



Leveraging E-Commerce in Existing Cambodian Women-Owned Businesses

To Increase Women's Employment in the Digital Economy

TKS

x



EXECUTIVE SUMMARY



PROBLEM

Businesses Exist. They Aren't Online.

The barriers surrounding e-commerce are:

1. Lack of mentorship,
2. Lack of e-awareness
3. Insufficient knowledge on trade logistics.

Women have the motivations and tools for success, however they aren't taking advantage of them. **61% of businesses in Cambodia are women-owned** but only **0.01% of women are in the digital economy** because of the barriers surrounding e-commerce.



SOLUTION

Leveraging E-commerce and Solving for Barriers

By leveraging the rapidly growing e-commerce industry in Cambodia, our app, **Spark aims to tackle the barriers of e-commerce for women through mentorship and consistent workshops.** The workshops follow two main focuses, "Starting an Online Business" and "Sustaining an Online Business." With the help of our english and Khmer speaking mentorship team, women will be able to make an easy transition to e-commerce.



IMPACT

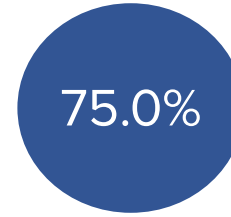
Increased Quality of Business - 10% Growth

Spark will help women expand their business by **generating 10% extra sales through e-commerce.** This expansion of businesses will also lead to the requirement of more women employees, leading to **an increase in women's employment in the digital economy** by 2026. Spark will also equip women with the digital skills they need to sustain online businesses in the long-term as well.



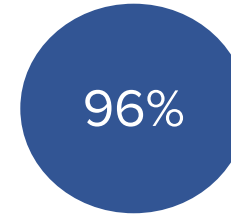
Why Cambodia?

61% of businesses in Cambodia are women run, however they are not online nor are they expanding.



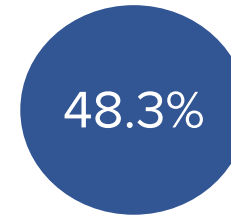
High Women's Literacy Rate

Cambodia has, according to UNESCO, a female literacy rate of 75.03%.



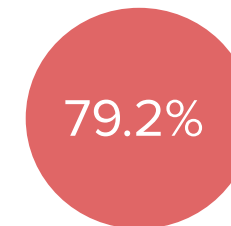
Access to Devices

96% of Cambodians aged 15-65 own a phone and 76.9% have access to internet as of 2018. For mobile Internet, Cambodia ranked 80 out of 109 countries, with an average download speed of 3.1 Mbps and an average upload speed of 1 Mbps. While they are not on developed countries' level, they are amongst the highest amongst underdeveloped countries in Asia and Africa. This makes it one of the most promising markets for digital solutions.



Employment

Women in Cambodia make up 48.34 % of the total workforce in 2020. 79.2% of Cambodians are in the labour force.



Informal Sector

There is **massive potential**. 79.2% of Cambodian women are in the labour force but 90% of them are doing informal work, like running their own businesses.

Currently, there is a **lack** of:

E-Awareness

There is a big gap in digital understanding between men and women. Sometimes women also think that the word ‘digital’ means IT [information technology]. There are existing domestic and international e-commerce platforms such as [Khmer24](#) and [LittleFashion](#) but **women are not aware they exist.**

Mentorship & Guidance

The endless possibilities created by digital technologies can present their own challenges for small women-owned businesses uncertain about where to begin this transformational journey. What strategy should I adopt? How do I learn about it, and who will help me implement it? Is the technology I want available to me? And if not, are there equivalent technologies in my local context and within my budget? **Adopting new technology can be overwhelming** as it requires knowledge, an open mindset, and suitable infrastructure.

[\(Source\)](#)

Awareness of E-Commerce Benefits

As is the case of most developing countries, many **women in Cambodia are unaware of the benefits of e-commerce.** Cambodia has not developed an e-commerce strategy yet. The fact that there isn't a clear strategy implemented is why people are unaware of e-commerce benefits.

Knowledge of Trade Logistics

In a study conducted by UNCTAD, the most heavily weighted issues were to **improve the transparency of procedures and duties on e-commerce websites**, make e-payment possible for customs and facilitate the rolling out of single windows.

WOMEN ARE RUNNING BUSINESSES BUT THEY AREN'T ONLINE

Why aren't women already leveraging e-commerce?

Ugandan fashion designer Daphine Kyaligonza sells her dresses, tops and menswear at numerous shops she runs in Kampala. Now, she also sells her items via her website to people all over the world. But she wouldn't have made the move to e-commerce without **mentoring and training.**



Logistics in Cambodia involve a **complex web of interconnected companies**, and even the largest logistics businesses rely on local MSMEs for “last mile” delivery.

“**Slow diffusion of e-commerce** in developing countries can be **attributed to lack of awareness and knowledge of e-commerce benefits** among consumers and their lack of confidence in service providers.”

E-Commerce - Why it Drives The Biggest Impact

We are going to get women-owned businesses into the digital economy through **e-commerce**.

