

RESEARCH BRIEF

The Main Street AI Paradox

The smallest businesses may
have the most to gain from AI—
and face the **greatest**
constraints to making it work.

JUNE 2026



Association for
Enterprise
Opportunity

Analysis of the 2025 Entrepreneurship in the Population Survey
EPOP 2025 · NORC AT THE UNIVERSITY OF CHICAGO

FOREWORD

A Note from Our President & CEO

Artificial intelligence is rapidly changing the way we work, compete, and build businesses. But as with every major economic transformation, the real question is not simply what the technology can do. It is **who will have the opportunity to benefit from it.**

For America's smallest businesses, that question is especially important.

Entrepreneurs running businesses on their own or with only a handful of employees operate every day with limited time, limited capacity, and limited resources. AI has the potential to change that equation—helping an entrepreneur create content, analyze information, reach customers, prepare documents, plan for growth, and accomplish work that might otherwise require additional staff or outside expertise.

Yet *The Main Street AI Paradox* reveals something we cannot ignore: the businesses that may have the most to gain from AI are often the least likely to be using it.

That presents both a challenge and an opportunity.

If we want AI to become a tool for economic mobility and business growth, we must move beyond simply telling entrepreneurs that these technologies exist. We must help them see how AI applies to the businesses they are already building, give them opportunities to experiment with it, and ensure they have the digital infrastructure and trusted support necessary to turn experimentation into meaningful business outcomes.

For more than three decades, AEO has worked to expand opportunity for Main Street entrepreneurs and strengthen the organizations and institutions that serve them. Today, that mission requires us to think seriously about how technological change will shape the next generation of entrepreneurship.

This research is an important step in that work. Our hope is that it challenges policymakers, funders, technology companies, financial institutions, and business-support organizations to think differently about AI adoption—not simply as a technology issue, but as an issue of **capacity, competitiveness, and economic opportunity.**

The future of AI on Main Street is still being written. We have an opportunity to ensure that America's smallest businesses are not simply included in that future, but positioned to thrive in it.



Natalie Madeira Cofield

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President & CEO

Association for Enterprise Opportunity

Key Findings

1

AI adoption among very small employers doubled in a single year—but most owners haven't crossed the threshold yet.

9.5% → 20%
2024 2025

2

Solo operators are the most underserved group, adopting at less than half the rate of employer firms (8.4% vs. 20%).

The barrier isn't confidence or technical skill—it's perceived relevance: solo operators are **11 points** more likely to say AI simply doesn't apply to their work. Yet when they do use it, **92%** report positive business impact—higher than employer firms.

3

Digital readiness is the clearest adoption pathway.

Having an online presence is the single strongest predictor of AI adoption (+18 points)—larger than any demographic or business characteristic. It's also the most actionable lever: the infrastructure business support organizations already use to build digital readiness can open the door to AI.

4

AI adopters are using the technology to push through operational friction.

Adopters report greater challenges with taxes, online presence, customer acquisition, and capital access than non-users—suggesting that AI may be helping very small businesses fill capacity gaps larger firms often solve with staff or consultants.

5

Latino business owners are leading adoption, at roughly twice the rate of white owners.

The question isn't only who is being left behind, but why some groups are moving faster—and what that means for how support is designed.

DATA SOURCE ENTREPRENEURSHIP IN THE POPULATION SURVEY

This brief draws on AEO's analysis of the **2025 Entrepreneurship in the Population Survey (EPOP:2025)**, conducted by NORC at the University of Chicago—a nationally representative, probability-based survey of U.S. business ownership. AEO developed and funded survey items on generative AI use, use cases, perceived impacts, and digital confidence. The analysis focuses on **small business owners with fewer than 10 employees**.

INTRODUCTION

The Main Street AI Paradox

America's smallest businesses have always had to do more with less. The corner shop, the home-based childcare provider, the restaurant owner, the independent contractor, and the solo operator all manage customers, marketing, compliance, finances, and operations with limited time and support.

AI could change that equation. New tools can draft marketing copy, analyze data, support customer communication, prepare documents, and automate routine administrative tasks. For very small businesses, even modest gains in time and capacity could matter.

