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Generative AI for Minority Small and Medium-Sized Enterprises in Canada

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Policy Memo

Generative AI for Minority Small and Medium-Sized Enterprises in Canada

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Bottom Line Up Front

Minority-led small and medium-sized enterprises (SMEs) are entering the artificial intelligence (AI) economy under structural constraints that limit their ability to benefit from emerging digital tools. Skills gaps, affordability barriers, weak connectivity and limited trust in opaque systems intersect with improvised "making-do" behaviours characteristic of resource-constrained entrepreneurship. As a result, AI adoption is occurring unevenly and often without the capabilities, safeguards or ecosystem supports required for productivity gains. Yet the same bricolage behaviours — working with available resources, recombining tools and addressing unmet needs — can enable rapid, context-specific innovation when supported by targeted policies. Strengthening digital skills, improving access to reliable and rights-safe AI tools, expanding community-based support infrastructure, and reducing governance risks are essential to ensure that minority-led SMEs can adopt and adapt AI in ways that enhance competitiveness, resilience and inclusive growth.

Key Points

- AI adoption among minority-led SMEs is shaped by constraints that cut across skills, affordability, connectivity, interoperability and trust, limiting the ability to integrate new tools effectively.
- Bricolage behaviours – making do, improvising with available tools and addressing unmet needs – frame how entrepreneurs encounter AI and where adoption bottlenecks emerge.
- Empowering factors such as trusted intermediaries, community-based capability building, and access to transparent and interoperable tools significantly improve adoption outcomes.
- Existing programs provide partial support, but gaps persist in governance assurance, rights-safe tool availability, infrastructure reliability and tailored ecosystem linkages.
- Cross-cutting risks, including bias, hallucination, intellectual property (IP) exposure and data-sovereignty concerns, require ongoing mitigation to ensure safe and sustainable AI use.

Recommendations

- **Strengthen targeted digital skills and capability-building programs:** Develop tailored, community-based training that supports incremental learning, practical experimentation and confidence-building for minority-led SMEs. Expand mentorship and advisory channels through trusted intermediaries.
- **Improve access to reliable, transparent and interoperable AI tools:** Facilitate availability of rights-safe, SME-oriented AI systems with clear guidance on verification, risk management and appropriate use. Promote modular tool kits that can integrate with existing workflows.
- **Enhance affordability and infrastructure reliability:** Support access to low-cost AI solutions, shared digital infrastructure and stable broadband connectivity. Provide micro-grants, vouchers or cloud credits that lower the upfront cost of adoption.
- **Build inclusive ecosystem and market linkages:** Expand community hubs, procurement pathways and demonstration projects that connect minority entrepreneurs to networks, resources and opportunities to scale AI-enabled innovations.
- **Address cross-cutting governance risks:** Develop clear standards and practical guidance for managing bias, hallucination, IP exposure and data-sovereignty issues. Ensure that regulatory approaches support safe experimentation while protecting entrepreneurs from disproportionate liability.

Introduction

Artificial intelligence (AI) is advancing rapidly across the global economy, reshaping production systems, business operations and entrepreneurial activity. For small and medium-sized enterprises (SMEs), generative and predictive AI tools have the potential to expand productive capacity, automate routine tasks and lower the barriers to innovation in ways that were previously unattainable. Across Canada, AI adoption is rising, yet it remains modest in absolute terms: 12.2 percent of businesses reported using AI in 2025, up from 6.1 percent in 2024 (Statistics Canada 2025). SME-specific surveys similarly show broad interest in AI tools, with many firms trialling at least one digital or AI-enabled function, but with uneven depth and sophistication of use (Alegbeh and Cruz 2025; Sage 2025).

However, these aggregate trends obscure a more structural challenge. Canada lacks disaggregated national data on AI adoption by race, ethnicity, immigration status, gender or Indigeneity, even though these groups make up a substantial share of Canada's entrepreneurial landscape. This absence of demographic visibility constitutes a policy blind spot. Yet complementary surveys consistently demonstrate that under-represented entrepreneurs, including Indigenous, immigrant, Black and newcomer business owners, face disproportionate hurdles in accessing digital infrastructure, capital, training and institutional support (Bates, Bradford and Seamans 2018). For example, 65 percent of Indigenous entrepreneurs report high internet costs and unreliable connectivity, 57 percent lack access to digital training, 88 percent cite affordability as a major barrier and 91 percent of Indigenous women entrepreneurs face financial constraints (Indigenous Prosperity Foundation 2025). These constraints shape not only access to technology, but also the conditions under which innovation is attempted. While Canada has introduced several SME-oriented digital adoption and innovation programs, including regional AI accelerators, digital skills initiatives and business catalyst funds, their reach and accessibility for under-represented entrepreneurs remain uneven, highlighting the need for more inclusive program design and better alignment with the realities of minority-led SMEs (Organisation for Economic Co-operation and Development [OECD] 2025).