E-Commerce Makes Sense

With so many businesses already established, it makes sense to reap the benefits of the digital economy through selling online. Cambodia specifically does not have a lot of friction towards this. “Public and private investment in ICT infrastructure enabled Cambodia to bridge part of the digital gap in the country. Milestones include: Rapid adoption of Smartphones, **estimated at 96% of phones** and growing, **Widely available 3G network**, and some 4G, with more growth planned and **Inexpensive mobile data plans** in both postpaid and prepaid contracts. [source](#)

The UNCTAD & Government Initiatives

The Cambodian government has stepped up efforts to strengthen the country’s e-commerce ecosystem in line with recommendations of an **UNCTAD eTrade Readiness Assessment**. For instance, it’s finalizing an e-commerce strategy with the support of the **Enhanced Integrated Framework (EIF)**, involving various key ministries.

Last year, the country passed an e-commerce law and is now finalizing its implementation sub-decrees to ease the registration of e-commerce businesses. According to the commerce ministry, the government has **reduced the cost of registration by 40%** to ease the burden of formalization for startups. Also, the private sector has rolled out various initiatives to improve the business environment, such as the **Ngeay Ngeay (Easy Easy) platform**, which offers information needed to register a business in Cambodia.

Unlocking Potential of Businesses

A store that works with Shop168 reported better sales since going online. - “I think about **10 percent growth in sales comes from the online market...** Even though it is not a big percentage, it can help our company get more customers.” - Khin Bona, a supervisor at Integrated Computer Enhancements.

Veasna Am, owner of BCS Computer said, “When the COVID-19 pandemic hit, my business suffered enormously but I managed to increase online sales and we are prospering again”

These businesses will expand and thrive further once they can access the digital economy. This will allow for the businesses to grow in employees and infrastructure, causing a ripple effect increasing the amount of women in Cambodia’s digital economy

THE UNITED NATION’S TAKE?

“The general population’s understanding and the **level of e-awareness of e-commerce are very low**, with reasons given by respondents ranging from ‘very **low ICT usage**’, ‘**lack of institutional support** for e-awareness’, ‘**lack of sufficient resources** for e-awareness’, ‘**difficulties in promoting** e-awareness in Cambodia’, and ‘**lack of clear strategy or roadmap** for the promotion of e-awareness’ among Government authorities”

The UN’s Recommendation for Solution:

“Empower and strengthen sector association in the areas of ICT and e-commerce to bridge the gaps between MSMEs needs and current education and training offered on ICT and e-commerce”

([source](#))

0.01% of Cambodian women are in the digital economy



We need to move the dial. E-Commerce is the way to go.

CASE STUDY

In the Gambia, the International Trade Centre's SheTrades initiative is providing **one-on-one coaching** to female entrepreneurs in the fashion sector, so they can target **international customers online**.



Bringing women online to sell goods.



1-on-1



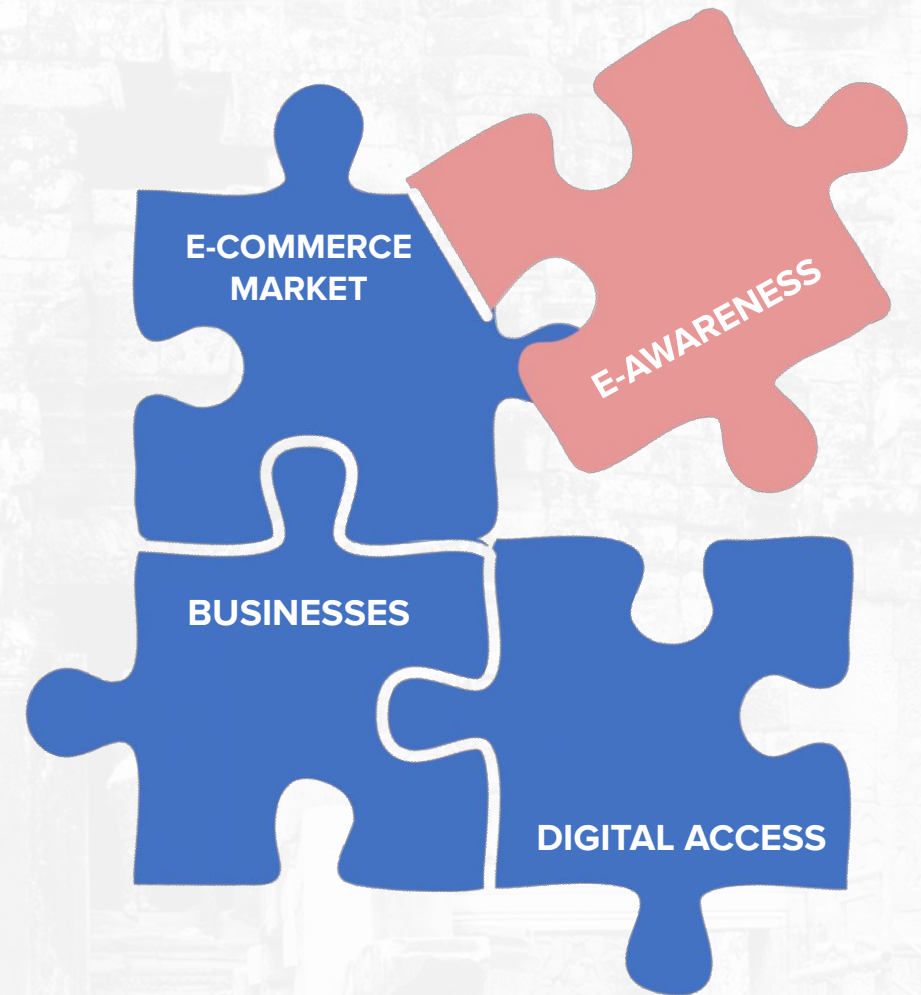
Using coaching to help women sell online.



