



Peer Circle Workshop, December 2024

Empowering Small Businesses through Digital Solutions

The Mastercard Strive initiative, in partnership with Business Fights Poverty, convened over 50 stakeholders to explore how to empower small businesses through digital solutions.

Executive Summary

The discussion focused on three areas: artificial intelligence and automation, access to finance and capital, and climate resilience and sustainability. The five overarching insights outlined below, spanning all three areas, form a framework of principles that empower organisations looking to better support small businesses to navigate climate disruptions and economic uncertainties:

1. **Cross-Sector and Regional Partnerships:** Collaboration across sectors and regions is essential to bridge foundational gaps—such as connectivity, data literacy, and trust—that hinder small enterprises from adopting advanced digital and AI solutions.
2. **Ecosystem-Level Synergy:** Strengthening connections between supply chains, financial service providers, and local communities fosters broad-based benefits, creating a more resilient and integrated business ecosystem.
3. **Targeted, Culturally Relevant Solutions:** Addressing specific, high-priority challenges delivers early wins, while engaging local experts and diverse teams ensures interventions are culturally relevant, bias-resistant, and aligned with real-world needs.
4. **Ethical Inclusion and Policy Innovation:** Ethical segmentation and inclusive policymaking safeguard underserved groups, such as women-led enterprises, ensuring equitable access to digital and financial opportunities.
5. **Sustainable and Adaptive Models:** Long-term success depends on business models that blend revenue streams, leverage data, and integrate seamlessly into existing financial platforms. AI-driven solutions must be built on inclusive teams, high-quality data, and a deep understanding of local challenges to drive meaningful impact.

The collective insights of attendees highlight five key pillars essential for developing effective support systems for small businesses. Whether engaging in value chains, working within development organisations, financial institutions, or technology providers, the opportunity to harness digital solutions can unlock the full potential of small enterprises. By leveraging these pillars, small businesses can overcome challenges, adapt to climate disruptions, and expand their economic opportunities in a truly sustainable and resilient way.

Breakout Conversations - Top Ten Insights

The breakout discussions uncovered numerous ways in which digital solutions can empower and enhance small businesses. Throughout these conversations, ten key insights emerged repeatedly. The following summary outlines these insights, along with an example or two of organisations doing this in practice. Combined, they highlight the most impactful strategies for supporting small enterprises. A detailed list of organisations and references cited in these insights can be found in the annex.

1. Address Foundational Gaps Before Implementing Advanced Digital and AI Solutions

Many small businesses lack the basic infrastructure required for **digital transformation**, such as reliable internet access, robust record-keeping, and digital literacy. Without these, even the most advanced AI or fintech solutions fail to gain traction. For instance, DataKind advises lenders to clean up data before launching AI credit assessments, while Opportunity International first builds digital skills among rural farmers before introducing AI-driven climate tools. Strengthening these core **competencies and trust** is essential before rolling out sophisticated solutions.

2. Engage Local Experts and Diverse Teams in Solution Design

Globally designed digital and AI solutions often **fail to reflect local business realities**. Developers working in major tech hubs may unintentionally embed assumptions that **clash with cultural, economic, or infrastructural realities**. Involving local experts and marginalised groups ensures greater **user acceptance, cultural relevance, and bias mitigation**. Women's World Banking refines credit-scoring models based on **first-hand knowledge of women-led enterprises**, while Oxfam blends **indigenous wisdom with climate models**, enhancing early warning systems. By integrating **on-the-ground expertise**, solutions become more **effective, ethical, and scalable**.

3. Focus on Solving Specific Problems Before Scaling

Grand, all-in-one platforms can overwhelm small businesses **struggling with digital adoption**. Solutions should start with **a single, pressing challenge**, delivering early wins before expanding. In Malawi, Opportunity International tackled one fundamental question—**“Which crop to plant?”**—helping farmers adapt to erratic rainfall before adding more complex features. Targeted, incremental approaches **build trust and lay the groundwork for broader adoption**.

4. Ensure Ethical Segmentation to Protect Underserved Groups

Segmenting businesses based on factors like **gender, climate risk, or access to finance** helps tailor solutions to diverse needs. However, segmentation must be conducted ethically to avoid **predatory lending or discriminatory pricing**. Transparency, community involvement, and clear ethical guidelines are essential. For example, DataKind ensures **stakeholder input on data protection rules**, while Christensen Global **segments businesses by solar-readiness while inviting their feedback**. Ethical frameworks must safeguard, rather than **exploit**, vulnerable groups in financial and digital services.

