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Design	and Impact:	Evaluating	SBA Programs	Efficacy in	Small Busines	s Success

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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Introduction

Small businesses are the driving force behind the United States economy, playing a vital role in job creation, innovation, and economic stability. The federal government, recognizing the indispensable role of emerging enterprises, has pledged to allocate a significant portion of its annual spend to small and minority-owned businesses, aiming to foster a competitive marketplace that stimulates sustained economic growth. Despite these actions, a noticeable disagreement persists between the perceived effectiveness of Small Business Administration (SBA) assistance programs responsible for the allocations and their realized returns on small business owners. This paper investigates the intricacies of SBA programs, analyzing the elements of their design, including incentives, structural components, and technological infrastructure, to reveal the roots of their perceived inefficacy. It additionally reviews the assumptions held by small businesses and policy-makers as they navigate the decision-making process in engaging with these assistance programs.

This paper progresses by first establishing the foundational role of small businesses in the U.S. economy and the government's efforts to support them through SBA initiatives. It then introduces the coproduction framework as the theoretical lens for the analysis, followed by a mixed-methods approach that combines quantitative data with qualitative insights and auto-ethnographic observations. The analysis section employs this framework to dissect the interactions between SBA programs' technological policies and societal norms, revealing the tensions and misalignments that underlie the perceived ineffectiveness of these initiatives.

The research offers an analytical examination of policy designs, technological infrastructures, and the experiences of small businesses. By investigating the assumptions underlying small businesses' engagement with SBA programs and the structural and technological aspects of these initiatives, this study seeks to contribute to a nuanced understanding of the challenges and opportunities inherent in government efforts to support small and minority-owned enterprises. This paper argues the design flaws of SBA assistance programs that contribute to their perceived ineffectiveness in achieving their intended

goals, focusing on issues related to incentive structures, organizational components, and inadequate technological infrastructure. Ultimately, this study not only questions the effectiveness of SBA assistance programs but also explores the broader implications for policy-making and technology in deployment support of small business, and other disenfranchised groups, success within the federal contracting domain.

Literature Review

Small businesses are often proclaimed as the main pillar of the United States economy, playing a critical role in job creation and innovation. The federal government's recognition of this essential role is reflected in its publicized goal to allocate a significant portion of its spending to small and minority owned businesses. The federal government aims to allocate 23% of its prime contract spending dollars towards small businesses (Diliger & Blackford, 2022). To clear up ambiguities for what constitutes a small or minority-owned business, the federal government, specifically the SBA, has instituted standardized designations for marginalized businesses such as Small Disadvantaged Businesses (SDBs), Service-Disabled Veteran-Owned Small Businesses (SDVOSBS), Women-Owned Small Businesses (WOSBs), and businesses located in Historically Underutilized Business Zones (HUBZone). The recognition and inclusion of such designations in public policy underline the government's acknowledgment of the importance of these businesses in fostering a healthy, competitive market and stimulating economic growth.

In addition to the economic impact directly attributed to small businesses by consistently reaching or exceeding the target goal of 23% contracting dollars received year-to-year since 2016 (Small Business Administration, 2021), the White House Council of Economic Advisors (2023) emphasizes the role of small businesses specifically in the employment landscape, noting that 45% of all private-sector jobs in the United States come from firms with fewer than 50 full-time employees. While easy for society to grant attention to emerging tech giants and billion-dollar conglomerates, the United States pays ample attention to the recognition of small businesses: in terms of federal spending, the period from 2016 to

2020 marked a record-breaking phase, with \$145 billion awarded to small and disadvantaged businesses, fulfilling federal goals (HigherGov, 2023).

