



Navigating the Walled Garden

Free and Subsidized Data Use in Myanmar

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LIRNEasia is a pro-poor, pro-market think tank whose mission is *Catalyzing policy change through research to improve people's lives in the emerging Asia Pacific by facilitating their use of hard and soft infrastructures through the use of knowledge, information and technology.*

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Executive Summary

This report presents analysis of mobile data users' perspectives on zero-rated and subsidized data promotions in Myanmar. The findings presented here are the result of research conducted by LIRNEasia in Yangon Region, Myanmar in July 2016. The team conducted focus group discussions with a total of 63 mobile phone users as well as informal interviews with corporate stakeholders and street-side vendors. All 63 respondents were Internet users, i.e., users of mobile data. At the time of research, Myanmar had a range of zero-rated data offerings—the most prominent being Facebook Free Basics (offered via MPT, the incumbent operator), and Free Facebook and Viber text messages (offered by new entrant Telenor). All operators offered a number of other subsidized or promotional data packages.

Key Findings

Respondents do not use or know Free Basics content other than Facebook

Though the Free Basics platform offers a variety of content, actual use was dominated by Facebook, with other content hardly used: while some 40 respondents have used Free Basics, only four know of free content available on the platform beyond Facebook and Messenger. Apart from user preference, advertising may be partially responsible for the low awareness of content other than Facebook. When MPT launched Free Basics, it used SMS, Facebook posts, billboards and fliers to market the promotion, but focused messaging only on Facebook. Only nearly two months later did MPT advertise the other content on the Free Basics platform by SMS and Facebook post.

Differently designed zero-rated Facebook promotions yield different user behavior

Respondents described different behavior on the two main zero-rated promotions in this study. Many respondents stopped using Free Basics because of user-experience frustrations: the absence of photos and video on the free version of Facebook, slow data speeds and the process of switching back and forth between paid and free content. Those who continue to use Free Basics use it—alongside paid data—for limited purposes. Many respondents use Free Basics primarily when their top-up balance has run out, as a means to keep in contact before topping up.

Respondents who use Telenor Free Facebook and Viber increase data consumption on the promotion. Several rural respondents began watching video content on Facebook for the first time because of the promotion. Most use their entire 150MB free quota each day, and many will pay for additional data. Thus, the promotion serves as an ‘on-ramp’ to paid data consumption, although not to the ‘open Internet’: users pay to continue using Facebook. Telenor Free users are content to remain within the ‘walled garden’.

Respondents use zero-rated promotions as a strategy to manage data-costs

Respondents pursue sophisticated data-cost management strategies that include switching telecom operators to for promotions and using zero-rated content. Several respondents use Free Basics regularly to manage data expenses. These respondents use one of several strategies on Free Basics: using free Messenger exclusively, choosing to read posts on free Facebook, or limiting certain Facebook activity to free mode, in particular checking Facebook groups. Some users of Telenor Free stop once they reach the daily cap, while others continue using Facebook by switching to MPT Free Basics.

Respondents use multiple SIMs and are highly responsive to top-up bonuses

Top-up bonuses determine when respondents choose to purchase additional mobile credit and how much they decide to purchase. Respondents swap out SIMs and operators depending on current promotions, and even purchase new SIMs in order to take advantage of bonuses. Respondents also describe swapping SIMs for better coverage as they move about or to use one operator for calling and another for data.

Some users do not perceive a ‘walled garden’

User perception matters: if users understand they are using free content, i.e., they see the ‘garden walls’, then they understand they are not using the ‘open Internet’. The limitations of Facebook on MPT Free Basics serve to highlight these garden walls: respondents know when they are using zero-rated content and when they are not. The same cannot be said for Telenor Free. Several users—from both urban and rural focus groups—describe the free 150MB Facebook allotment on Telenor as general-use data.

Most users exit the ‘walled garden’

Perception and visibility aside, users do not remain within the ‘walled garden’. Most active zero-rated-content users also use other Internet services, including Google, news websites, and apps. Respondents describe following links from within Facebook to external websites. Exiting the walled garden is more common among urban respondents, but most rural respondents who use zero-rated content also use other applications online, commonly BeeTalk or Clash of Clans.

Three respondents describe using only zero-rated services on the Internet: one urban, middle-income and two rural, lower-income users subscribe to Telenor Free and use Facebook and Viber exclusively. Whether this limited use is due to the availability/use of zero-rated content is unclear because several respondents describe similarly limited Internet use while not subscribing to zero-rated content.

Facebook dominates; some rural respondents conflate Facebook with the Internet

In discussing promotions and Internet-use more broadly, respondents focus on Facebook. Some respondents from rural focus groups use Facebook and the Internet interchangeably, as, for example Internet search for them means searching within Facebook. Yet, this sentiment is not universal. One rural respondent, for example, when asked about commonly visited websites, challenged the question: “I don’t have [it] like that. I read my friends’ Facebook posts. I use the Facebook application,” implying knowledge of the difference between websites on the ‘open Internet’ and content inside the Facebook app.

Our findings raise concern of Facebook’s influence within Myanmar, as these zero-rated promotions may serve to perpetuate its dominance and undermine widespread understanding of the distinction between its services and the ‘open Internet’. But, simultaneously, our findings reveal that users are more than uncritical: they are savvy consumers who switch between promotions and use Facebook for many different purposes. More than simply sharing cat videos, respondents use Facebook to communicate with family and friends at great distances, to read and share news from domestic and international sources, to relax, to create, to work, and to study.

Internet literacy and consumer awareness are generally low

Internet literacy varies considerably among respondents. Some urban, highly educated respondents are well versed, while rural, less affluent, and older respondents have poor understanding of mobile phones and Internet data. This is observed in the tendency to conflate Facebook with the Internet as well as answers to questions about websites and searching activity. All respondents have little understanding of how their mobile bills are calculated, as they do not have access to itemized deductions from their top-up balances.

