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ICSB 2025 Global MSMEs Report Editors: Dr. Ayman ElTarabishy, President & CEO, ICSB
Deputy Chair, Department of Management, GW School of Business

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**To every Micro Business, Small
Business, & Medium-sized
Business Entrepreneur,
this Global Report is in
recognition of your efforts.**



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Introduction

Celebrating the Importance and Resilience of MSMEs Worldwide

June 27, 2025 | Washington, D.C.

Dear Colleagues and Global Partners,

On behalf of the International Council for Small Business (ICSB), I am honored to present the 2025 ICSB Global Report on Micro-, Small, and Medium-Sized Enterprises (MSMEs). Released in celebration of the United Nations-designated MSMEs Day (June 27), this report continues ICSB's tradition of advancing actionable knowledge, innovative policy, and human-centered entrepreneurship for the world's most vital business sector.

This year's report centers on the theme of "Navigating Permanent White Water," a concept that describes the nonstop turbulence MSMEs now face, from market and tariff turbulations, geopolitical conflict, to rapid digital transformation and supply chain volatility. In this era, disruption is no longer episodic; it is a constant. For MSMEs, which often operate with fewer buffers and greater exposure to risk, the stakes are even higher. This theme sets the stage for urgent reflections on what it takes for micro and small businesses not just to survive, but to thrive: the capacity to adapt continuously, innovate with limited resources, build networks of support, and remain grounded in purpose in a world defined by uncertainty and acceleration.

The report opens with a visionary call in "Human-Centered Entrepreneurship: Empowering MSMEs to Thrive", followed by deep dives into regional and thematic issues such as "Building Resilience to Climate Change", "The Double Transition: Formalization and Sustainability", and "From Gaps to Growth: Accelerating SME Digitalisation". We also highlight transformative academic perspectives in "School for Business and Society."

We also provide strategic overviews in the MSMEs Global Dashboard and the Top Ten MSMEs Day Trends for 2025, as well as a preview of what's to come in "The 2025 SME Competitiveness Outlook: A Digital Transformation Roadmap."

Among the standout contributions:

The Future of SMEs (Rico J. Baldegger) examines the critical trends shaping the success of SMEs, including digital transformation, sustainability, workforce shifts, and financing gaps.

Digital Transformation & Competitiveness (ITC) introduces the e-DTI index, highlighting how expert users of digital tools outperform others in terms of productivity, cost reduction, and innovation.

WTO MSME Group Update (Kathryn Lundquist) reviews global efforts to integrate MSMEs into trade, including digitalization, AEO programs, and the Trade4MSMEs platform.

Financial Inclusion of Entrepreneurs (Andrea Minetti et al.) examines the persistent barriers SMEs face in accessing credit, and how trust, asymmetry, and policy gaps play a role.

Elizabeth Ann Seton as Entrepreneurial Pioneer examines how spirituality, resilience, and purpose-driven leadership shaped Seton into a model for mission-based entrepreneurship.

High-Tech MSMEs & Industrial Policy (Nicolas Durand) argues for targeted support to help high-tech start-ups scale domestically and avoid premature foreign acquisition.

Uncertainty as the New Normal (Alina Landowska) discusses the structural constraints undermining MSME resilience and how agile policy can improve productivity.

Entrepreneurial Ecosystems (Norris Krueger) outlines a bottom-up, data-driven framework for fostering local ecosystems that empower diverse and resilient entrepreneurs.

Risk Behavior in Indonesian SMEs (Margaretha Banowati Talim) utilizes GEM data to examine gender differences and cultural norms that influence SME risk appetite.

Impact Investing in Africa (Gilbert Kofi Adarkwah & Margaret Fong) emphasizes how blended finance and ecosystem support can bridge the MSME funding gap and promote inclusive growth.

Innovation Districts and Urban Renaissance (Ahmed Osman) demonstrates how historic cities can foster sustainable growth by integrating research, entrepreneurship, and community engagement.

Each chapter is a testament to the resilience, creativity, and leadership of micro and small enterprises (MSMEs) worldwide. As you read this report, we invite you to reflect on how your work can align with these insights—and how, together, we can champion the future of humane, innovative, and sustainable entrepreneurship.

With purpose and partnership,

Dr. Ayman ElTarabishy, President & CEO,
International Council for Small Business (ICSB)
Deputy Chair, Department of Management
The George Washington University School of Business

MSMEs Global Dashboard



Navigating Permanent White Water:

***What does
it mean
for Small
Businesses?***



Ayman ElTarabishy,
*President and CEO, ICSB, Deputy
Chair, Dept of Management, GWSB.*



Adapted from *The Great Wave off Kanagawa*, Katsushika Hokusai



In today's world, Micro, Small, and Medium Enterprises (MSMEs) are not simply operating in turbulent times; they are navigating what organizational theorist Peter Vaill termed "Permanent White Water." This evocative metaphor describes more than just disruption; it captures a relentless and accelerating environment of constant, unpredictable change. Once, such disruptions were episodic, perhaps occurring every few years. Today, their frequency has increased more than threefold. Once rare, shocks such as supply chain breakdowns, global pandemics, technological leaps, tariff wars, regulatory shifts, armed conflict, or climate-related events now arrive, often concurrently, in quick succession, leaving little time for recovery or reflection.

This is not a storm to be weathered or a wave to ride out. Permanent White Water is a continuous torrent, an unpredictable and unending cascade of currents, crosswinds, and submerged risks. Larger corporations, although affected, are often better equipped to manage or even capitalize on these conditions. They can absorb financial hits, deploy entire teams to scenario planning, or take dramatic actions to outmaneuver looming threats. Walmart, for instance, can "eat" the cost of sudden tariff increases to keep shelf prices steady and protect market share. Apple, facing impending trade restrictions, chartered entire fleets of cargo planes to fly iPhones out of China to the United States ahead of tariff deadlines.

But MSMEs cannot "eat" the tariffs. They cannot reroute global logistics overnight. They cannot charter airplanes or hedge billions in currency fluctuations. What they can do, however, is adapt in ways

that large firms often cannot. MSMEs are nimble. They are close to their customers, grounded in their communities, and able to pivot quickly, sometimes within a day, to a new product, model, or market niche. While they lack the muscle, they often make up for it in reflexes.

Yet, even agility has its limits when change becomes relentless. The pressure to constantly adapt without the buffers of scale or capital is unsustainable without support. That's why recognizing the Permanent White Water environment is so critical, not just for MSMEs themselves, but for policymakers, researchers, educators, and ecosystem builders who must now ask: **How do we support our smallest businesses when the waters are always choppy and rough?**

What Is Permanent White Water?

Coined in the 1990s, the concept of Permanent White Water originally described the business world's shift from predictable, stable conditions to an era where change is relentless, systemic, and often chaotic. Think of it like white-water rafting: you never know what's around the next bend, and standing still is not an option.

When Peter Vaill introduced the concept of Permanent White Water in the 1990s, it was a remarkable and forward-thinking insight, but it was not widely embraced or fully understood at the time. The business environment then still operated at what we now consider a relatively measured, linear pace. Industries evolved over years, sometimes decades, and the pace of change, while present, was neither relentless nor exponential. Nor was it sought,

even though change, especially in the form of innovation, could be advantageous.

The digital revolution was only just beginning. It wasn't until around 1991 that the National Science Foundation lifted its restrictions on the commercial use of the Internet. This pivotal moment quietly paved the way for the online economy we now take for granted. Only after that point could businesses begin to explore the internet for commercial purposes, launching websites, offering online services, and, eventually, engaging in e-commerce.

Even then, early adoption was slow. Most companies were still operating analogically, and digital transformation was a distant concern. The very infrastructure for disruption, such as high-speed internet, cloud computing, AI, or mobile platforms, did not yet exist. So, while Vaill's white water metaphor was prescient, it felt abstract for many in the business world. It described a future that few could yet see.

Fast forward to today, and the reality of Permanent White Water is no longer theoretical; it is lived, daily. What was once a conceptual warning has become a defining feature of modern business life, especially for MSMEs. The pace of change has accelerated so dramatically that even long-standing institutions struggle to keep up. The internet has gone from novelty to necessity, from dial-up to 5G, from static pages to AI-powered, real-time engagement. Running an MSME today is much like navigating a fast-moving river in an inflatable raft. The journey often takes place through unpredictable and turbulent waters.

What Vaill foresaw in the 1990s has become the water we all swim in. And for MSMEs, the currents have only grown stronger. What MSMEs are experiencing today are these relentless and ongoing challenges, turns, waves, and falls. Such as:

- **Technological disruption**
- **Geopolitical instability**
- **Climate change**
- **Shifting consumer expectations**
- **Global pandemics and public health crises**
- **AI-driven transformations in work and education**

For MSMEs, these forces aren't theoretical; they manifest in real terms, including supply chain shocks, sudden regulatory changes, rapid digitization needs, and labor market shifts.

Why MSMEs Must Adapt Differently

MSMEs represent over 90% of all businesses globally and provide around 70% of employment. Their survival is not only a local or sector-specific concern; it's a cornerstone of local, regional, and global economic stability. Yet in this era of Permanent White Water, the challenges facing MSMEs are profound and mounting.

- **Limited access to capital** makes it difficult for MSMEs to invest in risk mitigation, digital transformation, or sustained innovation. While large firms can weather financial turbulence or absorb short-term losses, MSMEs often operate with razor-thin margins.

- **With fewer human resources,** MSMEs rely heavily on multitasking. Employees often juggle multiple roles, spanning marketing, operations, and customer service. While this flexibility can be an asset, it usually leads to burnout and inefficiencies, especially in high-stress, rapidly changing environments.
- **A shortage of skilled employees** is becoming one of the most pressing and persistent barriers to the growth and adaptation of MSMEs. As technologies evolve rapidly, MSMEs struggle to attract and retain talent with the digital, managerial, or technical expertise required to keep pace. Unlike large firms, they often cannot offer competitive salaries, structured training programs, or long-term career pathways, putting them at a disadvantage in the talent market.
- **Information overload and digital skill gaps.** This exacerbates the problem even further. While the volume of data and the availability of digital tools for MSMEs have grown exponentially, many still lack the internal capacity to filter through the noise and extract meaningful insights. The core challenge is no longer just access to information, but the ability to interpret it effectively and act on it strategically. Compounding this issue are the rising costs associated with digital management systems and fluctuating currency values, which place additional strain on already limited resources.

Together, these constraints form a perfect storm for MSMEs trying to navigate constant change. Without skilled personnel, sufficient funding, or digital fluency, many find themselves operating reactively, putting out fires rather than building for the future.

To truly support MSMEs in this environment, we must recognize that survival is no longer just about opening a shop and selling goods; it's about building adaptive capacity, cultivating talent, and designing systems that allow small enterprises to thrive amidst the chaos.

Yet, despite these mounting challenges, MSMEs possess a distinct set of strengths that not only help them survive in the face of ongoing disruption but also often enable them to lead innovation at the edge of uncertainty. These strengths are not incidental. They are embedded in the very DNA of small and medium enterprises and offer critical strategic advantages in a world defined by Permanent White Water.

- **Flexibility:** Unlike large corporations encumbered by hierarchies and rigid processes, MSMEs are inherently agile. Their smaller size and flatter organizational structures enable faster decision-making and quicker responses to emerging threats or opportunities. Whether it's pivoting to a new business model, launching a new product line, or adjusting supply chains, MSMEs can adapt in days or weeks, whereas larger firms may take months. In the face of abrupt regulatory changes, consumer shifts, or economic shocks, this responsiveness can mean the difference between decline and growth.

- **Community Grounding:** MSMEs are more than economic entities; they are deeply ingrained in the social and cultural fabric of their communities. They serve not just as providers of goods and services, but as local employers, mentors, supporters of schools and charities, and anchors of neighborhood identity. This embeddedness allows them to sense shifts in customer sentiment early, engage directly with their base, and mobilize community support during times of crisis. In return, they are often seen as trusted and essential institutions, fostering resilience that multinational corporations struggle to replicate.
- **Purpose-Driven Leadership:** Many MSMEs are founded not just for profit, but from passion, vision, or a desire to serve. This sense of purpose acts as a stabilizing force in volatile conditions. Purpose-driven enterprises are often more committed to long-term sustainability, ethical practices, and the well-being of their employees. This clarity of mission not only inspires internal teams but also resonates with customers seeking meaning and values in their purchasing decisions. In turbulent times, shared sustainable purpose can be a powerful driver of cohesion and motivation.
- **Local Customer Loyalty:** In moments of uncertainty, customers tend to look inward, to their communities, their values, and the businesses that have always been a part of them. MSMEs, with their personal touch and local roots, often enjoy strong customer loyalty that can help cushion them

during broader market contractions. Conscious consumerism, where people deliberately choose to support local and independent businesses, has only grown stronger in recent years.

A compelling illustration of this dynamic is **Bookshop.org**, a platform purpose-built to empower independent bookstores to survive and thrive in the digital economy. Traditionally, small bookstores struggled to compete with online retail giants. But Bookshop.org flipped the script. It provides local booksellers with access to a national marketplace, modern e-commerce tools, and revenue-sharing arrangements that directly support their operations. Every purchase made through the platform contributes to the sustainability of small, local businesses, amplifying the value of community support through technology.

This model exemplifies how MSMEs, when supported by smart digital infrastructure and values-driven customers, can move faster and compete effectively, even against dominant players with vastly greater resources.

In a world of Permanent White Water, these traits, **agility, authenticity, embeddedness, and mission** are more than competitive edges. They are lifelines. They are what enable MSMEs not just to stay afloat, but to navigate the rapids with courage, creativity, and purpose.

The Skills MSMEs Need in Permanent White Water

To thrive in a permanent white water economy, MSMEs need to develop what we call adaptive capacity. This includes:

1. **Sensemaking Skills** – The ability to interpret complex signals and turn ambiguity into insight.
2. **Human-Centered Leadership** – Leading with empathy, empowerment, and enablement, the core of Human-Centered Entrepreneurship.
3. **Digital Fluency** – Using AI, data analytics, and platforms not just as tools, but as strategy enablers.
4. **Collaborative Networks** – Forming alliances with other MSMEs, universities, government agencies, and customers.
5. **Strategic Foresight** – Planning for multiple futures, not just probable outcomes.

Lessons from the Research Frontier

At the Journal of Small Business Management (JSBM) and the Journal of the International Council for Small Business (JICSB), we continue to explore the lived experience of MSMEs in Permanent White Water. Some emerging themes from our ongoing research include:

- **Resilience through Frugality:** Innovating under constraints often leads to breakthroughs. Many MSMEs are rediscovering frugal innovation.
- **Ethical Entrepreneurship:** In volatile times, transparency and trust become competitive advantages.

- **Embedded Adaptation:** MSMEs that integrate feedback loops from their communities adapt more effectively.

Conclusion: From White Water to Blue Ocean?

While Permanent White Water paints a picture of chaos, it also opens doors. The same churning waters that capsize the unprepared can propel the resilient forward. For MSMEs, the imperative is not to fear the white water, but to learn how to read it, navigate it, and harness its energy.

The call to action is clear: policymakers, educators, and researchers must rally around MSMEs with tools, frameworks, and ecosystems that recognize the new reality. We are no longer paddling toward stability; we are learning to live in motion.

In this world of Permanent White Water, MSMEs aren't just survivors. They are the most vital captains and navigators.

The Future of Small and Medium-Sized Enterprises (SMEs): Trends, Challenges, and Strategic Pathways



*Rico. J. Baldegger, Professor
Sawyer Business School, Suffolk University*

Abstract

Small and medium-sized enterprises (SMEs) play a crucial role in the global economy, representing over 90% of businesses and accounting for more than half of global employment. As the business landscape evolves due to technological advancements, changing market dynamics, and socio-environmental pressures, small and medium-sized enterprises (SMEs) must adapt to maintain long-term competitiveness and resilience. This contribution examines the outlook for SMEs, discussing emerging trends, key challenges, and strategic approaches that can support sustainable growth and innovation.

Introduction

Small and medium-sized enterprises (SMEs) drive economic growth, foster innovation, and create employment opportunities. However, they encounter distinct

challenges in adapting to rapid technological changes, globalization, and rising demands for sustainability. Understanding the trends and challenges shaping the future of small and medium-sized enterprises (SMEs) is crucial for policymakers, business leaders, and stakeholders seeking to foster a resilient and inclusive economic environment.

The 21st-century economy demands a shift from growth at any cost to balanced development, where entrepreneurship benefits markets, individuals, and the planet. Entrepreneurial ecosystems—comprising entrepreneurs, institutions, universities, capital providers, governments, and civil society—must be structured to facilitate value creation that is both economically viable and socially equitable while also being environmentally responsible. Ecosystems that flourish in the coming decades will prioritize sustainability, innovation, and human dignity

as core performance metrics rather than peripheral aspirations.

Emerging Trends and Key Challenges for the Next Decade

The primary challenges mentioned by SME executives include talent acquisition and retention (52.5% of respondents), growth and expansion (43.8%), funding and access to finance (35.7%), a non-supportive policy environment (21%), and the challenge of maintaining a strong culture along with a clear company purpose and values (20%) (OECD, 2021a).

Digital Transformation

Digital technologies, including artificial intelligence, cloud computing, and e-commerce platforms, are leveling the playing field for small and medium-sized enterprises (SMEs). Digitally advanced small and medium-sized enterprises (SMEs) are more productive, innovative, and more likely to export (Chen et al., 2025). However, many SMEs struggle with digital adoption due to limited resources and skills. The OECD highlights that while SMEs typically digitize general administration or marketing functions first, the gaps widen as technologies grow more sophisticated, such as data analytics or enterprise resource planning systems (OECD, 2021a, 2024).

The challenges for SMEs include barriers to technological adoption and cybersecurity risks. *Technological Adoption Barriers:* Limited expertise and high initial costs prevent many small firms from fully integrating digital solutions. The OECD highlights that SMEs lag behind larger firms in adopting digital tools, with significant gaps in combining business

processes and advanced technologies (OECD, 2021b, 2025).

Cybersecurity Risks: The increased digitalization of SMEs exposes them to numerous cyber threats, many of which they are unprepared to address. The OECD emphasizes that SMEs often invest less in digital security and have a limited understanding of the consequences of these threats (OECD, 2021b).

Open Innovation

Open innovation practices—collaborating with external stakeholders such as universities, larger corporations, start-ups, or innovation hubs—are increasingly being adopted by SMEs to supplement their limited R&D resources and accelerate product development. Digitalization supports open sourcing and open innovation, with large firms contributing to the transformation of business ecosystems through business accelerators and innovation labs that provide start-ups and innovative SMEs with access to resources and markets (OECD, 2019). The question is how SMEs can function within an open innovation system and play a crucial role in it.

Green Transition and Sustainability

As regulatory and consumer pressure for sustainable business increases, SMEs must adopt environmental, social, and governance (ESG) practices. Access to green financing and involvement in circular economy initiatives will be key drivers of competitiveness. The OECD notes that SMEs play a crucial role in transitioning towards more sustainable economies and

societies, given their significant environmental footprint and potential to develop and implement eco-innovations and greener business practices (OECD, 2022).

SMEs often lack the competence to manage sustainability; however, this competence can be sourced externally and significantly enhance innovation (World Economic Forum 2021). The big question is, what should we do or how can we improve to better introduce sustainable models into SMEs and, through these SMEs, to the markets in which they operate?

Changing Workforce Dynamics

Flexible work models, upskilling needs, and the entry of Gen Z into the workforce are shifting SME talent strategies. Businesses must cultivate digital literacy and inclusive work environments to attract and retain top talent. The OECD emphasizes that continuous upskilling and re-skilling are essential in a rapidly evolving digital landscape, particularly with the rise of data-driven business models (OECD, 2021b). Many highly talented individuals are not working in SMEs and prefer high-growth start-ups, larger corporations, or public organizations. Therefore, the challenge is to create jobs in SMEs to engage the younger generation.

Market Uncertainty and Global Supply Chain Resilience

The uncertainty of markets, characterized by rapidly changing regulations, trade dynamics, and customer expectations, requires continuous strategic realignment. SMEs, which are often part of the global value chain and frequently serve as sup-

pliers, tend to have less independence in their strategic choices. Typically, their international strategy aligns closely with that of larger corporations, and SMEs follow their lead in adopting a global approach.

Recent global disruptions, such as the COVID-19 pandemic and geopolitical tensions (e.g., the Ukraine war and the Gaza conflict), have highlighted the need for more resilient and localized supply chains. SMEs are reevaluating their dependencies and investing in agility and risk management to enhance their resilience. Many SMEs reported that before experiencing disruptions, they had limited formal risk management frameworks in place. However, exposure to crises prompted a shift toward a more structured approach to identifying and mitigating risks.

Access to Finance

Despite support measures, many SMEs encounter funding gaps, particularly in innovation and digital transition projects. The OECD notes that SMEs are disproportionately impacted by market failures, trade barriers, policy inefficiencies, and the quality of institutions (OECD, 2019).

The World Bank emphasizes the crucial role of SMEs in global economic development, noting that they comprise approximately 90% of businesses and account for more than 50% of employment worldwide. The report also discusses the significant financing gap faced by SMEs, estimated at \$5.2 trillion annually in developing countries (World Bank 2019).

Strategic Pathways for Future

Success

Policymakers, investors, educators, and community leaders must unite to redesign entrepreneurship support systems so that profit, people, and the planet are in harmony. By reimagining ecosystems with a focus on sustainability, innovation, and humanity, we can create economies that better serve everyone (ILO, 2021). Governments play a crucial role in nurturing SME-friendly ecosystems through tax incentives, digital infrastructure, and innovation grants. The OECD emphasizes that policymakers play a vital role in helping SMEs adapt their culture and processes to the digital world.

Strengthening the Integration of SMEs in Entrepreneurial Ecosystems

Building networks with corporations, academia, and public institutions can provide SMEs access to knowledge, markets, and innovative resources. Digitalization supports open sourcing and open innovation, with large firms contributing to the transformation of business ecosystems through business accelerators and innovation labs (OECD, 2019).

The concept of an entrepreneurial ecosystem has gained significant traction in recent years as a framework for understanding the spatial and institutional configurations that support entrepreneurial activity (Isenberg, 2010; Stam, 2015). Traditionally, studies on entrepreneurship have emphasized quantitative indicators, such as startup density, access to venture capital, and the performance of high-growth firms. However, emerging global challenges—such as the climate crisis, social inequality, and digital divides—re-

quire a more holistic and ethical approach to entrepreneurship.

Entrepreneurial ecosystems have emerged as strategic frameworks for driving economic development, fostering innovation, and facilitating societal transformation. As global challenges such as inequality, climate change, and technological disruption intensify, there is a growing need to reframe energy and environmental systems as purpose-driven, human-centered, and resilient. Therefore, a forward-thinking approach to entrepreneurial ecosystems that embeds environmental, social, and ethical values into their core structure is essential.

On the one hand, interdependent networks of actors, institutions, and cultural norms foster the creation of new ventures (Spigel, 2017). Classical models (e.g., Isenberg, 2010; Acs et al., 2017) stress tangible inputs—such as capital, talent, markets, and infrastructure—while more recent frameworks (Stam, 2021) introduce layered attributes, including social capital, support systems, and governance. However, critiques have highlighted the under-theorization of non-economic values (Cohen, 2006; Shwetz et al., 2019), such as sustainability, social impact, and equity. Entrepreneurial ecosystems have transformative potential—not only to accelerate economic growth but to do so with integrity, inclusion, and long-term value.

