

EVALUATING GOVERNMENT INNOVATION INITIATIVES THROUGH THE LENS OF WOMEN AND MINORITY ENTREPRENEURS

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Abstract: This multiple comparative case study examined the perceptions of U.S. women and minority business owners regarding government innovation support programs, addressing a literature gap on these programs' effectiveness and accessibility for underrepresented groups. The research focused on whether these business owners viewed government initiatives as beneficial for fostering innovation. Research questions explored the experiences and challenges these business owners faced with these programs. Data collection included three open-ended interviews with a program director who provides small business government support, and two business owners: one who received government support and one who did not. Additionally, document reviews and a research questionnaire (N = 100) were also used to gather comprehensive data for triangulation. Findings revealed that while many respondents saw potential benefits in government support programs, significant barriers existed concerning business owner awareness, access, and perceived relevance. These barriers were noted by both the questionnaire and interviewed participants. The study suggested the need for more targeted outreach and tailored support mechanisms to improve the effectiveness of innovation support programs for women and minority business owners. These insights could help develop a more inclusive and impactful policy framework, creating equitable support mechanisms for these groups. Future research should extend this study across diverse geographical and demographic landscapes, exploring regional economic conditions and cultural differences and comparing impacts on nonminority business owners. Doing so would deepen the understanding of the unique advantages and barriers faced by women and minority business owners.

Keywords: Innovation, U.S. Government Support, Women Entrepreneurs, Minority Business Owners, Accessibility, Barriers to Entry, Inclusivity, Policy Development, Equity.

INTRODUCTION

Overview

The status of government innovation support programs and their relationship to the success of U.S. women and minority-owned small businesses (WMOSBs) has piqued both academic and pragmatic interest (Martin, 2020). The nonprofit mentorship company, named SCORE, gathered data for 20,000 businesses, noting that while women-run organizations face greater disparities in networking, access, and funding, their success rate is similar to men-run businesses and the number of women-run

businesses skyrocketed over the past decade (Stiles, 2018). Historical disparities, limited resource access, and societal biases have long challenged these businesses (Conley & Bilimoria, 2022). This qualitative multiple-case study explored the impact of government programs on WMOSBs' innovation, growth, and success. This study addressed a knowledge gap concerning how the success of women and minority businesses is tied to government innovation support programs. By examining the experiences, challenges, and opportunities these businesses face, particularly within the context of government support programs, the research sought to enhance understanding and contribute to a more equitable and inclusive business ecosystem.

Background and Problem Statement

WMOSBs in the U.S. face persistent disparities and challenges, including limited access to educational opportunities and professional networks (Alfred et al., 2019; Bates et al., 2018; Mazumder, 2018; Ukowitz, 2023). Johnston and Preiksaitis (2022) explored critical incidents that small business owners faced as they worked through governmental support programs, finding that many of the participants in the programs terminated their use of them about halfway through due to diminished returns. The challenges highlighted by previous researchers have led to a need to better understand why some leaders find the programs less than helpful, while others lean on them for their success.

Purpose and Significance of the Study

This qualitative multiple case study explored the perceptions and experiences of women and minority-owned small business owners regarding government innovation support programs. The research aimed to better understand how these programs influence their operations, innovation processes, and outcomes. By examining the barriers, opportunities, strengths, and challenges these businesses face, the study sought to provide actionable insights to inform decision-making and improve current practices. The research further aligned with efforts to promote equity in business (Galli-Debicella, 2020). The significance of this study extends beyond academic inquiry, impacting organizations, policymaking, and the broader quest for purposeful innovation. The study provides WMOSBs actionable knowledge to navigate government support programs, make informed decisions, and drive innovation and growth. Policymakers can use the research findings to refine existing programs, making them more accessible, inclusive, and effective. The study contributes to academic disciplines such as entrepreneurship, innovation management, policy enhancement, and diversity studies, filling gaps in the literature, as noted by Dubey et al. (2022) and Winkler et al. (2020).