Search behavior varies between urban and rural respondents

Over half of respondents actively seek out information through Internet search engines. Google is more common among affluent and urban users, who search for their jobs, studies, or general use. But rural respondents search, particularly for news, on Facebook. Almost all respondents search using English (Roman) characters instead of Myanmar script, and many use English language.

Apps are considerably more popular than browsers

Less than one-third of respondents say they use browsers on their phone. All 63, however, actively use apps to access the Internet. Among those who use both, apps are preferred for their ease of use, speed, and reduced data costs. Apps for social media, messaging, gaming, media downloads, news, and education are popular.

Both local and international content are popular

Respondents describe consuming both local and international content on their phones. News from domestic sources is particularly popular, but much of this content is accessed through the international Facebook platform. Use of Myanmar apps is limited. Aside from news, international content dominates.

Poor Wi-Fi quality and availability lead to non-use

Only five respondents consider Wi-Fi their primary mode of access to the Internet. Over half of respondents acknowledge using Wi-Fi at least occasionally. But limited access and poor connection quality lead prevent greater use. In one rural township, there is only a single point of Wi-Fi access, the local teashop, but its connection is notoriously slow, so those interviewed say they choose not to use it.

Respondents are not happy with a second-class Internet

Given the choice between zero-rating, limited data to access unrestricted content, or unlimited access to open content but at slow speeds—three widely proposed models for spreading access—respondents prefer unrestricted content. Respondents express frustration at slow Wi-Fi and data speeds. Frustrations with limitations on Free Basics and the launch of an alternative with free full-content Facebook led seven respondents to switch from MPT to Telenor. Users themselves are not happy with a perceived second-class Internet.

The remainder of this report is divided into seven sections:

1. **Introduction** offers context: telecommunications in emerging Myanmar, a brief overview of the global zero-rating debate, and the details of the promotions considered in the research.
2. **Methodology** describes the research protocol and limitations.
3. **Using Data Promotions** presents how interview respondents use zero-rated promotions, Wi-Fi, and bonuses.
4. **Zero-Rated Content Users vs. Non-Users** analyzes respondents' activity and perceptions of 'walled gardens' and the 'open Internet' while putting results into conversation with past research.
5. **Internet Use and Perception** details respondents' understanding of and motivation to use Internet data, offering analysis of common uses including Facebook, search, browsers/apps, Wikipedia, and foreign/domestic content.
6. **Market and Competition** covers respondents' phone budgets, multiple SIM use, promotion advertising, vendors, and Myanmar content producers' perspectives on Free Basics.
7. **Recommendations** concludes with synthesizing remarks and recommendations for policymakers, mobile operators, Internet companies, and civil society.

Introduction

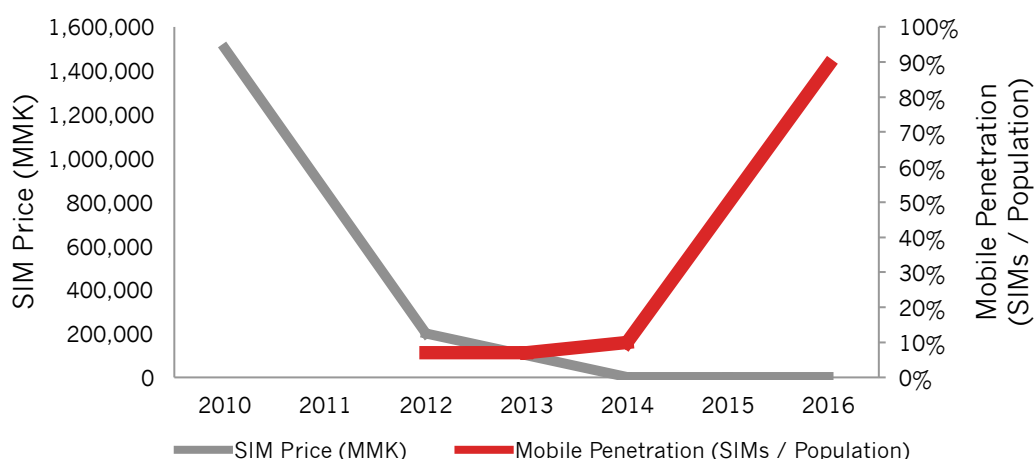
Myanmar: the Recent Rise in Mobile

Mobile phones and ICT industry are rapidly expanding in Myanmar today. Driven by liberalization of the sector, as shown in Figure 1, mobile penetration rose to an estimated 90 percent in 2016 from under 7 percent just four years before (Aung Kyaw Nyunt, 2016).¹ LIRNEasia's 2016 nationally representative survey found that 83 percent of households own a mobile phone, constituting a 46 percent increase from 2015 (LIRNEasia, 2016). By 2015 mobile signals were available in an estimated 90 percent of wards and villages across Myanmar (Galpaya et al., 2015).

But in a country where the average household income is less than MMK 300,000 (USD 254)² per month, affordability concerns remain. Mobile phone services and, particularly, Internet data constitute a large portion of users' budgets. Only 49 percent of mobile phone owners reported using data services in 2016 (LIRNEasia, 2016).³ Yet, 78 percent of those mobile phone owners have Internet-ready smartphones.

Mobile operators have responded by offering a range of discounts and zero-rated data promotions. This report focuses on these efforts to increase mobile Internet adoption.

Figure 1. Mobile Transformation in Myanmar



SIM prices have fallen to MMK 1,500 (USD 1.27) as mobile penetration soars.⁴

¹ Calculated as a proportion of SIM cards to population.