The future demands ecosystems that support purposeful entrepreneurs, regenerative business models, and inclusive innovation. Entrepreneurial ecosystems designed to foster humane ventures require institutional alignment with values of fairness, partici-

pation, and impact measurement that extend beyond GDP. Furthermore, women are both underrepresented and underserved in entrepreneurial ecosystems (Hayter, 2018; Audretsch, 2021). Barriers include limited access to funding, inadequate mentorship, and socio-cultural constraints. However, women entrepreneurs are more likely to lead in sectors related to education, health, sustainability, and social innovation (Abazi-Alili et al., 2024). Their inclusion enhances diversity, system adaptability, and community relevance (Ferreira et al., 2023).

Fostering a Culture of Continuous Learning and Humane Leadership

Lifelong learning initiatives and entrepreneurial education are essential for future-proofing small and medium-sized enterprises (SMEs) against technological and market shifts. Continuous upskilling and reskilling are vital in a rapidly evolving digital landscape (Percy et al., 2018). Therefore, prioritizing people and adopting a humane entrepreneurial approach is necessary. Humane entrepreneurship is founded on principles of equity, purpose, well-being, and human rights. The concept of humane entrepreneurship challenges the traditional profit-maximization paradigm. Grounded in stakeholder theory and human development approaches (Sen, 1999), humane entrepreneurship highlights dignity, inclusion, ethics, and societal welfare (Guerreiro & Siegel, 2024).

SMEs need to encourage the integration of young people into their environments; particularly ambitious young talents play a key role in this group. SMEs can and must be mobilized by these young talents, as they are capable of driving sustainability and prosperity. However, the

relationship between young talents and SMEs is often overlooked, even though SMEs could act as a training ground or playground for young talents to gain managerial and entrepreneurial experiences or to view SMEs as a future career step. The connection between large companies and start-ups regarding technology scanning and innovation processes is not clearly defined. We do not focus enough on how SMEs can benefit from young talents – and vice versa – in promoting their innovation processes (Hume et al., 2021).

Ambitious young talents must identify challenging projects within SMEs, and projects related to Sustainability and Technology could play a crucial role here. Alternatively, they can pursue their dream of owning a company by becoming a future owner, entrepreneur, CEO of an SME, or successor entrepreneur. To stray slightly from the main point, such a focus on sustainability is likely also to enhance diversity, as it appeals to women, among others.

Embracing Agile, Scalable, and Sustainable Business Models

From subscription-based services to remote operations, agility in business model design enables small and medium-sized enterprises (SMEs) to respond swiftly to market changes (Leung, 2007). Innovation is often narrowly defined as technological advancement. However, inclusive ecosystems must promote institutional and social innovation, such as new governance models, public-private partnerships, and community-driven solutions (Audretsch et al., 2019; Guerrero & Siegel, 2024). Innovation becomes not only a market function but also a mechanism of systemic change. For SMEs, it emphasizes devel-

opening innovation capabilities for sustainable business models and fostering entire markets that can implement the UN's 17 Sustainable Development Goals (SDGs).

Focusing on scalable business models with a long-term perspective is essential, even though it can be a challenging task. This involves not only innovative business models but also those that can scale, support successor entrepreneurs in existing SMEs, and prioritize impact over technology.

The European Commission is launching a strategy to support start-ups and scale-ups, focusing on enhancing access to finance, markets, and talent (Press release, 28 May 2025). The plan aims to create an innovation-friendly environment and bridge the innovation gap within the European Union. It emphasizes assisting innovators, founders, and investors in choosing Europe by improving conditions for start-ups and scale-ups, allowing them to thrive. Key actions are centered on promoting innovation-friendly regulation, enhancing access to finance, accelerating market uptake and expansion, attracting and retaining top talent, and facilitating access to infrastructure, networks, and services.

Navigating an Open System and Cultivating Technology Intelligence

Most small to medium-sized enterprises (SMEs) effectively conduct research and development (R&D). However, much of the R&D is performed internally, and SMEs are generally hesitant to adopt open innovation concepts. If these SMEs were encouraged to share their innovations beyond their boundaries, they could enhance their ideas and competen-

cies through contributions from external sources. Open Innovation is an innovation strategy that has been widely debated in management research over the past two decades (Chesbrough, 2003; Gassmann, 2006; West & Gallagher, 2006). In contrast to the old paradigm, which assumes that innovations should be developed within a company's boundaries, the Open Innovation paradigm embraces external ideas and pathways to market (Chesbrough, 2003, 2006). It emphasizes the importance of knowledge and information flows across a firm's boundaries, both inward and outward. Through these flows, companies can utilize external knowledge to create new offerings and leverage internal expertise by collaborating with outside partners within new business models. Thus, it allows firms to explore more opportunities through these inward and outward flows, as globalization and information technology have facilitated the exchange of information sources worldwide (Chesbrough, 2003).

Open innovation plays a crucial role in technology intelligence, enabling the development, capture, and delivery of intelligence. On the one hand, it discusses how companies can identify knowledge; on the other hand, it explores how knowledge can be transferred within firms. Technology intelligence maps a process from the input, which includes technology gaps and needs, to the output, which is intelligence for decision-makers within a firm. Furthermore, empirical evidence demonstrates that companies implementing Open Innovation necessitate the establishment of extensive networks of inter-organizational relationships with numerous external parties, including research institutions and universities (Perkmann & Walsh, 2007), users (von Hippel, 2005),

and suppliers (Chiaroni et al., 2011) to access sources of innovation: technology scouting, listening posts, crowdsourcing, user innovation, industry-research collaboration, and start-ups to tap into sources of innovation. Technology Intelligence is a significant organizational activity that keeps employees well-informed about technological developments. To enhance the company's ability to perform technology innovation successfully, technology scouting practices and listening posts in innovation clusters are encouraged (Dang et al., 2010).

Capturing and delivering technological data is defined by the concept of technology intelligence. The purpose is to integrate this process into the firm's strategy to enhance knowledge of technological threats and opportunities (Kerr et al., 2006). By establishing effective technology intelligence processes, firms can quickly identify and respond to radical trends (Lichtenthaler & Ernst, 2007). Technology intelligence illustrates how companies capture and process information to provide actionable insights. It is facilitated by a conceptual process that encompasses all the necessary steps to operate a technology intelligence system. This process is iterative and encompasses various phases. The firm's employees assigned to these tasks document their findings and disseminate the knowledge throughout the organization to assist decision-makers (Kerr et al., 2006; Mortara et al., 2009).

Architecting Adaptive Organizations: Strategic Leadership and Self-Organizing Systems

To address these future challenges, decision-makers—CEOs, board members,

founders, and managers—in small and medium-sized enterprises (SMEs) require a holistic management approach. Adopting a comprehensive strategy for controlled interventions by entrepreneurs and managers is essential, even though the core strategy of cybernetic management prioritizes self-regulation and self-organization. This is because self-regulation and self-organization are embedded within the structures of natural systems, unlike those of technical or social systems. Enterprises are designed to manage and regulate themselves whenever possible. The principles of self-organization and self-regulation should be applied in practical situations. Other steering and regulatory mechanisms should be utilized if these principles cannot be implemented. In this context, the leadership role in SMEs must be clearly defined. From a holistic perspective, handling complex management situations requires a system of problem-solving processes, the design, direction, and development of the enterprise as a social system, and the constant consideration of environmental relationships, as well as management as social functions (Baldegger 2025).

Leading an SME into the future requires the ability to efficiently manage a system of problem-solving processes with the appropriate tools and resources. As in any profession, using the right tools is critical for success. Decision-makers in SMEs must utilize a diverse range of management techniques and tools across various technical and functional areas in multiple forms. Management techniques support corporate management's problem-solving efforts and help navigate the complex system. A comprehensive set of methods is consistently provided by finance and accounting. Furthermore, there are many



tools, including several newly developed ones, that go beyond the traditional accounting approach.

Conclusion

The future of SMEs depends on their ability to adapt and innovate in a rapidly changing global landscape. Digitalization, sustainability, and collaborative innovation will form the foundation for achieving a competitive advantage. Although the road ahead presents challenges, a proactive strategy, supportive ecosystems, and a resilient mindset can help ensure that SMEs remain vital engines of inclusive economic growth. The future relies on their capacity to generate economic value, tackle systemic problems, and operate within planetary boundaries while also incorporating diverse voices. By re-centering ecosystems around sustainability, humane values, and gender equity, we can cultivate entrepreneurial landscapes that foster both economic vitality and social progress.

Innovation as a systemic driver is essential. However, it must extend beyond product development to include both technological advancements and the transformation of mindsets, processes, and social norms, thus creating a lasting impact. Therefore, only entrepreneurial leaders with a systems mindset, strategic thinking, and humane values can navigate the complexities of a VUCA world.

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A Preview of the 2025 SME Competitiveness Outlook: A digital transformation roadmap



International
Trade
Centre

*ITC contribution to
ICSB Annual Report*

In a world still shaken from the COVID-19 pandemic, and with crises from climate change to conflicts becoming more acute, the calls for new solutions to some of society's most entrenched challenges are growing stronger in both frequency and fervour. As governments, institutions, civil society, academics and businesses look for answers, many are turning to the current wave of digital transformation as a promising way to emerge from a crisis-driven, and crisis-ridden, period.

The international community concurs. When it was adopted by United Nations member states in 2015, the 2030 Agenda for Sustainable Development recognized the value that the spread of information and communication technology (ICT) and global interconnectedness could have in delivering on its vision for a fairer, more inclusive and more connected society.ⁱ

More recently, the Pact for the Future and Global Digital Compact adopted by United Nations member states in September 2024 made clear that these technologies are key for closing the gap between where the world stands on the Sustainable Development Goals (SDGs) and where these efforts must go in the coming years.ⁱⁱ

But this wave of digital transformation is unlike any technological revolution before it – and without a concerted effort to make sure it benefits everyone, it also runs the risk of making many of today's environmental, social and economic problems even harder to solve. This is a challenge, but also an opportunity – especially for the micro, small and medium-sized enterprises (MSMEs) that drive the global economy.

For companies looking at what the digital transformation could mean for them, the

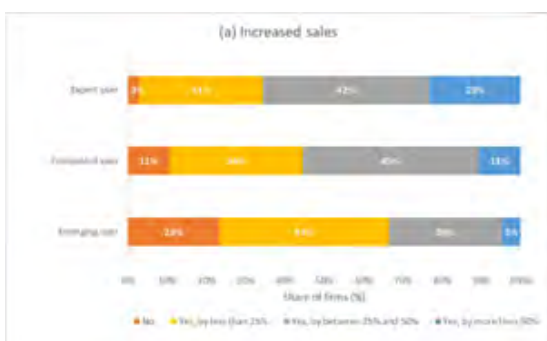
potential benefits are legion. Notably, these **digital technologies hold the key to boosting firm productivity**, which can help reignite economic growth, increase living standards and achieve many of the SDGs. These technologies are already transforming how businesses interact with one another, along with their workers and consumers.

Digital technologies matter for firm productivity

Digital technologies benefit almost all companies. More than 80% of firms that use digital technologies report higher sales and lower costs, a new ITC survey of some 7,400 companies in 78 countries shows.ⁱⁱⁱ

Those that use technologies more extensively benefit the most. Firms that use digital technologies intensively, which ITC dubbed expert users, were almost five times more likely to report a boost in sales by more than 50% than those with less extensive use, classified as emerging users. Similarly, 12% of expert users reported reduced costs by more than 50%, compared to 1% of emerging users.

Expert users, greater benefits



Source: ITC, based on ITC Digital Transformation Survey.^{iv}

Expert, competent and emerging users of digital technologies: How do companies fare?

To assess whether, how and to what ends firms use digital technologies, ITC surveyed 7,402 firms in 78 countries. These companies were assigned a score under the ITC Enterprise Digital Transformation Index (e-DTI) and classified as either expert, competent or emerging users of digital technologies. This new metric assesses how firms apply digital technologies, providing useful feedback that decision makers can use when determining what actions to take.

- Expert users of digital technologies have the highest e-DTI values. Nearly all expert users have a comprehensive digital strategy and are always updated on the latest trends in digital technologies. Many allocate more than 25% of their operational expenses to digital solutions and use computers with greater computation power and fixed broadband. These companies tend to use digital technologies for advanced processes.

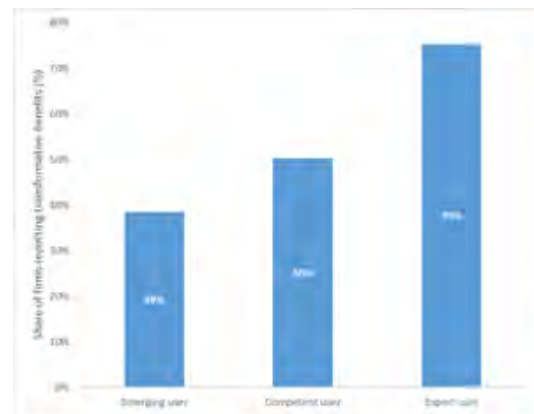
- Competent users fall within the middle tertile of the e-DTI distribution. They tend to have a digital strategy and a majority is always updated on digital technology developments. They spend slightly more on digital tools, but usually less than 25% of their operational expenses, and make greater use of personal computers or tablets than emerging users. A majority deploys digital solutions for more advanced processes.
- Finally, emerging users of digital technologies are those scoring within the lowest tertile of the e-DTI across countries. Most of these companies lack a digital strategy and are not updated on new developments in digital technology. They tend to spend very little on digital solutions, relying primarily on smartphones and mobile broadband. As a result, digital tools are mostly used for basic purposes such as communication.

The advantages of adopting digital technology go beyond productivity gains. On the one hand, emerging users reported mostly operational gains, such as improved efficiency and timeliness of production and delivery, as well as communication-related improvements, including access to new customers.

On the other hand, three out of four expert users reported that digital technology helped transform their businesses, in addition to improving operations and communications. They have more opportunities for innovation and have improved the quality of their products and

services, which often translates into higher prices. Some of these ‘transformative’ benefits tend to be associated with cutting-edge technologies, such as AI, cloud computing, blockchain and three-dimensional (3D) printing.

Expert users, transformative benefits



Source: ITC, based on ITC Digital Transformation Survey.^v

Artificial intelligence helps firms optimize their production processes and become more efficient. This enables them to focus on areas that add the most business value, further boosting productivity. AI-powered predictive analytics allow for improved demand forecasting, production planning, resource allocation and logistics.^{vi} Similarly, data-driven insights enable firms to better manage financial and other risks.

Cloud computing allows small businesses to scale. Through the cloud, SMEs can access additional processing power, storage capacity and software based on their needs, with much lower upfront investments and regular maintenance expenses.^{vii} Businesses with limited resources can then adapt quickly to market demands and compete

more effectively in the digital economy. ^{viii}

Blockchain technology reduces supply chain risk, increasing visibility and boosting trust across a complex ecosystem.^{ix} Distributed ledger technology and blockchain can help SMEs integrate into supply chains, become more efficient by eliminating errors, increasing transparency, reducing the need for physical documents and ensuring consistency across information sources.

Three-dimensional printing can help level the playing field between small and large companies with cheaper, quicker and more accurate manufacturing solutions compared to traditional methods. ^x By allowing rapid prototyping and manufacturing of small-volume products and components, 3D printing minimizes set-up costs and encourages innovation.

Many technological innovations, including extended reality, the Internet of Things and Big Data, enable businesses to innovate and transform their operations by enhancing efficiency, scalability and customization. They also open new avenues for value creation and competitive advantage in the digital era. The four technologies highlighted here are those that are more accessible to and used by small businesses.

Need and location influence whether firms adopt digital technologies

Several factors – including business need and the environment in which firms operate – determine whether companies

adopt cutting-edge technologies and become expert users.

Business needs vary across sectors and business lines. The digital needs of an agricultural firm are very different from those of a company in the digital services sector, for instance. One in five agricultural firms do not use the internet at all, compared with less than one in 10 in the connected services sector.^{xi} Most agricultural companies are emerging users of digital technologies, while connected services companies are largely expert users.

Businesses also adopt and use digital technologies when the countries where they operate are ‘digitally ready’.

High, medium and low digital readiness: How do countries fare?

To assess how far countries are in the process of digital transformation, the Network Readiness Index (NRI), developed by the Portulans Institute is used. The NRI provides disaggregated indicators for the most fundamental dimensions – or enablers – of digital readiness at the country level: access, individuals and regulations.

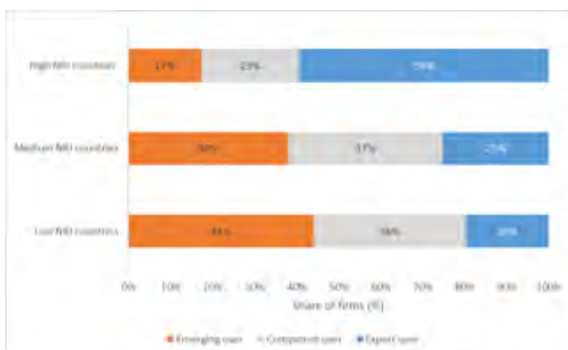
‘Access’ evaluates the technological infrastructure that a country needs to engage in the global economy. ‘Individuals’ captures the proficiency, inclusivity and adeptness of a nation’s population and entities in using technological assets. ‘Regulations’ assesses whether the right structures are in place to invigorate the networked economy and how far these structures reach.

Based on their NRI scores, ITC categorized countries into three groups: high, medium and low digital readiness.

- Countries with 'high digital readiness' have enablers that place them at a more advanced stage of digital transformation.
- Countries with 'medium digital readiness' have an adequate provision of critical enablers, or at least some of them.
- Finally, countries with 'low digital readiness' have low levels of critical enablers and are lagging behind in their digital transformation.

The higher the country's digital readiness, the higher the level of digital transformation of firms. In countries with high digital readiness, nearly 60% of firms are expert users – three times more than in countries that are less ready.

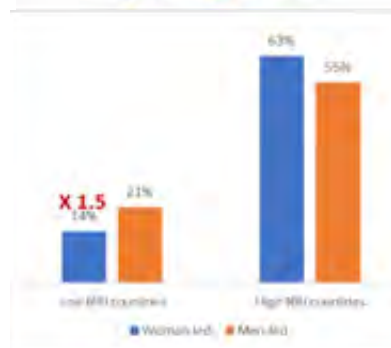
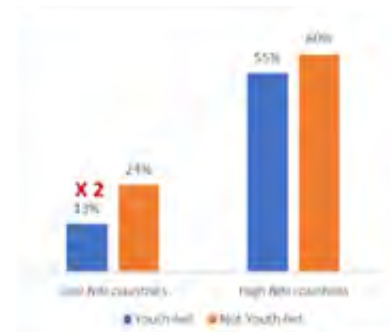
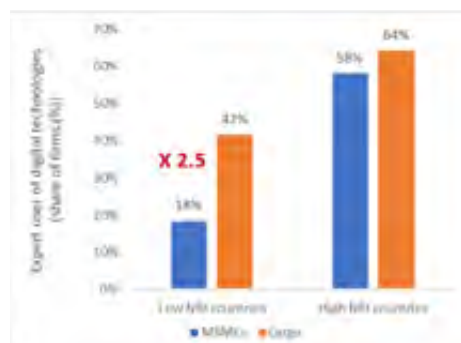
Digitally ready countries have three times more expert users



Source: ITC, based on ITC Digital Transformation Survey and NRI from Portulans Institute.^{xii}

Firms, especially the most vulnerable, struggle when operating in countries where digital enablers are lacking. In these contexts, large firms are 2.5 times more likely to be expert users than small firms. Similarly, non-youth-led businesses are twice as likely to be expert users than those led by young people, while companies led by men are 1.5 times more likely to be experts than those led by women.

Gaps grow wide in digitally unsupportive environments



Source: ITC, based on ITC Digital Transformation Survey and NRI from Portulans Institute.^{xiii}

The message is clear: **size and ownership matter, but mostly in unsupportive environments.** Small businesses in countries where enablers are in place are as well positioned as their large counterparts to adopt new technologies. In similar fashion, the gap between youth- and non-youth-led companies is virtually non-existent in countries with high digital readiness. Strikingly, the share of women-led firms at the expert level is higher than that of men-led ones in countries that are digitally ready.

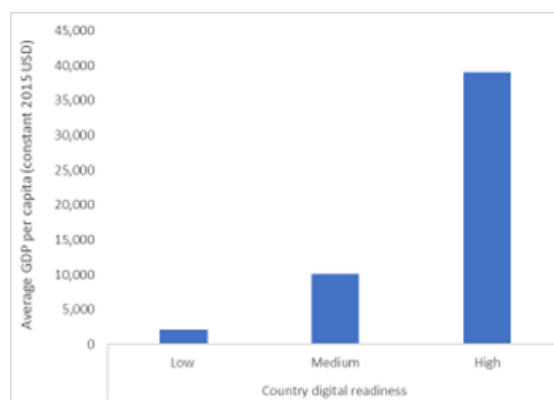
The issue is how to provide an enabling environment that spurs digital transformation.

Enabling the environment for digital transformation

To boost the digital transformation of companies and economies, countries must be digitally ready. They must ensure access to reliable digital infrastructure, invest in skills development and provide firms with a supportive regulatory framework.

A country's digital readiness is largely correlated with income. High-income economies are surfing the peak of the digital wave while others are paddling – and low-income economies are stuck in the sand. A country's level of income partially determines how much it can provide the digital enablers that firms need for their digital transformation.

Digital readiness and income are related



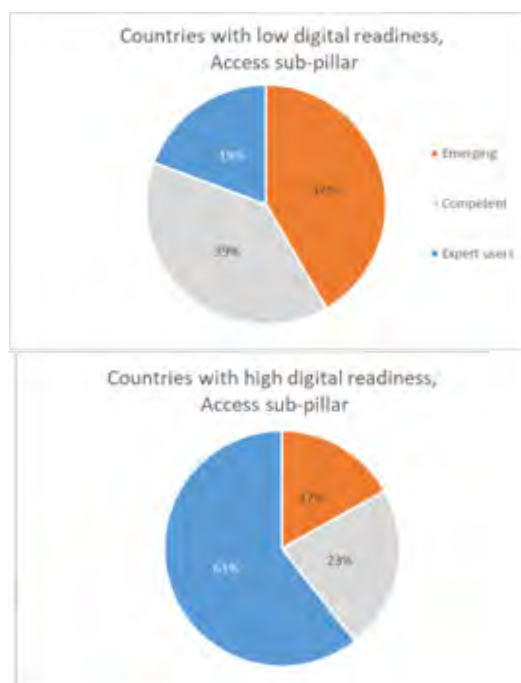
Source: ITC, based on World Bank World Development Indicators and NRI from Portulans Institute.^{xiv}

The concentration of technology in high- and upper middle-income countries could limit the benefits of digital transformation. An estimated 2.6 billion people, representing one-third of the global population, were still offline in 2023 and unable to participate in the digital economy.^{xv} Low-income countries lag far behind in terms of internet use, with only 27% of their populations online on average, compared to 93% in high-income countries.^{xvi}

Digital infrastructure enables internet access, connecting individuals, businesses and governments to the global digital economy. Digital access fundamentally depends on electricity and connectivity infrastructure and services, as well as internet-enabled devices and software, which must be reliable, affordable and of high-quality. Despite progress in electrification and internet use, divides persist in both, across and within countries, limiting the ability of firms to digitally transform.

In countries that provide access to high-speed, affordable internet and internet-enabled devices, firms are further along the digital transformation path. Specifically, in countries that score at the top of the NRI's 'access' sub-pillar, 61% of firms were classified as expert digital users, contrasting sharply with a mere 19% in low-scoring countries.