Research Questions and Theoretical Framework

The research investigated whether government programs designed to foster innovation unintentionally maintain disparities or serve as catalysts for positive change. This study was guided by the following research questions (RQs):

- **RQ1:** How do women or minority-owned business owners or leaders describe their experiences creating innovative processes or products?
 - **SubRQ1:** How do women or minority-owned business owners or leaders who accept government support describe these experiences compared to those who do not accept support?

- **RQ2:** How do women or minority-owned business owners or leaders describe strategies to overcome the challenges and barriers they experience creating innovative processes or products?
 - **SubRQ2:** How do women or minority-owned business owners or leaders who accept government support describe these experiences compared to those who do not accept support?
- **RQ3:** How do women or minority-owned business owners or leaders describe the role that the owners' self-efficacy levels have on the successes in overcoming barriers experienced by their business?
 - **SubRQ3:** How do women or minority-owned business owners or leaders who accept government support describe these successes compared to those who do not accept support?
- **RQ4:** How do women or minority-owned businesses contribute to economic development resulting from their businesses?
 - **SubRQ4:** How do businesses that accept government support describe these contributions compared to those that do not accept support?

The study's conceptual framework combined Bandura's (1986) social cognitive theory and Schumpeter's (1939) economic development theory. Bandura's theory allowed for an exploration of how self-efficacy relates to the context of innovation, while Schumpeter's theory provided a macroeconomic perspective on innovation driving economic growth.

Assumptions and Limitations

We made a few assumptions when designing and implementing the study. First, we assumed that WMOSBs exhibit diverse characteristics, experiences, and challenges. We also assumed that government innovation support programs influence participating businesses' innovation process and outcomes. We assumed that the participants would be honest and that the cases selected would offer relevance to other similarly situated businesses. Finally, we assumed that the programs operate fairly and with integrity. The study limitations include a lack of generalizability, although transferability to similar contexts should be considered probable. The study was completed in a short period of time and this acted as a limitation on any type of time-relevant findings. The relevance of the findings may also be limited by changes in socio and business environments which likely could or will occur. The study data were collected prior to the change in the United States President and the culture change in viewing WMOSBs as less protect-worthy, which could act as a limitation of the findings.

LITERATURE REVIEW

The Behavioral and Theoretical Foundations of Innovation

Innovation is often associated with technical advancements but also encompasses significant social and cognitive dimensions, as highlighted by Silva and Di Serio (2021). Their behavioral model of innovation posits that the process is influenced by four critical factors: individual, organizational, environmental, and process-related elements. Individual factors include the knowledge, skills, and attitudes of those involved in the innovation process. For instance, a team's technical expertise and creative problem-solving abilities can significantly shape the innovation outcome. Organizational factors affect a company's culture, structure, and resources, collectively determining the environment's conduciveness to innovation. For example, a company with a flat organizational structure and a culture encouraging

experimentation is likelier to foster innovative ideas. Environmental factors include the external conditions in which an organization operates, such as market dynamics, competitive pressure, and regulatory frameworks. Depending on how they are managed, these factors can stimulate or stifle innovation. Lastly, process factors refer to the methodologies and practices used in managing innovation, including specific tools, techniques, and information-sharing protocols. Effective management of these processes can facilitate smoother transitions from ideation to implementation. The definition of innovation has evolved, with various scholars contributing different perspectives. Historically, innovation has been described as developing and implementing new ideas, products, services, or processes (Ayllón & Radicic, 2019; Callens, 2022; Tavassoli, 2018). This definition encompasses creating entirely new entities and enhancing existing ones to meet emerging needs (Fan et al., 2022). Echeverría (2020) expands on this by suggesting that innovations are interactive processes that generate novel, transformative, and valuable outcomes within specific environments and systems. This perspective aligns with Schumpeter's (1939) theory of economic development, which views innovation as a process that disrupts equilibrium within industries, leading to creative destruction. According to Schumpeter, entrepreneurs play a pivotal role by introducing innovations that disrupt existing market structures and create new economic opportunities (Croitoru, 2017). This disruption often results in the creation of new industries and the decline of outdated ones, thus contributing to economic evolution. Frugal innovation is another important concept within the broader framework of innovation. It refers to the strategic repurposing of existing resources and sustainable resourcing methods to create affordable solutions for underserved markets (Hindocha et al., 2021). Frugal innovation is particularly relevant in sectors like health care, where cost-effective solutions are critical for addressing the needs of low-income populations. Dubey et al. (2022) and Winkler et al. (2020) highlighted a more inclusive and sustainable approach to economic development by catering to previously neglected market segments.