The roots of small business advocacy lie in the establishment of the Small Business

Administration (SBA) in 1953, a fundamental moment that formalized government support and
commitment to small enterprises. Dilger and Blackford (2022) detail the SBA's primary mission to ensure
that a "fair portion" of federal contracting dollars is allocated to small businesses, facilitating their
participation in the federal marketplace. In practice, the SBA implements this mission through a variety of
mechanisms. These include setting aside specific contracts exclusively for small businesses, offering
mentorship and guidance programs to help these businesses navigate the federal contracting process, and
establishing size standards to determine eligibility for these programs. The SBA implemented industrybased size standard allows companies to be classified as small businesses relative to other entities in their
sector avoiding potential issues with taxonomy in differently sized industries (U.S. Department of
Defense et al., 2023). This classification method is critical for maintaining a level playing field and
ensuring that assistance is targeted effectively.

Additionally, within the SBA's specialized support services for their targeted groups, there are two particularly impactful and in-demand programs: HUBZone and 8(a) Business Development Program. The HUBZone program focuses on promoting economic development in historically underutilized business zones. This initiative aims to increase employment opportunities and stimulate growth in areas that have traditionally been overlooked in the distribution of government contracts or generally economically underperforming (U.S. Department of Defense et al., 2023). Alternatively, the 8(a) Business Development Program represents a targeted effort to prioritize small businesses and disadvantaged firms in federal contracting. The attractiveness of these programs to small businesses stems largely from the mechanism of contract set asides, the federal government reserves specific contracts exclusively for companies recognized as either HUBZone or 8(a) entities. By "setting aside" contracts, effectively disallowing larger businesses from competing, rather than relying on overall budget allocations, the

program aims to foster diversity and inclusivity in government procurement (U.S. Department of Defense et al., 2023).

Passing legislation does not guarantee that a policy will be effective, however, government policies and involvement are documented to cause a significant impact on the success of small businesses. Audretsch, Heger, & Veith (2015) demonstrate a positive association between various types of physical infrastructures and the number of emerging businesses, highlighting the essential role of technological access in the growth of startups and consumer-related services, and the influence of government policy in their acceleration. Further emphasizing the impact of programs, set-asides for disadvantaged firms were shown to increase competition among incumbent firms, reducing price markups and lowering overall procurement costs (Ayres & Cramton, 1995). Beyond physical infrastructure, there is an equally distinct positive correlation between the support and advocation for emerging entrepreneurial endeavors and their growth and success. To that end collaboration and support for businesses, bolstered by public policy, plays a pivotal role in success of commercialization (Young, 2009). These observations explain the direct impact of government intervention on fostering a conducive environment for small business growth and innovation.

Nevertheless, there exist barriers that inhibit qualified business from participating in the federal programs, and there is a difficult transition from a state-level contractor to federal-level one has not been well addressed. For example, the Virginia Department of Small Business and Supplier Diversity (SBSD) employs a certification designation for Small, Women, and Minority-owned businesses (SWaM). While the certification is useful in the Commonwealth of Virginia, it is difficult to attain and is not recognized or converted to an equivalent certificate for any other state. Edelman and Azemati (2017) suggest that recognizing certifications across state and federal levels without requiring repetitive processes could alleviate some of these burdens. Such a measure would be particularly beneficial in mitigating the impact of existing technological barriers that stem from filing multiple state-specific forms, streamlining the process for businesses aiming to scale their operations from state to federal contracting domains.

Recognizing the shared challenges faced by emerging businesses across various industries is essential, whether or not their primary focus is on engaging with government contracts. Jones (2021) lists several key factors that significantly influence the trajectory of business success or failure, including sustainability, financial management, and leadership styles. These factors are pivotal in navigating the competitive and regulatory landscapes, which can be exacerbated within the realm of government contracting; Orazem et al. (2017) illuminate the distinct hurdles encountered by new entrants to the government marketplace. Among these are the extended durations of sales cycles, the substantial effort required upfront, prevailing negative perceptions towards government projects, and the lack of transparency in interactions with government officials. These obstacles not only demonstrate the disconnect between the intended support of government policies and the tangible experiences of small businesses but also spotlight the broader ecosystem of challenges that span across all sectors.