SheTrades' the Gambia project is successful because it **uses coaching as a way to overcome the barriers women face in e-commerce**, e-awareness: knowledge of the benefits of e-commerce, available platforms and more.

However, **there is room for improvement**. We can do even better by leveraging not only the booming market for e-commerce in Cambodia but also designing a platform that will reach many businesses. SheTrades' project **only accepts 30 women** per cohort to gain the benefits from the program.

Cambodia has even better potential for growth as the Gambia only had an internet penetration of 18% in 2017, whereas Cambodia's has a 76.9% penetration. We can do better, **we can increase the quantity of women-run online businesses while not only maintaining quality but also increasing the quality of these businesses**.



OUR SOLUTION:

Spark is an app where workshops that are developed to target the e-commerce barriers including, lack of e-awareness and digital skills will be hosted by Khmer-speaking, mentors and open to women that own businesses.

01

WORKSHOPS TO TACKLE THE BARRIERS OF E-COMMERCE

E-commerce potential isn't being unlocked by women due to the barriers which include, lack of e-awareness and e-commerce benefits as well as lack of essential digital skills. **Two groups of workshops will be hosted weekly** with the intention of optimizing for quantity **and** quality. **Starting Online Business** workshops will **focus on raising awareness of e-commerce and available platforms** and the **Sustaining Online Business** workshops will focus on **digital skills needed to sustain businesses that are online**. We want to help many businesses go online, as well as ensuring quality of these businesses.

02

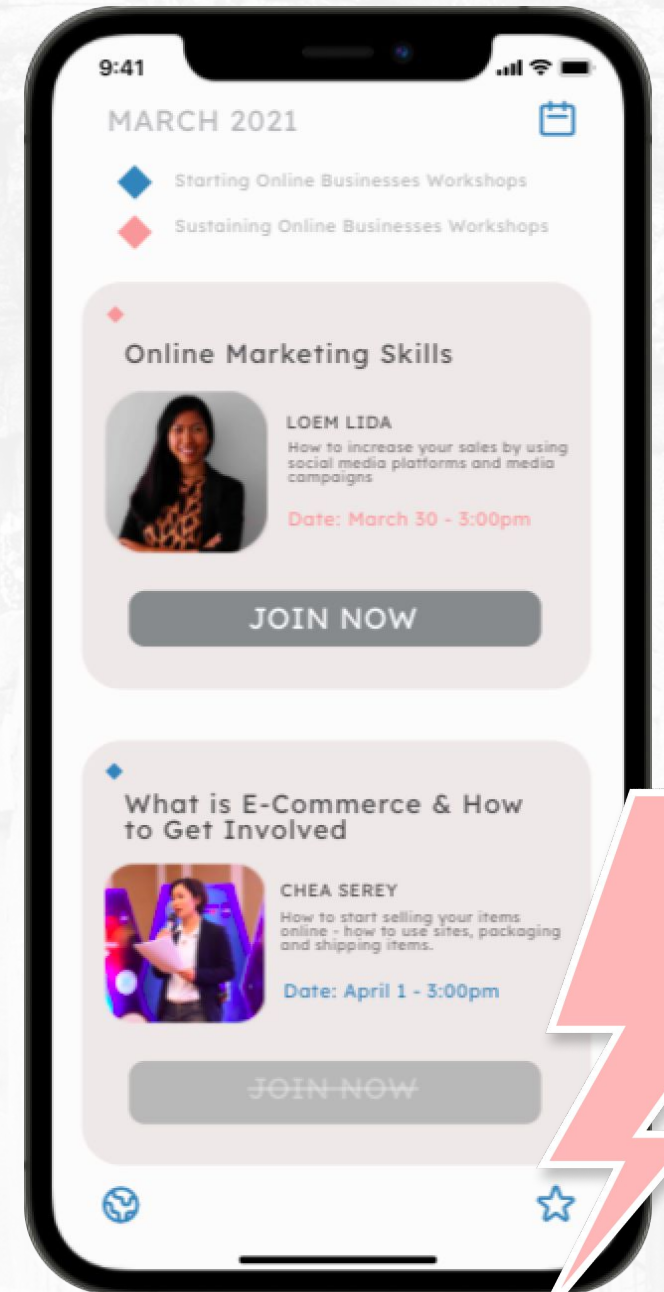
CURATED TEAM OF KHMER-SPEAKING MENTORS

Workshops will **occur twice a week** led by a mentor from our curated team of Khmer and english-speaking mentors. These individuals will be put through a screening process for qualification of the topic, fluency and ability to teach. We will be considering volunteers however to optimize for consistency **Spark will hire a team of 6 mentors** to provide guidance and host workshops consistently. Women will be able to message these mentors through the Spark app as well and ask for assistance and the mentors can either respond via text or start a call through our easy dial-in workshop and calling system.

