Report of a joint GSMA Connected Women-LIRNE*asia* study on

Mobile phones, internet, and gender in Myanmar

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MSR Myanmar Survey Research
USAID FROM THE AMERICAN PEOPLE
Australian Aid
IDRC CRDI
UKaid from the British people
Canada

About this report

This joint publication is the outcome of a research collaboration between GSMA's Connected Women programme and LIRNE*asia*.

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The research presented in this report originates from two sources:

1. A nationally representative baseline survey of knowledge, information, and communication habits and needs in Myanmar, conducted by LIRNE*asia* in Myanmar between February and May 2015. Fieldwork was conducted by Third Eye Co., Ltd.

2. A qualitative study of women's and men's mobile phone and internet usage, conducted by GSMA and LIRNE*asia* in Myanmar in July 2015. Fieldwork was conducted by Myanmar Survey Research (MSR).

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List of abbreviations

FGD	Focus group discussion
HV	Home visit
ICT	Information and communication technology
MMK	Myanmar kyat
SIM	Subscriber identification module
SEC	Socio-economic classification
USD	United States dollar

Definitions

Gender gap: How less likely women are to own a mobile phone than men or use a mobile phone for a given purpose than men. For example, for mobile phone ownership, the gender gap is calculated as follows:

$$\text{Gender gap in mobile phone ownership (\%)} = \frac{\text{Male mobile phone owners (\% of male population)} - \text{Female mobile phone owners (\% of female population)}}{\text{Male mobile phone owners (\% of male population)}}$$

Source: GSMA Connected Women and Altai Consulting, 2015

Keypad phone/handset: A mobile handset with a keypad interface. In this research, this includes basic/feature phones whose primary interface is through a keypad; smartphones (defined below) with keypads are also included, but are not common in Myanmar.

Mobile data services/data services: This includes mobile internet service (i.e. internet content accessed through a mobile-based browser versus a stand-alone application) as well as mobile internet applications (defined below).

Mobile internet applications (or 'apps'): Internet-based application software designed to run on smartphones, tablet computers, and other mobile devices. Apps are stand-alone programs that we distinguish from accessing internet content through a browser (although a browser itself is an application). Examples include calling/chat applications such as Viber and BeeTalk, search engine applications such as Google, and social networking applications such as Facebook and others.

Mobile owner: Someone who owns a working mobile handset and/or an active mobile SIM card; the national survey findings show that the number who own an active SIM but not a handset are very low, and negligible.

National baseline survey/national survey/baseline survey: A nationally representative baseline survey of information and communication technology (ICT) use in Myanmar conducted by LIRNE*asia* from February to May 2015 that yielded quantitative data. The phrase 'survey respondents' refers to those who responded to this national sample survey.

Non-owner: Someone who does not own a working mobile handset or an active mobile SIM card, although our research in Myanmar showed they typically have some experience (usually limited) with mobile communication.

Qualitative research: The in-depth interviews, focus group discussions, site visits, and other protocols conducted in Yangon (urban) and Pantanaw (rural) in July 2015, which yielded non-quantitative insights. The phrase 'qualitative respondents' refers to the subjects who participated in any of these qualitative research protocols.

Smartphone/'touchphone': GSMA Intelligence defines a smartphone as a mobile handset enabling advanced access to internet-based services with computer-like functions. In this research, a smartphone is considered to be what respondents commonly refer to as a 'touchphone', essentially any mobile with a touch-screen interface, and therefore excludes smartphones that may also have a keypad interface (according to LIRNEasia's baseline survey findings, less than 3% of keypad phone owners [defined above] in Myanmar also had a touch screen on their mobile).

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Executive Summary

This report is the result of research conducted by GSMA's Connected Women programme and LIRNE*asia* in Myanmar in 2015. Using a baseline survey, LIRNE*asia* collected nationally representative data from over 12,000 respondents in wards and villages across Myanmar[1] between February and March of 2015.[2] Deeper qualitative research with an additional 91 men and women was then conducted jointly by GSMA and LIRNE*asia* in July 2015 in one urban location (Yangon) and one rural location (Pantanaw).

The objective of the national baseline survey was to understand the information and communication needs and habits of people in Myanmar. The objective of the qualitative study was to understand the gender gap in mobile ownership and the reasons for low mobile internet use, which became evident in the national baseline survey.

Key research findings include:

In March 2015, 40% of Myanmar's population owned a mobile phone.

The well-being of one's family is a top priority for most people in Myanmar. Our research found that greater access to mobile communication in Myanmar has made it easier and more affordable to stay in touch with family. According to LIRNE*asia*'s national baseline survey, by March 2015, 40% of Myanmar's population aged 15–65 owned a mobile phone. An additional 41% had plans to get connected in the future.[3]

Women in Myanmar are 29% less likely to own a mobile phone than men.

While mobile phone ownership is growing fast, women in Myanmar are 29% less likely to own a mobile phone than men,[4] according to the national baseline survey. This gender gap in ownership was higher among lower income households. Despite this, many women have access to a shared household handset or one of another household member.

The gender gap in mobile phone ownership is due to a combination of low household income and traditional gender roles; men and women who leave the house for work or studies get priority for mobile ownership.

Our qualitative research findings show that much of the gender gap in mobile ownership has to do with the practical constraints of not being able to afford another handset in the household. In February and March 2015, close to half of the households in the study in Myanmar already owned a mobile phone, and getting a second handset was often not possible due to low household income. In most cases, the household member who goes out of the house for work or studies gets priority to keep the mobile with them—this is often not a female member of the household.

Traditional gender roles in Myanmar encourage men to leave the home to earn money for the family, while women are expected to stay home and run the household and take care of the family. However, many respondents in the qualitative research noted that these roles are becoming more flexible as more women choose to further their studies and/or join the workforce. In instances where a daughter/female member of the household went out to work or study, she received priority for mobile phone ownership. Men

1. Excluding 32 townships (or 3% of the population) which were deemed unsafe/inaccessible for researchers
2. With additional data collection in May 2015.
3. Based on the national survey findings. See: http://lirneasia.net/wp-content/uploads/2015/07/LIRNEasia_MyanmarBaselineSurvey_DescriptiveStats_V1.pdf
4. Where the gender gap in mobile ownership is calculated as [(% of male population that owns a mobile phone – % of female population that owns a mobile phone) / % of male population that owns a mobile phone].

have a more prominent role in the household based on the religious belief that only men can become a Buddha (see Section 4.2.1), but many of the women interviewed in the qualitative research took this for granted and did not consider it 'discrimination'.

Some women in the qualitative research mentioned that even if they had a mobile, they would find it difficult to afford top-ups. There is a substantial wage disparity between men and women in Myanmar, particularly in rural areas, and this limits women's ability to pay for top-ups. Furthermore, as the family's financial manager, women feel the need to prioritise others' needs before theirs and ensure that household income is spent prudently.

Women play a role in deciding whether to buy a mobile phone, but because they tend to have less product knowledge than men, they often rely on men to choose their handset, operator, and plan.

Women in Myanmar play a key role in the management of household finances. The decision to purchase a mobile phone is often a family decision, taken jointly by the family or senior household members—female as well as male. However, women are often less involved in decisions relating to the actual purchase (e.g. which handset or SIM to buy), as the advice of those with more product expertise are sought instead (e.g. men, teenage children, young adults in the household, men who know the man running the phone shop).

Women who own mobile phones in Myanmar are as likely to own smartphones or 'touchphones' as men; smartphones are a symbol of social status.

According to the national baseline survey, 64% of women who own a mobile phone have a 'touchphone' (smartphone with a touch screen) compared to 65% of men (a negligible difference). There is high demand for smartphones, even though many only use their smartphone for voice. Despite the cost barrier, people are often not interested in keypad phones (basic/feature phones with a keypad interface) or less expensive smartphones, which are also perceived as low quality. Not even secondhand smartphones are considered. There are several factors at play here: both male and female users want phones capable of data services (mainly Facebook, Viber, and other social media apps) and gaming; there is a strong desire to be seen as 'modern' and not 'outdated', and financially independent/capable. There is also a preference for better quality handsets that will last longer/perform better.

There is a latent demand for mobile internet services among both women and men.

Many of the interview respondents—both men and women—were initially motivated to adopt mobile internet services to meet basic communication needs (social, emergency, etc.), but once they were connected (especially through data services) their usage expanded to include business communication and coordination (for those who work or own a business), improving social status, and entertainment (gaming, social media).

Data services (or mobile internet service and applications) are used by a third of mobile owners in Myanmar; usage largely consists of social media and calling apps.

Approximately one-third of mobile owners have used at least one data service on their mobile phone, according to the national baseline survey. More than half of these users stick to using one to three data services; this was slightly more common among women (59%) than men (52%) data service users. Much of this use is limited to social media and calling and chat applications.

Digital skills are limited; women often rely on men to learn 'how' to do things on mobiles.

Many women did not possess the skills or knowledge to begin using data services (due to a lack of experience with technology), and usually relied on others (primarily men, either relatives or in phone shops) for instruction. This was seen to limit the amount of help women sought and received. Some rural women respondents felt uncomfortable (or shy) asking men for help, whereas urban women observed in the qualitative research were more confident.

Many men and women often have a limited understanding of what the 'internet' is, and therefore do not see why it is relevant to them.

This is especially true for people who do not own a mobile phone. There is a vague sense that one can gain knowledge, communicate with those far away, and meet new people through the internet. Much of women's understanding of the internet is shaped by Facebook and chat applications like Viber and BeeTalk, and is based on either hearsay or watching others use it. Since women are the primary managers of household finances, the value proposition for adopting data services has to be great enough to justify diverting some of the household's limited budget away from daily necessities, children's education, etc. Some smartphone owners (both male and female) were not aware of the choice of news and topics they could access through the internet.

Negative perceptions of the internet are common, especially among those with limited experience and knowledge of it.

Some who have not yet had any first-hand experience, but have 'heard' about the internet tend to focus on negative stories, such as 'inappropriate' online flirting or content.[5] Once people become actual data service users (even if they do not own a handset of their own), negative perceptions seem to be displaced by the benefits, such as maintaining relationships, emotional well-being, economic well-being, and knowledge and skills.

Summary of recommendations for stakeholders in Myanmar[6]

The identified stakeholder is a primary actor

The stakeholder needs to play a supporting/facilitating role

ACTOR	ACTION	
Government	Network roll-out to increase female (and male) mobile ownership	Ensure fair and affordable access by all mobile operators to the incumbent backhaul fibre optic network and sufficient coverage and capacity spectrum
		Simplify right-of-way access to all telecom operators (for backhaul and access network)
	Digital skills/ literacy development for women (and men, who women sometimes learn from)	Incorporate basic digital skills (internet safety and privacy awareness) into the national ICT curriculum beginning in primary school
		Support efforts by other stakeholders to develop digital skills content (e.g. short tutorial-style videos), which can be disseminated via social media or other channels
	Content development	Support the creation of an enabling environment for the local app market to grow, and develop locally relevant and accessible apps for women
	Demand stimulation	Ensure an equitable, transparent, and predictable taxation system, and ensure there are no distortions in investment and consumption of mobile services

5. There is a degree of variation in what is considered 'inappropriate,' for example, one respondent mentioned provocative pictures of 'half naked' women, while a more conservative elder respondent mentioned she did not want to watch foreign films because she wanted to avoid seeing people kissing.
6. See Section 6 for detailed recommendations.

ACTOR	ACTION	
Mobile network operators	Demand stimulation	Introduce more creative pricing to appeal to women's price sensitivity, call patterns, and daily routines (e.g. creative tariff plans, innovative data packages, low-denomination top-ups, bite-sized or on- demand data pricing, emergency credit services)
		Develop clear and transparent pricing, including warning reminders, especially for data charges
		Target men in marketing campaigns to reach women in settings where men commonly make decisions about women's SIM cards and plans
		Secure sufficient international bandwidth to keep up with increasing data traffic
		Create an enabling environment for the local app market to grow, and develop locally relevant and accessible apps for women
		Develop digital skills content (e.g. short tutorial-style videos), which can be disseminated via social media, agent networks, or other channels.
	Content development	Create an enabling environment for the local app market to grow, and develop locally relevant and accessible apps for women
	Digital skills/literacy development	Develop digital skills content (e.g. short tutorial-style videos), which can be disseminated via social media, agent networks, or other channels
		Create incentives for agent networks to improve the digital literacy of their female (and male) customers (i.e. an in-person approach)
Handset manufacturers	Demand stimulation	Continue efforts to design competitively priced and more durable, more affordable smartphones
		Explore the possibility of providing scaled down (lower cost) and easier-to-use versions of popular handset brands which meet user requirements, in order to make them more affordable for non-owners
		Develop innovative financing mechanisms to lower the cost of handsets (e.g. microloans, monthly installments)
		Conduct additional research on the negative perceptions of available low-cost handsets; identify actions to negate the perceptions (e.g. mobile repair services, partnerships with low-priced handset manufacturers)
		Develop solutions to improve the phone-sharing experience, especially ensuring data privacy for different users
App developers	Demand stimulation	Develop solutions to improve the phone-sharing experience, especially ensuring data privacy for different users
	Content development and digital skills/ literacy development	Develop locally relevant apps which take current low levels of digital literacy into account
		Lower data costs by designing apps that update efficiently
NGOs	Digital skills/literacy development	Development of digital skills content (e.g. short tutorial-style videos) which can be disseminated via social media, grassroots networks, etc.
Banks and other finance institutions	Demand stimulation	Develop innovative financing mechanisms to lower the cost of handsets (e.g. microloans, monthly installments)
Investors	Demand stimulation and content development	Support the local app developer market to grow, and develop locally relevant and accessible apps

1 Introduction

The recent introduction of mobile communication in Myanmar is a potentially life-changing prospect for the country, one of the poorest in Southeast Asia. A quarter of its population is estimated to live in poverty,[7] while the country as a whole performs poorly on most socio-economic indicators. There is much potential for mobile phones to play a role in socio-economic development, be it through access to services such as mobile money, or simply the access to information a mobile phone provides. It is estimated that 90% of wards and villages in the country already have a mobile signal.[8]

The Ministry of Posts and Telecom (MPT) began offering mobile services in 2013. In January 2014, Ooreedo and Telenor were granted licences to provide mobile services, with commitments to provide 85% voice coverage within five years. It is expected these new networks will first cover the densely populated urban centres and gradually move outwards to rural areas, which do not currently have coverage.

Since the country has opened up only relatively recently, there are few (public) sources of detailed nationally representative data available. This kind of data is needed to understand the current and future information, knowledge, and communication needs in the country. Disaggregated by gender and other demographics, it can be a powerful tool for evidence-based policymaking.

In recent years, much effort has been put into documenting and understanding the gap in mobile ownership between men and women (the gender gap). Organisations like GSMA Connected Women and LIRNE*asia* are among those who have been engaged in this kind of research. The gender gap in both mobile ownership and access has been a cause for concern in many low-income countries, where men and women do not benefit equally from the 'digital dividends' of mobile and internet services.

Now that Myanmar is on the mobile coverage map, it must be determined whether a gender gap exists and, if so, understand the factors contributing to it. Using a combination of quantitative and qualitative methods, the GSMA Connected Women programme and LIRNE*asia* have attempted to answer these questions.

7. The Integrated Households Living Condition Assessment-II survey of 2010 conducted by UNDP indicated a poverty level of 26% in Myanmar, using a poverty line based on consumption expenditure required to meet basic nutritional needs plus a provision for basic non-food expenditure. The poverty line was estimated at MMK 376,151, or approximately USD 295, which equated to less than 80 US cents per day at the time. See http://www.mm.undp.org/content/dam/myanmar/docs/FA1MMRPovertyProfile_Eng.pdf for more information.
8. http://lirneasia.net/wp-content/uploads/2015/08/2015-07-MyanmarBaselineSurveyICTuse-v9-11.pdf

A survey conducted by LIRNE*asia* in wards and villages across Myanmar[9] between February and March of 2015[10] was able to collect nationally representative data on the information and communication needs and habits of over 12,000 respondents. A gender-disaggregated analysis of the survey findings (some described below) was the starting point for a deeper qualitative study of 91 men and women in one urban location (Yangon) and one rural location (Pantanaw), conducted jointly by GSMA Connected Women and LIRNE*asia* in July 2015.[11]

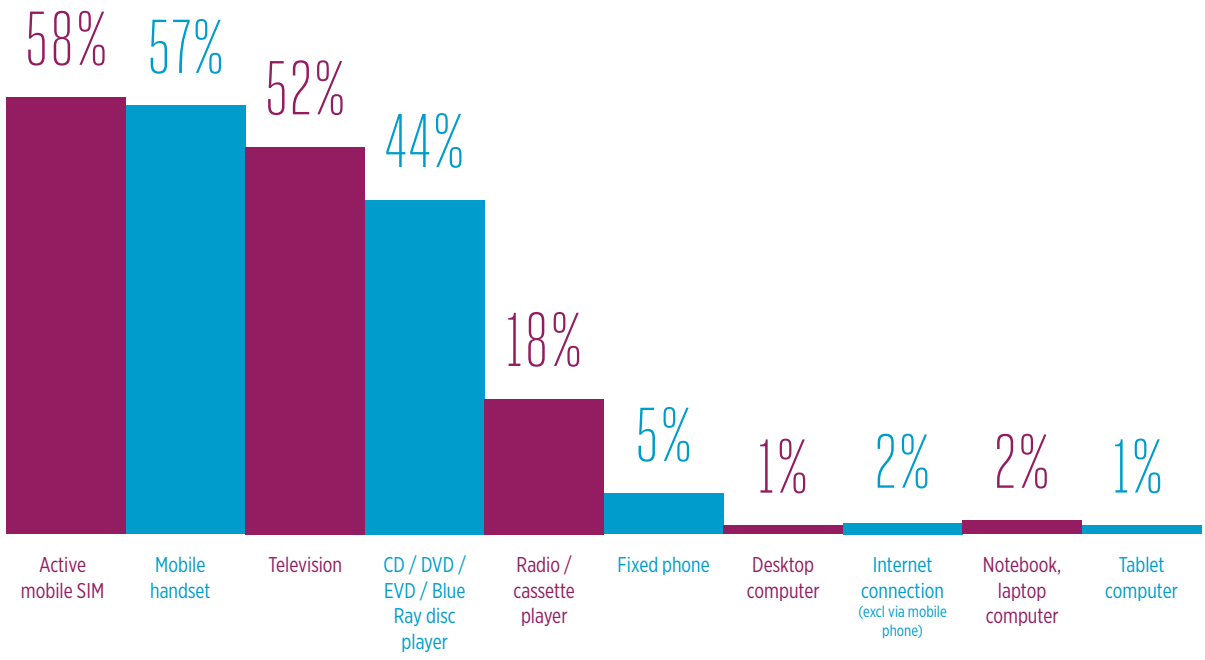
LIRNE*asia*'s national baseline survey findings indicate that a mobile signal can be found across the country, and uptake is already quite high relative to the post-liberalization growth some of Myanmar's neighbours have seen. At the time of survey, 96% of wards and 87% of villages in Myanmar received a mobile signal.[12] Quality is variable as networks expand coverage and capacity, but just one year after the two private licences were granted, mobiles have already become the most prevalent ICT in Myanmar households (Figure 1), with 58% of households having an active SIM and 57% having a mobile handset present, compared to 'older' ICTs like TVs and radios.

Figure 1

Source: LIRNE*asia* Baseline Survey, 2015

Household access to ICTs and ICT connections

% of Myanmar households



The findings point to a significant gender gap in mobile ownership. Overall, mobile phone ownership (having an active SIM, with or without a handset[13]) among 15–65 year olds in Myanmar was 40%, but among women it was just 33% compared to 47% among men.

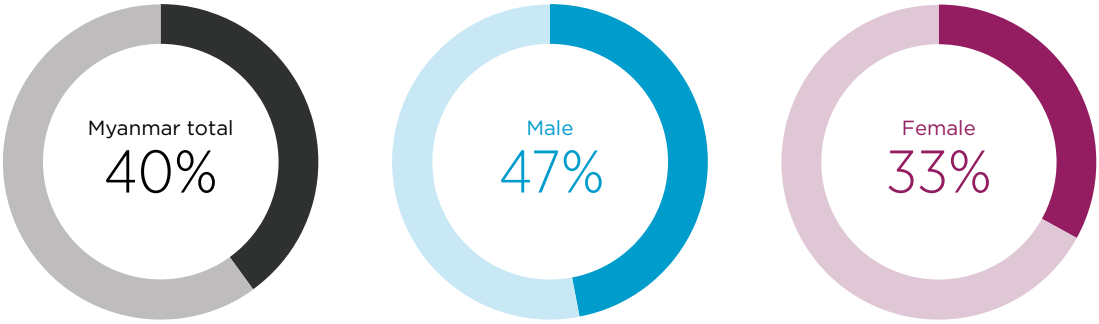
9. Excluding 32 townships (or 3% of the population) which were deemed unsafe/inaccessible for researchers
10. With additional data collection in May 2015.
11. The larger set of findings from the national baseline survey can be found at: http://lirneasia.net/wp-content/uploads/2015/07/LIRNEasia_MyanmarBaselineSurvey_DescriptiveStats_V1.pdf
12. Based on survey responses of ward/village administrators surveyed in every ward/village selected for the baseline survey; ward/village administrators were asked whether their ward/village received any mobile signal at the time of survey. Coverage data is based on responses to the following question: "Do you receive any mobile phone coverage in your ward/village?" All ward and village administrators/leaders in the survey were asked this question.
13. Although responses show that a negligible number (0.7%) own an active SIM but not a handset of their own, in this report, these SIM-only owners are also considered mobile 'owners'.

Figure 2

Source: LIRNE*asia* Baseline Survey, 2015

Mobile ownership

% of Myanmar's population aged 15-65



In other words, **women in Myanmar are 29% less likely to own a mobile than men**. This is just over twice the gender gap estimated by GSMA Connected Women and Altai Consulting in all low- and middle-income countries in 2014.[14] However, it is smaller than the gap estimated in some Asian countries like India (where women are 36% less likely to own a mobile than men), whose per capita income is higher than Myanmar's.

$$\text{Gender gap in mobile phone ownership (\%)} = \frac{\text{Male mobile phone owners (\% of male population)} - \text{Female mobile phone owners (\% of female population)}}{\text{Male mobile phone owners (\% of male population)}}$$

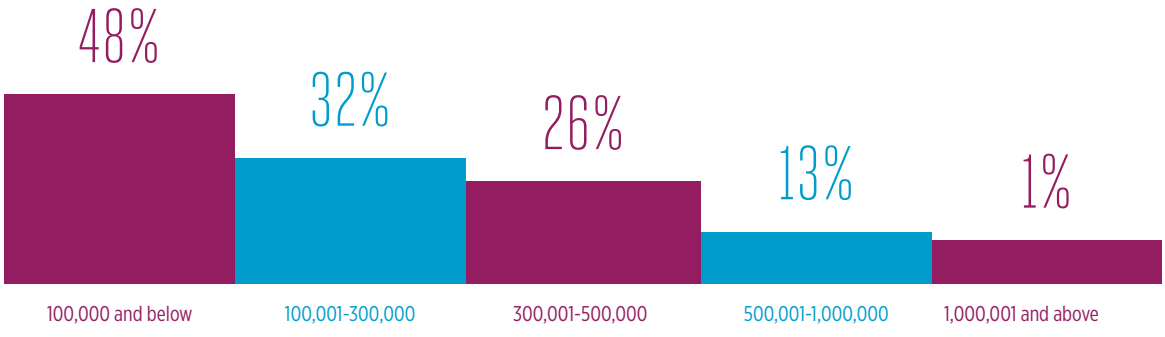
Source: GSMA Connected Women and Altai Consulting, 2015

Consistent with previous research, the gender gap in mobile ownership steadily declines as household income increases[15] (Figure 3), with more than a four-fold decrease across income groups.