² 1 USD = 1,181 MMK at the time of fieldwork.

³ LIRNEasia. 2016. "Mobile phones, Internet, information, knowledge: Myanmar 2016."

⁴ Figure inspired by Studio D (2015); sources: Aung Kyaw Nyunt (2016), Harpur (2016), Matsui (2016), and Bangkok Post (2016).

Zero-Rating

Zero-rated promotions allow subscribers to use data for free, i.e., without counting towards their purchased data plan or top-up balance. Such data is often limited in scope to a few apps or Internet services.

Zero-rated promotions are currently available for mobile subscribers in countries around the world. There is no comprehensive global figure on availability, as many zero-rated offers are limited time promotions. Facebook Free Basics, which offers a range of content, including a picture- and video-free version of Facebook as well as third party services, is offered in 53 countries worldwide (Internet.org, 2016). Wikipedia Zero, a zero-rated version of Wikipedia, is offered in 64 countries on 82 telecom operators (Internet Society, 2016). Specific, service-led promotions aside, a recent study in Latin America revealed that 15 of 19 countries studied had zero-rated offers of some sort (Viezens & Callorda, 2016). Another study looked at operators in eight countries in the Global South and found that of 181 plans reviewed, 13 percent were zero-rated offers (A4AI, 2016).

Zero-rated promotions, argue proponents, serve as an 'on-ramp' to the Internet. Today more than 70 percent of the global population lives in areas with mobile Internet coverage, but only some 45 percent of the population is online (Internet Society, 2016). Many countries have met affordability goals set by the UN Broadband Commission that requires monthly access to cost less than 5 percent of monthly income, yet still see low adoption (Galpaya, 2015, 11-12). Cost alone does not explain low Internet use in many countries in the Global South. Instead, people often do not see benefits of the Internet that warrant the cost. Zero-rated promotions introduce people to Internet services, and may thereby stimulate demand for mobile Internet access. Indeed, services often included in zero-rated promotions are some of the most popular in the world: Facebook, Twitter, and Wikipedia, among others. A recent study in South Africa found that zero-rating particular services increases use of those services, but generally only for the duration of the promotion (Chen et al., 2016). The same study found that a zero-rated WhatsApp promotion increased use on both mobile data and Wi-Fi, demonstrating spillover effects beyond the particular operators and promotion users.

Facebook cites internal research that half of its users who go online for the first time with Free Basics pay for data within 30 days (Internet.org, 2015). It is unclear, however, if such users simply pay to browse photos and video on Facebook, or if they use other Internet services outside the 'walled garden'. A recent phone-based survey study in eight countries across the Global South found that only 12 percent of zero-rated promotion users came online for the first time through the promotions (A4AI, 2016). Yet, 28 percent of zero-rated-offer users stopped using the promotions and instead paid for access to the wider Internet. The same study found that a further 35 percent of zero-rated-promotion users continue to use the free services while paying for data. A similar survey study in South Africa and Kenya found that respondents who use zero-rated promotions tend to use regular data as well (Chen et al., 2016). Taken together, these sources indicate that zero-rated services may have moderate influence as an 'on-ramp' to the Internet, but the picture remains far from clear.

Zero-rated offers are controversial. The Telecom Regulatory Authority of India banned zero-rating in 2016 after a publicized debate over its effects on Net Neutrality (See, e.g., Tech Desk, 2016). Critics of zero-rating challenge that such offers violate Net Neutrality in several ways. Zero-rating could create fast and slow lanes on the Internet and thereby explicitly violate Net Neutrality. A study of speed and quality of Facebook Free Basics in Pakistan and South Africa found that the zero-rated promotions were

generally slower than paid data (Sen et al., 2016). This is problematic, but not inherent to zero-rating; instead, it is a function of the particular services' reliance on distant proxy servers. The Body of European Regulators for Electronic Communications distinguishes between the zero-rating and traffic violations of Net Neutrality (BEREC, 2016). Zero-rating may nonetheless violate the spirit of Net Neutrality, as it could restrict poor users into a 'walled garden' of limited Internet access. Studies have found that people in several Southeast Asian countries disproportionately respond to surveys as using Facebook but not the Internet (See Mirani, 2015). These studies predate zero-rating in those countries, and so do not offer evidence on the question of whether zero-rating contributes to the phenomenon. Unclear, furthermore, is whether users leave the 'walled garden' of Facebook or not. In any case, it would be unfair to present this statistic in isolation: users around the world browse Facebook almost to the exclusion of all else, even when Facebook is not zero-rated.

Critics also charge that zero-rating undermines the spirit of Net Neutrality by limiting local expression: local content producers may struggle to earn a living while competing with zero-rated offers from disproportionately U.S.-based large corporations. This was poignant with the first iteration of Facebook Free Basics (at the time, Internet.org), where Facebook acted as a gatekeeper in selecting partners who would be allowed on the zero-rated platform; these decisions were made without transparently accounting for the decision-making process. Facebook later changed its policy. Today any service that meets basic technical requirements can join the platform without seeking permission from Facebook. It has been argued that economic incentives motivate zero-rating gatekeepers to seek as diverse content as possible in order to attract more users (Eisenach, 2015). It remains unclear, however, to what degree this argument translates into practice.

Many questions remain unanswered in the zero-rating debate. This report provides empirical data to answer some of these questions, based on research conducted in Myanmar in July 2016. Section 2 details the research methodology and limitations. Section 3 portrays how respondents use zero-rated promotions. Section 4 compares zero-rated promotions users' Internet activity with that of non-users. Section 5 details themes in all respondents' use and perceptions of the Internet. Section 6 presents evidence on market competition. Section 7 concludes with stakeholder recommendations.