5. Include Small Businesses in Policymaking and Standards-Setting

AI ethics, data governance, and climate finance policies often overlook **small business realities**. Regulations designed without considering **limited connectivity, informal business structures, or language barriers** risk being impractical. Accenture Development Partnerships integrates **local voices into AI governance**, preventing unintended policy pitfalls. Similarly, SEWA in India ensures grassroots feedback shapes **climate relief policies**, demonstrating that **inclusive policymaking leads to more equitable and effective outcomes**.

6. Pair Digital Tools with Human Intermediaries to Build Trust

Technology adoption among small businesses **relies heavily on trust**. Even the best AI-driven finance tools fail if businesses **fear hidden fees or fraud**. Local intermediaries—trusted **community figures, business mentors, and peer networks**—can **bridge the gap between tech platforms and end users**. Oxfam reintegrated mobile money in Tanzania **only after rebuilding trust through local representatives**. Women’s World Banking enlisted **midwives as intermediaries**, guiding female entrepreneurs onto digital platforms. Successful solutions blend **human relationships with technology** rather than replacing them.

7. Link Climate Resilience to Tangible Business Benefits

Small businesses are more likely to adopt **climate-resilient solutions** if they see immediate economic value. Whether it is **cost savings, improved crop yields, or faster recovery from disasters**, financial incentives drive engagement. Hand in Hand International in Kenya pairs **satellite imagery with financial training**, helping businesses **increase profitability while improving sustainability**. Climate strategies must be **economically viable to ensure widespread adoption**.

8. Design Financially Sustainable Models to Ensure Longevity

Donor-funded programmes often **struggle to remain viable once grants expire**. Building sustainable revenue models—whether through **user fees, blended finance, or data-driven credit assessments**—ensures continuity. Appalachian Community Capital, for example, uses **data insights to de-risk climate investments**, attracting stable funding. Embedding **finance, insurance, and credit tools within existing supply chains** (as seen in Unilever’s Retailer Initiative) also improves **financial inclusion and long-term resilience**.

9. Embed financial tools within familiar platforms

Small businesses often struggle with **limited financial records, complex banking procedures, and inaccessible credit**. Simplified digital solutions—such as **chatbot-based guidance, preloaded financial tools, and embedded lending within supply chains**—enhance adoption and trust. By streamlining access to finance through **relevant, bundled, and platform-based interfaces**, businesses can **overcome systemic barriers, secure funding, and drive sustainable growth**. Boost Capital merges fun, **chatbot-based financial guidance** with step-by-step training. Opportunity International distributes **tablets preloaded with concise financial resources**, meeting entrepreneurs at their level of digital competency.

10. Consider Ecosystem-Level Impacts and Indirect Benefits of AI and Digital Solutions

Even if a small business **doesn’t directly use AI**, its wider business ecosystem can benefit. AI-powered **credit scoring can lower borrowing costs**, AI-driven **demand forecasting can improve supply chains**, and digital logistics can **streamline rural commerce**. PACT observed that **better AI-based credit models reduced financial risk for small borrowers**, while DirectMarket’s demand forecasting **helped farmers optimise production**. **Ecosystem-wide AI adoption can amplify resilience across entire sectors**.

Conclusion

These ten insights highlight **practical strategies for empowering small businesses** to navigate climate and economic challenges. **Addressing foundational gaps, engaging local expertise, fostering trust, and designing sustainable financial models** are crucial for resilience. By ensuring **ethical, inclusive, and user-driven approaches**, small enterprises can not only **survive disruptions but thrive in an increasingly digital and climate-conscious world**.

Appendix A: Examples and Resources

Below is a consolidated list of the primary examples and resources cited during the Peer Circles. They are presented in alphabetical order by organisation.

Accenture Development Partnerships; Blueprint for Responsible AI

Accenture shares a comprehensive framework for implementing responsible AI, ensuring ethical and transparent use of AI technologies across industries.

<https://www.accenture.com/gb-en/case-studies/data-ai/blueprint-responsible-ai>

Appalachian Community Capital & Mastercard Strive Initiative; Data Platform Enhancement for Climate Finance

Improved local lenders' data capabilities, enabling better climate-adaptive financing decisions and expanding access to capital for small businesses.