Mainstream digital adoption policy typically focuses on extending access to tools or subsidizing training. But this framework does not reflect how many under-represented entrepreneurs actually innovate. For founders operating in resource-constrained environments, innovation is less a function of planned investment and more a function of necessity, an adaptive practice of making do, recombining available resources and solving problems under uncertainty. This logic aligns with entrepreneurial bricolage, defined as the creative reconfiguration of whatever resources are at hand to address new challenges or opportunities (Baker and Nelson 2005). For many racialized and minority-led ventures, bricolage is not a marginal behaviour; it is a central innovation strategy shaped by structural scarcity, limited financing, uneven digital literacy, gaps in institutional support and exclusion from mainstream innovation ecosystems (Carter et al. 2015).[1]

1 See www.scaleai.ca/acceleration/.

This paper argues bricolage provides a more realistic and analytically useful lens for understanding how minority-led SMEs encounter and adopt emerging AI tools. Rather than assuming access to abundant capital, stable broadband, advanced technical skills or deep networks, conditions that policy often presumes, bricolage foregrounds the constraints under which innovation actually occurs. It shifts the question from "Why are minority entrepreneurs not adopting AI?" to "How can AI be aligned with their resource-constrained innovation practices?" The paper proceeds in four steps. The next section, "Generative AI: What Can It Do and What Can It Not Do?," outlines the capabilities and limitations of contemporary AI tools, focusing on implications for SMEs operating without deep technical infrastructure. This is followed by "Entrepreneurial Bricolage as a Lens for Minority Entrepreneurs," which grounds the analysis in the theoretical foundations of bricolage and its relevance to resource-scarce contexts. The third section, "Minority Entrepreneurs: Barriers and Enablers Through the Lens of Bricolage," integrates updated evidence, including new 2024–2025 data on SME digital needs, to examine the practical conditions under which minority-led SMEs attempt AI adoption. The paper concludes with policy recommendations that map barriers, enablers and bricolage dynamics into a structured framework, identifying targeted interventions that can support inclusive AI-enabled innovation across Canada's SME sector.

This paper argues that inclusive AI policy must be grounded not in idealized models of linear innovation, but in the lived realities of entrepreneurs who innovate under constraint. By centring bricolage, policy makers can better design supports that translate AI's potential into equitable and scalable opportunities for under-represented business owners, strengthening Canada's competitiveness and advancing inclusive growth.

Generative AI: What Can It Do and What Can It Not Do?

Generative AI refers to systems that learn statistical patterns from large data sets and produce new content, text, images, code and increasingly multimodal outputs. These capabilities grew out of advances such as the Transformer architecture (Vaswani et al. 2017), which enabled models to interpret and generate human-like language at scale. Tools such as OpenAI's ChatGPT have since made these systems widely accessible (Ferrati, Kim and Muffatto 2024; Mollick 2024), rapidly embedding them into the everyday operational practices of firms, including SMEs.

For SMEs, generative AI can expand productive capacity in ways that previously required staff expertise or external contractors. Entrepreneurs use these tools to develop product concepts, explore alternative designs and create rapid prototypes (Obschonka et al. 2025). Lightweight market analysis, once costly or time-consuming, can be simulated through text and data generation (Boussioux et al. 2024; Girotra et al. 2023). Routine communication tasks, including marketing copy, pitch materials, websites and customer-service scripts, can be drafted efficiently (Reznikov 2024). In operational decision making, entrepreneurs draw on generative tools for forecasting and scenario planning (Chen, Wu and Zhao 2023), supporting functions such as pricing, inventory management and basic risk evaluation (Konina 2024). Evidence from creative and knowledge-intensive sectors demonstrates productivity gains in coding, writing,

ideation and analytical tasks (Choi et al. 2023; Doshi and Hauser 2024). For time-constrained founders, generative AI effectively operates as a force multiplier, enabling a single individual to perform the work of several (Reznikov 2024).

