



Mitigating vulnerabilities experienced by everyday entrepreneurs in the informal economy: a strength-based approach[☆]

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ABSTRACT

Everyday entrepreneurs in the informal economy provide essential services yet face intersecting vulnerabilities that threaten their subjective well-being. This conceptual article integrates a strength-based approach (SBA) with an entrepreneurship theories-based approach (ETBA) into a multi-level framework for mitigating vulnerability. The integration delivers what existing entrepreneurship theories do not. It makes vulnerability the focal construct and brings organizational and policy actors into the analysis as collaborators whose institutional capacities can be activated to support entrepreneurs. SBA-ETBA pathways moderate the negative relationship between vulnerabilities and subjective well-being, with the strongest mitigation arising when individual, organizational, and policy strengths are aligned. In support of the framework, we develop a diagnostic typology of six vulnerability domains (institutional and regulatory, financial and economic, operational and infrastructure, social and structural, knowledge and skill-based, environmental and climate) at the individual, organizational, and policy levels. The framework, propositions, and agenda advance entrepreneurship, customer vulnerability, and transformative service research.

1. Introduction

Recent crises have exposed how precarious the livelihoods of informal economy workers and entrepreneurs are. During the first months of the COVID-19 pandemic, around 1.6 billion informal workers, nearly half of the global workforce, were in immediate danger of losing their livelihoods, with their earnings falling by about 60% on average (ILO, 2020). They are also disproportionately exposed to climate risks, economic shocks, and political instability, often falling outside the reach of formal labor protections, social insurance schemes, and policy attention. Reports by OECD/ILO (2019) and UN (2024) highlight that tackling vulnerabilities in the informal economy is central to poverty reduction, decent work, and the pledge to “leave no one behind,” but also that current policy responses remain fragmented.

Within this broader picture, we focus on “everyday entrepreneurs,” individuals who operate small, often informal ventures as part of their daily lives rather than as high-growth, venture-backed start-ups (Dodd et al., 2023; Welter et al., 2017). These include street vendors, home-based producers, micro-retailers, market traders, and other owner-operators whose activities are deeply embedded in local

communities and informal service economies. Everyday entrepreneurs are central to livelihoods and local markets, especially in the Global South, yet they typically work in informal economies characterized by small-scale operations, weak legal and regulatory protections, and limited access to finance, infrastructure, and social protection. Even though they contribute substantially to employment and urban resilience, they remain largely invisible in mainstream entrepreneurship research, which continues to privilege high-tech, high-growth models (Welter et al., 2017).

We conceptualize vulnerability as a context-dependent condition in which individuals’ and organizations’ capabilities to pursue their goals are constrained by structural, relational, and situational factors (Baker et al., 2005; Raciti et al., 2022). For everyday entrepreneurs in the informal economy, such vulnerabilities are multi-dimensional: they include income and cash-flow insecurity, occupational and environmental health risks, exclusion from formal finance and social protection, predatory relationships with local authorities, and discrimination based on gender, class, ethnicity, or migration status (Ansari et al., 2012; Tikkanen et al., 2023; UN Women, 2020). These vulnerabilities are not fixed traits but produced across three interlinked levels of the service

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ecosystem: the individual level (everyday entrepreneurs and their households), the organizational level (service organizations, communities, and NGOs), and the policy level (regulatory, infrastructural, and social protection regimes). We see vulnerability as an antecedent that negatively influences subjective well-being, the perceived financial, physical, social, emotional, and eudaimonic quality of life (Lui & Fernando, 2018). We focus on how experienced vulnerabilities at individual, organizational, and policy levels negatively affect everyday entrepreneurs' subjective well-being, and how a strength-based approach (SBA) can extend an entrepreneurship theories-based approach (ETBA) to mitigate these.

Existing entrepreneurship theories provide important but partial insights into how everyday entrepreneurs act under conditions of constraint. Effectuation (Sarasvathy, 2001), the Resource-Based View (RBV) (Alvarez & Busenitz, 2001), Bricolage (Baker & Nelson, 2005), and Jugaad / frugal innovation (Radjou et al., 2012) emphasize adaptability, creative resource recombination, and the strategic use of scarce resources, qualities that are clearly visible in informal, low-resource settings. These lenses, which we collectively refer to as ETBA, are valuable for understanding individual-level behavior and firm-level resource configurations in the face of constraints. However, they treat vulnerability as background context rather than as the focal construct, and they center entrepreneurial agency at the individual and firm level without offering an architecture for multi-level coordination across the organizational actors (e.g., banks, NGOs, cooperatives) and policy regimes that intensify or mitigate vulnerabilities in informal economies.

Parallel streams in customer vulnerability and Transformative Service Research (TSR) have begun to reconceptualize vulnerability as dynamic, contextual, and relational, and to explore how service systems can be designed to enhance well-being and justice for marginalized customers (Anderson et al., 2013; Hill & Sharma, 2020; Mende et al., 2024; Rosenbaum et al., 2017). Much of this work, however, still focuses on formal markets and on relatively stable customer segments (e.g., older adults, people with disabilities) and remains heavily deficit-oriented, emphasizing what people lack rather than what they already have (Russell-Bennett et al., 2023). Everyday entrepreneurs in the informal economy occupy a hybrid position: they are simultaneously producers and customers in service ecosystems, yet their vulnerabilities as such are rarely theorized (Del Giudice et al., 2023; Sanchez-Barríos et al., 2015). Research at the intersection of entrepreneurship, TSR, and informal economies remains fragmented and provides limited guidance on how multi-level strengths can be mobilized to mitigate their vulnerabilities (Kabadayi et al., 2023; Russell-Bennett et al., 2023; Hammond & Zimmerman, 2012; Saleebey, 1996). SBA offers a promising but underutilized lens to address this gap. SBA redirects attention from deficits and risk factors to existing assets, capabilities, and relational resources (Saleebey, 1996; Hammond & Zimmerman, 2012). Rather than "fixing" vulnerable actors, SBA emphasizes contextual awareness, empowerment processes, and multi-stakeholder collaboration to identify and build on strengths that can help people transform their circumstances (Raciti et al., 2022). While SBA has been introduced into customer vulnerability and TSR debates, it has not yet been systematically integrated with entrepreneurship theories. Importantly, ETBA is itself strength-oriented at the individual and firm level, so SBA's distinct value for entrepreneurship lies not in introducing a strength perspective but in placing vulnerability at the center of analysis and in providing an architecture for multi-level coordination across organizational and policy actors.

We address these gaps by developing a conceptual model of how SBA can extend ETBA to mitigate vulnerabilities and protect the subjective well-being of everyday entrepreneurs in the informal economy. We focus on informal ventures, such as street vending, micro-retail, and home-based services, in regions where informal employment is prevalent (e.g., Latin America, Sub-Saharan Africa, South Asia, and parts of Europe). Our central research question is therefore: How can SBA extend ETBA across individual, organizational, and policy levels to mitigate the

negative effects of experienced vulnerabilities on the subjective well-being of everyday entrepreneurs in the informal economy?

We make two main contributions. First, we advance a conceptual framework that integrates SBA with ETBA across individual, organizational, and policy levels. The framework specifies how SBA extends ETBA by treating vulnerability as the focal construct and by providing an architecture for coordinating ecosystem actors in support of entrepreneurs. It then theorizes how SBA-extended pathways mitigate the negative effects of experienced vulnerabilities on the subjective well-being of everyday entrepreneurs and generates four level-based propositions for future testing. Second, in support of this framework, we synthesize prior research into a multi-level diagnostic typology of vulnerabilities experienced by everyday entrepreneurs, organized by six vulnerability domains (institutional and regulatory, financial and economic, operational and infrastructure, social and structural, knowledge and skill-based, and environmental and climate) at the individual, organizational, and policy levels. Our typology serves a different conceptual purpose from existing typologies of consumer well-being, which categorize sources and dimensions of well-being as outcomes (Rahman, 2021; Rani et al., 2025). It organizes vulnerabilities by the ecosystem level at which mitigation must occur and provides the diagnostic entry point for the SBA-ETBA framework. Together, these contributions inform a future research agenda on strength-based mitigation of vulnerability for everyday entrepreneurs in the informal economy, with implications for entrepreneurship and customer vulnerability research.

The remainder of the article develops the vulnerability typology (Section 2), reviews ETBA and integrates it with SBA (Sections 3 and 4), presents the conceptual framework and propositions (Section 5), and concludes with theoretical and practical implications and a future research agenda (Sections 6 and 7).