The Role of Innovation in Small and Medium-Sized Enterprises (SMEs)

Innovation is critical to economic growth and competitiveness, particularly for small-and medium-sized enterprises (SMEs). Soriano et al. (2019) and Rodrigues and Franco (2023) argued that innovation initiatives differ significantly from traditional innovation strategies, which often focus solely on creating competitive advantages. For SMEs, innovation can be a means of survival and growth, giving them the ability to respond to market changes and consumer demands. Y. Liu et al. (2021) emphasized that innovation can significantly enhance business development when coupled with technological advancement and business acumen. This coupling is evident in the rise of new technologies, such as artificial intelligence and blockchain, which offer new avenues for growth and differentiation. Ukowitz (2023) asserted that innovation is beneficial and essential for the continuation and development of businesses. The rapid pace of technological advancements has led to the proliferation of new business opportunities, making it imperative for companies to adopt innovative strategies. For example, integrating digital technologies into business operations has revolutionized industries such as retail and manufacturing. Business leaders' creative and entrepreneurial mindsets

have been instrumental in developing groundbreaking products like smartphones, computers, and advanced transportation systems (Bodolica & Spraggon, 2021; Hanandeh et al., 2021). These innovations have transformed lifestyles, making daily tasks more convenient and efficient. As the global population grows, the demand for sustainable innovation becomes increasingly critical. Y. Liu (2018) noted that the finite nature of planetary resources necessitates innovative solutions to meet the burgeoning demand for energy, food, clothing, and other essentials. Sustainable innovation is about creating new products and developing processes that minimize environmental impact and conserve resources. This approach aligns with the principles of the circular economy, which advocates for the continual use of resources through recycling and repurposing.

Theoretical Perspectives on Innovation: Schumpeter and Bandura

Schumpeter's (1939) theory of economic development remains one of the most influential frameworks for understanding innovation. Schumpeter introduced the concept of creative destruction, which posits that economic development is driven by the cyclical process of innovation, where new industries emerge and old ones decline. This process is not gradual but rather characterized by significant disruptions, as new technologies and business models render existing ones obsolete. Schumpeter argued that entrepreneurs are the agents of this creative destruction, as they are willing to take risks and introduce innovations that disrupt the status quo (Becker et al., 2012; Croitoru, 2017). The theory highlights several key elements, including the circular flow of economic activities, the role of the entrepreneur, and the cyclical nature of business cycles. In a circular flow, businesses operate in a predictable pattern, producing the same goods and services annually. However, entrepreneurs disrupt this equilibrium by introducing new combinations of resources, leading to innovations that change the market landscape (Langroodi, 2021). This disruption creates a cyclical process where periods of economic growth and stability are followed by phases of decline and restructuring as innovations emerge (Bazhal, 2019). Bandura's (1986) social cognitive theory provides another perspective on innovation, focusing on the human and social dimensions. According to Bandura, observational learning is crucial in shaping human behavior. People learn by observing others, and this learning is influenced by four factors: attention, retention, reproduction, and motivation. For instance, employees in a company may adopt innovative practices by observing their peers or leaders who have successfully implemented new ideas. The theory also emphasizes the importance of self-efficacy, or the belief in one's ability to succeed, which can be a significant motivator for engaging in innovative activities (Beauchamp et al., 2019). Social cognitive theory has been widely applied in various fields, including education, health care, and business, to understand and influence human behavior. In the context of innovation, the theory suggests that individuals' beliefs, social constructs, and goals significantly influence their propensity to engage in innovative activities. For example, a company's culture that rewards creativity and risk-taking can encourage employees to experiment with new ideas and solutions (Thomas & Gupta, 2021).