These functionalities complement the logic of entrepreneurial bricolage. Under resource constraints, entrepreneurs rely on recombining what they already have rather than accessing formal innovation infrastructure. Generative AI enlarges the set of available "materials" for such recombination and, in many cases, enables small firms to take modest inventive steps that would otherwise be unattainable. Much like the way the addition of a circular scrolling mechanism transformed the utility of the original iPod, incremental improvements produced through AI-assisted experimentation can create meaningful competitive differentiation for SMEs with limited research and development or design capacity.

Despite these advantages, generative AI carries limitations and risks, many of which fall disproportionately on small and minority-led firms. Output quality remains inconsistent: generated content may be generic, error-prone or misaligned with brand identity (Doshi and Hauser 2024; Ganguly 2024). Subscription costs, computing demands and integration requirements can be burdensome for businesses operating with narrow margins (Obschonka et al. 2025). Models can hallucinate factual claims or reproduce stereotypes embedded within their training data (Bengio et al. 2024; Landers and Behrend 2023; Leiser et al. 2024), and algorithmic bias remains a concern with direct implications for customer engagement, hiring, lending and marketing (Li et al. 2023; Otis et al. 2023).

Awareness of AI tools has grown; unfamiliarity is no longer the primary barrier. The challenge now lies in capacity: entrepreneurs may understand what these tools can do yet struggle with the digital skills, workflow readiness or cybersecurity infrastructure needed for safe and effective use (Gupta and Yang 2024; Rožman and Tominc 2024). As technology cycles accelerate, firms feel pressure to adopt at a pace that exceeds their ability to absorb new systems into daily operations. For minority-led SMEs, often operating with thinner buffers and fewer advisory supports, the margin for error is especially slim.

Legal and economic risks add further complexity. Entrepreneurial users who combine AI-generated content with existing materials may inadvertently encounter copyright, patent or trade-secret protections. For SMEs without dedicated legal counsel, exposure to such risks is difficult to assess and even harder to manage. Cross-border commercial activity introduces additional uncertainty in a global environment where enforcement is uneven and geopolitical tensions are rising. Errors produced by AI, as in contractual language, product descriptions or regulatory interpretation, can generate liabilities that resource-constrained firms are ill-equipped to resolve.

The value of generative AI depends on the broader ecosystem in which entrepreneurs operate. Training, mentorship and trusted advisory networks remain essential for supporting adoption (Gupta and Yang 2024; Rožman and Tominc 2024). Digital-skills readiness, privacy safeguards and cybersecurity practices form the practical foundation needed for responsible and effective use. Absent these complements, generative AI risks widening existing inequalities rather than narrowing them. For minority-led SMEs in

particular, these structural gaps often determine whether AI becomes a lever for growth or an additional obstacle that reinforces long-standing constraints.

Entrepreneurial Bricolage as a Lens for Minority Entrepreneurs' Barriers and Enablers

Theoretical Context: Bricolage in Resource-Constrained Entrepreneurship

Entrepreneurial bricolage explains how founders innovate under conditions of constraint by "making do" with the resources immediately available rather than delaying action until ideal conditions emerge (Baker and Nelson 2005). Rooted in Claude Lévi-Strauss's (1966) depiction of the bricoleur, an actor who assembles solutions from the "bits and pieces" at hand, bricolage is defined as "making do by applying combinations of the resources at hand to new problems and opportunities" (Baker and Nelson 2005, 333). This perspective provides an analytical lens for understanding how entrepreneurs respond to structural barriers, particularly in settings where capital, networks and institutional supports are unevenly distributed.

An element of bricolage is the willingness to work with whatever resources can be mobilized. Rather than viewing scarcity as a barrier to innovation, bricoleurs repurpose overlooked, undervalued or discarded assets and convert them into functional inputs (Brush, Greene and Hart 2001; Fisher 2012; Senyard et al. 2014). This action orientation reflects a refusal to accept imposed limits and challenges conventional assumptions that resource-poor firms must wait for more favourable conditions before undertaking entrepreneurial activity (Mintzberg 1979; Weick 1993). The capacity to recognize potential in existing resources is particularly relevant for entrepreneurs who must navigate structural disadvantages, including limited financing or uneven access to technical expertise.

A second component of bricolage involves the recombination of disparate physical, social and institutional resources to address problems those resources were not originally designed to solve (Andersen 2008; Duymedjian and Rüling 2010; Garud and Karnøe 2003). Through improvisation and experimentation, bricoleurs piece together novel solutions that emerge not from planned investment but from adaptive problem-solving in real time (Baker, Miner and Eesley 2003; Boxenbaum and Rouleau 2011; Pina e Cunha et al. 2014). Although bricolage is often framed as repurposing existing elements, it can also generate inventive steps, incremental innovations that arise from context-specific tinkering. These micro-innovations are an important but frequently overlooked channel through which small firms contribute to broader innovation ecosystems.