More expert users with advanced digital infrastructure

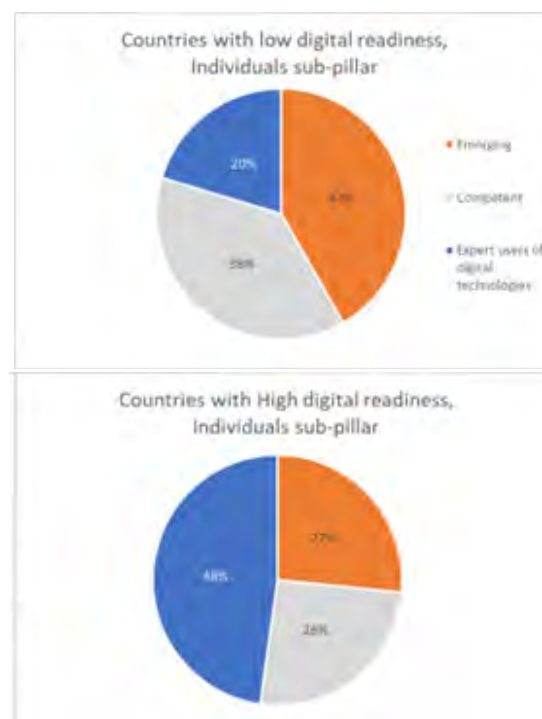


Source: ITC, based on ITC Digital Transformation Survey and NRI from Portulans Institute.^{xvii}

Digital infrastructure is necessary, but not enough. **Unless individuals have the skills required to take advantage of access, connectivity is meaningless.** Nearly half of businesses in countries that score high in the NRI's 'individuals' sub-pillar (an indicator of general educational quality) are expert digital users, contrasting sharply with just 20% in countries that score low in the same

sub-pillar.

Expert users flourish in countries with digital skills



Source: ITC, based on ITC Digital Transformation Survey and NRI from Portulans Institute.^{xviii}

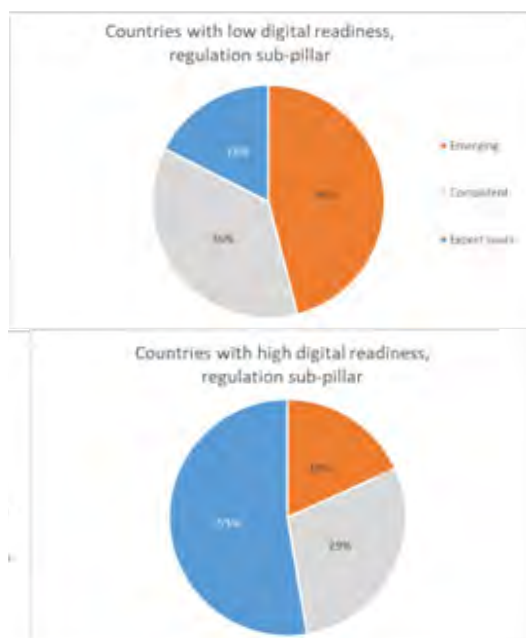
The share of digitally skilled individuals is particularly important for small businesses.^{xix} Just as firms differ by size, productivity and degree of digital transformation, so too do they differ in their ability to pay high wages. When digital skills are widespread in a population, small businesses can more easily hire people with those skills without paying a large wage premium, which they often cannot afford.

Finally, **regulations are at the core of digital transformation.** Regulations determine whether the right environment is in place for digital infrastructure and skills

to develop, or if these will fail to emerge. What regulations are in place also affects whether firms can attract the necessary investments and digital talent, if they can engage effectively in digital services markets and how they will interact with other firms locally and internationally in the digital economy.

In countries with a more digitally supportive regulatory ecosystem, as measured by the NRI's 'regulations' sub-pillar, 53% of firms are expert digital users. This stands in sharp contrast with 18% in countries displaying low regulatory readiness.

Expert users thrive under good regulation



Source: ITC, based on ITC Digital Transformation Survey and NRI from the Portulans Institute.^{xx}

Regulating the digital economy presents unique challenges that require great collaboration and agility. In other words, **governments must think not just about 'what' to regulate, but 'how' to regulate,**

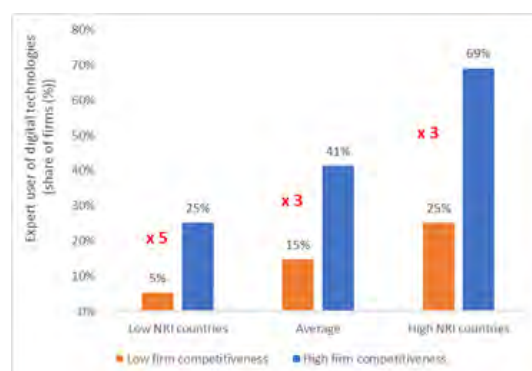
including how to ensure interoperability across sectors and borders.

Making up for what the environment lacks

These key enablers are critical for digital transformation to take place. Still, companies do not sit idle waiting for the environment to improve. **Firms can and must act to make up – at least partially – for what the environment lacks.**

In general, pre-existing **competitiveness** factors strongly influence a firm's **digital transformation**, especially in countries with low digital readiness. Just 5% of the least competitive companies, as measured by ITC's competitiveness framework, are classified as expert users in countries with low levels of digital readiness. However, if they act to increase their competitiveness, they raise by fivefold their chances of becoming experts. In other words, even in unconducive digital environments, one in four companies manages to be an expert user – but only if it is highly competitive.

Competitive firms, expert users



Source: ITC calculations, based on ITC SME Competitiveness and Digital Transformation Surveys of 1210 firms in Cambodia, Colombia, Philippines and Togo.^{xxi}

Defining competitiveness

There is a long-standing tradition of defining and measuring competitiveness at the country level. However, such measures are of limited relevance for understanding business dynamics. Competitiveness is also not just a country feature, but a firm-level phenomenon.

ITC defines competitiveness as ‘the demonstrated ability to design, produce and commercialize an offer that fully, uniquely and continuously fulfils the needs of targeted market segments’. The firms connect with and draw resources from the business environment and achieve a sustainable return on the resources they use.

Based on this definition, ITC has developed an analytical framework to understand firm competitiveness and how it improves over time.^{xix} The framework is built around the three pillars of compete, connect and change. It also operates on three levels: firm capabilities, the business ecosystem and the national environment. More details are available in International Trade Centre (ITC) *SME Competitiveness Outlook 2025*.

The actions that make a winner in a challenging environment fall into three camps. Firms that are expert users:

1. **Improve their financial management**, helping them afford the higher cost of internet connectivity where digital infrastructure, the first enabler, is limited or lacking.

2. **Identify and train staff**, which helps firms find and upgrade talent in labour markets with a limited supply of digital skills, the second enabler.

3. **Engage with strong business support organizations (BSOs)**, which help firms foster connections and obtain the information and tools they need to navigate complex regulatory ecosystems. BSOs can also help shape regulations, the third enabler.

A plan to leave no one behind

The Digital Transformation Action Plan proposed by ITC outlines key actions for making the digital transformation of firms possible. It sets out what must happen at the international and country levels – closing infrastructure, skills and regulatory gaps – and the steps smaller firms can take themselves, even when operating in challenging environments. In parallel, the Enterprise Digital Transformation Index can help assess firms’ digital transformation, providing useful feedback that decision makers can use when determining what actions to take next.

The action plan is not prescriptive: countries face different circumstances and have different needs. It instead shows what has worked well under specific conditions to inspire ideas for closing the digital gap. Not all actions apply everywhere and priorities must correspond with economies’ state of digital readiness. All measures must be underpinned by sustainability, inclusivity and ethical considerations, so that benefits outweigh risks and no one is left behind.

While every country must decide what the right path is, it is clear that inaction is not an option in this increasingly digitally driven world. Otherwise, the digital economy risks becoming even more fragmented and its opportunities limited to those who can afford, access and make use of it. This means that not only might economic disparities grow, but social ones too, particularly for women and youth.

Lastly, concerns are mounting that some of the same digital technologies that can help firms and individuals lower their carbon footprint are also highly energy-, water- and resource-intensive – which could counteract many of their environmental benefits and create lasting environmental harm, unless steps are taken right now to improve them.

Digital Transformation Action Plan

Ensure the sustainable, inclusive and ethical use of digital technologies		Public sector	Private sector	International community	Small businesses
	Infrastructure	Increase availability and affordability through direct investment, partnerships and (fiscal and non-fiscal) incentives	Develop innovative market-based solutions and socially responsible initiatives	Offer concessional financing and support data collection efforts to pinpoint gaps and needs	Improve financial management and access to finance
	Skills	Integrate digital skills in educational curricula, allow entry of foreign talent and strengthen social safety nets	Share information on demanded skills, provide training and transfer know-how	Support educational and training institutions to upgrade curricula	Professionalize recruitment and provide training to improve skills matching
	Regulations	Update/build the regulatory toolbox for the digital age and ensure cross-border interoperability	Engage in digital strategy-, policy- and rule-making, as well as implementation	Champion and facilitate regulatory alignment and cross-border governance mechanisms	Engage with BSOs to obtain information and advocate for SME-friendly rules

Source: ITC.



The SME Competitiveness Outlook 2025

The ITC *SME Competitiveness Outlook 2025* sets out what a digital transformation looks like for small and medium-sized enterprises. Featuring insights from the ITC new Enterprise Digital Transformation Index, a metric that assesses how firms are adopting new technologies, it shows what challenges or circumstances may hold these businesses back in an increasingly digital age.

The report also identifies the key enablers for firms to digitally transform—infrastructure, skills and regulations – while setting out what they can do when these enablers are absent.

The report unveils a Digital Transformation Action Plan at the national and international levels. This roadmap provides a menu of options that decision makers can adopt depending on a country's needs and circumstances – and reflects the key elements that must be in place to ensure that firms can benefit fully from the digital economy, and that no one is left behind.

The SME Competitiveness Outlook is scheduled to be released in July 2025 during the first ever Global SME Ministerial, and will be available for free download at www.intracen.org.

Endnotes

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Contributions to the financial inclusion of SMEs and Entrepreneurs



*Rubén Ascúa and Hernán Vigier,
Universidad Nacional de Rafaela*

Abstract

The research activities carried out on the topic of financial inclusion for SMEs and entrepreneurs have been a distinctive feature that has significantly shaped the work of research groups at the Universidad Nacional de Rafaela (UNRaf) and the Universidad Nacional del Sur (UNS) – Universidad Provincial del Sudoeste (UPSOU), Argentina. This identity has been forged through publications, participation in conferences, thesis and dissertation supervision, and lectures, placing both groups at the forefront of this issue in Argentina. These groups have also engaged in extensive collaborative efforts, including a twin survey conducted simultaneously in Rafaela and Bahía Blanca, Argentina. This article presents a compilation of key contributions from these research groups, which reflect the outcomes and conclusions of their research activities and provide a broad overview

of the main issues surrounding financial inclusion for SMEs and entrepreneurs. Overall, the contributions presented here address, from a local market perspective, the various problems identified in financial markets that affect and constrain the access to and availability of financing for SMEs and entrepreneurs. All contributions are associated with members of the two research groups. The selected content seeks to provide a comprehensive overview of the topics related to SME and entrepreneurial financing. In this regard, this review aims to summarize the issues discussed in each contribution.

Introduction

In an ideal scenario, financial markets would operate under the terms proposed by Fisher (1930), where investment and financing decisions are separated, allowing individuals, each in their specific role, to make savings decisions based on

their preferences, and company

managers to make straightforward decisions by investing in profitable projects; all taking place within a dynamic equilibrium. This is only possible if the assumptions of perfect markets are met, particularly the boldest hypothesis of perfect information—characterized by being symmetric and exogenous. It is symmetric because all individuals possess the same information about each economic event and exogenous because no one can gain an advantage from access to information.

However, in reality, informational phenomena deviate significantly from the assumptions of perfect market theory. Asymmetric information prevails across all phases of financial markets, dominating them. Adverse selection and moral hazard influence financial contracts both ex-ante and ex-post, affecting loan volumes and interest rates and necessitating the use of signals to mitigate their adverse effects. The described situation results in incomplete markets, leading to lower or even non-existent volumes and higher interest rates than would be expected in a balanced market. Conversely, signals, represented by so-called “guarantees,” replace missing information to help complete the markets, even if they never fully achieve completion.

To the phenomenon of information asymmetry, we must also add the condition of information as a public good. Stiglitz (1993) asserted that in this context, information as a “good” rarely functions as a privately consumed item, being more likely a jointly consumed good. Furthermore, the unique characteristics

of information make it difficult to enforce “exclusion” through market pricing. Its public good nature, and the resulting difficulty in valuing it, lead to another set of circumstances, primarily summarized in the so-called informational economies of scale, which favor large-scale projects at the expense of smaller ones. Informational economies of scale are significant because they involve fixed costs associated with providing information, which are largely independent of project size. These costs considerably impact company cost structures, clearly disadvantaging smaller firms.

When we introduce company size as a variable in our analysis, the considerations must be expanded. Informational economies of scale directly affect them; it is easier to evaluate and monitor a large company than a small one. Larger firms are more likely to possess a greater number of tangible assets suitable as collateral, while smaller firms may derive more value from their human capital, which is not easily used as collateral.

Many other characteristics of small and medium-sized enterprises (SMEs) hinder their access to credit markets. Their smaller size limits their ability to assume fixed costs, resulting in higher fixed costs per unit. Consequently, key organizational functions are often concentrated in a few individuals who must perform multiple roles, reducing task specialization. In many cases, these functions fall to the primary shareholder, who thus assumes both managerial and ownership roles. This common SME situation also leads to a conflation between the compensation the owner-manager receives for invested capital and that which should be received for managerial duties. This entanglement takes on additional dimensions when interacting with the financial market.

In such cases, guarantees become crucial. Financial institutions often find it difficult to accept SME assets as collateral, even when the firms are limited liability companies. The situation worsens when these restrictions stem from prudential regulations issued by financial system authorities. In such cases, the personal liability of individuals becomes highly valuable, facilitating credit approval. In many instances, it is easier to extend credit to individuals with personal guarantees than to companies. Consequently, it is common for companies not to borrow directly; instead, their partners take on the debt using personal assets as collateral. Banks can more easily seize personal assets than company assets.

Other initial conditions also hinder SME access to external financing. In addition to the low availability of tangible assets, SME management often lacks professional training. Business

development is more frequently based on intuition than on planning and economic analysis grounded in the academic literature.

Another specific characteristic of these companies is their low level of diversification—in terms of both their product/service portfolios and the personal assets of the business owners. This situation is even more complex in service-oriented firms, particularly those in the IT sector, where nearly all value resides in human capital.

All these situations lead to a generalized perception that these firms carry higher risks compared to larger companies. This condition becomes even more problematic when considering startups, entrepreneurs, and microenterprises, which are unlikely to easily access financing in formal credit markets.

Microfinance, in all its variants, as well as what the existing literature refers to as “Informal Credit Markets”, add further layers of analysis. These segments of the financial market are highly significant, yet they fall outside the scope of formal regulation and have received limited attention in traditional literature.

A considerable body of work has addressed these issues concerning the functioning of financial markets and their implications for the supply of financing (Stiglitz and Weiss, 1981; Stiglitz, 1993; Deakins and Hussain, 1994), as well as contributions related to the issue of firm size. In another line of research, Myers and Majluf (1984) propose a capital structure model directly applicable to the SME environment; Chittenden, Hall, and Hutchinson (1996) offer insights into the problem of fixed financing cost overruns from certain sources and their impact on SMEs; Berger and Udell (1998) explain the financial structure of small enterprises through a financial growth cycle, among others.

The contributions

Argentina is no exception in terms of the prevailing conditions in the market and among companies, where contracts within the financial system operate under similar circumstances as those described. Over the years, researchers from various institutions have studied these challenges from a local perspective, attempting to conceptually situate these issues within the Argentine context. Among the most cited in the literature are Bebczuk (2010) and Blejer and Rozenwurcel (2000). Also notable, of course, are the research groups featured in the referenced volume.

The research groups from UNRaf and UNS-UPSO have produced a body of contributions that distinguish them within the community of researchers in Argentina and position them at the forefront of these topics. Their approaches address most of

the described challenges through various methodologies and perspectives, all of which converge on the issue of financial inclusion.

Researchers from UPSO-UNS, Damián Salloun and Hernán Vigier, examine the impact of the banking market's credit supply to SMEs through the relationship between SMEs and commercial banks. Their analysis delves into phenomena of informational asymmetry and how they affect this relationship. In particular, based on a real-life experiment with bank managers, it is shown that in practice, managers prioritize avoiding Type I errors over Type II errors—valuing the applicant's financial guarantees more than the project being proposed.

The influence of collateral on SME bank financing is addressed in research conducted by the team led by Dr. Rubén Ascúa (UNRaf). These studies underscore the need for collateral to overcome moral hazard and adverse selection. They also verify that the guarantees available to SMEs are insufficient to meet financing needs, thereby justifying the need for public intervention to ensure collateral availability.

The overlap between ownership and management in SMEs—as well as the existence of a life-cycle theory for owner-managers—is addressed in contributions by Anahí Briozzo and Hernán Vigier (UNS-UPSO), as part of Briozzo's doctoral dissertation. The findings reveal self-imposed credit restrictions among older SME owners, as well as a tendency to substitute corporate collateral with personal guarantees in order to access financing.

In the realm of analyzing the impact of public financial support policies, contributions by Lilia Corzo, María Belén Guercio, and Hernán Vigier (UPSO-UNS)—within the framework of Corzo's doctoral dissertation—identify

a singular phenomenon related to interest rate subsidy policies. Specifically, they describe a segment of borrowers identified as demanders of subsidized credit who exhibit subliminal behavior: despite having applied for such credit, they claim to be unaware of it during the survey.

The issue of entrepreneurial financing and its connection to funders' practices is addressed in contributions from the UNRaf research group (Rubén Ascúa). These studies highlight an almost total disconnect between the interests of funders and those of entrepreneurs. This disconnect represents a direct obstacle to financing for the latter.

The Informal Credit Market (ICM) is the focus of research by Natalia Castillo (UPSO), who defines the ICM as all sources of financing not regulated within the market. Castillo's work seeks to estimate the size of this market in the city of Bahía Blanca.

As a specific case of microfinance, Branco Fibiger, Claudio Tesan, and Valeria Scherger (UNS-UPSO) examine the establishment of so-called municipal revolving funds in the southwest of the Province of Buenos Aires. In particular, they detail the main variables that characterize these funds, based on their long-term sustainability. Along the same lines, the doctoral dissertation of Sofía Orazi (UPSO-UNS) measures the potential demand for microcredit based on a survey conducted in the city of Bahía Blanca.

Finally, it is worth highlighting the contributions of Rubén Ascúa and Joaquín Matheu (UNRaf) in a preliminary analysis of the potential of FINTECH to facilitate SME access to financing. Specifically, they discuss the potential of new technologies to help solve many SME challenges, particularly those related to information availability.

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Enabling High-Tech MSMEs: Framework Conditions for Global Innovation and Impact



*Nicolas Durand, PhD,
CEO of the Campus
Biotech Foundation and
Founder of Abionic*

Abstract

Switzerland is recognized worldwide for its exceptional ability to generate scientific and technological breakthroughs. It has ranked first in the Global Innovation Index for 14 consecutive yearsⁱ. This status is largely due to sustained and substantial public investment in basic and applied research, particularly through its federal institutes of technology, cantonal universities and universities of applied sciences. The Swiss model proves that innovation thrives when are well funded, open and autonomousⁱⁱ.

However, this scientific success masks a structural fragility. While Switzerland stands out for its strong support for research, it does not offer equivalent support for the industrial development of the technologies resulting from this research. The country has a liberal, non-interventionist traditionⁱⁱⁱ: once a company is established, it is expected to quickly become profitable by marketing

its products or services, or to raise private capital to develop independently in foreign markets—without significant state support. This requirement is all the more difficult to meet given that the Swiss domestic market is often too small for a high-tech company to reach critical mass.

In addition, Switzerland's constitutional commitment to budgetary discipline – its “debt brake^{iv}” mechanism and its determination not to pursue industrial policy – ensures that it has one of the lowest levels of public debt in the OECD^v. While this macroeconomic prudence is widely welcomed, it comes at a price: no exceptions are made for strategic national investments in innovation during its growth phases. As a result, national public funding tends to view research and innovation not as long-term investments, but as short-term costs to be minimized.

This article argues that in countries such as Switzerland—where the pipeline of cutting-edge innovations is strong but support is lacking in the industrial growth phases—it is essential to rebalance the framework conditions in order to remain attractive in the face of intense international competition. Without such an adjustment, promising high-tech micro, small, and medium-sized enterprises (MSMEs) may not be able to survive their initial development phases, may be acquired by foreign groups, or may be forced to expand abroad, limiting their social and economic impact at the national level.

1. High-tech MSMEs: drivers of innovation, victims of systemic shortcomings

High-tech MSMEs are key players in the global innovation landscape. Often originating in university laboratories or research hubs, these companies are now developing technologies in cutting-edge fields such as medical technology, clean energy, artificial intelligence, and quantum computing. Their agility and disruptive capacity make them indispensable for tackling today's complex societal and environmental challenges.

In Switzerland, the ecosystem offers an ideal environment for the development of start-ups. Public funding provided mainly by the cantons, strong intellectual property frameworks and the proximity of leading scientific institutions constitute a very fertile ground for innovation. However, this same system fails to support these start-ups in their critical subsequent phases of industrialization and commercial expansion.

The absence of industrial policy means that Switzerland systematically underinvests in the creation of national champions. The liberal paradigm assumes that market forces will select the winners and losers, and that private capital will naturally follow good ideas. However, Swiss high-tech MSMEs often do not have access to European venture capitalists, who must prioritize the majority of their investments within the European Union, and therefore start-ups find themselves competing with American, Chinese, or Israeli projects that benefit from large domestic markets and lower living costs, and therefore represent lower risks. In addition, the strength of the Swiss franc and the lack of a real domestic market further limit the attractiveness of local businesses.

Paradoxically, Switzerland's consistently high position in innovation rankings seems to undermine the political will to take action. Policy makers assume that Switzerland is doing enough because it is a champion of innovation. But as the Innovation Commission of the Vaud Chamber of Commerce and Industry (CVCI) has repeatedly pointed out, success in research does not automatically translate into economic or industrial leadership^{vi}. Without deliberate policy changes, Switzerland risks becoming an “innovation library,” a place where brilliant ideas are born but their economic and social value is realized elsewhere.

2. Essential framework conditions for promoting high-tech MSMEs

To unlock the full potential of high-tech MSMEs, strong research is not enough. Countries that excel in innovation but lack favorable industrial conditions risk

becoming net exporters of intellectual property and talent. This section identifies five essential framework conditions for bridging the gap between invention and impact, which are particularly relevant in non-interventionist economies such as Switzerland.

a. From research strength to industrial policy: supporting the transition phase

In many countries, public investment in innovation focuses mainly on research, leaving the private sector to finance industrial transfer. While early-stage efforts often receive substantial support, there is a lack of funding to accompany critical phases such as the establishment of pilot lines, clinical demonstrations (where applicable), industrial validation, and regulatory compliance.

A modern industrial policy does not necessarily mean a return to dirigisme or tighter control policies. Rather, it should be based on targeted and transparent mechanisms aimed at reducing risks and accelerating the market entry of innovations—with a focus on technology adoption rather than systematic regulation. These could include matching funds for industrial scaling up, loan guarantees, or transition grants conditional on local job creation or market anchoring. Without such measures, promising high-tech MSMEs remain vulnerable during their most capital-intensive phase, leading to premature acquisitions, relocations, or bankruptcies.

b. Rethinking innovation financing: an investment, not an expense

Innovation is still too often seen as a discretionary expenditure in public budgets, rather than a long-term investment in growth. In Switzerland, the “debt brake” rule has helped maintain enviable budgetary discipline, but it is applied rigidly, with no exceptions for strategic investments in science and technology. This creates a paradox: the state provides massive funding for upstream research but is reluctant to invest in downstream infrastructure that delivers real social and economic impact. A forward-looking framework would treat investment in innovation as a depreciable asset, in the same way as roads, hospitals or energy infrastructure.

c. Public procurement as a strategic lever

Public procurement is a powerful but underutilized tool for supporting high-tech MSMEs. In many countries, particularly those wary of protectionism, public procurement is managed as a purely transactional process: the cheapest bid wins. However, in cutting-edge sectors where early market access is essential, public buyers can play a catalytic role by acting as early adopters.