Innovation Support Programs and Challenges

The importance of innovation for economic growth and business development has led to the establishment of various innovation support programs, particularly for WMOSBs. These programs aim

to provide the resources and support needed to overcome barriers to innovation, such as access to capital, networking opportunities, and mentorship. However, despite these efforts, significant challenges persist, particularly for historically underserved and marginalized groups. One of the primary challenges facing innovation support programs is the one-size-fits-all approach often adopted by the government and other supporting agencies. This approach fails to account for different businesses' unique characteristics and needs, particularly women and minority-owned enterprises. Fechner et al. (2022) argue that tailored support is crucial for those businesses that often face additional challenges, such as implicit bias and systemic racism. These challenges can limit their access to resources and opportunities, making it more difficult for them to innovate and grow (Rodrigues & Franco, 2023). Another significant challenge is many organizations lack a supportive innovation culture. Management's reluctance to embrace change and prioritize long-term innovation over shortterm profits can stifle creativity and discourage employees from proposing new ideas (Tian et al., 2018). This issue is compounded by the fear of failure, which can lead to a risk-averse culture where innovative ideas are not given the chance to be explored and developed. Laur and Danilovic (2020) Note that many managers may not have the authority or desire to implement significant changes, leading to an environment where employees are hesitant to share their innovative ideas. Access to funding and resources is another critical barrier, particularly for SMEs. Many SMEs struggle to secure the financing needed to invest in new technologies or scale up innovative products and services. This issue is especially pronounced for WMOSBs, which often face additional barriers to accessing capital due to discrimination and systemic inequalities (Torres, 2023). While programs like the U.S. Small Business Administration's (USSBA) Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) aim to provide funding opportunities, these businesses often receive less support compared to their non-minority counterparts (Joshi et al., 2018).

Strategies for Supporting WMOSBs

To address these challenges, several strategies have been proposed to support WMOSBs in their innovation efforts. A critical strategy is to develop tailored support programs that consider these businesses' unique needs and characteristics. This approach involves creating specialized training and mentorship programs, providing access to networking opportunities, and offering financial incentives tailored to the specific challenges faced by WMOSBs (Johnston & Preiksaitis, 2022). Mentorship and networking are particularly important for these businesses, as they often lack the networks and connections to provide valuable support and resources. Mentorship programs can help women and minority business owners develop the skills and confidence needed to succeed, while networking opportunities can give access to potential customers, partners, and investors. For example, programs that connect WMOSBs with experienced mentors from similar backgrounds can provide valuable guidance and support, helping them navigate the complexities of entrepreneurship (Baskaran et al., 2019). Educational institutions and financial organizations also play a critical role in supporting these businesses. Universities and colleges can offer specialized courses and programs on entrepreneurship and business development for women and minority students (Ndou et al., 2018). These programs can

provide the knowledge and skills needed to start and grow a business and access to networks and resources. On the other hand, financial institutions can develop lending programs specifically designed for WMOSBs, offering favorable terms and reduced collateral requirements to make it easier for these businesses to access capital (Bonini & Capizzi, 2019). In addition to these strategies, there is a growing recognition of the importance of corporate social responsibility (CSR) in supporting WMOSBs. Many large corporations have implemented supplier diversity programs prioritizing sourcing from these businesses. These programs provide business opportunities and encourage innovation by setting high standards and expectations for suppliers (Flammer & Kacperczyk, 2019). Corporations can engage in mentoring, capability building, and knowledge sharing with women and minority business owners as part of their CSR efforts, further supporting their growth and development.