Myanmar Zero-Rating Promotions

Each of the three major telecommunications companies in Myanmar—MPT, Telenor, and Ooredoo—offers a range of discounted data plans. A summary is provided in Table 1. Each type is described in detail below.

When subscribers pay for mobile services, they may buy top-ups of set denominations of MMK 1,000, 3,000, 5,000, and 10,000 for all operators.⁵ They may elect to use those credits towards pay-as-you go consumption, or they can buy dedicated data, calling, or other promotional packs. Still another, albeit less popular, option are post-paid plans that bill subscribers monthly. This report focuses on pay-as-you-go data and associated zero-rated promotions.

Table 1. Mobile Operator Promotions

Type	Description	Operator	Examples
Zero-Rated Data	Content-specific free data	MPT, Telenor	MPT Free Basics; Telenor Free Facebook and Viber; Telenor Free Wikipedia; Telenor Facebook Zero
Top-up Bonuses	Additional kyat balance bonus	MPT, Ooredoo, Telenor	10,000+10,000 kyat MPT Bonus
Data Pack Bonuses	Additional data bonus	MPT, Ooredoo, Telenor	1G+1G MPT Bonus
Night Plans	Time-specific discounted data and voice	MPT, Telenor	MPT Night Package (11PM – 7AM, varying duration and data caps)
Social Packs	Content-specific discounted data	MPT, Ooredoo, Telenor	Ooredoo Facebook Plus (1kyat/MB)
Calling Packs and Bonuses	Free or discounted calling, usually within network	MPT, Ooredoo, Telenor	Daily 50 minutes of free Ooredoo to Ooredoo calls (duration varies with top-up)

⁵ Ooredoo also offers top-ups of MMK 500, although no respondents mentioned them.

Zero-Rated Data: Content-Specific Free Data

Zero-rated data is free to the user: it does not count towards their data allotment. Such data is often limited in scope to a few apps or Internet services. In Myanmar at the time of fieldwork, MPT and Telenor both offered zero-rated plans.

MPT: Facebook Free Basics

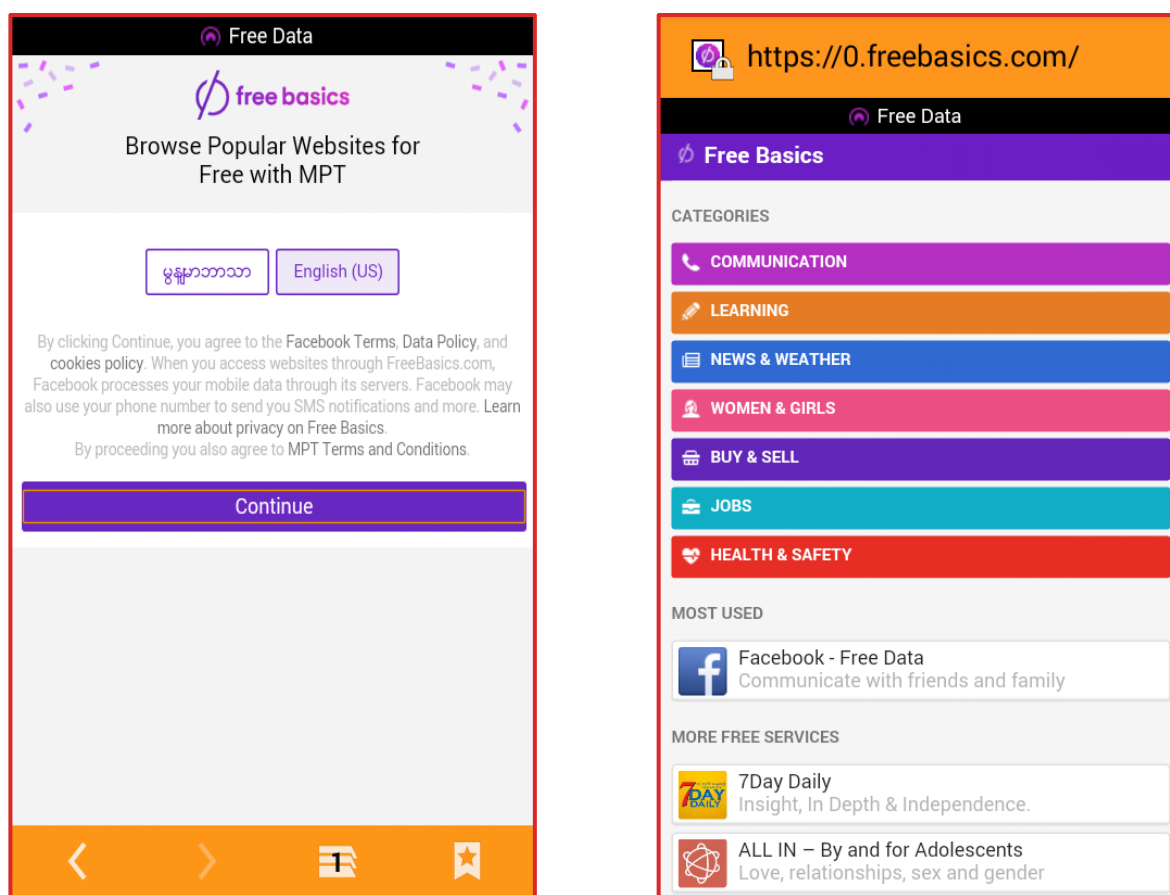
MPT Free Basics is the local version of Facebook Free Basics, and was first released in Myanmar on June 2, 2016. MPT Free Basics provides access—free of charge—to Facebook Flex, an image- and video-free version of Facebook and Facebook Messenger, as well as free access to Burmese Wikipedia, WikiHow, resources from UNICEF's Internet of Good Things, and several local websites. The Myanmar websites include 7 Day Daily news, employment resource JobNet.com.mm, real estate website ShweProperty.com, and mother and child health app MayMay (Table 2). Facebook Free Basics is available in a mobile web browser or in a standalone app; additionally, Facebook Flex is available within the standard Facebook app (Figure 2).