Governments should adopt “innovation-friendly” public procurement rules, prioritizing technological value, domestic benefits, and sustainability criteria. This is not about favoritism, but about recognizing that strategic autonomy and economic resilience depend on developing local capabilities. Labels such as “Swiss Know-How” or similar origin-related standards can help define eligibility while ensuring quality and competitiveness.

d. Align tax frameworks with innovation cycles

In general, the current tax policy applied by the cantons in Switzerland hinders entrepreneurship in the high-tech sector because it does not take into account the specific characteristics of innovative MSMEs. For example, share-based remuneration—such as stock options—is often disadvantaged, and founders may be taxed in advance on assets that are still illiquid. Furthermore, the regulatory pathways applicable to new technologies remain fragmented and not conducive to experimentation.

A more favorable environment would be based in particular on the tax neutrality of investments in the growth phase, as well as taxation based on actual income rather than on the holding of illiquid assets.

Finally, high-tech MSMEs cannot develop in isolation. Their survival depends on access to global markets, talent, and supply chains. In Switzerland's case, limited access to the European Union market, combined with restrictive migration rules for non-European talent, significantly hinders competitiveness.

3. Building collaborative alliances: an evolving model for high-tech MSMEs

High-tech MSMEs operate in ecosystems, not silos. Their success often depends less on their internal capabilities than on the networks to which they belong, which give them access to infrastructure, knowledge, capital, and markets. This reality has led to the growing importance of innovation parks as a strategy for developing innovation.

The 2024 Global MSME Report^{vii} highlights “collaborative alliances” as one of the key trends that will shape the future of entrepreneurship. These alliances bring together public and private actors, academia and industry, national clusters and international consortia. They are particularly vital for high-tech MSMEs, whose technological needs (AI, clean rooms, clinical validation, etc.) often exceed the means of a single company.

Shared infrastructure and technology platforms

One of the most effective forms of collaboration is the pooling of cutting-edge infrastructure. At Campus Biotech^{viii} in Geneva, for example, research platforms serve several academic institutions and companies. This model reduces duplicate investments, accelerates time to market, and promotes interdisciplinary knowledge exchange. It also gives MSMEs access to cutting-edge technologies (e.g., neuroimaging, omics data, neuromodulation devices) at costs compatible with the early stages of development.

Replicating such thematic models at the national level would significantly reduce barriers to entry for emerging entrepreneurs in advanced technologies, particularly in sectors such as health and clean technologies, or quantum computing.

Public-private co-development and consortia

Beyond infrastructure, collaborative alliances can take the form of co-

development partnerships. These can include university-industry consortia, joint ventures between MSMEs, or innovation partnerships with public bodies. When well designed, these alliances reduce the risks associated with technology transfer, align product development with public needs, and open up access to public procurement or regulatory channels.

However, effective collaboration requires governance frameworks that promote trust, clarity of roles, and equitable value sharing. Governments and regions should actively facilitate the creation of such consortia through matchmaking, seed funding, and legal tools.

A platform approach to innovation

Just as the digital economy thrives on platform-based models, so too can the innovation economy. Governments should not see themselves solely as funders or regulators, but as “ecosystem architects” that foster co-creation between entrepreneurs, researchers, investors, and policymakers. However, this requires a genuine industrial policy that targets specific innovative sectors with the potential to generate positive impacts at the national level and beyond.

In short, collaborative alliances are not peripheral, they are structural. For high-tech MSMEs, they provide the growth, stability, and legitimacy needed to expand globally while remaining anchored in local innovation systems.

4. Risks, gaps, and policy recommendations

Despite their strategic importance, high-tech MSMEs face systemic risks that threaten to erode their potential. These risks are not country-specific; they are structural and recurrent in all innovation-driven economies. However, as the Swiss experience shows, their consequences can be particularly severe in liberal and fiscally conservative systems that lack active industrial strategies.

Key risks and structural gaps

- Innovation leakage: MSMEs with global potential are often bought out or relocated abroad due to a lack of support for their development, resulting in a net loss of value creation and strategic autonomy.
- Budgetary myopia: public budgets view innovation as a short-term cost rather than a long-term investment, limiting support for early-stage research and neglecting industrial deployment.
- Institutional fragmentation: the lack of interdepartmental coordination between science, industry, and finance leads to a fragmented approach, which dilutes impact and accountability.
- Political inertia: Success in global innovation rankings breeds complacency. Policymakers assume that the system is working, while entrepreneurs face increasing constraints and declining competitiveness.
- Regulatory burden and scarcity of capital: Complex procedures, taxation

of innovation-related instruments, and insufficient capital make growth difficult or even impossible.

Policy recommendations

To address these challenges, governments and institutional partners should consider the following measures:

1. Introduce transitional financing mechanisms

Create growth funds or transition grants for high-tech MSMEs emerging from the R&D phase, particularly in strategic sectors. Combine public funding with private investment and link support to local economic impact.

2. Modernize tax rules

Adapt Switzerland's "debt brake" strategy to allow strategic exceptions for innovation infrastructure, the industrialization of advanced technologies, and public-private consortia.

3. Use public procurement to anchor domestic innovation

Encourage public institutions to be the first customers of innovative products and services from high-tech MSMEs. Integrate "know-how" and sustainability criteria into tendering procedures.

4. Simplify taxation and technology licensing processes for high-growth MSMEs

Exempt founders and employees from taxation on illiquid equity in the start-up phase. Simplify the licensing of advanced technologies through fast-track procedures.

5. Strengthen strategic international integration

Ensure full participation in international research and innovation programs (e.g., Horizon Europe^{ix}). Facilitate the importation of talent and quickly recognize foreign qualifications.

6. Create a National Innovation Council with MSME representation

Create a cross-sectoral body responsible for harmonizing science, industry, and finance policies, with explicit representation of high-tech MSMEs to inform and evaluate policy outcomes.

Conclusion

High-tech MSMEs are important silent drivers of the next industrial and technological revolutions. They are designing the technologies that will improve our daily lives tomorrow. However, their ability to thrive is not a given: it depends on the framework conditions in which they operate.

The Swiss experience illustrates a broader dilemma: scientific excellence does not automatically guarantee economic sovereignty. Without deliberate, coordinated and forward-looking policies, innovation-rich countries risk becoming exporters of potential rather than concrete players.



To unlock the full potential of high-tech MSMEs, policymakers must go beyond research funding. They must invest in industrial infrastructure, adopt pragmatic public procurement policies, modernize tax practices, and foster collaborative ecosystems. These are not protectionist reflexes, but strategic levers.

At a time when global challenges demand rapid and bold innovation, empowering high-tech MSMEs is no longer an option. It has become an essential condition for resilience, technological sovereignty, and shared prosperity.

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Uncertainty as the New Normal: Structural Constraints and Policy Pathways for MSMEs



*Dr. Alina Landowska,
Center for the World Economy at Cardinal
Stefan Wyszyński University in Warsaw
(UKSW)*

Abstract

In today's global economy, uncertainty is no longer a temporary disruption – it is a persistent condition that defines the operating environment for Micro-, Small-, and Medium-sized Enterprises (MSMEs). From inflationary shocks and trade wars to digital disruption and fragile supply chains, MSMEs face a complex and evolving risk landscape with limited buffers and constrained access to resources. This contribution explores how structural challenges – such as restricted credit, regulatory burden, and limited digital capacity – undermine MSME resilience. It highlights recent global policy initiatives, including deregulation efforts, AI support strategies, and inclusive financial tools aimed at enabling MSMEs to adapt and thrive under uncertainty. Drawing on comparative insights and national data from Poland, the paper argues that investing in MSME resilience is not just

a response to crisis, but a foundational strategy for inclusive and sustainable economic growth. As uncertainty becomes the new normal, agile and targeted support for MSMEs must be central to future economic policy design.

INTRODUCTION

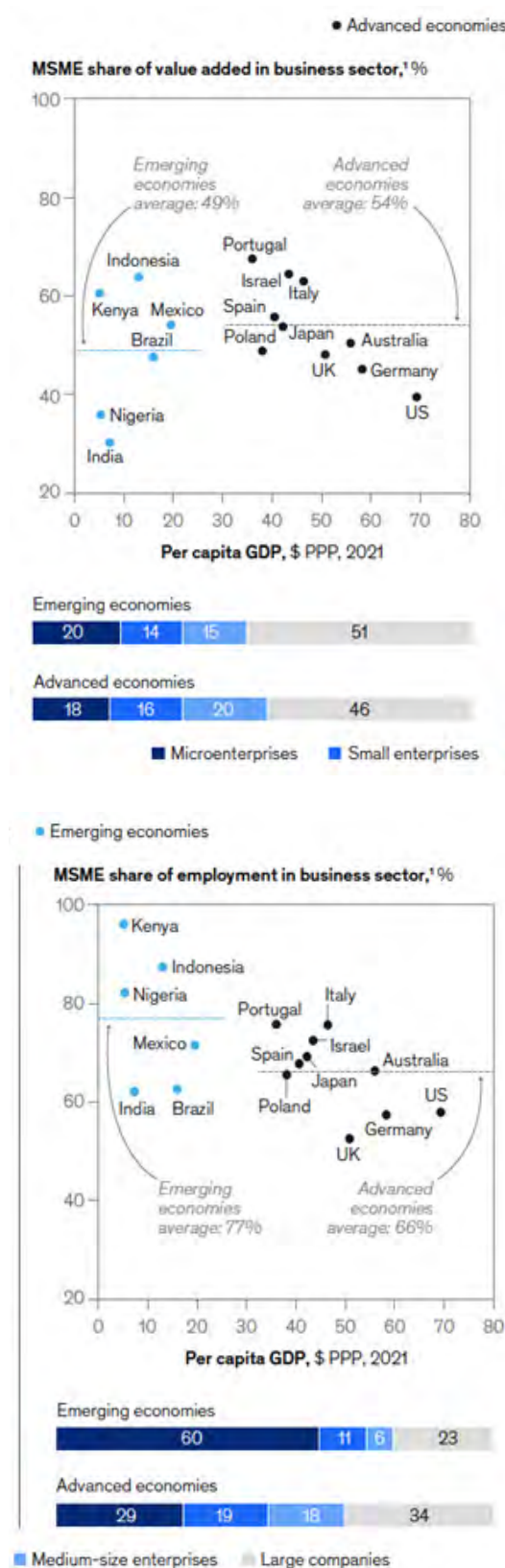
In 2025, uncertainty is no longer an anomaly – it is the prevailing condition of global business. For Micro-, Small-, and Medium-sized Enterprises (MSMEs), this environment is shaped by overlapping disruptions such as geopolitical volatility, inflationary shocks, digital transformation, and fragile supply chains. These challenges do not merely cause episodic setbacks; they redefine how small businesses assess opportunity, allocate capital, and manage risk.

MSMEs represent over 90 percent of firms globally and account for a substantial

share of employment and value creation across economies. In Poland, for instance, MSMEs generate 49 percent of business-sector value added and 65 percent of employment – figures that mirror global trends (refer to Figure 1). Yet, these enterprises often operate with thinner margins, smaller financial buffers, and more restricted access to external finance. Paradoxically, this vulnerability also fosters agility – MSMEs are frequently the first to adapt business models, explore niche markets, and adopt emergent technologies. Their responses to crisis – whether retrenchment or reinvention – offer vital clues about resilience under pressure.

Poland's experience underscores both the opportunity and the urgency. Despite contributing significantly to employment and output, Polish MSMEs remain only half as productive as their large-company counterparts – below the 60 percent benchmark in peer advanced economies. According to McKinsey's recent analysis, closing this productivity gap could unlock value equivalent to 6.5 percent of GDP [6]. Sectors such as trade, construction, and professional services offer particularly high-impact potential for scale and collaboration. Addressing these inefficiencies requires not just capital, but targeted interventions in infrastructure, policy, and digital capacity.

Figure 1. Share of Value Added and Employment in the Business Sector vs. Per Capita GDP, with Breakdown by Firm Size and Economy Type



Source: McKinsey Global Institute (2024), A Microscope on Small Businesses: Spotting Opportunities to Boost Productivity. Available at: <https://www.mckinsey.com/industries/small-business/our-insights/a-microscope-on-small-businesses>

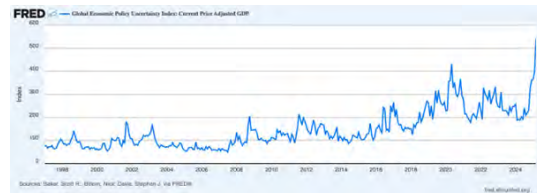
mckinsey.com/mgi/our-research/a-microscope-on-small-businesses-the-productivity-opportunity-by-country#/

Understanding MSME behavior under uncertainty is therefore not just a matter of capital flows; it is a strategic lens into economic development and recovery. Investing in MSMEs resilience and productivity – especially in uncertain environments – should be at the core of inclusive economic strategy.

UNCERTAINTY AS THE NEW NORMAL: GLOBAL TRENDS AND MSME IMPLICATIONS

Over the past decade, a global economic policy uncertainty has not only intensified but become a persistent feature of the business landscape. This trend is captured in the Global Economic Policy Uncertainty Index, which tries to quantify unpredictability by tracking media coverage of uncertainty-related terms across major economies. As illustrated in Figure 2, the index shows sharp spikes during major geopolitical and economic disruptions – such as the 2008 financial crisis, the COVID-19 pandemic, and the war in Ukraine – each of which has had profound implications for MSME investment behavior. These recurrent shocks underscore the urgency of understanding how uncertainty shapes decision-making at the enterprise level, especially for MSMEs that lack the buffers and tools of larger firms.

Figure 2. Global Economic Policy Uncertainty Index (1997–March 2025): Trends in Policy-Related Uncertainty Across Major Economies



Source: Federal Reserve Bank of St. Louis, FRED Database. Available at: <https://fred.stlouisfed.org/series/GEPUCURRENT>

Despite their critical role in both emerging and advanced economies, MSMEs remain disproportionately vulnerable to uncertainty due to a range of structural constraints. The following key factors outline the systemic challenges that limit their capacity to invest, adapt, and grow in volatile environments.

Limited Financial Buffers and Liquidity Constraints

MSMEs often operate with minimal financial reserves, making them particularly vulnerable during economic downturns. This fragility is compounded by persistent barriers to external financing, including limited access to credit, high collateral requirements, and underdeveloped financial markets [2], [10]. Empirical research confirms that MSMEs in both emerging and developed economies are disproportionately affected by liquidity shortages, especially during periods of macroeconomic instability [4]. For instance, in the United Kingdom, a report by Allica Bank highlighted a \$114 billion lending gap in bank financing to SMEs, which represents approximately 3.38% of the UK's GDP [1]. Emerging markets face a larger absolute and relative financing gap for MSMEs compared to developed economies. In 2019, the credit gap for MSMEs in emerging markets and developing economies (EMDEs) was estimated at \$5.7 trillion – equivalent to



19% of their combined GDP [2]. These structural constraints limit their ability to invest in resilience-building measures, such as digital transformation or workforce upskilling, further entrenching their exposure to risk. According to the World Bank's Financial Inclusion Overview [10], enhancing inclusive access to financial services is foundational for narrowing these financing gaps, particularly in low-capacity MSMEs.

Restricted Access to Credit and High Perceived Risk

Financial institutions frequently categorize MSMEs as high-risk borrowers, leading to more stringent lending criteria, elevated interest rates, and limited credit availability. These issues are particularly pronounced in emerging markets, where underdeveloped financial systems and weak credit infrastructures drive up transaction costs and restrict access to formal finance [2], [10]. Even when financing instruments exist, MSMEs often remain excluded due to eligibility barriers, lack of collateral, and risk-averse lending practices [4], [11].

In response, multilateral institutions and governments have introduced a range of complementary tools to address these financing gaps. These include guarantee schemes, public-private credit platforms, and insurance-based risk mitigation instruments aimed at reducing lender exposure [2]. The rise of fintech solutions – including digital credit scoring, peer-to-peer lending, and embedded finance – also plays a growing role in expanding access to credit for underserved MSME segments [2], [3]. While these innovations offer promise, the systemic trust gap between financial institutions and MSMEs

remains a critical barrier that must be addressed through more inclusive financial policy design. The IFC's 2025 GPFI Action Plan reinforces this by calling for better-aligned financial instruments, scalable public-private partnerships, and digitally enabled credit access tailored to MSMEs in diverse markets [15].

Lower Capacity for Strategic Planning and Risk Management

Due to resource constraints, MSMEs often lack access to sophisticated risk assessment tools and long-term strategic planning capabilities. This limitation hampers their ability to anticipate, prepare for, and respond to complex disruptions. Several global reports emphasize that smaller firms are less likely to engage in formal contingency planning or use predictive financial modeling, increasing their exposure during crises [4], [11]. The World Bank and IMF underline the need for integrated support mechanisms, including access to fintech tools, risk advisory services, and tailored capacity-building programs to strengthen MSME preparedness in volatile environments [5], [12].

Limited Digital and Operational Resilience

The adoption of digital technologies among MSMEs is frequently hindered by financial constraints, skill shortages, and limited infrastructure. This digital divide reduces their ability to pivot operations, maintain business continuity, or access alternative markets during crises. The World Bank and UNCITRAL both highlight that digitalization – particularly in financial services – can significantly enhance MSME resilience by improving access to credit, streamlining operations, and

expanding market reach [10], [11], [12], [13]. However, the implementation gap remains substantial, especially in low- and middle-income regions where MSMEs struggle to adopt digital tools without targeted support or policy incentives [11], [12]. Case studies further illustrate how lack of digital infrastructure, inadequate training, and institutional fragmentation create persistent barriers to adoption, even in relatively tech-ready markets [14].

Artificial Intelligence (AI) adoption among MSMEs is emerging as a critical factor in enhancing operational resilience. Leading countries such as South Korea, Denmark, and Sweden report AI adoption rates among enterprises exceeding 25 percent with innovation hubs like Midtjylland (Denmark) and the Brussels-Capital Region (Belgium) surpassing 30 percent. In knowledge-intensive sectors, Finland, Sweden, and Denmark have business adoption rates exceeding 66 percent and 45 percent, respectively. These nations have implemented comprehensive strategies combining robust AI infrastructure, skilled workforce development, and supportive regulatory environments to facilitate AI integration among MSMEs. [17]

In Poland, by contrast, only 13.9 percent of industrial enterprises with 10–49 employees reported using AI in 2023, compared to 42.3 percent of large firms. Among those that adopted AI, nearly half cited productivity gains, and 46 percent noted improved production efficiency – yet workforce benefits remained limited. This significant gap in adoption between small and large firms suggests that without targeted national AI support mechanisms, Polish MSMEs may struggle to keep

pace with digital transitions at home and abroad. [9]

This significant gap in adoption between small and large firms suggests that without targeted national AI support mechanisms, may struggle to keep pace with digital transitions. Some countries have begun to bridge this divide through structured financial incentives. In Singapore, for example, the government supports AI adoption among SMEs through a combination of subsidies, grants, and low-interest loans designed to lower the entry cost of advanced technologies and mitigate adoption risk. These tools, along with tailored digital readiness programs, form a model for inclusive technological transition in the MSME sector. [7]

Policy and Regulatory Challenges

MSMEs frequently encounter difficulties navigating complex and often fragmented regulatory environments, a challenge that becomes more pronounced during periods of economic policy uncertainty. These issues can create a loss of confidence, confusion, increase compliance costs, and discourage formalization or investment. The UNCITRAL Legislative Guide underscores the critical role of coherent legal frameworks – especially in areas like credit reporting, collateral systems, and insolvency regimes – in expanding access to finance for small businesses [13]. Complementing this, the World Bank’s Raising and Accelerating MSME Performance (RAMP) program highlights the importance of streamlining regulations and simplifying digital compliance tools to reduce the bureaucratic burden on MSMEs [11]. Moreover, recent policy discussions emphasize that agile,



inclusive policy design – tailored to the realities of small enterprises – is essential to fostering both resilience and formal growth in uncertain environments [13]. For instance, Polish regulations are often more favorable to companies backed by foreign direct investment. Thus, in Poland, first major deregulation bill from 2025, introduced over 40 measures to simplify business regulations and reduce bureaucratic burdens on entrepreneurs – key mechanisms include a six-month grace period before new obligations take effect, a “one in, one out” rule for regulations, and mandatory review of each economic law after two years [8]. Deregulation to enhance investment efficiency, reduce compliance costs, and support MSMEs is urgently required – the importance of simplifying taxation laws, rationalizing labor regulations, and decriminalizing business laws to foster a more conducive environment for small businesses.

and responsive to evolving challenges. These priorities form the foundation of a resilience strategy that enables MSMEs not only to withstand uncertainty, but to drive inclusive and sustainable growth in the years ahead.

CONCLUDING REMARKS

As governments and institutions chart the next phase of recovery and growth, placing MSMEs at the center of policy design is both a strategic imperative and a moral one. To turn this vision into action, five priorities stand out: first, simplifying regulatory frameworks to reduce compliance burdens and improve the ease of doing business; second, closing the credit gap through well-designed financial instruments and digitally enabled lending tools; third, accelerating access to digital and AI technologies through targeted support and infrastructure investment; fourth, embedding MSMEs in national risk preparedness and economic continuity planning; and fifth, strengthening coordination across institutions to ensure that support measures are agile, scalable,

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KEY POLICY OPPORTUNITIES WITH ENTREPRENEURIAL ECOSYSTEMS

**how embracing the ecosystem
model helps grow innovation
and impact**



Norris Krueger, PhD, Distinguished Visiting
Research Professor, Kyushu University
Adjunct Professor American University
Leadership Council, ESHIP Alliance
(formerly Ecosystem Builder Leadership
Network/ESHIP) Board member, International
Council for Small Business

Too many entrepreneurship programs miss the mark. OECDⁱⁱ argues that entrepreneurship support programs often confuse activity with impact, and outputs with outcomes. Worse, as Kauffmanⁱⁱⁱ notes despite many targeted programs, under-represented groups lag painfully. To support medium-, small-, and micro-enterprises we need the best programs and the best policies. We offer here the strong consensus of policy experts, entrepreneurial champions, scholars, and practitioners.

Entrepreneurs drive innovation, inclusion, and sustainability. Yet surprisingly, the EU's recent blue-ribbon white paper on Europe's innovation crisis failed to mention entrepreneurship. **Not even once.**^{iv}

Local economies function as ecosystems – complex networks that evolve organically. While traditional models emphasize big

institutions, we now know that entrepreneurs and their connectors truly drive economic growth. This ecosystem approach, though messier than old institutional models, proves more effective at fostering new businesses, often at lower costs.

Over the past ten years, we've learned that local economies work like ecosystems. Two different Nobel Prizes show us that local economies are ecosystems and the best way to manage them is by understanding ecosystems, made up of many connected networks that change and grow organically. The older, simpler models don't show us what really drives new businesses and new ideas.