The allocation of significant resources and perceived ineffectiveness of the programs established toward supporting small businesses raises questions about the effectiveness of these initiatives. The U.S. Government Accountability Office (GAO) (2019) notes that only a small percentage of businesses awarded contracts experienced sustained growth or advanced to a medium size designation. This observation suggests that the current metrics and evaluations may not fully capture the impact of government assistance, indicating the need for a more nuanced approach to performance assessment. Additionally, the report calls for the implementation of a new size-standard and designations for mid-sized businesses, which could help address the issue of larger enterprises monopolizing small business designations and benefits (U.S. Government Accountability Office, 2019). The auditing efforts carried out by the U.S. GAO is vital in ensuring the SBA maintains its commitment to its objectives and conducts retrospective evaluations of the outcomes of the program. The oversight is crucial for identifying areas of improvement and assessing the efficacy of the initiatives.

This literature review establishes the foundational understanding that, while small businesses are essential to the U.S. economy and receive significant government support, challenges in accessing and

benefiting from federal contracting opportunities persist, with direct implications from the policies enforced. These insights set the stage for exploring how the SBA's program designs and technological infrastructure may contribute to these challenges, as well as the assumptions small businesses hold that might influence their perceptions of the programs' effectiveness.

Theoretical Framework: Co-Production

To effectively understand the dynamics between small businesses and government assistance programs, particularly those coordinated by the Small Business Administration (SBA), this paper utilizes Sheila Jasanoff's *co-production* framework as its theoretical basis. Jasanoff (2004) posits that science, technology, and society are indistinguishably interlocked, each continuously shaping and being shaped by the other This interdependence indicates that technological systems and scientific knowledge are not mere reflections of societal order but are fundamental to its establishment and continuation, themselves causing change. Within this perspective, co-production serves to examine the relationship between technological initiatives within SBA programs and societal norms, values, and economic practices, demonstrating how technological policies and tools designed to aid small and minority businesses are shaped by societal values and reciprocally influence these values through their impacts.

This paper examines how the SBA's technological policies and tools, aimed at supporting small and minority businesses, are both influenced by and influential in reshaping societal values. The selected framework examines the reciprocal relationship between science, technology, and society, focusing on how social order, technological systems, ordering, mutual shaping, and socio-technical ensembles interact to create a dynamic where technology and social structures continuously shape each other (Jasanoff, 2004). In the context of this paper, co-production examines the intricacies of *social order*—the arrangements that organize societal interactions through institutions, roles, and norms—highlighting how the SBA's efforts to champion diversity and economic equality via small business support reflect in

broader societal commitments to equity and justice. *Technological systems*, comprising practices, artifacts, and institutions, surface as pivotal factors in delivering functionalities that support the SBA's mission. The process of *ordering*—or aligning technology with social norms and expectations—is evident in the SBA's policies and programs, aimed at nurturing small businesses in alignment with national economic objectives. This investigation into the *mutual shaping* of technology and social structures through the SBA's technological infrastructures reveals how these systems both shape and are shaped by societal beliefs about entrepreneurship, opportunity, and economic development. The concept of *sociotechnical ensembles*—where social and technical elements integrate within a functioning societal unit—reveals the SBA's role in facilitating interactions between government and small businesses, creating a nuanced understanding of these engagements.

Methods

Adopting a mixed-methods strategy, this paper combines quantitative data analysis with qualitative research techniques to describe the impacts of SBA assistance programs on small and minority businesses. The quantitative analysis focuses on datasets from Government Accountability Office (GAO) publications and other sources to map the effects of SBA programs on small business growth and their federal contracting opportunities. Similarly, qualitative insights revealed from interviews with SBA-affiliated businesses and those that have outgrown the small business category paint the narrative with personal experiences and perceptions of SBA programs. Furthermore, the author's firsthand observations, drawn from running an SBA, SAM-registered company, introduce an overall auto-ethnographic lens to the analysis, offering a grounded view of the day-to-day realities facing businesses engaged with SBA programs and enhancing the credibility of claims. A thorough examination of legislative texts related to the SBA interprets the legal framework within which it operates, shedding light on policy changes and amendments over time. Additionally, academic journals, agency reports, and journalistic accounts serve as secondary sources, broadening the scope of discourse surrounding the support and challenges faced by small businesses in the context of federal contracting, enhancing our understanding of the factors shaping