The productivity stakes are substantial. If AI helps even a fraction of these owners save time, manage complexity, and reach new customers, the gains could ripple across the broadest layer of the U.S. business landscape.

96.5%

of all U.S. businesses have **fewer than 10 employees**—the Main Street layer where small AI gains could scale into broad productivity gains.¹



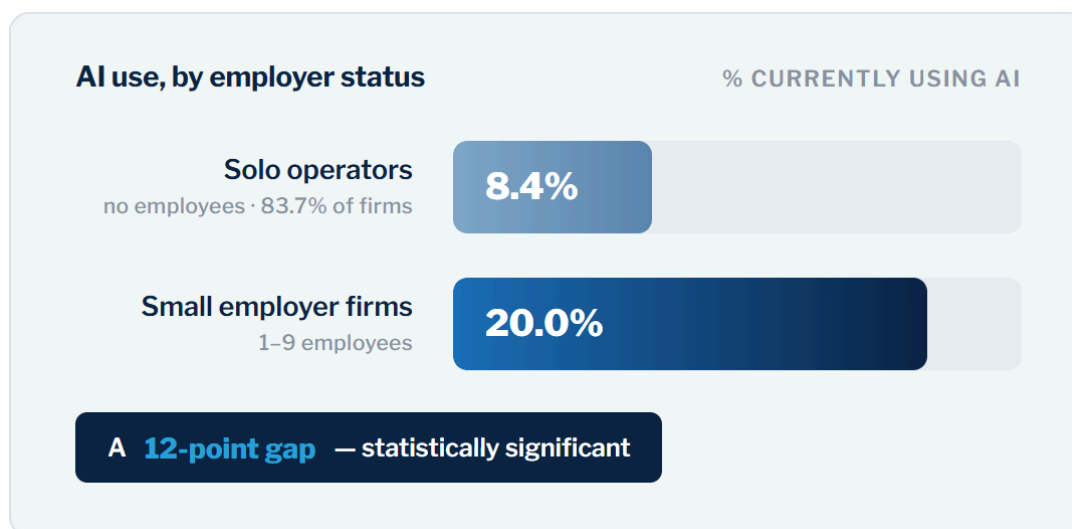
THE PARADOX

The smallest businesses may have the most to gain from AI—and face the greatest constraints to adopting it meaningfully.

This brief examines AI adoption among America's smallest businesses: who is using AI, who remains on the sidelines, and what conditions appear to enable successful adoption.

AI Is Reaching Main Street, But Unevenly

AI adoption among small business owners is moving fast. About **one in eight (13.5%)** currently uses AI, and adoption among very small employer firms **doubled in a single year**—from 9.5% to 20%.² But the headline numbers mask a sharper divide.



— THE SOLO OPERATOR GAP

The starkest gap is between owners who work alone and those with at least one employee. Only **8.4%** of solo operators were using AI last year, compared to **20.0%** of small employer firms. This 12-point gap is statistically significant and persists after controlling for demographic and firmographic characteristics.³

83.7%

of all U.S. businesses are **solo operators**—meaning the lowest-adopting group is also by far the largest layer of Main Street.⁴

A NOTE ON MEASUREMENT

Adoption figures vary widely across studies because they measure different things. Before reading the numbers in this brief, it helps to know exactly what is—and is not—being counted.

HOW TO READ THESE NUMBERS

The takeaway is not that AI adoption is small. It is that adoption is still uneven—and 2025 likely represents a floor, not a ceiling.

AI is already embedded in many tools businesses use every day, from email platforms to accounting software. This brief measures something narrower: **whether small business owners say they are currently using generative AI in their business.**

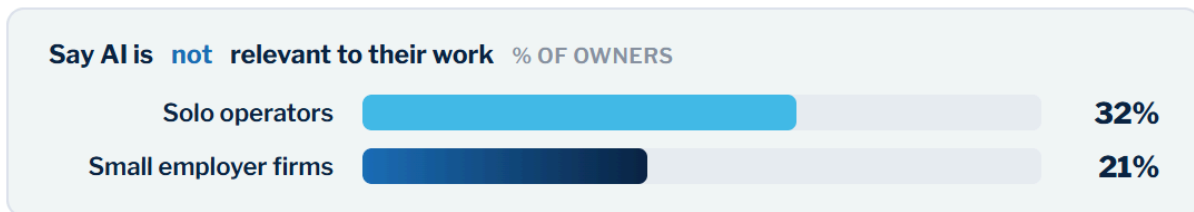
That distinction matters. Some surveys count any AI-enabled tool or software feature. Others focus on employer firms or businesses with established banking relationships—groups that tend to be larger, more formalized, and more digitally connected than the full Main Street business population.

