Connected Women

CASE STUDY
OOREDOO MYANMAR:
MYANMAR, MOBILE AND MATERNAL HEALTH

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Introduction

In a highly competitive mobile market, differentiating from the competition is critical. In 2014, Ooredoo launched the first non-state-owned mobile network in Myanmar, followed closely by its competitor Telenor. This case study tells the story of Ooredoo Myanmar partnering with an international NGO and a local tech start-up to launch a mobile maternal health service: maymay. Developed with the support of a GSMA Connected Women Innovation Fund grant, the service has now been evaluated by the Connected Women team to assess the social benefits (so far) for women in Myanmar, the commercial benefits for Ooredoo, and the potential future impact of the service. This case study reports on the results of this evaluation, which was conducted four months after launch. A series of quantitative studies into various aspects of the service will be undertaken over the next two years by researchers from the University of Sydney and UCLA, with support from partners such as the International Growth Center (IGC).

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Executive summary

In 2014, Ooredoo developed and launched a maternal and child health smartphone app called 'maymay'. The aim of the service was to improve the perception of the Ooredoo brand, increase ARPU (Average Revenue Per User) by encouraging users to use more mobile data services such as apps, and serve as a successful differentiator when competing for new subscribers. Ooredoo also hoped the app would contribute to improving maternal health outcomes in Myanmar, a country with one of the highest maternal mortality rates in Southeast Asia.

The maymay app launched on the Google Play Store on 5 September 2014, three weeks after the launch of the Ooredoo network in Myanmar. In the first four months after launch, the app had almost 7,000 downloads and 1,700 registered users. This is slightly below target and is believed to be due to delays in the marketing and promotion of the app. A post-launch analysis was conducted at the end of December 2014, and indicative results suggest the service is meeting its commercial and social objectives. The majority of users reported the app had significantly improved their perception of the Ooredoo brand, and qualitative feedback suggests it is having an impact on customer stickiness, with some users saying they use an Ooredoo SIM as their primary SIM in order to use the app. Three-quarters of women surveyed also said their confidence in using mobile has significantly improved by using the maymay app. It is hoped this increased confidence may encourage women to try other mobile data services. Although it is too early to test the impact of the app on maternal health outcomes, users report the app is having a positive effect on maternal health knowledge and practices and is a valued service. These positive early results seem to support the business case that investing in mobile services for resource-poor women in Myanmar has had both positive commercial outcomes for Ooredoo and a positive social impact on female users.

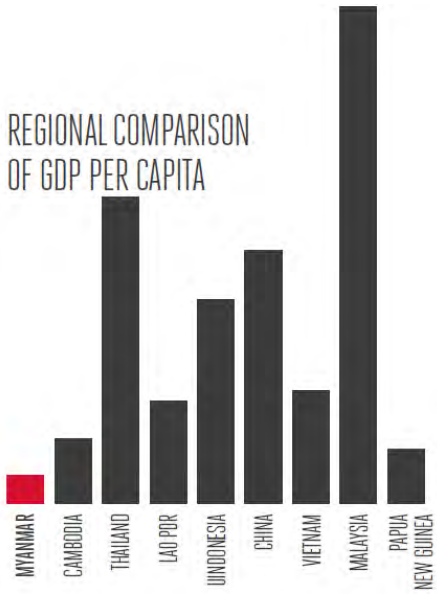
The biggest challenge in the next 12 months will be scaling up the user base and increasing the number of users in the lower income, rural segment of the market. In the first four months after the app's launch, Ooredoo network coverage was limited to urban centres. It is therefore not surprising that many of the app's users are higher income urban dwellers. While social media and word of mouth have been effective, and there are low-cost distribution channels in urban centres, these channels are expected to be much less effective in more rural parts of Myanmar where awareness of mobile services is low and technical literacy is typically poor. Partnerships with organisations with rural distribution networks, such as NGOs and health organisations, will be critical to successfully scaling up the maymay service in rural areas.

Country context

Myanmar is located in Southeast Asia and is the largest country by area on the mainland. With a population of 54 million and an estimated GDP of US$ 55 billion, it is one of the poorest countries in Asia. It is estimated that 25% of the population live below the poverty line, with rural areas accounting for 85% of total poverty.[1]

Myanmar's stunted development is driven by its troubled history. Between 1962 and 2011, the country was ruled by a military junta whose authoritarian rule and human rights abuses brought international condemnation. The first elections in 20 years were held in 2010, and a nominally civilian government was installed in March 2011. Since then the country has undergone a series of important economic and political reforms, such as floating the currency to stimulate private sector growth and foreign investment.

Government reforms are showing a positive effect on the economy, with growth of 7.3% in 2012-13 and 7.5% in 2013-14. According to the World Bank, the main drivers of growth include increased gas production, an expanding service sector, increased construction and foreign direct investment, and strong commodity exports. However, Myanmar still lacks basic infrastructure; less than 30% of the population has access to electricity, road networks are poor, and access to drinking water is limited in many areas.