A third aspect of bricolage is its strategic application to unmet needs or opportunities. Entrepreneurs use their improvised solutions to pursue problems that larger or better-resourced actors may ignore, often in underserved or niche markets (Baker and Nelson 2005; Garud and Karnøe 2003). Rather than being deterred by institutional gaps or market failures, bricoleurs test boundaries, extend their improvisational practices and

identify “unseen” opportunities that mainstream firms may overlook (Pina e Cunha et al. 2014; Halme, Lindeman and Linna 2012). This strategic dimension makes bricolage especially pertinent to minority entrepreneurs, who frequently build businesses around problems that are locally salient but insufficiently addressed by existing services or programs.

These components typically co-occur in resource-constrained environments, where structural barriers shape the conditions under which entrepreneurs operate (Baker and Nelson 2005; Lévi-Strauss 1966). A making-do mindset fuels creative recombination, which in turn enables the pursuit of problems others bypass. Bricolage is inherently dualistic. While it can produce “brilliant unforeseen results,” it may also lead to partial, fragile or unsustainable solutions when foundational supports, financing, reliable digital infrastructure, intellectual property (IP) guidance or technical assistance are lacking (Weick 1993). This duality is particularly salient for minority entrepreneurs: the same conditions that necessitate bricolage can also magnify its vulnerabilities, exposing firms to risks such as inadvertent IP infringements, regulatory complications when integrating digital tools or challenges in scaling improvised solutions beyond the immediate context in which they were created.

Minority Entrepreneurs: Barriers and Enablers Through a Bricolage Lens

Minority entrepreneurs, including racialized, immigrant, Indigenous, disabled and women founders, typically operate in environments characterized by resource scarcity, uneven institutional support and structural barriers that complicate access to capital, networks and technology. These constraints make bricolage not merely a stylistic preference but a functional necessity, shaping how these entrepreneurs navigate uncertainty and pursue growth (Bain & Company and BlackNorth Initiative 2022; Baker and Nelson 2005; Karanasios et al. 2025). The framework aligns closely with their lived realities: owners must routinely “do more with less,” assembling improvised solutions, experimenting under pressure and repurposing limited assets to keep their businesses viable (Bain & Company and BlackNorth Initiative 2022; Karanasios et al. 2025).

Viewing AI adoption through this lens reveals a dual dynamic. On one side, the same constraints that prompt bricolage (limited financing, unreliable digital infrastructure or lack of training) restrict the capacity to benefit from advanced technologies. On the other, the ingenuity, improvisation and adaptive orientation inherent to bricolage position minority entrepreneurs as capable and motivated early movers if complementary supports are in place. This section therefore links each facet of the bricolage process to concrete barriers in AI adoption, identifying where targeted policy measures could convert improvisational strengths into durable digital capabilities.

Working with Resources at Hand: Mindset in the Face of Constraints

For many minority-led small firms in Canada, "working with what is at hand" is not simply an entrepreneurial style, it is the structural condition shaping day-to-day operations. Limited access to affordable credit, exclusion from established business networks, and gaps in financial and digital infrastructure compel these entrepreneurs to rely heavily on personal savings, community relationships and low-cost digital tools (Baker and Nelson 2005; Bain & Company and BlackNorth Initiative 2022; Canadian Federation of Independent Business [CFIB] 2025). They substitute free or inexpensive software for formal systems, repurpose household and community assets, and lean on flexible family or informal labour. This adaptive behaviour reflects the essence of bricolage: a refusal to treat scarcity as prohibitive and a commitment to mobilizing whatever resources are immediately available.

Barriers: Despite heightened public awareness of AI, the ability to use generative tools remains highly uneven across minority-led SMEs, with structural constraints sharply limiting their inclusion in the emerging digital economy:

- Fifty-seven percent of Indigenous entrepreneurs report lacking access to digital skills training, a foundational barrier to engaging with modern technologies, including AI (Indigenous Prosperity Foundation 2025).
- Eighty-eight percent identify affordability as a major barrier, and 65 percent cite high internet costs or unreliable broadband, particularly in rural and remote regions (ibid.).
- National SME trends show a widening capability gap: while overall digital adoption is rising, many small firms, especially those led by under-represented groups, remain in the "early exploration" stage with AI tools (CFIB 2025; Sage 2025).
- Algorithmic bias and discriminatory AI outputs, documented across credit evaluation, hiring filters and automated decision systems, reinforce hesitancy among entrepreneurs already facing systemic exclusion (Otis et al. 2023).