Table 2. Content Available Through MPT Free Basics

Website	Local Content	Burmese Language
Facebook Flex		Yes
Facebook Messenger		Yes
7 Day Daily (news)	Yes	Yes
Connect Smart		Yes
Free Books by Worldreader		
Mathematics by TeachMe.com		
Girl Effect		Yes
ShweProperty.com	Yes	Yes
JobNet.com.mm	Yes	Yes
All in-By and for Adolescents		Yes
Baby Center		Yes
WikiHow		
Emergency Information		Yes
Facts for Life		Yes
MayMay (women's health)	Yes	Yes

* at time of fieldwork

Figure 2.



Screen shots of Facebook Free Basics on MPT terms and conditions agreement and menu

Telenor: Facebook Zero and Free Wikipedia

When Telenor launched in Myanmar in 2014, the operator began offering Facebook Zero and Free Wikipedia (Tan, 2014). Facebook Zero resembles Facebook Flex within the Free Basics suite, although it is not available in an app: it is a browser-based version of Facebook without photos or video (Hicks, 2010). Free Wikipedia, also known as Wikipedia Zero, offers users full access to Wikipedia, including images and is similarly available only through a browser.

Telenor: Free Facebook and Viber

Telenor Free Facebook and Viber, marketed under the Sate Kyite plan, is a data promotion that began in July 2016. Telenor subscribers must opt into the program, which sets fees for voice and data services and, notably, provides limited duration free data for Facebook and Viber. The free data period varies by top-up amount: less than 3,000 kyat yields 5 days, 3,000 to 9,999 kyat yields 10 days, and over 10,000 yields 30 days. During the free data period, customers can message on Viber without limit and use 150MB per day on Facebook and Messenger free of charge. (The 150MB cap was added after the launch of the service, which initially launched with unlimited data.) Facebook data beyond the daily quota, as well as voice over IP (VOIP) services on both Viber and Messenger, will charge to the customer's balance. The plan includes photos and video on Facebook, and is explicitly marketed as such, in contrast with MPT's Facebook Free Basics that launched the month prior.

Top-up and Data Pack Bonuses

In addition to free promotions, mobile operators offer bonuses to their subscribers. There are two main categories: top-up credit bonuses and data-multiplier bonuses. All three operators provide both types. Either may take the form of a limited-time or recurring offer.⁶ Notably, these promotions are equal-rated; they can be used towards any type of content.

Top-up credit bonuses give users who top-up during the promotional window a further bonus credit. Telenor, for example, has offered such promotions on an increasing scale where a MMK 1000 top-up yields an additional MMK 200, increasing with top-up size to MMK 10,000 doubling with an additional MMK 10,000.

Respondents also describe “lucky draw” bonuses associated with Telenor top-ups. Upon topping up, a subscriber could receive an extra MMK 300, 1,000, or 10,000 balance.

Data bonuses reward customers with data beyond their standard purchase. Ooredoo offers a promotion that doubles the allowance associated with fixed-duration, fixed-amount data packs: MMK 3000 for 550MB monthly, for instance, gives users a total of 1100MB during the promotion.

Bonuses may combine both credit and data promotions. MPT rewards customers who top-up on Fridays with an increasing scale of credit and data bonuses: MMK 1,000 gives a user a bonus 20MB and MMK 100, scaling all the way to a 1,200MB and MMK 9000 bonus for MMK 30,000.

Social Packs, Night Plans, and Calling Packs/Bonuses

Operators also offer a range of discounted, specific-use packs. At the time of fieldwork, Ooredoo offered “Facebook Plus,” a pack with discounted data rates for Facebook. Such packs came in two forms: a one day-duration 200MB for MMK 199 and a weeklong 1000MB for MMK 999.

Both MPT and Telenor offer night plans, with discounted data for off-peak hours. Telenor’s Super Zee Kwat plan offers weekly or monthly packs of MMK 2,500 or 800, respectively, and then charge only MMK 1 per MB or minute of talk for the duration of the plan.

Operators also offer calling packs. Respondents choose to subscribe to Ooredoo because of their free Internetnetwork calls: subscribers can call other Ooredoo numbers for 50 minutes per day for a number of days, varying with the size of their top-up. Respondents also describe calling promotions from Telenor and MPT; the latter has been re-launched. At the time of writing, MPT offers unlimited calling within its network for MMK 399 for one day.

⁶ Annual promotions around the Thingyan water festival are but one example. See Aung Kyaw Nyunt (2015).



Methodology

This report is based on qualitative fieldwork done in July 2016. Semi-structured interviews in focus groups were the primary data collection method. Informal interviews with local Internet companies and street vendors were also conducted. This section outlines the methods used and associated limitations.

Research Overview

Fieldwork was conducted in July 2016 by LIRNEasia researchers and a team from the Myanmar ICT for Development Organization (MIDO). Ten focus group discussions (FGDs), which included 63 respondents in total, were conducted in the Yangon urban location and two rural locations, Twantay and Kawhmu. Each FGD lasted between one to two hours. Focus groups were composed of 6 to 9 participants. One protocol (FGD 9) included only one participant and so operated as an individual in-depth interview.

Table 3 describes the sample composition of each focus group. The number of respondents was 63, consisting of 33 men and 30 women. The overall sample included urban and rural, working and non-working respondents as well as students. Respondents ranged from age 18 to 65 and belonged to socio-economic classification (SEC) groups A-E. Effort was taken to sample for an age cohort younger than 45, as this group is more likely to have used mobile data. That said, an exception was made for a total of three respondents who lie outside this target age cohort. All respondents were mobile phone owners and mobile data users. At least one respondent in all focus groups aside from FGD 9 had used zero-rated data promotions on their mobile phones.