Figure 3

Source: LIRNE*asia* Baseline Survey, 2015

Gender gap (%) in mobile ownership in Myanmar



Total monthly household expenditure (MMK)

14. GSMA Connected Women and Altai Consulting, 2015.
15. Total household monthly spending is used as a proxy for monthly household income.

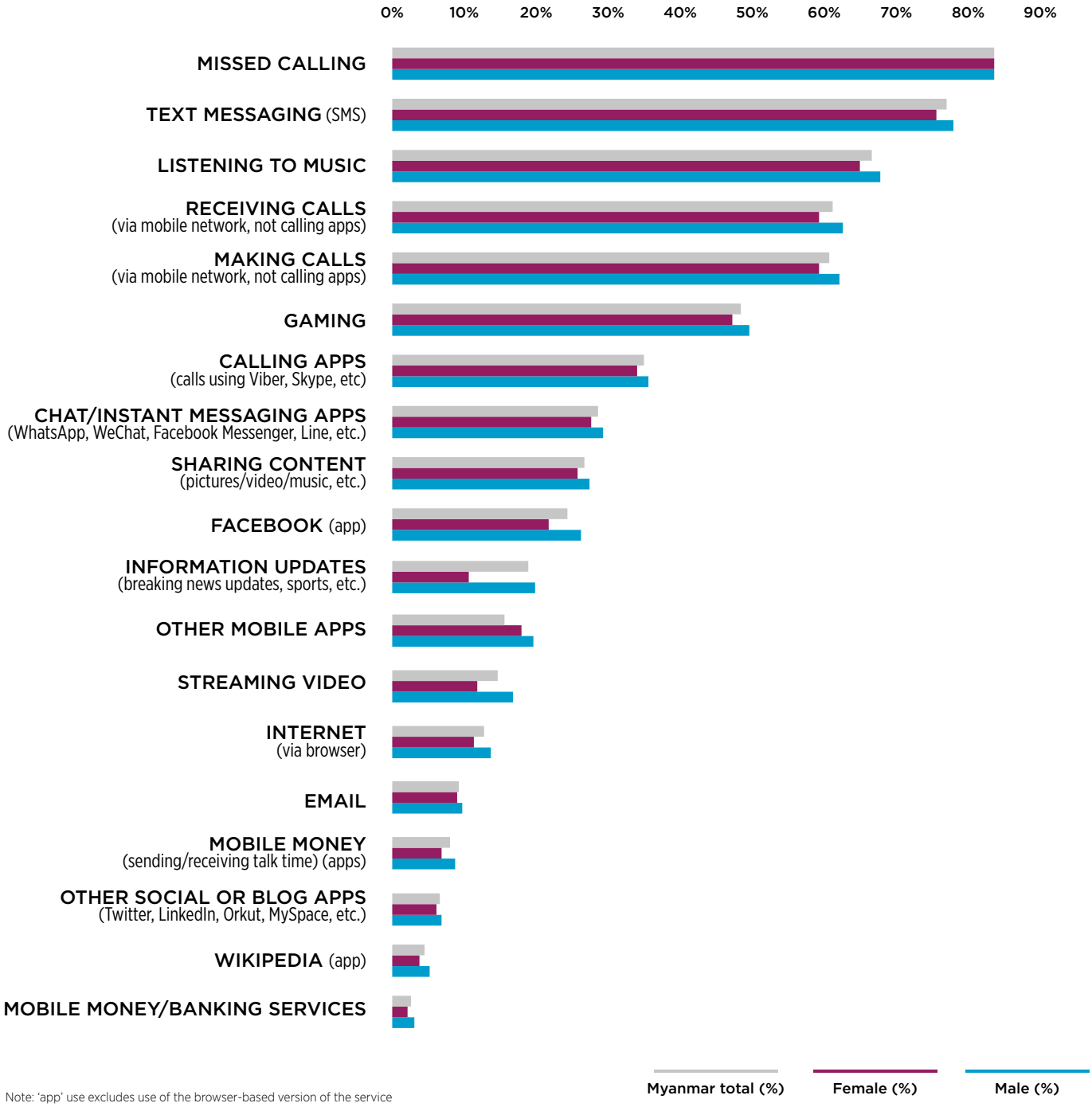
The findings also showed very low use of mobile internet service and/or apps (data services) in Myanmar among smartphone owners (Figure 4). Although smartphone ownership is high (66% of mobile owners), the majority of owners stick to missed calls, voice, and listening to music. There are only very small differences in usage between men and women. Female smartphone owners were slightly less likely to use data services than male owners, primarily when it came to using mobiles to receive information updates, such as breaking news and sports.

Figure 4

Source: LIRNE*asia* Baseline Survey, 2015

What smartphone owners use their mobile phone for

% of smartphone owners



Note: 'app' use excludes use of the browser-based version of the service

Based on these findings, the following research questions were used for more in-depth qualitative research:

- Why is there a gender gap in mobile ownership in Myanmar?
- Why do many mobile owners in Myanmar not use mobile internet services and apps (data services)?
  - Are there different reasons for men than women?
- What opportunities are there to encourage more women to own and use mobile phones (especially data services) in Myanmar?

The remainder of this report is organised as follows:

- **Section 2** describes the quantitative and qualitative research methods used to collect the data for this study.
- **Section 3** takes a brief look at some of the prior research relating to topics addressed in this report.
- **Section 4** provides a broad socio-economic/cultural context to help understand the research findings.
- **Section 5** presents the research findings.
- **Section 6** outlines the recommendations arising from the research and concludes the report.

Throughout this report, the term "survey" or "baseline survey" refers to the nationally representative sample survey of ICT use in Myanmar mentioned earlier. "Survey respondents" refer to those who responded to this national quantitative baseline survey. "Interviews" or "qualitative research" refer to the in-depth interviews, focus group discussions, and site visits and other protocols that yielded non-quantitative insights. Finally, "qualitative respondents" refers to the subjects who participated in any of these qualitative research protocols.

2 Methodology

The research reported in this report stems from two sources:

1. A nationally representative baseline survey of knowledge, information, and communication habits and needs in Myanmar. Of all the data generated from this survey, only the data relevant to the research questions in Section 1 (i.e. the questions relating to gender) is included in this report.[16]
2. A qualitative study of women's and men's mobile phone and internet usage in an urban location (Yangon) and a rural location (Pantanaw) in Myanmar.

The following sub-sections outline the research methods used for both.

2.1 Quantitative research: Nationally representative baseline survey

This section summarises the methodology used for LIRNE*asia*'s Baseline Survey on Information, Knowledge and Communications Technology Needs and Uses in Myanmar.[17]

Two main surveys were conducted:

1. **Household survey:** This survey collected information on the characteristics of household members; housing and living status; household expenditure and income; the respondent's profile; ICT use, information sources, needs, and access; the respondent's media habits; and perceived impact of ICTs. The head of household (or a suitable alternative) was first interviewed about the characteristics of the household, and then one household member aged 15–65 was randomly selected (using the Kish grid) to be interviewed about their personal characteristics and habits. Data was collected from 8,138 households (more than 12,000 individuals in total).
2. **Cluster survey:** This survey was conducted in each ward (urban) and village tract (rural) where the household surveys were conducted, and included ward and village-level characteristics collected from the local ward or village administrator. Data was gathered from 592 ward and village administrators[18] in 420 clusters.

Fieldwork was conducted in local language/dialects by Third Eye Co., Ltd. using computer-assisted personal interviewing (CAPI) methods in February, March, and May 2015. LIRNE*asia* joined the field staff in the field and led the analysis.

The sample was designed to represent all accessible areas of Myanmar, both urban and rural with no more than ±2.5% margin of error. The township was used as the primary sampling unit (PSU). Thirty-two townships were excluded from the PSU sampling frame due to inaccessibility and security concerns. The excluded townships contained 3% of total households, or 3.5% of the population living in conventional households.[19]

Informed consent for participation was obtained from all research subjects.

16. A broader set of findings is available at: http://lirneasia.net/wp-content/uploads/2015/07/LIRNEasia_MyanmarBaselineSurvey_DescriptiveStats_V1.pdf
17. This report only includes findings relevant to the specific research questions in Section 1; a broader set of findings is available at: http://lirneasia.net/wp-content/uploads/2015/07/LIRNEasia_MyanmarBaselineSurvey_DescriptiveStats_V1.pdf
18. 14 of whom were female
19. Excluding those living in institutions. For a list of excluded townships and full details on methodology, see: http://lirneasia.net/wp-content/uploads/2015/07/LA-MM-baseline-methodology-note.pdf

2.2 Qualitative research

This section summarises the methodology used for the qualitative research module, which was designed to explore the research questions identified in Section 1 in depth, based on the baseline survey findings.

A total of 25 home visits (involving in-depth interviews with selected respondents) and 11 focus group discussions were conducted in one urban location (Yangon) and one rural location (Pantanaw) in Myanmar. Protocols lasted approximately two hours each. Focus group discussions involved six to seven participants who fit the sample criteria. Fieldwork was conducted in July 2015 by MSR (Myanmar Survey Research), with the participation of LIRNE*asia* researchers for some of the protocols.The sample included women and men, urban and rural, and working and non-working respondents, ranging from age 18 to 65 and socio-economic classification (SEC[20]) groups B–E.

Informed consent for participation was obtained from all research subjects.

Figure 5 Source: MSR

Qualitative research locations

Yangon	Pantanaw
• Urban • Commercial centre of Myanmar • Widest availability of modern infrastructure and services • High penetration of mobile phones • Fast mobile and internet service; wi-fi access available	• Rural • Typical rural and traditional small town, approximately 96 km from Yangon by road • Lower penetration of mobile phones • Mobile internet has been available since early 2015

2.3 Limitations

The key limitations of the survey data are that the data is based on respondent recall; questions on usage patterns, spending patterns, and household expenditure are therefore subject to recall bias. In an attempt to reduce this bias, questions were phrased to capture information about the most recent occurrence or time period (e.g. their last phone call or expenditure in the last month).

The key limitation of the qualitative data is the inability to generalise findings, due to the non-random sampling method used. Respondents were purposely selected to fit certain criteria (e.g. mobile-owning woman, aged 18–29, who works and also uses internet services). The sample was designed to capture as much diversity as possible (gender, age groups, SEC categories, usage habits, etc.), while ensuring there were enough sample points to identify patterns. Given our resources, we were not able to include equal numbers of men and women or equal numbers from the three age groups (18–29,30–45, 46–65), but best efforts were made to balance the sample based on the research questions.

20. SEC categorises households into groups A (highest) to E (lowest) based on the socio-economic characteristics of the chief wage earner (education, occupation, etc.) and/or household (presence of durable goods, housing material, income, etc.). In Myanmar, the most commonly used SEC is based on monthly household income. SEC D and E (those earning less than MMK 500,000, or USD 289, approximately) are considered low-income households in this research.

Table 1

Focus group discussion sample table

Protocol	Respondents	Location	Gender	Occupation	SEC	Age group	Mobile ownership	Internet and app use (via any device)
FGD 1	6	Urban	Female	Working	B-C	18-29	Owner	Yes
FGD 2	6					46-65	Owner	50% Yes, 50% No
FGD 3	6			Non-working	C-D	18-29	Non-owner	No
FGD 4	6				B-C	30-45	Owner	50% Yes, 50% No
FGD 5	6	Rural		Working	C-D	18-29	Owner	50% Yes, 50% No
FGD 6	6				D-E	18-29	Non-owner	No
FGD 7	6			Non-working	D-E	30-45	Non-owner	No
FGD 8	6					46-65	Non-owner	No
FGD 9	6	Urban	Male	Working	B-C	30-45	Owner	Yes
FGD 10	6	Rural			C-D		Owner	50% Yes, 50% No
FGD 11	6			Non-working	D-E	18-29	Non-owner	No

Table 2

Home visit sample table

Protocol	Location	Gender	Occupation	SEC	Age group	Mobile ownership	Internet and app-use (via any device)
IDI 1	Urban	Female	Working	B-C	18-29	Owner	Yes/No
IDI 2				D-E		Non-owner	No
IDI 3				B-C	30-45	Owner	Yes/No
IDI 4				D-E		Non-owner	No
IDI 5				C-D	46-65	Owner	Yes/No
IDI 6			Non-working	B-C	18-29	Owner	Yes/No
IDI 7				D-E		Non-owner	No
IDI 8				B-C	30-45	Owner	Yes/No
IDI 9				D-E		Non-owner	No
IDI 10				D-E	46-65	Non-owner	No
IDI 11	Rural		Working	C-D	18-29	Owner	Yes/No
IDI 12				D-E		Non-owner	No
IDI 13				C-D	30-45	Owner	Yes/No
IDI 14				D-E		Non-owner	No
IDI 15				C-D	46-65	Owner	Yes/No
IDI 16			Non-working	C-D	18-29	Owner	Yes/No
IDI 17				D-E		Non-owner	No
IDI 18				C-D	30-45	Owner	Yes/No
IDI 19				D-E		Non-owner	No
IDI 20				D-E	46-65	Non-owner	No
IDI 21	Urban	Male	Working	B-C	18-30	Owner	Yes
IDI 22			Non-working	B-C	30-45	Owner	No
IDI 23			Working	D-E	18-29	Non-owner	No
IDI 24	Rural		Working	C-D	18-29	Owner	Yes
IDI 25			Non-working	C-D	30-45	Owner	No

3 Gender & ICTs: A brief overview

A vast body of empirical research has shown many positive impacts of mobile phones and mobile communication. At a macro-level, the impact of mobile penetration on economic growth has been proven.[21] At a micro-level, simply providing network coverage[22] has been shown to have positive impacts on individual and market outcomes, as have specific mobile-based interventions.[23]

Interestingly, it has been shown that rolling out mobile phone networks is the most powerful development 'intervention' since it facilitates better communication, increases access to information, allows users to coordinate better and markets to function more smoothly, and ultimately improves people's livelihoods. Targeted mobile services and applications (agricultural price information apps, etc.) also have an impact, although it is more difficult to generalise the evidence.[24]

If it is accepted that ICTs have a positive effect on income and poverty alleviation, women's disparate access to ICTs could magnify existing inequalities and leave them increasingly marginalised "from the economic, social and political mainstream of their countries and of the world."[25] Clearly, the extent of these disparities needs to be measured before they can be remedied.

A significant amount of empirical evidence points to major differences between men and women in the volume, frequency, and quality of ICT access, particularly among those in developing countries. GSMA's Connected Women programme recently conducted a multi-country study to measure the mobile gender gap in low- and middle-income countries (see Box 1). The study showed that the gender gap varies between countries, and affordability is a key barrier to women owning mobile phones. LIRNE*asia*'s Teleuse@BOP research in Asia has similarly shown wide gender gaps in mobile ownership, especially in South Asian countries.[26] Other research in low- and middle-income countries also indicates lower levels of ICT knowledge and usage among women than men.

21. For example, Roeller and Waverman, 2001; Waverman, Meschi and Fuss, 2005; Kathuria, Uppal and Mamta, 2009
22. For example, Jensen, 2007; Aker, 2010, etc.
23. For example, Camacho and Conover, 2011
24. Samarajiva, Stork, Kapugama, Zuhyle and Senaratne Perera, 2013
25. Hafkin and Taggart, 2001, p. 7
26. Zainudeen, Iqbal and Samarajiva, 2010

It is important to understand the factors associated with, and perhaps even underlying, these gender disparities. Research in Africa has (quantitatively) shown that gender disparities in ICT access reflect other socio-economic disparities; women are often poorer and less educated than their male counterparts and have less access to essential services that are often complementary to ICT use, such as electricity.[27] When these socio-economic variables are controlled for, often in the African countries studied, there is no apparent effect of "gender" on access per se, or as Gillwald et al[28] put it, "women with similar income, education, employment status, etc. will be as likely to have a mobile phone as men. However, these influencing factors differ for women and therefore mobile phone usage is not equally accessible." Much of the empirical evidence on internet use in developed markets also shows this.[29]

The reality is that most women are not on par with men in terms of income, education, and employment status. In many developing countries, men are considered the breadwinners who leave the house to work, while women are expected to stay at home to care for the family. Since they spend the bulk of their time at home, there is a perception that it is less important for a woman to have her own mobile phone. This, coupled with generally lower levels of income, formal education and ICT literacy, also supports the perception that a mobile phone is not an important tool for women to have access to. In countries and regions where gender inequalities are more acute (e.g. many in the Middle East and some in South Asia[30]), there may be strong cultural barriers that further restrict women's access to ICTs (as well as education and income-earning opportunities).[31]

Many factors have been identified as influencing the gap in ICT adoption between men and women. The most significant deciding factor in whether or not a mobile phone is purchased is usually income. Many households in low-income markets strive to have at least one handset with an active SIM, but it tends to be owned by a man in the household because his need for a mobile phone takes precedence over a woman's access to one.

Policy interventions are needed that would allow women and girls to enjoy the benefits of ICTs equally. However, many of the barriers for women relate to cultural norms and practices that are difficult to legislate away.[32]

27. Muller, 2009
28. Gillwald, Milek and Stork, 2011; p.18
29. For example, Bimber, 2000; Rice and Katz, 2003; Wasserman and Richmond-Abbott, 2005
30. http://hdr.undp.org/en/content/table-4-gender-inequality-index
31. As prior GSMA research has shown. See GSMA Connected Women and Altai Consulting, 2015; also see Buskens and Webb, 2014
32. See Gillwald, Milek, and Stork

Box 1

Connected Women research on bridging the gender gap in mobile access and usage in low- and middle-income countries

GSMA Connected Women has made much progress in investigating the gender gap in mobile ownership in many low- and middle-income countries over the last five years. In its most recent study, Bridging the gender gap: Mobile access and usage in low- and middle-income countries,[33] men and women in 11 countries were studied to find out how many women in low- and middle-income countries own mobile phones, how intensively they use them, and the barriers to mobile phone adoption and use compared to men.

Data was collected from primary and secondary sources, including 11,000 closed-ended, face-to-face interviews with both men and women, 77 focus group discussions in Niger, India, the Democratic Republic of the Congo (DRC), Mexico, Indonesia, China, Turkey, Kenya, Colombia, Egypt, and Jordan.

Source: GSMA Intelligence and World Bank data, Altai Consulting analysis

Mobile phone ownership in low- and middle- income countries

Population (billions)

Note: There are 80 million fewer females than males in low- and middle-income countries: unconnected population includes individuals who do not own, but may borrow phones.

33. GSMA Connected Women and Altai Consulting, 2015

Key findings of the study:

- Over 1.7 billion females in low- and middle-income countries do not own mobile phones.
- Women, on average, are 14% less likely to own a mobile phone than men, which translates into 200 million fewer women than men owning mobile phones.
- Women in South Asia are 38% less likely to own a phone than men, highlighting that the gender gap in mobile phone ownership is wider in certain parts of the world.
- Even when women do own mobile phones, there is a significant gender gap in mobile usage which prevents them from reaping the full benefits of mobile phone ownership. Women report using phones less frequently and intensively than men, especially for more sophisticated services such as mobile internet. In most countries, fewer women than men who own phones report using messaging and data services beyond voice.
- Cost remains the greatest overall barrier to owning and using a mobile phone, particularly for women, who are often less financially independent than men.
- Security and harassment emerged as one of the top five barriers to mobile phone ownership and usage, and is a key concern for women.
- Women also cite service delivery issues (network quality and coverage and agent or operator trust) and technical literacy and confidence as key barriers to mobile phone ownership and use.
- Social norms influence women's access to and use of mobile technology, and often contribute to women experiencing barriers to mobile phone ownership and use more acutely than men.
- Women understand the inherent value of mobile phones and a 'lack of perceived value' is no longer a top barrier to mobile phone ownership, indicating a positive shift in attitudes in the last five years.
- Systemic barriers, including the lack of gender disaggregated data at all levels (mobile subscribers, national statistics) and unconscious biases within organisations, have kept the focus off women and sustained the gender gap in ownership and usage.

Taken together, these findings indicate the gender gap in mobile ownership and usage are driven by a complex set of socio-economic and cultural barriers negatively affecting women.[34]

34. A number of recommendations for stakeholders can be found in the report: http://www.gsma.com/connectedwomen/resources-2/gender-gap/

4 Myanmar's socio-economic context

This section looks at the socio-economic context of Myanmar (based on LIRNE*asia*'s baseline survey findings and national census data) as well as the country's social-cultural context (based on the qualitative research findings) to provide a framework for understanding the key research findings presented in Section 5.

4.1 Socio-economic context and challenges

The mean age of survey respondents was 35 for men and 36 for women. Sixty-eight percent of the survey sample came from rural areas and 32% from urban. There are clear socio-economic disparities between those living in urban and rural areas, as well as access to services, but in qualitative research protocols (both urban and rural), the main day-to-day challenges respondents cited were lack of income and job opportunities.

According to the survey, more than two-thirds of households in Myanmar spend less than MMK 300,000 (USD 291) per month (Figure 6). When household expenditure is used as a proxy for household income, this equates to socio-economic classification groups D and E (the lowest two). In rural areas, the most common occupations were farming/animal husbandry/fishing/logging and skilled/unskilled labour (Figure 7), which means most earn a daily wage or on a profit/dividend/interest basis (Figure 8).

More women (53%, compared to 7% of men) were out of the workforce (not seeking employment) and identified themselves as housewives (Figure 7). In Myanmar, housewives have a huge impact on the financial standing of the household even if they are not directly involved in any income-generating activities. The primary female in a household (mother, wife, or other) is the financial manager of the house, ensuring that money is spent and saved wisely. Although their main role is in the home, some housewives contribute to household earnings through small jobs and business ventures.

The biggest concern among those interviewed in the qualitative research was their limited employment opportunities. Most rural respondents had no regular income, many were daily wage labourers and earned seasonal income from fish farming and fishing in the paddy fields. The types of jobs available to women in rural areas tended to be limited, and the survey findings showed there is a substantial wage disparity between men and women (Figure 9), with men earning up to 77% more than women. The wage difference is lower in urban areas (46%).

"My mother is also a housewife and didn't work outside. So normally, we say she is dependent. But her role in our family is really important. She guided and looked after us so we became educated. She taught us when we were young. She opened a bookshop because she wanted to do some business to increase our income. But we look in general, her job can't be seen because she is a housewife and she is dependent although she plays a very important role in our life."

Female mobile owner, 40, SEC B, Yangon

"Guys get more chance than females because males can go and work at the workshop. But females have to do mat weaving business, here... We have less job opportunities here in Pantanaw."