The real drivers are individuals – the entrepreneurs and the people who connect them. Ecosystems are messier, but it helps us grow more new businesses, often at a

lower cost. Healthy ecosystems nurture and accelerate virtuous spirals, especially as they grow more inclusive.^v

“Entrepreneurial ecosystem” often becomes just another buzzword for “local economy.” True ecosystem thinking requires a fundamental shift in how we approach entrepreneurial growth. Top-down simply does not work – two recent Nobel Prizes tell us that; so do key voices in development economics.^{vi}

How to Look At Ecosystems

Researchers and practitioners both note that entrepreneurial ecosystems have three key dimensions:

Macro (institutions)

Micro (entrepreneurs) and

Meso (the essential connectors that bridge macro and micro).^{vii}

Victor Hwang revolutionized ecosystem thinking in 2012 with a powerful metaphor: Innovation thrives in rain forests, not manicured fields. Local economies need the complex, evolving nature of a rain forest rather than the rigid structure of a managed farm.^{viii} Carefully manicured fields don’t breed innovation, rain forests do. Ostrom’s Nobel work showed how to successfully manage biological ecosystems by embracing the reality of ecosystems having economic, political, social, and cultural dimensions. Entrepreneurial ecosystems are equally complex and offer the same opportunities to manage productively

Venture capitalist Brad Feld asked if the key principles of how his city (Boulder, Colorado) became a startup-driven stellar tech hub worked in other startup communities.^{ix}

- #1: Put entrepreneurs at the heart of all major initiatives and policy decisions
- #2: “Include the whole stack” - engage every segment & stakeholder of the entrepreneurial community

What are the immediate strategic policy implications from Feld & Hwang?

Feld: Listen directly to ALL entrepreneurs – not their self-appointed spokespersons

Hwang: Protect, encourage, and nurture your community’s unselfish connectors

Expert-Backed Principles for Growing Entrepreneurial Communities

Consensus of scholars, ecosystem builders, policy experts, and entrepreneurs themselves:

1. Embrace ‘Rising Tide’ Strategies
2. Universal support outperforms targeted programs, which often benefit only well-connected players
3. Create ‘nutrient-rich seedbeds’ for all entrepreneurs
4. Remove barriers rather than picking winners
5. Recognize and address diverse entrepreneurial needs through direct interaction^{xx}

Al Shapero said to think of this as providing and maintaining a “nutrient-rich fertile seedbed”. Just as you must consider the differing needs of different plants, the same is true for entrepreneurs – ask them.^{xi}

More below.

1. Believe in Ecosystems: Champion Bottom-Up Growth; Find the Real Experts

- Bottom-up strategies prove more effective than top-down controls;
- Challenge entrenched interests that resist grassroots innovation
- Engage real experts: entrepreneurs and community superconnectors;
- Resist the temptation to ‘pick winners’ from above

2. First, Do No Harm (remove barriers)

- Heed entrepreneurs’ primary request: “Stop hurting us before trying to help us”
- Address the regulatory cost crisis: Small firms pay 36%+ more in compliance costs^{xii}.
- Prioritize regulatory reform for maximum impact^{xiii}; e.g., eliminate ineffective regulations that penalize small businesses

3. Evidence-Based, Data-Driven Strategy & Tactics

- Rigorously assess the impacts of entrepreneurs & small business and of policies to support them
- Engage as many stakeholders as possible assessing impact, outside-in not inside-out^{xiv}
- Map the best resources (again engage stakeholders)^{xv}
- Map the unselfish connectors^{xvi}

- Rankings can be very misleading and easily gamed^{xvii}

4. Government’s Role in Ecosystem Development

- Act as referee, not player – constrain bullying by incumbents
- Support entrepreneurs as leaders; serve as ‘feeders’ (Feld’s model)
- Convene genuine experts and community-minded players
- Follow successful models like Startup Delta (Netherlands), Japan’s SMRJ^{xviii} [see also endnote 39]
- Demand best-in-class entrepreneurial education and training [see endnotes 34 and 64]

5. Ensure Universal Access

- Embrace ‘Zero Barriers’ principles [endnote 7]
- Embrace the ‘Right to Start’
- Create opportunities for underrepresented entrepreneurs^{xix}; do not forget rural and inner-city
- Foster self-reinforcing cycles of inclusive growth.^{xx}

6. Leverage Existing Strengths^{xxi}

- Focus on amplifying successes rather than fixing weaknesses
- Identify and nurture emerging strengths in your ecosystem
- Learn from successful entrepreneurs about what works – and not.

7. Support All Business Stages

- Value small businesses equally with startups; McKinsey notes how helping small businesses be more productive offers huge payoffs^{xxii}
- Remember: 90% of high-growth firms achieve profitability before scaling^{xxiii}
- Include micro-enterprises in support strategies.^{xxiv}
- Balance support between ‘unicorn hunting’ and sustaining small business growth^{xxv}

8. Embrace Impact Ventures

- Support all forms of social enterprise: B Corps^{xxvi} nonprofits, and hybrid models
- Remember Drayton’s^{xxvii} principle: “Every great entrepreneur must be a social entrepreneur”
- Align with UN SDGs through support of social impact^{xxviii}
- Recognize that entrepreneurial skills drive both profit and purpose like Japan is^{xxix}

9. Align Support with Actual Value Creation

- Match ecosystem roles to participants who add most value^{xxx}
- Avoid ‘McDonaldization’ of entrepreneurial support^{xxxi}
- Identify which entrepreneurial support mechanisms actually work well^{xxxii}
- Customize support programs to specific MSME requirements

- Base decisions on program’s actual value added, not just presumed capabilities

10. Invest in Quality, Unselfish Connectors^{xxxiii}

- Fund the most effective support organizations, not just established ones
- Let entrepreneurs guide funding decisions
- Identify and support proven unselfish community connectors; professional training/certification

- Challenge entrenched interests when necessary

11. Leveraging Ecosystem Builders^{xxxiv}

- Connect with ESHIP & Ecosystem Builder Leadership Network’s 500+ professional ecosystem builders
- Access grassroots champions and proven connectors
- Partner with experts in bottom-up bottom

12. Develop Entrepreneurial Capital

- Build both social and human capital simultaneously
- Foster entrepreneurial skills, mindsets, and behaviors
- Create K-12 entrepreneurial learning programs^{xxxv}
- Learn from global success stories like Japan and the Netherlands
- Convene the best and brightest for

program development, including the world's best scholars

13. Shape the Narrative: Use the Bully Pulpit

- Leverage data and case studies from global organizations (ILO, UNIDO, UNCTAD, EU, OECD)^{xxxvi}
- Amplify success stories of small businesses
- Partner with national organizations (NFIB, US Chamber SME, Small Business Majority, Right to Start)
- Promote evidence of small business impact on innovation and inclusion

Building the Case for New (and Small) Business

Key Statistics to Drive Policy:

New jobs come from startups and growing existing firms not by recruiting business.^{xxxvii}

- Young firms (<5 years) create more jobs than older companies (US SBA via Right to Start^{xxxviii})
- Over last 25 years, 2/3 of all new jobs created were in small businesses (USA SBA Office of Advocacy)
- Smaller firms innovate more per capita^{xxxix} (Congressional Research Service); Innovative small firms often thrive in bad times^{xl}
- Startups and small firms are major drivers of economic diversity and economic complexity^{xli}
- 1% rise in entrepreneurship = 2% drop in poverty (again, Right to Start^{xlii})

- Startups create more jobs than relocating companies^{xliii} (Center on Budget and Policy Priorities).

- Entrepreneurship effectively de-marginalizes stigmatized individuals^{xliv}

Yet... the startup rate remains far below its historical peak. Who will speak for entrepreneurs? Who will champion their cause? As policy experts, how can you help them effectively and affordably?

Research-Backed, Battle-Tested Solutions

We draw our recommendations from:

- Global network of successful connectors^{xlv}
- International policy experts (OECD, EU, World Bank, UN, ICSB)
- Leading ecosystem researchers
- Direct, honest entrepreneur feedback

Implementation Framework

Our recommendations are:

- Widely supported by diverse stakeholders
- Proven effective in multiple locations
- Cost-effective to implement



Three-Tier Action Plan [see table below]:

1. Quick Wins: Immediate, low-cost initiatives
2. Scale Up: Expand successful existing programs
3. Strategic Investments: Longer-term, high-impact projects

Moving Forward

- Access our expert network for implementation support
- See appendix for more detail
- Connect with proven partners ready to help

In today's volatile environment, entrepreneurial success drives economic resilience. Our network stands ready to help you build a thriving entrepreneurial ecosystem. For each recommendation in the following table, there are skilled people and organizations ready to help you take action.

How can we help you to help grow entrepreneurs? Contact us^{xlvi}. Credits here.^{xlvi}

<i>Theme</i>	Low-hanging fruit	Do more	Bigger 'Asks'
<i>First do no harm</i>	Renew (or improve on) TCJA^{xlviii} Direct federal agencies to include small & new firms on vendor lists^{xlix} Encourage regulators help small/new firms to comply^l	Democratize access to new tech, e.g., protect/expand SBIR^{li} Keep pushing about unfair business practices by large firms (e.g., Big Tech and AI)^{lii}	Right to Start advises set-asides for new firms Regulatory reform to reduce massive penalty for small firms^{liii} Better tax treatment for investors and entrepreneurs^{liv}
<i>Convener/Referee</i>	Convene global ecosystem experts (policy experts, connectors, scholars) ^{lv}	Inter-agency collaboration (like Sickler and Shieh have done so well at SBA & EDA) ^{lvi}	Replicate Startup Delta (they WILL help us!) & other models ^{lvii}
<i>Data/information</i>	Add input to EDA's CEDS by local ecosystem builders^{lviii} Support emerging research (e.g., superconnectors and ecosystem metrics)^{lix}	Keep increasing data accessibility (ask USDA to share ERS data) Consider additional data efforts to explicitly address ecosystem phenomena^{lx}	What Works Clearinghouse for economic & community development to test efficacy of metrics & "best" practices (a la D of Ed's highly successful WWC) ^{lxi}
<i>Bully Pulpit</i>	Entrepreneur-ONLY listening sessions (no ESOs, other institutions) led by entrepreneurs and connectors^{lxii} Support community-based research to guarantee all voices are heard^{lxiii}	Help Right to Start to create more "offices of entrepreneurship" in additional states. Celebrate the wins Include strong ombudsman role^{lxiv}	Give more teeth to SBA Office of Advocacy to stop punitive regulations ^{lxv}
Connectors? Educators?	(again, convenings) Train & support ecosystem builders/ superconnectors "Students Are Our Secret Weapon": develop world-class youth entrepreneurship programs, helping students to help their local ecosystem^{lxvi}	launchpads and landing zones for exports (extend existing STEP, etc.)^{lxvii} extend and improve basic business skills training^{lxviii} expand global entrepreneur-in- residence programs^{lxix} support those who educate entrepreneurs about raising capital^{lxx}	Support multiple new PhD students in ecosystems research^{lxxi} Democratize entrepreneur & small business access to new technologies^{lxxii}

Endnotes

- i. e.g., top ten things we know about ecosystems: [<https://icsb.org/expert/norris-krueger/top-ten-things-that-research-tells-us-about-ecosystems-implications-for-us/>]; 2023 voters' guide: <https://bit.ly/2023EntrepVoterGuide>
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xiii. [Idaho](#) is working to place all state regulations under mandatory sunset review. Striking graph [here](#) (HT www.mountainstatespolicy.org)

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xvi. Feldman & Zoller “Dealmakers in Place: Social Capital Connections in Regional Entrepreneurial Economies”; also Stephenson differentiates between selfish *gatekeepers* and unselfish *hubs*: www.bit.ly/Karen_S

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xxi. Asset-Based Community Development is effective but not as politically resonant as needs-based and arguably more important for disadvantaged groups; Kretzmann, & McKnight. (1996) Assets-based community development.- *National Civic Review*. 85(4): 23-29.

xxii. <https://www.mckinsey.com/mgi/our-research/americas-small-businesses-time-to-think-big>; <https://www.mckinsey.com/mgi/overview/in-the-news/time-to-think-big-to-close-americas-small-business-productivity-gap>

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xxiv. <https://bit.ly/MicroBizImpact>

xxv. Perhaps amazingly, our understanding of unicorns and how they grow is often flawed (www.dileepprao.com)

xxvi. Benefit corporation ["B-Corp"] is a voluntary but rigorous certification for businesses that commit to greater social impact.

xxvii. William Drayton, founder of Ashoka, social entrepreneurship's global pioneer, Ashoka (www.ashoka.org)

xxviii. In partnership with the International Council for Small Business <https://unctad.org/meeting/micro-small-and-medium-sized-enterprises-day-trade-climate-change> ; <https://icsb.org/icsb-events/msme-day/> ; <https://www.un.org/sites/un2.un.org/files/globalmsmesreport2024.pdf>

xxix. www.linkedin.com/posts/norriskrueger_lessons-from-japan-fascinating-so-far-activity-7241790531427598337-Vn9G/ POC Dr. Yoshiaki Ishii, Director-General of SMRJ.

xxx. A parallel model is the EU's Smart Specialization which can be highly effective if well-executed. <https://iap.unido.org/articles/how-smart-are-smart-specialization-strategies>

xxxi. "McDonald-ization" was [coined](#) by entrepreneurship education expert Martin Lackeus to decry the excessive routinization and standardization (often to the lowest common denominator) of training. "One size fits all" has visibly [lowered](#) the impact of training.

xxxii. Richard Hunt at Virginia Tech: https://onlinelibrary.wiley.com/doi/pdf/10.1111/jsbm.12329?casa_token=rljxY7TBp-IAAAAA:MbJQ8Bd5uKiPlsp8YIHXYyXHeFGmcebWW3XdDJX6R_pZf_QDUDQRQ8NPY8ezOP99lpun1qFktAT2-QQfjg

xxxiii. The US SBA piloted a Community Navigator program where in theory unselfish hubs would distribute money, advice, etc. to hubs representing underrepresented groups but [\\$100 million yielded only 500 businesses](#), [in large part](#) because they did not identify unselfish hubs.

xxxiv. *Full disclosure:* The author was a Goal Champion under ESHIP and a member of EBLN's Leadership Council but has no financial conflict of interest (volunteer). For more on the ecosystem builder model check out fellow Goal Champions [Anika Horn](#) and [Jeff Bennett](#) and the Federal Reserve's [Dell Gines](#). See also www.bit.ly/ESHIPgoals

xxxv. Entrepreneurship education is improving rapidly & extending to K-12 globally. Including Japan and Scandinavia. Andy Penaluna is the guru for developing national K-12 programs based on [cutting edge theory and practice](#): <https://link.springer.com/content/pdf/10.1007/s41959-020-00038-0.pdf>. Udyham.org in India is helping a million preteens. For older students/adults, also see EU's powerful [EntreComp](#) tool to develop entrepreneurial skills.

xxxvi. e.g., [United Nations/UNIDO](#); EU: https://ec.europa.eu/growth/document/download/9e7fd906-c5b0-46c5-9b9e-4b62f6bce98f_en; [OECD](#):

xxxvii. Powerful arguments for growing your own, not recruiting businesses: <https://www.mainstreet.org/blogs/national-main-street-center/2021/01/14/jump-off-the-business-recruitment-train-the-real-r>

xxxviii. Again, www.RightToStart.org; see also “America’s New Business Plan” at www.StartUsUpNow.org

xxxix. <https://www.forbes.com/sites/nishacharya/2019/05/05/who-is-creating-jobs-in-america/#2d51c94597de>

xl. Gramigna, G. (2020) “Short-term and long-term economic disruptions and the SME Spectrum”, UN ILO webinar, 26 April.. Microbusinesses are also leaders as economies revive: [Go Daddy data](#) showing value of microenterprises; [Idaho data](#) on how SMEs were critical to its revival. Also: Morelix, A. (2021). *Rebooted: An Uncommon Guide to Radical Success & Fairness in the New World of Life, Death & Tech*

xli. <https://www.mckinsey.com/featured-insights/sustainable-inclusive-growth/charts/economically-complex-highly-productive>

xlii. See also Lee, N., & Rodríguez-Pose, A. (2021). Entrepreneurship & the fight against poverty in US cities. *Environment & Planning A: Economy and Space*, 53(1), 31-52. <https://journals.sagepub.com/doi/pdf/10.1177/0308518X20924422>

xliii. [Mazarov, et al.](#), Center for Budget Policies & Priorities (see also striking data from Idaho: <https://bit.ly/GrossNetJobs>)

xliv.a German project for ex-convicts reduced recidivism from 46% to 11%, a UK program for 67% to 14%: https://icsb.org/expert/icsb-expert-admin/advancing-humanity-through-entrepreneurship-the-rehabilitation-of-ex-offenders/?_post_id=4559

xl.v.e.g., expert ecosystem builders from ESHIP and Ecosystem Builder Leadership Network

xlvi. Norris Krueger, PhD: +1 208 440 3747; norris.krueger@gmail.com.

xlvii. None of this would be possible without the wisdom, encouragement, and nudging of these boon colleagues. Any errors of fact or judgment are wholly my responsibility. Globally, thank you to my friends at OECD (e.g., David Halabisky, Andrea Hofer, Jon Potter, and especially Raffaele Trapasso), UN (Chantal Line Carpentier, Dragan Radic), EU (Margherita Bacipalugo), Entrepreneur Development of India (Adarsh Kalia) and Japan’s Dr. Yoshi Ishii who already does so much to champion and support entrepreneurs, US Senator James Risch, SBA’s Jennifer Shieh & Brittany Sickler, Endeavor’s Samanta Jovanovic, and of course, Victor Hwang of Right to Start, plus many from ESHIP/EBLN, especially my best teachers Grace Belangia, Jeff Bennett, Alistair Brett, Melissa Roberts Chapman, Jess Edwards, Scott

Gillespie, Kimberly Gramm, Anika Horn, Erick Isaac, Carlos Jimenez, Pava LaPere, Mark Lawrence, Anand Macherla, Craig Montuori, Mary

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xlvi. e.g., www.mountainstatespolicy.org/failure-to-extend-the-federal-tax-cuts-and-jobs-act-tcja-would-hurt-taxpayers On the other hand, the Tax Cuts and Jobs Act also revised the R&D tax credit to be less attractive for certain ventures.

xli. Right to Start advocates persuasively for new firm set-asides, simply persuading agencies to broaden their vendor lists to be more inclusive is also powerful. Equally important to reduce reporting requirements which deter new and small firms.

l. [OSHA](http://www.osha-slc.org) only has budget to help a few SMEs; [EPA](http://www.epa.gov) only for tribal businesses. Both are easily expanded.

li. Multiple studies on SBIR's positive impacts on innovation (including a lofty ROI to the taxpayer): <https://www.perplexity.ai/search/evidence-of-roi-for-sbir-cAc7MIXVSZ6OJIFxLAc6HQ>.

lii. <https://smallbusinessmajority.org/policy-agenda/2024-policy-priorities> – “leveling playing field”

liii. See Sargeant [endnote 10] again, the latest data shows even bigger penalties especially for manufacturers: <https://sbecouncil.org/2024/03/11/bidens-ever-growing-list-of-regulatory-costs-for-small-businesses/>

liv. Other options to innovate the tax code: tax advantages for informal investors, lowering long term capital gains tax to help startups and growing firms. Crucially, the entrepreneur/small business communities will be badly hurt by taxing unrealized gains. [Here](#).

lv. The Academy of Management and International Council for Small Business are already convening research workshops that bring together the voices of scholars, policy experts, and ecosystem builders. <https://bit.ly/2024aomPDWecosystems>

lvi. Existing leaders in federal service like SBA's Brittany Sickler & Jennifer Shieh, e.g., <https://www.nist.gov/tpo/policy-coordination/lab-market>.

lvii. www.bit.ly/OECDdelta; https://bit.ly/OECD_IntComp (pp.111-115).

lviii. During ESHIP, Mark Lawrence [www.inncuvate.com/], the author & Scott Gillespie proposed that given EDA's concerns re annual *Comprehensive Economic Development Strategy* (CEDS) reports, why not help local EDDs to get input from local grassroots ecosystem builders while building greater local connectivity?

lix. A small amount of support for scholars to collaborate would also be invaluable (even travel support for under-resourced colleagues such as HBCUs & developing countries). See also SEIZMIC project below.

lx. Two existing annual global surveys of entrepreneurial activity (e.g., Global Entrepreneurship Monitor) and large-scale panel studies (e.g., Panel Study of Entrepreneurial Dynamics) are less useful for studying ecosystems. Why not a PSED and/or GEM for ecosystems?

lxi. <https://ies.ed.gov/ncee/wwc/> + ESHIP proposed project: [<https://bit.ly/WWCeship>] Assess ecosystem metrics, test “best” practices, assess programs, and regulatory impacts.

lxii. Early model of effective entrepreneur-only [no Entrepreneurial Support Organizations] listening sessions: <https://www.slideshare.net/norriskrueger/copenhagen-ecosystem-workshop>

lxiii. <https://www.kauffman.org/reports/community-engaged-entrepreneurship-research-methodologies/> ; <https://hc-v6-static.s3.amazonaws.com/media/resources/tmp/cbpar.pdf>

lxiv. Several years ago, City of Seattle appointed a champion for new & small business, Ms. Rebecca Lovell (worth a chat). <https://www.seattletimes.com/pacific-nw-magazine/the-new-american-dream-whats-it-mean-for-you/>

lxv. Pre-COVID, the US SBA’s Office of Advocacy toured the country where new and small firms identified hundreds of incontrovertibly dysfunctional regulations but SBA had zero power to act.

lxvi. Japan’s METI & SMRJ under Dr. Ishii has been using students to support ecosystem events and now is rolling out k-12 entrepreneurship education country-wide [see also *endnotes xxiv, xxix*]. SLUSH, Scandinavia’s top entrepreneurship conference was designed by is still led by Aalto students [*endnote xxvi*]. More [here](#) from 2024 ICSB World Congress.

lxvii. Australia implemented [these](#) quickly and affordably:

lxviii. OECD, UN, and EU all agree: Best way to support new/small business is much better basic business training. Multiple large research studies have shown this: e.g., Gielnik, M. M., Frese, M., et al. (2015). Action and action-regulation in entrepreneurship: Evaluating a student training for promoting entrepreneurship. *Academy of Management Learning & Education*, 14(1), 69-94. https://business.uoregon.edu/sites/default/files/media/Gielnik_Frese_et-al_2015.pdf

lxix. Multiple states now support [Global EIR programs](#) where non-USA founders can be employed as EIRs.

lxx. Including financial literacy (e.g., www.operationhope.org) and groups that work to educate entrepreneurs on how to raise capital (e.g., angel group www.keiretsuforum.com/ and virtual accelerator www.kinectcapital.org)

lxxi. The SEIZMIC project in the EU is funding 15 (!) PhD students in sustainability; why not



have NSF or EDA (or ?) funding a crop of top PhD students studying important aspects of ecosystems? www.seismic.eu/msca

lxxii. Turning new ideas into value for society is not for the elite few, per EU and OECD who look to increase training so startups & SMEs are much more involved; we could beat them to it (or we could collaborate). However, the Bayh-Dole Act presents [sizable barriers](#):



Catalyzing Inclusive Growth in Africa: The Role of Impact Investors in Strengthening Msme Ecosystems

*Gilbert Kofi Adarkwah, Assistant Professor of International Business
HEC Montreal*

*Margaret Fong, Assistant Professor of Accounting
HEC Montreal*

INTRODUCTION

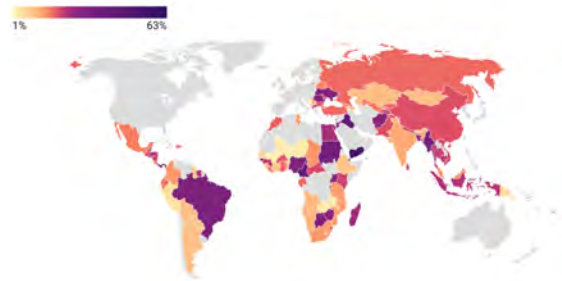
Micro, Small, and Medium-sized Enterprises (MSMEs) are essential to the economic development of many countries. This is especially so for developing countries where MSMEs constitute a significant portion of gross domestic product (The World Bank, 2025). For example, the International Labour Organization estimates that over 89% of all workers in Africa are employed by MSMEs (Kiaga and Leung, 2020). MSMEs account for nearly 90% of businesses across both developed and developing economies, contributing through job creation, employment, tax revenues, and

support for sustainable economic growth (The World Bank, 2025).