SEC: Socio-economic classification

SEC categorizes households into groups A (highest) through E (lowest) based on the socio-economic characteristics of the chief wage earner (education, occupation, and more) and/or household (presence of durable goods, housing material, income, and more). In Myanmar, the most commonly used SEC is based on monthly household income. SEC D and E (those earning less than MMK 300,000 or USD 254 at time of fieldwork) are considered low-income households in this research.

	Income in Kyats/month
E	100,000 or below
D	100,001 - 200,000
	200,001 - 300,000
C	300,001 - 400,000
	400,001 - 500,000
B	500,001 - 600,000
	600,001 - 700,000
	700,001 - 800,000
	800,001 - 900,000
	900,001 - 1,000,000
A	over 1,000,000



Informed consent for participation and publication was obtained from all research subjects. In line with ethical research standards, individuals' names are not used in this report.

Table 3. Respondent sample for Focus Group Discussions

Protocol	Number of Respondents	Location	Gender	SEC	Occupation	Age group	Mobile ownership	Use of Mobile Data	Zero-rated data user/not
FGD 1	6	Urban	Male	A-C	Working	21-34	Yes	Yes	All
FGD 2	8		4 Male; 4 Female	A-D	Students	18-24			All
FGD 3	6		Female	A-B	Working	20-30			4 respondents
FGD 4	7		Male	A-C		22-33			6 respondents
FGD 5	6		Female	A-C		19-26			All
FGD 6	5		2 Male; 3 Female	A-B	Working / Not-working	43-49			3 respondents
FGD 7	7	Rural	5 Male; 2 Female	C-E	Mix	18-64			All
FGD 8	8		5 Male; 3 Female	D-E	Mix	18-42			5 respondents
FGD 9	1	Urban	Female	D	Working	35			No
FGD 10	9		4 Male; 5 Female	B-D	Students	18-22			3 respondents

Limitations

This research faces several important limitations. Most significantly, the sample makes no claims at representativeness. This report is an analysis of the verbally expressed and observed behaviors and beliefs of the 63 respondents interviewed. Respondents were purposively selected to meet a number of criteria, including gender, SEC, age, mobile ownership, and use of zero-rated content. Being mobile users (early adopters in Myanmar's recently liberalized market), the sample is likely more technologically literate than the general population. All respondents were both phone owners and data users. They were recruited by MIDO through snowball sampling that started with known contacts. Respondents for the rural FGDs were recruited through Telenor 'Lighthouses', educational telecenters established by MIDO.

The Yangon Region differs considerably from other areas in Myanmar; as such, this research should not be read as addressing data-use elsewhere in the country.

Within the focus groups, there are two limitations of note. Questions of phone and data use as well as expenditure rely on respondents' memory. As such answers are subject to recall bias. Questions were designed to minimize this concern by addressing key questions in multiple ways, allowing for triangulation by the researchers. Budget questions, for example, were asked broadly and followed up with weekly expenditure queries. A second limitation within the focus groups involves respondents who may know each other. Several focus groups included respondents from the same towns, schools, and in one case, neighborhood. Thus, prior relationships may have biased focus group answers, particularly limiting disclosure of taboo behavior or affecting answers to budgetary questions. Focus group questions, however, did not address income or household budgets aside from phone expenses and relative priorities, so the effects of such bias, within the focus of the research questions, are limited.

Questions This Report Answers

- How do people use Facebook Free Basics and other zero-rated offerings?
- Do users connect to the Internet beyond zero-rated services or stay within these 'walled gardens'?
- (How) do users change data consumption habits after using zero-rated offerings?
- Do users continue to use zero-rated offerings over time?

Questions This Report Does Not Answer

- Does zero-rating serve as an on-ramp to the Internet, connecting the unconnected for the first time?



Using Data Promotions

Desired Content and User Experience Dictate Adoption

Of the 63 mobile phone users interviewed, 50 use one or more free data promotions. Thirty-nine users have tried MPT Free Basics; 22 have used Telenor Free Facebook and Viber. Below we report important themes in their experiences.

MPT Free Basics

1. Many Stopped Using, and Those Who Continued Use Zero-Rated Data for Specific Purposes

Of the 39 users who have tried MPT Free Basics, less than half subsequently continued to use the free data. Free Basics saves users money. Yet, use and disuse is not a simple function of income—indeed those who continued to use the service ranged from SEC A to E—but instead is explained in each user’s data consumption strategy (See next two pages).

2. Top Uses: Facebook and Messenger; Most Unaware of Further Offerings

None of those interviewed actively use the third party content available on Free Basics, and instead limit their use to Facebook Flex and Free Messenger (See Table 4). Only four users say they are aware of third party content on Free Basics. They learned about these offerings from advertisements on 7 Day Daily’s website and through an SMS from MPT. Only one respondent has tried another free website, specifically 7 Day Daily, but he has since stopped, because, in his words, “I mostly read Myanmar local news on Facebook. I read 7 Days news when I cannot access Facebook during travel” (R4: male, 26, SEC A, urban).

Advertising may be responsible for respondents’ lack of awareness. When MPT launched Free Basics, it used SMS, Facebook posts, billboards and fliers to market the promotion, but focused messaging only on Facebook. Only nearly two months later did MPT advertise the other content on the Free Basics platform by SMS and Facebook post. [See dedicated Advertising discussion in Section 6.](#)

3. Many Use Offerings Infrequently, When Top-up Empty

Facebook Flex and Free Messenger are widely used—but infrequently. Many of those interviewed primarily use MPT Free Basics when their balance has run out. The eleven users with this strategy generally use Free Messenger to keep in touch with friends and family before they can top-up again. R2 (male, 25, SEC A, urban) articulates these common sentiments: “I haven’t used it properly. I only use MPT Free to send messages when I have no balance. I do not intentionally use it.” Respondents from SEC A through E pursue this use strategy.