2. Vulnerabilities faced by everyday entrepreneurs in the informal economy

Everyday entrepreneurs, also referred to as informal entrepreneurs, operate outside the high-growth start-up paradigm, engaging in small-scale ventures embedded in local socio-economic contexts and informal service ecosystems (Del Giudice et al., 2023; Welter et al., 2017). Within this broader domain, our focus is on informal service ventures, specifically street vending, home-based production, micro-retail, and market trading, where entrepreneurs participate simultaneously as producers and customers. They contend with limited resources, regulatory challenges, and systemic inequities through resilience, resourcefulness, social embeddedness, and identity-based motivations (Smith et al., 2022; Viswanathan et al., 2010), yet these contexts also expose them to intersecting vulnerabilities at the individual, organizational, and policy levels that can erode their subjective well-being. The informal economy is a global phenomenon, accounting for over 60% of global employment, 89% in South Asia and Sub-Saharan Africa, and substantial shares across Latin America and parts of Europe (Giraldo et al., 2020; Hazans, 2011; ILO, 2023; Ulyssea, 2020). It comprises economic activities that operate outside formal institutional structures (registration, taxation, labor regulations, employment benefits) yet remain socially legitimate within local norms, ranging from subsistence and necessity-driven self-employment to opportunity-seeking and socially embedded enterprises (Webb et al., 2013; Williams & Nadin, 2012). Cross-country research on street vending in Latin America and Africa shows how informal entrepreneurs simultaneously address regulatory, economic, and social vulnerabilities while generating individual and collective well-being in their communities (Giraldo et al., 2020).

These vulnerabilities are not homogeneous but shaped by local cultural, economic, and institutional contexts. For instance, gendered norms in India constrain women's mobility, business autonomy, and market access, particularly in home-based or subcontracted work arrangements (Boeri, 2018; Datta & Gailey, 2012). In Colombia, migrant

entrepreneurs face ethical tensions and exclusion rooted in social and national identity (Del Giudice & Kabadayi, 2024). Socio-spatial research from Russia demonstrates how entrepreneurs in marginalized areas prioritize social objectives (e.g., community cohesion) over economic goals, reflecting the culturally embedded nature of entrepreneurial motivation (Williams & Nadin, 2012). Institutional incongruence, the mismatch between formal legality and informal legitimacy, further creates barriers that differ widely by region, influencing the scope and type of entrepreneurial opportunities available in informal settings (Webb et al., 2013).

In this section, we synthesize prior research to develop a multi-dimensional typology of vulnerabilities experienced by everyday entrepreneurs in the informal economy, organized by (1) six vulnerability types and (2) three levels. Our goal is to provide a transparent, structured synthesis that clarifies how everyday entrepreneurs in the informal economy experience vulnerabilities and where existing approaches to mitigate them fall short.

2.1. Literature review methodology and level logic

We followed a structured, semi-systematic literature review (Snyder, 2019) to identify studies that empirically document vulnerabilities experienced by everyday entrepreneurs in informal economies. This design is appropriate for synthesizing fragmented evidence across entrepreneurship, informal economy, customer vulnerability, and service research literatures into a multi-level conceptual typology (Jaakkola, 2020). It differs from a fully systematic review in that it prioritizes thematic synthesis and conceptual development over exhaustive coverage.

First, we conducted database searches in Scopus and Web of Science using two-dimensional keyword combinations. The first dimension covered the entrepreneurial actor and context (“informal entrepreneur,” “informal economy,” “street vending,” “subsistence entrepreneur,” “everyday entrepreneurship,” “informal work,” “service ecosystem”). The second covered the focal construct (“vulnerability”). We complemented database searches with backward and forward citation tracking of key articles (e.g., Webb et al., 2009; Williams & Nadin, 2012; Viswanathan et al., 2008, 2010) and manual searches in leading entrepreneurship and service research journals.

Second, we focused on peer-reviewed journal articles in English that (a) examined entrepreneurs or self-employed individuals operating in informal or semi-formal contexts and (b) reported constraints, risks, or disadvantages related to their entrepreneurial activity. We primarily included work from 2000 onwards but retained earlier foundational studies when they were frequently cited in more recent research. Consistent with the global scope of informal employment, we did not restrict by region but ensured that the empirical base reflects regions where informal employment is most prevalent (Latin America, Sub-Saharan Africa, South Asia, and parts of Europe; ILO, 2023). This regional emphasis supports theory development by surfacing the contextual variation through which similar vulnerability domains (e.g., social and structural) take different empirical forms across institutional settings.

Third, we conducted a thematic analysis of the selected articles (Braun & Clarke, 2006), coding instances where everyday entrepreneurs encountered constraints, risks, or disadvantages that affected their ability to start, maintain, or grow their ventures. Because empirical work in this area uses several adjacent labels for vulnerability, including marginalization, exclusion, disadvantage, and precarity, our coding treated these as synonymous indicators when the underlying mechanism matched our working definition of vulnerability. This step retained studies framed under different vocabulary but addressing the same conceptual phenomenon. Through iterative comparison and clustering, we identified six recurring vulnerability domains, namely institutional and regulatory, financial and economic, operational and infrastructure, social and structural, knowledge and skill-based, and environmental and

climate.

To assign each vulnerability instance to an ecosystem level, we applied a consistent coding rule. A vulnerability was coded at the policy level when its primary causal mechanism operated through regulatory, legal, or social-protection regimes; at the organizational level when its primary mechanism operated through interactions with intermediaries, communities, market associations, or local institutions; and at the individual level when it originated in the entrepreneur’s own capabilities, household, or daily practice. Where multiple levels were involved, we coded the level at which mitigation primarily needs to occur. This rule organizes levels by the locus of mitigation rather than the locus of experience. Together with the six vulnerability domains, the level coding produces a diagnostic matrix that aligns directly with the SBA-ETBA framework developed in Sections 3 and 4.

2.2. Institutional and regulatory vulnerabilities

At the organizational level, everyday entrepreneurs’ interactions with local authorities and institutions often contribute to operational disruptions and informal taxation. Street vendors in African cities, for example, face frequent fines and evictions due to their unregistered status (Williams et al., 2017). Regulatory harassment disrupts livelihoods and creates a cycle in which the perceived costs of formalization outweigh potential benefits, reinforcing informality. Fines, confiscation of goods, and bribery demands by local officials impose financial and operational burdens. At the policy level, everyday entrepreneurs are often denied access to government programs and business registrations due to their informal status (Webb et al., 2014), including subsidies or schemes tailored to small businesses (Ulyseas, 2020; Williams et al., 2016). Lack of legal recognition restricts their ability to secure contracts, access formal tenders, or protect property. Insecure property rights, missing official contracts, and weak dispute resolution mechanisms exacerbate vulnerability (Sutter et al., 2019). These policy gaps prevent access to formal protections and support and can undermine entrepreneurs’ subjective well-being by increasing uncertainty and exposure to arbitrary enforcement.

2.3. Financial and economic vulnerabilities

At the individual level, everyday entrepreneurs often experience inconsistent incomes and thin profit margins, limiting their ability to save, manage shocks, or reinvest in their ventures (Engström & McKelvie, 2017). Income volatility translates into financial stress for both the business and the household. At the organizational level, reliance on informal lenders and financial intermediaries can create financial vulnerabilities. In Ghana, for example, entrepreneurs’ use of mobile payment systems exposes them to excessive and opaque transaction fees that hinder savings and reinvestment (Senyo et al., 2023). Similar dynamics occur when entrepreneurs rely on informal money-lenders charging exploitative interest rates due to a lack of collateral or credit history (Bhowmik & Saha, 2011). However, work with vulnerable consumers in Colombia shows that informal financial relationships can also produce unintended positive effects, promoting social inclusion, dignified treatment, and access where formal financial infrastructure is absent or exclusionary (Sanchez-Barrios et al., 2015). At the policy level, financial exclusion results from inadequate policy frameworks for credit access and banking. Informal entrepreneurs often lack access to formal credit and basic financial services, limiting their ability to scale or sustain operations (Omri, 2020). Low-income consumers’ perceptions of access, inclusion, and social dependence across formal and informal lending relationships significantly shape financial well-being and inclusion outcomes (Giraldo et al., 2024).

2.4. Operational and infrastructure vulnerabilities

At the individual level, many entrepreneurs lack the digital and

managerial capabilities needed to integrate technology into their operations. Limited digital literacy, for instance, constrains the ability to adopt e-commerce tools or digital payments, undermining efficiency and competitiveness (Neumeier et al., 2020). At the organizational level, weak institutional structures and fragmented supply chains make informal economy entrepreneurs vulnerable to input disruptions. Informal distribution networks lack the robustness of formal supply chains, increasing the risk of inconsistent access to raw materials and markets (Iyengar et al., 2021). At the policy level, physical infrastructure deficits are influenced by national or regional policies on urban planning and public service provision. In many African cities, unreliable electricity forces small shop owners to rely on expensive and polluting generators, limiting the growth of energy-intensive ventures such as cold storage or refrigeration (Brown & McGranahan, 2016). Gaps in transport, sanitation, and digital infrastructure further constrain entrepreneurial activity and increase physical and economic risks.