Emerging Trends and Future Directions in Innovation

The innovation landscape constantly evolves, driven by rapid technological advancements and changing market dynamics. Emerging technologies such as artificial intelligence (AI), machine learning, blockchain, and 3D printing are reshaping industries and creating new opportunities for innovation. For instance, AI and machine learning can help businesses analyze vast amounts of data to identify patterns and trends, enabling more informed decisionmaking and the development of personalized products and services (Muhlroth & Grottke, 2022). With its potential for enhancing transparency and security, blockchain technology is being explored for various applications, from supply chain management to digital identity verification (Huynh, 2022). Robotic process automation (RPA) is another emerging trend, particularly in industries like manufacturing and finance. RPA can automate repetitive tasks, freeing human workers to focus on more complex and creative activities. This technology can potentially increase efficiency and reduce costs, making it an attractive option for businesses looking to streamline their operations (Hyun et al., 2021). Moreover, 3D printing is revolutionizing manufacturing by enabling rapid prototyping and customized production, allowing businesses to bring new products to market faster and more cost-effectively (Stocker et al., 2022). The increasing emphasis on sustainability is also shaping the future of innovation. Concerns about climate change and resource depletion are growing, and businesses are under pressure to develop sustainable products and practices. This includes everything from using ecofriendly materials and reducing waste to developing new business models that promote the circular economy. Sustainable innovation helps protect the environment and provides a competitive advantage by meeting the growing demand for green products and services (Y. Liu, 2018). In this rapidly changing landscape, WMOSBs must navigate unique challenges and seize new opportunities. While they face barriers such as limited access to capital and networks, they also have the potential to be at the forefront of innovation. By leveraging emerging technologies and adopting sustainable practices, these businesses can succeed and contribute to a more inclusive and sustainable economy. Innovation is a complex and multifaceted process influenced by various factors, from individual and organizational characteristics to broader environmental and societal trends. Innovation offers both challenges and opportunities for SMEs, particularly for WMOSBs. While these businesses face unique barriers, such as limited access to resources and systemic

discrimination, tailored support programs, mentorship, and networking to help them overcome these challenges and thrive. As the innovation landscape continues to evolve, driven by emerging technologies and a growing emphasis on sustainability, these businesses must stay informed and adaptable. By embracing new technologies and sustainable practices, WMOSBs can enhance their competitiveness and contribute to a more inclusive and equitable economy. The future of innovation will depend on the ability of all businesses, regardless of size or ownership, to navigate these changes and seize new opportunities.

Methodology, Design, and Participants

A qualitative case study approach was chosen to explore the impact of government innovation support programs on WMOSBs in the U.S. This method allows for an in-depth examination of participants' experiences, perceptions, and challenges, providing a holistic understanding of the subject matter. The constructive paradigm underpins this study. Constructivism acknowledges the subjective nature of reality, emphasizing the importance of social and cultural contexts in shaping business outcomes (Charmaz, 2014; Creswell & Poth, 2017). Through the use of the Bandura and Schumpeter combined conceptual framework, the pragmatic aspect of constructivism focused the study on findings leading to recommendations and practices.

Data Collection and Sampling Strategy

The participants were selected using a purposeful, criterion-based sampling strategy, focusing on WMOSBs that had engaged with or opted out of government innovation support programs. This approach ensured a diverse representation across industries and geographic locations, providing comprehensive insights into the study's focus (Campbell et al., 2020; Palinkas et al., 2015). Data were collected through multiple sources, including semistructured interviews of three individuals, organizational document reviews, and a research questionnaire sent to 100 WMOSB owners. The semistructured interviews provided detailed narratives about the participants' experiences with innovation and government programs. Document reviews supplemented these interviews, offering additional context and verifying the information provided. The research questionnaire, distributed via social media, captured broader data on engagement with government programs, organizational culture, and the challenges these businesses face (see Adams & Cox, 2008; Bowen, 2009; Creswell & Poth, 2017). Data collection was approved by and overseen by the University of the Cumberland Institutional Review Board. No adverse ethical issues occurred during data collection.