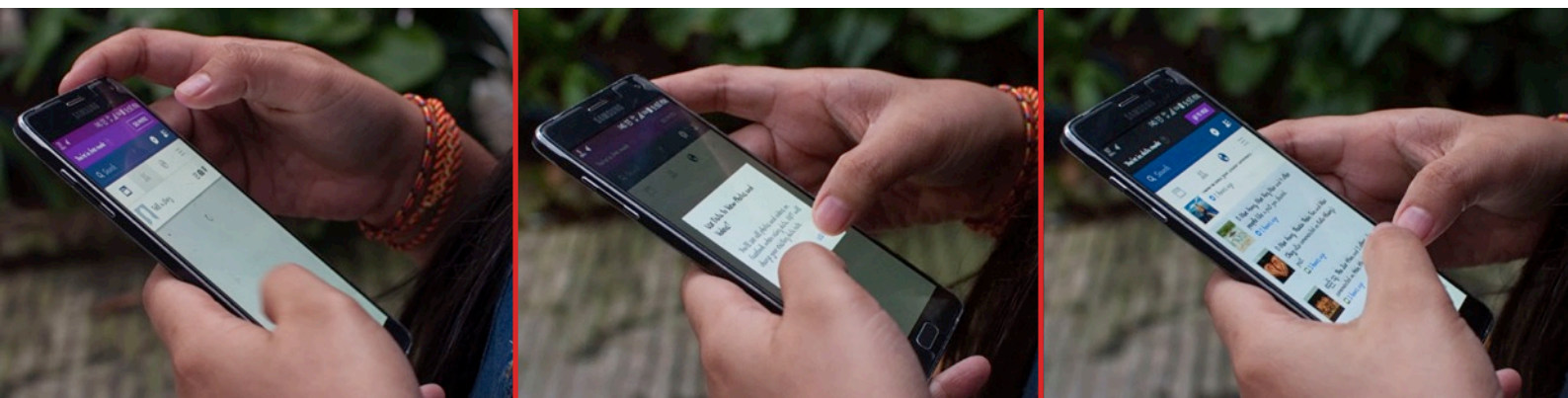
4. Some Use Often For Messaging and Reading, Despite Expressing Frustration With Lack of Photos and Interface

Nine users do not consider their use infrequent or limited to only when their balance has run out. The ways each describes his or her use of Free Basics varies considerably. Some use it exclusively for Messenger. R10 (female, 24, SEC B, urban) is one of them, and she describes not minding Free Basics’ content limitations: “It is convenient for me because I mostly use Messenger.” Others use Free Facebook when they wish to read posts. R21 (male, 23, SEC B, urban) is a member of three Facebook groups he checks regularly: “I usually check my football group, writing group and electronics group on Facebook twice a day. I use the [MPT] free service when I read through the entire page because there is no charge. I use it for reading. I use data at other times. I am careful to save data... When I am reading, I don’t need to know what the photo shows. I use normal data if I want to see the photos.”

Table 4. Respondents’ Knowledge and Use of Free Basics Content

Website	Respondents Know	Respondents Use
Facebook Flex	Yes	Yes
Facebook Messenger	Yes	Yes
7 Day Daily (news)	Yes	
Connect Smart		
Free Books by Worldreader	Yes	
Mathematics by TeachMe.com		
Girl Effect		
ShweProperty.com		
JobNet.com.mm	Yes	
All in-By and for Adolescents		
Baby Center		
WikiHow		
Emergency Information		
Facts for Life		
MayMay (women’s health)		

Figure 3.



Switching from free to paid mode with Facebook Free Basics involves an interstitial page that frustrates some respondents.

5. Half of Respondents Stopped Using Free Basics. Top Reasons: No Photos, Onerous Interstitials, Slow Speeds

MPT Free Basics' user interface impacts usage. Among those who continue to use MPT and those who have stopped, there is considerable frustration with the promotion's lack of photos or video. As one stakeholder puts it, social media without photos is "like curry without the sauce." Sixteen respondents stopped using the promotion for this reason.

On the subject, R31 (female, 20, SEC B, urban) shares a poignant story that others worry could happen to them: "I used MPT's free mode plan for one day. But it is not flexible: I couldn't see photos... One of my friend's sisters tagged her in a photo and [sarcastically] wrote in the description that it was cute. I was using MPT free mode and couldn't see the photo. So I commented yes, friend you are cute. She became very upset with me because she thought I had mocked her."

Others are unhappy with the means of switching from free to paid mode and back again. R41 (male, 28, SEC C, rural) explains the onerous process: "After clicking use data button to see photos, I need to change [back] to free mode when I do not want to see photos. After changing to free mode, it returned to top of the page, so I need to scroll back down to the place that I want to see. Thus, it is complex to change again and again when I want to see the photos or not." R20 (female, 20, SEC B, urban) similarly describes her use being shaped by a frustration with interstitials when switching from free to paid mode within Facebook: "I mostly use Messenger rather than the News Feed... I rarely use it because there are many steps to switch between these two modes such as pop-ups that say please confirm to use data mode, yes or no." (See Figure 3 above). Still others expressed frustration at the service's slow data speeds.