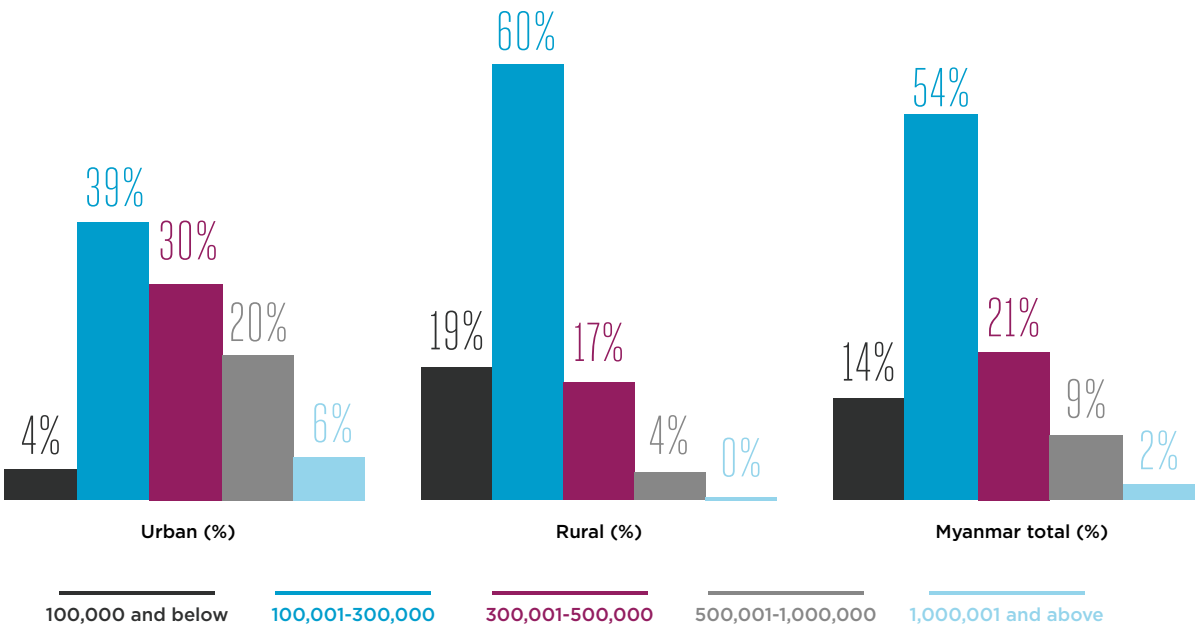
Female mobile owner, 28, Pantanaw

Figure 6

Source: LIRNE*asia* Baseline Survey, 2015

Monthly total household expenditure, MMK

% of Myanmar households



Note: USD 1 = MMK 1032.49 as of 31 March 2015

Figure 7

Source: LIRNE*asia* Baseline Survey, 2015

Occupation

% of population aged 15–65

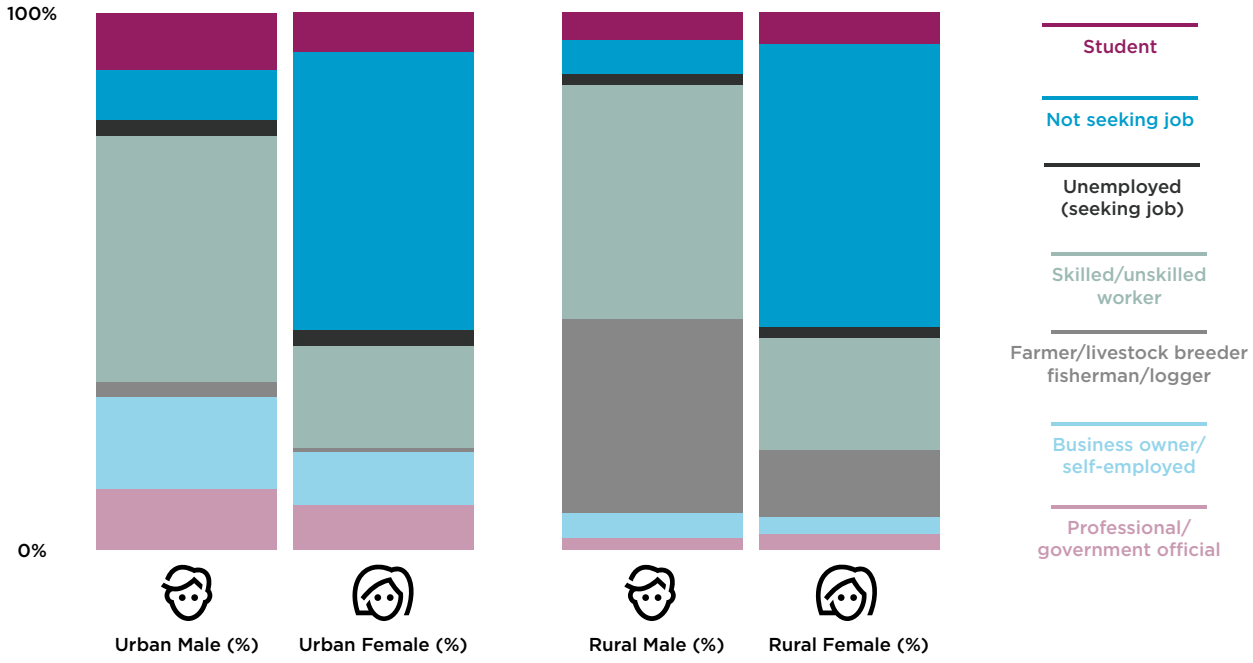
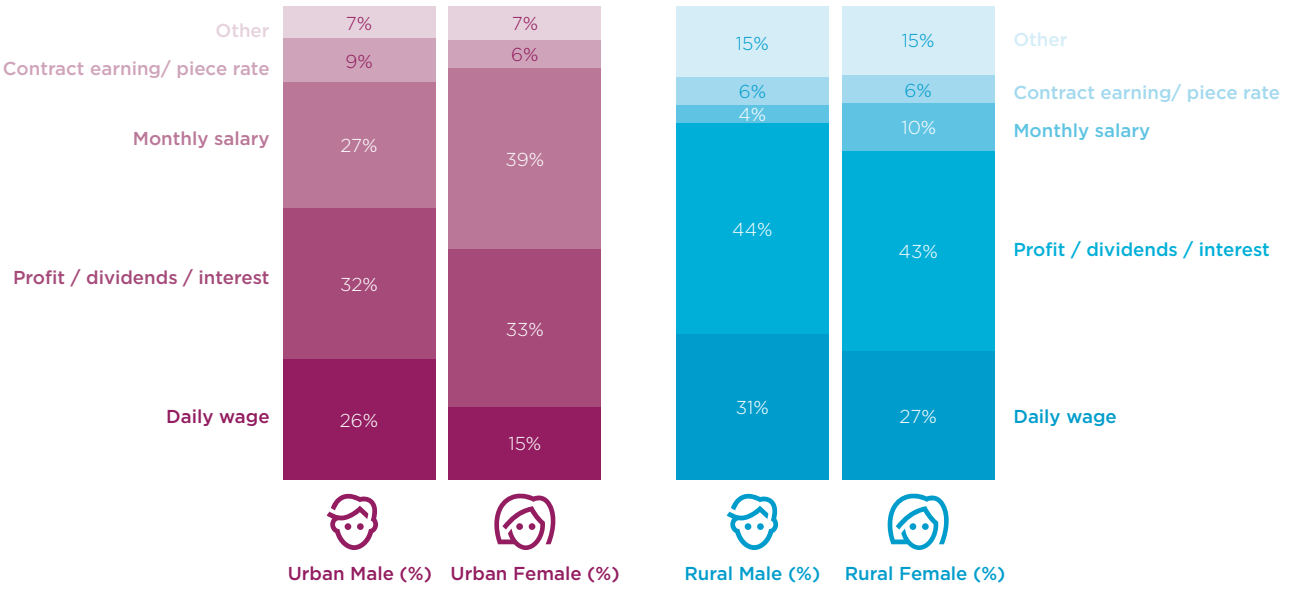


Figure 8

Source: LIRNE*asia* Baseline Survey, 2015

Types of earnings

% of population aged 15-65 who are earning money



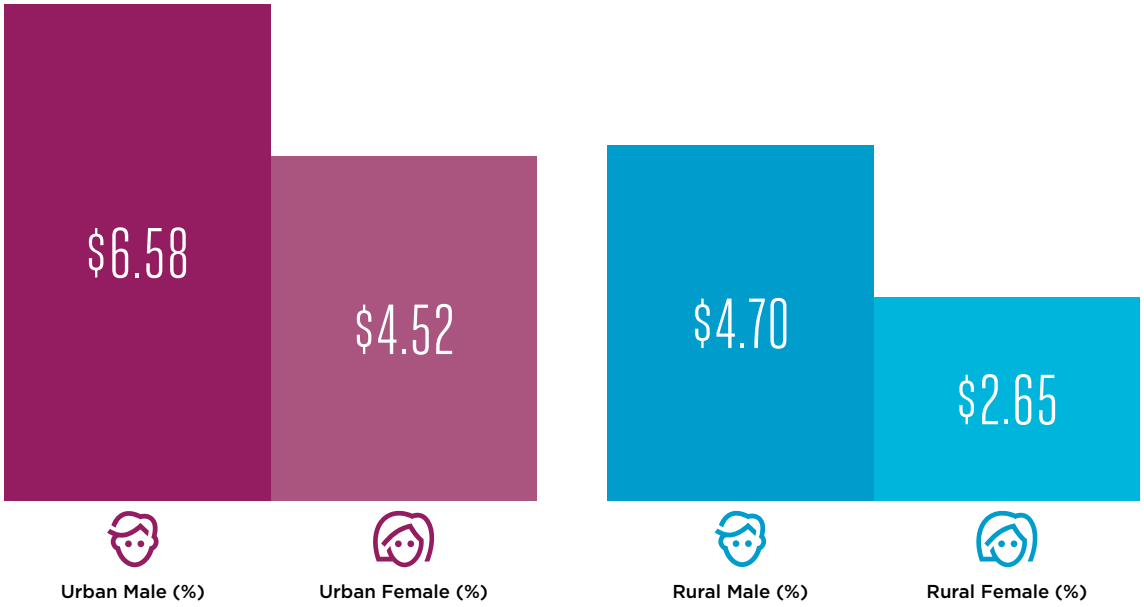
Note: 'Profit/dividends/interest' includes earnings from business ventures and/or interest earnings on loans, and includes small, medium, and micro enterprises and self employed; 'contract earning/piece rate' includes earnings for contract-based work (e.g. a contract for construction of a wall) and/or earnings from the manufacture or sale of goods (e.g. per mat weaved).

Figure 9

Source: LIRNE*asia* Baseline Survey, 2015

Mean wage that daily wage earners earn for a day's work

USD equivalent



Note: USD 1 = MMK 1032.49 as of 31 March 2015; includes only daily wage earners

Education levels are lowest in rural Myanmar, with just 15% having more than primary education, compared to 48% in urban areas (Figure 10). Gender differences were not as stark, although a higher number of women had either not completed primary school or had not enrolled at all. The qualitative research found this was not only the result of girls (more so in earlier cohorts) having to drop out of school to help earn money, but also limited resources being funnelled towards their brothers' education instead. Respondents also pointed out that there is more emphasis nowadays on educating all children to improve their life opportunities, and financial support from relatives working abroad helps to make this possible.

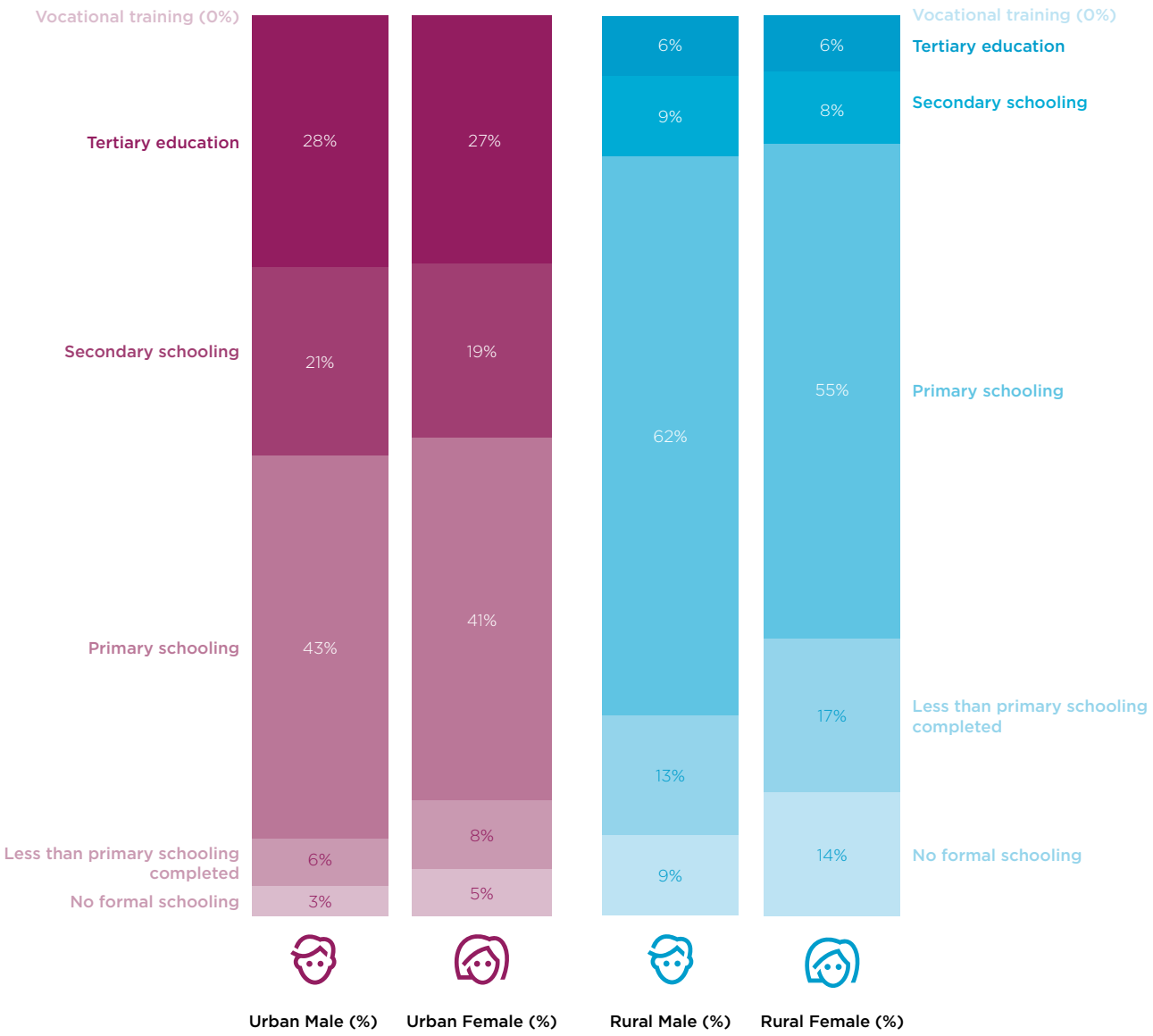
> "We need to get education for females to get them a job. As a man you could still go abroad and work even without education."
>
> **Female mobile owner, 52, SEC C/D, Pantanaw**

Figure 10

Source: LIRNE*asia* Baseline Survey, 2015

Highest level of education completed

% of population aged 15–65



The national baseline survey revealed that access to electricity in rural households in Myanmar is low: just 37% (Table 3). Even where electricity is available at the village level, affordability is an issue. According to qualitative respondents in Pantanaw, the total cost of getting connected to the electrical grid is as high as USD 300–400, which is higher than the total monthly expenditure of the majority of households in Myanmar (Figure 6). Low rural connectivity does not seem to be a barrier to mobile access, as owners either charge their phones at family or friends' houses or mobile-charging businesses. Urban access to electricity is far better, with 93% of households either connected to the national grid or another source.

Table 3

Source:LIRNE*asia* Baseline Survey, 2015

Access to electricity

% of households

	Urban	Rural	Myanmar total
GOVERNMENT ELECTRICITY SUPPLY	88%	19%	40%
OTHER ELECTRIC POWER	5%	19%	14%
TOTAL	93%	37%	54%

Sixty-nine percent of households have access to some kind of transportation, mostly bicycles, motorcycles, or three-wheeled vehicles. Houses are usually made of wooden materials, with bamboo used more often in rural areas. Houses in rural areas are basic, often with no running water or sanitation. Houses are sparsely furnished; people sit and sleep on the floor. Despite this harsh living situation, villagers value the communal spirit of their communities and having their neighbours as a support network. In contrast, urban dwellers often live in a rather anonymous environment, knowing neighbours only by sight.

Urban residents in SEC C and B have a much more comfortable home than lower income families and rural residents. They have access to electricity (although power outages occur frequently) and water, and own appliances like air conditioners, refrigerators and newer model TVs, as well as a bed. However, the living conditions of urban residents in SEC D and below is quite similar to their rural peers.

While the urban and rural poor share concerns about inadequate income and employment opportunities, the qualitative research revealed additional urban-specific challenges, including:

- Longer commuting time due to greater road congestion
- High costs of better and higher education
- Cramped living conditions.

4.2 Social fundamentals and key values in Myanmar society

There are clear differences between urban and rural areas in terms of income, education, access to services, and other factors. Yet, many of the 'softer' characteristics (family values, social norms, etc.) appear to be shared across urban and rural Myanmar, most noticeably among the lower SEC (D and E) urban population.

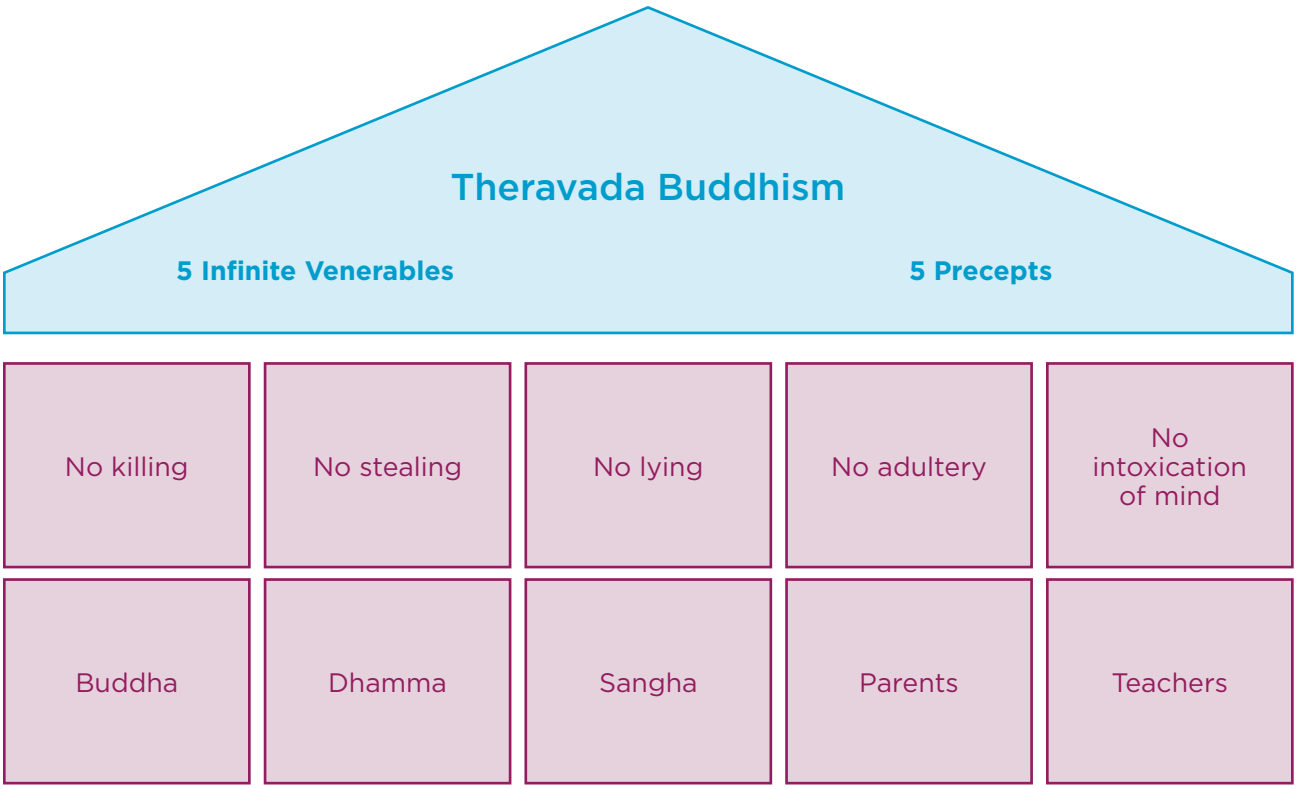
4.2.1 Role of religious values in shaping social expectations

Theravada Buddhism is the dominant (state) religion in Myanmar, with the majority of people in Myanmar following this religion. Buddhists are expected to follow five Precepts (e.g. no killing, no stealing) and to show respect to the five Infinite Venerables, made up of the Three Jewels (Buddha, Dhamma [teachings], Sangha [community of monks]) along with parents and teachers (Figure 11). In this form of Buddhism, everyone (parents, teachers, children, husbands, wives, etc.) has predetermined roles they are expected to fulfill. The ultimate aim is to create good karma through actions, and any deviation from this has a negative impact on the family's honour and reputation and ultimately leads to bad karma—an undesirable outcome.

While Buddhists are expected to show respect/ humility and obedience to all of the five Infinite Venerables, next to the Buddha, parents are the most important in life. Looking after one's parents is a key part of the 'children's role'. Even in affluent families, children send money and buy gifts for their parents. The well-being of the family (and extended family who typically live in the same household) is also a priority in most people's lives. Families (including those living away from home) come together at least four times a year for religious festivities and other family celebrations in Myanmar. Therefore, the need for families to be in touch for planning is high. Supporting the Sangha (community of monks) is also a key priority.

Figure 11 Source: MSR

Five Infinite Venerables and Precepts in Theravada Buddhism



4.2.2 Gender roles in Myanmar

Moderator: "Have you encountered/ witnessed/ heard of any gender discrimination?"
Respondent: "No."
Moderator: "How about at home, does your brother get more priority over you?"
Respondent: "Actually, yes. Mother gives more priority to him than me."

Urban female, 46, non-mobile owner

"I haven't experienced any different treatment of males and females. If they would do I would complain. The only difference is that we can't become a Buddha. Women are also leaders."

Female mobile owner, 19, SEC C, Yangon

Prescribed gender roles in Myanmar govern how Myanmar society functions. Men are expected to fulfill the role of the family head, responsible for breadwinning and family leadership, and they also take the lead on matters outside the home. Women are expected to play a nurturing role, looking after the family and elders/ageing parents, and putting the needs of others before their own. These roles are taught to children at an early age and are reinforced in school education and textbooks (Figure 12). Both men and women see these as their 'duty' and (older) women specifically do not see this as discrimination in any way.

Females cannot become a Buddha according to Theravada Buddhism; therefore, males have a more important position in society and tend to be favoured over females. However, many women in the qualitative research seemed to accept this and take it for granted, to the extent that some may not even perceive it as gender discrimination.

The younger generation is somewhat torn between their traditional role, which includes obedience to parents and social norms, and experimenting with new ways of communication with the opposite sex, including social media. Access to 'modern' influences (fashion, celebrity lifestyles, dating, etc.) through mobiles and social media is challenging traditional gender roles. Changing work environments (longer opening hours, increased urban migration, more female entrepreneurs, etc.) requiring greater flexibility and mobility are also having an impact on gender roles.

Some respondents noted that gender roles are becoming more flexible as more women continue their education and leave the home to work. In some households encountered in the qualitative research, women were the main breadwinners and men in the household helped out with domestic chores.

In terms of employment, it is widely acknowledged that women have less earning opportunities and that a significant wage gap exists (as the survey data also shows; Figure 9). While there are more job opportunities in Yangon, respondents in the qualitative research felt that, in most companies, women hardly ever hold management positions. Young women more often find jobs as sales/promotion staff in cosmetic or fabric stores. Some of the younger respondents pointed to inequality between women and men in terms of career progression, with employers preferring to hire unmarried (and attractive) women for these positions. Unmarried women are seen as more flexible since they are not encumbered by family responsibilities. One respondent had lied to her boss about her marital status to get the job.

Figure 12

Source: MSR

Excerpts from a Myanmar primary school textbook and translation

Our Mother

Our Mother, who feeds and nurtures us till we grow old and loves us much.
Our Mother, who sets the disciplines for our childhood and tells us which is right and wrong.
Our Mother, who sends us to school and makes us educated.
Our Mother, who treats us nourishing food to make us healthy.
Our Respectful Mother.
Our Mother, who treats us with kindness and takes care of our clothing.
Our Lovely Mother.