These constraints directly reshape the scope of bricolage: when connectivity, affordability, skills and trust are insufficient, AI does not become part of the resource set "at hand." Even with free or low-cost generative tools, many minority entrepreneurs lack the exposure, confidence or technical grounding required to experiment productively. Qualitative research continues to show persistent concerns about complexity, misalignment with small-scale operations and potential misuse (Mostafiz et al. 2025; Wach et al. 2023). Awareness of AI has improved, but actionable capability has not kept pace, a central constraint on integrating AI into improvisational problem solving.

Enablers: When even modest digital capabilities are in place, generative AI can be incorporated into bricolage practices with substantial efficiency gains. Firms that engage in continuous digital learning, however incremental, are significantly more likely to adopt and adapt AI tools, even without formal infrastructure (CFIB 2025; Sage 2025). For minority entrepreneurs facing structural constraints, small capability advances can unlock disproportionate benefits:

- AI-generated marketing materials reduce reliance on external contractors;

- automated administrative systems mitigate staffing shortages; and
- chat-based AI interfaces lower barriers to analytics, customer engagement and operational planning.

Evidence from Stan Karanasios et al. (2025) and related work shows that entrepreneurs with bricolage-oriented mindsets excel at creatively appropriating emerging technologies once they cross a minimal skill threshold. This reinforces a core insight: capability building (not hardware, and not major capital), is the most powerful enabler of AI adoption among resource-constrained founders.

Policy implications: Realizing this potential requires a direct policy focus on capability formation, digital inclusion and confidence building. High-impact interventions include:

- practical digital literacy training centred on free and low-cost AI tools;
- subsidized mentorship and coaching delivered through trusted community intermediaries;
- peer-learning cohorts that enable experimentation with real business tasks;
- investments in broadband reliability and affordability in underserved regions; and
- awareness initiatives that highlight successful and relatable minority-led AI use cases.

Such measures shift AI from a distant, high-risk technology to a usable everyday tool. In doing so, they extend the reach of entrepreneurial bricolage into the digital era, enabling minority entrepreneurs to convert structural constraints into opportunity and to participate equitably in Canada's evolving AI-enabled economy.

Recombination of Resources: Improvisational Action with AI

The second dimension of bricolage, recombining resources for new purposes, captures how entrepreneurs create workable solutions by fusing together whatever assets, knowledge or tools are available. For many minority-led firms operating under systemic constraint, this improvisational capability is not peripheral; it is central to daily business survival. Whether blending community knowledge with digital tools, repurposing informal networks for market access or pairing lived experience with emerging technologies, these entrepreneurs exemplify the bricoleur's practice of forming novel combinations from disparate elements (Baker and Nelson 2005; Lévi-Strauss 1966; Senyard et al. 2014).

In the context of AI, recombination increasingly involves embedding generative systems into existing workflows in incremental, adaptive ways. Scholars have found that when resource-constrained founders combine AI with intuition or experiential knowledge, they identify more opportunities and achieve higher innovation performance (Kang, Chaivirutnukul and Zeng 2023). Digital bricolage research similarly shows that SMEs frequently adopt technology through emergent, trial-and-error combinations of simple, affordable tools rather than through formal transformation programs (Ciborra 2002; Karanasios et al. 2025; Lanzara 1999; Oborn et al. 2019; Zorina 2021). The iterative, patchwork quality of these processes mirrors what OECD work characterizes as "minor inventive changes," incremental recombinations that enhance productivity without

requiring substantial new investment (OECD 2025). Recent examples from Scale AI illustrate this dynamic: Canadian SMEs in retail and logistics have combined low-cost demand-forecasting models with existing inventory systems to reduce waste, improve purchasing decisions and stabilize cash flow, even in the absence of enterprise-level infrastructure.