Myanmar ranks poorly across many human and social development indicators. Maternal and child mortality rates are some of the highest in the region, and it is estimated that 32% of children under five suffer from malnutrition. One area in which Myanmar performs strongly is literacy; its national literacy rate of 93% makes it one of

[1] World Bank

the highest in the region. However, it is unclear how reliable this figure is due to a lack of data on educational standards in Myanmar. UNDP research suggests overall educational attainment remains low, with 75% of rural residents and 37% of urban residents having attended only primary school or below.[2]

Myanmar's mobile market

By the end of 2013 mobile subscriber penetration in Myanmar was estimated at 11%, one of the lowest in the world. Mobile communications were provided by state-controlled operators, and a lack of investment and competition meant that coverage was poor and usage very expensive: the average cost of a SIM was $125 USD in 2013.[3]

As part of its wide-ranging reforms, the Myanmar government has since granted network licences to international operators for the first time. By opening its doors to foreign investors, the government hopes to boost investment in network infrastructure, increase competition, and significantly improve mobile access for the population of Myanmar. It is estimated that growth in the mobile market will add 7% to the country's GDP.[4]

With a population of over 50 million and subscriber penetration of just 11%, mobile operators saw a clear commercial opportunity. Over 90 bids were received in what was one of the most competitive licensing rounds in history. The successful bidders were Ooredoo and Telenor, but more licences are expected to be granted in the coming years.[3] Ooredoo launched its network in mid-August 2014 and Telenor launched three months later in mid-November. Both operators launched their networks in the main urban areas of Yangon, Mandalay and Nay Pyi Taw, and will expand the geographic coverage of their networks over time.

Ooredoo and Telenor are pursuing different strategies for their network rollout. Telenor is investing in 2G and 3G, while Ooredoo is, for the first time, building a 3G-only network. Ooredoo hopes that a 3G-only network will encourage first-time mobile users in Myanmar to 'leapfrog' traditional mobile usage and purchase a smartphone and 3G subscription rather than a basic or feature phone. This strategy is supported by the low-cost smartphone handsets sold through Ooredoo stores.

> *"We think we can get Myanmar using advanced services more quickly than other markets."*
>
> Nick Swierzy, CSO, Ooredoo Myanmar

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[2] UNDP Integrated Household Living Conditions Survey (2009-2010)

[3] GSMA Intelligence: Foreign operators seek to unlock Burmese potential, September 2013

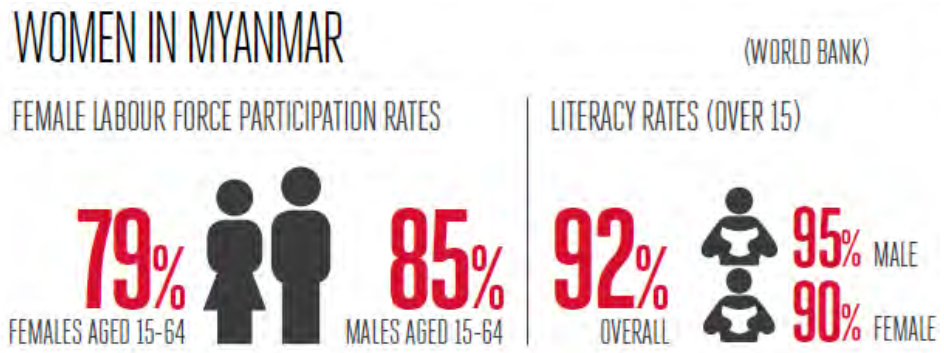
[4] Mobile World Live: Myanmar ready to leap into 3G era, August 2014

A woman walks past an advertisement for Ooredoo Myanmar in Yangon, Myanmar

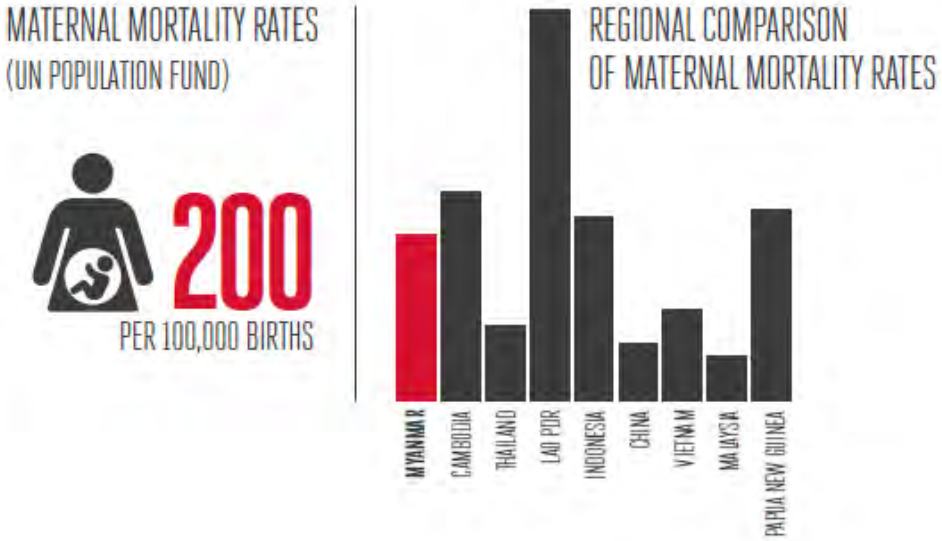
Credit: Paula Bronstein / Stringer / Getty Images

Women in Myanmar

Women in Myanmar enjoy basic rights such as consensual marriage, divorce, and partition of property. Women and men also have equal rights to participate in public affairs, and a number of high-ranking public positions are currently held by women. However, negative cultural attitudes towards women still persist: marital rape is not recognised as a criminal offence and there is a high prevalence of violence against women and girls.



World Bank statistics show that Myanmar has reached, or almost reached, gender parity across a number of education and employment indicators. However, lack of data and analysis around more detailed education and employment measures, such as the gender wage gap, makes it difficult to fully assess the economic inclusion of women in Myanmar.



Health is one of the biggest challenges facing women in Myanmar. Poor access to healthcare, health information and social services, particularly in rural and remote areas, has led to one of the highest rates of maternal mortality in the region: 200 women die for every 100,000 live births.