Our Father

Our Father, who earns money for our needs (food, clothing, shelter).
Our Benefactor, Father.
Our Father, who knows how to do and what to do if some issues happen.
Our Father, who manages our family.
Our Respectful Father.
Our Father, who is thoughtful, intelligent and who can control us.
Our Father, who works for the country.
Who works for us.

4.2.3 Importance of family and the home

In Myanmar, the home is like a nest, a place where all family members belong and stay together. Being with one's family at home is regarded as the 'default' mode, and people generally do not leave without a valid reason (work, studies, etc.). Respondents generally agreed that females have to be home after dark. Males have more freedom and can stay out in the evening to meet friends at teashops or beer stations, but mothers or wives 'monitor' them via mobile phone. Both male and female family members who go out for work or leisure need to inform their mother (and/or wife) of their whereabouts and are expected to be in frequent contact with home. In part, this has to do with safety and guidance (to ensure the family member is not doing something that would harm the family's honour/reputation), but part of it is also the closeness of family members. Many adult children are close to their family, and girls and women especially discuss most affairs with their mothers and need to feel close to her if they live in another town. Therefore, those who work or study outside the home (e.g. in another town) are 'entitled' to have a mobile phone, regardless of gender.

4.2.4 Gender roles at home

In addition to their role as family caretaker, women (wife/mother) are almost universally the financial managers of the household, regardless of whether or not they earn money or have a job. All working family members give their income to either their mother or wife (if they do not live with their parents). She spends the money carefully on necessities like food and education, and tries to save for emergencies (e.g. health). She is the decision-maker for daily or routine purchases.

According to the qualitative research, in most families all income is handed over to her, and family members will ask for some back or get pocket money from her (e.g. for transport, snacks, teashop, and betel and cigarettes for men). Some men keep some of their income for themselves (e.g. 20–30%).

Men are used to this financial arrangement and know that incomes are spent wisely for the good of the entire family. Those that hand all of their income over to their wives/mothers said they have no issue asking them for pocket money since they would hardly refuse if the amount is reasonable.

Men are considered to be the (official) head of the household and participate in decisions about bigger and non-routine purchases. These kinds of decisions are discussed and made by the leading male and leading female in the house; often, older children are also involved. If a decision cannot be reached, the male head of household will decide.

It is vital to note that important family decisions are often not led by men per se, but governed by seniority (e.g. a grandmother is asked for her opinion, too). Younger children are generally excluded from decision-making.

> "Males are the head of the household. You have to favour and respect them. He has to lead the family. Whatever we do, we have to discuss with him."
>
> **FGD, Rural female mobile owner, 18–28, SEC C/D**

> "The father is the head of the family, he is the oldest in the family so he has to get favour. He has outside contacts, I rather stay home."
>
> **Home visit, Yangon, female owner, 25, working, SEC C**

Quite often, a couple will buy a mobile phone together, although product expertise determines who will actually go and buy it. Most women feel that their technical know-how is inferior to men (due to their lack of experience with mobiles and other technology), so they let them decide the brand/model/type. Quite often adolescent children accompany and consult their parents on electronic goods, especially mobile phones, since they are seen as having more experience and expert knowledge than their parents.

To summarise, women have a lot of influence and decision-making power in families, but men dominate 'out-of-home' affairs, especially about work and the community. Only men would gather and make decisions about community issues, for example.

However, in one village there were many female-headed households who would get involved in community decisions that had a social aspect. Male dominance in the 'outer' world stems from a shared cultural belief that they are the main income earners and that is their duty. Even if women are the main income earner (as was encountered in this study), men would still be regarded as the head of the family and have the ultimate veto over family affairs. However, it seems that most operate on equal terms since both male and female qualitative respondents stressed collective leadership in their families.

"I plan to buy a mobile but we do not have enough income. My wife says that I shouldn't buy one. She is about to give birth so we need to save the money."

FGD, Rural male non-owner, 18–29, SEC D/E

5 Mobile use in Myanmar

According to the research, 57% of Myanmar's population aged 15–65[35] used a mobile the last time they used a phone,[36] while 30% had never used any type of phone (mobile or fixed) before. Women were 6% less likely to have used a phone in general than men. The reasons for this difference could be that many women do not own their own phone, so their access is through shared household phones (mostly mobile), or borrowed phones (mostly from other household members). Furthermore, of the women in Myanmar aged 15–65, almost half stay at home (i.e. do not work). Even if someone in their household does have a mobile, it is most likely taken with them out of the house during the daytime.

Both men and women use the phone for social reasons or keeping in touch (Figure 13). Based on the last call made by respondents who are currently working, men used the phone more for livelihood-related purposes.

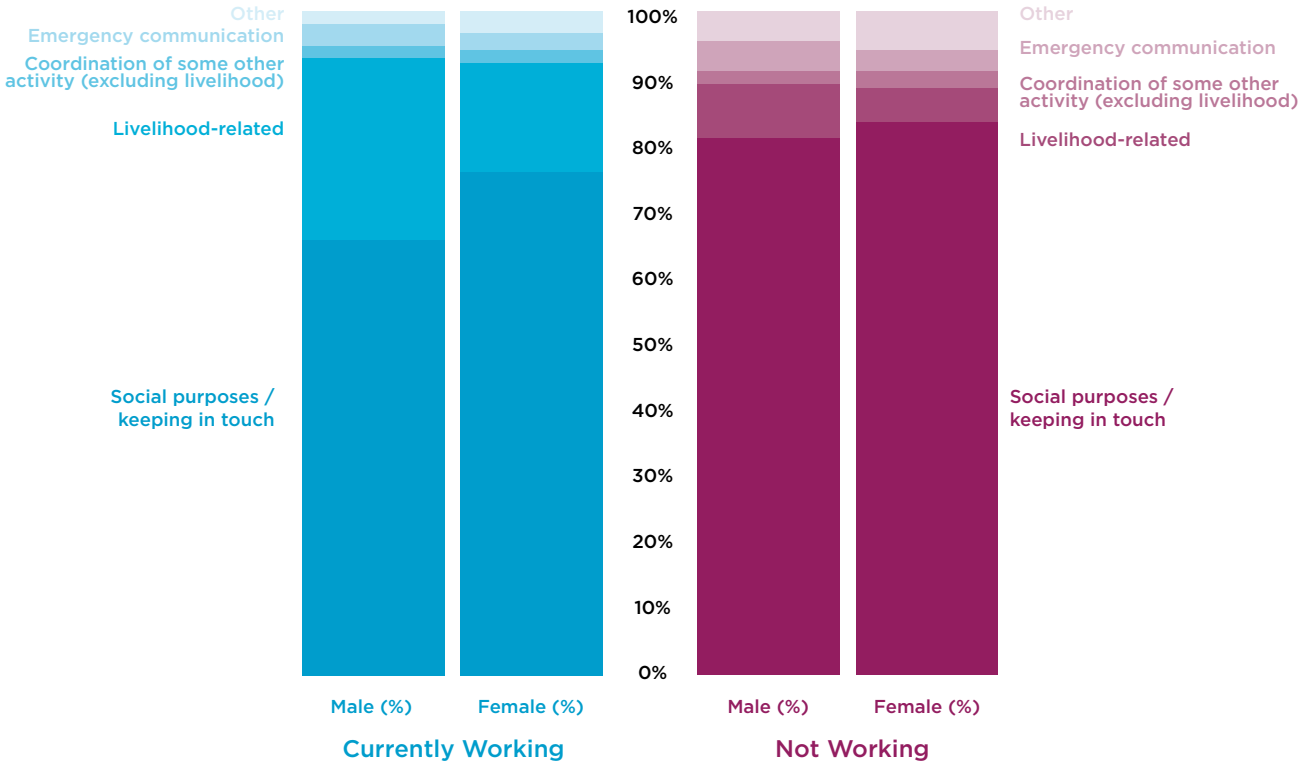
35. The target population of the national survey
36. While 13% had used a fixed phone/landline for their last phone call, 30% had never used a phone before.

Figure 13

Source: LIRNE*asia* Baseline Survey, 2015

Main purpose of the respondent's last phone call

% of the population aged 15–65 who have used a phone before



5.1 Getting connected

The well-being of one's family is a top priority for most people in Myanmar. Greater access to mobile communication in Myanmar has made it easier and more affordable to stay in touch with family, according to qualitative respondents. As mentioned in Section 1, 33% of females and 47% of males aged 15–65 own a mobile phone. Mobile ownership was highest among those who were currently working: 44% versus 33%.

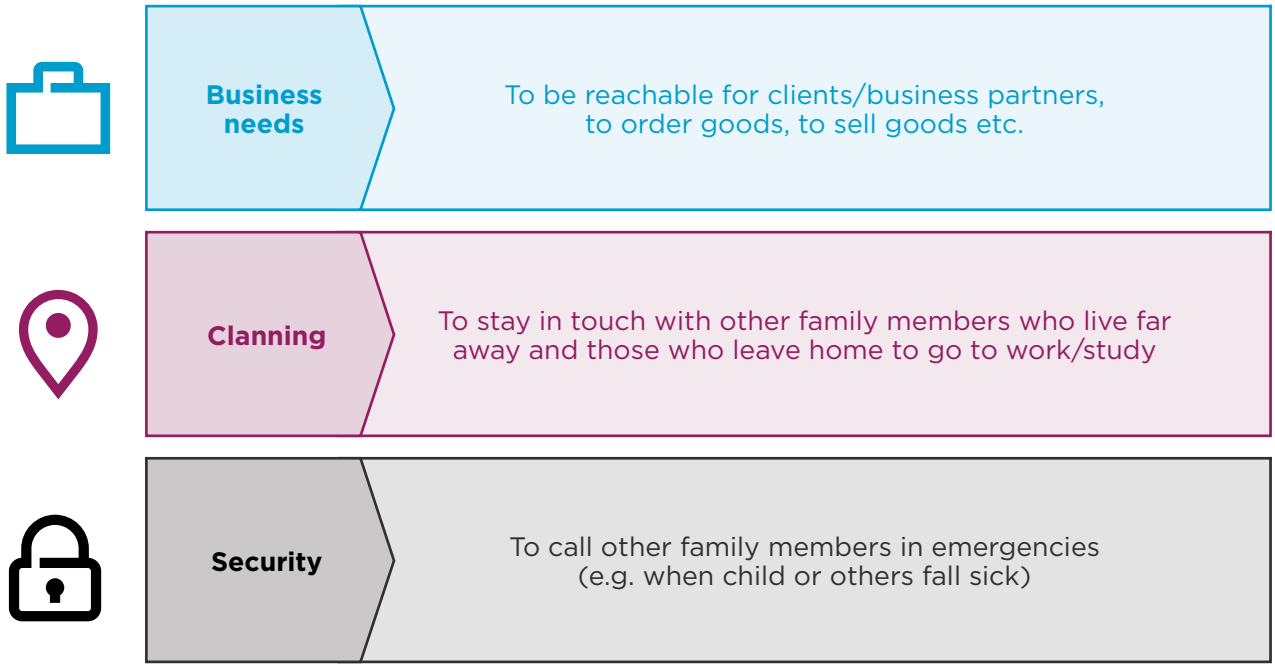
At the time of the survey, mobile ownership[37] in Yangon was 83% of 15–65 year olds. This high penetration in urban areas has contributed to a perception that 'everyone', even the very poorest, have a mobile phone. According to the survey, 79% of men and 69% of women who are currently unconnected planned on getting connected by February–March 2016.

> "Everyone has it. Only me don't have it. Even those who collect plastic bags have it."
>
> **Female non-owner, 28, Yangon**

37. That is, ownership of an active mobile SIM card.

Figure 14 Source: MSR

Initial adoption motives



A common pattern seen in the qualitative research is a change in adoption motives as mobiles become more widespread and people learn more about them. Initially, adoption motives are related to voice calls, either for business needs (communicating with clients/business partners, etc.), staying in touch with family ('clanning'), or for security/ emergency communication. Social status is now a key motivating factor—to avoid feeling left out, or to avoid the embarrassment of having to ask others to use their phones. Entertainment/relaxation is another motivating factor, as smartphone owners use the internet and many have discovered gaming and listening to music.

"Even my mother plays games. We thought it's relaxing."

Female non-owner, 36, SEC D-E, Yangon

"I want the latest model to feel modern."

FGD Yangon, female non-owner, 18–29, non-working, SEC C/D

"I was the first [in my family] to own a phone and bought it 8 months ago. I wanted it because everybody has one."

HV, rural, female owner, 21, working

5.1.1 Who makes the decision to get connected

There are essentially two components to the 'decision' to adopt. The first is the decision to actually get a mobile phone; the second relates to the decision (or set of decisions) to act on it.

Since getting connected for the first time would involve spending a fairly large amount of household income, the decision would most often be discussed among the 'seniors' in the house: the household head, spouse, elders, and any adult children. The practice of consulting with seniors on 'big' decisions is a part of the culture observed in most families, as revealed by the qualitative research. Younger members of the household would typically not be involved at this stage.

Once a decision is made to buy a mobile, a second set of decisions needs to be made: what type of handset to buy, which provider's SIM to purchase, etc. Typically women would not get involved in these decisions; they feel they have little product knowledge and that men would do a better job at deciding since they know more about technical issues. For these kinds of decisions, additional product expertise is sought from family/ friends or younger members of the household who are knowledgeable about mobile phones.

Some young urban educated women interviewed in the qualitative research were quite knowledgeable; they knew exactly which model they wanted and compared options themselves before telling their family what they wanted. They felt their mobile phone knowledge was on par with men and were self-confident in this respect.

Enabling women to improve their digital skills can help them to participate in the handset purchase decision.

5.1.2 Who gets the first mobile?

According to the national survey, 58% of households have an active SIM, and 57% at least one working handset; many households had more than one. In fact, in some affluent households visited in the qualitative research, all adults had a mobile.

In less affluent ones, where only one or two could be afforded, ownership was 'awarded' by necessity. Those who manage a business, do trading, or work outside the home or in a different part of Myanmar were seen to have a higher need for a phone and therefore got one first, regardless of gender.

In most cases, however, it seems that male family members owned a mobile first since they are the ones who are expected to/are more likely to go outside the home and earn an income. Furthermore, they earn more than female family members, so they can save and afford them faster. Since access to mobile communication has become less expensive, many think that everyone should have a mobile phone to stay in touch with family members all the time. Even low-income earners sometimes borrow to buy or buy a mobile in installments, because they do not want to be left out, particularly in urban areas.

In some families, women were actually the first one to own a mobile because they managed the family business or left home to study. A few women in the sample studied abroad or lived in Yangon, separated from their family. Those women were self-confident and had an independent mind-set, which increased their curiosity to engage with the internet and technology.

"My youngest daughter has a mobile. She bought it with her income by installment. Her brother only has a low income."

FGD rural, female non-owner, 30–45

"I have to give priority to my younger brother. All his friends have one so he wants one, too. I pity him."

FGD rural, female non-owner, 18–29, working, SEC D/E

"I was the first to own a phone and bought it 8 months ago. I wanted it because everybody has one. My family asked me to save money and buy it. They didn't want to go to the phone shop anymore. My brother lent me money."

HV, rural, female owner, 21, working

"Males work and have business so they carry the phone. But if the wife has business she also has one. Today even youngsters and children have a mobile."

HV, Yangon, female owner, 19, not working, SEC C

"Usually women my age hardly own a mobile in this village because they don't have an income. I do business so I need one."

HV, rural, female owner, 52, working, SEC C/D

Actions that help households afford a second, third, or more handsets will help to enable more women to get their own mobile.

5.1.3 Who taught them to use the mobile phone?

Most women have learned how to use a mobile phone from relatives or friends who already own one. Shop staff will also explain how to use it. However, many women are not actually present when their phone is purchased, so they do not get an introduction to the phone at the shop. Many rely on siblings, husbands, or other relatives to show them how to operate the phone and the internet. Many female owners are still insecure and treat their phone with utmost care. They are afraid that they may break it by pressing 'wrong' buttons, and just stick to basic calling. Many feel too embarrassed to go to a phone shop to ask basic questions about the internet or apps. They do not even know what details to ask because they do not fully understand the internet/apps.

As a result, many women only follow the instructions of others instead of exploring all the possibilities and functions themselves. This leaves many women with very limited knowledge of their phone and the internet.

"Females don't have the time to learn and fiddle with phones since they are busy at home. They are not as skillful as us."

FGD, rural, male owner, 30-45, SEC C/D

"We don't fiddle with it a lot because we are concerned that we would damage it. We don't want to waste money. I can't afford a new one."

FGD Yangon, female owners, 18–29, working, SEC B/C

"Males know better how to operate and to repair phones … there are hardly females working in phone shops."

HV Yangon, female owner, 19, SEC C

- Making basic digital skills available and accessible to women, without having to rely on shop staff or other men, will help to increase mobile usage.
- Simplifying handset features may improve the user experience.
- The reason women fear damaging the handset should be understood, and actions taken to negate this fear.

5.1.4 Selecting a mobile operator

Until 2013, a SIM card in Myanmar could cost hundreds of dollars, and even if one had the money, SIM cards were not freely available. In 2013, the government introduced a lottery whereby monthly winners could buy a SIM for as little as MMK 1,500 (less than two US dollars). Since liberalisation and the entry of Ooreedo and Telenor in 2014, the price of a SIM has stayed at MMK 1,500, but SIM cards are now freely available to anyone who can afford them. This has enabled scores of people to get connected, and some (around 13%) are even able to afford more than one SIM card. Multi-SIM ownership is a strategy employed by some to take advantage of cheaper rates and promotions, by others to take advantage of network availability, and others to take advantage of better call/data quality.[38] In general, the consensus among qualitative research respondents (in Yangon and Pantanaw) was that:

- **MPT** is used for incoming calls since many have had this SIM the longest and their contacts are familiar with this phone number; network stability and data speed is perceived as inferior to Telenor and Ooredoo, especially in Pantanaw.
- **Telenor** is perceived to have the best calling and data rates, although the internet connection can be patchy in places.
- **Ooredoo** is perceived to have a good network quality but higher charges than others.

New mobile owners tend to use what others are using, but female owners did not actively select the operator themselves because others bought their handset and SIM.

Enabling women to improve their digital skills can help them to participate in the SIM-purchase decision and find a plan that best suits their needs.

38. For example, though mobile signal is present in 96% of wards and 87% of villages according to the national survey, only 56% of mobile owners in urban Myanmar (wards) and 40% in rural (villages) say that their mobile calls are successful upon first attempt.

5.1.5 Smartphone usage

At the time of the survey, 66% of mobile owners aged 15–65 in Myanmar had a touch-enabled smartphone (commonly known as 'touchphones'—any mobile with a touch screen). Three percent of owners had both a smartphone and a keypad phone (a mobile with a keypad interface; in most cases this was a basic/feature phone). There were no differences between male and female owners of smartphones (Table 4).

Table 4

Source: LIRNE*asia* Baseline Survey, 2015

Type of mobile handset owned (% of mobile owners)

	Male mobile owners (%)	Female mobile owners (%)
OWN A 'TOUCHPHONE' (SMARTPHONE)	65%	64%
OWN A 'KEYPAD' PHONE (BASIC/FEATURE PHONE)	37%	37%

The arrival of installment plans has brought smartphones within reach of many who would not otherwise be able to afford them. Phone shops also offer cheap bundles (handset + SIM + top-up) from Ooredoo or Telenor. For example, one shop in Pantanaw offered such a package for MMK 25,000 but it included a keypad handset. The majority of respondents are not interested in keypad phones.

Particularly in Yangon, having a smartphone has become the standard, since people rarely see or know people with a keypad phone. Qualitative respondents indicated that having a keypad phone would be somewhat of an embarrassment, and they would be perceived as socially inferior. Some prioritise social status over functionality; one respondent was holding out on buying a mobile because she could not yet afford a smartphone (even though a keypad phone was already within her budget). When asked whether people would consider second-hand smartphones, there was reluctance, mainly because the owner would feel inferior to other owners since they had not purchased it themselves. Similarly, when asked if they were given a mobile for free, they would accept it, but would still feel inferior if people knew they had not paid for it. The ability to afford a (brand new) mobile phone clearly bolsters the perception of one's social status, or at least in their minds.

Some rural owners of smartphones used it as if it were a keypad phone, and limited their use to basic calling instead of exploiting all the functionalities of their phone. That said, some indicated that a keypad phone was fine for those who just needed to make calls, but a smartphone was needed for Facebook, Viber, and other internet-related uses. Female urban non-owners already had some knowledge of the internet and/or app-use either by using them on someone else's phone or watching them use it.

Those few keypad phone owners (mostly older, rural, lower-income individuals) in the sample were actually satisfied with what they had since their primary usage motive was to make phone calls. They believed that smartphones were more complicated to use.

Based on the qualitative research, most rural participants had low brand awareness; if they had any, it was Huawei. For them it was important to own any touchphone, regardless of the brand (Figure 15). In Pantanaw, the female qualitative respondents had no awareness of models and prices.

Brand awareness among the Yangon qualitative respondents was high. The qualitative research suggests there are two categories or stages of awareness in urban areas. In the first category or stage, people do not want to have a smartphone, but they want a particular brand. Brands like Huawei and Samsung are popular (i.e. many aspire to own them even if they cannot afford them). The second stage (where younger and more affluent owners are), owners strive to have the latest model and most prestigious brand to show off their social status.

There is a common belief that a cheap phone cannot be any good. Most female non-owners had no understanding of how to compare different brands or models. They did not know what to look for beyond generic features like 'needs to have a touchscreen', 'want what others have', or 'want a big screen to play games.'

"Wives should have at least a keypad phone so that we can communicate when I am away. Everybody should have one otherwise you will be outdated."

FGD, male owner, rural, 30–45, SEC C/D

"My younger sister has the only mobile in the family. My father decided to buy one. She said that all her friends had a touchphone so I gave her favour and said that she can have it."

FGD, rural, male non-owner, 18–29

Moderator: "Did your husband tell you to buy a mobile phone?" Respondent: "Yes. But I can't buy it because I don't have enough money. Sometimes he gave money to buy a mobile phone. But I have to use it for school fees."