Barriers: While recombination holds potential, the quality and reliability of available resources often limit its effectiveness. Minority entrepreneurs disproportionately rely on free or low-tier AI tools, many of which suffer from hallucinations, inconsistent output quality, biased recommendations or poor interoperability with core business systems (Norori et al. 2021; Rana et al. 2022; Otis et al. 2023). These weaknesses heighten operational fragility, particularly for firms already navigating thin margins and high exposure to risk. Emerging legal and trade-related risks complicate improvisational action further:

- IP infringement risk: Generative AI outputs may unintentionally reproduce copyrighted content, exposing small firms, especially those producing marketing materials or creative assets, to liability.
- AI-related hallucination liability: Incorrect or fabricated AI-generated outputs used in customer communication, financial projections or regulatory submissions may create legal exposure.
- Cross-border digital trade risks: Many free or low-cost AI tools rely on offshore data processing. SMEs using them may inadvertently breach data localization requirements or sector-specific privacy rules.
- Data-quality risks: Training-data biases may reproduce discriminatory outcomes, undermining customer trust and disproportionately affecting entrepreneurs from already marginalized groups (Otis et al. 2023).

These constraints limit the degree to which minority entrepreneurs can safely and effectively integrate AI into their existing bricolage systems. When tools are unreliable, incompatible or legally ambiguous, recombination becomes a source of additional burden rather than opportunity.

Enablers: Recombination becomes far more effective when entrepreneurs have access to appropriate, reliable and transparent AI resources. User-friendly, low-cost tools, especially those designed with clearer documentation, bias controls and exportable outputs, expand opportunities for frugal digital innovation (Karanasios et al. 2025; Oborn et al. 2019; Zorina 2021). Evidence also shows that when entrepreneu¬rial cognition and bricolage are paired with ecosystem-based support, such as advisory services, trusted intermediaries or community-anchored training programs, AI adoption becomes significantly more effective (Mostafiz et al. 2025; Thornton et al. 2019). Improvements in AI model transparency, reduced hallucination rates and clearer usage rights further lower operational and legal risks, enabling entrepreneurs to transition from fragile digital patchworks (“parallel bricolage”) toward more resilient and scalable configurations (“selective bricolage”). Scale AI case studies and OECD analyses demonstrate that when SMEs gain access to validated data sets, interoperable tools and modular application programming interfaces (APIs), recombination ceases to be a defensive practice and becomes a driver of productivity and innovation.

Policy implications: Public policy can play a catalytic role in strengthening this action-oriented dimension of bricolage. Effective measures include:

- targeted grants or equipment vouchers enabling minority-owned firms to access higher-quality AI systems, complementary software and secure data-storage solutions;
- community-based digital infrastructure hubs providing shared access to computing resources, trusted guidance and expert support, particularly important for rural, Indigenous and newcomer communities;
- clear standards and practical guidance on safe AI use, verification of outputs, mitigation of hallucinations and compliance with IP and cross-border data rules;
- pilot programs with Scale AI, regional innovation centres and local chambers to demonstrate real-world cases of frugal, modular AI adoption; and
- promotion of interoperable, trustworthy AI tools, aligned with OECD frameworks on trustworthy AI and digital trade, to reduce legal exposure and enhance SMEs' confidence in recombining technologies.

By lowering legal uncertainty, improving access to reliable tools and providing actionable guidance, policy can convert improvised digital combinations into durable, scalable, opportunity-enhancing systems. In doing so, it strengthens the capacity of minority entrepreneurs to extend their bricolage practices into the digital economy and to leverage AI in ways that reinforce, not undermine, their resilience, creativity and long-term viability.

Tackling Unsolved Problems and Opportunities: Strategic Use of Bricolage

The third dimension of bricolage, applying improvised solutions to unmet needs, captures how minority entrepreneurs convert constraint into strategic opportunity. Operating in markets often overlooked by mainstream firms, these founders are positioned close to persistent service gaps and emerging demands. Bricolage enables them to mobilize what is locally available, community networks, cultural knowledge and simple digital tools, to address problems that established firms bypass. Research consistently shows that such "opportunity seeking under constraint" is strengthened when entrepreneurs recombine accessible inputs to generate new value propositions (Baker and Nelson 2005; Garud and Karnøe 2003; Miner, Bassoff and Moorman 2001).

The rise of generative AI can extend this strategic repertoire. When used appropriately, AI-enabled translation, automated content generation or simple domain-specific models allow firms to reach new customer segments, improve product fit or test demand with low upfront cost. Indigenous Prosperity Foundation (2025) notes, for example, that Indigenous entrepreneurs are beginning to use automated translation and remote-commerce tools to serve dispersed communities, yet broadband limitations and high connectivity costs sharply restrict the scale of such initiatives. Similar patterns appear among immigrant-owned microbusinesses applying AI-driven marketing to reach diaspora consumers while operating with minimal capital. These cases reflect bricolage's

core logic: minor inventive recombinations — small but strategic adjustments to existing practices — can unlock distinct competitive positions (OECD 2025).