Mobile adoption for women in Myanmar: Key barriers and challenges

Cost

Cost has historically been one of the biggest barriers to mobile adoption in Myanmar. In 2013, the average cost of a SIM card was $125 and this figure was as high as $1,500 in 2010. Extremely low availability of low-cost or secondhand handsets in the country has also made handsets prohibitively expensive for many. Although the cost of ownership has fallen significantly since the Ooredoo and Telenor networks were launched—SIMs now cost less than $1.50 and the cheapest new smartphone handsets retail at $29—mobile ownership and usage will continue to be out of reach for a large segment of the population. Consumer insights research by Ooredoo revealed that the cost barrier disproportionately affects women: focus group studies with both urban and rural men and women revealed a gender gap in mobile ownership and usage. For women, cost was the most commonly cited barrier to phone ownership. Many women also said it was not worth the expense when their husband already had a phone they could borrow.

> *"Without it [a mobile phone] I'm still ok. Food is more essential."*
>
> Rural female FGD participant

Low awareness of mobile services

If Ooredoo and Telenor are to be successful in 'leapfrogging' first time mobile users to smartphones and 3G, it is essential that Myanmar consumers recognise the value of mobile data services, particularly given the price difference of 2G versus 3G and feature phones versus smartphones. However, most of the population have never owned or even seen a smartphone handset, and have little understanding of how or why to use one. Again, these challenges are more acute for women: Ooredoo's consumer insights research showed that women typically had lower awareness and understanding of mobile services and the benefits of mobile than men. In focus group discussions, all urban and rural men had some awareness of what a smartphone was, but only some of the urban and rural female participants had heard the term 'smartphone'. Among the very few women who did own a smartphone, there was a tendency to use it in a less sophisticated way than men. While male smartphone owners could cite multiple apps and websites, women typically only used Facebook and some were not even connecting their smartphone to 3G.

> *"I've never bought one [a phone] so I have no idea about it."*
>
> Rural female FGD participant

Lack of local content

Low penetration of internet service in Myanmar means there are very few websites written in the local language or that contain content tailored to Myanmar consumers. This lack of local content severely limits the value of mobile data

services for both men and women, and is therefore a barrier to subscribing to 3G and using services such as apps and mobile internet.

Low technical literacy

Poor access to technology in Myanmar has hindered the ability of consumers to use more sophisticated mobile services such as apps and mobile internet. Consumer insights research revealed that technical literacy levels are typically low for both men and women in urban and rural areas, but are particularly low among rural women. Women also tend to be less confident using a mobile than men, which may hinder their ability to try mobile data services.

> *"If you touch it (a smartphone), it gets here and there, you don't know where it goes."*
>
> Rural female FGD participant

Overview of service

Market opportunity

Figure 1 illustrates the process by which Ooredoo identified the market opportunity in Myanmar. Its maternal and child health app has been designed to address some of the major barriers to women's adoption of 3G, while also providing a way for the company to differentiate itself from its market competitors.

Figure 1. Identifying the market opportunity

CHALLENGES	OPPORTUNITIES	CONCEPT
Low awareness of mobile internet, particularly among women	Develop new marketing channels to raise awareness among the hard-to-reach female segment	A simple and easy-to-use maternal and child health smartphone app with content tailored to Myanmar women
Lack of local content for women	Develop content tailored to Myanmar women	The app will be exclusive to Ooredoo subscribers in the first few months after launch and marketed/distributed through hospitals, clinics, and rural health worker networks
Low technical literacy levels among women	Develop an easy-to-use app that improves confidence and ability to use a smartphone	
Limited scope to differentiate from competitors	Develop a service that is exclusive to Ooredoo subscribers	

There are two main reasons why Ooredoo decided to develop a mobile maternal and child health service:

- Consumer insights research found that personal and family health was the greatest concern of respondents, particularly maternal health, due to high maternal mortality rates and limited access to health information. For many women in rural areas, the primary source of maternal health information is friends and family, which leads to numerous, and sometimes dangerous, myths about pregnancy and childbirth.
- A maternal health service would open up new marketing channels, such as hospitals, health clinics, and rural health worker networks. These channels could also create valuable opportunities to raise awareness of mobile services, and the Ooredoo brand in general, among more hard-to-reach segments of the population, such as women in remote rural areas.

Partnerships

In addition to receiving funding and advisory support through the GSMA Connected Women programme, Ooredoo also engaged two in-country partners: global health NGO Population Services International (PSI) and technology start-up Koe Koe Tech.

Figure 2. Roles of partners

Partnering with Population Services International (PSI)

PSI is a global health NGO with programmes targeting malaria, child survival, HIV, and reproductive health. PSI has operated in Myanmar since 1995 and is one of the largest NGOs in the country, working across nearly all 331 townships. PSI's role in the project included sourcing maternal and child health content, translating the content into the local language, adapting it to the local context, and seeking approval from the Ministry of Health. PSI also managed the M&E process with external research agencies, including drawing up contracts, supporting the development of the research tools (e.g. focus group discussion guides), and reviewing the results. The costs associated with PSI's activities were funded by a GSMA Connected Women Innovation Fund grant and Ooredoo Myanmar.

Partnering with Koe Koe Tech

Founded in 2013, Koe Koe Tech is a Myanmar-based social enterprise specialising in technology for the health sector. Koe Koe Tech led the design and technical development of the app, including developing the product specifications, user experience, and branding. Koe Koe also managed all online and social media marketing activities, including the website and Facebook page. Koe Koe covered the cost of its own activities in exchange for an agreement that it would receive all revenues associated with in-app advertising and own the intellectual property associated with the app.

Service concept

Named 'maymay', which means 'mother' in Myanmar, the app is designed to provide maternal and child health advice to women during pregnancy and for three years after giving birth. The health content is based on the MAMA (Mobile Alliance for Maternal Action) maternal health content, but is translated into the local language and adapted to the local context. The MAMA content was selected because it was developed by a team of health experts, tried and tested in developing markets, and was freely available.