Female non-owner, 28, Yangon

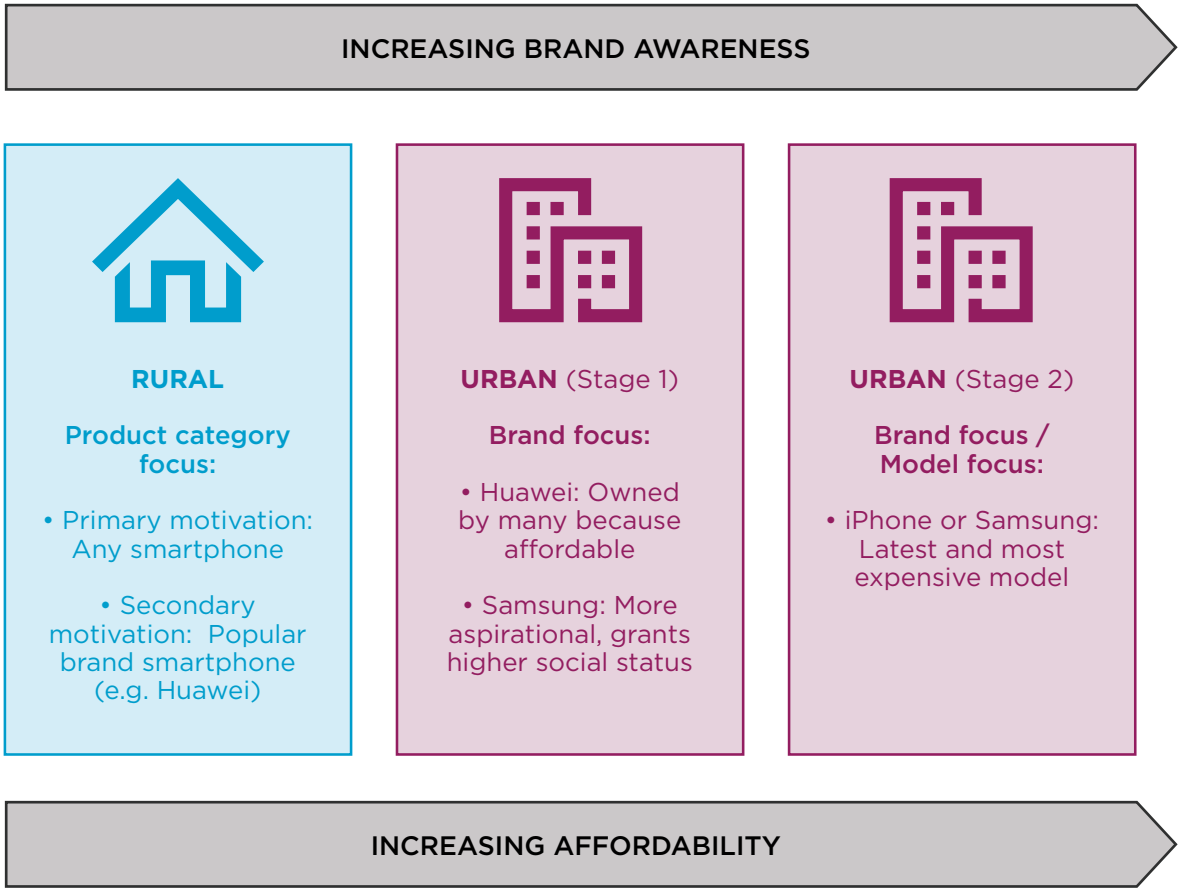
"I want the latest model to feel modern."

FGD Yangon, female non-owner, 18–29, non-working, SEC C/D

Figure 15

Source: MSR

Importance of handset brand



- Making mobile handsets more affordable (e.g. through installment plans, micro-loans) will help many more to get connected.
- Developing simplified or scaled down smartphones (in terms of design and features) could improve the user experience.

5.2 Understanding the gender gap/differences

The gender gap in mobile phone ownership in Myanmar is 29%. As mentioned in Section 1, the gender gap is highest among lower income households, particularly those that spend/earn less than MMK 500,000 (SEC groups C, D, and E).

5.2.1 Barriers to women's mobile ownership

Table 5

Source: LIRNE*asia* Baseline Survey, 2015

Main reason for not owning a mobile phone

% of non-owners

	Male	Female	Myanmar total
I CANNOT AFFORD A HANDSET	42%	38%	40%
I HAVE NO USE FOR IT / DON'T NEED ONE	25%	34%	30%
NO MOBILE COVERAGE WHERE I LIVE	11%	6%	8%
I CANNOT AFFORD A SIM CARD	2%	2%	2%
I DON'T KNOW HOW TO USE A MOBILE/TOO COMPLICATED	5%	8%	7%
MY PHONE IS BROKEN	5%	2%	3%
NO ELECTRICITY WHERE I LIVE TO CHARGE MOBILE PHONE	2%	1%	1%
MY PHONE GOT STOLEN	2%	1%	1%
OTHER	7%	8%	8%

Affordability

The most common reason for not owning a mobile phone is the inability to afford a handset (Table 5). Affordability is more of a concern in lower income households, with 45% citing it as a main reason for not owning a mobile, compared to 30% in higher income households. This is a concern shared by both male and female non-owners. As the household financial manager, the need women felt to conserve the limited family budget compounds this concern. When there is already a mobile in the household, women feel that since they are not earning, they do not have the resources to purchase a mobile for themselves or the regular airtime purchases needed to use it. At the time of the research, the lowest denomination top-up was MMK 500, only offered by one of the three operators;[39] this is more than some rural women earn in a day, if they earn at all.

It is important to mention that the perception of affordability is mainly benchmarked against the price of a smartphone. A keypad handset, although cheaper, is hardly considered an option because most people now own a smartphone. Many non-owners felt that others would look down on them if they 'only' had a keypad phone. To avoid feeling socially excluded, they would rather wait and save for a smartphone than buy a keypad phone. This is especially the case if there is already a phone in the household that covers 'basic' communication needs.

Considering that just two years ago access to any mobile phone would have been met with excitement, the speed with which the social status of a mobile phone has changed is tremendous.

"Usually women my age hardly own a mobile in this village because they don't have an income. I do business so I need one."

HV, working female owner, 52, rural, SEC C/D

"I sometimes weave mats and earn 300–400 kyat a day."

Female non-owner, 46, SEC D-E, Pantanaw

"A touchphone is high class and you can play games with it. Keypads are outdated."

Rural female mobile owners, 18–28, SEC C/D

"Others hold a touchphone so I wanted one, too. My wife agreed and came along when I bought it."

FGD Yangon, male owner

"Even trishaw drivers have a mobile. All have one. It is rare to find people without a phone especially since you can by them with installments."

FGD, rural, female owner, 18–29, SEC C/D

- Measures to make smartphones more affordable will increase uptake by women.
- Measures to enable non-earning women to afford to stay connected (e.g. micro-top-ups) can also encourage adoption.

39. http://www.ooredoo.com.mm/en/Personal/Support/FAQ-Result.aspx?Category={1ACF1ABF-1D51-441D-A738-66A185126B14}#

Lack of need and the hierarchy of mobile ownership

The second most-cited barrier, that there is no need to own a mobile, is more common among women than men, particularly in higher income households. There is a hierarchy in the distribution of mobile phones in a household, since many households cannot afford multiple connections at once, at least initially.

When a household typically gets its first mobile phone, the household member who gets first preference for keeping it is the person who leaves the house either for work or studies. As mentioned in Section 4.2, this tends to be a male household member (although not always), and the ability to keep in touch with and be reachable by home is key. At this stage, the mobile is perceived more as 'family' or common property, but as the number of mobiles in the house increases, they increasingly become individual property. Therefore, women do not feel that they need a mobile phone, since the majority (more than 50%; Figure 7) do not go out to work or study.

> "Males work and have business so they carry the phone. But if the wife has business she also has one. Today even youngsters and children have a mobile."
>
> **HV, Yangon, female owner, 19, not working, SEC C**

Changing perceptions and attitudes of women (as well as men) about the economic value of a phone for work, business, and even the coordination of household affairs may encourage them to get connected.

5.2.2 Problems with phone sharing

While women do have access to phones, it is through shared household phones (mobile or fixed), or borrowed phones (mostly from other household members), and this sometimes limits their use to just basic calling; many owners only allow others to make short calls.

Some mobile owners are reluctant to share their mobiles due to privacy concerns. Mobile phones are regarded as personal items, since contact lists, messages/chat histories (e.g. with boyfriends/girlfriends who the borrower—a parent/spouse/sibling, etc.—may not know about), and other personal data are stored on them. Those who do not have a mobile therefore feel reluctant to ask.

The ubiquitous phone shops and stalls of the past are also quickly disappearing, leaving non-owners even more to the 'mercy' of owners.

Others were not keen on sharing because of the borrower using up their credit (relatives and friends generally do not charge others to use their phone). Yet, many have to pay inflated rates when using another's phone, even for incoming calls. Many non-owners do not know actual calling rates. Current fees for using other phones have not dropped in the past year, although actual costs for calling rates have decreased.

Fees depend on the owner: most qualitative respondents paid MMK 100/min for an outgoing call and MMK 300 for an incoming (if it does not exceed five minutes).

"When I wanted to play games I had to ask my brother. He blamed me that I use all his credit when I called my friends."

FGD, Yangon, female owner, 30–45, non-working, SEC B/C

"My siblings wouldn't share their phone. They have boy and girlfriends."

HV Yangon, female owner, 25, working, SEC C

"Before, when my daughter called from Malaysia I had to go to neighbors."

FGD Yangon, female owner, 46–65, working, SEC B/C

"Those who have a touchphone don't let others use it because it could be damaged. They would let others only receive calls. I heard neighbors arguing about who holds the phone."

FGD rural, female non-owner, 46-65, non-working, SEC D/E

"I have to top-up her phone even though I only receive phone calls, but we go together on the Internet. I can only afford to top-up with 1000 kyats."

HV Yangon, non-owner, 29, non-working, SEC D/E

"This guy had photos of other girls in his phone so he didn't let his wife use it."

FGD Yangon, female owner, 30–45, non-working, SEC B/C

Innovative solutions that enable greater privacy between users (e.g. creating user profiles/accounts) can promote more phone sharing in the short to medium term, but in the long run, measures are needed that enable those who share to get their own mobiles.

5.2.3 Mobile usage

Many owners cannot imagine being without a phone anymore as their mobile has become a constant companion in their daily lives.

Men's and women's mobile usage is largely the same, according to the survey data. After missed calls, SMS,[40] and voice calls, the most popular uses were entertainment-related (Table 6). Mobiles provide a much-welcomed source of entertainment, especially in rural areas, where entertainment options are limited (two state TV channels, although reception and electricity availability varies). Furthermore, for women who generally have to be home after dark, mobile entertainment is valued.

The top entertainment use among women and men was listening to music.

Gaming was the next most popular use of a mobile, equally popular among women as men, with a third of mobile owners gaming on their mobiles (most of this use was among those below 34 years). Current non-owners cited gaming as a motivation for getting a mobile phone. Many are aware of the addictive nature of games. Mothers spoken to in the qualitative research were concerned their children were getting distracted from their studies, so they only allowed them to game after they finish their homework. Some wives were not happy that their husbands spent too much time (and money) gaming. The game Clash of Clans is very popular, and some participants justified their frequent gaming with the potential to make money from it. There is apparently a market for Clash of Clans accounts, and if one has many jewels/points it can be sold for several hundred dollars.

Sixteen percent of female mobile owners used some kind of social media compared to 19% of male mobile owners (although this use was mostly Facebook). Qualitative respondents who were already internet users[41] often mentioned social media and gaming as their favorite pastimes. Calling and chat applications were also popular low-cost ways of communicating. Section 5.3 looks at internet and application use in Myanmar in more detail.

> "The phone is near me all the time except when I take a bath."
>
> **FGD Yangon, female owner, 18–29, working, SEC B/C**

> "With a mobile my mother would not be worried anymore and I could download music."
>
> **HV Yangon, male non-owner, 29, working, SEC B**

> "These days we are wasting so much time with gaming or chatting."
>
> **FGD Yangon, female owners, 18-29, working, SEC B/C**

> "I learned to use the Internet to play Clash of Clans. I hardly watch TV anymore, just play it. Even grade 6 students play it, many do. My friends say you can sell your clan in Yangon."
>
> **FGD rural, female owners, 18-29, working, SEC D/E**

> "I don't want to visit my rural home anymore because the Internet is bad. I wouldn't be able to play there. Sometimes I get up in the middle of the night to play Clash of Clans."
>
> **HV Yangon, female owner, 19, non-working, SEC C**

> "I told my husband you are just playing the game (COC) all the time but do nothing. When we tell him to babysit he is playing games."
>
> **HV Yangon, female non-owner, 36, working, SEC D/E**

40. The qualitative research suggests that the 'use' of SMS refers to the receipt of SMS messages, mainly from operators (e.g. advertisements). Respondents don't understand the messages (e.g. when they are received in English) and/or do not know how to reply and therefore do not send any SMS.
41. Note: These qualitative respondents were recruited specifically because they had already used the internet and/or mobile applications.

Table 6

Source: LIRNE*asia* Baseline Survey, 2015

What mobile owners do with their mobiles

% of mobile owners

	Male	Female	Myanmar total
FOR MISSED CALLS[42]	80%	80%	80%
FOR TEXT MESSAGING (SMS)	66%	65%	66%
RECEIVING PHONE CALLS (VIA YOUR NETWORK PROVIDER, NOT ANY OTHER CALLING APPLICATION)	58%	55%	57%
TAKING PHONE CALLS (VIA YOUR NETWORK PROVIDER, NOT ANY OTHER CALLING APPLICATION)	58%	54%	56%
TO LISTEN TO MUSIC	53%	49%	52%
TO PLAY GAMES	34%	32%	33%
FOR CALLING APPLICATIONS (E.G. CALLS USING VIBER, SKYPE, ETC.)	25%	23%	24%
FOR USING CHAT/INSTANT MESSAGING APPLICATIONS (E.G. WHATSAPP, WECHAT, FACEBOOK MESSENGER, LINE, ETC.)	20%	19%	20%
FOR SHARING CONTENT (PICTURES/VIDEO/MUSIC, ETC.)	19%	18%	18%
TO USE FACEBOOK APPLICATION (NOT THROUGH BROWSER)	18%	15%	17%
TO DOWNLOAD/USE ANY OTHER MOBILE APPLICATION ('APP')	14%	13%	13%
TO RECEIVE UPDATES, SUCH AS BREAKING NEWS UPDATES, SPORTS UPDATES, ETC.	14%	7%	11%
TO WATCH ONLINE VIDEO CONTENT (STREAMING)	12%	8%	10%
FOR USING THE INTERNET/WEB THROUGH A BROWSER	10%	8%	9%
FOR EMAIL	6%	6%	6%
FOR MOBILE MONEY (SENDING/RECEIVING TALK TIME) APPLICATIONS (NOT THROUGH BROWSER)	6%	5%	6%
TO ACCESS OTHER SOCIAL NETWORKING OR BLOG APPLICATIONS (TWITTER, LINKEDIN, ORKUT, MYSPACE, ETC.) (NOT THROUGH BROWSER)	5%	5%	5%
TO USE WIKIPEDIA APPLICATION (NOT THROUGH BROWSER)	4%	3%	3%
TO ACCESS MOBILE MONEY OR BANKING SERVICES	2%	2%	2%

42. That is, dialling another person's mobile and hanging up before they answer; this has been seen as a way of communicating among mobile owners in low-income settings, to avoid incurring call charges. This is also referred to as 'beeping,' or 'flashing' in other settings.

Those with their own incomes tended to pay for their mobile top-ups themselves, while those without relied on the family budget for top-ups. Not having their own income to support mobile top-ups was one reason non-working women gave for not owning a mobile of their own.

The average monthly spend on mobile top-ups was MMK 8,997 (USD 8.71), according to the survey data. Men who were currently working, from more affluent households, and used the internet, spent significantly more than others (Table 7). Higher spending also corresponded with usage patterns. For example, heavy internet users interviewed in the qualitative research spent MMK 15,000–30,000 (some as high as MMK 50,000), the bulk of which was for data usage.

Several mobile owners interviewed in Pantanaw said they would like to use the internet more than they currently do, but could not afford it. Low incomes do not allow people to 'waste' money since necessary expenses for food have to be met first. Female mobile owners are especially sensitive to this, as they feel responsible for spending money on the well-being of their family instead of for their own entertainment. The smallest top-up card denomination seen in the field research was MMK 500. Most rural respondents were daily wage labourers and many women earned MMK 1,500 daily, which is not enough to top-up frequently.

Table 7

Source: LIRNE*asia* Baseline Survey, 2015

Mean monthly spend on mobile top-ups by mobile owners (MMK)

MALE	9,254
FEMALE	8,682
CURRENTLY WORKING	9,196
NOT WORKING	8,611
LOW-SPENDING HOUSEHOLDS[43]	7,479
HIGH-SPENDING HOUSEHOLDS[44]	10,485
MOBILE DATA SERVICE USERS	11,662
MOBILE DATA SERVICE NON-USERS	7,609
ALL MYANMAR MOBILE OWNERS	8,997

Note: USD 1 = MMK 1032.49 as of 31 March 2015; mobile data service user defined as someone who uses at least one of the following: mobile internet service (via browser) or any mobile internet application.

43. Total monthly household expenditure of MMK 300,000 or less
44. Total monthly household expenditure of MMK 300,001 or more

"I used a news app before but it took too much credit."

HV rural, female owner, 21, working, SEC D/E

"I spent too much money for the internet so I had no credit for calling anymore. The phone is important for business so I stopped using the internet."

FGD rural, female owner, 18-29, working, SEC D/E

"It is good to be modern, but the costs for internet are also high."

FGD rural, male owner, 30-45, working, SEC C/D

"My wife complains if I top up too much."

FGD Yangon, male owner, 30–45, SEC B/C

"Females need income to top it up."

FGD Yangon, female mobile users, 30–45, non-working, SEC B/C

- Micro top-ups can help low-income mobile owners manage their airtime expenses according to their needs.
- Increased offerings of data bundles and cheaper plans that meet specific needs (e.g. gamers versus voice-only users) can help low-income owners manage their expenses.

5.2.4 Current communication behaviour of non-owners

Phone usage, frequency, and spending

Mobile non-owners in Yangon tend to have access to a phone via a relative/husband in their household, which is predominantly a smartphone with internet access. Consequently, although they had little phone or internet knowledge of their own, they had heard about or seen what others did online.

In most cases, mobile non-owners in Pantanaw had no phone at home. Their nearest phone was a few houses away or at a next door neighbour's. The general level of knowledge about mobile phones and internet among rural people, especially women, was even lower than urban mobile non-owners (which was also limited), and some had never even touched a smartphone. Although they would use a neighbour's or friend's phone, many did not know how to operate it and the owner had to perform even the most basic tasks, such as dialling or hanging up for them.

Access to a phone improved for most over the last year, as many can now rely on friends/relatives to make a call or be reached through their number. Phone sharing has problems, however.

General phone usage by non-owners is currently quite low. Most only make calls in emergencies or to enquire about the health of faraway relatives (although quite infrequently). Non-working women especially expressed low need for a mobile since they stayed home most of the time. However, many stated that they would call their children/husband/parents more often if both parties had a phone.

Efforts are needed to increase digital literacy, especially for rural residents and women.

"I don't know how to operate a mobile phone. I would ask them to dial for me."

FGD rural, female non-owner, 30-45, non-working, SEC D/E

5.2.5 Benefits of mobile access: Changing perceptions with data service uptake

The qualitative research indicated a shift in the perceived benefits of having a mobile once respondents had access to the internet. While calls were still important, the internet introduced them to new experiences, such as:

- Staying in touch with friends and family in a new way by sharing photos and making video calls, so one feels closer to them.
- Making new friends, especially of the opposite sex, independently from their family (offline, this kind of activity would not be approved of by parents, elders, etc.), especially among younger males.
- Having access to international news and information, which is not available offline. Villagers often rely on hearsay, radio, or the limited state TV channels, since pay TV is more expensive and reception is not always good.
- New entertainment possibilities, such as games and social media, are popular among all age groups and men and women, and they also help users fulfill the need to stay in touch with others.
- New business opportunities, such as selling goods through an online store, expands one's reach to different regions.
- More efficient day-to-day activities, for example, access to more information (e.g. prices of fish) and remote coordination of business and other activities (making a doctor's appointment) has reduced the need to travel.

These findings are supported by the survey, which showed mobile owners perceive greater benefits to using a mobile than non-owners, with very small[45] differences between women and men (Figure 16). Women who do not own a mobile have slightly higher perceptions of the benefits of mobile access, perhaps because they tend to have more access (e.g. via their husband's mobile) than non-owning males (it is less likely that a man's wife will own a mobile for him to use freely when he does not have one himself). Among mobile owners, men tend to have (very slightly) higher perceptions of the benefits of access.

> "Initially I bought it to communicate with my parents but then I found out that you can search for news with your phone. You don't have to buy journals anymore."
>
> **FGD Yangon, female owner, 30-45, non-working, SEC B/C**

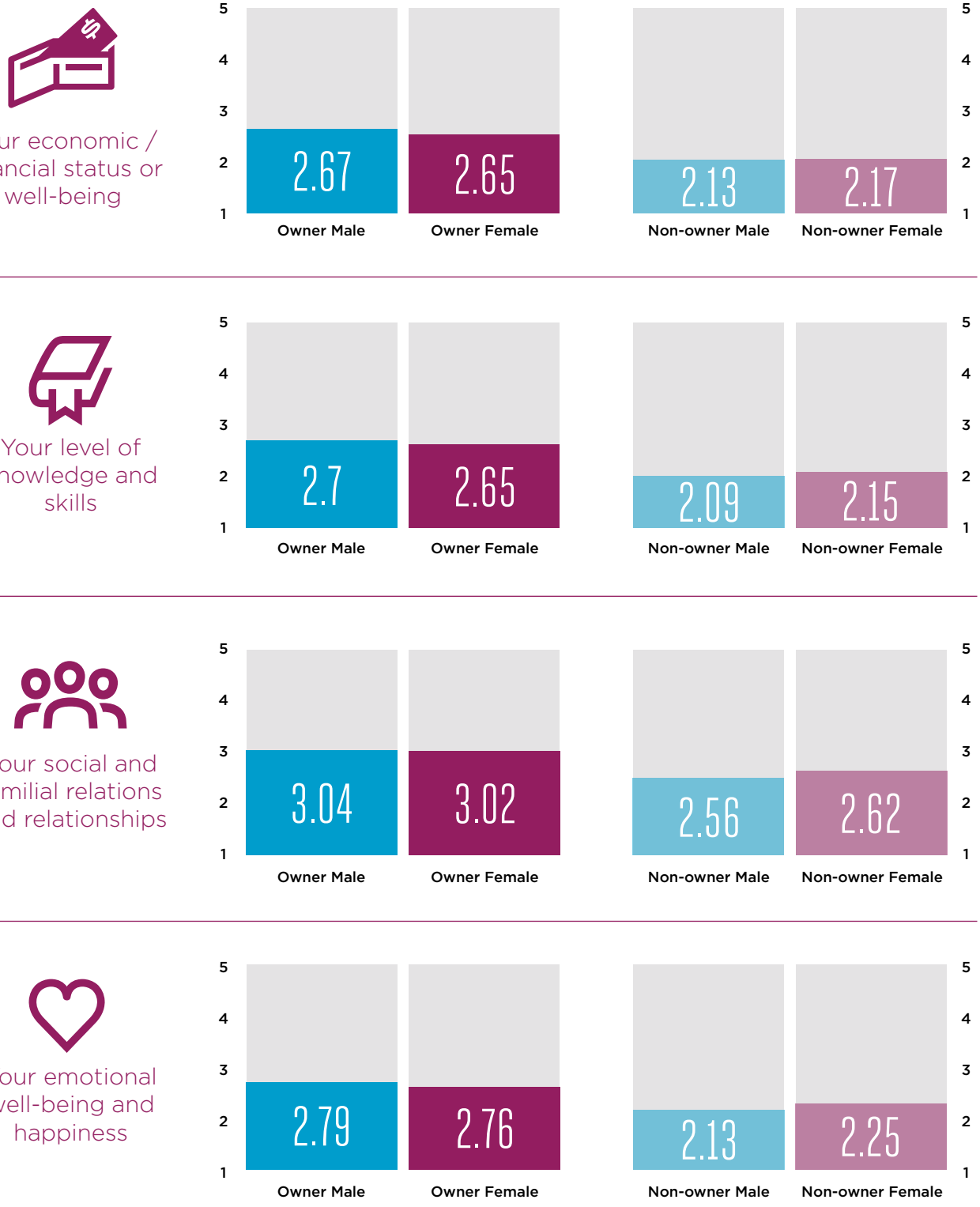
45. But statistically significant

Figure 16

Source: LIRNE*asia* Baseline Survey, 2015

Perceived benefits of mobile phone use and access on various aspects of life (mean response)

1=No change 5=Improved greatly



"You gain knowledge because you can search for things you don't know. You can even download books."

FGD Yangon, female owner, 18–29, working, SEC B/C

"I can access the things I don't know. They are right in front of me. Instead of others telling me I can look myself."

