

The AI Advantage: How Microbusinesses Can Thrive Through Technology

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Introduction

In the bustling streets of Asingan and nearby towns in Pangasinan, small food producers wake up before dawn to prepare homemade delicacies — puto, kakanin, longganisa, and bagoong — sold in local markets or through Facebook Messenger orders. These microbusinesses are the lifeblood of the community. They keep local flavors alive and families afloat. Yet many of them face the same daily struggles: unstable demand, rising costs, and the lack of modern tools to manage their small enterprises efficiently.

For years, these entrepreneurs have relied on manual methods — tallying sales on paper, estimating inventory by memory, and advertising only through word of mouth. But a quiet revolution is underway. The growing accessibility of Artificial Intelligence (AI) is transforming how microbusinesses can operate, grow, and survive.

Today, with just a smartphone and an internet connection, a food vendor can use AI to track expenses, predict demand, design product labels, or even generate social media captions. What was once the privilege of large corporations has now become the opportunity of the smallest entrepreneur.

Rethinking the Microenterprise Mindset

In my own research on enhancing food microbusinesses in Pangasinan through AI tools, one finding stood out clearly: technology adoption begins with a shift in mindset. Many of the respondents initially believed AI was “too complicated” or

“only for big companies.” Yet, after short demonstrations on simple AI-driven apps, most realized that technology can simplify, not complicate, their operations.

A carinderia owner in Bautista, for example, started using a free AI app to record daily sales and inventory. Within weeks, she noticed which menu items generated the most profit and began adjusting her daily preparation accordingly. Her income grew by nearly 20%.

This story is just one among many. AI doesn’t replace entrepreneurial intuition — it enhances it. It allows microbusiness owners to combine their natural business instincts (“diskarte”) with data-driven decisions. When intuition meets information, opportunities multiply.

Automating the Basics: Efficiency at Your Fingertips

One of the biggest burdens for microentrepreneurs is routine paperwork. Recording sales, monitoring expenses, and computing profit margins are often done manually — if at all. This is where AI-powered financial tools such as Wave, Zoho Books, or even Google Sheets with AI plug-ins can help.

During a community training I facilitated, a group of local snack producers learned to use an AI chatbot to create instant sales summaries and price breakdowns. The process that once took hours now takes seconds. They can now focus on improving recipes, customer service, and packaging — tasks that directly enhance business value.

In marketing, AI-based tools like Canva’s *Magic Design* and ChatGPT can generate attractive promotional materials, design logos, and suggest online ad copies in minutes. A simple “help me design a poster for my homemade bagoong” prompt can produce professional-quality marketing materials — no expensive designer required.

Knowing the Customer Better

AI thrives on data, and every transaction — every order, comment, or “like” on Facebook — contains valuable insight. Even small enterprises can use free AI-driven analytics tools to understand customer behavior.

For instance, an empanada seller from Rosales learned through her page analytics that most of her orders came in between 3–6 p.m. on Fridays. With this information, she began preparing batches ahead of time and offered “Friday Saver” promos to regular buyers. Sales rose significantly.

AI makes personalization possible even for small entrepreneurs. When used well, it transforms the relationship between the seller and customer from transactional to relational — building loyalty, trust, and repeat business.

Bridging the Gap: Challenges in AI Adoption

Despite the potential, challenges persist. Many microentrepreneurs still face knowledge-based barriers — limited digital literacy, fear of technology, and lack of exposure. Infrastructure gaps such as weak internet connectivity in rural areas also hinder adoption.

These findings align with what the Technology Acceptance Model (Venkatesh et al., 2012) predicts: perceived ease of use and self-efficacy determine whether technology is embraced or avoided.

The good news? When provided with hands-on training and simple demonstrations, microentrepreneurs quickly overcome their hesitation. During our workshops, once participants saw how AI could help them generate a business plan or compute profit margins, curiosity replaced fear. They began asking: *“Can I use AI to manage my customer list?”* or *“Can it help me with my Facebook posts?”*

These small sparks of curiosity are what ignite innovation at the grassroots level.

Building Local AI Literacy

To scale this transformation, community-level training is crucial. Local governments, state universities, and private partners can collaborate to design training modules that simplify AI concepts for entrepreneurs.

For example, short courses like *“AI Tools for Small Business Success”* can be offered through extension programs. Workshops can include tutorials on AI-driven bookkeeping, marketing automation, and inventory management. The impact goes beyond profit — it builds digital confidence among local entrepreneurs and fosters a more resilient local economy.

In Pangasinan, such initiatives can transform rural enterprises into smart, sustainable microbusinesses — capable of competing not only in local markets but also online and beyond.

Inclusive and Ethical Innovation

AI must empower, not exclude. Women entrepreneurs, who make up a large portion of the microbusiness sector, should have equal access to digital tools and training. AI

can ease their workload by automating repetitive tasks, allowing them to balance family responsibilities while managing their businesses effectively.

Equally important is ensuring that AI use remains ethical and responsible. Entrepreneurs should be made aware of data privacy, fair use, and accuracy. Technology should always serve human dignity, not replace it.

Thriving in the Smart Business Era

In the coming years, the difference between a thriving microenterprise and a struggling one will depend on adaptability. Those who learn early to integrate AI — even in small, practical ways — will gain the advantage.

A vendor who uses AI to predict demand, a baker who automates costing, or a retailer who uses AI-generated captions to reach more buyers — these are today's innovators. They might not use the term “artificial intelligence,” but they are already experiencing its benefits.

AI is not about replacing human skill; it's about amplifying it. It gives Filipino microentrepreneurs the power to make informed decisions, reach wider audiences, and scale their dreams sustainably.

Personal Insights

Microbusinesses represent the creativity, resilience, and hope of the Filipino people. With AI, they can become smarter, more strategic, and more competitive — without losing their human touch.

The AI advantage is not just technological; it is transformational. It brings the future of business to the smallest of enterprises and reminds us that innovation belongs not only in the city, but also in every humble kitchen, sari-sari store, and roadside stall where entrepreneurship begins.