Participants and Research Setting

The research involved two primary cases, referred to as Case 1 (C1) and Case 2 (C2), alongside the ASBDC Program Director (P3) and 100 questionnaire participants (QPs). C1 was characterized by its independent approach to innovation, without seeking government support, while C2 actively engaged with government programs to support its business initiatives. The selection criteria for these cases were based on the desire to achieve data saturation and triangulation, ensuring a comprehensive understanding of the varied experiences within the WOSB and MOSB communities (Braun & Clarke, 2006). Data was primarily collected through virtual semi-structured interviews, leveraging platforms

like Zoom. This method allowed for in-depth discussions, allowing participants to share their experiences and insights. The interviews were transcribed verbatim, ensuring accuracy and completeness. Participants were allowed to review and correct their transcripts, which were then imported into NVivo for systemic coding and analysis.

Data Cleaning and Coding

The data cleaning and preparation involved transcription of the interviews, and multiple reviews to ensure accuracy. The coding process began with a deductive approach, identifying key themes and patterns based on the research questions. As the analysis progressed, an inductive approach was employed to uncover new insights and themes, following Braun and Clarke's (2022) reflexive, thematic analysis framework. This dual approach allowed for comprehensive data exploration, revealing expected and unexpected findings.

Data Analysis and Key Themes

NVivo software facilitated the organization and analysis of data. Several key themes emerged from this analysis:

- **Innovation Processes and Products.** Participants provided detailed experiences in developing innovative solutions, with those utilizing government support often achieving enhanced product development and market expansion.
- **Challenges and Barriers.** Commonly reported challenges include bureaucratic hurdles, resource access difficulties, and market entry barriers. Participants indicated that government support programs played a crucial role in mitigating these challenges by offering funding, networking opportunities, and other resources.
- **Role of Self-Efficacy.** Confidence and belief in their abilities significantly influenced business owners' success in overcoming obstacles. Participants who engaged with government support programs frequently reported increased self-efficacy, positively impacting their business resilience and growth.
- **Economic Contributions.** The study highlighted the substantial economic contributions of WMOSBs, including job creation and community development. The level of economic impact is often correlated with the extent of government support received.

Research Questions and Analysis

RQ1: Innovation Experiences

The experiences of WOSB and MOSB leaders in creating innovative processes or products were categorized into three main themes: collaboration and networking, resource allocation and prioritization, and economic impact. These themes were crucial in understanding how these businesses navigated the complex innovation landscape.

Collaboration and Networking. Participants highlighted the importance of building strong networks and collaborating with other businesses and organizations. P3 emphasized, "This idea of collaboration is front and center for all of us. We know it is really important to embrace the idea that together we are stronger." This sentiment was echoed by C2, who noted that networking provided valuable opportunities for accessing resources and support, stating, "We had some interaction with

other SBA-funded businesses. That was helpful as they made introductions and networked their portfolio of SBA-supported businesses." This collaboration theme confirmed the findings of Johnston and Preiksaitis (2022), who noted that finding mentoring organizations within the SBA-support groups was a critical component to successfully completing the government programs.

Resource Allocation and Prioritization. Effective resource management emerged as a critical factor in the innovation process. C1, who did not take government support, discussed resource allocation challenges, stating, "Any development or work that needs to be done in my company will cost us money and resources to be allocated." This perspective was countered by QP21, who mentioned, "Take advantage of the available resources. They truly help small businesses when they need it. They also provide insights into additional resources I was unaware of."

Economic Impact. The economic contributions of WOSBs and MOSBs were significant, with participants noting their role in job creation and economic growth. C2 stated, "No matter where the business is in the United States, all businesses make up most of the national GDP. Small businesses are vibrantly accountable for job creation." This illustrated the broader economic impact of these businesses, particularly in creating new job opportunities and stimulating local economies.