FGD rural, male owner, 30–45, working, SEC C/D

"Before I just listened to what others said. Now I read the news on my phone so I can tell my parents and even talk back to others. I am more up to date."

HV Yangon, female owner, 25, working, SEC C

"It is more convenient. I applied for a job and they could call me to tell me about the interview."

FGD Yangon, female owner, 30–45, non-working, SEC B/C

"Now I can order goods for my shop and get them delivered. And customers can order from me."

FGD Yangon, female owner, 46–65, working, SEC B/C

"I study English with my phone."

FGD Yangon, female owner, 46–65, working, SEC B/C

"Now we have convenient communication plus games, FB, and Viber to call far away friends for free. I feel I became closer to friends even though they are not living nearby."

FGD Yangon, female owner, 18–29, working, SEC B/C

5.3 Use of mobile data services

Mobile internet service and mobile internet application use (or data service use) in Myanmar is low. Thirty-four percent of mobile owners currently use at least one data service (internet via a browser or apps, including social media, calling and chat applications, etc.) on their mobile phone, despite 66% already owning a smartphone. Usage was limited to a few apps; over half of these data service users only used between one and three types of services, according to the national survey. This was slightly more common among female (59%) than male (52%) data service users. The qualitative research indicates that most had first experienced the internet by friends and family showing them.

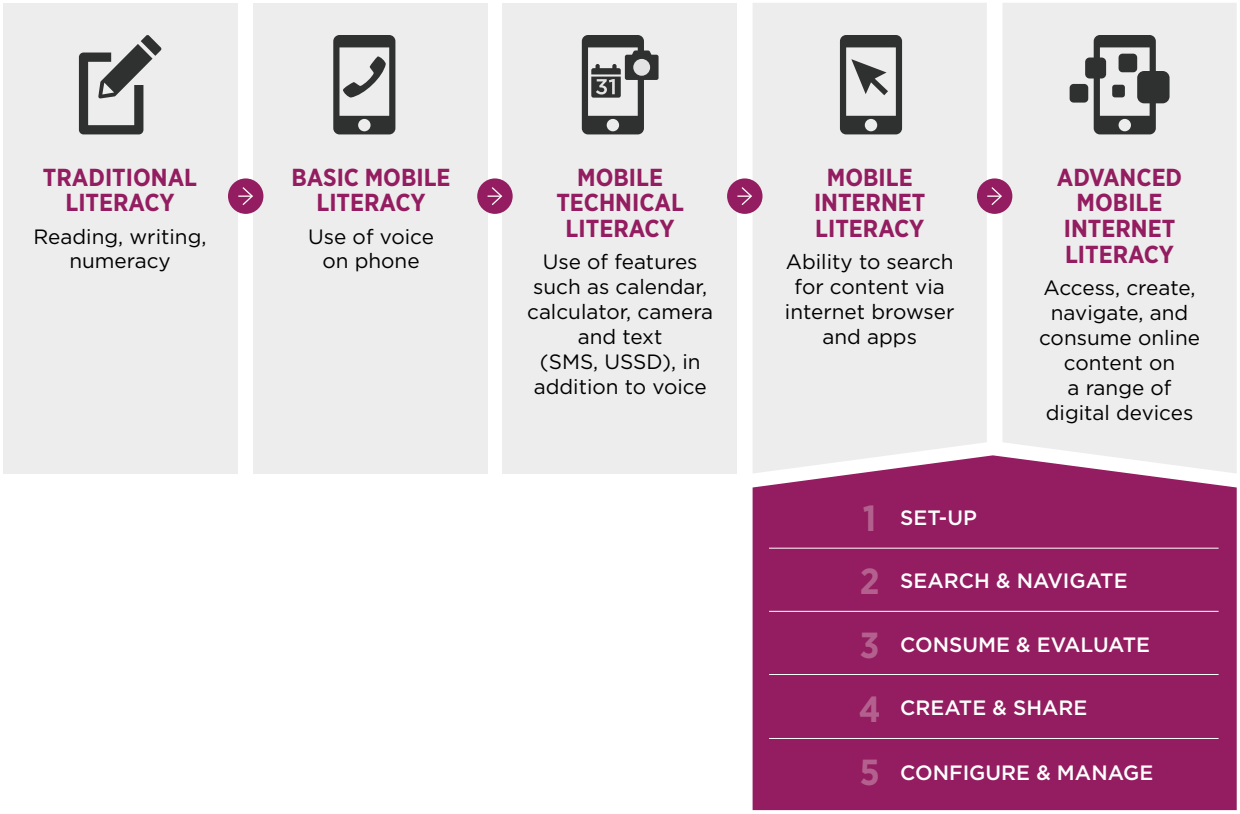
5.3.1 Digital skills and mobile literacy

Research on digital literacy barriers by the GSMA Digital Inclusion and Connected Women programmes has created a framework for assessing digital skills, including mobile internet literacy (see Figure 17). Digital literacy is defined in stages, with literacy in the traditional sense (reading, writing, numeracy) coming first, followed by basic mobile literacy, and so on. For mobile internet literacy, five functional and necessary skills are defined:[46] Set-up, Search and Navigate, Consume and Evaluate, Create and Share, and Configure and Manage. The GSMA research found that mobile data service users require these skills to learn how to navigate mobile internet and discover new services or applications (e.g. to access a browser or an application store), and to use specific services and applications (e.g. within Facebook).[47]

46. GSMA Digital Inclusion, GSMA Connected Women, and Dalberg Global Development Advisors (2015)
47. Annex 1 provides detailed descriptions of what is included in the five stages.

Figure 17 Source: GSMA Digital Inclusion, GSMA Connected Women, and Dalberg Global Development Advisors (2015)

Stages of digital literacy in using a mobile device



In general, it seems that many female and male qualitative respondents were stuck in the basic mobile literacy stage, needing help even to make a call, especially rural respondents. One issue was that many female owners were not present at the time of purchase and did not get an 'introduction' to the mobile at the shop (as men tend to do), so they relied on relatives and friends who are already owners (see also Section 5.1.3). Many (including female non-owners) feared they could damage the phone when experimenting with it. This concern has limited their exploration of phone functionalities and internet possibilities. Language was another barrier that restricted trial and investigation. Respondents who knew English were better educated and had no usage barriers.

According to the survey, 80% of mobile owners had handsets with a camera, while just 18% (19% of male and 18% of female mobile owners) share photos and other content using their phone. The qualitative respondents indicated that taking photos (one of the elements of 'technical' literacy) was one of their favourite non-internet pastimes, however, many did not know how to post a photo online.

Respondents who used data services possessed some elements of all the mobile internet literacy skills, suggesting a non-linear progression up the skills ladder. For example, some were able to block unwanted contacts on Viber or BeeTalk (Stage 5 of mobile internet literacy), but were unlikely to be able to create and share content (Stage 4). Table 8 provides some of the relevant findings under each level, although it should be emphasised that these are based on qualitative research protocols with a purposely (thus non-random) selected group of mobile users in two locations in Myanmar. Without a larger quantitative dataset, a detailed assessment of digital literacy cannot be made.

Table 8

Mobile internet literacy among qualitative respondents who used mobile data services

LEVEL 1: SET-UP	• Most either bought their phone with the relevant applications pre-installed, or sought the assistance of shop sales staff to install the application at the point of purchase. Some respondents also had applications installed by friends or family members who had more expertise. • Respondents stated they usually get help setting up their accounts from friends/ family or the shop where they bought the handset. Most respondents turn to family members of friends for help when setting up Facebook accounts (rather than asking at a shop). Some respondents said they set up their own accounts (having learned by watching others). • A few (mostly non-owners) did not have their own Facebook account and looked at content on accounts belonging to others.
LEVEL 2: SEARCH AND NAVIGATE	Most of the qualitative respondents (who used internet) used Facebook and Viber. While some respondents did search, many seemed to use it more passively and would mostly look at the news feed. Although Facebook was widely used, little use of Google was mentioned; only a few respondents (university students, for example) used Google to search for information.
LEVEL 3: CONSUME AND EVALUATE	Most data service users in the qualitative research primarily used Facebook and Viber. Many respondents mentioned reading 'news' on the internet, often referring to news they had seen on their Facebook newsfeed, and did not seem aware of other news sources online. A few of the more internet-savvy respondents had installed and used news applications. Use of news applications seemed higher among men than women. A few used Google to search for information, but this was a minority.
LEVEL 4: CREATE AND SHARE	Most data service users just scroll down and read what is already in their newsfeeds; few know how to make a new post, comment on an existing one, or even 'like' an existing one. Some had experience with groups and forums on chat applications like Viber.
LEVEL 5: CONFIGURE AND MANAGE	Most data service users did not seem aware that privacy settings existed and did not know how to alter the settings. Many female respondents expressed concern about the risks involved in posting photos, i.e. were concerned that strangers might see their photos and misuse them, but they did not seem aware or were not confident that risks could be controlled through privacy settings. Some had experienced harassment through 'wrong number' calling on Viber or BeeTalk, and were able to block those callers; others dealt with the issue by stopping use of the app or even deleting it altogether.

- Efforts are needed to improve the digital skills of women and men beyond basic mobile literacy, especially women who have somewhat limited opportunities to 'learn'.
    - A better understanding of why women fear breaking their mobile is needed to counter these fears/misperceptions; improving digital literacy could increase women's confidence in experimenting with their handsets. Further research is needed to understand whether a lack of local mobile phone repair businesses is part of the problem; if so, there could be an opportunity for vocational education providers.
- Simplifying handset (operating system) design and increasing local language content could be considered to encourage unfamiliar users to experiment with handset features.

5.3.2 Awareness and understanding of internet terminology

Those who do not own a mobile want to learn about and use the internet if/when they do have one. After researchers introduced respondents to internet usage possibilities beyond Facebook, they wanted to get information on health, cooking, nutrition, weather, news about politics and the economy, employment, and any information that would help educate their children. Even those who had a smartphone but no interest in using the internet initially became curious. The same is true for smartphone owners whose usage was limited to Facebook, Viber, and gaming because they did not know the internet was so versatile and diverse.

Qualitative research respondents were asked about their understanding of 'the internet:'

"We don't know properly, it is a communication network, you can access news from other countries, you gain knowledge because you can look at everything and verify news."

FGD rural, male owner, 30–45, working, SEC C/D

"People say they get connected, use Facebook, Viber, and read news."

FGD rural, male non-owner, 18–29, working, SEC D/E

"With the internet you can send pictures with a message."

FGD rural, female owner, 18–29, working, SEC C/D

"We have all heard of 'internet' but don't know what it is. It is installed in the phone. You can see the other side's face when you call. You can make friends – boyfriend and girlfriend."

FGD rural, female non-owner, 46–65, non-working, SEC D/E

"You use it to connect with others, send pictures, make friends and fall in love" … "It is good for business, good to gain knowledge" … "I don't know what you can do".

FGD rural, female non-owner, 18–29, working, SEC D/E

"I don't know what the internet is. Others use it to talk with friends."

HV rural, female non-owner, 21, working, SEC D/E

"Younger people have internet, they upload pictures and talk to friends. I had a look when somebody used it."

HV rural, female non-owner, 35, working, SEC D/E

"It is a place to make new friends, meet people, and search for information."

FGD Yangon, female owner, 18–29, working, SEC B/C

"It is good for getting knowledge, you can search for anything. You search on Facebook or Google."

FGD Yangon, female owner, 30–45, non-working, SEC B/C

"Even you stay at home, you know everything." VS. "I don't know; nobody in my community uses it."

FGD Yangon, female non-owner, 18–29, non-working, SEC C/D

Facebook predominantly shaped respondents' understanding of the internet, followed by instant messenger apps. However, Facebook and Viber have the potential to taint the overall 'reputation' of the internet because some respondents do not want to encounter 'inappropriate' content and 'false news' (see below).

Many non-owners interviewed in Pantanaw, especially older women (30+), had no internet experience at all. They had never seen 'the internet'; they had only heard others talking about it.

Smartphone owners in Yangon have a broader/richer understanding and internet usage patterns. For them, the internet is not just a place to make friends and chat, but also to search for information.

Most rural respondents, even mobile owners, were not familiar with typical English 'mobile and internet' terms (e.g. browser).

Many had not heard of mobile apps or admitted they did not understand what they were. Qualitative respondents in Pantanaw (rural) call apps 'buttons' that one needs to press to enter Facebook or Viber. Many had memorised the look of those 'buttons' that others had shown or explained to them, but they did not know what they actually meant since they are in English.

Most respondents had not installed apps on their phones themselves. They were either pre-installed or installed via Zapya (a file-sharing app) with the help of relatives who had more phone experience.

Nearly all smartphone owners had plenty of apps installed they had never used, and did not even know what they were. Some 'curious' respondents clicked on them only to find out that they were in English or Chinese, so they did not explore them further.[48]

Since most of their limited experience/ knowledge of the internet was based on either seeing others use it or hearsay (especially negative stories of social media; see Section 5.3.3), many believe the internet to be largely for entertainment and socialising.

"I heard people saying 'the person is on the line with distant relatives."

FGD rural, female non-owner, 30–45, non-working, SEC D/E

"I don't know what a smartphone is. I haven't seen one yet. I heard that it is technologically advanced and expensive."

FGD rural, female non-owner, 18–29, working, SEC D/E

"I don't know how to delete and un-install things. Someone would need to explain and demonstrate to me."

FGD Yangon, female owner, 30–45, non-working, SEC B/C

48. Respondents were not actually asked why they do not delete those unused apps, but it is possible they may not know how to do so and would not understand the correlation with data usage.

"A friend of mine uses Facebook. He adds girls and starts talking to them."

HV Yangon, male non-owner, 29, working, SEC D/E

"I could see all things I haven't seen before on Facebook."

FGD rural, male non-owner, 18–29, working, SEC D/E

Efforts are needed to improve digital skills and literacy to enable new users to experiment with the features on their phones and find new and valuable uses. Developing locally relevant content could also help to raise awareness.

5.3.3 Usage and awareness of brands/apps

Among qualitative respondents who used data services, Facebook and Viber were the most popular. Many admitted that chatting and browsing Facebook had become an addiction, and most used Facebook daily.

Facebook

Even non-owners who were interviewed in the qualitative research had heard of Facebook from their community. They stated that they would use it if they had a mobile, although not everyone really knew what it was.

Many consider Facebook the only entry point for information, and many regard postings as news. Before mobile phone penetration expanded in Myanmar, people in rural areas such as Pantanaw had limited access to news either via radio or TV, and the signal of the few state-run stations was poor. Word of mouth was the main source of information and it seems that reading (and believing) postings on Facebook replaces other information sources. Many were just reading whatever came up in their news feed, as they did not know how to post, search, add friends, or 'like' postings.

Mobile owners we spoke to in Yangon had more technical skills, so they understood that postings may not be news and could be used to spread rumours. Many of them tended to use Facebook to search for information and to read news from media houses like Eleven or Irrawaddy.

The majority of qualitative respondents were interested in celebrities, crime news (in order to be aware of crime and be more cautious), fashion, and beauty. Men showed more interest in current affairs, national politics, and soccer results.

There were a few mobile owners in the qualitative research who were not on Facebook because they did not know how to install it, had no one to help them, or did not want to spend the money to have it installed at a phone shop.

Viber and other instant messenger apps

Viber was popular among smartphone owners, especially younger ones, due to the lower costs. Those with friends or relatives living abroad and far away use it for voice calls. Unstable and slow internet connections limit use, however, so regular voice calls were not replaced entirely.

Most mobile non-owners had heard of Viber and knew that it could be used to talk with 'far-away' people.

Other mentioned instant messenger apps BeeTalk, WeChat, and Line. Of these, BeeTalk seemed more popular, although it was not as widely used as Viber. BeeTalk is available in Burmese.

Chat applications seemed to be a way to 'meet' new people online and start up conversations, and later friendships, with the opposite sex. Some perceived this as positive and some as negative, mainly because this could be done 'under the radar', away from parental/elders' control/sight. Offline, these kinds of interactions would be frowned upon. Some women have stopped using Viber since male strangers approached them.

"Even my younger brother is not using it anymore. From Viber you end up flirting with people, fall in love, and strangers can approach you. In a group I was interrupted by strangers whilst talking to others. They disturbed me. I want to have a clear conscious."

FGD rural, female owner, 18–29, working SEC C/D

"I was added to too many groups and couldn't control it anymore. I don't use Viber anymore."

FGD Yangon, female owner, 18–29, working, SEC B/C

"Viber can be slow when the Internet connection is not good."

FGD Yangon, male owner, 30–45, working, SEC B/C

"With Viber you can talk for cheap."

FGD Yangon, female non-owner, 18–29, non-working, SEC C/D

Google

There was higher usage and awareness of Google among urban smartphone owners. Many rural respondents in the qualitative research stated that they did not know what Google was, although some of them used the app to search for news/topics. It seems that the concept of a search engine and what Google offers are not widely understood, since many respondents had not actively tried to use Google to search for any information they were interested in.

> "I pressed once Google accidentally after others mentioned that I would find all celebrity news there. I have never thought of searching there for other topics, too. I thought it has only celebrity news."
>
> **HV rural, 21, mobile owner, working, SEC D/E**

Other apps

Many used one to two Myanmar language news apps, although usage is more prevalent among Yangon respondents. TZ is popular because it shows news sorted by topic (e.g. politics, entertainment) and links to the original media house website, thus providing a high level of credibility.

Smartphone owners in Yangon used more apps than those in Pantanaw. Some had English dictionaries or special interest apps (a pregnant woman had many pregnancy and child rearing apps) installed. Others used YouTube, Tango, or Skype as well.

- Data service users have limited digital skills and, as a result, a limited understanding of what the 'internet' is. Their data services usage was largely limited to one to three data services, mainly social media and calling apps.
- Network quality improvements are needed to ensure rural users have sufficient connectivity to use data services.

5.3.4 Experiences and perceptions of mobiles and social media

Using a (smart)phone in itself was not a cause for concern among respondents, but there were concerns that seemed to stem from hearsay about 'online flirting' through social media. Many qualitative respondents had heard of 'stories' of marriages ending due to extra-marital affairs started up online. Many women and men had heard of people meeting online through Viber or Facebook, although few had directly experienced it. Some respondents had also heard about people being deceived by others using false identities/photos when flirting online.

Women who were more versatile and had a diverse internet experience were more self-confident. To them, the advantages of using the internet outweighed the negatives. Many were aware of 'inappropriate' (i.e. sexual) content, but they just ignored it.

Rural females tended to be shyer than their urban peers. One had encountered unwanted approaches by male strangers, especially on Viber. It made her feel intimidated, so she decided to delete Viber.

On the other hand, some respondents seem to have a more playful attitude to flirting and embrace the increased opportunity to meet new friends.

Some women had experienced 'wrong number' callers, but this was not widely perceived as an issue. One woman reported that a male stranger continued to call her, so she blocked his number. Men seem to have less of an issue with unknown online contacts, although a few feel that online flirting could become potentially harmful as it could destroy a marriage.

One rural respondent's Facebook account that was installed by a phone shop had been hacked.

Those with more in-depth internet experience were rather concerned about the spread of rumours on Facebook.

For most, privacy was a little known concept. Respondents were not aware of any privacy settings that could be used to enhance the safety of their internet experience.

"I want to learn about the internet, about health and news but I don't want to see inappropriate things."

HV rural, female owner, 52, working, SEC C/D

"The wife used the internet and the husband caught her flirting. Now they don't use the phone anymore."

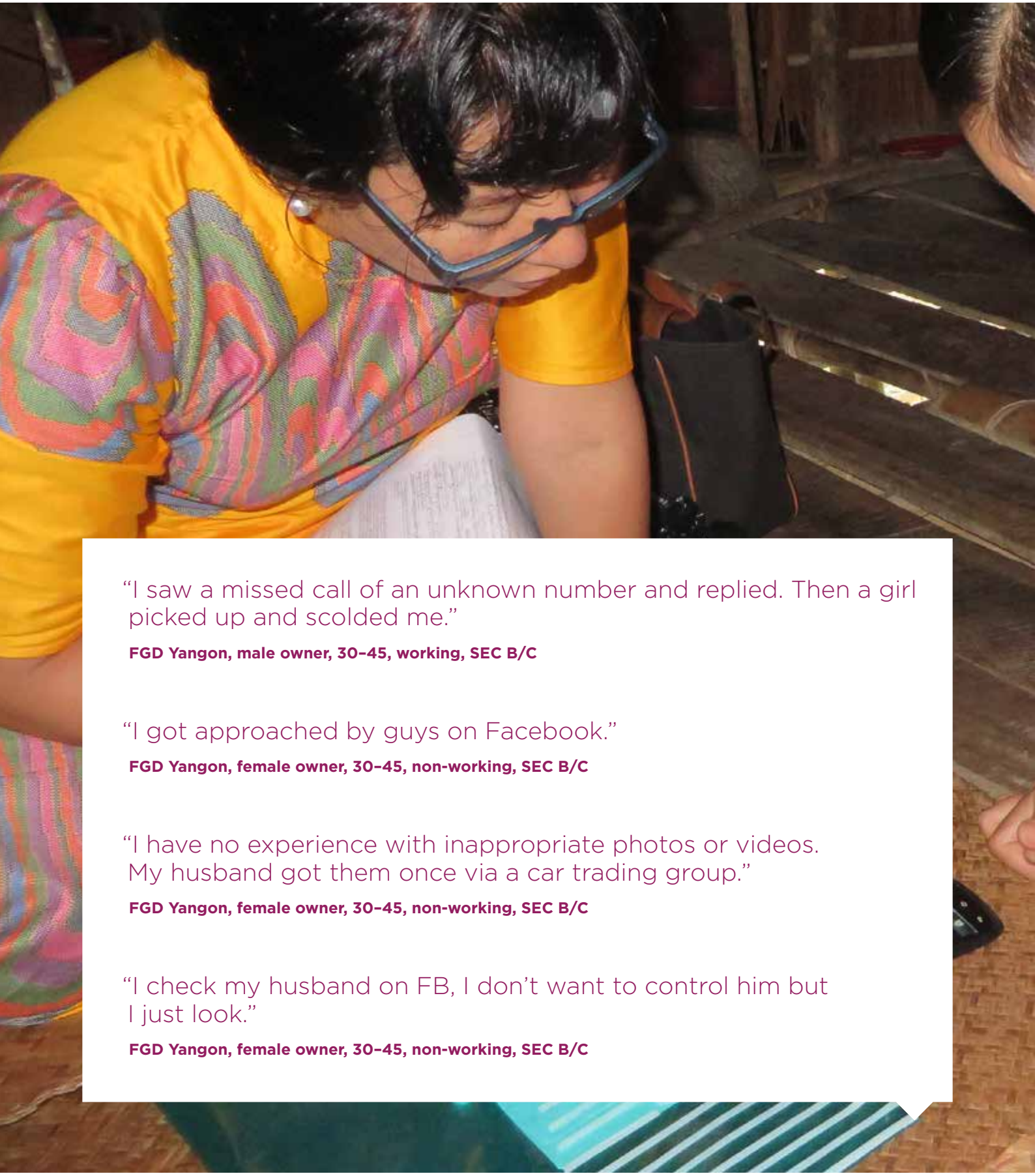
FGD rural, female non-owner, 18–29, working, SEC D/E

"Some young singles do inappropriate things. They start a relationship without ever having seen each other. They use fake photos but in reality they are ugly."

FGD rural, female non-owner, 18–29, working, SEC D/E

"The internet has many good things but also things children shouldn't know. There are many rumors."

FGD Yangon, female owner, 46–65, working, SEC B/C



"I saw a missed call of an unknown number and replied. Then a girl picked up and scolded me."

FGD Yangon, male owner, 30–45, working, SEC B/C

"I got approached by guys on Facebook."