<https://appalachiancommunitycapitalcdfi.org/2024/08/06/acc-receives-mastercard-grant-to-launch-the-resilient-appalachia-data-initiative/>

Ashoka; Debt Capital Exchange with Revenue-Sharing

Aggregates diverse data streams to tailor financing for social entrepreneurs, fostering transparent growth across impact-driven ventures.

<https://www.ashoka.org/en-us>

BFA Global; Contingent Lines of Credit & Weather-Index Insurance

Offers swift digital payouts following climate shocks, stabilising cash flow for small businesses and encouraging climate resilience investments.

<https://bfa-global.com/wp-content/uploads/2024/05/Climate-Resilience-Insurance-Learnings-Gaps-Opportunities.pdf>

Boost Capital

White-labeled tech platform entered via social media channels - integrates chat based AI to onboard more small business customers digitally.

<https://www.strivecommunity.org/programs/boost-capital-philippines>

Business Fights Poverty: Financial Inclusion Insights

Exploring how financial inclusion initiatives, such as those led by Atul Tandon, transform lives and create opportunities.

<https://businessfightspoverty.org/how-financial-inclusion-transforms-lives-with-at-ul-tandon/>

Business in the Community; AI Programmer Diversity Advocacy

Highlights the lack of diversity among coders, advocating inclusive AI design to reduce bias against underserved small businesses.

<https://www.bitc.org.uk/report/diverse-and-inclusive-supply-chains-insights-report/>

CARE; Women-Centred AI Design Approach

Engages women entrepreneurs early, ensuring AI solutions address real-world barriers and improve usability for underserved female-led businesses.

<https://www.careinternational.org.uk/news-stories/ai-and-the-global-south-making-ai-more-ethical-and-effective-through-inclusive-participation/>

Caribou; Gamified Financial Literacy Chatbot

Uses fun, interactive modules to help small entrepreneurs adopt digital finance tools, building confidence step by step. <https://www.cariboudigital.net/>

CIFAR Alliance and BFA Global; Climathons

Share a blog exploring the role of financial services in enhancing climate resilience through practical actions.

<https://www.cifaralliance.org/news/building-resilience%3A-financial-services-and-climate-action>; and a collaborative initiative by CIFAR Alliance and BFA Global that breaks down silos on climate solutions and facilitates localised climate resilience. <https://www.cifaralliance.org/climathon-ct/>

Christensen Global; Solar Lending Models

Trains financial institutions to finance solar solutions, lowering risk perceptions and boosting clean-energy access for small enterprises. The following blog explores strategies for overcoming knowledge barriers in the adoption of solar energy, offering insights for both consumers and producers.

<https://www.christenseninstitute.org/blog/taking-on-the-knowledge-barrier-solar-lessons-for-consumers-and-producers/>

DataKind; Foundational Data Management for Lenders

Advises lenders to clean and standardise data prior to advanced analytics, ensuring fair, accurate credit decisions.

https://www.datakind.org/wp-content/uploads/2023/08/DataKind_Economic-Empowerment.pdf With data-driven products aimed at driving financial inclusion. <https://www.datakind.org/2024/09/27/data-driven-impact-for-financial-inclusion-unveiling-three-datakind-products/>

DirectMarket (France); AI-Driven Agricultural Supply Chain Forecasting

Improves product labelling, demand prediction, and logistics for agricultural suppliers, indirectly benefiting small farms serving hospitality markets.

<https://strivecommunity.org/programs/directmarket-france>

FII Institute: Advancing Financial Inclusion

A resource hub focusing on initiatives that promote financial inclusion and innovative approaches to addressing economic gaps globally.

<https://fii-institute.org/>

FinDev Gateway; Expanding Financial Inclusion for Women in Mexico

Research guidelines focusing on enhancing financial inclusion for women, published by FinDev Gateway.

<https://www.findevgateway.org/es/guiasherramientas/2024/09/expandiendo-la-inclusion-financiera-de-las-mujeres-en-mexico-lineamientos>

Flourish FI; Gamification for good finances

A Mastercard Strive partner that uses gamification to enable people and small businesses to adopt positive financial behaviors.

<https://strivecommunity.org/programs/flourish-fi>

Fundación Capital; Chatbot & In-Person Check-Ins

Combines digital chatbots with regular face-to-face meetings, building trust and boosting entrepreneurial confidence in financial tools.