The app is designed to have no download or usage fees although, as with any app or data service, consumers are charged for their data usage. To minimise the cost of data usage, the app was designed primarily with simple graphics and text. Premium versions of the service with more data-heavy video and audio files may be developed in future for users with a greater ability to pay for data.

Early versions of maymay had three main features:

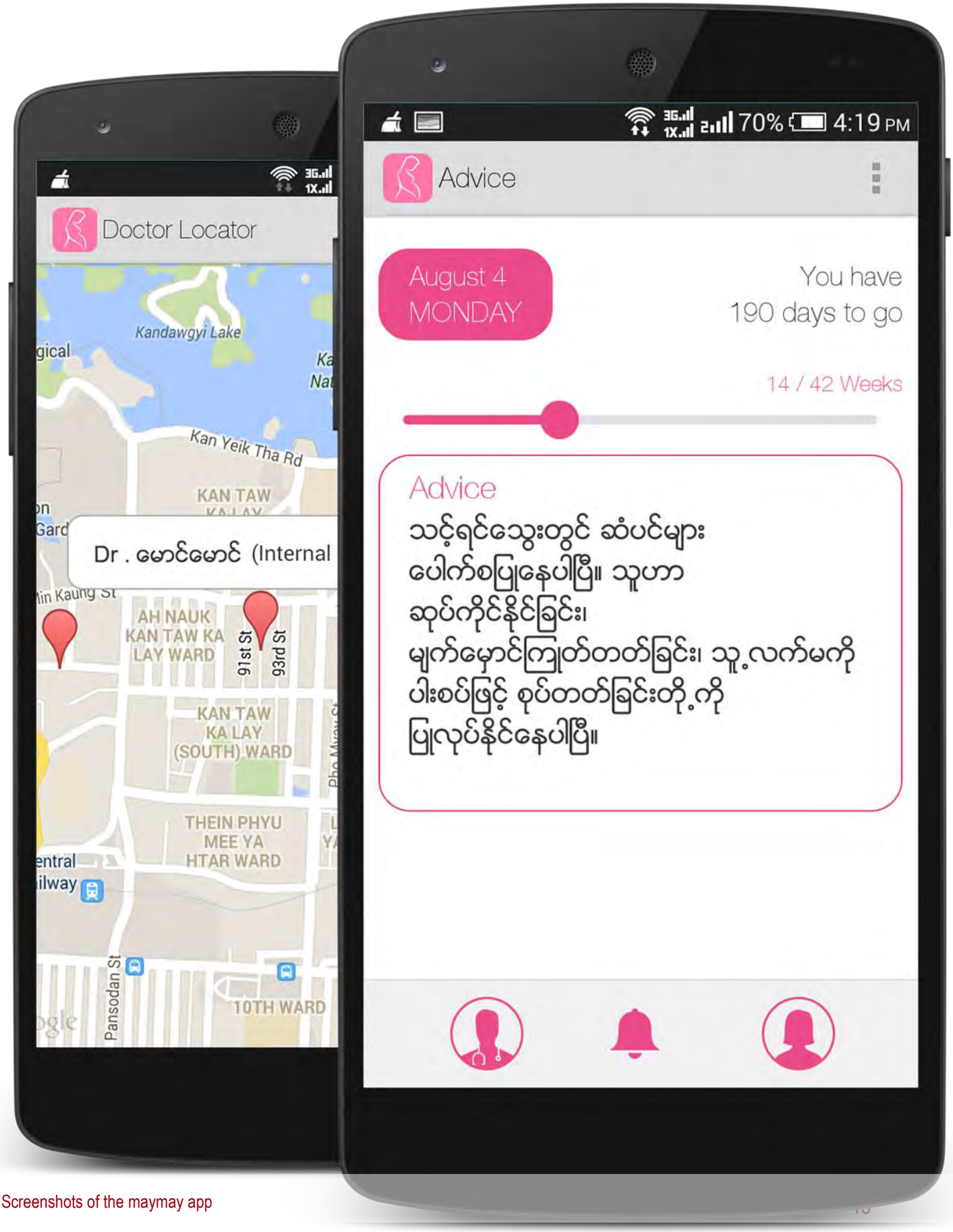
- **Maternal health advice notifications:** Users of the app receive three maternal health advice alerts per week, tailored to the user's stage of pregnancy. The user receives the first part of the advice message as a push notification and is then encouraged to click on the notification to open the app and read the rest of the message.
- **User profile:** Users of the app are required to enter the date of their last menstrual period or expected due date so that notifications are timed with the stage of their pregnancy. Messages are customized based on whether or not this is the user's first pregnancy, and the user can switch notifications on and off at any time.
- **Social media:** Users can post comments and photos relating to their pregnancy to the maymay Facebook page via the app and login with their Facebook account.

Since launch, the following features have been in development:

- **Health worker hotline:** Users can call a dedicated hotline (operated by PSI staff) to seek maternal health advice from 9 am to 5 pm five days a week.
- **Doctor locator:** The app will use the user's GPS location and a database of Myanmar health professionals to provide users with information on their nearest health worker. Users can search for the nearest health workers and see information on their location, daily schedules, and contact details.
- **SMS version of service:** To ensure the service is accessible to women (and men) of all income levels, an SMS version of the service is currently being developed for users with basic or feature phones. Subscribers

will receive SMS notifications three times a week tailored to the stage of their pregnancy. The service will charge subscribers a fee to receive messages (the fee structure is currently in development).

- **phayphay:** Since the maymay app has attracted high levels of interest and engagement from male users, a 'father' version of the app is being developed. 'phayphay', meaning 'father', is currently available in beta on the Google Play Store and includes all the features of the maymay app, but with maternal and child health advice tailored to male family members.