However, despite their crucial role, many MSMEs face substantial barriers to accessing capital to grow and sustain their operations. The International Finance Corporation (IFC) estimates that 65 million firms—representing 40% of MSMEs in developing countries—have an annual unmet financing need of \$5.2 trillion (The World Bank, 2025). This accounts for 46% of the global financing gap: Latin America and the Caribbean (23%), and Europe and Central Asia (15%). Half of formal MSMEs lack access to formal credit, with even

greater gaps when informal MSMEs are included (see **Figure 1**). Scholars have referred to the financing challenges faced by MSMEs as a grand societal challenge, and call for effective solutions to address it (Montiel *et al.*, 2021).

FIGURE 1: MSMEs' financing gap, as % of GDP (2025)



Source: Data obtained from the IFC, available at <https://www.smefinanceforum.org/>

To solve this grand challenge, some investors—impact investors—have taken it upon themselves to bridge the financing gap in developing countries (Adarkwah, Groggaard, and Tomassen, 2022).

Impact investors are defined as investors who knowingly accept lower expected financial returns in exchange for nonfinancial benefits (Barber, Morse, and Yasuda, 2020). For instance, impact investors, such as the Investment Fund for Developing Countries (IFU), the Norwegian development finance institution (Norfund), and British International Investment (BII) (formerly 2 CDC Group) seek to promote sustainable economic development, combining both social and environmental goals. Unlike traditional investors who avoid institutionally weak regions (Mol, Stadler, and Ariño, 2017), impact investors often focus on these areas to maximize their developmental impact. Norfund,

for example, explicitly states its mission as “investing where others will not” (Norfund, 2022a). The global impact investment market has expanded rapidly in recent years—from \$116 billion in 2017 to \$1.164 trillion in 2022 (Hand *et al.*, 2024), a significant portion—around 40 %— of which targets enterprises in the Global South (Jones and Murray, 2025). For example, in 2024, impact investors such as the members of the Association of European Development Finance Institutions (EDFI)—who managed a total of \$53 billion— increased their investments in MSMEs by 104% (EDFI, 2025).

Despite these efforts, critical questions persist regarding the real-world impact of these investments. Scholars have raised concerns about whether such initiatives effectively address systemic social issues or merely claim to do so. For instance, Margolis and Walsh (2003: 283) question whether impact investments “really make a concrete difference in curing social ills when they act as though they can do so.” Likewise, Doherty, *et al.* (2014: 430) claim that there are “challenges for measuring performance and impact.” To maximize the benefits of impact investing for MSMEs in developing countries, innovative strategies and enabling policies are essential. This article investigates how impact investors can foster economic growth for MSMEs, focusing specifically on Africa. The research question guiding this discussion is: *How can impact investment firms contribute to the economic growth and development of MSMEs in developing countries?* By analyzing business cases, interventions, and best practices, we seek to shed light on the potential of impact investment as a transformative tool for strengthening local economies and fostering resilient, inclusive communities.

The MSME Ecosystem in Africa

MSMEs in Africa often operate in environments marked by what George et al. (2016: 377) describe as a “persistence of institutional void,” which contributes to limited private investment on the continent. Many MSMEs are part of the informal economy, which, while providing employment and livelihood, also limits access to formal financial services and legal protections (Larsen and Witte, 2022). In many areas, regulatory burdens and a lack of business development services further hinder their scalability and legitimacy due to constrained access to capital and contracts. Despite this, African MSMEs have demonstrated remarkable adaptability and resilience, often developing innovative business models to serve local needs. In addition, the growth of Africa’s youth population, mobile penetration, and digital innovation hubs offer significant opportunities for MSMEs to grow if supported by the right ecosystem (Leke, Chironga, and Desvaux, 2018).

The Role of Impact Investors in Strengthening MSMEs in Africa

Impact investors are increasingly recognized not only for their financial contributions but also for their ability to provide long-term support tailored to the needs of MSMEs (Norfund, 2020).

This “patient capital” allows MSMEs to grow sustainably, investing in innovation, infrastructure, and human capital without immediate pressure for high returns (Norfund, 2020). Unlike traditional investors, who often prioritize short-term returns, impact investors aim to create value that extends beyond profit (Barber et al., 2020). Impact investors often

make use of blended finance structures that combine concessional funds with private capital, reducing the risk and encouraging commercial co-investors to enter underfunded markets (Choi and Seiger, 2020).

Beyond funding, impact investors frequently provide support in the form of advisory, training, and mentorship for MSMEs. Norfund, for instance, conducts annual knowledge transfer and capacity-building programs for investee and co-investee firms, focusing on areas like corruption and relationship management. Since 2018, Norfund reports having supported over 70 direct and indirect investees through technical assistance facilities, resulting in increased managerial capacity, improved corporate governance, and enhanced knowledge sharing among associated firms (Norfund, 2022b). Such efforts directly enhance MSMEs’ managerial capabilities, financial literacy, and operational efficiency, making them more attractive to follow-on investors. Additionally, through their global networks, impact investors connect MSMEs to value chains, procurement contracts, and export markets, thus helping to scale businesses beyond local boundaries. They also often work with policymakers to improve the regulatory and institutional environment. Thus, impact investors contribute not only to enterprise growth but also to systemic transformation of the MSME ecosystem. In the following section, we explore real-world applications of these strategies through targeted case studies across diverse sectors in Africa.

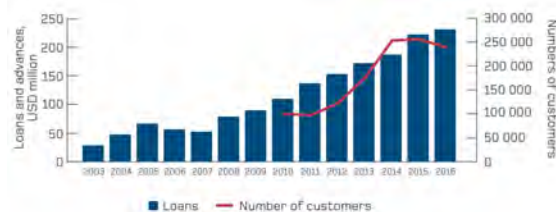
Case Studies

Case 1: Norfund— Increasing Access to Financing in Uganda

Norfund has been instrumental in expanding microfinance institutions across Africa. Between 2004 and 2016, Norfund invested \$38.6 million in DFCU, a Ugandan bank focused on serving MSMEs. This partnership with DFCU and other Ugandan banks such as BRAC helped scale outreach to underserved MSMEs, promoting equity and community development. For instance, following the investment in DFCU, DFCU expanded its risk capital offerings, ran incubator programs, and supported MSMEs typically excluded from traditional banking (Norfund, 2020).

These actions led to a 718% increase in DFCU's customer base and helped create more than 500 jobs (see Figure 2).

FIGURE 2: Increase in the availability of financing for SMEs in Uganda by DFCU



DFCU also opened a start-up incubator and accelerator programs to support young MSMEs (Javira, 2023). Norfund has the ambition of reaching \$40 million clients and \$25 billion, indicating a dramatic uptick in resources available in the countries in question, which will further helped MSME with crucial training and consequently economic development.

Case 2: British International Investment (BII) and Agro-Processing in Kenya In another innovative application of impact investing, in 2022, BII launched the Trade Access platform in partnership with INOKS Capital. This platform helps address the lack of accessible trade financing for MSMEs and traders operating in Africa. Targeting countries such as Mali, Liberia, and Togo, the platform has invested over \$65 million in transactions and issued 290 loans to MSMEs. With loans ranging from as little as €94.15 and an average loan size of \$224,000 (British International Investment, 2025), the platform reaches MSMEs typically excluded from formal financial markets. The platform not only bridges the trade financing gap but also focuses on inclusive and sustainable growth. For instance, it emphasizes support for women-owned and led MSMEs, promotes climate-positive trade, and strengthens local supply chains critical to food security and economic stability (British International Investment, 2025).

According to BII, by facilitating MSMEs' access to capital, the initiative enables these actors to remain active and resilient contributors to local value chains—a critical development component in today's turbulent geopolitical climate. Through this platform, BII exemplifies how impact investment can provide a scalable model of how targeted financing solutions can unlock economic potential in Africa.

The Challenges of Measuring Impact

Despite the notable progress and effort in bridging the financing gap for MSMEs in developing countries, measuring the

impact of these investments remains a complex challenge. While sustainability reporting has gained momentum—driven by both mandatory regulations and voluntary initiatives—impact metrics often rely on proxies such as job creation, income levels, and business survival rates. As a result, evaluating the true outcomes of impact investing remains largely an emerging and underdeveloped field. This has prompted growing recognition of the need for accurate, standardized methods for assessing the outcomes of social impact initiatives.

Currently, different organizations adopt distinct frameworks and definitions, leading to fragmentation and a lack of comparability. This diversity of approaches has raised concerns over the absence of shared and reliable principles for impact measurement. Emerging tools such as the Impact Management Project (IMP) framework and IRIS+ metrics are helping to bring greater structure and consistency to the field. These frameworks aim to create a common language for defining, measuring, and managing impact across industries and geographies. However, for measurement to be truly meaningful, investors should prioritize participatory methods. This includes actively incorporating feedback from MSME stakeholders to ensure that evaluation reflects not only investor objectives but also local realities and needs. By grounding assessments in stakeholder experience, impact investors can better understand which interventions are most effective and sustainable.

Policy Recommendations

To unlock the full potential of impact investing for MSMEs in Africa, a supportive

policy environment is essential. key initiatives of action include:

1. Streamline Business Registration

African governments must work to simplify—and ideally digitalize—procedures for business formation and registration. This can help informal businesses formalize and access financing, as impact investors often require formal registration to provide investment.

2. Incentivize Impact Investment

Provide tax incentives and co-investment schemes to attract more private capital into high-impact sectors and rural communities, where access to capital is often limited.

3. Improve Financial Infrastructure

Reduce risk and transaction costs faced by foreign investors by expanding credit bureaus, collateral registries, and fintech ecosystems.

4. Enhance Data Systems

Help investors assess risks, target interventions, and monitor outcomes effectively by ensuring reliable MSME data.

Conclusion

Impact investors play a crucial role in addressing the financing gap that MSMEs face in Africa.



By combining financial returns with social impact, they not only support enterprise growth but also contribute to broader development goals. Strategic investments—coupled with innovations in impact measurement and enabling policies—can transform MSMEs into engines of inclusive, sustainable growth across the continent. As Africa continues to urbanize and digitize, the role of impact investing in shaping resilient economic ecosystems will only grow in importance.

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RISK BEHAVIOR of INDONESIA SME'S ENTREPRENEUR

Dr. M. Banowati Talim,

Business Administration Parahyangan Catolic University-Indonesia

Assistant Professor of Human Resource and Humane Entrepreneurship

Abstract

Research on Small and Medium Enterprises (SMEs) has been widely conducted, particularly concerning their contribution to the national economy and the challenges they face in business operations. However, studies that specifically examine the risk behavior of SME entrepreneurs and how such behavior affects business growth remain limited.

This study aims to analyze risk-avoidance behavior among SME entrepreneurs in Indonesia and to determine whether there are differences in behavior between male and female entrepreneurs.

Secondary data sourced from the 2022 GEM (Global Entrepreneurship Monitor) data for Indonesian SMEs serves as the primary data source for this study. Descriptive statistical analysis is used to assess risk behavior and

behavioral differences between male and female entrepreneurs.

This research offers a new contribution by focusing on analyzing the risk behavior of male and female SME entrepreneurs in Indonesia, which can serve as a basis for policy development and SME assistance programs in the country.

The results show that SMEs in Indonesia tend to take risks in developing their businesses. However, there remains a small group of entrepreneurs who are very cautious and tend to avoid risk. There is a slight difference in risk taking behavior between male and female entrepreneurs. Targeted support is needed for entrepreneurs who show a strong tendency to avoid risk, to help them build the confidence to pursue business development wisely—ultimately contributing to national economic growth.

Background

Small and Medium Enterprises (SMEs) are the backbone of Indonesia's economy, contributing more than 60% to the Gross Domestic Product (GDP) and providing employment for the majority of the workforce (Yasri et al., 2025). In 2022, SMEs contributed significantly to Indonesia's GDP and absorbed approximately 96.92% of the total workforce, highlighting their critical role in economic development and employment generation (Yasri et al., 2025; Jayani, 2021). This aligns with global trends where SMEs are recognized as key drivers of economic growth and job creation (Ayyagari, Beck, & Demirguc-Kunt, 2007). However, SMEs often face various risks that can affect their business performance. According to the Global Entrepreneurship Monitor (GEM) 2022, the fear of failure rate among Indonesian entrepreneurs is relatively high, reaching 48.95% (GEM Indonesia Report, 2022). This means nearly half of Indonesia's entrepreneurial population is hesitant to start a business due to fear of failure.

Numerous studies have been conducted on SMEs, particularly regarding their contribution to the national economy and the operational challenges they face. SMEs are widely recognized as vital contributors to GDP and employment, especially in developing economies like Indonesia (Yasri et al., 2025). However, they also face significant operational challenges, including limited access to finance, supply chain disruptions, and vulnerability to economic shocks, as highlighted during the COVID-19 pandemic (Ahmed, Chowdhury, & Jabber, 2022). These challenges have prompted governments and institutions to implement targeted policies to

support SME resilience and sustainability (Ayyagari, Beck, & Demirguc-Kunt, 2007). Other research has found that risk management and innovative behavior significantly and positively influence the sustainability of SMEs in Semarang City. For instance, studies have shown that strategic innovation and proactive risk management practices are critical for enhancing SME resilience and long-term viability in Indonesia's manufacturing sector (Iskandar et al., 2025). However, studies specifically examining risk behavior among male and female SME entrepreneurs remain limited, despite growing interest in gender-based entrepreneurial dynamics and decision-making under uncertainty (Naranjo et al., 2025).

The Global Entrepreneurship Monitor (GEM) provides a comprehensive model of entrepreneurship that includes individual- and national-level variables. GEM collects data on motivation for entrepreneurship—driven by attitude, necessity, and opportunity—among adults aged 18 to 65 through the Adult Population Survey (APS). National teams conduct this survey according to guidelines from the Global Entrepreneurship Monitor.

The tendency of Indonesian SME entrepreneurs to avoid risk can be attributed to various factors, including cultural norms and economic conditions. GEM data shows that entrepreneurial activity in Indonesia tends to be more conservative compared to other countries. Many SME entrepreneurs prefer business stability and sustainability over taking high risks for faster growth. This tendency is often linked to their desire to maintain long-term viability and avoid the volatility

associated with aggressive expansion strategies (Barzi, 2023). Research also shows that entrepreneurs with lower risk-taking propensities are more likely to prioritize steady performance and resilience over rapid scaling (Gartner & Liao, 2021). Furthermore, resilience-focused strategies have been increasingly adopted by SMEs in response to recent global disruptions, reinforcing the preference for sustainable over risk growth (Williams et al., 2023)

This study aims to analyze how risk-avoidance behavior manifests among SME entrepreneurs in Indonesia and whether there are behavioral differences between male and female entrepreneurs. Secondary data sourced from GEM 2022 data on Indonesian SMEs will serve as the main reference for this analysis. The findings of this study offer a new contribution by focusing on the analysis of risk behavior among male and female SME entrepreneurs in Indonesia, which can inform future policy development and SME support programs.

Research Questions:

- 1. How do Indonesian SME entrepreneurs exhibit risk-avoidance behavior?**
- 2. What are the differences in risk taking behavior between male and female SME entrepreneurs in Indonesia?**

Literature Review

Definition of Risk

The concept of risk has been discussed by various experts and focuses on different

perspectives. Psychological perspective and risk are a subjective construct shaped by how individuals perceive and emotionally respond to potential negative outcomes. This view emphasizes the role of cognition and emotion in risk perception. Analytical perspective, risk is defined as the probability of an unwanted event occurring, often used in scientific and technical assessments (Vacondio, M., & Dickert, S., 2023). Enterprise Risk Management (ERM) perspective, risk is any event or condition that could affect the achievement of business objectives, managed through integrated risk frameworks (Fraser, J., Simkins, B. J., & Narvaez, K., 2014). In summary, risk can be defined as the potential for problems that may hinder a company's success in achieving its goals. Therefore, risks need to be properly managed as they may create opportunities for benefit—or conversely—result in adverse outcomes affecting organizational sustainability.

Characteristics of Risk-Avoidance Behavior

Risk behavior among SME entrepreneurs refers to how they identify, assess, and manage the risks encountered in their business operations. Research shows that entrepreneurs who adopt proactive risk behavior are generally more successful in overcoming business challenges (Solodovnikov, S. Y., Rummyantseva, A., Meleshko, Y. V., & Skoraya, K. V. (2025). One form of risk behavior is risk avoidance, which refers to actions taken by entrepreneurs to avoid or minimize the negative impact of risk. Characteristics of this behavior include cautious decision-making, a preference for stability, and a tendency to avoid high-risk investments (Kan, K., & Tsai, W.-D., 2006).

There are some reason the SME's entrepreneur avoiding risk, such as economic uncertainty – economic fluctuations and unpredictable policy changes make entrepreneurs more cautious in their business decisions (Solodovnikov et al., 2025); limited access to capital – many SMEs struggle to obtain funding, leading them to prefer safer business strategies (Kan & Tsai, 2006); lack of financial and digital literacy – studies show that many SME entrepreneurs lack sufficient knowledge in risk management and digital technology, which could enhance their competitiveness (Solodovnikov et al., 2025).

Research Methodology

This study uses a quantitative method with a descriptive approach. Secondary data sourced from the 2022 GEM dataset is used to analyze the risk-avoidance behavior of 2,468 SME entrepreneurs (Male: 1,266 and Female: 1,202). Data analysis is conducted using descriptive statistics to illustrate the risk-avoidance tendencies among SMEs.

In this study, risk-avoidance behavior is defined as an individual's tendency to avoid taking entrepreneurial risks, whether due to internal factors (fear, passivity) or external factors (perceived environmental barriers).

Table 1. Variable Operationalization

Code	SPSS Name	Question Label	Indicator Type
Q4	FEARFAIL	You would not start a business for fear it might fail	Internal Psychological – Fear of Failure
Q12	PROACT	Even when you see profitable opportunities, you rarely take an action.	Internal Behavior – Passive
Q12	OPPORT	There are good opportunities to start a business in your area.	Internal Perception – Low Opportunity
Q19	EASYSTART	In your country, it is easy to start a business.	External Perception – Environmental Barriers

Notes:

- FEARFAIL, PROACT, OPPORT ➤ Focus on internal individual factors in risk avoidance.
- EASYSTART ➤ External factor influencing risk perception: The belief that starting a business is not easy may reinforce the tendency to avoid risk.

Research Result

Here the research results present one by one according to risk taking behaviors: internal side and external side of risk avoidance behavior

a. Internal side of risk avoidance behavior

Table 2. Frequencies distribution of FEARFAIL

Response Category	Frequency	Valid Percent
Strongly disagree	122	4.9%
Somewhat disagree	875	35.5%
Neither agree nor disagree	565	22.9%
Somewhat agree	772	31.3%
Strongly agree	134	5.4%

The table 2 shows that 36.7% of SME entrepreneurs in Indonesia tend to fear failure when starting a business, while 40.4% are more confident in seizing business opportunities. This indicates that most of SME entrepreneurs in Indonesia demonstrate a degree of risk tolerance and are willing to take advantage of available opportunities. However, there remains a significant number of entrepreneurs who face psychological barriers in the form of risk-avoidant behavior when starting a business. This group should become the

target of development programs, as every business endeavor inherently carries the risk of failure — what matters is how those risks are managed, and that is where competency needs to be developed.

To further address the question of how risk-taking behavior differs between male and female entrepreneurs, the following table presents a comparison:

Table 3. Frequencies distribution gender based

Fear of Failure Response	Male %	Female %
Strongly disagree	5.5%	4.3%
Somewhat disagree	33.9%	37.1%
Neither agree nor disagree	22.7%	23.0%
Somewhat agree	31.5%	31.0%
Strongly agree	6.3%	4.5%

Table 3 above shows that no strong gender gap in fear of failure exists among Indonesian respondents. Women tend to show slightly less fear of failure than men, which contrasts with global trends, where women are typically more risk averse. This finding needs further investigation to understanding why males slightly report more fear could involve exploring cultural norms, previous business failure experiences, or different expectations in entrepreneurial roles.

Table 4. Frequencies distribution PROACT

Response Category	Frequency	Valid Percent
Strongly disagree	65	2.7%
Somewhat disagree	837	34.4%
Neither agree nor disagree	632	26.0%
Somewhat agree	829	34.0%
Strongly agree	72	3.0%

Indonesian respondents are almost evenly split between being proactive and passive when facing opportunities. The relatively high neutral response (26%) suggests that many may be situational in their actions, possibly depending on external support or resources. Combined with fear of failure, this data suggests that while psychological fear plays a role, behavioral passivity is also a notable barrier. Indonesia's relatively risk-averse culture also contributes to this behavior. Social norms that emphasize financial security and business sustainability cause many SMEs to favor low-risk business strategies (Iskandar et al., 2025).

Table 5. Frequencies distribution gender based

ProAct Response	Male %	Female %
Strongly disagree	1.9%	3.5%
Somewhat disagree	33.2%	35.6%
Neither agree nor disagree	27.8%	24.0%
Somewhat agree	33.8%	34.3%
Strongly agree	3.3%	2.6%

This result show that there is no significant gender gap in passivity towards opportunities in Indonesia. Slightly more females are proactive (disagree more often), which aligns with the earlier observation on fear of failure where females showed slightly lower aversion. This finding also brings implication to policy development that there is the urgency to create some programs to encourage proactive entrepreneurial behavior that can target both genders similarly and addressing contextual barriers (e.g., support systems, mentoring) may help convert neutral individuals into more active entrepreneurs.

**Table 6. Frequencies distribution
OPPORT**

Response Category	Frequency	Valid Percent
Strongly disagree	39	1.6%
Somewhat disagree	238	10.1%
Neither agree nor disagree	405	17.1%
Somewhat agree	1,434	60.6%
Strongly agree	251	10.6%

Most Indonesians are opportunity-driven and do not avoid risk due to lack of perceived opportunities. This suggests that risk avoidance in Indonesia is not strongly driven by pessimism about external market conditions. It aligns with previous findings where fear of failure and passivity are more significant barriers than lack of opportunity. Further implication for policy making is developing support systems to convert neutral individuals into opportunity seekers could further boost entrepreneurship.

**Table 7. Frequencies distribution
gender based**

OpportL Response	Male % within gender	Female % within gender
Strongly disagree	1.4%	1.9%
Somewhat disagree	11.5%	8.5%
Neither agree nor disagree	17.9%	16.3%
Somewhat agree	58.1%	63.3%
Strongly agree	11.1%	10.0%

Both genders in Indonesia display strong confidence in the presence of business opportunities. Females are marginally more opportunity-driven, continuing a trend seen in previous variables (lower fear of failure, more proactive behavior). The gender gap is minimal, but the slightly higher optimism in females suggests that women are equally or more inclined to pursue entrepreneurial activities when opportunities arise. Implication of this

finding suggest that supervising program for both genders, focusing in encouraging action on perceived opportunities (linked to ProAct) remains key, as optimism does not always translate to behavior.

b. External side of risk avoided behavior

**Table 8. Frequencies distribution
EASYSSTART**

Response Category	Frequency	Valid Percent
Strongly disagree	57	2.3%
Somewhat disagree	410	16.7%
Neither agree nor disagree	707	28.8%
Somewhat agree	1,105	45.0%
Strongly agree	178	7.2%

Over half of the respondents have a positive view of Indonesia's entrepreneurial environment. However, nearly one-fifth perceive barriers, and nearly a third remain uncertain, suggesting that while ease of starting a business is not a major barrier overall, perceived or actual bureaucratic or financial challenges could still influence risk behavior. Compared to opportunity perception, ease of starting is rated lower, indicating room for policy improvement. Interventions can target the neutral group, providing clearer information and support regarding how to start a business. Simplification of regulations and accessible startup resources can reduce the perception of difficulty, encouraging more people to act on business intentions.

