

SOLAR SISTER



DIGITIZING WOMEN ENTREPRENEURS

SOLAR SISTER LEARNINGS REPORT



**PREPARED BY:
SOLAR SISTER IMPACT
HUB**



BACKGROUND

As the world becomes more digital, women are being left behind. According to reports from UN Women, the digital gender divide is particularly pronounced in developing regions, where women are 20% less likely than men to be online, and 30% less likely to have access to a smartphone. It is estimated that by 2030, 230 million jobs in sub-Saharan Africa will demand digital competencies, making the need to bridge this digital divide an urgent priority for gender equality and women's economic growth.

Solar Sister empowers women in Africa to become clean energy entrepreneurs, supporting them with training, mentorship, and a trusted product pipeline. The women Solar Sister works with are particularly impacted by the digital gender divide; **less than 10% of Solar Sister Entrepreneurs have access to smartphones**, and more than 2/3 of those with access share the device with another member of the household. Digital tools are critical for business success in today's ever-digitizing world, and Solar Sister is dedicated to ensuring women are not left behind.

Over the past several years, Solar Sister has worked diligently to digitize women entrepreneurs by improving access to digital tools, building digital literacy skills, and providing a practical application of digital tools and skills through clean energy businesses. In 2024 the organization identified digitization as a priority learning area in our Organizational Learning Agenda-- In this report you will find an outline of our digitization efforts to date, key learnings from our pilot efforts, and recommendations for the path forward.

KEY TAKEAWAYS

Digitizing Solar Sister entrepreneurs is a catalyst for business growth. When women entrepreneurs have access to digital tools and skills, they experience greater and more rapid economic growth and improved job skills that expand beyond Solar Sister.

- 1** Solar Sister Entrepreneurs who own smartphones earn 80% more on average.
- 2** Entrepreneurs cite social media marketing as their greatest digital business asset.
- 3** Access to digital tools is the most significant barrier to digitizing entrepreneurs.

TO DATE...

522

Solar Sister Entrepreneurs have been trained in comprehensive digital literacy skills.

246

Smartphones have been distributed to Solar Sister entrepreneurs through pilot programs.