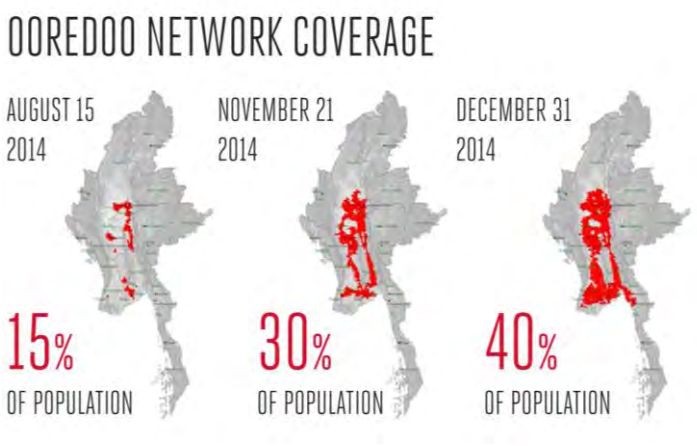


Screenshots of the maymay app

Key challenges and barriers for Ooredoo

The greatest supply-side challenges Ooredoo currently faces in reaching women are network coverage and reliability.

Figure 3. Ooredoo network rollout (August–December 2014)



When the Ooredoo network officially launched on 15 August 2014, network coverage was limited to the urban centres of Yangon, Mandalay and Nay Pyi Taw, and reached approximately 15% of the population. By the end of 2014, the network had expanded to reach approximately 40% of the population. Ooredoo has committed to geographic coverage of 84% for both voice and data by the end of 2017.

Since the maymay app has so far been available exclusively to Ooredoo subscribers, uptake has been tied to the reach of the Ooredoo network, which is rolling out in urban centres first. This has therefore limited the number of rural women who can download and use the service. The app will no longer be exclusive to Ooredoo subscribers as of March 2015, but there will continue to be a substantial proportion of women in rural areas who will not have network coverage from Ooredoo or any other mobile operator.

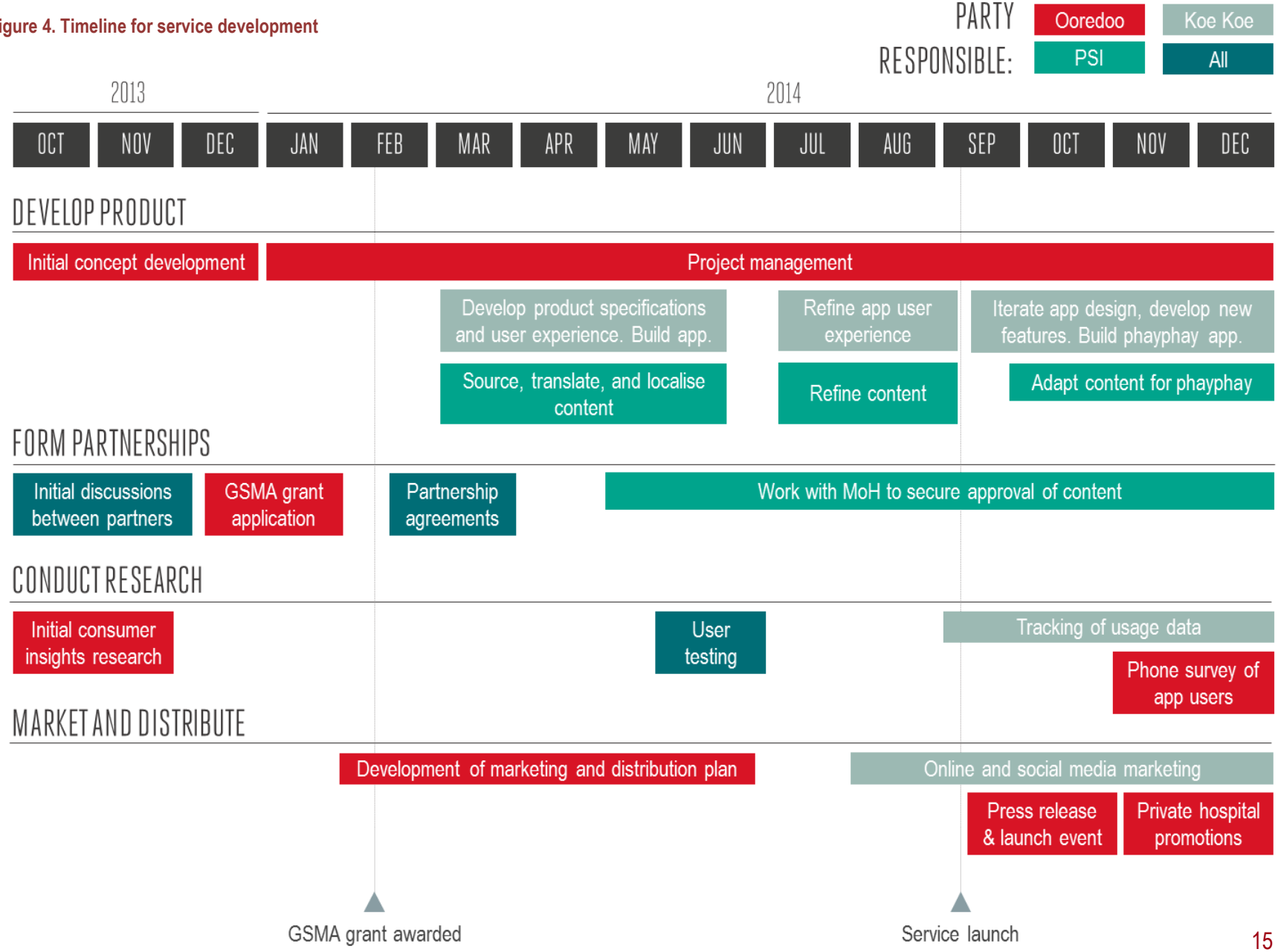
There have been a number of challenges in building the mobile network in Myanmar, including an underdeveloped transport infrastructure that makes transporting equipment difficult, lack of rural electrification, locating sites for towers, and monsoon rains. These challenges are expected to be even greater as Ooredoo expands to more rural parts of the country.