**Table 9. Frequencies distribution
gender based**

EasystartL Response	Male % within gender	Female % within gender
Strongly disagree	1.8%	2.9%
Somewhat disagree	17.2%	16.1%
Neither agree nor disagree	29.7%	27.8%
Somewhat agree	43.4%	46.6%
Strongly agree	7.9%	6.6%

There is no significant gender gap in the perception of how easy it is to start a business in Indonesia. Both males and females experience similar levels of confidence and uncertainty in the business environment. The slight female edge in agreeing that starting a business is easy supports previous findings that women in Indonesia are comparably, if not slightly more, optimistic in entrepreneurial perceptions. Policy efforts to simplify business processes and reduce barriers can be applied universally without strong gender targeting. Further interventions can focus on reducing uncertainty, as nearly 30% remain neutral in their perception.

Table 10. Findings Summary

Variable	Question	Key Findings (Indonesia)
fearfailL	You would not start a business because of fear of failure.	36.7% agree that fear of failure prevents them from starting a business.
proact	Even when seeing profitable opportunities, you rarely take action.	37.0% admit to being passive, rarely taking action despite opportunities.
opportL	There will be good opportunities to start a business in the next 6 months.	71.2% perceive good opportunities, indicating high optimism.
easystartL	In your country, it is easy to start a business.	52.2% feel starting a business is easy, reflecting moderate confidence.

Conclusions

Risk avoidance in Indonesia is more strongly influenced by internal factors (fear of failure, passivity) than by external perceptions (opportunity, ease). Effective interventions needed especially focus on strengthening self-efficacy, reducing psychological fear, and empowering action on perceived opportunities. The business environment's perception is positive, but support is still needed for those who remain hesitant or neutral.

Research findings suggest developing a policy to increase the secure environment for SME's entrepreneur in developing their business and take a risk wisely. Training and supervising programs need to include also risk management for SME's entrepreneurs. Further research needed to explore these findings.

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The Top 10 Micro, Small, and Medium Enterprises Trends for 2025



Dr. Ayman El Tarabishy

President & CEO of the International Council for Small Business; Deputy Chair of the George Washington University School of Business, Department of Management

Predicting the future isn't about gazing into a crystal ball; it's more like looking into a mirror. What we see reflects our hopes, challenges, and the realities shaping our time.

The future of micro, small, and medium-sized enterprises (MSMEs) is an ever-evolving tapestry of innovation, entrepreneurship, and adaptation. In 2025, this evolution has been marked by fast and sudden changes, reflecting the dynamic and unpredictable nature of the global business landscape. At the International Council for Small Business (ICSB), we recognize that agility and insight are more critical than ever for MSMEs navigating these shifts.

Our journey to identify the **Top Ten Trends for MSMEs in 2025** was a comprehensive and collaborative effort. Our discussions with partners spanned all continents, providing diverse perspectives on the challenges and opportunities facing MSMEs. We also delved into our world-class academic journals, analyzing submissions from leading researchers pushing the boundaries of entrepreneurship theory.

But we didn't stop there. Figuratively speaking, we "hit the streets," engaging directly with MSME owners to hear their real-world experiences, triumphs, and challenges. Interestingly, what we heard from researchers and practitioners sometimes stood in stark contrast. Yet, this divergence affirmed our ability to connect theory with practice—bridging the gap between academic insights and the lived realities of entrepreneurs.

The trends we present this year are not merely theoretical projections. They result from rigorous analysis, expert forecasting, and a steadfast commitment to understanding the transformative forces shaping the business world. These trends blend enduring principles with innovative breakthroughs, offering a roadmap for growth, innovation, and resilience.

They reflect the unique challenges of our time and the strategies MSMEs are adopting to thrive amidst uncertainty. From sustainability and technological advancement to inclusive and resilient business practices, these trends illuminate opportunities and pathways to success.

As ICSB remains at the forefront of championing MSMEs and global entrepreneurship research and practice, we invite you to explore these transformative trends. Let them guide your journey as we collectively embrace the challenges and opportunities of 2025, shaping a future of prosperity for MSMEs around the world.

10

NUMBER TEN TREND

MSMEs Navigating Counterfeiters and Cybersecurity Pitfalls

In 2025, MSMEs face a dual challenge: combating counterfeit goods and escalating cybersecurity threats. Counterfeit products flood markets, eroding trust and undermining small businesses' hard-earned reputations. Advanced technology allows counterfeiters to replicate products and packaging with alarming precision, making it harder for customers to identify authentic items. For MSMEs, counterfeit goods mean lost revenue and damaged customer loyalty.

Simultaneously, MSMEs are prime targets for cyberattacks, as their smaller operations often need more robust security systems for larger enterprises. Cybercriminals exploit these vulnerabilities through ransomware, phishing, and data breaches that can financially and operationally cripple businesses. Without safeguards, MSMEs risk losing critical data and eroding customer trust—a vital asset for any small business. Affordable cybersecurity measures, such as encryption, multi-factor authentication, and employee training, must become priorities to reduce these risks effectively.

To tackle these issues, MSMEs must adopt proactive strategies that blend innovation and collaboration. Investing in technologies to authenticate products and secure data is just the start. By joining industry alliances and leveraging shared knowledge, small businesses can strengthen defenses against counterfeiters and cyber criminals. Protecting integrity and innovation is critical for MSMEs to remain a driving force in economic growth and societal progress.

9

NUMBER NINE TREND

Human-Centered Entrepreneurship – A Rising Movement

We are excited to spotlight **Human-Centered Entrepreneurship**, a trend gaining importance and moving closer to the mainstream. Its inclusion as **the theme for the 2024 UN MSMEs Day** at the ILO and the United Nations marks a significant milestone in its global recognition. In 2025, this transformative concept continues to rise in prominence, ranking **Humane Entrepreneurship: Coaching and Mentoring of Employees** as the **#8 trend** for MSMEs, following its ranking at #4 in 2023.

Human-centered entrepreneurship creates a workplace culture that values employees as the core of business success. MSMEs increasingly understand that investing in their workforce's growth and well-being is more than a moral imperative—a strategic advantage. Coaching and mentoring programs have become practical and impactful tools for enhancing employees' skills, unlocking their potential, and nurturing career development. This approach fosters employee loyalty and commitment while building inclusive, empathetic, and productive work environments.

This trend aligns with a broader global shift toward valuing the **human aspect of business**. By embracing Humane Entrepreneurship, MSMEs are fostering growth and innovation and positioning themselves for long-term success in a competitive and dynamic business landscape. As this movement continues to gain traction, its importance in shaping the future of work and enterprise cannot be overstated.

8

NUMBER EIGHT TREND

MSMEs Forming Collaborative Alliances – An Elegant Evolution

In 2024, **Collaborative Alliances** emerged as the #1 trend for MSMEs, revolutionizing how small businesses leverage unity to navigate challenges. By pooling resources, expertise, and market insights, MSMEs banded together as a collective force, negotiating better terms, accessing untapped markets, and building resilience against economic uncertainties. These alliances represented a robust response to volatile markets, transforming individual MSMEs into a united front capable of thriving in an unpredictable business environment.

In 2025, this trend has evolved and, as a result, dropped in ranking, now sitting at **#9**. This shift is due to its digitization through simple yet effective technologies like **WhatsApp and other apps** that enable MSMEs to connect effortlessly. These digital tools have streamlined collaboration, allowing MSMEs to share knowledge, form partnerships, and coordinate efforts more efficiently. As these platforms increasingly integrate with **AI-powered solutions**, we anticipate further transforming collaborative alliances, enhancing their impact through automation, data-driven insights, and predictive analytics.

7

NUMBER SEVEN TREND

The Evolution of WomenPreneurs – Progress Remains Slow

Empowering women in entrepreneurship continues to be a vital yet slow-moving trend in 2025, maintaining its position on our **ICSB Top Ten Trends**. The **Evolution of WomenPreneurs** gained global attention in 2023, driven by ICSB's emphasis on supporting women and youth in MSMEs and resilient supply chains. This theme gained momentum following Claudia Goldin's Nobel Prize for her groundbreaking research on gender income disparities, particularly those linked to childbirth. Goldin's recognition brought new urgency to addressing the systemic barriers women face in the labor market, aligning directly with ICSB's mission to foster inclusivity in the entrepreneurial ecosystem.

The path forward requires a **collective effort** from international organizations, policymakers, and individuals to create sustainable, inclusive ecosystems where women can thrive as entrepreneurs. This includes addressing gender income disparities, investing in women-led businesses, and fostering resilient supply chains that support women's leadership. ICSB remains committed to advancing this mission, as empowering women entrepreneurs is not just a matter of equity—it is a cornerstone for building a brighter and more inclusive global economy.

6

NUMBER SIX TREND

Circular Economy Business Models – Sustainability Takes Center Stage

In 2025, **Circular Economy Business Models** have become more prominent, increasing one spot in the ICSB Top Ten Trends for MSMEs. This shift reflects MSMEs' growing urgency and commitment to adopting sustainable practices and prioritizing waste reduction. As the global focus on environmental responsibility intensifies, MSMEs increasingly align their operations with circular economy principles, reimagining traditional linear supply chains and product lifecycles for a more sustainable future.

A defining feature of this trend is **product design for recyclability**, where MSMEs innovate to create products that can be easily disassembled and recycled, minimizing waste and environmental impact. Beyond design, many MSMEs are launching **refurbishment and resale programs**, extending the lifespan of products and reducing the need for new manufacturing. These efforts reduce ecological footprints and position MSMEs as leaders.

In 2025, the rise of Circular Economy Business Models underscores the evolving priorities of MSMEs as they respond to global sustainability challenges. This trend is not only about doing what's right for the planet—it's also about creating value, innovation, and leadership in the marketplace.



5

NUMBER FIVE TREND

ESG Principles – Lost in Bureaucracy, Stifling MSMEs

Environmental, Social, and Governance (ESG) principles were initially designed to promote sustainability, accountability, and ethical practices, but MSMEs have devolved into a burdensome compliance system. Institutions advocating ESG now impose rigid frameworks with overly detailed requirements that often overlook the unique needs of smaller businesses. Instead of fostering meaningful change, ESG has become another layer of **unnecessary bureaucracy**, part of the broader issues outlined in **Trend #1**. Business owners are forced to allocate resources to navigate complex reporting systems, hire consultants, and comply with standards irrelevant to their scale, diverting time and energy from innovation and growth.

At the heart of the problem is a **misalignment of priorities**. Many institutions prioritize safeguarding their relevance over enabling impactful change, creating compliance-driven systems that alienate MSMEs. These frameworks often stifle the entrepreneurial spirit of smaller enterprises, which thrive on creativity, agility, and localized solutions. The current ESG approach discourages MSMEs from engaging in sustainability efforts by focusing on bureaucratic processes instead of practical, actionable outcomes. This micromanagement reveals a fundamental misunderstanding of ESG's purpose, turning it into a barrier rather than a tool for positive change.

To truly support MSMEs, ESG must return to its **original intent**: empowering businesses to pursue sustainability in ways that align with their unique contexts. This requires shifting to simplified, entrepreneurship-focused frameworks prioritizing outcomes over processes and enabling innovation.

4

NUMBER FOUR TREND

MSMEs and Navigating Trade Wars

MSMEs and Navigating Trade Wars first appeared on our list in 2020 and are returning to the ICSB Top Ten Trends for 2025. This trend is back, propelled by an evolving and volatile political landscape. Global trade dynamics are shifting dramatically, creating mixed opportunities and challenges for MSMEs. While some enterprises may find new markets and advantages, others risk being negatively impacted by the turbulence.

The ICSB projects that **trade wars will remain a significant issue impacting MSMEs**, and evidence is already visible. Major economies' increased tariffs are disrupting global supply chains and escalating costs for small businesses dependent on international trade. These actions create ripple effects across industries, adding layers of complexity to the already challenging landscape for MSMEs.

The implications for MSMEs are profound. Businesses must navigate these trade disputes with agility, carefully adapting their strategies to mitigate risks and capitalize on emerging opportunities. This could mean rethinking supply chains, diversifying export markets, or leveraging regional trade agreements to minimize exposure to high-tariff zones.

As trade wars evolve, MSMEs must stay informed, flexible, and innovative in their approach. For those who can adapt successfully, this challenging environment may open the door to new growth opportunities while reaffirming MSMEs' resilience and importance in the global economy.



3

NUMBER THREE TREND

The Humanizing of Artificial Intelligence & the Rise of GEN AI

In 2025, **Artificial Intelligence** (AI) has climbed to the No. 3 trend, reflecting its transformative impact on the global business landscape. For Micro, Small, and Medium-sized Enterprises (MSMEs), AI is no longer a distant technology; it is a vital tool for reshaping operations, decision-making, and customer engagement. From providing data-driven insights to optimizing supply chains and delivering personalized customer experiences, AI empowers MSMEs to compete globally with unprecedented efficiency.

What sets AI apart in 2025 is the growing emphasis on **humanizing its application**. Businesses are not just adopting AI for automation and efficiency but are focusing on creating AI systems that enhance human interaction, foster trust, and bring empathy to digital experiences. This human-centric approach to AI ensures that technology is a collaborator rather than a replacement, making it accessible and valuable to a broader audience.

Central to this transformation is the emergence of **GEN AI**—a generation that has grown up immersed in an AI-integrated world. These individuals are naturally fluent in AI-driven tools and possess an innate ability to leverage technology for innovation and problem-solving. Their adaptability and creativity make them indispensable contributors to industries evolving alongside AI. For MSMEs, investing in AI education and upskilling initiatives is essential to harnessing the potential of GEN AI to drive growth, competitiveness, and innovation.

As AI evolves, MSMEs have a unique opportunity to integrate AI innovatively and empathetically. By embracing AI's humanization and leveraging the talents of GEN AI, businesses can redefine the game's rules and shape a future where technology and humanity thrive together.



2

NUMBER TWO TREND

Peace for Economic Development & Prosperity

As we enter 2025, the urgent call for peace as a foundation for economic development and prosperity remains paramount, especially in regions affected by prolonged conflicts like Syria, Gaza, Ukraine, and others. The devastating impact of war has left communities in turmoil, economies strained, and global markets disrupted—leading to soaring natural gas prices and critical shortages of essentials like wheat. These challenges underscore the need for peace to rebuild and prosper, highlighting the vital role of MSMEs in post-conflict recovery.

The International Council for Small Business (ICSB), under the leadership of Dr. Ayman El Tarabishy, has long emphasized the critical role of MSMEs in fostering resilience and hope in war-torn regions. Since proposing the establishment of the United Nations Day for MSMEs in 2016—celebrated annually on June 27th—the ICSB has championed these enterprises as the backbone of economic reconstruction and the hallmark of peaceful, prosperous societies. As we anticipate peace in Syria, Ukraine, Gaza, and beyond, entrepreneurs are poised to lead the charge in rebuilding shattered economies and communities. The global community must rally to support these efforts, mobilizing resources and innovative solutions to aid displaced populations and rebuild fractured economies. By empowering MSMEs, we lay the groundwork for sustainable development, resilience, and a brighter, more peaceful future for all.



NUMBER ONE TREND

Bureaucracy – Hindering Entrepreneurship & Innovation

As we confront 2025, **bureaucracy** continues to hinder the progress of MSMEs, with digitized systems introducing more complexity instead of reducing it. Entrepreneurs are frustrated, wondering whether to blame the technology or the people running it. Adding to the irony, many of those managing these systems—“**Administrators**,” “**CFOs**,” and “**Regulators**”—were instrumental in building the very **bureaucratic digital walls** that now obstruct progress.

By design, these roles are focused on control, oversight, and compliance—tasks like monitoring, reporting, and enforcing regulations. While these functions have their place, they often prioritize maintaining order over fostering innovation or streamlining processes. Their mandate is not to create or innovate **but to control**, leaving little room for entrepreneurial thinking or solutions that could empower MSMEs.

ICSB **calls on all governments to take decisive action to reduce bureaucracy and eliminate unnecessary red tape for MSMEs**. The challenges entrepreneurs face today concern more than digitization; while digital systems promise efficiency, they often add complexity instead of reducing it. Governments must go beyond surface-level solutions and tackle the root of the problem: the excessive steps, redundant processes, and outdated functions that hinder the progress of MSMEs.

Simply stating that “going digital” will streamline operations is no longer enough. Many digital platforms replicate the same bureaucratic inefficiencies in a virtual format, leaving entrepreneurs bogged down by systems as cumbersome as their manual predecessors. What MSMEs need is not just digitization but **genuine simplification**. Governments must reevaluate their regulatory frameworks and remove steps that no longer serve a purpose. They must prioritize clarity and efficiency and focus on fostering innovation rather than enforcing excessive control.

The message is clear: We **don’t need more control; we need more creativity**. Let’s assign entrepreneurs these roles and watch how things progress. The future of business demands it.

Top Trends Written by:

Dr. Ayman ElTarabishy

President & CEO, ICSB

Deputy Chair, Department of Management

PIGTURES WORLD CONGRESSES 2025





2025



ICSB WORLD CONGRESSES

1977	Wichita, KS, USA	2002	San Juan, Puerto Rico
1978	Cullowhee, NC, USA	2003	Belfast, Northern Ireland
1979	Quebec City, Canada	2004	Johannesburg, South Africa
1980	Monterey, Peninsula, CA, USA	2005	Washington, DC, USA
1981	Waco, TX, USA	2006	Melbourne, Australia
1982	Knoxville, TN, USA	2007	Turku, Finland
1983	Halifax, Nova Scotia, Canada	2008	Halifax, Nova Scotia, Canada
1984	Chicago, IL, USA	2009	Seoul, South Korea
1985	Montreal, Canada	2010	Cincinnati, Ohio, USA
1986	Denver, CO, USA	2011	Stockholm, Sweden
1987	Vancouver, Canada	2012	Wellington, New Zealand
1988	Boston, MA, USA	2013	Ponce, Puerto Rico
1989	Quebec City, Canada	2014	Dublin, Ireland
1990	Washington, DC, USA	2015	Dubai, United Arab Emirates
1991	Vienna, Austria	2016	New Jersey/New York, USA
1992	Toronto, Canada	2017	Buenos Aires, Argentina
1993	Las Vegas, NV, USA	2018	Taipei, Taiwan
1994	Strasbourg, France	2019	Cairo, Egypt
1995	Sydney, Australia	2020	Covid-19
1996	Stockholm, Sweden	2021	Paris, France
1997	San Francisco, CA, USA	2022	Washington, DC, USA
1998	Singapore	2023	Gwangju, South Korea
1999	Naples, Italy	2024	Berlin, Germany
2000	Brisbane, Australia		
2001	Taipei, Taiwan		



International Council
for Small Business

Advancing Entrepreneurship Worldwide

ICSB Annual Global Micro-, Small, & Medium Sized Enterprise Reports



View all past issues at
msme.days



LEARN MORE:
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Journal of Small Business Management

Origin of Korean Entrepreneurship



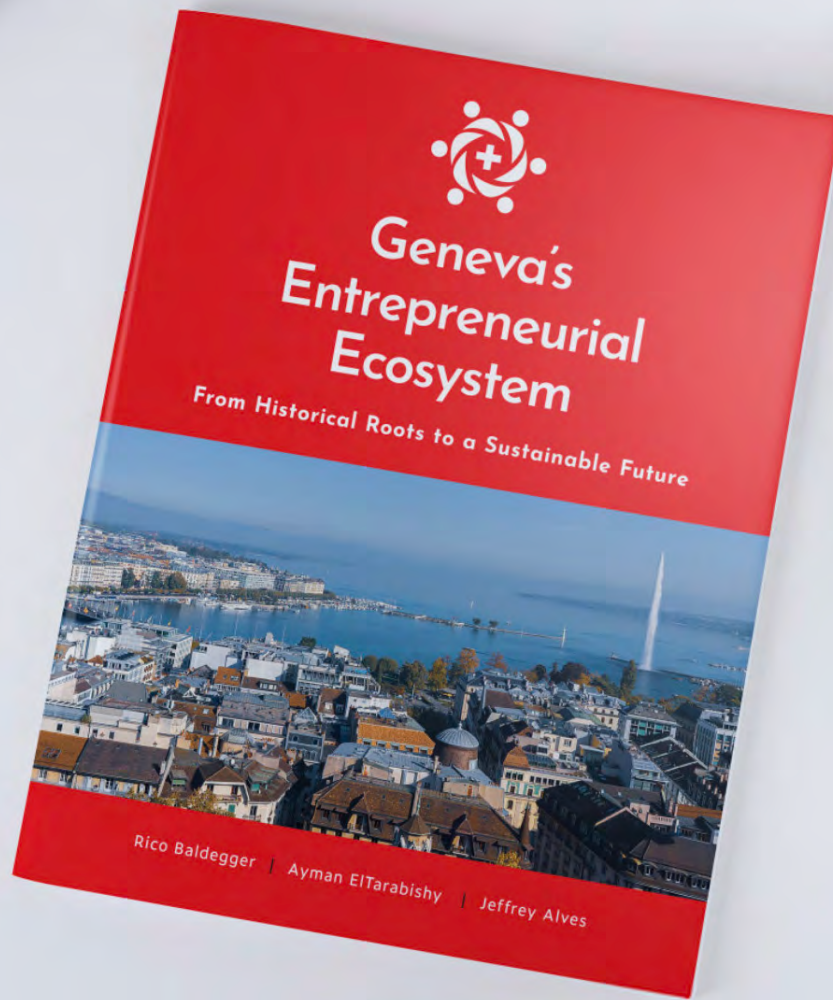
DOI: <https://doi.org/10.1080/00472778.2023.2218450>

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Taylor & Francis Group



Rico Baldegger

*Dean and Professor
School of Management Fribourg
(HEG-FR), HES-SO*



Ayman ElTarabishy

*President & CEO, ICSB Department
of Management, George Washing-
ton University, Washington, DC,
USA*



Jeffrey Alves

*Distinguished Professor of Free
Enterprise & Entrepreneurship
Emeritus and Dean Emeritus, Sidhu
School of Business and Leadership,
Wilkes University*

East Meets West in Entrepreneurship



CONTRIBUTORS:

Ayman ElTarabishy | Kyoo-il Jo | Joon Oh | Kichan Kim | Rico Baldegger | Jeff Alves



70TH Anniversary

ICSB Signature Event
SYDNEY

July 09-10, 2025



Turning *Insights* Into *Action*



Empowering MSME Leadership

Developing agile business leaders through investment in education, mentorship, and capacity building.



Driving Innovation

Equipping MSMEs with the tools to innovate, adopt new technologies, and remain competitive.



Building Resilient Ecosystems

Strengthening local and global support networks, including policy frameworks, financial systems, & partnerships.

Shifting trade dynamics, global shocks, and rapid technological change are reshaping the world. In response, nations are turning inward to build more resilient, self-sustaining economies. At the center of this shift are MSMEs, flexible, innovative, and deeply rooted in their communities.

As MSMEs face mounting pressures, their ability to adapt and innovate has become essential. Investing in the next generation of MSME leaders prepares them to lead with agility, vision, and purpose. This gathering in Sydney is a call to action for public and private leaders to support MSMEs, nurture leadership, and spark the innovation needed to thrive in a rapidly evolving world.