03

TARGETING WOMEN THAT ALREADY OWN BUSINESSES

61% of businesses are women-owned, that is a lot of businesses with untapped potential to expand through e-commerce. We know there **is** potential as businesses that are using Cambodian e-commerce platforms like Shop168 reported a 10% increase in sales after going online. By targeting women that have **already established businesses**, the switch to **implementing online platforms is easier** and there is larger target demographic to make impact.



TWO FOCUSES

WORKSHOPS 1: Starting an Online Business

The first workshop is catered to larger audiences once a week and will have a **duration of 2 hours**. Mentors will book the workshop 2 days prior, alerting women on the app 2 days before and an hour before. This workshop serves to help women become accustomed to the benefits of e-commerce and the available platforms where they can get started.



E-Commerce Awareness

The UN states that “The general population’s understanding and the level of e-awareness of e-commerce are very low.” By **educating women about the e-commerce industry on a whole**, we will tackle this barrier.



Benefits of E-Commerce

Many women in Cambodia are unaware of the benefits of e-commerce. This lack of knowledge large barrier we will tackle through **showing evidence of successful online businesses** in workshops.



Using Available Platforms

Unbeknownst to women, there are many available e-commerce platforms in Cambodia, the largest one being Facebook Marketplace, which is optimal for beginning an online business and becoming accustomed. Through these workshops women will practice **utilizing the e-commerce tools at their disposal and start their shops online**.

End Goal: Tackle the knowledge barriers the UN highlights for e-commerce and help women get their online businesses off the ground through mentorship. Throughout the workshops, women can ask questions and get advice from our Khmer-speaking mentors, removing the barrier of lack of guidance as well.

Workshops will take place weekly and will be directed by two mentors per workshop of a team of 10 curated **Khmer & English speaking mentors**. [\(Learn more about our mentor hiring plan here\)](#).

WORKSHOPS 2: Sustaining an Online Business

The second workshop targets a smaller audience of **women that have started their online business** through workshop one and now need the skills to sustain it. These workshops will also **be held once a week, for three hour periods**. Each month will cover one key skill, and within the weeks, mentors and women will go deep into the skills and gain understanding.



Online Marketing Skills

Veasna Am, owner of BCS Computer said, “When the COVID-19 pandemic hit, my business suffered enormously but, thanks to my digital marketing skills, I managed to increase online sales and we are prospering again.” Workshops covering marketing will aim to **equip women with skills on promotional content creation, leveraging social media** and more.



Online Finance Skills

Once online, women are 30-50% less likely than men to use the internet to increase their income. There is a huge gap in women’s understanding how leveraging online technologies for finance. These workshops will **teach women about transferring money online and processing online orders**.



Establishing Proper Trade Logistics

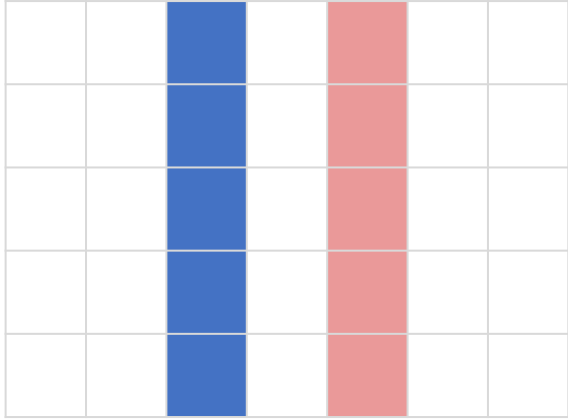
The UN states that the second largest bottleneck for e-commerce in Cambodia is the lack of proper trade logistics. Mentors will be helping women **establish their trade logistics and map out trade plans together**.

End Goal: Tackle the sustainability barriers the UN highlights for e-commerce including trade logistics and payment. We will help women develop the skills needed to manage an online businesses on the long-term. Throughout the workshops, women can ask questions and get advice from our Khmer-speaking mentors, removing the barrier of lack of guidance as well.