2.5. Social and structural vulnerabilities

At the individual and organizational levels, social hierarchies and community-level dynamics contribute to the marginalization of everyday entrepreneurs. Social institutions, customs, and religious norms often prevent marginalized groups, especially women, from accessing markets. Practices such as *Purdah* in rural Bangladesh limit women's public presence and engagement in market transactions (Mair et al., 2012), forcing them into home-based or subcontracted work where they earn significantly less than men for equivalent work (Boeri, 2018). Women's informal work, although labelled as entrepreneurial, often lacks the autonomy or financial independence typically associated with entrepreneurship. Barriers such as limited mobility, domestic responsibilities, and restricted access to capital further constrain women's entrepreneurial opportunities (Datta & Gailey, 2012; Deshpande & Kabeer, 2024). At the policy level, the absence or inadequacy of health insurance and social protection programs directly affects entrepreneurs' security. Informal sector entrepreneurs are frequently excluded from traditional social protection mechanisms such as health insurance, pensions, and unemployment benefits (Canagarajah & Sethuraman, 2001). This exclusion further increases their vulnerability to shocks and can entrench intergenerational disadvantage.

2.6. Knowledge and skill-based vulnerabilities

At the individual level, limited education and training opportunities hinder entrepreneurs' ability to manage or grow their ventures. In South India, street vendors have been shown to underprice goods due to a weak understanding of profit margins and basic accounting (Viswanathan et al., 2008). Such skills and education gaps directly impact long-term profitability and competitiveness. Informal entrepreneurs often lack access to business development services and training programs, which restricts their ability to develop essential management capabilities such as bookkeeping, pricing, and inventory management (Palmer, 2020). Inability to adopt new technologies can also lead to reliance on labor-intensive, outdated practices, reducing efficiency and scalability (Korsunova et al., 2022). At the organizational and policy levels, limited availability of accessible, context-relevant training and entrepreneurship support programs further constrains capability-building, particularly in rural or marginalized urban communities.

2.7. Environmental and climate vulnerabilities

At the organizational level, local institutions often fail to provide adequate access to tools and programs for climate resilience. In India, for example, smallholder farmers and rural entrepreneurs may lack drought-resistant seeds or irrigation technologies, leading to frequent crop failures and severe income losses (Agrawal, 2010). External interventions, such as technology transfer or climate finance, are

frequently mediated through local institutions that do not distribute resources equitably. At the policy level, inadequate climate and urban policies exacerbate environmental risks. Extreme weather events such as floods and heatwaves can destroy inventory, damage infrastructure, and disrupt operations (Hallegatte et al., 2016). Poor urban planning and underinvestment in infrastructure mean informal settlements and markets are often located in areas prone to flooding, landslides, and other environmental hazards (Satterthwaite et al., 2018). These conditions heighten physical and financial vulnerability.

Overall, vulnerabilities faced by everyday entrepreneurs in the informal economy are intersectional and dynamic. For instance, women entrepreneurs in rural areas may face financial exclusion, technological barriers, environmental threats, and gender norms simultaneously. Vulnerabilities also evolve in response to external shocks such as economic crises, pandemics, and climate change. Table 1 summarizes our literature review, organized by the six vulnerability categories and by individual, organizational, and policy levels.

3. Relevant entrepreneurship theories

Entrepreneurship research over the last two decades has predominantly focused on high-growth, technology-oriented ventures in formal settings (Welter et al., 2017), often neglecting the realities of everyday entrepreneurs in the informal economy. Our literature review points to four established theories that can inform how entrepreneurs overcome challenges: Effectuation (Saravathy, 2001), Resource-Based View (RBV) (Alvarez & Busenitz, 2001), Bricolage (Baker & Nelson, 2005), and Jugaad or frugal innovation (Radjou et al., 2012). This ETBA illuminates how everyday entrepreneurs mobilize limited means, recombine resources, and improvise under uncertainty. We argue that ETBA provides important but incomplete insight into the six vulnerability domains identified above. ETBA is itself strength-oriented at the individual and firm level, so the gap we develop in this section is not the absence of strength orientation but two related limits. First, ETBA treats vulnerability as background context rather than as the focal construct, addressing instead uncertainty, smallness, or resource constraints. Second, ETBA centers entrepreneurial agency at the individual and firm level and does not provide an architecture for multi-level coordination across the organizational actors and policy regimes that intensify or mitigate vulnerability. We review each theory below with attention to (a) what level of analysis it emphasizes, (b) what types of vulnerabilities it helps address, and (c) what vulnerabilities it leaves unaddressed for everyday entrepreneurs in informal economies.

3.1. Effectuation: navigating uncertainty with given means

Effectuation theory describes entrepreneurial decision-making under conditions of high uncertainty and limited predictability (Saravathy, 2001). Rather than starting from a predefined goal, effectual entrepreneurs leverage the means at their disposal ("who they are, what they know, and whom they know"), embrace affordable loss, form partnerships, and co-create opportunities with stakeholders as they go (Fisher, 2012; Read et al., 2009). Studies of subsistence and informal entrepreneurs, for instance, show how street vendors and micro-entrepreneurs rely on local knowledge and relational networks to adjust product offerings and locations in real time (Viswanathan et al., 2010, 2012). In relation to our typology, Effectuation is particularly relevant for individual-level vulnerabilities such as income instability and market uncertainty. It explains how everyday entrepreneurs can cope with volatility by staying flexible and leveraging existing strengths. However, Effectuation is a theory of individual decision-making (Read et al., 2009; Saravathy, 2001) with limited reach into the organizational and policy structures within which informal ventures operate (Welter et al., 2017). It explains how everyday entrepreneurs respond to vulnerability, but not how vulnerabilities themselves are mitigated at the organizational and policy levels.

Table 1
Key literature on vulnerabilities experienced by everyday entrepreneurs in the informal economy.

Author(s)	Types of vulnerabilities experienced	Context/location	Level
Institutional and regulatory vulnerabilities:			
Bhatt (2012)	<ul style="list-style-type: none"> Lack of legal recognition for informal workers (e.g., street vendors seen as illegal) Exploitation due to inadequate labor laws for self-employed women 	Self-employed women, in India	Policy
Pansera & Owen (2018)	<ul style="list-style-type: none"> Market-based approaches expose rural entrepreneurs to dependency and inequities Grassroots innovators face exclusion due to lack of institutional support 	Grassroots entrepreneurs and informal innovators, in India	Policy
Sutter et al. (2019)	<ul style="list-style-type: none"> Lack of institutional support (e.g., regulatory and market barriers) Inequities in market access due to institutional voids 	Developing economies, in regions of extreme poverty	Policy
Teyi et al. (2023)	<ul style="list-style-type: none"> Lack of institutional support increases resource scarcity and uncertainty High dependency on informal networks to navigate environmental challenges 	Informal entrepreneurs, in Ghana	Policy
Vershinina & Rodionova (2011)	<ul style="list-style-type: none"> Dependence on co-ethnic networks creates limited business opportunities Lacking institutional resources limits growth & forces reliance on informal means 	Illegal self-employed entrepreneurs, in UK	Policy
Webb et al. (2013)	<ul style="list-style-type: none"> Institutional incongruence creates barriers for informal entrepreneurs Resource allocation constraints limit entrepreneurial growth and stability 	Entrepreneurs in informal economy, Global	Policy
Webb et al. (2014)	<ul style="list-style-type: none"> Lack of formal property rights hinders ability to secure and grow assets Institutional voids lead to reliance on informal norms and governance structures 	Informal economies, in developing regions	Policy
Webb et al. (2009)	<ul style="list-style-type: none"> Institutional incongruence between formal legality and informal legitimacy Weak enforcement of formal institutions encourages informal channels 	Informal entrepreneurs, Global informal economies	Policy
Williams et al. (2017)	<ul style="list-style-type: none"> Regulatory burdens such as high costs and complexity of registration processes. 	Informal entrepreneurs, in developing economies	Policy

Table 1 (continued)

Author(s)	Types of vulnerabilities experienced	Context/location	Level
	<ul style="list-style-type: none"> Reliance on informal networks rather than formal systems 		
Financial and economic vulnerabilities:			
Bhowmik & Saha (2011)	<ul style="list-style-type: none"> Limited access to formal credit due to lack of collateral and legal recognition Reliance on exploitative informal credit systems with very high daily interest rates 	Street vendors, across India	Organizational
Giraldo et al. (2024)	<ul style="list-style-type: none"> Face price, information and documentation barriers in formal financial services Financial exclusion and indebtedness due to informal lenders and social ties 	Low-income consumers, in Latin America (Colombia)	Organizational
Omri (2020)	<ul style="list-style-type: none"> Underdeveloped formal credit and banking infrastructure restricts informal entrepreneurs' access to capital. Limited reach of formal financial services constrains the ability to scale or sustain 	Large informal sectors, in emerging economies	Policy
Roy & Wheeler (2006)	<ul style="list-style-type: none"> Lack of access to market knowledge and formal training limits decision-making Insufficient access to financial capital and credit inhibits growth 	Informal micro-entrepreneurs in urban West Africa	Organizational
Sanchez-Barrios et al. (2015)	<ul style="list-style-type: none"> Excluded from formal financial services, relying on stigmatized informal provider Limited choice and power asymmetries create financial dependency 	BoP consumers, in Colombia	Organizational
Senyo et al. (2023)	<ul style="list-style-type: none"> Exploitation by intermediaries and high transaction fees in mobile money systems Lack of affordable, tailored financial services for informal businesses 	FinTech and informal businesses, in Ghana	Organizational
Operational and infrastructure vulnerabilities:			
Brown & Mc Granahan (2016)	<ul style="list-style-type: none"> Poor urban infrastructure, including unreliable energy and sanitation services Exclusionary urban planning policies that fail to address informal economy needs 	Urban informal economies, in low-income countries	Policy
DeBerry-Spence & Elliot (2012)	<ul style="list-style-type: none"> Disruptions from hawkers and poor market conditions (e.g., lack of infrastructure) Cultural and linguistic challenges in 	Microentrepreneurs (arts and crafts), in Ghana	Individual