SubRQ1: Comparing Government Support

The comparison between businesses that accepted government support and those that did not revealed distinct differences in their experiences. Those who utilized government support programs reported strategic use of resources and enhanced ability to navigate regulatory challenges. C2 reflected on the differences, noting, "Working with a government support program like the USSBA involves a different level of accountability compared to working directly with investors." This highlights the unique challenges and benefits associated with government support.

RQ2: Overcoming Challenges

The study identified several strategies employed by WOSB and MOSB to overcome barriers to innovation. These strategies were categorized into agile development and iteration, empowering teams, customer-centric approach, and adaptability and learning.

Agile Development and Iteration. Just emphasize the need for flexibility and rapid iteration in their business processes. C2 Highlighted the importance of being proactive and hands-on, stating, "I like digging in and rolling up my sleeves, learning new industries, and finding innovative ways to change things. But that is not for the faint of heart." This approach underscores the necessity of agility in responding to market changes and customer needs.

Empowering Teams. Empowering employees was a common theme, with leaders encouraging team members to take initiative and contribute ideas. C1 described the organizational culture: "We hear ideas from every single employee that we have in my company." This inclusive approach fosters a culture of innovation and creativity, allowing for diverse perspectives and solutions.

Customer-Centric Approach. A focus on understanding and meeting customer needs was crucial for success. C1 remarked, "Without customers, there would be no business and no product to offer."

This perspective highlights the importance of a customer-centric approach in developing products and services that meet market demands.

Adaptability and Learning. Continuous learning and adaptation were identified as key factors in overcoming challenges. C2 shared, "I am a risk taker. I wouldn't oppose doing it again, just learning from the experience and not making the same mistakes twice." This attitude reflects the importance of resilience and a willingness to learn from failures.

SubRQ2: Experiences with and without Government Support leaders who accepted government support emphasized the advantages of collaboration and networking facilitated by such programs. P3 noted the role of these programs in building a supportive ecosystem, stating, "The first thing I would like to put out there is that the critical support we receive here in the United States is best described as an ecosystem." This contrasts with the experiences of businesses that did not engage with government programs, which faced more challenges in accessing resources and navigating regulatory landscapes.

RQ3: Self-Efficacy and Success

This study explored how owners' self-efficacy levels influenced their ability to overcome barriers and succeed. High self-efficacy was associated with positive outcomes across several domains, including navigating regulatory challenges and fostering a culture of innovation.

Culture. A strong organizational culture that encourages innovation was linked to leaders' self-efficacy. C1 emphasized, "It's very important for us to encourage all our employees to be extremely innovative and develop new ideas." This demonstrates how self-efficacy can influence the broader organizational environment and employee behavior.

Navigating Regulatory Challenges. Business owners with high self-efficacy showed resilience in dealing with regulatory challenges. P3 Discussed how businesses adapted during the COVID-19 pandemic, stating, "Businesses were interrupted significantly, and even beyond that., we are still finding small business owners looking to adapt more fully to reform and create new businesses altogether."

Empowering Teams. The ability to empower teams was also linked to self-efficacy. C2 described an innovative approach to employee empowerment, stating, "We actually encourage employees to come up with complementary businesses that this holding company could foster."

SubRQ3: Successes with Government Support

Leaders who accepted government support reported that such programs significantly contributed to their business growth. C2 highlighted the benefits of grants, stating, "There are a bunch of government programs out there that are grant and probably easier to manage, less stressful. Because there is no repayment necessary." This indicates that government support can alleviate financial pressure and provide valuable resources for business development.

RQ4: Contribution to Economic Development

The study found that WOSBs and MOSBs contribute significantly to economic development, particularly through job creation and the utilization of government programs. Participants highlighted the ripple effects of their businesses on local economies and communities.

Economic Impact. C2 discussed the broader economic implications of their business, noting, "With fast-growing technology companies, employee's offshoot and form new companies.

That's more economic development." This underscores the role of small businesses in fostering economic growth and innovation.

Use of Available No-Cost Support Programs. The strategic use of government programs was a reoccurring theme, with participants noting the benefits of accessing no-cost resources. C1 reflected, "The startup founders often don't know what they want. So putting together some sort of support package or program where I, as an entrepreneur, will be exposed to different content and support programs is beneficial."