Launching the service

Overview of the process

A timeline of the development of the maymay service, from concept stage to four months after launch, is depicted in Figure 4. In the first few months after launch, the service was marketed through social media, promotions in private hospitals, and SMS blasts to segments of the Ooredoo subscriber base. These low-cost channels were selected to ensure the service would be commercially sustainable, but have so far proven to be most effective in targeting higher income, urban women. The most cost-effective way to target lower income rural women is believed to be through partnerships with NGO networks. To reach these women, Ooredoo will partner with PSI to distribute the service through its network of rural 'SUN' doctors, and is negotiating with other potential NGO partners as well.

Figure 4. Timeline for service development

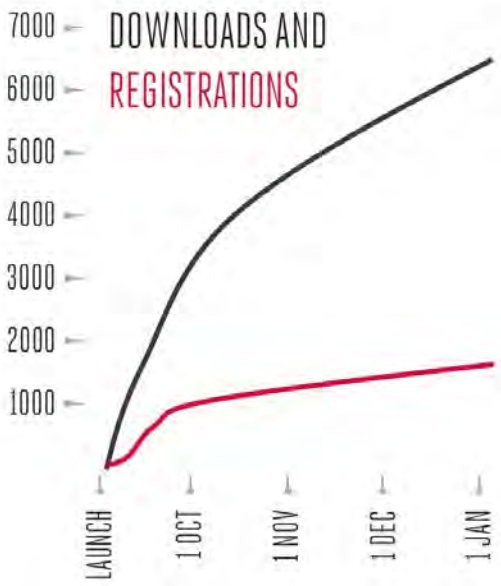


Results to date

In December 2014, Ooredoo conducted a phone survey of registered users of maymay. Although the survey was small scale,[5] combined with the app's back-end usage data it provided an early indication of the commercial and social impact of the service. Four months after launch, maymay's user base is still fairly small, but feedback from users is very positive. The majority of users say that maymay has improved their maternal health practices and has added significant value to their lives. The app also appears to have achieved its commercial objectives of improving the perception of the Ooredoo brand and encouraging users to purchase an Ooredoo SIM. The most common negative feedback was that the information in the app was already available to the user (e.g. through a doctor or the internet), but this may reflect the fact that the majority of users are currently from higher income, urban areas where health information is much more accessible. As the Ooredoo network expands its coverage, the main areas of focus will be launching the new features currently in development, driving uptake, and increasing the proportion of registered users from lower income, rural areas of Myanmar.

Level of usage

The app launched on the Google Play Store on 5 September 2014, three weeks after the launch of the Ooredoo network in Myanmar. In the first four months, the app had almost 7,000 downloads and 1,700 registered users. The drop-off between download and registration is primarily due to the fact that non-Ooredoo subscribers can download the app, but cannot complete the registration process. To mitigate this issue, from March 2015 Ooredoo will allow non-subscribers to use the basic notification feature and keep all premium features, such as the health worker hotline and the doctor locator. It is hoped this will drive uptake and awareness and encourage non-subscribers to purchase an Ooredoo SIM to access premium features.

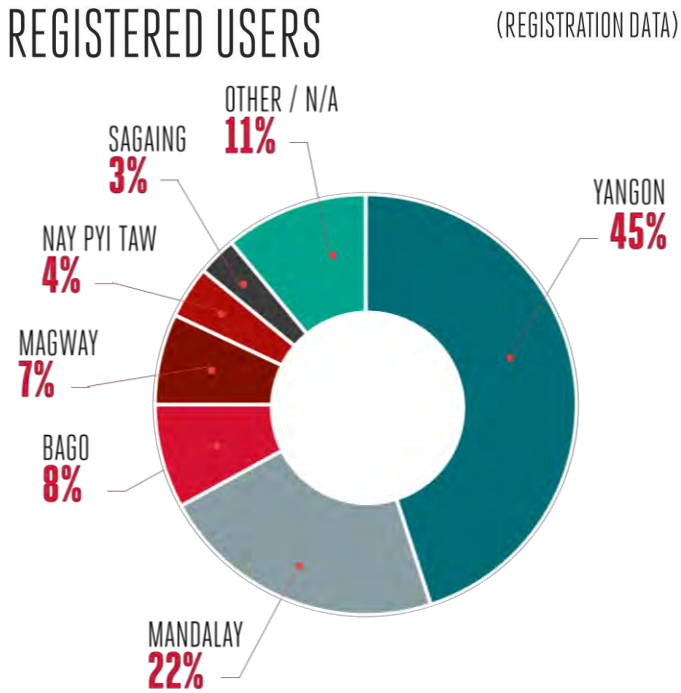


The app had over 1,000 downloads in the first six days after launch due to pre-launch promotion through the maymay Facebook page, which generated over 13,000 likes. While the number of downloads in the first two months exceeded expectations, the rate of downloads slowed during November and December. This is believed to be due to delays in the marketing and promotion of the app. By the end of December 2014, the app had still not received approval from the Ministry of Health, which limited marketing channels to the maymay website, Facebook page, and some private hospitals. Once the app receives Ministry of Health approval it can be marketed more widely through government hospitals and clinics, as well as SMS blasts to the Ooredoo subscriber base. As of January 2015, the app is being pre-loaded onto

[5] Survey designed by GSMA Connected Women and conducted with 132 registered users of maymay: 68 survey respondents answered all questions