WORKSHOP BREAKDOWN

3-Month Cycles

- = Starting Online Businesses Workshops
- = Sustaining Online Businesses Workshops



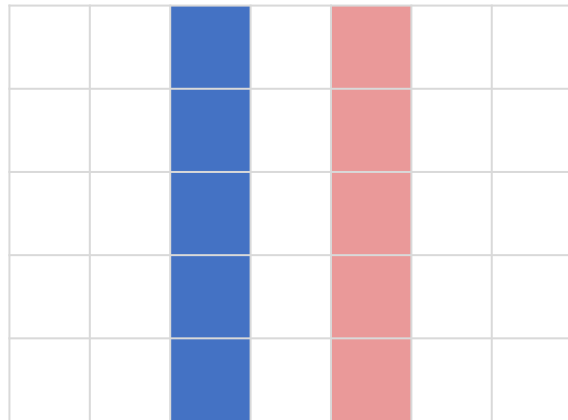
MONTH 1 FOCUSES

- ■ : E-Awareness
- ■ : Online Marketing Skills



MONTH 2 FOCUSES

- ■ : E-Commerce Benefits
- ■ : Online Finance Skills



MONTH 3 FOCUSES

- ■ : Using Available Platforms
- ■ : Establishing Proper Trade Logistics

Mentors will be required to host a workshop once every 3 weeks, as we will be **rotating through a group of 6**.

Each workshop will follow the topic for that respective month and the type of workshop. For example, on during month 3, a workshop on the Tuesday workshop on week 2 would cover “using available platforms,” however the workshop would focus on one particular platform.

Individual Workshop Outline

Mentors are responsible for creating plans for their workshops and establishing the specificity, as they will be prior trained. However, there is a structure for the workshops, to ensure women are not only listening but building as well.

The only guideline for content is that the workshop related to the category of workshop (1 or 2) and the focus for that month.

Structure:

- 30 mins: Introduction
- 10 mins: Break
- 30 mins: Going Deep
- 30 mins: Hand On Activity
- 20 mins: Questions

**For 3 hour workshops, Going Deep and Activity will increase by 30 minutes.



IMPLEMENTING KNOWLEDGE

Building Online Businesses

After the attending workshops for 6 months, women will be:

- E-Aware
- Familiar with E-Commerce Platforms
- Able to Create Promotional Content
- Well-versed in online payment systems
- Established on a platform of their choice

Where our team will provide 1-on-1 coaching for next steps:

- Mapping out Personalized Logistics
- Using their Own Platform - Business Website

With our hired team of 6 mentors, since only 2 workshops will occur during a week, with one mentor hosting each, mentors are only required to host a workshop once every three weeks. Otherwise, they will be assisting with 1-on-1 support through texting and setting up personal calls to guide the women in later steps.

Potential Partnerships

Shopify

Shopify will tackle the barrier of payment methods for e-commerce that the UN highlights as Shopify has partnered with leading international payment providers to support sales efforts. Business' customers can pay in their local currency using their preferred payment method. **Shopify is open to a partnership with Spark.**

SHE Investments

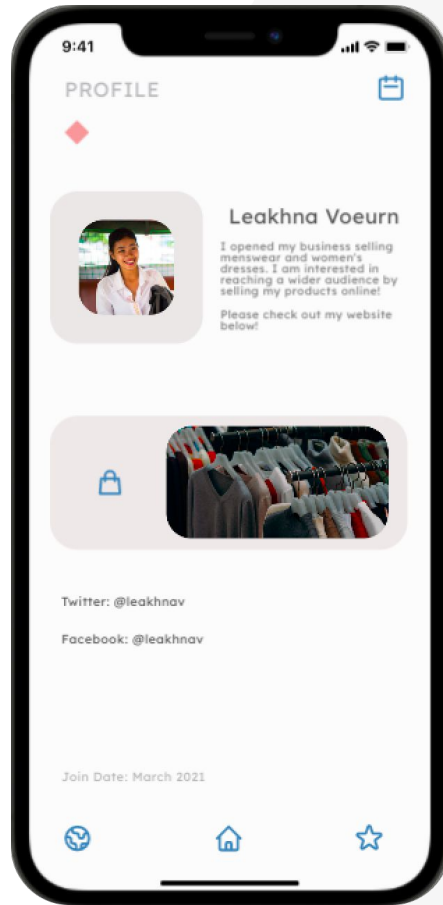
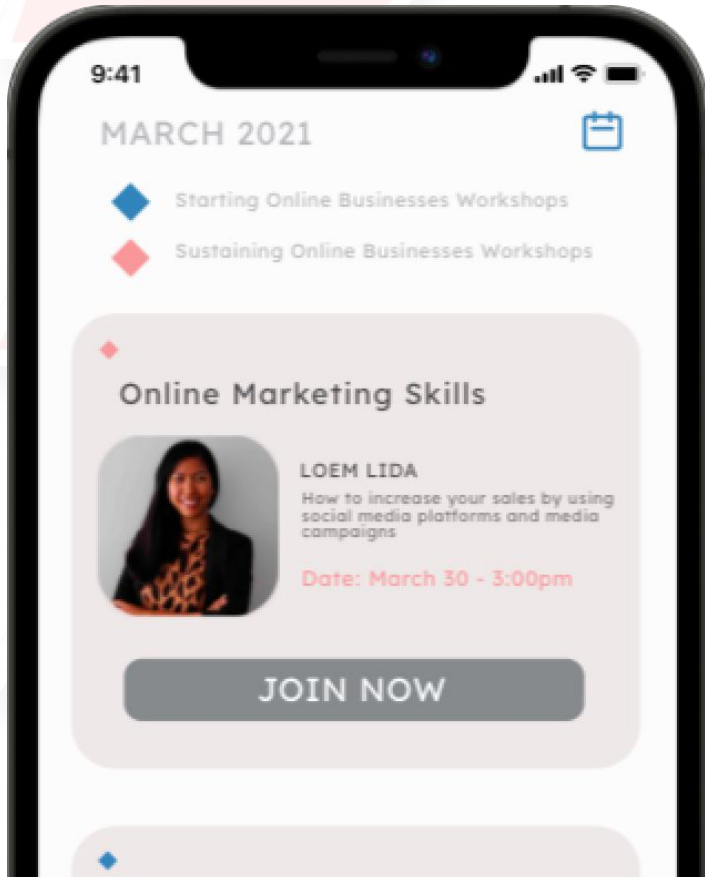
Will provide funding to develop proper trade logistics women need to sustain online businesses. SHE Investments typically invests \$10,000 into businesses, as we want to reach a larger number of businesses, SHE Investments will provide \$500 to support the initial transportation establishment expenses. **SHE Investments is interested in a partnership with us.**



