishment of optimal strategies essential to maximizing resource availability and allocation, and growth and development.
- Further inferences can be drawn from the study that financial restructuring and resource optimization have significant positive effects on resource availability and allocation, as well as growth and development. Amid all these observations, resource availability and allocation do not mediate the impact of change management strategies on start-ups and entrepreneurial ventures' growth and development. To address such an issue, the current study recommends the need to enhance organizational learning and knowledge management, strengthen leadership and change capabilities, emphasize strategic alignment and refocus on change management strategies.

Theoretically, the findings highlight the importance of learning, experimentation, and adaptation in driving growth and development. Practically, the findings demand that start-ups and entrepreneurial ventures continue to invest in customer insights and market research to stay attuned to changing customer dynamics. Additionally, the study's practical implications also call for the development of a comprehensive financial restructuring plan that considers different aspects like diversification of funding sources, working capital optimization and debt management. Based on the established findings, the study recommends managers of start-ups and entrepreneurial ventures to:

- 1) Engage in research activities to understand better the evolving customer needs and preferences, organizations as this allow them to make informed resource allocation decisions to effectively address customer expectations while navigating the challenges posed by the post-pandemic environment. This knowledge can inform resource allocation decisions and help organizations identify new growth opportunities, develop innovative solutions, and deliver value to customers.
- 2) Conduct a thorough resource optimization analysis to identify underutilization, redundancies, and inefficiencies, start-ups and entrepreneurial ventures should perform

a thorough resource optimization analysis. Resources can be reallocated, processes can be improved, and cost optimization strategies can be developed based on this information.

- 3) Develop a financial restructuring strategy by collaborating with financial institutions to negotiate favourable debt repayment terms and interest rates and exploring opportunities for equity partnerships and investment to inject capital and optimize the financial structure.
- 4) The government on the other hand can encourage digital skills development by establishing specialized training programs, workshops, and online courses focused on digital skills relevant to entrepreneurship. Additionally, the government can also provide financial incentives for digital adoption by introducing tax incentives, grants, or subsidies for businesses that invest in digital technologies and solutions. These suggestions aid in serving the growth and development of entrepreneurial projects in the Kurdistan region.

Suggestions for future research

The study is not void of limitations. As such, the study draws its findings from a cluster sample of randomly sampled start-ups and entrepreneurial ventures in Erbil, the Kurdistan Region of Iraq. Hence, the findings cannot be generalized to other cities as well as non-start-ups and entrepreneurial ventures outside North Iraq. To address this issue, a comparative examination involving start-ups and entrepreneurial ventures from other cities can help in broadening the study's scope and implications. Researchers can conduct a longitudinal study that tracks the evolution of entrepreneurial projects over an extended period post-COVID-19. In this way, they can compare the growth trajectories of ventures that implemented different change strategies and assess how resource availability and allocation mediate these strategies. In addition, a hierarchical or group-by-group analysis involving several distinct business ventures can aid in enhancing understanding of the significance of change management strategies in the post-Covid-19 landscape.

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