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Table 1 (continued)

Author(s)	Types of vulnerabilities experienced	Context/location	Level
Iyengar et al. (2021)	<ul style="list-style-type: none"> interacting with customers. Disruptions in supply chains due to illness or cash flow issues Vulnerabilities from unstable supplier and distributor relationships 	Micro-entrepreneurs, in emerging economies	Organizational
Social and structural vulnerabilities:			
Ansari et al. (2012)	<ul style="list-style-type: none"> Limited capability-building mechanisms due to weak bonding and social capital Structural barriers to leveraging social capital for community empowerment 	Informal entrepreneurs, Global	Organizational
Boeri (2018)	<ul style="list-style-type: none"> Exploitation through subcontracted home-based work with little labor protection Gender-based constraints limiting mobility and access to better opportunities 	Home-based garment workers, in India	Policy
Canagarajah & Sethuraman (2001)	<ul style="list-style-type: none"> Exclusion from formal social protection systems due to informal labor status Increased risk of asset loss and income insecurity from lack of legal recognition 	Informal workers, in developing countries	Policy
Datta & Gailey (2012)	<ul style="list-style-type: none"> Gendered societal norms limiting women's agency and access to resources Patriarchal restrictions on women's participation in entrepreneurial activities 	Women entrepreneurs, in India	Policy
Del Giudice et al. (2023)	<ul style="list-style-type: none"> Resistance to formalization due to mistrust in governmental policies and systems Depend on informal networks and paralegal systems to access services/resources 	Informal service entrepreneurs, in Colombia	Organizational
Del Giudice & Kabadayi (2024)	<ul style="list-style-type: none"> Ethical tensions from navigating informal economy with own cultural identity Discrimination and exclusion in formal labor markets and public spaces 	Venezuelan migrants in informal economy, Colombia	Policy
Giraldo et al. (2020)	<ul style="list-style-type: none"> Often persecuted, harassed and stigmatized, despite providing essential services Income instability and limited access to formal protections and support 	Street vendors, in Colombia, Peru, and Kenya	Organizational
Korsunova et al. (2022)	<ul style="list-style-type: none"> Lack of formal support for waste pickers, leading to marginalization. 	Informal entrepreneurs, in Brazil, India, and Tanzania	Organizational

Table 1 (continued)

Author(s)	Types of vulnerabilities experienced	Context/location	Level
Lassalle & Shaw (2021)	<ul style="list-style-type: none"> Health risks and harassment faced by informal sector workers due to stigma Gendered societal norms limit the agency of women migrant entrepreneurs Isolation from local business networks due language barriers and social isolation 	Polish women migrant entrepreneurs, in UK	Organizational
Mair et al. (2012)	<ul style="list-style-type: none"> Conflicting community, political, and religious norms creating institutional voids Gender barriers to market participation due lacking property rights and autonomy 	Informal women entrepreneurs, in Bangladesh	Policy
Ramani et al. (2016)	<ul style="list-style-type: none"> Gender norms restrict women's mobility, education, and access to resources Lack of institutional support and exposure to patriarchal systems limit growth 	Informal women entrepreneurs, in India	Policy
Williams and Nadin (2012)	<ul style="list-style-type: none"> Dependence on informal structures due limited access to formal support systems Socio-spatial variation in motivation, emphasizing social over economic objective 	Informal entrepreneurs, in Russia	Organizational
Knowledge and skill-based vulnerabilities:			
Engström & McKelvie (2017)	<ul style="list-style-type: none"> Low financial literacy impedes good opportunity evaluation and decision-making Limited access to role models reduces social learning and entrepreneurial growth 	Informal economy, in Ecuador	Individual
Neumeier et al. (2020)	<ul style="list-style-type: none"> Limited digital literacy impeding technology adoption and business efficiency Inability to integrate technology as both a product and process due to skill gaps 	Informal poor entrepreneurs, in developing economies	Individual
Palmer (2020)	<ul style="list-style-type: none"> Lack of access to skills development programs due to cost and location barriers Limited recognition of informal skills acquisition, hindering further education 	Informal workers, in low- and middle-income countries	Policy
Viswanathan et al. (2008)	<ul style="list-style-type: none"> Limited marketplace literacy impedes informed decision-making and negotiation Vulnerability to exploitation in pricing and credit due to low literacy 	Informal micro-entrepreneurs in India	Individual

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Table 1 (continued)

Author(s)	Types of vulnerabilities experienced	Context/location	Level
Viswanathan et al. (2010)	<ul style="list-style-type: none"> Limited literacy inhibits decision-making and understanding of pricing & quality Dependence on social networks for market information and coping mechanisms 	Low-income, low-literacy entrepreneurs, in India	Individual
Environmental and climate vulnerabilities:			
Agrawal (2010)	<ul style="list-style-type: none"> Poor rural communities face intensified livelihood risks due to climate variability Lack of access to institutional support enhances vulnerability to climate impacts 	Rural households, in the global South	Organizational
Hallegatte et al. (2016)	<ul style="list-style-type: none"> The poor are disproportionately affected by disaster-induced well-being losses Lack of financial inclusion and social protection enhances vulnerability to disaster 	Low-income population and worker, Global	Policy
Satterthwaite et al. (2018)	<ul style="list-style-type: none"> High exposure to climate-related risks (e. g., floods), due to bad infrastructure Lack of access to formal services such as water, sanitation, and electricity 	Informal settlements and workers, in low-income cities	Policy

3.2. Resource-Based View (RBV): intangible strengths and their limits

The Resource-Based View (RBV) posits that sustainable advantage arises from resources that are valuable, rare, inimitable, and non-substitutable (Barney, 1991). Applied to entrepreneurship, RBV highlights how individual-level resources such as cognitive abilities, human capital, and social capital can compensate for limited tangible assets (Alvarez & Busenitz, 2001). Everyday entrepreneurs in informal economies often rely on deep local knowledge, trusted relationships, and adaptive learning to operate in highly uncertain environments. RBV thus aligns with our strength-based emphasis by focusing on what entrepreneurs have rather than what they lack. It offers insight into how individual and, to some extent, organizational strengths can be leveraged to address financial and operational vulnerabilities. However, RBV concentrates on firm-level resource configurations and treats the broader institutional and policy context as the external environment in which firms compete (Alvarez & Busenitz, 2001; Barney, 1991), leaving policy-level vulnerabilities and everyday entrepreneurs' embeddedness in unequal service ecosystems outside its conceptual reach (Sutter et al., 2019).

3.3. Bricolage and Jugaad: creative improvisation under constraint

Bricolage captures "making do by applying combinations of the resources at hand to new problems and opportunities" (Baker & Nelson, 2005, p. 333). It has been used extensively to describe how entrepreneurs in resource-poor contexts recombine and repurpose existing materials, skills, and relationships to create value under chronic constraint

(Fisher, 2012). Jugaad, an Indian concept, extends this logic by emphasizing frugality and ingenuity in developing cost-effective solutions tailored to local needs (Radjou et al., 2012). Examples range from grassroots health and education innovations in India to improvisational agricultural and logistics solutions in parts of Africa (Pansera & Owen, 2018; Prahalad & Mashelkar, 2010; Viswanathan et al., 2014). Both are powerful lenses for understanding how everyday entrepreneurs can mitigate individual and operational vulnerabilities by creatively reconfiguring limited resources. Like Effectuation and RBV, however, Bricolage and Jugaad remain entrepreneur-centered theories of resource recombination (Baker & Nelson, 2005; Radjou et al., 2012), with limited attention to how organizational relationships and policy structures shape which solutions become legitimate or scalable (Pansera & Owen, 2018).

3.4. Limitations of entrepreneurship theories in addressing vulnerabilities

Synthesizing across these theories, ETBA highlights important strengths of everyday entrepreneurs, including their ability to act under uncertainty, mobilize intangible resources, and creatively recombine what is at hand. These insights explain how entrepreneurs cope with individual-level vulnerabilities such as income volatility, limited tangible assets, or operational constraints. ETBA is itself strength-oriented at the individual and firm level (Alvarez & Busenitz, 2001; Baker & Nelson, 2005; Radjou et al., 2012; Sarasvathy, 2001). The gap we identify is therefore not the absence of strength orientation in entrepreneurship theory but two related limits.

First, ETBA treats vulnerability as background context rather than as the focal construct. It addresses uncertainty, resource constraints, and liabilities of smallness, but does not center vulnerability as the conceptual problem to be mitigated. As a result, ETBA explains how entrepreneurs act within constraints rather than how the constraints themselves can be reduced.