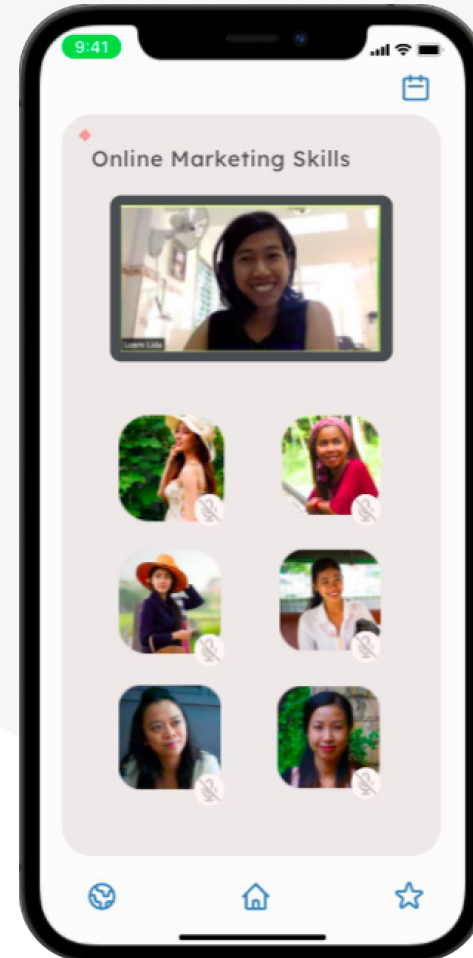
SPARK

USER INTERFACE

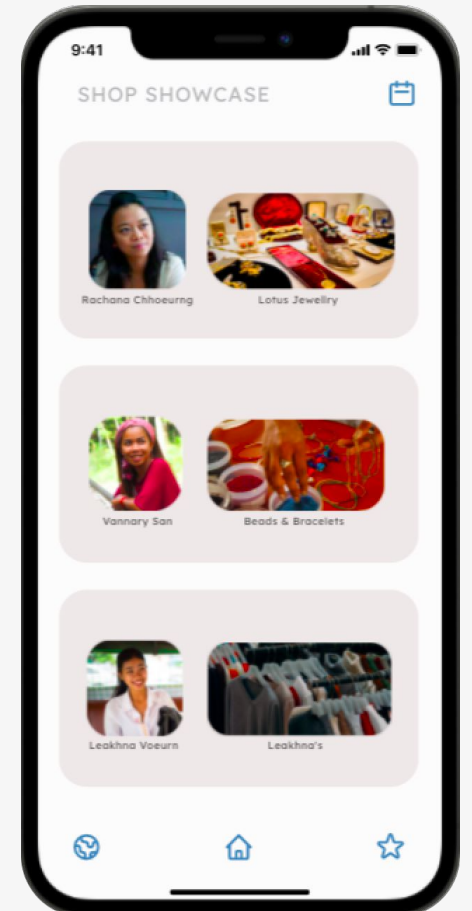
Check out the smaller features of Spark here!



User Profile Page



User In-Call Page



Shop Showcase Page

Implementation & Timeline

SPARK ROADMAP

MAY 2021

**CREATION +
TESTING**

Creating Spark using Angular, Agora, and Firebase.
Organizing and applying Beta tester Feedback.

December 2021

**MARKETING +
DEPLOYMENT**

Getting the app in front of women who own businesses through online and in-person methods. Deploying the app on Cambodian app stores (apple, Oppo)

2022-2026

MAINTENANCE

Solving any issues that arise, performing regularly scheduled maintenance, integrating user feedback.

2026

EXPANSION

Expanding to other similar countries.