SOLAR SISTER'S SOLUTION



Provide digital tools
for women who have a
barrier to access



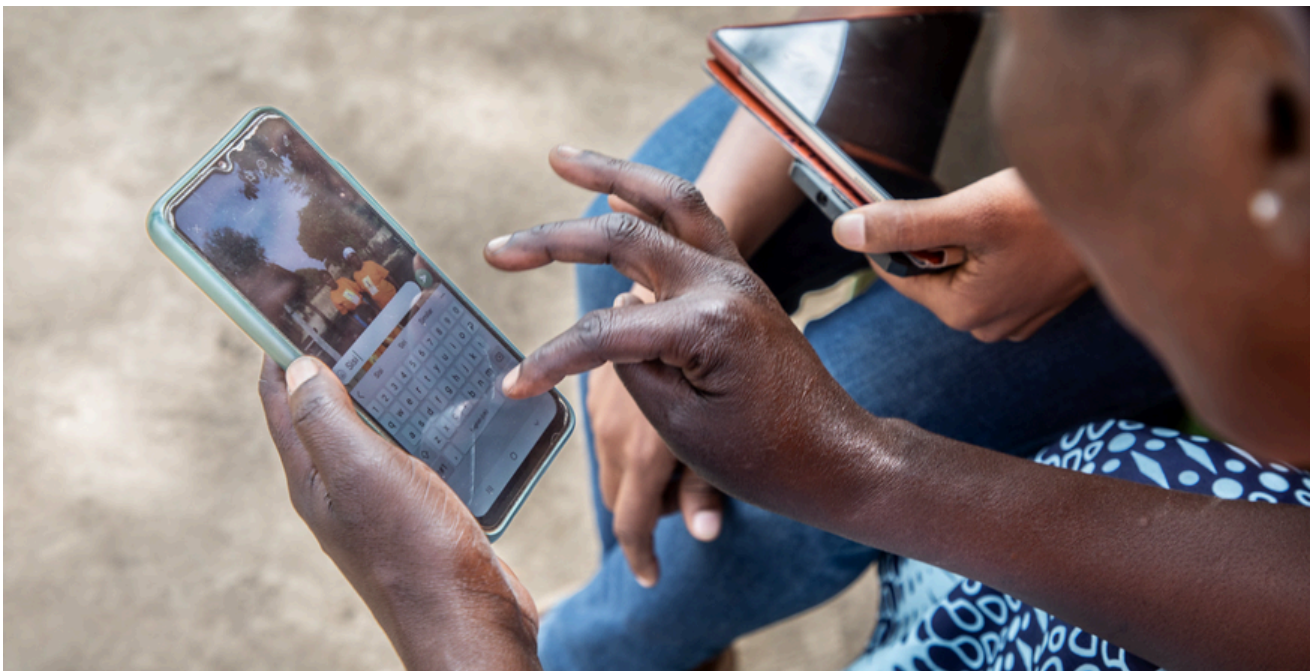
Train women
on digital business skills



Provide opportunities
for women to put digital
job skills to practice

Over the past 2 years, Solar Sister has piloted smartphone distribution programs to 246 solar entrepreneurs and with the significant support of Cisco Foundation, has provided digital skills training to over 500 women. The training, delivered by Solar Sister Business Development Associates at monthly Sisterhood Group meetings, gives women the opportunity to practice and learn from one another. Solar Sister has also engaged [Learn.ink](#), an App-based digital learning platform designed specifically for rural African learning contexts to provide supplemental training refreshers and practice scenarios for entrepreneurs to do asynchronously.

Beyond hardware and training, Solar Sister entrepreneurs have the opportunity to put their digital skills to practice by applying what they've learned to their clean energy business operations; Solar Sisters use social media to market products, mobilize potential customers on WhatsApp, and digitize their customer records, all of which contribute to business growth and increased earnings.



PROGRAM EVALUATION FINDINGS

Solar Sister launched a program evaluation of our digitization efforts in 2024, including a deep-dive into program results and a series of focus group discussions with participants of the program.

Entrepreneurs who own smartphones consistently have higher-earning businesses than those who do not. Entrepreneurs note the following as the key reasons smartphones enable this level of business growth:

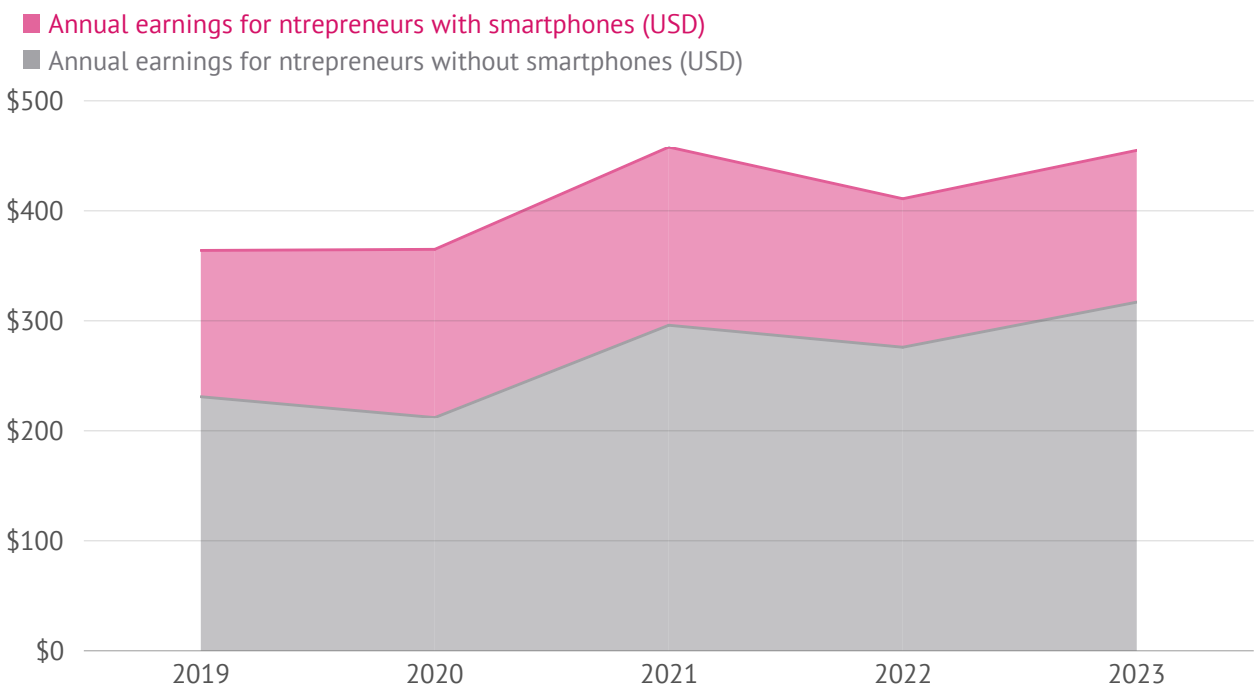
Social media marketing

Allows entrepreneurs to expand to new customer bases. Entrepreneurs are able to reach people online they may never have encountered on foot.

Digital communication

Reduces overheads and improves business efficiencies. Smartphones have significantly improved marketing and customer connection, reducing the need for physical travel to market products.

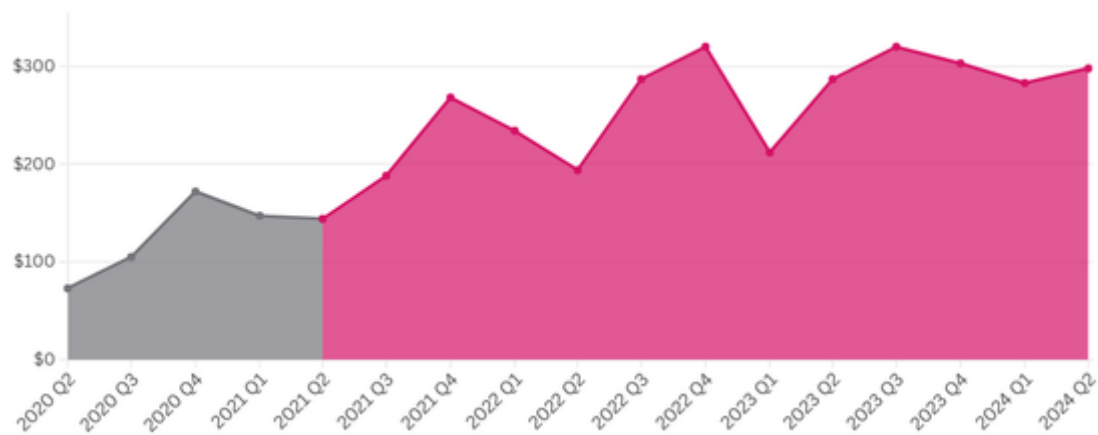
Solar Sister Entrepreneurs who own smartphones earn more on average than those who don't



Solar Sister Entrepreneurs who have participated in smartphone distribution programs increased their sales and earnings after receiving the smartphone by **70-80%**

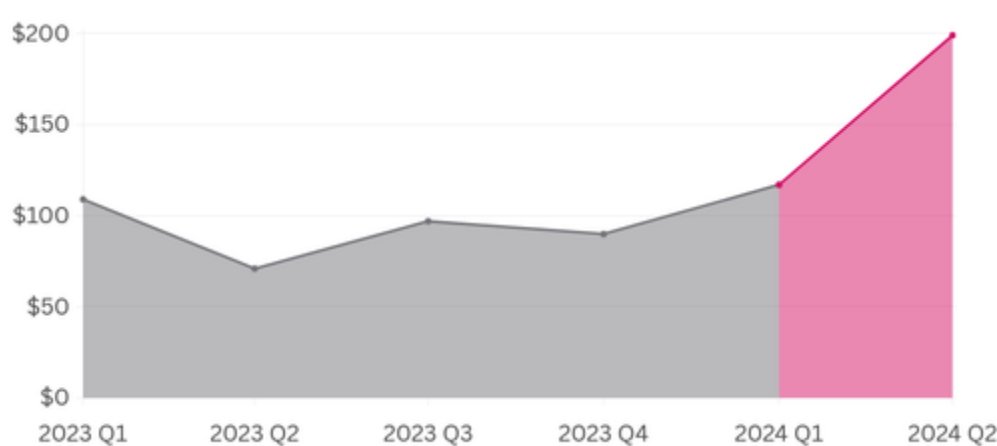
Entrepreneurs in Nigeria who received a smartphone increased sales by 80% in the **quarters following receiving the phone (2021 Q2)** and maintained that growth over time