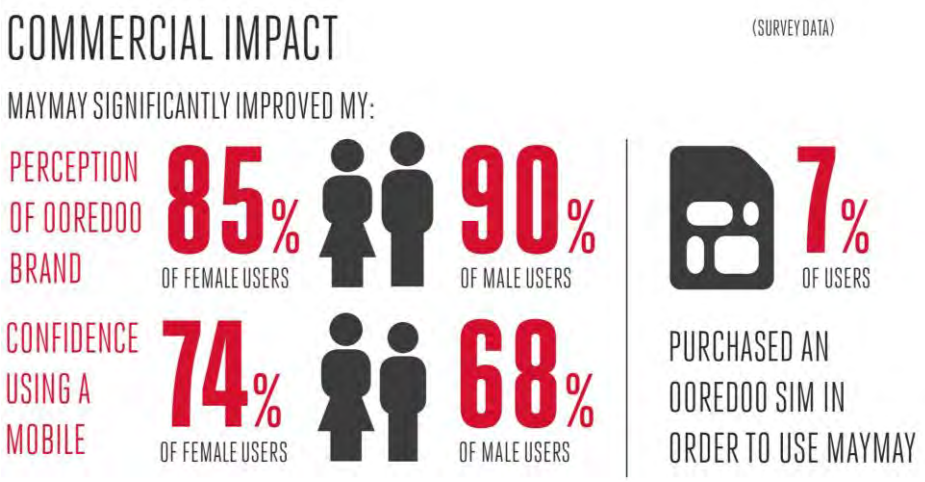
150,000 of the cheapest smartphone handsets sold through Ooredoo stores each month, which will serve as a large-scale distribution channel.

The app's registration process asks users to select their gender. 68% of those who registered selected 'female' and 32% selected 'male'. Since gender was not a mandatory field in the early versions of maymay this figure is only indicative, but it suggests there are a significant number of men using the app. Feedback from male respondents to Ooredoo's phone survey revealed that many men were indeed actively using the service, as they saw value in understanding the development of their baby and learning how to better support their partners. The number of men using the app is expected to decline with the launch of phayphay.



The majority of phone survey respondents said they were located in either Yangon or Mandalay. This is not surprising given the large populations in these cities and the fact that these areas were the first to have Ooredoo network coverage. Although the figures are lower in other regions, there are promising signs that awareness of the service is growing outside the major hubs of Yangon and Mandalay.

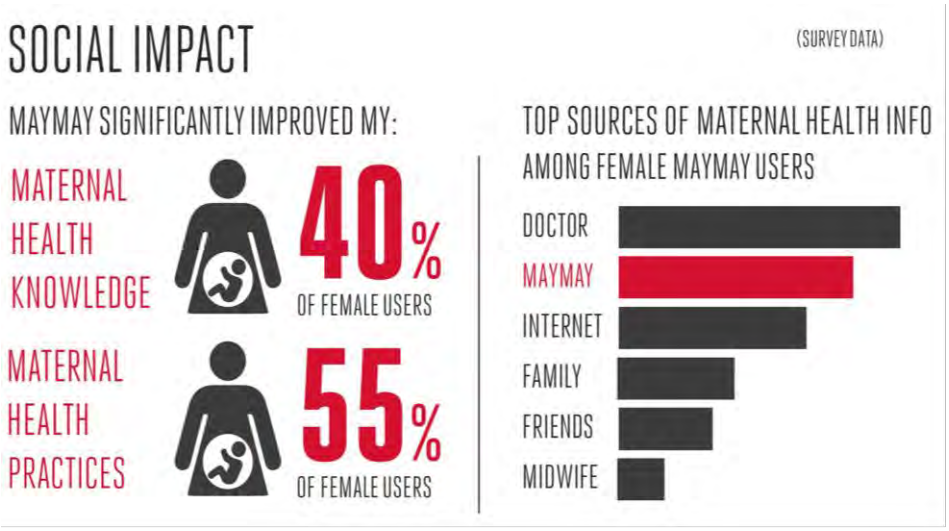
Commercial impact



Indicative results show that maymay is increasing ARPU. Since the app is designed to be data light, the revenue from data usage associated with the app is low. However, the indirect impact on ARPU is believed to be much higher. Feedback from respondents indicates many users are using their Ooredoo SIM more than their other SIMs in order to use maymay, and over two-thirds of users report that maymay has significantly increased their confidence in using a mobile phone. It is hoped this greater confidence will encourage users, particularly women, to try other apps and mobile data services.

Although it is difficult to measure precisely, maymay may also have an impact on new subscribers and customer stickiness: 7% of users said one of the reasons they purchased an Ooredoo SIM was to use maymay and an overwhelming majority of users (89%) report that the maymay app has significantly improved their perception of the Ooredoo brand.

Social impact



The impact of maymay on maternal health information and practices appears to be positive, with 62% of users citing it as one of their top two or three sources of maternal health information, and 55% of female users reporting they had changed their maternal health practices due to information received through the app. 88% of users said that they had recommended the service to someone else, which suggests the majority of users see the app as a useful tool. The maymay service cannot be directly attributed to an increase in mobile access since the vast majority of maymay users owned a SIM before purchasing an Ooredoo SIM card. However, this is expected to change once Ooredoo network coverage expands to more rural areas, where mobile penetration is significantly lower.

The two most common reasons respondents gave for the app not significantly improving their maternal health knowledge or practices were that they had only used the service for a short time and that they already had access to the information (e.g. through their doctor). Improvements in maternal health knowledge and practices are expected to be much more significant once users have had more time to use the app and once it is available in lower income, rural areas where access to other sources of maternal information are much more limited.

Lessons learned

Form the right partnerships

The maymay business model is based on synergies between partners. maymay aligns with PSI's objectives of improving maternal health outcomes in Myanmar and, as a not-for-profit, PSI was able to support the development of maymay at a low cost to Ooredoo. maymay also aligns with Koe Koe's objective of developing technology for the Myanmar health sector, and Koe Koe was able to develop the app at no cost to Ooredoo in return for the revenues generated by the in-app advertising and access to Ooredoo's marketing and distribution channels.