Second, ETBA centers entrepreneurial agency at the individual and firm level and does not offer an architecture for multi-level coordination across the organizational actors (NGOs, cooperatives, financial institutions, intermediaries) and policy regimes (regulatory frameworks, social protection, infrastructure) that intensify or mitigate vulnerability. ETBA explains entrepreneurial response to vulnerability but says little about how ecosystem actors can act in coordinated ways to reduce it.

4. Extending ETBA with SBA

As summarized in Table 1, empirical work documents intersecting vulnerabilities at the individual, organizational, and policy levels for everyday entrepreneurs (e.g., Ansari et al., 2012; Bhowmik & Saha, 2011; Canagarajah & Sethuraman, 2001; Satterthwaite et al., 2018; Viswanathan et al., 2008; Webb et al., 2009, 2013; Williams & Nadin, 2012), yet vulnerability is typically treated as background rather than focal construct, and prior studies rarely offer an integrated framework for mitigation. As Section 3 showed, ETBA (Effectuation, RBV, Bricolage, and Jugaad) explains individual-level resourcefulness under constraint without placing vulnerability at the center of analysis or coordinating organizational and policy actors. SBA provides the conceptual tools to fill this gap and extend ETBA.

4.1. Theoretical foundations of SBA

SBA emerged in social work and community development as a response to deficit-based models that emphasize problems and as a paradigm for addressing vulnerabilities across diverse contexts (Baker et al., 2005; Raciti et al., 2022; Saleebey, 1996). It focuses on identifying, mobilizing, and enhancing existing strengths (capabilities, relationships, and institutional assets) at multiple levels (Hammond & Zimmerman, 2012; Raciti et al., 2022). In customer vulnerability research and TSR, SBA has been used to reconceptualize vulnerability as

dynamic and context-dependent and to design interventions that build on customers' and communities' assets rather than treating them as passive recipients of help (Kabadayi et al., 2023; Russell-Bennett et al., 2023).

We adopt three SBA principles directly relevant to entrepreneurship and our vulnerability typology. The first is a focus on strengths rather than deficits, including psychological capital, skills, and tacit knowledge at the individual level. The second is contextual and relational embeddedness, recognizing family, community, service organizations, and ecosystems as sources of strength. The third is multi-level collaboration, recognizing that policy, regulatory, and infrastructural actors can either exacerbate or mitigate vulnerability.

The first SBA principle overlaps with ETBA. Effectuation, RBV, Bricolage, and Jugaad already emphasize individual resourcefulness under constraint (Alvarez & Busenitz, 2001; Baker & Nelson, 2005; Radjou et al., 2012; Sarasvathy, 2001). The distinct contribution SBA brings to entrepreneurship therefore lies in the second and third principles. The second principle places vulnerability at the center of analysis, treating relational embeddedness as a deliberate target for mitigation rather than as a backdrop for entrepreneurial action. The third principle provides an architecture for multi-level coordination, treating organizational actors (intermediaries, NGOs, communities) and policy actors (regulators, infrastructure providers) as collaborators whose strengths can be aligned in support of entrepreneurs.

Strength means different things at each level. At the individual level, strength refers to developable psychological and capability-based resources such as hope, self-efficacy, resilience, and marketplace literacy (Luthans, 2015; Raciti et al., 2022). These are properties of the entrepreneur that can be intentionally cultivated through training and support. At the organizational level, strength refers to relational and intermediary assets, including community savings groups, market associations, cooperatives, and NGOs whose support can be deliberately aligned with entrepreneurs (Boenigk et al., 2021; Del Giudice et al., 2023). These are properties of the actors with whom entrepreneurs interact, activated through coordination rather than possessed by the entrepreneur. At the policy level, strength refers to institutional capacities that can be activated in coordinated support of entrepreneurs, including recognition mechanisms, social protection coverage, and climate-resilient and digital infrastructure (Fisk et al., 2023; Kabadayi et al., 2023; Russell-Bennett et al., 2023). These capacities of public and quasi-public regimes exist whether or not they are mobilized in support of entrepreneurs. SBA's contribution at this level is the explicit recognition of policy actors as collaborators with whom such mobilization can be coordinated.

4.2. SBA in customer vulnerability and service ecosystems

Service ecosystems consist of interconnected actors, including individuals, communities, and organizations, working collaboratively to mitigate vulnerabilities and enhance resilience. While much SBA scholarship has historically focused on the individual and community level (Hammond & Zimmerman, 2012; Saleebey, 1996), recent TSR and service ecosystem research has begun to extend SBA principles to organizational and policy-level coordination (Alkire et al., 2023; Boenigk et al., 2021; Finsterwalder et al., 2025; Russell-Bennett et al., 2023). For instance, Russell-Bennett et al. (2023) argue that service ecosystems are essential for addressing financial exclusion and digital divides, mobilizing collective strengths to create more equitable service delivery. This systems-based perspective critiques individualistic approaches and emphasizes the interconnectedness of actors within the ecosystem (Alkire et al., 2023). Recent research on informal service economies further underscores the importance of addressing vulnerability through an ecosystem-based lens (Del Giudice & Kabadayi, 2024; Del Giudice et al., 2023). Informal entrepreneurs often self-exclude from formal service ecosystems due to barriers such as mistrust of institutions, lack of formal recognition, and structural discrimination, with attitudes

and practices that prioritize recognition over assimilation into formal systems. These examples illustrate how SBA has been extended to ecosystem-level analysis, providing the conceptual base for our integration with ETBA.

4.3. The need for SBA in entrepreneurship research

Individual level: deployment of given strengths versus development of those strengths. At the individual level, ETBA describes how entrepreneurs deploy existing means under uncertainty (Sarasvathy, 2001), recombine resources (Baker & Nelson, 2005), and improvise frugal solutions (Radjou et al., 2012). SBA addresses what ETBA assumes, namely the underlying psychological and capability-based resources such as hope, self-efficacy, resilience, and marketplace literacy that make deployment, recombination, and improvisation possible in the first place (Luthans, 2015; Raciti et al., 2022). The distinction is therefore between deployment of given strengths (ETBA) and intentional development of those strengths (SBA), with both required for mitigating individual-level vulnerabilities such as income precarity, skill gaps, and health and safety risks.

Organizational level: entrepreneurial agency versus ecosystem coordination. At the organizational level, ETBA describes the entrepreneur's mobilization of social capital and network ties to access resources and opportunities (Ansari et al., 2012; Webb et al., 2013), with the entrepreneur as the active agent. SBA shifts attention to the ecosystem actors themselves (intermediaries, NGOs, cooperatives, financial institutions, market associations) as collaborators whose relational and intermediary assets can be deliberately aligned in support of entrepreneurs (Alkire et al., 2023; Boenigk et al., 2021; Del Giudice et al., 2023). The distinction is therefore between entrepreneurial agency in mobilizing networks (ETBA) and coordinated action by ecosystem actors on behalf of entrepreneurs (SBA). When integrated, the two reduce exposure to exploitative intermediaries, broaden access to financial and knowledge resources, and support collective problem-solving, mitigating organizational-level vulnerabilities identified in Table 1.

Policy level: fixed background versus activable institutional capacities. At the policy level, ETBA largely treats hostile regulation, insecure property rights, absent social protection, and poor infrastructure as fixed background conditions within which entrepreneurs must act (Canagarajah & Sethuraman, 2001; Satterthwaite et al., 2018; Webb et al., 2009, 2013). SBA brings the policy level into theoretical view by treating policy actors (regulators, social protection agencies, infrastructure providers) as collaborators whose institutional capacities can be activated in coordinated support of entrepreneurs through recognition mechanisms, inclusive social protection, and climate-resilient and digital infrastructure (Fisk et al., 2023; Kabadayi et al., 2023; Russell-Bennett et al., 2024). The distinction is therefore between policy as fixed background (ETBA) and policy actors as collaborators with activable capacities (SBA), with the latter providing the architecture for mitigating policy-level vulnerabilities.

Empirical work on informal economies illustrates how the two extensions operate in practice. In Ghana, informal entrepreneurs combine social networks with individual inventiveness (Ansari et al., 2012; Teyi et al., 2023), showing how organizational coordination complements entrepreneurial agency. In India, rural entrepreneurs draw on community networks and indigenous knowledge to sustain ventures (Ghosh et al., 2024; Gurtoo & Williams, 2009), illustrating organizational actors as carriers of strength. In Brazil, entrepreneurs in favelas combine social capital and advocacy to address infrastructural barriers (Ansari et al., 2012), pointing to the policy-level coordination that SBA brings into focus.

SBA does not replace entrepreneurship theories but extends their reach. The integration provides the conceptual foundation for the framework developed in Section 5. Table 2 summarizes how SBA extends each entrepreneurship theory across vulnerability centrality and multi-level coordination.

Table 2
Key literature on entrepreneurship theories, identification of key gaps, and extension with SBA.