Average entrepreneur quarterly sales revenue (USD)



Entrepreneurs in Tanzania who received a smartphone increase sales by 70% in **the quarter after receiving smartphones (Q1 2024)**

Average entrepreneur quarterly sales revenue (USD)



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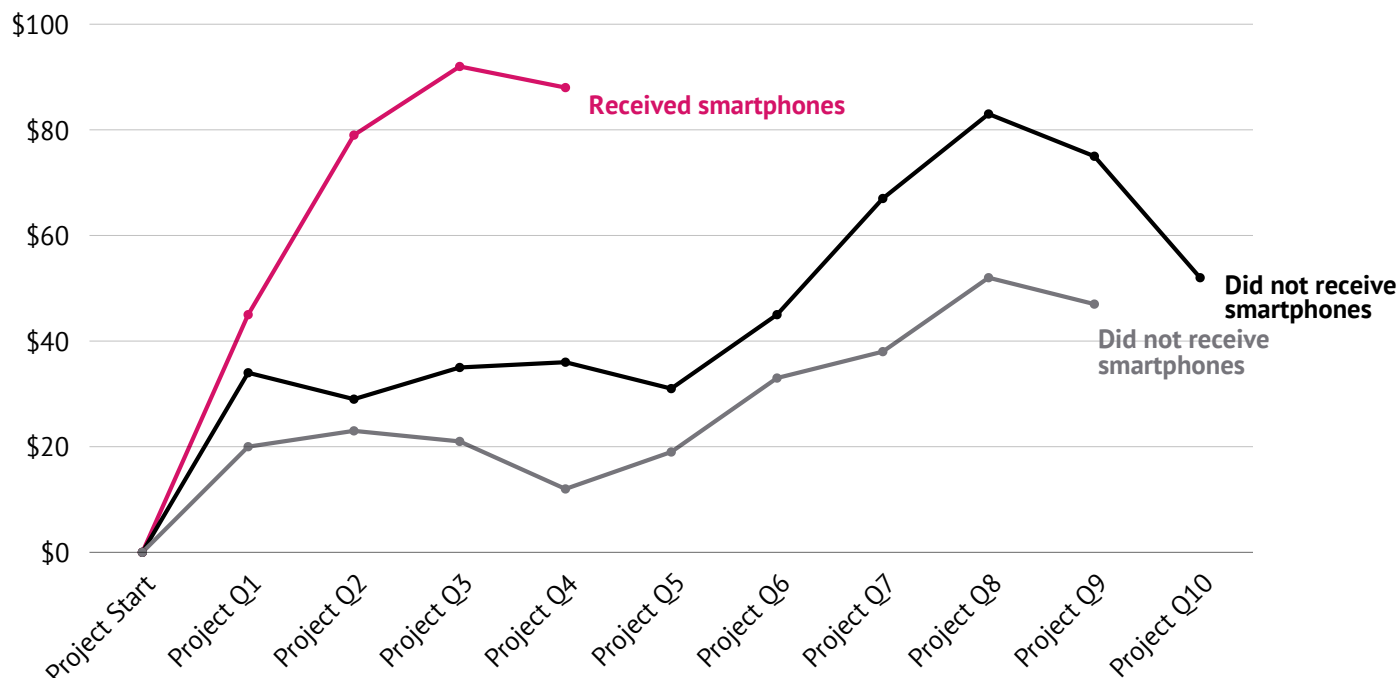
2024

Between 2022-2024, Solar Sister Nigeria implemented three programs that were focused on recruiting and supporting new women entrepreneurs in vulnerable conditions such as climate refugees. One of these programs, launched in 2024, included a smartphone distribution component paired with digital skills training, while the other two, launched in 2022, did not. Although there were several small differences across these programs in terms of eligibility criteria and the specific community of focus, the smartphone distribution was the primary difference in implementation between these programs.