<https://fundacioncapital.org/eng/>

Google's Flood Hub; AI-Powered Early Warning System

Delivers customised flood alerts to vulnerable areas, helping small businesses prepare for climate disruptions and protect operations.

<https://blog.google/technology/ai/google-ai-global-flood-forecasting/>

Grameen Foundation (Nepal); Localised Sustainable Land Management

Adapted the global WOCAT database with local agents, making climate guidance relevant to Nepalese farmers' real conditions.

Related Resource: Developing Skills and Expertise in Digital Farming:

<https://grameenfoundation.org/her-outcomes/digital-farming/develop-skills-and-expertise>

Hand in Hand International & Sevi; Stock-Financing Tool

Initially offered broad features; refocusing on inventory challenges for a specific user segment improved adoption and impact.

<https://www.handinhandinternational.org/> and <https://www.sevi.io/>

Hello Alice: AI-Driven Platform for Startups

Hello Alice is an AI-powered platform designed to help startups and small businesses identify needs and access tailored resources for growth.

<https://helloalice.com/>

IFC: Targeted Sectors for Financial Inclusion

The International Finance Corporation outlines definitions and targeted sectors for advancing financial inclusion through investments and initiatives.

<https://www.ifc.org/en/what-we-do/sector-expertise/financial-institutions/definitions-of-targeted-sectors>

Khatabook; Digital Bookkeeping Solutions

Provides simple record-keeping for small Indian businesses, generating data for better credit scoring and easier financial management.

<https://khatabook.com/>

Kipu Quantum; Gender-Focused AI Credit Scoring

Segments users by gender and business type, refining credit models to address biases against women-led enterprises. <https://kipu-quantum.com/>

Kiva; Community-Based Lending Model

Works through local partners and peer underwriting, expanding credit for underserved entrepreneurs lacking traditional financial records.

How Kiva Works with Lending Partners:

<https://www.kiva.org/blog/how-kiva-works-with-lending-partners>

Lendingkart & Women's World Banking; AI-Based Credit Model

Refines algorithms to reduce gender bias in India's lending ecosystem, expanding equitable access to capital for women.

In a World of Gender Bias, Lendingkart's AI-Based Credit Model Stands Apart:

<https://www.womensworldbanking.org/insights/in-a-world-of-gender-bias-lendingkarts-ai-based-credit-model-stands-apart/>

Mastercard Centre for Inclusive Growth & data.org; Artificial Intelligence to Accelerate Inclusion Challenge

The AI2AI Challenge winners include: Quipu who created an AI-driven credit alternative scoring model & IDinsight who powers an AI-driven call center providing Health Extension Workers with real-time medical guidance on complex cases.

<https://data.org/initiatives/challenges/artificial-intelligence-to-accelerate-inclusion-challenge/>

Mastercard Centre for Inclusive Growth; AI-Driven Business Continuity Tools

Embedded AI tools in familiar mobile platforms, ensuring essential services remain accessible for small businesses during disruptions. Democratizing data analytics and AI can empower small businesses, levelling the playing field in competitive markets.

<https://www.mastercardcenter.org/insights/article/democratizing-data-analytics-and-ai-to-level-the-playing-field-for-small-businesses>

Mercado Pago; External Banking Records Pilot

Encourages merchants to share external data for enhanced underwriting, improving trust, credit assessments, and overall lending transparency.

<https://www.mercadopago.com.mx/developers/en>

Meta, WhatsApp & Facebook; Bundled Microfinance Offerings

Explores embedding microfinance tools on widely used social platforms, meeting small businesses where they operate every day.

<https://en-gb.facebook.com/business>

MESH; Gradual AI Adoption for Entrepreneurs

Builds a digital community first, then adds AI features, smoothing the learning curve for small business owners. <https://www.mesh-ai.com/>

MicroSave Consulting: Impact of Digital Platforms in Bangladesh

A study examining how digital platforms influence microenterprises in Bangladesh and their access to financial solutions.

<https://www.microsave.net/2024/11/18/impact-of-digital-platforms-on-microenterprises-bangladesh-country-findings/>

Microsoft; Data Readiness for AI Adoption

Stresses foundational data organisation and infrastructure before advanced AI, helping small businesses implement technology effectively.

<https://adoption.microsoft.com/en-gb/ai-readiness-wizard/>

Oxfam; Forecasting & Early Warning Systems

Merges community knowledge with advanced climate data, sending proactive alerts to mitigate disaster impact on microenterprises.