ETBA	Key concepts	Select references	Key gaps	Extension with SBA to bridge key gaps
Effectuation Theory	Decision-making under uncertainty using existing resources and leveraging contingencies.	Fisher (2012), Read et al. (2009), Sarasvathy (2001), Welter & Kim (2018)	Limited focus on individual –level decision-making; insufficient attention to systemic barriers and collective resource pooling in informal economies.	SBA complements Effectuation by embedding integral collaboration and collective resource utilization into decision-making processes. It operationalizes the logic of working with existing resources by fostering partnerships within community ecosystems, thus expanding Effectuation beyond the individual entrepreneur.
Resource-Based View (RBV)	Competitive advantage from leveraging rare, valuable, and inimitable resources, including social capital.	Alvarez & Busenitz (2001), Ansari et al. (2012), Barney (1991), Gupta et al. (2004), Kimmitt et al. (2020)	Limited focus on intangible and community resources; inapplicability to resource-scarce environments like informal economies.	SBA leverages underutilized intangible resources such as social capital, local knowledge, and community networks. It shifts the RBV's focus from solely firm-specific resources to ecosystem-level resource mobilization, promoting inclusivity and resilience in resource-scarce environments. SBA reframes resource scarcity as a shared opportunity for innovation and partnership.
Bricolage	Innovating by ‘making do’ with available resources, emphasizing resource improvisation and adaptability.	Baker & Nelson (2005), Fisher (2012), Senyard et al. (2014)	Overemphasis on individual improvisation; neglect of integration with community, structural enablers, and long-term solutions.	SBA extends entrepreneurial Bricolage by embedding it within community networks and partnerships, enabling long-term innovation. While Bricolage focuses on improvising with available resources, SBA highlights the collective capacity of communities to co-create solutions, transforming isolated improvisations into scalable, collaborative innovations.
Jugaad	Frugal innovation emphasizing flexibility and grassroots problem-solving in resource-scarce environments.	Bhatti et al. (2013), Bound & Thornton (2012), Pansera & Owen (2018), Prabhu & Jain (2015), Radjou et al. (2012)	Focuses on immediate, local solutions but lacks scalability and integration into formal systems, which limits long-term impact and ecosystem-level resilience.	SBA aligns grassroots innovation with institutional frameworks, enhancing scalability and impact. It addresses the tension between frugality and sustainability by promoting co-creation with formal institutions, ensuring that Jugaad innovations are scalable and integrated into broader value chains.

Note: SBA = Strength-based approach, ETBA = Entrepreneurship theories-based approach.

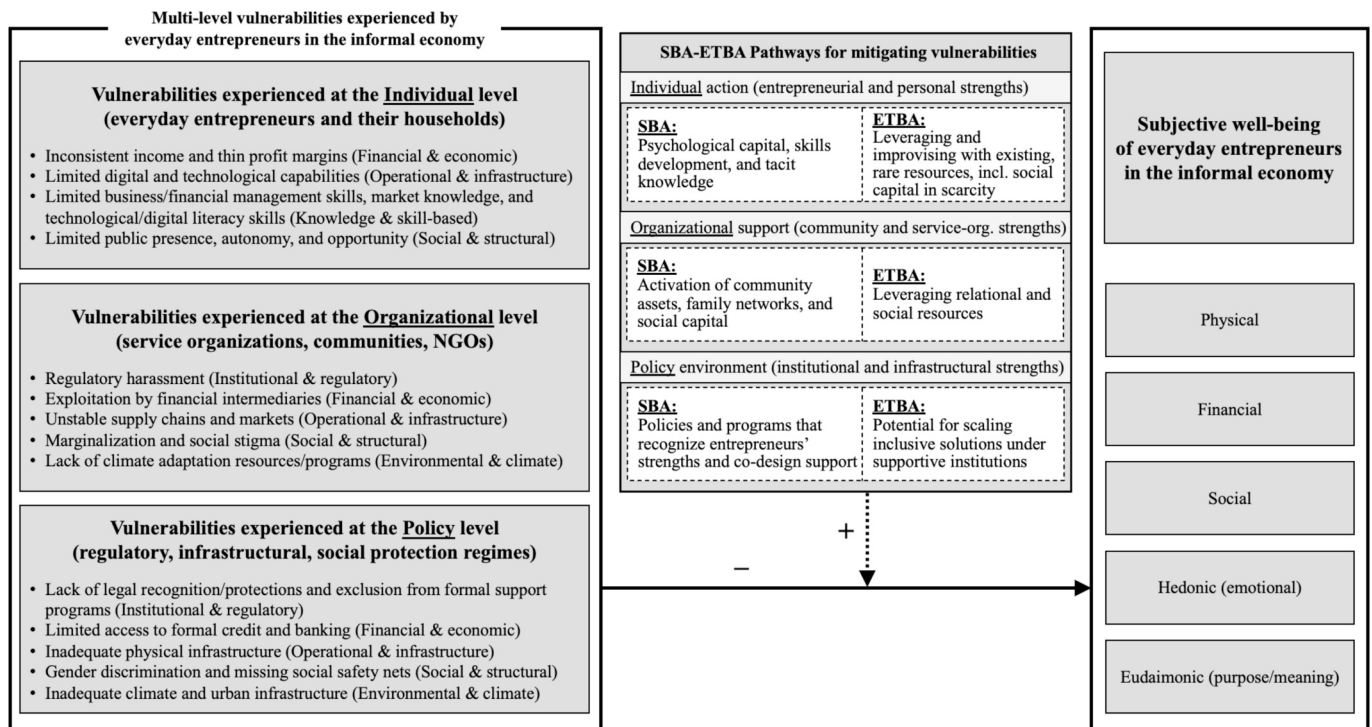


Fig. 1. Conceptual framework. Note: SBA = Strength-based approach, ETBA = Entrepreneurship theories-based approach. SBA-ETBA pathways moderate the negative relationship between multi-level experienced vulnerabilities and the subjective well-being of everyday entrepreneurs in the informal economy. The framework is organized along three ecosystem levels (individual, organizational, and policy). The six vulnerability domains operate as diagnostic content within each level, identifying what kinds of vulnerabilities cluster at that level and need to be mitigated.

5. Conceptual framework and propositions

Building on our vulnerability typology and the SBA-ETBA integration developed in Section 4, we develop a conceptual framework (Fig. 1) that explains how multi-level vulnerabilities experienced by everyday entrepreneurs in the informal economy affect their subjective well-being, and how SBA-extended ETBA mechanisms can mitigate these effects. We then derive four level-based propositions from this framework.

5.1. Framework description

Our framework places the six vulnerability domains developed in Section 2, organized at the individual, organizational, and policy levels of the service ecosystem, as antecedent conditions that negatively affect everyday entrepreneurs' subjective well-being. The domains operate as diagnostic content within each level, identifying which vulnerabilities cluster where mitigation must occur. We adopt Lui and Fernando's (2018) multidimensional model of subjective well-being, comprising physical, financial, social, emotional, and eudaimonic (purpose-related) dimensions. These dimensions are shaped not only by entrepreneurs' own actions but also by the behavior of organizational and policy actors in the broader service ecosystem. We depict SBA-ETBA pathways as an integrated mechanism that moderates the negative relationship between multi-level vulnerabilities and subjective well-being.

At the *individual level*, the deployment-development integration developed in Section 4.3 combines ETBA's account of how entrepreneurs work with given means (Baker & Nelson, 2005; Radjou et al., 2012; Sarasvathy, 2001) with SBA's account of how the underlying psychological capital and marketplace literacy are intentionally built (Luthans, 2015; Raciti et al., 2022). This integration attenuates the negative effect of individual-level vulnerabilities (income precarity, skill gaps, health and safety risks) most strongly on financial, emotional, and eudaimonic well-being.

At the *organizational level*, vulnerabilities cluster around regulatory harassment, exploitative financial practices, unstable supply chains, and social stigma. The agency-coordination integration developed in Section 4.3 combines entrepreneurs' mobilization of network ties (Ansari et al., 2012; Webb et al., 2013) with coordinated action by ecosystem actors on behalf of entrepreneurs through community savings groups, cooperatives, market associations, and NGOs (Alkire et al., 2023; Boenigk et al., 2021; Del Giudice et al., 2023). It reduces exposure to exploitative intermediaries, broadens access to financial and knowledge resources, and supports collective problem-solving, attenuating the negative effect of organizational-level vulnerabilities most strongly on social and financial well-being.

At the *policy level*, vulnerabilities cluster around exclusionary regulation, insecure property rights, weak social protection, and inadequate infrastructure (Canagarajah & Sethuraman, 2001; Satterthwaite et al., 2018; Webb et al., 2009, 2013). The fixed-background-versus-activable-capacities integration developed in Section 4.3 treats policy actors as collaborators whose institutional capacities can be activated through recognition mechanisms, inclusive social protection, and climate-resilient and digital infrastructure (Fisk et al., 2023; Kabadayi et al., 2023; Russell-Bennett et al., 2024). When aligned with individual and organizational mechanisms, this integration attenuates the negative effect of policy-level vulnerabilities most strongly on physical and financial well-being.

Together, the three level analyses establish the moderating role of SBA-ETBA pathways on the negative relationship between experienced vulnerabilities and subjective well-being. Higher activation and alignment of SBA-ETBA mechanisms across the three levels weakens the negative impact of multi-level vulnerabilities on subjective well-being.