EPOP:2025 captures a wider universe: owners with fewer than 10 employees, including solo operators. For that reason, the estimates here should be read as a clearer view of the hardest-to-reach part of the market.

WHY THE GAP EXISTS

The Gap Is About Perceived Relevance, Not Skill

The solo-operator gap is not mainly about skill or interest. Solo operators are no more likely than employer firms to report difficulty keeping up with technology, cite skill barriers, or express disinterest in adopting AI. Among non-users, intent to adopt in the next 12 months is also similar across both groups.



What separates solo operators is **perceived relevance**. Nearly one in three solo operators (32%) say AI simply is not relevant to their work, compared with about one in five small employer firms (21%).⁵

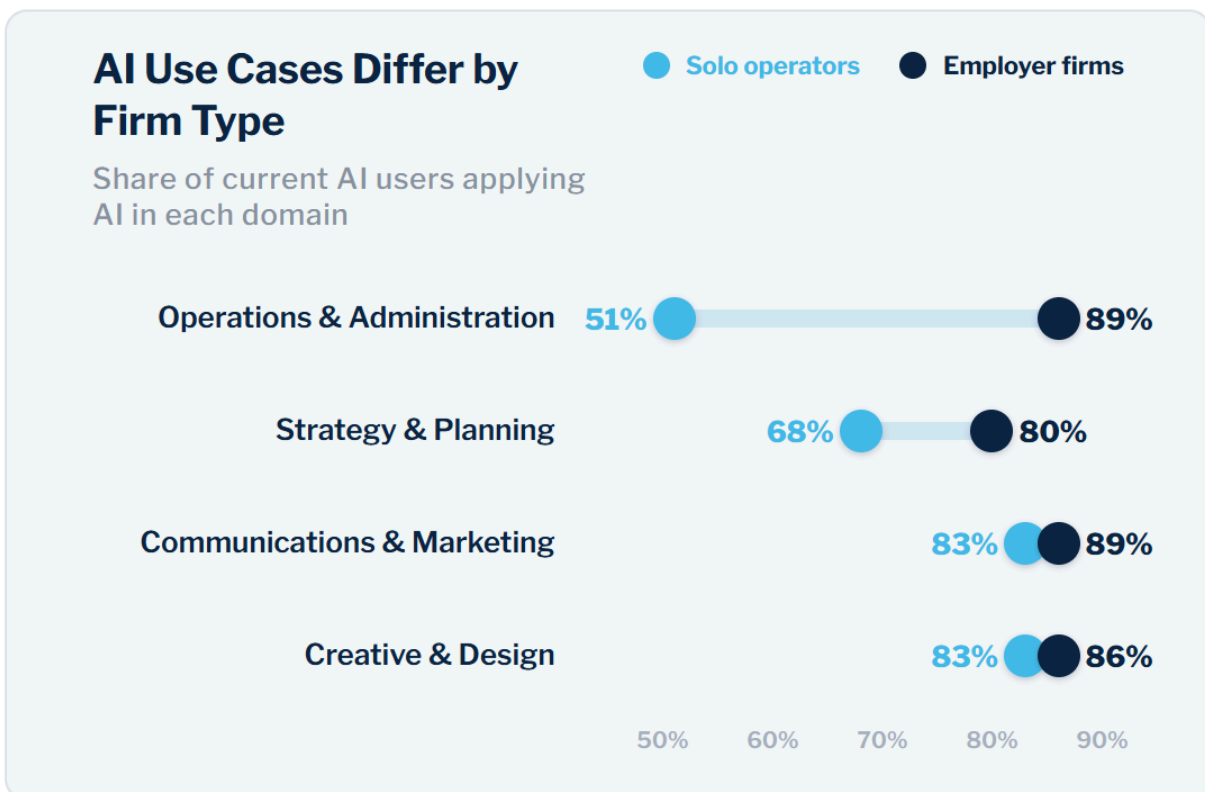
WHAT THIS MEANS

The challenge is not convincing solo operators that technology matters. It is helping them see where AI fits into the work they already do.