small business support and federal contracting in the United States. Through this integrated approach, the paper aims to offer a comprehensive insight into the effectiveness and challenges of the SBA's initiatives, contributing to a nuanced understanding of governmental efforts to nurture small and minority businesses.

Analysis

United States small businesses are often considered the supporting structure of the national market due to their significant contributions to innovation and job creation. However, there exists a profound misalignment between the expectations small businesses have of SBA programs and the operational realities of these programs. Diliger and Blackford (2022) and the White House Council of Economic Advisors (2023) acknowledge the vital economic role of small businesses yet indicate that the design and technological infrastructure of SBA programs may not align with these businesses' operational realities. Edelman & Azemati (2017) further illuminate this discrepancy, noting that small businesses anticipate straightforward and supportive experiences with SBA programs but instead face complex certification processes and opaque contracting cycles that foster frustration and perceptions of ineffectiveness. The co-production framework reveals how societal encouragement of entrepreneurship shapes the expectations of small business owners and the quality of support provided to them by the government. These expectations are then contrasted with the realities of engaging with government technology and policy, highlighting a crucial area where societal norms and technological/policy designs fail to coalesce effectively. The stark difference in expectation versus reality of the programs and technologies around required administrative tasks can serve as a severe morale blow to businesses that perform quality work but lack in experience to properly execute on government facilitated bids.

Additionally, despite intentions to allocate a significant portion of federal expenditures towards small businesses, the SBA's misaligned government evaluation processes and complex requirements serve as arduous barriers. Diliger & Blackford (2022) contrast the federal aims with the bureaucratic hurdles encountered by small businesses and found the regularly provided reports on small businesses do not account for the actual effect of SBA set-asides on the receiving businesses, economy, or industry, and

SBA's requirement processes for disadvantaging smaller firms, which lack the resources to navigate the SBA's obscure procedures, thereby undermining the SBA's foundational mission of equitable economic opportunity. In my time operating an SBA designated firm, I have personally encountered the frustrating and resource-draining challenges posed by the SBA's certification programs and platforms, which are intended to support small businesses but often serve as barriers to those with limited time and resources. My experiences align with the findings of Diliger & Blackford (2022) and Hawkins, Gravier, & Randall (2018), as it has become alarmingly clear that the SBA's processes are not as straightforward or technologically efficient as one would expect, thereby undermining the agency's mission of promoting equitable economic opportunity. This situation exemplifies the application of co-production of technology and policy within the realm of federal contracting; the technological systems and bureaucratic processes and evaluations designed to implement policy objectives inadvertently become obstacles to achieving these goals, reflecting a misalignment between the intended and actual impacts of these socio-technical arrangements by expecting the experience of SBA programs to be on par with the theoretical effectiveness of the policy which establishes it.

Doctors & Workrutch (1983) argue that providing effective support to small business programs leads to the same positive outcomes as directly supporting the small businesses themselves. However, this assertion highlights a cyclical problem: despite the government's vocal commitment to small businesses as the backbone of the economy, its inadequate support and assistance to these programs undermine the very entities it aims to protect. Addressing a seemingly simple barrier, which in my experience is one of the most significant obstacles, such as improving user experience within the SBA's certification programs and platforms, falls under the government's responsibility and should be given the same level of attention and effort as the programs themselves. Moreover, continuously improving software and ensuring quality from the outset not only reduces costs over time (Jones, 2015), but also requires only a small portion of the total contracting dollars allocated for set-asides. By prioritizing these improvements, the government

could substantially increase the accessibility and effectiveness of these initiatives for small businesses, ultimately furthering its stated goal of supporting the backbone of the economy.