5.2. Theoretical integration of ETBA and SBA and development of propositions

The framework yields four propositions that link experienced vulnerabilities to SBA-ETBA mechanisms and subjective well-being. The first three propositions specify level-based mitigation pathways. The fourth proposition specifies their cross-level complementarity.

P1 (Individual-level mitigation pathway): For everyday entrepreneurs in the informal economy, stronger SBA-ETBA mechanisms at the individual level (higher psychological capital, enhanced financial and marketplace literacy, and greater capacity for Effectuation, RBV, Bricolage, and Jugaad) will attenuate the negative relationship between vulnerabilities experienced at the individual level (income instability, limited skills, health and safety risks) and subjective well-being, particularly financial, emotional, and eudaimonic well-being.

P2 (Organizational-level mitigation pathway): Stronger SBA-ETBA mechanisms at the organizational level (entrepreneurial mobilization of network ties combined with coordinated action by community organizations, NGOs, financial institutions, and market associations on behalf of entrepreneurs) will attenuate the negative relationship between vulnerabilities experienced at the organizational level (regulatory harassment, exploitative intermediaries, unstable supply chains, social stigma) and subjective well-being, with pronounced benefits for social and financial well-being.

P3 (Policy-level mitigation pathway): Stronger SBA-ETBA mechanisms at the policy level (activation of institutional capacities through recognition mechanisms, inclusive social protection, and climate-resilient and digital infrastructure investments that explicitly recognize and support everyday entrepreneurs) will attenuate the negative relationship between vulnerabilities experienced at the policy level (lack of legal protections, social protection gaps, infrastructure deficits) and entrepreneurs' subjective well-being, particularly physical and financial well-being.

P4 (Cross-level complementarity of SBA-ETBA pathways): The mitigating effect of SBA-ETBA pathways on the relationship between multi-level vulnerabilities and subjective well-being will be strongest when individual, organizational, and policy-level strengths are activated and aligned, compared to interventions that occur at only one level. Cross-level alignment of strengths creates complementary, mutually reinforcing resilience pathways that move everyday entrepreneurs from coping with vulnerability toward sustained improvements in subjective well-being.

Together, P1 through P4 specify how clusters of vulnerabilities at different levels affect subjective well-being and how SBA-extended ETBA mechanisms can mitigate these effects. They also provide the basis for future empirical research to test and refine the multi-level mitigation pathways and the SBA-ETBA moderator.

6. Discussion

6.1. Theoretical contributions

We extend entrepreneurship theory by integrating SBA with ETBA across the individual, organizational, and policy levels of the service ecosystem. The integration places vulnerability at the center of analysis (a focal construct in SBA but a background condition in ETBA) and provides an architecture for coordinating ecosystem actors in support of everyday entrepreneurs (an ecosystem-level orientation that ETBA does not develop). Two main theoretical contributions follow.

First, we advance an SBA-ETBA integrative framework for mitigating vulnerabilities experienced by everyday entrepreneurs in the informal economy. Our framework explains how multi-level vulnerabilities affect entrepreneurs' subjective well-being and how coordinated action across the individual, organizational, and policy levels of the service ecosystem can mitigate these effects. ETBA (Effectuation, RBV, Bricolage, and Jugaad) provides the established account of how entrepreneurs deploy

strengths under constraint at the individual and firm level (Alvarez & Busenitz, 2001; Baker & Nelson, 2005; Radjou et al., 2012; Sarasvathy, 2001). The framework integrates SBA with ETBA along two extensions. The first extension makes vulnerability the focal construct of analysis. Strengths are theorized as the resources mobilized to mitigate vulnerability, not as resources entrepreneurs use to act under uncertainty, smallness, or resource scarcity. The second extension brings organizational and policy actors into theoretical view as collaborators whose strengths can be aligned in support of entrepreneurs, beyond the entrepreneur-centered scope of established theory.

Our framework specifies the SBA-ETBA integration mechanism at each level, building on the distinctions developed in Section 4.3. At the individual level, the deployment-development integration combines ETBA's account of working with given means with SBA's account of intentionally building psychological capital and marketplace literacy. At the organizational level, the agency-coordination integration combines entrepreneurs' mobilization of network ties with coordinated action by ecosystem actors. At the policy level, the fixed-background-versus-activable-capacities integration treats policy actors as collaborators whose institutional capacities can be activated in coordinated support of entrepreneurs. Four propositions translate the framework into testable level-based mitigation pathways (P1, P2, P3) and one cross-level complementarity claim (P4).

Second, in support of this framework, we develop a multi-level diagnostic typology of vulnerabilities experienced by everyday entrepreneurs in the informal economy. The typology organizes six vulnerability domains (institutional and regulatory, financial and economic, operational and infrastructure, social and structural, knowledge and skill-based, and environmental and climate) at the individual, organizational, and policy levels. The typology serves a different conceptual purpose from existing typologies of consumer well-being, which categorize sources and dimensions of well-being as outcomes (Rahman, 2021; Rani et al., 2025). Our typology takes vulnerability as the antecedent and organizes it by the ecosystem level at which mitigation must occur. This locus-of-mitigation logic links the typology directly to the SBA-ETBA framework, because each level corresponds to a distinct integration mechanism (deployment versus development at the individual level; agency versus coordination at the organizational level; fixed background versus activable capacities at the policy level). We position the typology as a diagnostic device rather than a definitive classification, with future refinement expected as empirical work expands.

Together, these contributions reposition entrepreneurship research on informal economies. The SBA-ETBA framework shifts attention from a primarily individual-level account of how entrepreneurs cope under constraint toward a multi-level account of how vulnerability can be mitigated when entrepreneurial agency, ecosystem coordination, and policy capacity are aligned. The typology supports this account with a diagnostic instrument grounded in the ecosystem level where mitigation must occur. We present this as preliminary conceptual work; Section 7 develops the future research agenda.

6.2. Practical contributions

Our framework suggests actionable strategies to mitigate the impact of vulnerabilities experienced by everyday entrepreneurs on their subjective well-being. It can serve as a diagnostic and design tool for entrepreneurs, policymakers, service organizations, and development agencies, supporting the identification of specific vulnerabilities and the co-creation of targeted SBA interventions aligned with the resources of each service ecosystem.

6.2.1. Practical contributions to everyday entrepreneurs

Our framework helps everyday entrepreneurs understand the vulnerabilities they face at the individual, organizational, and policy levels and respond to them deliberately. Bricolage and Jugaad principles

support creative repurposing of available resources and the development of cost-effective, contextually tailored solutions (Baker & Nelson, 2005; Radjou et al., 2012). Effectuation supports adaptability in volatile markets through iterative learning and reliance on existing means (Sarasvathy, 2001). SBA-informed training and support build the underlying psychological capital and marketplace literacy that make these ETBA capabilities possible (Luthans, 2015; Raciti et al., 2022). For example, a food vendor applying Effectuation might adjust the menu based on available ingredients, while SBA-informed peer learning circles or association membership build the confidence and literacy that make such adjustments effective. Together, these strategies strengthen individual resilience and feed into organizational and policy mitigation pathways.

6.2.2. Practical contributions to policymakers

Policy environments shape the ceiling for what entrepreneurs and ecosystem actors can achieve. Policymakers can activate institutional capacities by simplifying business registration, easing tax compliance, and providing fair legal protections, which reduces vulnerabilities linked to informality and legal uncertainty (Williams et al., 2016). Gender-sensitive policy design addresses challenges faced by women entrepreneurs, including mobility restrictions, domestic burdens, and limited credit access (Ndinda & Ndhlovu, 2018). Activable policy capacities also include digital inclusion and infrastructure development. Initiatives such as affordable internet access and digital literacy programs help entrepreneurs reach broader markets and adopt new technologies (Fisk et al., 2023; Tikkanen et al., 2023). Tiered registration schemes can support gradual formalization, and public procurement reforms and regulatory sandboxes can provide institutional inclusion and flexibility for innovation. When these policy capacities are activated in coordination with individual and organizational mechanisms, they reduce policy-level vulnerabilities and support subjective well-being (Lui & Fernando, 2018).

6.2.3. Practical contributions to service organizations

Service organizations can adopt SBA-informed interventions matched to entrepreneurs' capabilities and contexts. Microloans tailored to local resourcefulness, mentorship, and digital training programs help close technological and market-access gaps (Viswanathan et al., 2014). By drawing on informal networks and shared resources, service organizations co-create resilient entrepreneurial ecosystems with the people they serve. Community resource hubs that centralize informal-sector services (childcare, storage, Wi-Fi, public facilities), community-driven training, and microfinance initiatives such as chit funds and inclusive financing models built on social collateral promote inclusion and strengthen support structures (Bhowmik & Saha, 2011; Boenigk et al., 2021; Russell-Bennett et al., 2019). Co-design methods, in which entrepreneurs help shape support systems such as eligibility criteria for credit programs or mobile applications in local languages, ensure relevance and adoption.