SubRQ4: Government Support and Economic Contributions

Businesses that accepted government support reported greater contributions to economic development, particularly using no-cost support programs. These businesses leveraged available resources to grow and expand, contrasting with those not engaging with such programs.

Supplementary Findings

In addition to the study's findings, several supplementary findings emerged from this study.

Awareness and Impact of Government Programs

A significant supplementary finding was the lack of awareness among participants about available government support programs. Many QPs expressed surprise at the existence of these services, with QP11 stating, "Services are available but not well known. I recommend every business owner use the available resources in their area and take advantage of such programs." This lack of awareness suggests better communication and outreach efforts to ensure more businesses benefit from available support.

Entrepreneurial Skill Development

This study also highlighted the importance of entrepreneurial skill development. Participants noted that their experiences in starting and managing businesses contributed significantly to their skill set and ability to navigate challenges. C1 stated, "My first startup experience helped me in my second startup to gain my first investment. That first experience also helped me learn or improve my skill set in developing a project." This underscores the value of practical experience in building entrepreneurial competencies.

Critical Examination of Certification Programs

A critical examination of the WOSB and MOSB certification programs revealed skepticism among participants. Many felt that the benefits of these certifications were not well communicated or substantial. QP33 remarked, "There was no benefit to doing so," while QP46 stated, "It's not worth it in my opinion." This feedback highlights a potential disconnect between government initiatives and the perceived needs of business owners.

CONCLUSION

This study reinforced and expanded upon existing scholarship related to the impact of government innovation support programs on women- and minority-owned small businesses (WMOSBs). Through a comparative case study approach and triangulated methods, the research highlighted key factors influencing program effectiveness: awareness, accessibility, perceived relevance, and the role of self-efficacy. These findings underscore the need for more nuanced, equity-focused approaches to innovation policy. The study's findings support Bandura's (1986) social cognitive theory by illustrating how WMOSB owners' self-efficacy shaped their ability to innovate, persist through challenges, and leverage support systems. Business owners who perceived themselves as capable were likelier to engage in risk-taking, empower their teams, and creatively respond to changing conditions—behaviors Bandura identified as essential to learning and behavior change. Schumpeter's (1939) theory of economic development is also affirmed at the macro level. Participants who received government support demonstrated innovation-driven contributions to job creation and market expansion, reflecting Schumpeter's concept of creative destruction through entrepreneurial action. These findings confirm and extend the work of Blount and Smith (2021), who identified that WMOSBs often underutilize available government support programs due to lack of visibility, bureaucratic barriers, and mismatches between business needs and program design. Our study corroborates their conclusions and adds evidence that improved awareness and targeted outreach can significantly enhance program uptake and utility. Importantly, these insights align with broader critiques in the literature regarding the shortcomings of one-size-fits-all models in innovation policy (Rodrigues & Franco, 2023) and the need for empowerment oriented frameworks (Atkinson & Penrod, 2022). The study contributes to this discourse by showing how WMOSB leaders proactively adapt to systemic constraints—demonstrating agile development, team empowerment, and customer-centered innovation—as key to resilience and success. Moreover, the recent and forthcoming policy changes at the U.S. Small Business Administration, prompted by a shift in executive leadership, highlight the urgency for updated research on the evolving landscape of government innovation support. These changes may alter funding priorities, eligibility requirements, and support structures, which could disproportionately impact WMOSBs. Future research should, therefore, monitor how such administrative transitions influence both the accessibility and effectiveness of support programs. Taken together, these findings emphasize that inclusive innovation policy is not only a matter of equity but also a driver of national economic resilience. Future studies should examine the long-term outcomes of tailored support efforts and explore region-specific variations that may shape the experiences of WMOSB leaders. A longitudinal, policy-aware research agenda will ensure that government innovation support mechanisms remain responsive, equitable, and impactful.

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