Barriers: Strategic bricolage is constrained by systemic biases and structural frictions that distort opportunity pursuit. Minority entrepreneurs face entrenched lending discrimination, unequal access to procurement pathways and ecosystem exclusion, all of which limit the translation of improvised solutions into scalable models (Bain & Company and BlackNorth Initiative 2022). These barriers carry over to AI adoption. Trust deficits are significant: founders who already experience institutional bias may distrust algorithmic tools linked to opaque decision systems or documented discriminatory outputs (Otis et al. 2023). Concerns about fairness, authenticity and cultural misalignment reinforce hesitation. Operational barriers also matter. AI tools frequently hallucinate, generate inaccurate or biased outputs, or raise questions of liability and data governance, risks that fall disproportionately on firms with thin margins. Cross-border digital tools introduce trade and IP concerns, including unclear data sovereignty obligations and exposure to non-compliant content sourcing. Meanwhile, bricolage-based solutions, although effective locally, often remain fragile. Without capital, infrastructure or stable broadband access, minority-led innovations struggle to move from small-scale improvisation to repeatable, scalable operations, a constraint well documented in digital bricolage research (Karanasios et al. 2025). Moreover, competitive pressures are accelerating. As more firms adopt baseline digital tools, minority entrepreneurs who rely on ad hoc workarounds risk falling behind. The issue is no longer cognitive resistance but the need to adapt rapidly; without targeted support, bricolage cannot keep pace with rising digital expectations.

Enablers: Strategic bricolage flourishes when trust, networks and ecosystem linkages are strengthened. Transparent AI systems, inclusive design practices and bias-mitigation standards build credibility and reduce perceived risk. Community-based innovation hubs, Indigenous business centres and immigrant-serving organizations expand access to expertise, data and procurement pathways. These platforms help entrepreneurs graduate from hyper-local experimentation to broader market participation. Role models and demonstrated use cases play an important function. When minority-led firms successfully apply AI to solve community-specific problems, they broaden the perceived opportunity space and reduce informational asymmetries. Network-based enablers — mentorship, supply-chain connections, accelerator programs tailored to under-represented founders — build the institutional capital required to sustain strategic experimentation.

Policy implications: A supportive policy environment is essential to ensure that improvised innovations can translate into durable economic contributions. Priority measures include:

- AI transparency and fairness standards, including certification schemes for SME-oriented tools, to reduce algorithmic bias and increase trust (Cukier, Patterson and Blanchette 2025);
- inclusive regulatory input, with Indigenous, immigrant and minority entrepreneurs participating directly in AI ethics and governance consultations;

- targeted funding and challenge grants focused on community problems, enabling entrepreneurs to scale promising bricolage-led innovations;
- credit guarantees and alternative lending models to counter discriminatory financing barriers; and
- supportive innovation ecosystems, including tailored accelerators, procurement pathways and community-based technical assistance.

Through these interventions, policy makers can transform bricolage from a necessity-driven survival response into a strategic engine for inclusive innovation. When trust, capability and institutional access are strengthened, minority entrepreneurs can extend their improvised solutions beyond local markets and contribute more fully to Canada's digital economy.

Recommendation: Synthesis — Bricolage Components Mapped to Barriers, Enablers and Policy Measures

Table 1 distills the analysis into a structured policy framework that links the three components of entrepreneurial bricolage to the barriers, enablers, policy levers, existing programs and cross-cutting risks that shape AI adoption among minority-led SMEs. It shows that the constraints these firms face — skills gaps, affordability pressures, unreliable connectivity, digital infrastructure and distrust of opaque systems — operate concurrently across all stages of entrepreneurial activity. Similarly, the most effective enablers — trusted intermediaries, incremental capability building, transparent and interoperable tools, and community-based networks — reinforce one another rather than functioning in isolation. By organizing these elements in a 3 × 5 matrix, the framework clarifies where policy intervention has the greatest leverage: strengthening digital capabilities, improving access to reliable and rights-safe tools, ensuring fairness and transparency in SME-oriented AI systems, and expanding ecosystem supports that allow improvised innovations to scale. The synthesis also underscores the value of building on existing programs, such as the Canada Digital Adoption Program (CDAP), Scale AI demonstrations, Indigenous and immigrant-serving entrepreneurship supports, and regional digital hubs, while addressing ongoing governance gaps around IP, bias, hallucination risk and data sovereignty. No single measure is sufficient. Inclusive AI adoption requires coordinated progress in skills, infrastructure, trust and regulatory assurance. The table therefore functions as both a diagnostic tool and a policy design guide for federal, provincial and community actors aiming to expand minority-led participation in Canada's AI-enabled economy. It identifies market and policy failures, highlights partial overlaps across current initiatives and indicates where targeted investment or regulatory action would yield the highest impact, aligning Canada's approach with emerging international best practice for SME digital transformation.