[Click here for Spark Complete Financial Breakdown](#)

SPARK CREATION

Building our app using Angular, Agora, and Firebase

Front end/ Angular

For our front end, we will be using Angular, which allows us to run HTML, CSS, and JavaScript; this is what the user is going to see. Its **consistency, security, and easy structure** is why we are using it.

Back end/ Agora

Agora is what allows our app to communicate live, with **real-time audio**. Agora also supports messaging. Agora is also perfect as it **reaches users with lower bandwidth**, making it even more accessible to Cambodian users.

Servers/ Firebase

Google's Firebase is a mobile application development platform. Allowing us to **host our app, use Google's servers, and even see app analytics**.

[Click here for Spark Creation Guide](#)

BETA TESTING

[Click here for Beta-Testing Guide](#)

Beta Tester Personas

1. Technical Beta Testers

These users are the people we want to release the final product to, women who own businesses. Their role is to **detect bugs** and give constructive feedback on the workshop process.

2. Marketing Beta Testers

These users are also part of our marketing plan female business influencers who have a platform to talk about our app. This helps get the word out there.

Testing Time Frame: 3 months/ A complete workshop cycle

1. Finding Beta-Testers

Technical beta testers can be assembled through social media platforms, as well as word of mouth from other beta testers. Marketing beta testers are selectively chosen by impact and contacted through social media.

2. Delivering our App / TestFlight

The app store allows for our app to be delivered to beta testers before release through TestFlight. Beta testers will then be able to download it from the app store

3. Improving off of Feedback

Identifying common complaints and assessing how we can adjust. We can also monitor which features are used often, and which are not to determine next steps.

4. Keep Testers Connected

When connected with passionate beta testers create connections with them. They can be used for future recommendations, trials, or even future versions.



Front end for Spark as well as marketing will be in **Khmer**, which **95% of Cambodians speak** as their mother tongue.

MARKETING

How do we reach women with businesses?

Social Media



Facebook

97% of Cambodians who own phone use Facebook. It's targeted advertisements, enabling us to target women who are interested in business. This specificity makes the average cost to acquire a user only \$0.35



Line

Line ads run as a banner on user talk lists or timeline. The second most used social media app in Cambodia Line also has a **larger demographic of young people.**



WeChat

WeChat is one of Asia's largest superapps. It is also widely used in Cambodia with massive reach.

[Click here for Social media plan](#)

Poster Ads

The majority of Cambodian informal businesses are located in Phnom Penh, Battambang, Banteay Meanchey, Kampong Cham, Sihanoukville, and Kep. Placing posters will allow us to reach the women we need to. We can achieve this by recruiting women who live in the area to hang posters in areas near informal businesses.

[Click here for Poster Ads Plan](#)

Beta-testing

By recruiting individuals with a large relevant social media presence to beta test we can leverage their following as a form of marketing. Some influencers that we will reach out to include Kounila Keo, Kon Jab Meas, and, Loem Lida.

Group chats

By joining relevant interest group group chats in Facebook, Line, and Wechat we can advertise to potentially **hundreds at the same time for no cost.** This method also allows interaction with potential users to better answer questions or concerns.

APP DEPLOYMENT

Apple represents 40% of phones in Cambodia making it the largest mobile brand. This is why we will be releasing the app on the IOS app store. Here are the general steps to successfully developing an app on the app store.

1. *Assemble App Information*
2. *Create a Bundle Identifier*
3. *Create Production Provisioning Profile*
4. *Create Listing*
5. *Make The Release Build*
6. *Submit Version for Review*
7. *Release*

Click below for:

[Apple Deployment guide](#)

[OPPO Deployment guide](#)

Oppo is the runner up with a 22% market share. Check out the detailed deployment guide by clicking the buttons above.

MAINTENANCE

Maintenance is key for making improvements, fixing bugs, and overall app performance. Some things we need to continue to do is update UI, software, monitor app performance, necessary features, along with regular system maintenance. Click the button below for what maintenance looks like and a detailed plan on how to do it.

[Maintenance Guide](#)

EXPANSION

We will be expanding to the following countries after success in Cambodia.

Thailand

93.6% Literacy rate
40% of women run Thailand's MSMEs
72 % of Thailand's Population owns Mobile phone

Indonesia

95.6% Literacy rate
60% of women run Indonesia's MSMEs
63 % of Indonesian Population owns Mobile phone

Ghana

79% Literacy rate
70% of women run Indonesia's MSMEs
55% of Ghana's Population owns Mobile phone

Why Spark will Work

The UN highlights the following barriers to e-commerce in Cambodia:

- **Insufficient ICT Structure** → Solved through familiarizing women with working platforms and ensuring Spark has the best ICT structure.
- **Lack of Payment Methods for E-Commerce** → Solved through our partnership with Shopify who will provide easy payment methods.
- **Insufficient Knowledge & Understanding of E-Commerce** → Solved through our “Starting Online Businesses” workshops.
- **Insufficient E-Business Development Skills Among Entrepreneurs** → Solved through our “Sustaining Online Business” workshops.