Adoption Is Not the Whole Story

Even after adopting AI, solo operators and employer firms are using it differently. Solo operators—often the businesses with the greatest capacity constraints—are less likely to use AI for the operational tasks where efficiency gains can compound. Among AI users, employer firms are nearly twice as likely as solo operators to use AI for internal operations and administration (89% vs. 51%). Yet the two groups look remarkably similar in communications, marketing, and creative work.

In other words, solo operators are adopting AI—but not always in the areas where it may have the greatest potential to relieve administrative burden. That finding reinforces the importance of moving beyond awareness and toward practical demonstrations of how AI can fit into everyday business workflows.



Note: Among current AI users only. Estimates rounded to nearest whole percent. Source: Author's calculations using EPOP:2025 RUF.

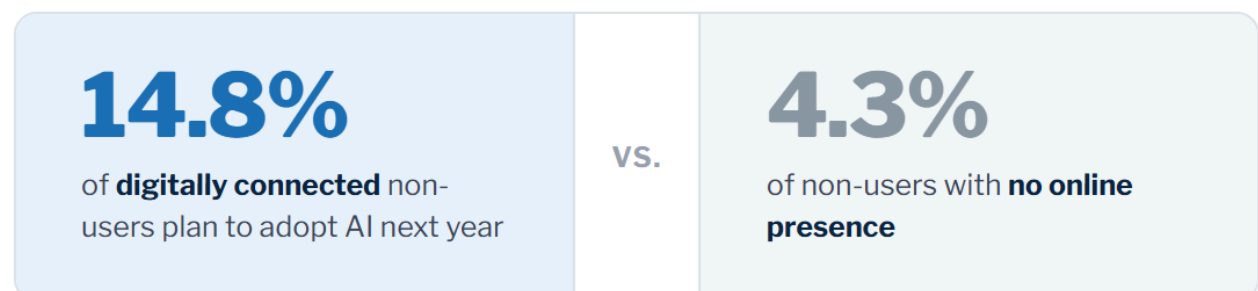
Digital Readiness Is the Clearest Pathway to AI Adoption

Among the strongest predictors of AI adoption is something that predates AI entirely: whether a business has any online presence at all. Just **2.8%** of microbusiness owners with no website or social media account currently use AI, compared to **19.3%** of those with any online presence—nearly a sevenfold gap. That difference persists after accounting for demographics, education, geography, industry, income, and digital confidence, with predicted adoption probabilities of 8.3% versus 23.2%.



— THE GAP IS WIDENING

The pattern extends beyond current use. Among non-users, those with an online presence are more than three times as likely to plan adoption within the next 12 months. Without intervention, this gap is more likely to widen than to close.



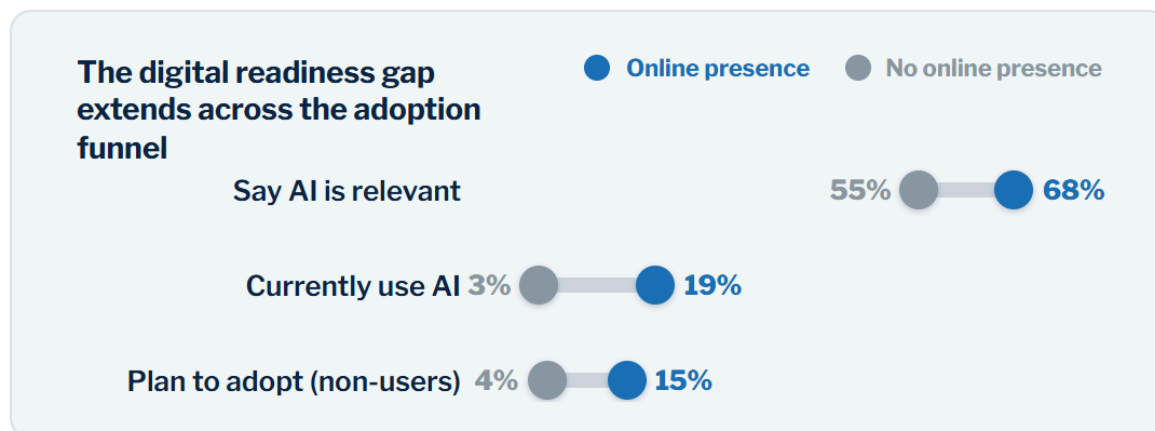
Digital readiness is not just correlated with adoption today. It also predicts who is most likely to adopt tomorrow.