Table 1: Entrepreneurial Bricolage Components Mapped to Barriers, Enablers, Policy Levers, Programs and AI Risks

Bricolage Component	Barriers (AI Context)	Enablers ("Empowering Factors")	Policy Implications	Existing Programs (Illustrative)	Cross-Cutting AI Risks (IP, Trade, Bias, Hallucination)
1. **Working with resources at hand** Mindset: "Making do"	• **Limited digital skills:** 57% lack digital training (Indigenous Prosperity Foundation 2025). • **Affordability** constraints: 88% report cost barriers; 65% face unreliable broadband. • **Early-stage AI use:** Minority-led SMEs remain concentrated in "exploration" (CFIB 2025; Sage 2025). • **Algorithmic bias** erodes trust in AI tools.	• **Incremental digital upskilling:** Practical, workflow-based training that lowers entry barriers. • **Low-cost AI tools:** Expand usable resources for microbusinesses. • **Peer learning:** Community-driven training and role models that normalize adoption.	• **Targeted digital-skills programs** for under-represented SMEs. • **Mentorship via trusted intermediaries** (Indigenous, immigrant-serving organizations). • **Connectivity investments** to improve broadband affordability and reliability. • **Awareness campaigns** highlighting low-risk, practical AI use cases.	• CDAP. • Indigenous Prosperity Foundation training supports. • Settlement-agency digital-skills programs.	• **Biased outputs** in lending, hiring, marketing. • **Hallucinations** in operational/financial tasks. • **Liability exposure** from incorrect AI outputs. • **Connectivity failures** disrupting AI-supported processes.
2. **Recombination of resources** Improvisational integration of tools, relationships, knowledge	• **Low-tier tool reliability:** Hallucinations, bias, inconsistent outputs (Norori et al. 2021; Rana et al. 2022). • **Poor interoperability** forces fragile workarounds. • **Limited financing** restricts access to robust tools. • **Uncertain IP, copyright and data-processing rules.**	• **Trustworthy, transparent tools:** Clear documentation, stable performance and safe usage rights. • **Ecosystem supports:** Digital hubs, advisors, and open data sets enabling safe recombination. • **Modular architectures:** APIs and exportable outputs supporting incremental upgrading.	• **Micro-grants, vouchers, cloud credits** targeted to minority SMEs. • **Digital infrastructure hubs** offering shared computing and expert technical support. • **Verification and safe-use standards** (IP-safe reuse, hallucination mitigation). • **Alignment with OECD trustworthy-AI frameworks.**	• Scale AI SME pilot projects. • Ontario Digital Modernization Program. • Regional innovation centres and municipal digital labs.	• **Hallucination liability** embedded into workflows. • **Data-localization and privacy risks** from offshore processing. • **IP spillover** from generative reuse. • **Bias propagation** within recombined outputs.
3. **Addressing unmet problems and opportunities** Strategic orientation	• **Financing and procurement bias** restricting scaling. • **Distrust of opaque or non-inclusive AI systems.** • **Infrastructure fragility:** Improvised solutions stall without digital backbone (Karanasios et al. 2025). • **Broadband constraints** limit experimentation. • **Absorptive-capacity limits** under rising digital expectations.	• **Fairness and transparency assurances** that reduce hesitation. • **Community innovation hubs** expanding networks and procurement access. • **Role-model minority-led cases** expanding perceived opportunity space. • **AI-enabled micro-innovation** lowering cost of testing new offerings.	• **AI fairness and transparency standards** for SME tools. • **Challenge grants** for community-specific AI applications. • **Inclusive procurement and credit guarantees** for scaling firms. • **Minority participation in AI regulatory design.**	• Indigenous business innovation centres. • Immigrant-serving entrepreneurship programs. • Inclusive procurement initiatives. • OECD Inclusive Innovation Playbook (2025).	• **Biased or misaligned outputs** undermining legitimacy. • **Regulatory/ compliance errors** from AI-generated text. • **Trade and data-sovereignty constraints** for cross-border operations. • **Scaling fragility** if bricolage solutions remain unsupported.

Source: Author.

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