The expertise provided by PSI and Koe Koe was also essential to developing a high-quality product. PSI provided local health expertise in developing the content, a link to the Myanmar Ministry of Health, as well as a distribution channel for the app through its rural doctor network. As a tech start-up based in Myanmar and run by local staff, Koe Koe provided app development expertise as well as a clear understanding of the local context.

Invest in consumer insights research

One of the key success factors in developing the maymay service was focus group discussions with Myanmar women. Early focus groups identified maternal health as a strong market opportunity to reach the female segment. Focus groups were also key to the app's design and content: major changes were made to the original design of the app based on feedback from target users, such as significantly reducing the number of steps required to register. Feedback from target users on maternal health content was also essential to identifying messages that were confusing or offensive to Myanmar women. By investing in early testing of messages and content, Ooredoo was able to produce a product that users rated as relevant, valuable, and were likely to recommend.

Include men when designing for women

Just as important as the focus groups with women were those with men. These discussions revealed strong interest in a maternal and child health mobile service among men, particularly those in urban areas. This interest is supported by the fact that 32% of current registered maymay users have registered as male and 60% of those who answered the phone survey were men. In a country where men play a leading role in household decision-making, this could have a real impact on the lives of pregnant women and mothers. In response to this clear market opportunity, 'phayphay', a version of maymay tailored to men, is currently in development. Focus groups with men will be held in the coming months to user-test phayphay and gather detailed feedback on its features and design.

Men have also proven to be an important channel in raising awareness of maymay. The majority of male users of maymay surveyed said they had heard about the app through Facebook or the maymay website, and over 90% of men said they had recommended maymay to a friend or family member. In contrast, most women said they had heard about maymay through a friend or their partner.

Iterate the user experience (UX)

Since version 1 of maymay was launched on the Google Play Store, multiple updates have been released. These updates include new features, an improved design, a simplified registration process, and removal of bugs. These iterations have been essential to the development of a high-quality product. Focus groups with target users and the phone survey have provided useful feedback on how to improve the service. However, low-cost options, such as comments and polls on the Facebook page, reviews on the Google Play store, and in-app surveys can also be extremely valuable tools for improving the user experience and increasing user engagement with the service. For example, a poll on the maymay Facebook page asking which logo people preferred received over 500 votes.

Take advantage of low-cost distribution channels

To date, marketing and distribution channels have been limited to social media, SMS blasts from Ooredoo, and the maymay website. Facebook has been the most successful way to raise awareness; there were over 44,000 likes on the maymay Facebook page by January 2014 and 46% of registered users said they had heard about the app through Facebook. This is closely followed by word of mouth, with 36% of users saying they had heard about the app through a family member or friend. Capitalising on low-cost channels such as social media and developing app features to 'recommend a friend' will be critical to the commercial sustainability of the service.

While social media and word of mouth have been effective as low-cost marketing channels in urban centres, they are expected to be much less effective in more rural parts of Myanmar where awareness of mobile services is low and technical literacy is typically poor. Partnerships with organisations with rural distribution networks, such as NGOs and health organisations, will be critical to scaling up maymay in rural areas. Budgeting for and planning these rural distribution channels at the concept stage is essential to ensuring the product reaches scale among target users in a sustainable way.

Conclusions

In a highly competitive market such as Myanmar, brand perception and brand loyalty are critical to a mobile operator's success. The experience of Ooredoo Myanmar shows that apps tailored to the local context are often highly valued by users and can be an effective tool in improving brand awareness and brand perception. Early results also suggest that providing an app with a simple user interface and content in a local language can help users overcome technical literacy barriers and even improve their confidence using mobile services.

While there are commercial benefits for Ooredoo, it is important to note that these benefits are indirect and often difficult to measure. Careful cost management was key to the commercial success of the maymay service. By sourcing free content, partnering with an NGO to "localise" the content, outsourcing the app development, and capitalising on low-cost distribution channels, Ooredoo was able to develop a high-quality service with very limited upfront investment.

Although it is too early to assess the app's impact on maternal health outcomes, feedback from users suggests the maymay app is a useful tool for improving the maternal health knowledge and practices of women in Myanmar. However, as the app was only available to urban populations in the first few months after launch, the impact of the app has yet to be tested in more rural contexts. Over the next 12 months, GSMA Connected Women will continue to provide support in tracking the commercial and social impact as network coverage expands to a greater proportion of the population.

About the GSMA

The GSMA represents the interests of mobile operators worldwide, uniting nearly 800 operators with more than 250 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and Internet companies, as well as organisations in adjacent industry sectors. The GSMA also produces industry-leading events such as Mobile World Congress, Mobile World Congress Shanghai and the Mobile 360 Series conferences.

For more information, please visit the GSMA corporate website at www.gsma.com.
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About Mobile for Development - Serving the underserved through mobile

Mobile for Development brings together our mobile operator members, the wider mobile industry and the development community to drive commercial mobile services for underserved people in emerging markets. We identify opportunities for social and economic impact and stimulate the development of scalable, life-enhancing mobile services.

For more information, please visit the GSMA M4D website at: http://www.gsma.com/mobilefordevelopment

About the GSMA Connected Women Programme

GSMA Connected Women works with partners to deliver socio-economic benefits to women and the broader mobile ecosystem through greater inclusion of women across the industry. The programme is focused on increasing women's access to and use of mobile phones and life-enhancing mobile services in developing markets, as well as closing the digital skills gender gap, attracting and retaining female talent, and encouraging female leadership in technology on a global basis.

For more information, please visit the GSMA Connected Women website at: www.gsma.com/connectedwomen
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