A large barrier women face is the **lack of guidance and mentorship**, because they do not have the prior digital knowledge: only 8% of CS students are female in Cambodia. Our app, Spark targets the barriers the UN highlights through mentorship, **effectively making e-commerce easy for women in Cambodia.**

Women **want** to do this.

Facebook is filled with women selling one or two products, however they aren't turning this into a full-fledged e-business due to the barriers which Spark will tackle. In fact, Little Fashion, a facebook marketplace has garnered a following of 1.7 million.

Women **will** grow through e-commerce.

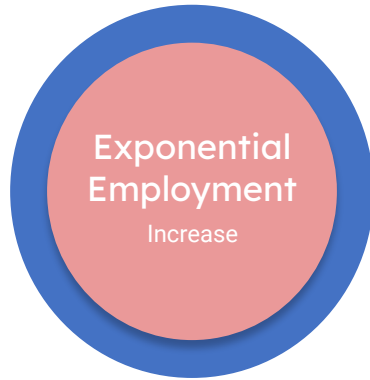
As of 2020, eCommerce in Cambodia amounts to revenue of \$359m USD, with expected growth to \$805m USD by 2026. This is backed by new secure technology coming online and more importantly, Cambodian people becoming comfortable with finding out information and buying online.

Spark ensures **sustainability**.

30 percent of new e-businesses may not survive past the first 24 months, and 50 percent of those may not make it past five years. However, 70 percent of mentored e-businesses survive longer than 5 years. Mentorship will ensure that businesses are sustainable, paired with long-term essential skills for business.

OUR SOLUTION'S

Impact



Expansion of a business leads to increased employment within that business. E-Commerce will bring MSMEs (3.6 Employees) to SMEs (10 Employees) and later on Medium-Sized businesses (50 employees).

Spark will help women expand their business by generating 10% extra sales through e-commerce, which requires more womanpower. As women eventually grow to small businesses and then medium-sized businesses, they will hire larger teams of marketers, logistics managers and more. E-commerce ensures expansion, and expansion ensures increased employment. Our solution will lead to a boom of employment of women in the digital economy through tackling the barriers of e-commerce by 2026.

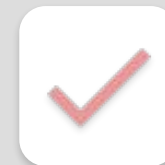


Help women build *sustainable* online businesses.



Increase women's business' sales by 10%. *

Spark's Metrics of Success



Increase women's business' longevity to be past 5 years.

* Many stores that works with Shop168 - one of the available e-commerce platforms our workshops teach, reported better sales since going online. A 10% increase to be exact, and this was without prior education or training.

WHAT'S NEXT?

Collection & Further Connection

Spark is a scalable solution for increasing the quantity and quality of women's businesses online. The criteria for expansion includes:

- ✓ Women have access to phones and internet.
- ✓ Women are educated and literate.
- ✓ There are available e-commerce platforms.
- ✓ Many women own businesses.
- ✓ The country has a growing market for e-commerce.

As a small pilot project, we will be hosting a workshop on e-awareness for our target audience: Cambodian women that already own businesses. We will invite a Khmer and English fluent speaker and gauge our turnout rate, giving us more data on impact projections.

Data Collection



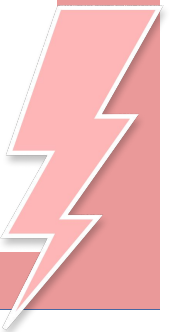
Annual Company Reports

Collect annual reports from online businesses established with Spark's help to gather data on economic expansion, number of employees and sustainability. To accomplish our metrics we will be measuring the growth in sales each year. Our goal is to reach a 10% increase within 5 years. To measure longevity, each time a report is submitted to the program, it will process it as another year the business has been afloat. With these two key measurements we will track longevity and sales increase.



Incentivization

Incentivize women to stay with Spark after gaining the knowledge and skills by offering weekly shop features on Spark's shop showcase page. They can also become featured guests at workshops.



ANY QUESTIONS?

Check out our in-depth explanations.

Mentor Hiring

Spark App UI & Features

How to Create Spark

**Costs associated with
implementing Spark**

Poster Ads plan

Beta-testing guide

**OPPO app Deployment
guide**

Apple app Deployment guide

Maintenance guide

Social Media Playbook

If you still have questions, feel free to ask us anything through the form below. We will get back to your questions ASAP!

**Ask Us
Anything**

THANK YOU!

A Personal Note

Through this challenge, our team was ignited and as we researched more into global problems, we **accelerated our desire to drive impact**. Which is why we want to **thank you!** This opportunity has allowed each and everyone of us to become more aware, grow, and overcome many hurdles along the way. The biggest reward we're taking away from working on the United Nations Global Challenge is the lesson on how to breakdown a problem and actually **solve it**. Anyone can program, write or speak - it takes critical thinking to seek understanding, and use resources to make change. We want to change the world and help millions of women, and we hope to do it alongside you.



Harsehaj Dhami



Edward Wang



Ali Haider



Emaan Amin