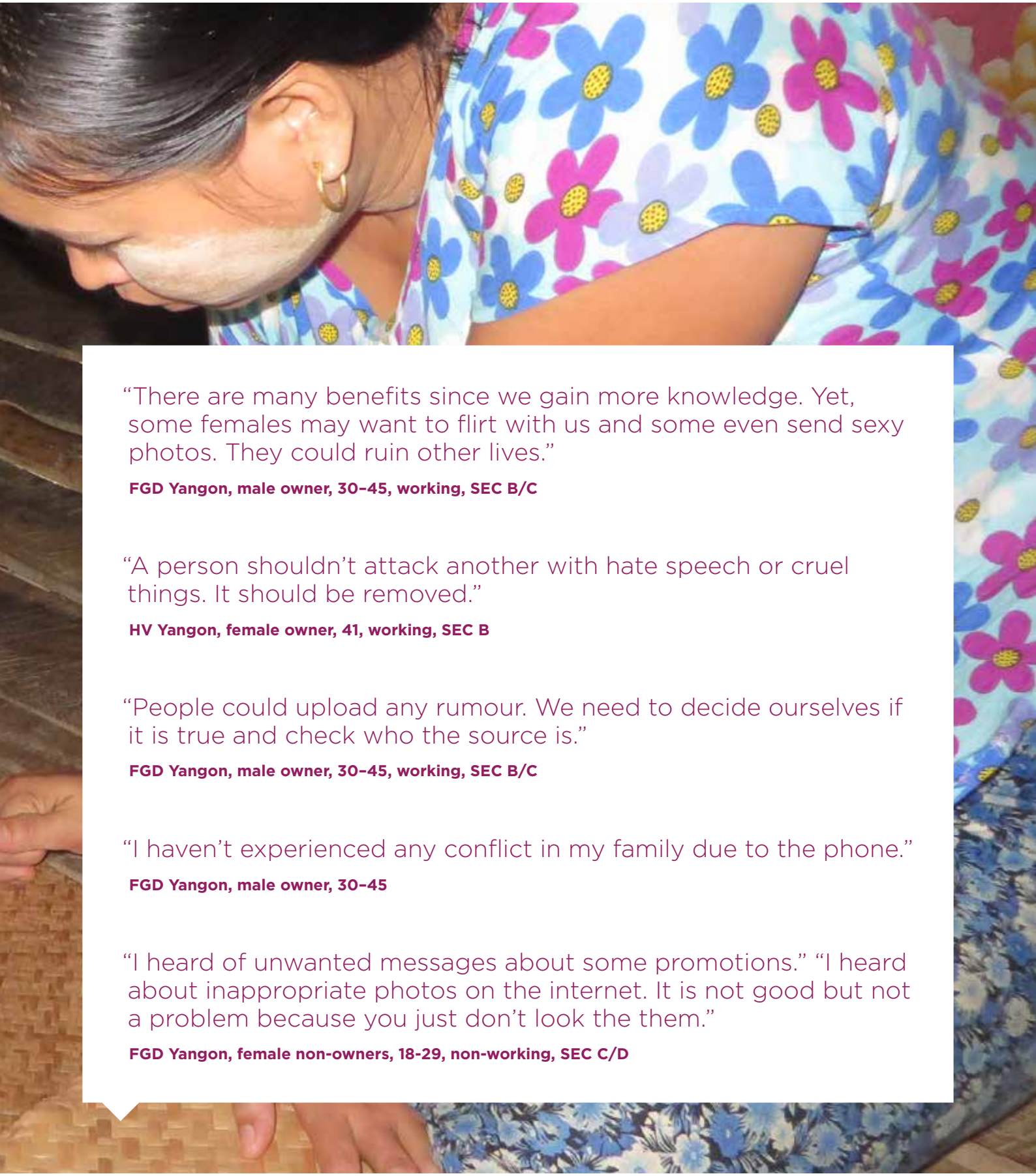
FGD Yangon, female owner, 30–45, non-working, SEC B/C

"I have no experience with inappropriate photos or videos. My husband got them once via a car trading group."

FGD Yangon, female owner, 30–45, non-working, SEC B/C

"I check my husband on FB, I don't want to control him but I just look."

FGD Yangon, female owner, 30–45, non-working, SEC B/C



"There are many benefits since we gain more knowledge. Yet, some females may want to flirt with us and some even send sexy photos. They could ruin other lives."

FGD Yangon, male owner, 30–45, working, SEC B/C

"A person shouldn't attack another with hate speech or cruel things. It should be removed."

HV Yangon, female owner, 41, working, SEC B

"People could upload any rumour. We need to decide ourselves if it is true and check who the source is."

FGD Yangon, male owner, 30–45, working, SEC B/C

"I haven't experienced any conflict in my family due to the phone."

FGD Yangon, male owner, 30–45

"I heard of unwanted messages about some promotions." "I heard about inappropriate photos on the internet. It is not good but not a problem because you just don't look the them."

FGD Yangon, female non-owners, 18-29, non-working, SEC C/D

"I heard that there could be affairs in marriages but don't know if it is true. You can't control if your husband has an affair anyhow."

FGD Yangon, female owner, 46–65, working, SEC B/C

"Some say that females should use the internet only under our supervision but my niece already uses it without supervision."

FGD rural, male owner, 30–45, working, SEC C/D

"You need to educate people so that they don't have these problems. It depends with whom you make friends. You can un-friend them if you don't like what they post." "Those under 18 shouldn't use the internet. They are still immature. They could fall in love, meet outside, and get abused. But if they are older it is not a problem."

FGD rural, female owners, 18–29, working, SEC C/D

"I haven't heard of any negative things."

FGD rural, female non-owner, 46–65, non-working, SEC D/E

"I got calls from guys who knew my name but I blacklisted these numbers."

HV Yangon, female owner, 19, non-working, SEC C

- Incorporating content on internet safety and privacy (including social media) in digital literacy efforts is necessary.
- Content design should take into account the lack of awareness of privacy and security settings, for example, simplifying settings, making them more accessible, etc.

5.3.5 Children and the internet

The vast majority of respondents believed that the internet was an overall positive thing that helped people to develop and gain knowledge.

However, there was also consensus that children need some restrictions on when they are allowed to play games and when they should be allowed to have their own mobile. This is mainly out of concern for their education and it interfering with their studies. Many parents let their children play with phones because they consider it beneficial for their development, but not during study time.

There is also widespread agreement that children should only own a phone after grade 11 because the 'right' usage of the internet requires some maturity.

"Children before grade 11 shouldn't use a mobile. They could fall in love on FB, use drugs and meet unsuitable persons. They should concentrate on their education."

HV Yangon, female owner, 19, non-working, SEC C

"Children only want to play games and not learn anything."

HV Yangon, female non-owner, 40, non-working, SEC C/D

Incorporating content on internet safety and privacy (including social media) into national school ICT curricula can help ease concerns about the negative impacts of children accessing mobiles.

6 Recommendations

A vast body of empirical research has shown many positive impacts of mobile phones and communication. The survey results from Myanmar show a small access and usage gap between women and men, and a wider gap in ownership. Our qualitative research shows that the role and position of women in Myanmar is strong—certainly stronger than the position of women in many South Asian countries that the team had observed in previous research. Income (or lack of income) is the primary source of the access and ownership gap, in part because prices are high compared to income, but more importantly because women's role as the 'chief financial officer' of the family makes them put the needs of others before theirs (family members who work outside the home get the first phones in the family, for example).

Income is not the only barrier, however. The research clearly shows a skills and awareness gap—when women have access to a phone they exhibit less confidence in using it. Their low digital literacy leaves them out of the final decision-making stages about phone purchases, and certainly limits their phone usage. Less sophisticated awareness of privacy issues may also be putting them at risk in various social contexts.

The recommendations from these findings are as follows:

Facilitate network expansion

Given that income is the biggest barrier to mobile usage and ownership, the question of what mobile networks can do for household income is pertinent. Systematic empirical evidence[49] from low- and middle-income countries is clear: simply rolling out mobile phone networks is the most powerful development 'intervention' since it allows better communication, increases access to information, increases productivity, allows users to coordinate themselves better, and ultimately improves people's livelihoods. Therefore, actions that facilitate faster network rollout across Myanmar will have a significant positive impact on livelihoods in general. And, if family income increases, more women will be able to afford a phone without having to make trade-offs between owning a phone and their family's welfare.

Since the liberalisation of Myanmar's market, mobile operators have made significant investments in rapidly deploying networks and offering voice and 3G services to consumers. To avoid network saturation (given the rapidly growing demand for mobile voice and data services in Myanmar), operators will need cost-oriented and open access to sufficient local and international backhaul fiber optic network, and making sufficient harmonised spectrum available in a predictable and transparent manner. Where private players are laying their own fiber optic networks, government can assist by ensuring all mobile operators have access to the incumbent backhaul fiber network, and making sufficient harmonised spectrum available in a predictable and transparent manner. Where private players are laying their own fiber, government can facilitate this by simplifying the procedures required to obtain rights-of-way.

Make handsets more affordable

A key barrier to women owning mobile phones is unaffordable handsets. This prevents households from obtaining a second, third, or more handsets, which could reach the hands of women. Yet, the research is clear that brand preference is high in Myanmar, and women do not necessarily want a no-name phone just because it is cheap. 'Scaled down', easy-to-use, lower cost versions of popular brand handsets that meet basic usage requirements are required.

Handset retailers, banks, microfinance institutions, and even operators should explore ways to bridge the affordability gap, for example, through installment plans, microloans, and other innovative mechanisms.

There is also an opportunity in the short to medium term for handset manufacturers and app developers to come up with innovative solutions to improve the phone-sharing experience, especially creating more privacy between users (e.g. partitioning of SIMs or handsets).

Make services more affordable through lower unit prices and micro-recharge

For many women who do not earn an income, a key concern was that they would not be able to afford usage charges if they had a mobile. The minimum top-up allowed (by card or electronically) is currently MMK 1,000 (97 cents) for two operators and MMK 500 (48 cents) for another. Micro-top-ups (for as low as MMK 500) can help low-income mobile owners to manage airtime expenses based on their needs.

More targeted offerings of data bundles and cheaper plans to meet the needs of specific users (e.g. gamers versus voice-only users) can also help low-income owners with limited requirements manage their expenses and encourage mobile adoption. For example, app developers should take the limited spending power of potential users into account and design apps that update efficiently to lower data costs.

To make services even more affordable, government should ensure an equitable, transparent, and predictable taxation system is in place, and that mobile is taxed on par with other goods and services without creating distortions in the investment and consumption of mobile services.

49. Samarajiva et al., 2013.

Make content more relevant and increase awareness

Supply-side solutions alone are insufficient. When asked why they do not have a phone, more women (34%) say, "I have no use for it/don't need one" compared to men (25%). For women, a mobile phone has to be seen as a tool for improving their livelihoods (income), as opposed to taking money away from other household expenses. There is clearly a limited picture of what the internet is and what one can do on it (gaming and social media, as far as many are concerned), and there are many negative perceptions of the 'internet' as a result of this limited outlook. As the financial managers of the household, the value proposition is still not sufficient for many women to venture into using data services.

Crossing this barrier requires skills, awareness, applications, and content that is relevant to women and the different roles they play in the home and society. Platforms are needed that enable women to conduct home-based micro-businesses, applications that allow them to find the best prices for everyday household goods, provide microfinancing to start businesses, and offer other content in the local language. App developers should ensure these types of services are accessible even to those with poor digital skills, for example, by incorporating simple design, using graphics, and IVR.

Creating mobile apps and content does not just happen. It takes a nudge from the government and investment from the private sector—there has to be a real return for the young and tech-savvy to develop content and apps for women, especially poor, unconnected women who have less spending power. The innovation and social investment environment is key. Apps are also a differentiation strategy for network operators, since they will reach market saturation in a few years and will need to attract customers from other networks.

Improve digital skills

The barriers to digital literacy need to be addressed. Many do not have the skills to get online, or even to operate their mobile beyond calling; some are inhibited to explore the functions of their handset out of fear that the phone could 'break'. From our findings, these problems are more common among women. There is no evidence that phones are breaking, but there is a perception that they will. Handset manufacturers need to conduct further research into the negative perceptions of low-quality handsets to see whether these views are widespread, and understand the reasons behind these negative perceptions (design issues, faults, lack of repair facilities, etc.).

Some women have derived limited utility from their phones, but basic digital skills are required to even do this. Most respondents in the qualitative research had still not passed the 'set-up' stage of GSMA's digital literacy framework.

Mobile operators, NGOs, government, and other specialised organisations can play a role by developing and disseminating easily digestible digital skills training (e.g. short video tutorials) that gives people the basic skills to operate a smartphone, search for content, judge the credibility of content from different sources, operate privacy settings, and so on. Making these tutorials easily accessible through the internet can reduce women's reliance on men to gain digital skills. The power of social media can be harnessed to disseminate this content even more. Operators (through their agent networks) need to play a role in increasing digital skills and awareness, for example, by providing incentives to agent networks to improve the digital literacy of their female (and male) customers (i.e. an in-person approach).

Government and educators also have a role to play in de-bunking misconceptions about the internet, and educating schoolchildren about internet safety and privacy, particularly on social media. Governments and educators should explore the possibilities of incorporating these topics into the national school curricula from a primary level, to ensure girls who may drop out after a few years can also benefit.

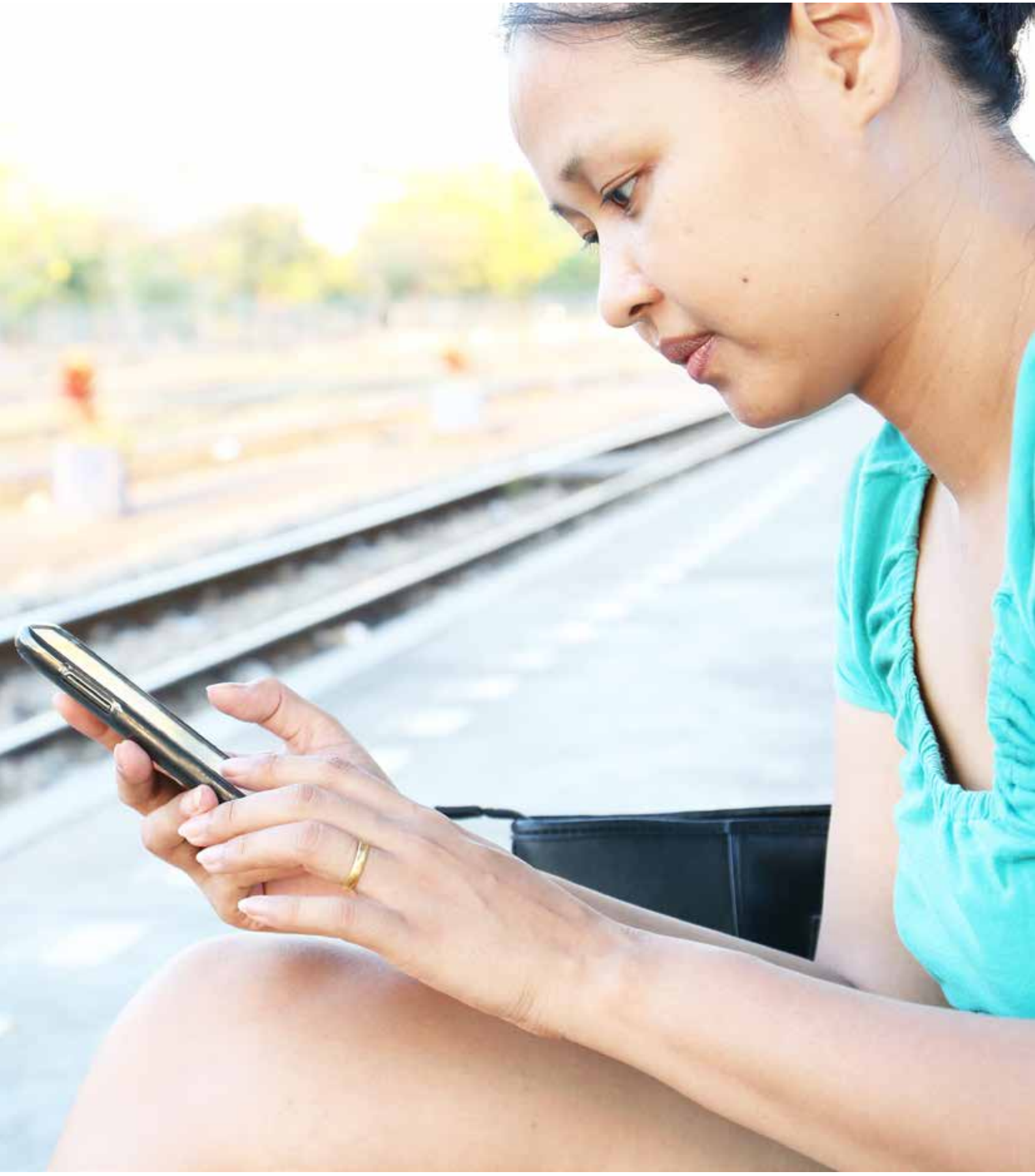


Table 9

Summary of recommendations for Myanmar stakeholders

The identified stakeholder is a primary actor

The stakeholder needs to play a supporting/facilitating role

Actor	Action	
Government	Network roll-out to increase female (and male) mobile ownership	Ensure fair and affordable access by all mobile operators to the incumbent backhaul fiber optic network and sufficient coverage and capacity spectrum
		Simplify right-of-way access to all telecom operators (for backhaul and access network)
	Digital skills/literacy development for women (and men, who women sometimes learn from)	Incorporate basic digital skills (internet safety and privacy awareness) into the national ICT curriculum beginning in primary school
		Support efforts by other stakeholders to develop digital skills content (e.g. short tutorial-style videos), which can be disseminated via social media or other channels
	Content development	Support the creation of an enabling environment for the local app market to grow, and develop locally relevant and accessible apps for women
	Demand stimulation	Ensure an equitable, transparent, and predictable taxation system, and ensure there are no distortions in investment and consumption of mobile services
Mobile network operators	Demand stimulation	Introduce more creative pricing to appeal to women's price sensitivity, call patterns, and daily routines (e.g. creative tariff plans, innovative data packages, low-denomination top-ups, bite-sized or on- demand data pricing, emergency credit services)
		Develop clear and transparent pricing, including warning reminders, especially for data charges
		Target men in marketing campaigns to reach women in settings where men commonly make decisions about women's SIM cards and plans
		Secure sufficient international bandwidth to keep up with increasing data traffic
		Create an enabling environment for the local app market to grow, and develop locally relevant and accessible apps for women
		Develop digital skills content (e.g. short tutorial-style videos), which can be disseminated via social media, agent networks, or other channels.

Actor	Action	
Mobile network operators *(continued)*	Content development	Create an enabling environment for the local app market to grow, and develop locally relevant and accessible apps for women
	Digital skills/literacy development	Develop digital skills content (e.g. short tutorial-style videos), which can be disseminated via social media, agent networks, or other channels
		Create incentives for agent networks to improve the digital literacy of their female (and male) customers (i.e. an in-person approach)
Handset manufacturers	Demand stimulation	Continue efforts to design competitively priced and more durable, more affordable smartphones
		Explore the possibility of providing scaled down (lower cost) and easier-to-use versions of popular handset brands which meet user requirements, in order to make them more affordable for non-owners
		Develop innovative financing mechanisms to lower the cost of handsets (e.g. microloans, monthly installments)
		Conduct additional research on the negative perceptions of available low-cost handsets; identify actions to negate the perceptions (e.g. mobile repair services, partnerships with low-priced handset manufacturers)
		Develop solutions to improve the phone-sharing experience, especially ensuring data privacy for different users
App developers	Demand stimulation	Develop solutions to improve the phone-sharing experience, especially ensuring data privacy for different users
	Content development and digital skills/literacy development	Develop locally relevant apps which take current low levels of digital literacy into account
		Lower data costs by designing apps that update efficiently
NGOs	Digital skills/literacy development	Development of digital skills content (e.g. short tutorial-style videos) which can be disseminated via social media, grassroots networks, etc.
Banks and other finance institutions	Demand stimulation	Develop innovative financing mechanisms to lower the cost of handsets (e.g. microloans, monthly installments)
Investors	Demand stimulation and content development	Support the local app developer market to grow, and develop locally relevant and accessible apps

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8 Annexes

Annex 1: GSMA Digital Skills Framework criteria

Criteria	Description
LEVEL 1: SET-UP	This includes acquiring and using a data plan, setting up internet access on a phone and downloading applications and services (e.g. Facebook), and signing up for these services and applications.
LEVEL 2: SEARCH AND NAVIGATE	This refers to the ability to search and navigate within a mobile internet service or application. For example, this could involve searching for contacts on WhatsApp or Facebook. At a more advanced level, users would be able to apply the search and navigation skills learned in one service to other, unfamiliar services. For example, a user who can search for friends on Facebook should also be able to search for content on Google or YouTube.
LEVEL 3: CONSUME AND EVALUATE	At a basic level, a user would understand there are different sources and types of content on the internet (e.g. understand the differences between advertisements, crowd-sourced comments, and news articles). At a more advanced level, the user would be able to discover new and useful services, applications and information, and then determine the extent to which they can trust this content
LEVEL 4: CREATE AND SHARE	This refers to a user's ability to create tailored content for an online interaction and then share that content with a particular audience. For the purpose of this study, we adopted a broad definition of the term 'content creation' to include messaging, as well as posting on an online forum (e.g. posting status updates on Facebook or commenting on news items). At a more advanced level, a user would be able to create content for a broader audience, not just for one's own social network.
LEVEL 5: CONFIGURE AND MANAGE	This skill includes the ability to update settings and preferences for one or more internet services (e.g. adjusting privacy settings on Facebook). At a more advanced level, it includes the ability to configure new services and applications independently. The ability to manage multiple digital identities and critical risk factors related to internet use, such as privacy and harassment, are also a part of this skill.

Source: GSMA. (2015). "Accelerating Digital Literacy: Empowering women to use the mobile internet". http://www.gsma.com/connectedwomen/wp-content/uploads/2015/06/DigitalLiteracy_v6_WEB_Singles.pdf

Annex 2: Respondent portraits

PWINT PHYU	
AGE	25
LOCATION	YANGON (URBAN)
OCCUPATION	SALESPERSON AT A CLOTHING STORE
MOBILE OWNERSHIP STATUS	OWNER

As a married person, I need to be independent, and be financially independent. Then we could have a happy family life without having to worry too much about livelihoods. This is critically important to me.

Twenty-five year old Pwint Phyu is a working mother of one. She is the eldest daughter in her family. She works full time as part of the sales staff at a clothing shop close to her house.

She needs to communicate with her husband as she is out of the house all day. She uses her mobile phone for communication and entertainment.

Her household

Pwint Phyu's husband is a taxi driver and is the main income earner of their household. Even though she is married and has one child, she cannot support herself financially, and is still dependent on her parents. She eats at her parents' house and spends much of her time there. She, her husband, and daughter sleep at her in-laws' house. She has four other family members: her parents, elder brother, younger sister, in addition to herself. Her monthly salary is about USD 85 and her husband earns around USD 300.

Challenges and difficulties

"There are many difficulties for a woman. For example, if I want to apply for a job it is more difficult now than when I was single. Because I am married, they refused to employ me. With some positions which I badly wanted, I had to lie to them and say that I am single. Then the employer found out so I had to leave the job."

She faces some challenges when using her mobile for Facebook, Viber, and the internet. She uses her brother's Facebook account and she needs her sister's assistance to share files on Zapya. Both her siblings are quite busy with their own activities, so neither of them are able to patiently explain how to use her phone. Her mobile is not very good quality and has very limited memory. She wants to have a new handset with a higher storage capacity.