WHY DIGITAL READINESS MATTERS

The divide is not only technical. Businesses with no online presence are also more likely to see AI as irrelevant to their work. Nearly half (**44.6%**) say AI does not apply to their business, compared with **32%** of those with a website or social media presence.

AI adoption appears to build on existing digital infrastructure—not just technically, but perceptually. Owners who already use digital tools to reach customers can more readily imagine using AI to improve that reach: drafting content, responding to inquiries, improving search visibility, and streamlining customer engagement. Owners without that foundation may struggle to see where AI fits into their business at all.

— ACROSS THE ADOPTION FUNNEL



This does not mean AI is irrelevant to offline or place-based firms. Restaurants, repair businesses, personal services, construction firms, and childcare providers can all benefit from AI-supported scheduling, customer communication, bookkeeping preparation, and compliance support. But these use cases are **less visible, less marketed, and less embedded in the support ecosystem** than AI tools designed for content-heavy or digitally native businesses.

When It Works, It Works: AI Use and Impact on Business Operations

Among small business owners who use AI, it works. Most AI-using owners (78.1%) report a positive impact on their business processes, against fewer than 1% reporting a negative one. More than half say AI has increased their productivity. Roughly a quarter report reduced workload.

What AI Is Doing for Small Business Owners

Overall positive impact

ANY POSITIVE IMPACT

78%

SPECIFIC IMPACTS REPORTED

MULTI-SELECT · DO NOT SUM TO 100%

Increased productivity

55%

Changed job roles or responsibilities

26%

Decreased workload

23%

No noticeable impact

13%

Notes: Among current AI users. Respondents were first asked about the overall directional impact on their business, then allowed to select more than one specific impact; percentages do not sum to 100%. Source: EPOP:2025 RUF.

Solo operators—who face the steepest barriers to adoption—experience the most concentrated benefit once they get there. Nine in ten (92%) report a positive business impact, compared to seven in ten employer firms. For owners without anyone to share the load, AI may be functioning less like a productivity tool and more like a first hire.

Who Adopts: Drive, Not Advantage

A common assumption is that early technology adopters are the most resourced or the least constrained. Among small business owners, the opposite often appears true.

AI users report higher business challenge rates than non-users across nearly every domain. More than half say doing their taxes is a significant difficulty, compared with 30% of non-users. Nearly a quarter report trouble accessing capital, compared with 12% of non-users. Half identify setting up an online presence as an active challenge, compared with fewer than one in six non-users.⁶

AI users do not appear more confident with digital tools. On a composite measure of confidence across twelve technologies, users and non-users score nearly identically—2.26 versus 2.19 on a three-point scale.

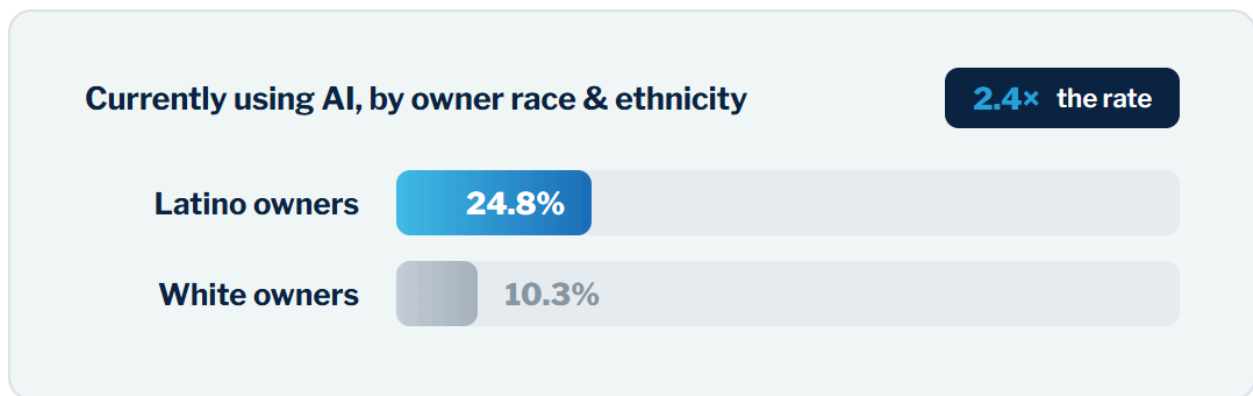
WHO ADOPTS?