While there's a common expectation that stringent approval cycles are critical for engaging in business with the government, with some arguing that rigorous processes ensure only the most qualified businesses benefit—thereby fostering fair competition and upholding quality in line with the SBA's mission—it's crucial to recognize that the skills required to meet contractual obligations differ significantly from those needed to navigate the procurement landscape. This difference indicates that the capacity to handle the complexities of government contracting and the ability to execute these contracts can, and often do, exist independently. Hawkins, Gravier, & Randall (2018) highlight a notable point in this context: despite facing significant disadvantages, such as limited manpower and financial resources compared to larger corporations, small businesses have shown performance levels comparable to their larger counterparts. This evidence demonstrates the argument that the capability of small businesses to fulfill government contracts effectively is not inherently less than that of larger enterprises, and lack of front-office resources will not dimmish the quality of procured work. It challenges the assumption that stringent procurement processes are solely necessary to filter for the most qualified businesses, suggesting instead that a more accessible and navigable procurement system could still maintain high standards of quality and fairness while supporting small businesses in their efforts to contribute to government objectives.

Shifting focus from the challenges faced by small businesses in navigating the procurement landscape, it is important to examine the role of programs specifically designed to support disadvantaged businesses. The HUBZone and 8(a) Business Development Program, designed to support disadvantaged businesses and promote fair competition, has faced scrutiny regarding their effectiveness in fostering sustainable growth and long-term competitiveness for the businesses they aim to assist (U.S. Department of Defense et al., 2023). While intended to level the playing field, the effectiveness of these programs in promoting the independence and competitiveness of small businesses remains a critical concern for their

long-term impact. For example, the programs represent an attempt to align governmental policy with societal values of fairness and inclusivity, however, the effectiveness of this alignment is contingent upon the successful integration of policy objectives with the operational realities of small businesses and the capabilities of technological infrastructures, resulting in a cyclical problem. The potential for technology to simplify and streamline application and certification processes for small businesses to tackle this problem is significant. However, Maheshwari et al. (2007) argue that current implementations often fall short of optimizing these processes, thereby not fully realizing the potential to reduce administrative burdens on small businesses.

Based on first-hand experience, the process for engaging with government programs is highlighted as a significant and complex hurdle for small businesses. This process embodies a peculiar combination of outdated systems and procedures, peppered with documents often marked by outdated information. Although the intention of making this information more accessible via providing reference materials, guides, and dedicated portals is commendable for its intention to assist businesses, the actual execution of the HUBZone certification process falls markedly short. It remains muddied in complexity and lacks a user-friendly approach, reflecting an outdated, inaccessible, design that does not align with contemporary expectations for simplicity and efficiency. This pattern of cumbersome processes extends beyond HUBZone, affecting various other registration and administrative tasks associated with conducting business with the government. Specifically, SAM.gov, the only recognized federal bidding and registration portal that every business must go through, suffers from the same drawbacks of the HUBZone registration system. It is evident that the gap between the theoretical support structure and its practical application emphasizes a broader issue within government-business interactions, where the need for modernization and streamlining is evident yet remains unaddressed.

This identifies a critical area where the co-production of technology and societal objectives could be enhanced. Effective technological systems are central in realizing the SBA's goals, demonstrating the

need for a socio-technical ensemble that aligns technological capabilities with the needs and expectations of small businesses and societal goals of economic growth and innovation.

Conclusion

There's significant room for improvement in how the SBA evaluates the success of government agencies in meeting its objectives. The current score-card system, which primarily focuses on the total dollars spent towards SBA's goals, proves insufficient for a comprehensive assessment. This method's superficiality becomes apparent upon realizing it neglects critical factors such as the quality of work delivered, the distribution of contracts (especially concerning new versus established businesses), and the potential for industry monopolization by mid-sized firms. An agency could drastically reduce its spending on small and minority businesses without significantly impacting its scorecard report. This critique, supported by the Government Accountability Office (GAO) in 2019, emphasizes the urgent need for refined metrics that more accurately reflect the long-term effectiveness of SBA initiatives, emphasizing sustained business growth and competitiveness beyond the initial contract award.