"If I ask them, they would help me, but with comments such as, "Oh, my gosh! You don't even know that! Why? ... This is very easy but you don't know yet." I don't want to receive such comments from them."

"I am worried about breaking the phone because if it is broken, I have to take it to the shop and repair it. I need to spend money on repairs; and I cannot afford that."

She cannot afford to buy a new handset (i.e. a smartphone) because of her financial difficulties. Her husband encouraged her to use an old one instead of spending money on a new handset.

Why and how did she get her mobile phone?

Pwint Phyu wanted to be able to keep in touch with all her family members and didn't want to be left out.

"Even though I was married, I did not have any income at the time. So I asked my mother to buy me a phone. She bought me what she could afford, which was USD 200."

Her mother is the main decision-maker for financial matters in the household. She decided to get one mobile phone for the whole family even though it was too expensive for them. She paid about USD 1,800 for their first mobile which is used by her father. Her mother bought a USD 500 mobile for herself, her elder son, and younger daughter. Then she asked her mother to get her a mobile phone, which she bought for USD 200. She was the last member of her family to get a phone. Her first SIM was a CDMA worth approximately USD 200. However, it was resold by her mother and she got a SIM card from her sister which she obtained for USD 1.50, from MEC through the lottery. Pwint Phyu also received her sister's old handset.

Mobile and internet usage

Pwint Phyu mainly uses her mobile phone at work. She has more free time at work than she does at home. She calls her husband on a daily basis. She spends around MMK 10,000–15,000 (approximately USD 10–15) per month on top-ups. She plays simple games such as Animal Feeding. Even when she wants to do more with her phone, the handset cannot accommodate the larger storage requirement.

Pwint Phyu uses the internet for:

- Viber (to call people she knows)
- Facebook (to see pictures that have been uploaded, search for news on celebrities, current news, etc.)
- Watching videos

She doesn't know how to search the internet or upload and share content.

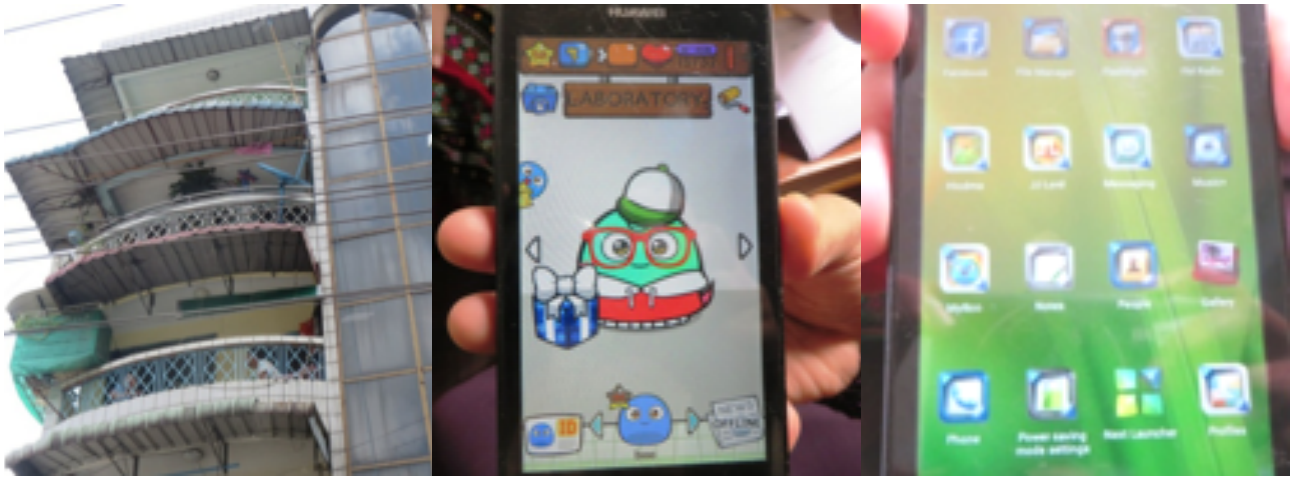
What she thinks of owning a mobile phone

"Once I was at the hospital with my daughter when she was sick. I did not have a mobile at the time. When I needed to get something, I could not contact anyone. I could not go out to make a call as I could not leave my daughter alone. I tried to borrow a phone from others to make a call, but no one wanted to share their mobile phone. I was really panicking so I thought to myself that I should have a mobile of my own."

"When some of my friends found better jobs, they called and told me about them so I could apply. Otherwise I would have missed this opportunity."

"I became more knowledgeable than I was before having a mobile and using the internet. In the past, I knew nothing as I was at home all the time and did not get a chance to go out and socialize."

"Schoolchildren should not use mobile phones, because they are still young. But many already have mobile phones so they find boyfriends online and the parents remain unaware about these developments."



DAW SWE SWE	
AGE	63
LOCATION	YANGON (URBAN)
OCCUPATION	RETIRED HIGH SCHOOL PRINCIPAL AND PART-TIME TEACHER AT A PRIVATE SCHOOL
MOBILE OWNERSHIP STATUS	OWNER

I think it would be useful if there were courses for those over the age of 60 on the use of the internet, YouTube, etc.

Of course, it may have its functions but I don't know how use them. Whenever I get a call, I just know the buttons to answer or to hang up.

Daw Swe Swe, is a 63-year-old working woman. She is a retired principal of a government high school, but is now a part-time teacher at a private school. She is actively involved in a B.Ed. alumni association and in social activities. She values the work and responsibilities she had when she was working as a public servant. However, her mother's health and her daughter's job are now more important to her. Daw Swe Swe owns her own mobile phone, but does not use the internet.

Her household

Daw Swe Swe is a widow and currently lives with her mother, sister, niece, and daughter. All members of the household have their own income and they share household expenses. She obeys her mother and consults her on financial matters. Her mother is the head of the household and is the key decision-maker for family affairs. Between them, she and her daughter earn MMK 800,000 a month. She also keeps some money aside for her own expenses.

Challenges and difficulties

Daw Swe Swe faced many work-related challenges when she was a high school principal. She has no significant challenges on the home front though, as her mother takes the lead in household activities and is involved in most family affairs.

In terms of communication, she faced many difficulties not having a mobile phone when she worked at the high school. Whenever landlines broke down, she was compelled to ask a member of the school staff or dispatch a man to send messages or documents to other offices/schools. She also faced problems with landline phones, and a mobile phone became a necessity for keeping informed about her family's safety, and for her own security as well.

"I used to spend most of my week at school and returned home only once a week. I used to call the home phone when I was about to come back home. On one such day when I called home, no one answered the phone. So, I thought our phone was broken. But when I called again after 1 or 2 days and they still didn't answer, I become suspicious. So I called one of my sisters, who told me that my mother was at the SSC hospital but that it was not emergency. After that, I had to go back home after school every day."

Mobile ownership in her household

Except for Daw Swe Swe's mother, all other members of the household have mobile phones. Although she has two handsets, i.e. a keypad phone and a smartphone, she mainly uses the keypad phone.

"I don't have enough time to learn how to use a mobile phone. When I was in service at the government school, I couldn't learn because of my work commitments at school. Now, I still have some level of responsibility to take on in the classroom at the private school that I work in."

"Whenever I ask my daughter (to teach me how to use the phone), she says, "Mom, you will forget it again because you don't use it often".

"But I forget everything when I stopped using it [the phone]."

Why and how did she get her mobile phone?

Even though she required a mobile phone, she allowed her daughter to get one for herself first. They had to send applications in order to get the SIM from the government. It was a difficult time for telecommunications. Later, when mobiles become cheaper, she bought a new one for herself.

Daw Swe Swe had received verbal, unofficial notice from the Divisional Education Department that using mobile phones would be beneficial at work. She says that the Department must focus on arranging this. She bought her first SIM from the government and gave it to her daughter. She later bought a CDMA SIM from Nay Pyi Taw.

"I didn't need a mobile phone that much at the time. It was more important that she [my daughter] had a phone. And she wanted to use it. I could also check on her whereabouts when she carried a mobile phone."

"[Mobile phones are] popular among the youth even though they have nothing special to do with it…they just want to use it as a fashion accessory."

Mobile and internet usage

She currently uses only one feature on her mobile: voice calling. Whenever she makes a call, she presses the buttons on the keypad to dial, and does not use the address book in her phone. She does not know how to save contact numbers and cannot read messages.

"Sending messages and storing numbers confuses me. I need to see the number. They [callers] said you have the numbers in your phone but I don't know how to look it up on the phone. So, I ask them just to give the numbers and then I write them down."

Daw Swe Swe never uses the internet herself. However, she uses the information gathered from the internet by other people, such as her daughter or teachers from her school.

"What I understand is that I can use the internet to look for what I want to know. For example, I want to write an essay about "the moon". Then I need to find the information, and for this I have to ask for my daughter's help. So, I found a lot of information about the moon. I just translate this information from English to Burmese and copy it. I don't need all data that is found in this way."

What she thinks of owning a mobile phone

"It's more convenient when we have mobile phones, as we can inform each other about where we are and when we will be back."

"I'll practice a lot after I've changed my handset. Especially, messaging. My friends ask me to send messages."

"I want to use Facebook and email for work…there may be other things as well. Now the internet and YouTube are very popular and I have never heard about them before. Whatever new things come in, I want to learn about them as well."

She suggests that there should be demonstration courses on TV channels to show how to use mobile phones and how to go on the internet, especially for older women like her.

On the risks of mobile phone usage, she says that students have access to inappropriate content without their parents' knowledge:

"Most Grade 11 students surfed the web when I was in service at the Government school. Sometimes, they were even watching pornographic videos in the class. The Director General of the Education Department asked us to handle such situations by keeping all of the mobile phones of the students in order to investigate. So, once we found out, we informed their parents. To be honest, their parents didn't let them bring mobile phones to school; instead, they just let them use them outside of school for emergency purposes. However, the children brought mobile phones to school without their parents' knowledge and they shared the videos with their friends."

MAY THAZIN	
AGE	19
LOCATION	YANGON (URBAN)
OCCUPATION	UNDERGRADUATE STUDENT
MOBILE OWNERSHIP STATUS	OWNER

My mobile phone is like a second mother to me. I love it because my mother and grandmother gave it to me as a present. I keep and use it carefully.

Playing COC energizes me. It makes me think about how to earn money in that game. Because of this game, there have been nights that I don't sleep... I am that crazy about this game.

Living here alone without any relatives is really hard for me. I've got no one to talk to, no shoulder to cry on if I face a problem.... I am so alone ... So I have to discuss it with my mother over the phone.

19-year-old May Thazin is a third-year student at Tarwa University. She resides in Yangon and goes to university every day by bus. On average, she spends 2–3 hours on the bus. She is not employed as yet. She is a mobile phone owner.

For May, her mother is the most important person in her life. Her mother fulfills everything she needs and even though they are miles apart, she feels close to her. She thinks her mother understands her more than her father.

Her mother calls her every day from the village. However, if the weather is not good or if there is an electricity shortage in town, she could lose contact with her mother for 3–4 days.

Her household

May lives in her grandparents' house in Yangon, with one maid, while her other family members live in Bogalay where they do business. There are six family members in total: her grandparents, parents, younger sister, and herself.

Her grandfather arranged to rent the front space of their house and gives this rental fee to May for her expenses. She receives MMK 120,000 from this rent and uses it to pay for food and school fees.

Why and how did she get her mobile phone?

She got a mobile phone after passing her matriculation exams with good results. She asked her mother for a mobile as her graduation present.

"My mother and my grandmother paid for my mobile as a reward for my achievement. I chose Samsung Note II. Everyone wanted to buy it because of its large screen."

She also has a keypad phone that she uses only for voice calls.

Mobile and internet usage

"I use my mobile all the time. Even in the toilet."

According to May, she uses her mobile to access Facebook all the time. Currently she is using the handset for playing the Clash of Clans (COC) network game. She uses her mobile mainly for:

- Facebook
- COC
- COK (Clash of Kings)
- Viber
- Dictionary

Through Facebook, she says she learns about how ladies should behave before and after marriage, about the freedom that a girl should have, and how to protect herself. She also learns about religious teachings.

"I use dictionaries a great deal for my assignments. Sometimes I have to use three dictionaries at the same time. We have Shwe, Oxford, Longman, and Planet Dictionaries."

"I used to be afraid of people when I was a child and it's very difficult to connect with friends. Now I can learn a lot from Facebook about how to behave in life, how to act when someone is jealous of me, etc. Reading the words on these pages makes me realize how to control my anger. I have saved in my phone sermons from monks. Having this phone makes it easy for me to hang out with friends."

May spends about MMK 1,000 per day on her mobile, especially on internet usage. She uses an MPT SIM for browsing the internet and a Telenor SIM for outgoing calls. She does not like Ooredoo because she does not understand its promotions. She prefers Telenor for its messages about credit balance and the promotions it offers. She initially learned to play (mobile phone) games from her friends, and later learned more about how to play these games from her boyfriend.

She understands that there are good and bad things about using a mobile phone.

"We use it for using Facebook, for voice calls, and for playing games. Talking on the phone for a long time can damage your ears. Also playing games make my eyes bad. I have to wear contact lenses because of bad eyesight. Plus I lose hours of sleep because I use the mobile too much. Playing COC is costly for me."

"... children should not use mobile phones until they graduate high school for their own safety. Education is very important, and at the same time, so is social networking. But because so many people meet on Facebook, they became boyfriend and girlfriend and then get married unintentionally."

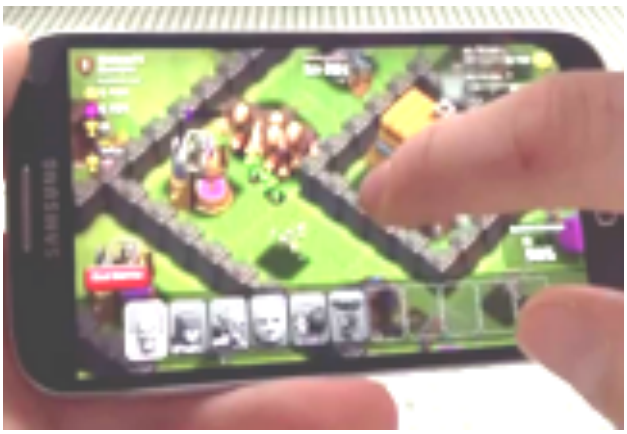
What she thinks of owning a mobile phone

"We will become more knowledgeable, possibly. I didn't have much knowledge about many things before I had my mobile. We were too reserved to go to public areas. When we use Facebook through a mobile phone, we can realize what kinds of people are around us and we can't be cheated easily. I also want people from my hometown to be knowledgeable. They can, for instance, know the prices of fish and of weather conditions."

Regarding mobile ownership, she thought that more men have mobiles, as women do not have equal opportunities compared to men. Men receive priority for mobile phones, and their interests are also different.

"Men are interested in business and politics. Women are interested in social media and how to keep a family together or how to take care of their husband."

"It would be good for girls from rural areas if they know how to use it well. Otherwise it could be a hazard. They need to have a good understanding of the ways in which they should use the app."



MOE MOE WIN	
AGE	39
LOCATION	PANTANAW (RURAL)
OCCUPATION	MAT WEAVER
MOBILE OWNERSHIP STATUS	OWNER

A mobile phone is useful for health and business-related communications.

I no longer need to wait till the wholesalers come and buy mats nor do I need to go to Pantanaw to sell them, as I did before. I just have to contact them through my mobile phone. It obviously saves time and money.

39-year-old Moe Moe Win from Tawtaya Gyu village, Pa Thwe Village Clan in Pantanaw, rural Myanmar, is a working wife, mother, and daughter who plays the leading role in her household. She is even entrusted with decisions such as the purchase of gold; her husband trusts her judgment greatly. Her mother and son are of immense importance to her. Her ambition is to overcome her family's current financial difficulties. She maintains her own mobile phone.

Her household

There are four members in her household: her mother, her husband, her son, and herself. She weaves mats all day using her own raw materials. Her husband is a casual worker. He helps her in drying raw materials for her mats. Their 19-year-old son sometimes works as a casual worker, like his father. She is the only one who earns a regular income and their total household income is approximately MMK 150,000 per month. Each member of the household has his or her own responsibilities for domestic chores. Moe Moe usually helps her mother cook.

Mobile phone ownership in the household

There are two mobile phones in her household; one belongs to her while the other belongs to her son. Her son was the first mobile phone owner in the family. He has a smartphone called Vivo that cost MMK 120,000. Hers was the second mobile phone purchased—a Samsung keypad phone. Her husband does not want to get a mobile phone and he always gives priority to his wife and son. She let her son buy a mobile first as he is a young man and he wanted to own a mobile phone, much like others in the community.

Why and how did she get her mobile phone?

Her brother purchased her mobile phone for her in Yangon. She gave him the money and asked him to get one which is easy to use. She uses it to keep in touch with relatives in Yangon, for business, and for family health-related situations, as well as emergencies.

Moe Moe and her mobile phone

She can top-up her phone balance using her own funds, and each MMK 1,000 top-up card lasts 4–5 days. For her, the sole purpose of owning a mobile phone is to make voice calls. She is not very familiar with the features of her phone and does not know how to save phone numbers to her contact list.

Despite using a feature phone with a Telenor SIM card, she does not use the internet for three reasons: the cost, lack of time, and lack of interest (she appears to know very little about the internet).

HNIN HNIN	
AGE	28
LOCATION	YANGON (URBAN)
OCCUPATION	UNEMPLOYED
MOBILE OWNERSHIP STATUS	NON-OWNER

At times he gives me money to buy a mobile phone. But I have to use it for school fees for my children. And what I want to get is a smart phone, which I can't afford to buy yet.

Whenever I have to talk with my husband about something important, the lack of a mobile phone makes the task more difficult. When he is on a trip, I often can't contact him because I don't have a mobile phone.

I would contact my children's teachers first because the school sent out a letter saying that parents should give the teachers a contact number so that they can contact the parents for situations or emergencies concerning their children.

I don't have enough money at the moment. I would like to work any job that will allow me to earn some money. Finding a job is difficult for me. I would work even if it is as a cleaner because our income is not enough for our children.

Having only one mobile isn't enough for us. At least two are needed. Both of us should have one each. Then we could communicate while we are away from one another.

28-year-old Hnin Hnin is a housewife. She is married and lives with her husband and two children—a son aged 9 and a daughter aged 4. She does not own a mobile phone.

Her household

Her husband, who works at the dock of the Myanmar Port Service doing welding and cutting, is the sole income earner. She is completely reliant on her husband's income. Her husband does not allow her to work outside the home. She tried to earn some money by selling groceries at home, but she had to give that up as she lost capital after going deeply into debt.

Hnin Hnin receives money from her husband. She only knows that her husband earns approximately MMK 98,000. She does not think that her husband gives all his wages to her as he keeps some aside for buying alcohol and beetle. She manages the household finances, including paying the rent and keeping money aside for various purchases. She also borrows money from her parents and relatives. Most of the time, she has to make the decisions regarding household purchases. However, her husband never discusses the purchase of electronic goods such as TVs and mobile phones with her. She is only required to hand over the necessary money.

Communication

Hnin Hnin's siblings own personal mobile phones. In her household, her husband owns a mobile phone. He got the SIM card from the government through an installment payment scheme. The SIM cost MMK 200,000, which he paid to his department in monthly installments of MMK 15,000. He purchased a handset for over MMK 100,000 (she thinks).

She uses her husband's mobile for voice calls to other relatives and to play games once he comes home from work. His phone is a smartphone, but he does not use the internet. During the day, she chats with her neighbours. She has one close friend who is a 19-year-old girl who owns a smartphone and also uses the internet.

She feels that it is inconvenient for her to use other people's phones because she cannot talk very long and feels uneasy talking about financial matters in their presence.

She does not know how to store a contact number in a phone, and is not familiar with the other features of her husband's phone either. She usually plays games and looks at photos with her husband's phone. She does not use the internet on his mobile.

Even though she does not have her own phone right now, she really wants to buy a smartphone for herself, especially for playing games.

Challenges and difficulties

The main difficulty for Hnin Hnin is a lack of extra money, which causes problems running the household every month. She is often in debt and can only pay it back at the end of the month after receiving her husband's salary.

"When the end of the month draws near, that is the 25th or 26th days of the month, there is no money left for our use. Money is the most important thing for me. I feel upset when I don't have any money."

Being a mother of young children, she looks after them even though she wants to go out and work. There is no one else in the house who can take care of them instead.

She feels bad about being female and doing household chores and thinks that males are less burdened in life.

"I feel upset about being a girl. I want to be a boy because they don't have to do anything. Nobody told me to do so, but since we are girls, we need to do all the household chores like washing and ironing. Even though there are jobs everywhere for us."

What she thinks of owning a mobile phone

Hnin thinks that it is not enough to have one mobile for her family because her husband takes the mobile when he goes to work. Sometimes it is difficult to communicate with him when she borrows a mobile phone from someone else. She says it is quite difficult to find a pay phone nowadays since mobile phones are so readily available. She has to ask someone to lend her their phone, or she needs to wait for her friend to lend her phone. She has to buy top-up cards for her friend because she uses her mobile most often. They spend time together by reading posts on Facebook and the internet.

"I have to top-up her phone balance, even though I received the phone call. We can't afford to buy MMK 5,000. So, we can only afford to buy top-ups worth MMK 1,000 which we have given her. Although I only received the phone call, I am required to top-up her phone."

"My friend also comes to me and shows me. If she doesn't come to me, I go to her. She told me to surf the internet with her. Sometimes, we look at photos and Myanmar traditional performances together. I do want to read the news. I go to her and watch the news whenever I want to. But since she is busy, we don't watch anything."

Hnin also expressed her feelings about using the internet on a mobile phone. She has seen many young boys from her community watch pornography and other inappropriate content. She is afraid that her children and husband might be exposed to similar content on the mobile phone. Thus, she will not allow these types of videos to be stored on the phone as she wants to protect her children from seeing them.

"Young boys look at such things on mobile phones and their parents don't know anything. I don't let my children watch such things. If they go near them, I beat them...There are no such materials on my husband's mobile phone. Every child can check the phone. Even a 4-year-old girl can press buttons and explore the phone. I don't allow these things to be put on my husband's mobile phone. I am afraid that they would watch pornography or inappropriate scenes."

What she wants to do once she has her own phone

If she had a choice, Hnin would like to get a smartphone because she wants to play games for entertainment, and she would also like to read news and information from the internet. She would search for recipes since cooking is her hobby. She would use a Telenor SIM card which would allow her to top-up the phone with MMK 1,000. She would use the Myanmar font to avoid any difficulties reading words on the mobile. She would also ask her younger brother to help her to buy the handset, install game applications, and teach her how to use the phone.

Barriers to owning a mobile phone

Her financial situation is the main barrier to having the mobile handset she wants. She is able to buy a keypad phone, as her husband has given her money to get a phone. However, she does not want a keypad phone, especially when she sees that every man and woman from her community is able to have a smartphone. She is upset that even the garbage collector uses a smartphone, and feels that only she cannot afford one. She thinks that if there are cheaper handsets of good quality in the market, this will help women to own better mobile phones and will promote mobile usage. While she knows the cheapest smartphone available costs MMK 60,000–70,000, she thinks that these would not be of good quality:

"[The lowest price for a handset is] more than 60,000–70, 000 kyats. But those are not good enough, only handsets that cost more than 1 lakh[50] kyats are good enough to be used...[i.e.,] more durable than the [cheaper] ones."

Why do more men own mobile phones than women in Myanmar?

She believes that a man becomes the first mobile owner in a household because men have to go out for work. Mobiles are a necessity for men to do business and report to their seniors. However, when she reflected on what she has observed in her community, she said that both men and women from her quarter have mobile phones. Almost all own a mobile.

50. 1 lakh = 100,000

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