AI users are not the most comfortable businesses. They are often the most stretched.

AI users report more operational challenges than non-users, yet show nearly identical levels of digital confidence. Adoption appears to be driven less by technical sophistication than by the search for practical ways to extend capacity.

THE ADOPTER PROFILE

The demographic profile also complicates a simple “advantaged firms adopt first” story. Latino business owners report using AI at more than twice the rate of white owners⁷—a difference that persists after accounting for education, income, digital presence, industry, and other business characteristics. Black owners show a similar directional pattern.⁸ By contrast, women and men report adopting AI at similar rates.



Overall, this is not a portrait of owners adopting AI from a position of comfort. It is a portrait of owners operating under pressure and reaching for tools that can extend their capacity. The tasks where AI use concentrates—tax documentation, content creation, business planning, and data analysis—map closely onto services that many small business owners cannot afford to hire out.

This suggests AI may “fit” differently for different kinds of firms. For some owners, it may fill gaps that are already covered elsewhere by staff, consultants, vendors, or more mature systems. For many very small and underserved businesses, it may offer a low-cost way to navigate growth, complexity, and unmet support needs.

THE IMPLICATION

AI May Be Following a Different Adoption Pattern Than Previous Technologies

The dominant narrative around AI often assumes that adoption will flow first to the most resourced firms and eventually diffuse outward. The findings in this brief suggest a more complex reality on Main Street.

The businesses adopting AI are not necessarily the most digitally confident or the least constrained. Many appear to be owners facing significant operational challenges and searching for practical ways to extend capacity. Yet the businesses with the most to gain—solo operators and owners without digital infrastructure—remain the **least likely to adopt**.

This creates a paradox. AI may offer some of its greatest value to the smallest businesses, but those same businesses often face the greatest barriers to seeing its relevance, integrating it into workflows, and translating adoption into business value.

The opportunity for the small business ecosystem is therefore not simply to increase AI awareness. It is to help owners move from curiosity to practical application, particularly in the operational areas where time and capacity constraints are most acute.

THE BOTTOM LINE

Whether AI ultimately widens or narrows gaps among small businesses may depend less on the technology itself than on how effectively support organizations help owners put it to work.

RECOMMENDATIONS

Six Priorities for the Field

Translating these findings into impact will depend less on the technology than on how the small business ecosystem helps owners put it to work. Six priorities follow.

1 Prioritize operational use cases over general AI awareness.

Support programs should focus on concrete business challenges—customer communications, business planning, tax preparation, compliance, and administrative workflows—rather than generic AI education. Demonstrations should show owners how AI applies to the work they already do.

2 Treat digital readiness as the foundation for AI readiness.

The strongest predictor of AI adoption is whether a business has a website or social media presence. Investments in basic digital infrastructure remain one of the highest-leverage AI interventions available.

3 Help owners move from adoption to workflow integration.

How AI is used may matter as much as whether it is used at all. Support efforts should pair demonstrations with hands-on, one-on-one assistance that helps owners build repeatable workflows and translate experimentation into sustained productivity gains.

4 Target the businesses most likely to be overlooked.

Solo operators and owners without an online presence represent the largest adoption gaps and the largest share of Main Street. Future investments should prioritize these groups.

5 Scale peer-led adoption and demonstration networks.

Because relevance is often the primary barrier, peer examples from similar businesses may be more persuasive than expert instruction alone.