The participants who received smartphones earned more income right off the bat than those without, and doubled their earnings nearly **4x faster** than the other two programs, further indicating how catalytic smartphone ownership and the use of digital business tools can be for entrepreneur success.

Entrepreneurs who **received a smartphone** as part of their program participation doubled their earnings 4x faster than those who did not receive smartphones.

Average entrepreneur quarterly sales revenue (USD) for 3 programs, one of which had a smartphone component.





FEEDBACK FROM ENTREPRENEURS

Solar Sister is dedicated to growing and evolving our programming to best support our entrepreneurs' needs and to meet them where they are. The Impact Hub Team conducted focus group discussions with entrepreneurs and Solar Sister staff to gather feedback on the digitization programming. Important takeaways include:

- Social media platforms like WhatsApp and Facebook are highly effective for marketing and customer engagement, allowing entrepreneurs to reach new markets both physically and socially.
- Entrepreneurs value the training on new digital and media marketing topics and are eager to learn more; requested topics that Solar Sister is working to integrate include cybersecurity, creating digital marketing materials such as flyers, and new social media platform exposure.
- In-person training is critical for entrepreneur learning; although Solar Sister utilizes an app-based learning platform, entrepreneurs shared that they learn best when their mentor is teaching them directly. This reiterates the importance of Solar Sister's monthly Sisterhood Meetings, where entrepreneurs gather to learn. App-based learning is a valuable tool for practicing and refreshing topics learned first in the group learning setting.



KEY CHALLENGES

Over the past year, Solar Sister has learned a lot about what is and isn't working in our digital programming. The following were the key challenges that need to be addressed in future iterations of Solar Sister's digitization efforts:

1

Access to digital tools

Less than 10% of Solar Sister Entrepreneurs have access to smartphones, and many of those share the smartphone with other family members. Improving this access barrier is key to closing the digital divide

2

Digital and data literacy

Although Solar Sister has trained entrepreneurs to collect digital customer information, entrepreneurs report a lack of understanding on what to do with that data, indicating a need for improved training on using digital data insights for business improvements.

3

Data and network challenges

Entrepreneurs highlighted significant challenges with network reliability and data costs affecting their ability to upload photos, use business applications, and access training platforms. Solar Sister is exploring solutions including simplified/ more data-friendly platforms.

CONCLUSION AND RECOMMENDATIONS

The integration of smartphones into the business operations of Solar Sister Entrepreneurs in Nigeria, Tanzania, and Kenya presents valuable opportunities for enhanced outreach and efficiency. Findings show that smartphone ownership is a key facilitator of business growth and entrepreneur success, and the current rate of digital growth worldwide demonstrates that the need for digital skills is only going to increase over time. Solar Sister will continue to iterate and build on our learnings, moving forward with the following recommendations in mind:

- Continue to prioritize in-person training and technical support. using digital learning platforms as a secondary learning source.
- Enhance community support for entrepreneurs by initiating and supporting digitalconnections between entrepreneurs from different geographic areas.
- Expand training offerings, including topics such as:
 - Cybersecurity
 - Capturing and understanding customer data insights
 - Creating digital marketing materials
 - New social media platforms such as TikTok and Snapchat



SOLAR SISTER

2024

THANK YOU

To our funders and supporters who have made this work possible, including Acumen, Cisco Foundation, Global Affairs Canada, and Puma Energy Foundation.



Interested in supporting Solar Sister in our ongoing efforts to support women entrepreneurs through programs like our digitization efforts?

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