

# Dimagi

Supporting Women's Economic Empowerment in Rwanda through Financial Literacy and Female-Centric Technology

## Challenge

Limited access to information and technology, and pervasive social and gender norms, make it challenging for women in Rwanda to run a successful business. As is the case across much of sub-Saharan Africa, the country has a relatively low number of Internet users, with just 12 percent of men and less than 5 percent of women regularly using it. Smartphone access is likewise limited, with just under 2 million smartphones active in a country of approximately 13.5 million people. At the same time, women in Rwanda often are not provided with tools and knowledge regarding personal finance, as managing the household budget is considered the domain of men. To address this inequity, USAID's WomenConnect Challenge (WCC) awarded Dimagi a grant to partner with Women for Women International (WfWI) in order to design digital applications using female-centric technology for Rwandan women to improve their financial literacy and increase access to opportunities that support their economic empowerment.

## Solution

In 2020 and 2021, Dimagi developed two chatbot applications in Kinyarwanda and English. Chatbots are virtual agents that use artificial intelligence or rule-based applications to simulate human conversation and interactions. They produce automated text replies to decrease the need for text responses from human users. Unlike traditional SMS services, chatbots engage users through dialogue and interactive engagement, support multimedia, and are deployed on internet-enabled channels such as Facebook, WhatsApp, and more.

Both of Dimagi's WCC chatbots were designed to introduce women in Rwanda to financial education, such as common issues with businesses, how to make a business grow, how to create a project plan, how to map customers and market competitors, how to advertise, and how to plan and keep to a budget.

The "Coach Carene" bot is specifically designed to help participants and graduates of WfWI's 12-month empowerment program to continue building their business and entrepreneurial skills. It is hosted on WhatsApp with a menu-based format, where users can select topics of interest, such as business planning or tracking expenses. The chatbot was designed to communicate like an elder sister or other female member of a local community, someone who is well-respected and well-positioned to advise her users on various topics. The second chatbot, "Coach Ana," is hosted on Facebook and is designed for girls and young women. It covers the fundamentals of savings, access to bank accounts, financial goal setting, and budgeting. Both Coach chatbots are designed to share key messages and relevant financial literacy knowledge for women, specifically female entrepreneurs, giving them foundational educational tools and testing their ability to apply the tools to real life situations through interactive techniques such as quizzes and other games.

To increase the number of women using smartphones, and therefore accessing the chatbots, WfWI distributed smartphones to women's savings groups in Nyaruguru District. WfWI and Dimagi also purchased Internet airtime so members of the women's groups could immediately begin to use the digital resources about which they had learned.