6.2.4. Practical contributions to sustainable development goals (SDGs)

Our framework also informs the UN Sustainable Development Goals (SDGs) by identifying intervention points at all three levels. To reduce poverty (SDG 1), SBA-informed interventions such as community-based microfinance and financial literacy training reduce dependency on exploitative lenders and build long-term financial self-sufficiency (Ansari et al., 2012; Boenigk et al., 2021; Datta & Gailey, 2012; Russell-Bennett et al., 2024). For gender equality (SDG 5), SBA-driven programs improve women's access to finance, networks, and institutional support (Alkire et al., 2023; Ndinda & Ndhlovu, 2018; Raciti et al., 2022), and ecosystem-based interventions such as cooperatives and mobile banking help reduce spatial and economic exclusion in restrictive contexts (Kumari & Pandey, 2012; Viswanathan et al., 2014). For inclusive growth (SDG 8), digital inclusion initiatives such as affordable broadband and e-commerce training expand market reach and enable

innovation (Fisk et al., 2023; Tikkanen et al., 2023).

7. Limitations and future research agenda

The framework and propositions developed in this article open several avenues for future research on multi-level mitigation of vulnerability for everyday entrepreneurs in the informal economy. As preliminary conceptual work, the framework requires empirical validation of its propositions, conceptual extension across new contexts, and methodological refinement. Our agenda aligns with recent calls in TSR for multi-level frameworks that map collaborators and pathways from vulnerability contexts to transformative service initiatives (TSIs) and outcomes (Finsterwalder et al., 2025). Table 3 summarizes research themes, illustrative research questions, and the vulnerability types and levels each addresses.

7.1. Empirical validation of the conceptual framework

Empirical testing is essential to establish the validity of the framework across diverse settings. Future work can test the four propositions developed in Section 5. P1, P2, and P3 specify level-based mitigation pathways at the individual, organizational, and policy levels, and P4 specifies their cross-level complementarity. Quantitative tests can use moderation models to examine whether SBA-ETBA mechanisms attenuate the negative relationship between experienced vulnerabilities and subjective well-being, with appropriate measures of psychological capital, marketplace literacy, and ecosystem coordination at each level (Luthans, 2015; Raciti et al., 2022). Longitudinal designs can examine whether the cumulative activation of SBA-ETBA mechanisms produces sustained gains in subjective well-being across the five dimensions in Lui and Fernando's (2018) model. Comparative designs across regions where informal employment is concentrated, including Latin America, Sub-Saharan Africa, South Asia, and parts of Europe, can examine how the same mechanisms operate under different institutional and cultural conditions (Ansari et al., 2012; Giraldo et al., 2020; Ndinda & Ndhlovu, 2018). Qualitative work grounded in direct engagement with everyday entrepreneurs is needed in parallel, especially to refine the operational definitions of strength at the organizational and policy levels and to surface mechanisms the typology does not yet specify.

7.2. Expanding SBA in entrepreneurship research

Conceptual extension is a second avenue. The framework can be extended to entrepreneurship contexts beyond informal economies, including refugee entrepreneurship, micro-platform ventures in the gig economy, and other settings where everyday entrepreneurs face multi-level vulnerabilities. Each extension requires re-examining what strength means at each level for that specific context. The framework can also be extended in dialogue with adjacent entrepreneurship theories. Variants of effectuation under different uncertainty regimes (Welter & Kim, 2018) raise the question of how the deployment-versus-development distinction operates when uncertainty is structural rather than market-driven. Bricolage and Jugaad scholarship on grassroots innovation (Pansera & Owen, 2018; Prabhu & Jain, 2015) raises the question of how individual improvisation scales through coordinated organizational and policy support. RBV scholarship on intangible resources (Alvarez & Busenitz, 2001; Barney, 1991) raises the question of how to measure activable institutional capacities as a class of policy-level resource.

7.3. Methodological innovations

Methodological refinement is a third avenue. The multi-level architecture of the framework calls for matched empirical designs. Quantitative social network analyses can evaluate the strength of organizational coordination and its moderating effect on knowledge and

Table 3

Future research agenda and select research questions on SBA in entrepreneurship research.

Future research themes	Select future research questions	Type and level of vulnerability
Empirical validation of the conceptual framework	<ul style="list-style-type: none"> • How does SBA influence long-term entrepreneurial resilience in informal economies? • What outcomes (e.g., financial stability, psychological capital) emerge from SBA-driven practices for everyday entrepreneurs in the informal economy? 	Financial and economic, Individual and Organizational
Expanding SBA in entrepreneurship research	<ul style="list-style-type: none"> • How does SBA complement entrepreneurial theories in addressing resource constraints? • How can SBA principles foster inclusive economic growth and systemic well-being by leveraging community strengths? 	Operational and infrastructure, Organizational and Policy
Methodological innovations	<ul style="list-style-type: none"> • Which research designs best test multi-level SBA-ETBA mechanisms? • How do digital platforms enable coordination and resource mobilization for everyday entrepreneurs in informal economies? 	Social and structural, Individual and Policy
Cross-disciplinary research	<ul style="list-style-type: none"> • How can positive psychology inform SBA's application to entrepreneurial resilience? • How can SBA principles be adapted into experiential learning and training programs for entrepreneurship education? 	Knowledge and skill-based, Individual
Cross-cultural and comparative research	<ul style="list-style-type: none"> • How do cultural and institutional differences influence the applicability of SBA in diverse informal economies? • What are the universal vs. context-specific elements of SBA for informal entrepreneurs? 	Institutional and regulatory, Organizational and Policy
Addressing global challenges	<ul style="list-style-type: none"> • How does SBA-driven entrepreneurship mitigate vulnerabilities related to climate change and economic inequality? • How does SBA align with SDGs to promote inclusive economic growth and gender equality? 	Environmental and climate, Policy
Exploring ecosystem dynamics	<ul style="list-style-type: none"> • How do ecosystem-level interactions (e.g., collaboration among NGOs, government, and entrepreneurs) enhance resilience? • What roles do community and institutional networks play to reduce vulnerabilities? 	Institutional and regulatory, Organizational and Policy
Policy-level interventions	<ul style="list-style-type: none"> • How can SBA inform policies to reduce barriers like regulatory hurdles and financial exclusion? • What is the impact of targeted policies on scaling informal businesses? 	Institutional and regulatory, Organizational and Policy

skill-based vulnerabilities at the individual level. Multi-level structural equation models can test the cross-level complementarity claim in P4 by partitioning variance across the individual, organizational, and policy levels. Qualitative case studies can document how everyday entrepreneurs interpret and act on SBA-informed support in practice, with particular attention to under-researched informal sectors where data collection is logistically and ethically demanding. Digital ethnography can examine how digital platforms enable coordination and resource mobilization in informal economies (Tikkanen et al., 2023). Field experiments can test specific SBA-informed interventions, such as community microfinance circles or digital literacy programs, against control conditions, providing causal evidence on which mitigation pathways are most effective. This methodological pluralism aligns with TSR's call to connect conceptual pathways with diverse empirical designs that inform TSIs (Finsterwalder et al., 2025).

7.4. Cross-disciplinary research

Cross-disciplinary engagement is a fourth avenue. Positive psychology can inform the operational definition of individual-level strength as developable psychological capital, including resilience, hope, and self-efficacy (Luthans, 2015). Social work scholarship offers methodological tools for working with marginalized populations, including the strength-based assessment instruments developed for vulnerable communities (Saleebey, 1996). Entrepreneurship education can integrate the deployment-and-development distinction into curriculum design for everyday entrepreneurs, building the underlying capacities that ETBA assumes alongside the entrepreneurial behaviors ETBA prescribes (Hammond & Zimmerman, 2012).

7.5. Addressing global challenges

Global challenges constitute a fifth avenue. Climate change, economic inequality, and technological disruption are intersecting shocks that intensify multi-level vulnerabilities for everyday entrepreneurs in the informal economy. Future research can examine how SBA-ETBA pathways operate under shock conditions, including how environmental and climate vulnerabilities at the policy level interact with financial and operational vulnerabilities at the organizational and individual levels (Pralhad & Mashelkar, 2010). The framework can also inform research on the SDGs, particularly the reduction of poverty (SDG 1), gender inequality (SDG 5), and exclusion from inclusive growth (SDG 8) (Datta & Gailey, 2012; ILO, 2023; Russell-Bennett et al., 2024). This work aligns with TSR calls for transformative service initiatives that coordinate collaborators and pathways from vulnerability contexts to outcomes (Finsterwalder et al., 2025).

Finally, two further themes in Table 3 round out the agenda. Ecosystem dynamics research can examine how organizational actors coordinate their relational and intermediary assets in support of everyday entrepreneurs. Policy-level intervention research can examine how institutional capacities are activated through specific instruments such as tiered registration, inclusive social protection coverage, and digital infrastructure investment. Regional and sectoral contextualization is essential across all themes because the same mechanisms operate differently under different institutional conditions. The framework, propositions, and agenda (Table 3) provide a roadmap for integrating SBA into entrepreneurship and customer vulnerability research and for advancing the subjective well-being of everyday entrepreneurs in the informal economy.

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During the preparation of this work, the authors used Claude strictly to improve language and readability. After using this tool, the authors reviewed and edited the document and take full responsibility for the

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Declaration of competing interest

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