6 Measure and track Main Street AI adoption over time.

BSOs, CDFIs, lenders, ecosystem partners, policymakers, and funders should track AI adoption, use cases, and outcomes to identify what interventions are working and how gaps evolve.

Endnotes

- 1 Author's calculations using the 2023 U.S. Census Bureau Annual Business Survey and Nonemployer Statistics (ABS/NES-D).
- 2 All estimates reflect author's calculations using the Entrepreneurship in the Population (EPOP) Survey Project Restricted Use Data File: 2025 and 2024. NORC at the University of Chicago. [EPOP.norc.org](https://www.norc.uchicago.edu/ePOP). All estimates reflect "microbusiness" owners—businesses with fewer than ten employees, referred to throughout as small or very small businesses—representing 96.5% of all U.S. firms, with survey weights applied throughout. AI adoption is measured using the question, "*Is your business currently using generative AI?*" Before responding, survey participants were shown a definition describing generative AI as a category of AI that generates new content—including text, images, audio, and video—rather than simply analyzing existing data, with large language models (LLMs) such as those powering chatbots noted as a common example. Response options were Yes, No, and Unsure; respondents selecting Unsure are treated as non-adopters in this analysis. Because the question asks about intentional, conscious use of generative AI tools, it likely undercounts adoption that occurs through AI features embedded in other software—such as writing assistants or email platforms—that users may not recognize as generative AI.
- 3 Transaction data from the JPMorgan Chase Institute corroborates the pattern: in 2025, employer firms were nearly twice as likely as nonemployer firms to have paid for AI services (26.1% versus 15.3%). See JPMC Institute (2025). [Understanding the Use of AI Among Small Businesses](#). JPMorgan Chase Institute.
- 4 Author's calculations using the 2023 U.S. Census Bureau ABS/NES-D.
- 5 The difference in relevance perception between solo operators and small employer firms is statistically significant ($p = 0.015$). All group comparisons in this brief that are described as significant meet at least the $p < 0.05$ threshold. This pattern isn't unique to the smallest businesses. The Federal Reserve's Small Business Credit Survey finds the same among larger non-adopting firms—"not applicable to my business" is the leading reason for non-adoption, cited by a majority of non-adopters.
- 6 AI-using microbusiness owners are more likely to report business challenges, not less. Specifically, they're more likely to struggle with taxes (53% vs. 30%), setting up an online presence (50% vs. 16%), finding customers (43% vs. 35%), and accessing capital (23% vs. 12%).
- 7 After controlling for education, income, online presence, AI-specific confidence, and business characteristics, Latino small business owners have an estimated 11.4 percentage-point higher probability of using AI than comparable white owners (average marginal effect from survey-weighted logistic regression; $p=0.049$; $n=526$).
- 8 Black microbusiness owners show an estimated 14.5 percentage-point higher probability of AI use than white owners in the full model ($p=0.096$). The pattern is statistically significant in models without digital confidence controls ($p=0.007$) and attenuates when AI-specific confidence is included, suggesting part of the advantage may work through confidence rather than race per se. Estimates should be interpreted with caution given subgroup sample sizes.

Acknowledgements

This brief was authored by Lori Smith, PhD, Head of Research & Insights at the Association for Enterprise Opportunity. We gratefully acknowledge the NORC EPOP research team for administering the 2025 Entrepreneurship in the Population Survey and making the public use data available. The EPOP Survey project is conducted by NORC at the University of Chicago with funding from the Ewing Marion Kauffman Foundation. AEO developed and funded a set of microbusiness owner questions included in EPOP:2025, including items on generative AI use, AI use cases, business impacts, and digital technology confidence. We are grateful to AEO colleagues, partners, and field practitioners who offered feedback on the brief's framing and interpretation.

About Research at AEO

As the leading voice of innovation in microbusiness, the Association for Enterprise Opportunity (AEO) has an extensive history of conducting research that aims to understand, support, and promote the interests of underserved nonemployer, small, and microbusinesses. For more than 30 years, AEO and its member and partner organizations have helped millions of underserved entrepreneurs in starting, sustaining, and growing their businesses. Together, AEO is working to change the way that capital and services flow to underserved entrepreneurs so that they can create jobs and opportunities for all.

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