Day One

8:00 AM – 9:00 AM | Registration & Networking

9:00 AM – 10:00 AM | Opening of Forum & Keynote Speech

10:00 AM – 11:00 AM | Panel Session 1: Challenges Facing MSMEs and Emerging Opportunities from Australia and the World

11:00 AM – 11:30 AM | Coffee Break & Networking

11:30 AM – 12:30 PM | Panel Session 2: Investing in SMEs - Global Best Practices

12:30 PM – 2:00 PM | Lunch & Networking – Step Out, Connect, and Support a Local Restaurant with Fellow Attendees

2:00 PM – 3:00 PM | Panel Session 3: The 50% Factor: Women CEOs and Scaling Up MSMEs

3:00 PM – 4:00 PM | Panel Session 4: Advancing Knowledge: High-Impact Research for the Future of MSMEs

4:00 PM – 04:30 PM | Coffee Break & Networking

4:45 PM – 05:30 PM | Research in Academia and Publishing - Meet the Editors

5:30 PM – 07:30 PM | Evening Reception – Making New Friends & Building Global Connections

Day Two

8:30 AM – 9:00 AM

Registration & Networking Breakfast

9:00 AM – 9:15 AM | Opening Keynote: Human-Centered Entrepreneurship: A New Paradigm for Business Success

9:15 AM – 10:15 AM | Session 1: Applying Human-Centered Entrepreneurship in the Business World

10:15 AM – 11:00 AM | Session 2: HELP UNIVERSITY Case Study

11:00 AM – 11:30 AM | Coffee Break & Networking

11:30 AM – 12:30 PM | Session 3: Origin of Korean Entrepreneurship - Jo Shik and the Human-Centered Approach

12:00 PM – 1:30 PM | Lunch – Enjoy a Meal and Support Local Restaurants

1:30 PM – 3:00 PM: Session 4 | Global Research for Policy & Practice

3:00 PM – 3:30 PM | Coffee Break & Networking

3:30 PM – 4:30 PM: Session 5 | Shaping the Future of MSMEs — Bridging Research, Policy, and Action

4:30 PM – 5:30 PM | Session 6: Korea Spotlight Session – Presented in Korean by Leading Scholars

Upcoming Events



INNOVATION UNLEASHED

A 5-PART GLOBAL EVENT

UNLEASHING INNOVATION. EMPOWERING MSMES. SHAPING THE FUTURE.

In a time of rapid change and global transformation, Innovation Unleashed is ICSB's bold initiative to unite entrepreneurs, educators, policymakers, and change-makers from every corner of the world. This dynamic five-part global series is designed to spotlight key areas of entrepreneurial innovation, with a focus on inclusive education, cutting-edge policy, and the transformative power of technology.

Each event serves as a catalyst for dialogue and action, bringing together diverse voices to reimagine the future of small business. By exploring the intersection of creativity, resilience, and collaboration, Innovation Unleashed aims to equip leaders with the insights and tools needed to thrive in an increasingly complex and connected world.

[ICSBGLOBAL.ORG](https://www.icsbglobal.org)



CAIRO, EGYPT NOVEMBER 25-27, 2025

1

WORLD CONGRESS RESEARCH

A global gathering of leaders & entrepreneurs addressing today's biggest MSME challenges.

2

ICSB ACADEMY

An immersive program for students focused on entrepreneurship, leadership, & collaboration.

3

WOMEN CEOS FORUM

A space for women leaders to connect, share insights, & advance inclusive entrepreneurship.

4

SME MARKETPLACE

A showcase of creative, sustainable, and impactful small business products and ideas.

5

ECOSYSTEM BUILDERS

Connect founders, investors, and educators to build ecosystems that drive innovation.

2025 SOUTH KOREA TOP TEN TRENDS FOR MSMES

By Kichan Kim

*Professor of Business Administration, The Catholic University of Korea Chair of the Board,
International Council for Small Business Visiting Professor of Management, GW University*

1. Intensification of Bureaucracy and Decline of Entrepreneurship
2. Transition to the AI Era: Enhancing Productivity and Digital Innovation
3. Humane Entrepreneurship: Balancing High-Tech and High-Touch
4. The Galapagos Syndrome: Overdependence on Domestic Markets
5. CFO-Led Management: Insufficient Investment in Technology Innovation
6. Strengthening Brand Power and Global Customer Trust
7. Decline of Entrepreneurship Among Third-Generation Leaders
8. Declining Competitiveness of Platform Monopolies
9. The Evolution of Women Entrepreneurs: Sustained Support Needed
10. Welfare-Oriented SME Policies and Weakening Innovation Ecosystems

READ MORE AT
[ICSB.ORG/ICSB-TRENDS/MIDDLE-EAST](https://icsb.org/icsb-trends/middle-east)



THE HISTORY OF ICSB

Founded in 1955, the International Council for Small Business (ICSB) was the first national and international membership organization to promote the growth and development of small businesses worldwide. The organization brings educators, researchers, policy-makers, and practitioners worldwide to share knowledge and expertise in their respective fields through publications, programs, workshops, training sessions, and certifications. ICSB is a not-for-profit organization hosted in Washington, D.C., at the George Washington University.

ICSB proudly holds the distinction of being the founder of the United Nations initiative for small businesses. The United Nations created the U.N. Micro-small and Medium-sized Enterprises Day (MSMEs Day), which is now celebrated every June 27th. This pioneering effort has shaped global policies and initiatives in support of entrepreneurship and economic development. Through its visionary leadership and collaborative efforts, ICSB continues to drive impactful change on a global scale, advocating for the needs and interests of small businesses worldwide.

ICSB.ORG



International MSMEs Day

The International MSMEs Day, observed on June 27th every year, provides an opportunity to highlight the crucial role of MSMEs in sustainable development and advocate for policies that support their growth. The United Nations General Assembly designated June 27th as the International Day for MSMEs in recognition of the importance of MSMEs in promoting economic growth and job creation. Argentina proposed the Day with the International Council for Small Business (ICSB).



June 27 | MSME Day 2024 Program

INTERNATIONAL LABOUR ORGANIZATION (ILO) & INTERNATIONAL
ORGANIZATION OF EMPLOYERS (IOE) GOVERNING BODY ROOM

10:00 AM - 10:05 AM

WELCOMING REMARKS FROM ILO

10:05 AM - 10:45 AM

OFFICIAL OPENING FOR MSMEs DAY

Session Chair: Dr. Ayman ElTarabishy, CEO & President, ICSB

Distinguished Speakers:

- H.E. Ambassador Jung Sung Park, Deputy Permanent Representative of the Republic of Korea in Geneva
- H.E. Ambassador Matthew Wilson, Permanent Representative of Barbados to the United Nations Office in Geneva
 - Dragan Radic, Chief-Micro, Small and Medium-Sized Branch (MSME) Sustainable Enterprises, Productivity, and Just Transition Department, ILO
- Akustina Morni, Director of Policy, International Organization of Employers, IOE
- Ki-Chan Kim, Chair of the Board, International Council for Small Business (ICSB)

10:45 AM - 11:30 AM

THE GLOBAL IMPACT OF MSMEs FOR A BETTER WORLD

Session Chair: Dr. Rico Baldeger, Dean and Professor, School of Management Fribourg (HEG-FR)

Speakers:

- H.E. Martin Garcia Moritan, Ambassador to Uruguay, The Republic of Argentina
 - Perrine de le Court, Director Ashoka, Belgium
 - Nigist Goytom, Founder and CEO of Ha Hu, Switzerland
- Roland Decorvet, Founder and Chairman, Alpha Seeds, Congo, Switzerland
- Chang-Jae Shin, Chairman & CEO of KYOBO Life Insurance, S. Korea - Recognition to Follow

11:30 AM - 12:15 PM

WOMEN IN BUSINESS - OPPORTUNITIES FOR IMPACT

Session Chair: Ms. Analia Pastran, ICSB Board Member, Argentina

Speakers:

- Katia Passerini, Provost and Executive Vice President, Seton Hall, USA
- Narmina Hasanova, CEO and founder of MiniBoss Business, Azerbaijan

- Chantal Line Carpentier, Head, Trade, Environment, Climate Change and Sustainable Development, The United Nations
- KyungRan Yang, Co-founder and CEO of MegaGen Implant Co. Ltd., S. Korea
 - Sonja Betschart, Co-founder of WeRobotics, Switzerland
- Franziska Giffey, Deputy Lord Mayor of Berlin (via video), Germany

12:15 PM - 1:15 PM

HUMAN-CENTERED ENTREPRENEURSHIP: A GLOBAL PERSPECTIVE

Session Chair: Rico Baldeger, Dean and Professor, School of Management Fribourg (HEG-FR)

Speakers:

- Nicolas Durand, Director of Foundation Campus Biotech, Switzerland
 - Cameron McKenzie, CEO Aspire, Switzerland
- Mouad Lamrani, General Director R&D Innovation Center, Menicon Co., Ltd., Switzerland
 - Louis-Jacques Filion, Professor Emeritus HEC Montréal, Canada
 - Kristina Babina, CEO and Founder of TotUp, Switzerland
 - Thomas Heupel, Research Director, FOM, Germany
- Christian Meisel, Head of Entrepreneurship Center, h2, Germany

1:15 PM - 2:15 PM

LUNCH BREAK AT THE ILO

2:15 PM - 3:00 PM

HEAD TO UNITED NATIONS PALAIS DES NATIONS - ROOM XVII

pre-registration required

UNITED NATIONS PALAIS - ROOM: XVII

3:00 PM - 4:00 PM

OPENING STATEMENTS

Session Chair: Dr. Ayman ElTarabishy, President & CEO, ICSB

Distinguished Speakers:

- H.E. Ambassador Carlos Mario Foradori,
Permanent Representative of Argentina to the United Nations in Geneva
 - H.E. Ambassador Seong Deok Yun,
Permanent Representative of the Republic of Korea in Geneva
- H.E. Orkhan Mammadov, Chairman of the Management Board, Azerbaijan
The Small and Medium Business - Azerbaijan - Host of COP 29

- H.E. Jo Kyu-il, Mayor, Jinju City, S. Korea
- Chantal Line Carpentier, Head, Trade, Environment, Climate Change and Sustainable Development, The United Nations Conference on Trade and Development (UNCTAD)
 - Representative, International Trade Centre (ITC)
- Ki-Chan Kim, Chair of the Board, International Council for Small Business (ICSB)

4:00 PM - 4:45 PM

GLOBAL MSMEs INITIATIVES FROM ORGANIZATIONS

Session Chair: Ms. Chantaline Carpentier, Head, Trade, Environment, Climate Change and Sustainable Development, The United Nations Conference on Trade and Development (UNCTAD)

Speakers:

- Amelia Santos - Chief, Investment Issues and Analysis Section, Enterprise and Investment Division, UN Trade and Development
- Henrique Pacini - Sustainable Manufacturing and Environmental Pollution Programme Manager, Trade and Environment Branch, UN Trade and Development
- Dragan Radic, Chief-Micro, Small and Medium-Sized Branch (MSME) Sustainable Enterprises, Productivity and Just Transition Department, ILO
- Lucia Cusmano, Acting Head of the SMEs and Entrepreneurship Division and Head of the Unit on SME and Entrepreneurship Transformation at the OECD Centre
 - Rico Baldegger, President of the Board of Trustees, Swiss Sustainability Foundation, Switzerland
- Andrés O. Hayes, President & CEO Airtifae Group, United States
 - Marc Tienbig, President of the German Small and Medium-Sized Business Association (DMB) (via video), Germany - introduced by Hartmut Meyer
- Sebastian Striezel, President of the Chamber of Commerce, Berlin (via video), Germany

4:45 PM - 6:00 PM

LOOKING INTO THE FUTURE SESSION - THE YOUTH INPUT & CONCLUSION

Session Chair: Dr. Ayman ElTarabishy, President & CEO

6:00 PM

RECEPTION AT VIEUX BOIS GENEVA











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The ICSB Lighthouse Awards honor small business agencies and organizations whose sole mission is to support MSMEs and entrepreneurs nationally. These exceptional organizations develop and implement programs, influence government policies, and drive research and innovative solutions that create a positive impact.

The award symbolizes a Lighthouse—a guiding beacon that steers MSMEs and entrepreneurs through challenges, offering stability, hope, and a safe harbor. Just as lighthouses are vital during storms, these organizations are critical in navigating MSMEs and entrepreneurs toward growth, prosperity, and resilience.

ICSB thoughtfully selects each recipient and provides a personalized explanation from the ICSB President detailing their significant contributions.

LEARN MORE:

[ICSB.ORG/LIGHTHOUSE-AWARDS](https://www.icsb.org/lighthouse-awards)



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The International Council for Small Business (ICSB) is proud to announce the recipients of the ICSB Golden Book Awards for 2024, recognizing the Top Five Essential Books of 2024. These books stand out as the pinnacle of thought leadership, innovation, and impact in their respective fields. Each has been meticulously reviewed by ICSB, earning its place among the best for the quality of topics explored, the depth of knowledge shared, and the transformative insights presented. Each book has an extensive review by the President of ICSB.

While the ICSB Golden Book Awards do not rank these five works, we honor them equally for their remarkable contributions to academia, entrepreneurship, and small business development. Together, these books are essential for professionals, educators, policymakers, and entrepreneurs seeking to stay ahead in an ever-evolving world.

LEARN MORE:

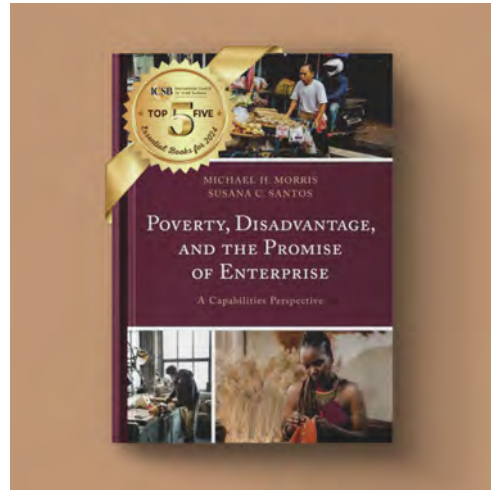
[ICSB.ORG/ESSENTIAL-BOOKS](https://www.icsb.org/essential-books)

Poverty, Disadvantage, and the Promise of Enterprise: A Capabilities Perspective

Authors:

Michael H. Morris is a professor of entrepreneurship & social innovation at the University of Notre Dame's Keough School of Global Development.

Susana C. Santos is an associate professor of entrepreneurship at the Jim Moran College of Entrepreneurship at Florida State University.



Research Methodology: Best Practices for Rigorous, Credible, and Impactful Research

Authors:

Herman Aguinis – The George Washington University School of Business, USA, The George Washington University



The Future of Business Schools: Purpose, Action, and Impact

Edited by Rico J. Baldegger, Former Dean and Professor, School of Management Fribourg (HEG-FR), University of Applied Sciences & Arts Western Switzerland,

Ayman El Tarabishy, President & CEO, International Council for Small Business (ICSB), Deputy Chair, Department of Management, School of Business, The George Washington University, US,



Agents of Innovation: Entrepreneurs, Facilitators and Intrapreneurs

Author:

Louis Jacques Fillion is an Emeritus Professor at HEC Montréal, Canada, where he directed the Rogers J.-A.-Bombardier Chair of Entrepreneurship from 1995 to 2016.



Elegant Design: A Designer's Guide to Harnessing Aesthetics

Author:

Dr. landoli is the Dean of the Collins ollege of Professional Studies and a Professor in the Computer Science, Mathematics, & Science Division.

Giuseppe Zollo is a professor of business and management at the University of Naples Federico II, School of Engineering and School of Architecture, Italy. With a background in architecture and information science, Giuseppe's research focuses on complex systems, organizational learning, and sense-making.



INTERNATIONAL COUNCIL FOR SMALL BUSINESS

PRESENTS



This prestigious recognition honors individuals whose research has significantly contributed to advancing micro-, small, and medium-sized enterprises (MSMEs) worldwide. The High-Impact MSME Researchers are thought leaders whose work drives innovation, informs policy and inspires actionable solutions to MSMEs' challenges.

These researchers are committed to excellence and demonstrate a profound understanding of MSMEs' pivotal role in fostering economic growth, job creation, and societal progress. Their studies address critical issues such as access to finance, digital transformation, crisis resilience, and sustainable development.

By shaping the global MSME narrative and providing data-driven insights, these researchers empower entrepreneurs, policymakers, and stakeholders to unlock the potential of MSMEs. Their contributions resonate globally, creating a lasting impact on the future of small business ecosystems and economies around the world.

Congratulations to the 2024-2025 honorees for their dedication to advancing the MSME agenda and for being catalysts of positive change!

LEARN MORE: [ICSB.ORG/ESSENTIAL-BOOKS](https://icsb.org/essential-books)



INTERNATIONAL COUNCIL FOR SMALL BUSINESS

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The Global MSME Influencers: The Power Ten is a prestigious recognition presented annually by the International Council for Small Business (ICSB). This honor celebrates dynamic entrepreneurs, visionary leaders, and transformative changemakers who have made a profound impact on the global landscape of micro, small, and medium-sized enterprises (MSMEs).

The awardees are trailblazers from various fields—including government, multi-national organizations, academia, corporate leadership, and non-profits—driven by a shared mission to elevate entrepreneurship as a force for economic growth and societal transformation. Renowned for their visionary leadership and global influence, these influencers deeply understand MSMEs' pivotal role in fostering resilience, driving job creation, and promoting social equity.

Highly respected in their industries, these individuals are sought-after speakers at global conferences, thought leaders whose insights shape policies and practices, and prolific creators of impactful content. Their articles, posts, and publications are widely read, inspiring action and innovation across the MSME ecosystem. Beyond their intellectual contributions, they excel in organizing dynamic events that ignite collaboration and spark progress in the MSME domain.

ICSB firmly believes that the pulse and wisdom of the MSME sector thrive through the dedication and expertise of these global influencers, who serve as beacons of inspiration and catalysts for change. The Power Ten is not in any particular order.

LEARN MORE: [ICSB.ORG/POWER-TEN](https://www.icsb.org/power-ten)



**LIST PREPARED BY: DR. AYMAN ELTARABISHY
& DR. WINSLOW SARGEANT**

TOP TEN TRENDS IN THE MIDDLE EAST

Discover the dynamic shifts shaping MSMEs in the Middle East! From the rise of sustainability and ethical practices to the power of youth driving business innovation, Ahmed Osman highlights the region's top ten transformative trends.

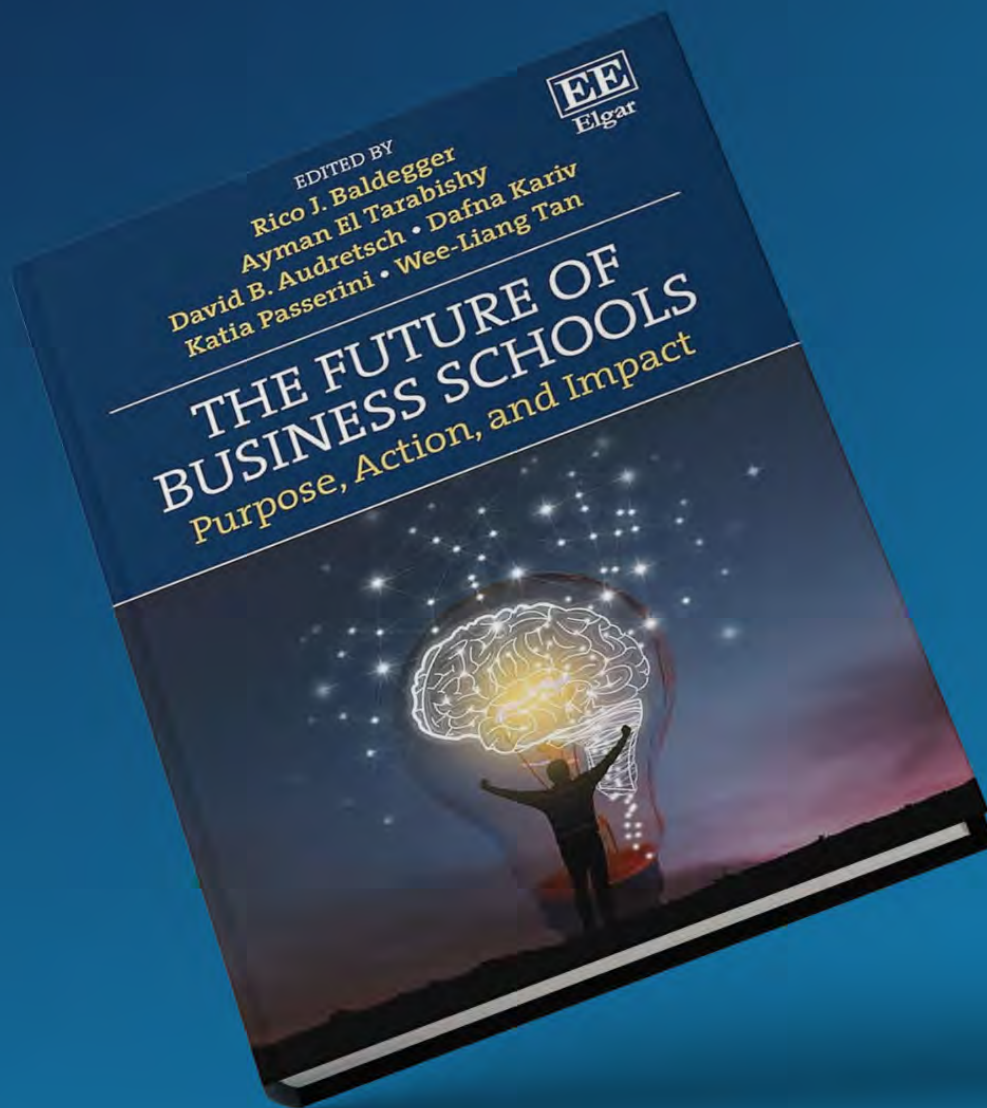
1. The Power of Youth is a Force for Good in Business
2. Entrepreneurs Going ALone and SMEs Seeking to Scale
3. The Growth of Customer Loyalty
4. Pan – Arab Trading is a Must, Let's Grow Together
5. Creative Financing Allows MSMEs to Scale
6. The Positive Effect of Podcasts on MSMEs
7. AI For Small Businesses Becomes The Norm
8. Customer Convenience is King
9. MSME Commerce Shifts Online
10. The Rise of Sustainability and Ethical Business Practices

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[ICSB.ORG/ICSB-TRENDS/MIDDLE-EAST](https://icsb.org/icsb-trends/middle-east)

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RICO I. BALDEGGER, AYMAN ELTARABISHY, & KATIA PASSERINI

INTERNATIONAL COUNCIL FOR SMALL BUSINESS

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The logo features a stylized gold trophy on the left, with a globe as its head. To the right of the trophy, the letters 'ICSB' are written in a large, bold, gold serif font. Below 'ICSB', the words 'MINI-GLOBE AWARDS' are written in a smaller, bold, gold sans-serif font.

ICSB

MINI-GLOBE AWARDS

ICSB has such an incredible community of volunteers and workers, and they deserve recognition. ICSB members and non-members alike who participate in the advancement of ICSB's mission, which is devoted to the interests and advancement of small businesses globally, will now be welcomed graciously into the ICSB Mini-Globe Hall of Fame. Upon being recognized, each Mini-Globe awardee will be recognized in the annual ICSB Global MSMEs Report.

Mini-Globe awards are presented to those who volunteered to help advance the principles of entrepreneurship and, thus, the advancement of society. ICSB cherishes you and your commitment.

The ICSB MINI GLOBE Awards are awarded to those for their dedication to promoting small businesses and entrepreneurship.



BUILDING BRIDGES FOR A
SUSTAINABLE FUTURE

WINTER 2024 | ISSUE NO. 8 | DECEMBER 10, 2024

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