Change Social  
Norms & Cultural  
Perceptions



Create  
Economic  
Opportunities



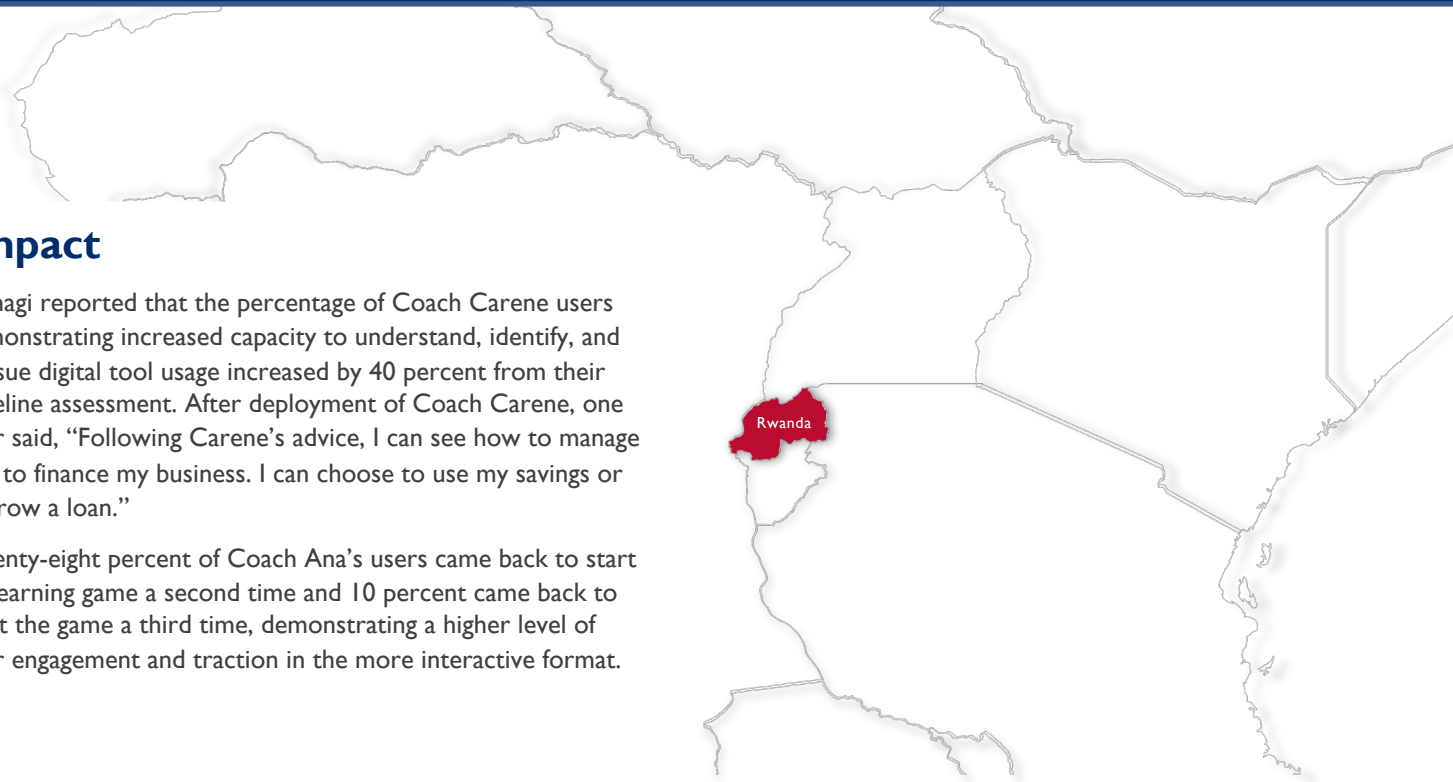
Cultivate  
Women's  
Confidence



Design Creative  
Women-Centric  
Technology



Develop  
Community  
Support



## Impact

Dimagi reported that the percentage of Coach Carene users demonstrating increased capacity to understand, identify, and pursue digital tool usage increased by 40 percent from their baseline assessment. After deployment of Coach Carene, one user said, “Following Carene’s advice, I can see how to manage and to finance my business. I can choose to use my savings or borrow a loan.”

Twenty-eight percent of Coach Ana’s users came back to start its learning game a second time and 10 percent came back to start the game a third time, demonstrating a higher level of user engagement and traction in the more interactive format.

## Strategies Employed

Through the WCC, USAID has identified five proven strategies to close the gender digital divide and increase women’s economic empowerment. Dimagi’s work under the WCC grant tapped into two of these—designing creative women-centric technology and creating economic opportunities.



**Creating Economic Opportunities**—Women learn the value of their work and of saving, household budgeting, basic business and vocational skills, and managing assets.



**Designing Women-Centric Technology**—Chatbots on the easy-to-access WhatsApp platform introduced financial concepts with a friendly female avatar. In designing the chatbots, Dimagi and WfWI carefully thought through what the avatar of the chatbot would look like, what her profession might be, and how old she might be, as well as the bot’s tone of engagement and messaging, with the goal of designing personas that were relatable to the target chatbot users.



Advancing women’s digital connectivity and meaningful use of technology are key components to ensuring women’s socio-economic empowerment. The WomenConnect Challenge is a global call for solutions to improve women’s participation in everyday life by significantly changing the ways women access and use technology.