Incorporating dynamic evaluation frameworks and soliciting real-time feedback from those directly involved in SBA programs could dramatically enhance the accuracy of assessments and the subsequent refinement of program designs. This approach would address the shortcomings of the current evaluation system by providing insights into the broader impacts of SBA initiatives, beyond mere expenditure figures. The introduction of such feedback mechanisms is crucial within the co-production framework, enabling an ongoing process of policy and technological adaptation to the changing needs of small businesses. It helps prevent the issues currently plaguing the score-card system, ensuring a more nuanced and effective evaluation of how well agencies are supporting the SBA's mission. By aligning program objectives with societal values and technological capabilities, these mechanisms can ensure SBA programs are not only effective but also responsive to the evolving landscape of small business needs, thereby fostering a more equitable and dynamic economic environment.

The research paper explores the interactions of technology, policy, and small businesses within the U.S. federal contracting landscape, drawing on Sheila Jasanoff's co-production framework to highlight how societal values, technological infrastructure, and government policies collectively influence the experiences and outcomes of these businesses. Despite the foundational belief in the critical role of small businesses for the economy and governmental efforts to support them through policies and financial commitments, a significant disconnect remains. Operational challenges, such as intricate certification processes, unclear contracting cycles, and technological and bureaucratic hurdles, hinder the effectiveness of SBA initiatives, reflecting broader societal struggles to balance technological progress with equitable economic growth. The paper advocates for a comprehensive reassessment of SBA and government agency initiatives, critiquing the current evaluation systems that focus on expenditure over impact and proposing a dynamic framework that incorporates feedback from small businesses. This approach aims to ensure alignment between policy objectives, technological capabilities, and the operational realities of small businesses, fostering a conducive environment for their success in federal contracting. By realigning technological systems, policy designs, and societal values, the analysis calls for innovative reforms to create a more equitable and thriving ecosystem for small and minority-owned businesses in the U.S. federal contracting landscape, underscoring the need for a concerted effort to address these challenges and support the vital role of small businesses in the economy.

Through improving the interaction between technology, policy, and small businesses, there is an opportunity to realign these forces in a way that not only supports the practical needs of small enterprises but also advances broader societal goals of inclusivity and economic fairness. This research posits the urgent need for concerted efforts to bridge the gap between the government's aspirations for small business support and the lived realities of these crucial economic actors, advocating for a future where technological systems and policies coalesce more effectively to uplift the spirit of entrepreneurship and innovation.

The implications of this work suggest a fundamental shift of how technological systems and policy designs can be better aligned with the socio-economic realities of small businesses. Implementing more responsive and user-friendly technological infrastructures, alongside streamlined certification processes, could significantly lower the barriers for small business participation in federal contracting. Furthermore, this research advocates for a reevaluation of the current metrics used to assess the success of SBA initiatives. Adopting a more nuanced approach that captures the quality of outcomes for small businesses, rather than merely quantifying expenditures, could provide a more accurate reflection of these programs' impact on fostering economic diversity and innovation.

Future research should focus on developing and testing new models for evaluating SBA program effectiveness, incorporating real-time feedback mechanisms from small business owners. Such studies could explore the potential for digital platforms that facilitate more direct interactions between the SBA and small businesses, potentially offering more personalized guidance and support. Additionally, comparative analyses of SBA program designs with those of other countries could yield valuable insights into best practices for fostering small business growth and participation in federal contracting. Research could also delve deeper into the socio-technical dynamics of small business ecosystems, examining how different stakeholders, including policymakers, entrepreneurs, and technology providers, can collaborate to create a more conducive environment for small business success.

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