Building Resilience with Climate Change & Disaster Risk Information:

<https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620561/er-climate-change-disaster-risk-information-build-resilience-280818-en.pdf?sequence=1>

Opportunity International; AI-Driven Climate Advisory

Delivers crop-specific guidance via WhatsApp, bridging digital gaps to help farmers navigate unpredictable weather patterns and discusses how AI is enhancing opportunities for farmers and teachers globally.

<https://time.com/7160849/opportunity-international-ai-farmers-teachers/>. Whilst in Rwanda farmers' digital profiles help them get financing:

<https://www.opportunity.org.uk/news/blog/24000-farmers-to-benefit-from-new-project-launched-in-rwanda>

Pact; AI-Enhanced Creditworthiness Models

Improves banks' underwriting processes, indirectly benefiting small businesses through more favourable lending and better access to finance.

<https://www.pactworld.org/>

Reckitt; Six-Factor Inclusivity Framework

Assesses neurodiversity, social constraints, and readiness, crafting inclusive financial services that benefit diverse small-business owners.

<https://www.reckitt.com/media/10114/culture-and-inclusion.pdf>

SEWA (Self-Employed Women's Association); Climate Livelihood & Resilience Recovery Fund

Tailors rapid digital relief payouts to local climate hazards, helping women entrepreneurs recover faster from shocks. <https://www.sewa.org/>

Small Firm Diaries; Personal Savings Reliance Study

Reveals small firms relying on personal savings alone, limiting formal record creation and stunting credit access. <https://www.smallfirmdiaries.org/>

Somo Africa; Micro-Business Hubs

Offers shared assets, training, and tools to underserved Kenyan entrepreneurs, bolstering local economic development and resilience.

<https://somoafrica.org/>

Standard Chartered; Dedicated Platform for Women-Led Businesses

A community-driven environment for female entrepreneurs to share knowledge, gain support, and foster inclusive business growth.

<https://www.sc.com/ke/business/sc-win/>

TechnoServe; Inclusive Loops – Circular Economy

Explores how social enterprises enable circular economies, helping communities adopt climate-resilient, sustainable business practices.

Inclusive Loops: Social Enterprises in the Circular Economy;

<https://www.technoserve.org/wp-content/uploads/2023/12/Inclusive-Loops-Social-Enterprises-in-the-Circular-Economy-Report.pdf>

UNHCR; Connectivity for Refugees

UNHCR Innovation Service examines the role of connectivity in improving the lives of refugees globally.

<https://www.unhcr.org/innovation/connectivity-for-refugees/>

Unilever; Retailer Initiative & Sustainability Programmes

Integrates digital ordering with credit access, empowering micro-retailers and advancing sustainable livelihoods for vulnerable communities.

Unilever's Sustainability & Livelihoods Initiatives:

<https://www.unilever.com/sustainability/livelihoods/>

Verizon; Minority Chambers of Commerce Partnerships

Collaborates with local groups to foster trust and adoption of climate-focused digital solutions among underserved minority entrepreneurs.

<https://espanol.verizon.com/about/news/verizon-grants-100k-aacc-digital-inclusion-program>

Women's World Banking; AI-Enhanced Credit Scoring for Underserved Women

Mitigates algorithmic bias to include more women-led businesses, widening equitable financial access across emerging markets:

https://www.womensworldbanking.org/wp-content/uploads/2021/02/2021_Algorithmic_Bias_Report.pdf; their five key insights on using reject inference techniques to reduce biases and improve fairness in credit decisions

<https://www.womensworldbanking.org/insights/beyond-biases-five-insights-on-enhancing-credit-fairness-with-reject-inference-techniques/>; and the field guide for lenders to identify and address bias in algorithms.

<https://www.womensworldbanking.org/insights/report-check-your-bias-a-field-guide-for-lenders/>. In addition they share their blog on the intersection of climate change, gender, and financial inclusion.

<https://www.womensworldbanking.org/insights/a-vital-response-to-climate-change-financial-inclusion-for-women/>

<https://www.womensworldbanking.org/insights/a-vital-response-to-climate-change-financial-inclusion-for-women/>

World Economic Forum: AI for Impact 2024

This study highlights the innovative use of AI technologies to address challenges and drive impact across underserved markets globally:

https://www3.weforum.org/docs/WEF_AI_for_Impact_2024.pdf

Appendix B: Contributors

We would like to thank the following people for so generously giving their time and sharing their expertise.

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