Frequent User Saves Money on Free Basics with Multiple Use Strategies

R10 (female, 24, SEC B, urban) is a frequent user of MPT Free Basics, and saves considerable money doing so. In her words: “It used to cost over 1000 Kyat per day in the past. Since MPT began the free service for Facebook, I spend only 5000-10000 *per month*.” That is not to say that R10 is a happy customer, however; she complains that the data connection is frustratingly slow, requiring her to “try to be patient.” She will switch back and forth from free to paid mode if she wishes to view photos: “I usually view photos after checking whether or not I know who posted it...” R10’s logic similarly applies to external links: “if it seems interesting to me or the post was shared by my friends, I continue to click and see them although I know it will cut my bill.” Others describe similar methods in reading captions before choosing to switch from free to paid mode.



Telenor Facebook Zero and Free Wikipedia

1. Similar to Free Basics, Facebook Zero Limitations Lead to Infrequent Use

Two respondents report having used Facebook Zero. R1 (male, 21, SEC C, urban) started using the free service when he first got a phone in 2014: “I was broke, therefore, I used Facebook Zero to see messages. If there were important messages and if I did not have any balance, I would use Facebook Zero.” When asked if he continues to use the service, he replies: “I use it when I am broke. I can’t use it more than 30 minutes because its service style is inconvenient. It is only text and is boring... I mainly view messages and reply. If I have no balance, I use it. I rarely chat with this service.”

R21 (male, 23, SEC B, urban) has stopped using Facebook Zero entirely. He describes his past use: “It is convenient because it cost zero kyats for seeing and reading football links. I sometimes used it. If I need to know something, I use data. Now I am not using Telenor.” He has since switched to MPT in order to obtain a promotional bonus, and now uses MPT Free Basics in the same way.

2. Few Report Using Free Wikipedia on Telenor

Telenor offers its users free access to Wikipedia on their mobile phones. Of those interviewed, only two use the service. One is a preparatory school student, the other a university student who works as a freelance journalist and translator. The latter uses it frequently, and describes his use: “I am very pleased because I see all of the things... If I search the history of Buckingham Palace or [Queen] Elizabeth, it is underlined with blue lines. I don’t need to pay money if I read about Elizabeth by clicking on [internal links on] Wikipedia because it is in it. There are references at the bottom of the page. I rarely look at these. Sometimes I do if I want to know the source exactly.” [See the dedicated analysis of general Wikipedia use in Section 5.](#)

Telenor Free Facebook and Viber

1. Photos and Video Within Facebook Drive Appeal, Lead Users to Switch From MPT

Over one-third of respondents use Telenor’s Free Facebook and Viber promotion. In contrast to MPT’s Free Basics, no one has stopped using the service after trying it. Users emphasize the appeal of free full-feature Facebook, and this content motivated seven users to switch from MPT Free Basics to Telenor’s promotion. R23 (male, 22, SEC C, urban) expresses a common sentiment: “I can see everything by using Telenor. MPT is not convenient for giving comments and likes. It is possible that I could give happy comments for pictures that actually look sad. That’s why I use Telenor.”

2. Users Say Telenor Free Facebook and Viber Saves Them Money

The promotion helps some users save money. R40 (male, 20, SEC C, rural) increased his phone use but cut his average daily cost from 1000 to 300 kyat; in his words, “It

is good because it is free for Facebook and Viber.” When asked why she uses the promotion, R9 (female, 21, SEC B, urban) responds, “My brother told me about free plan. At that time, I had no phone bill but I eagerly want to use Facebook. So I tried the free plan as my brother said.”

3. Promotion Users Change Data Consumption: (More) Video Within Facebook

Users of Telenor Free Facebook and Viber increase their data consumption, particularly of data-heavy content like video and audio. Indeed, three rural users watched video for the first time using the Telenor promotion. As R45 (female, 18, SEC D, rural) says, “I used to skip videos before I use Sate Kyite Plan. Now I watch comedy videos without end. Moreover, I can watch and listen to whichever videos and music I want to.”

4. Users Respond Differently to the Free Data Cap: Some Pay for More, Others Stop

Telenor imposes a 150MB per day cap on free Facebook data. Most users find themselves reaching the daily cap, but they respond in different ways. Nine respondents describe continuing to use data at a paid rate, while five say they do not. The decision to pay beyond the free limit is not a simple function of income, as users ranging from SEC B to D choose to pay for excess data. R23 (male, 22, SEC C, urban) says, “I get 150 MB free for one day but I must spend additional 50MB to 70 MB per day... if it runs out, I receive a message alert that says it has expired for today. After that, if I use more data, it will charge from my top-up balance. If I calculate with a rate of six Kyats per 1 MB, it costs four hundred and twenty kyats to five hundred Kyats more.” Others continue to pay for data, but restrict the extent of their data consumption by avoiding video or other data-heavy content. Telenor Free ‘on-ramps’ respondents to paid consumption, but not to the ‘open Internet’: most users increase data consumption and pay for this increase, but they only use the data to access Facebook.

Others, a total of five users, describe stopping using Telenor Facebook once they have reached the daily cap. Two continue using Facebook, but on MPT Free Basics instead. R44 (female, 18, SEC C, rural) simply switches to Telenor’s other free offering: Viber; “I stop and use Viber free. There is no daily limitation on Viber.”



New User on Free Facebook and Viber

R44 (female, 18, SEC C, rural) is a student from a rural farming family, who first began to use a mobile phone in 2015. Prior to July 2016 and the Telenor Free Facebook and Viber promotion, she had not used her phone to watch video. She now watches circus and comedy videos on Facebook. She uses her 150MB allotment in its entirety everyday, and then subsequently switches to free Viber to communicate. Whereas she once used her phone at most two hours per day, she says, "I now use it three or four hours a day. I can use free Facebook and Viber, therefore it costs less. I only have to pay for making calls."

Wi-Fi

1. Used Infrequently Due to Lack of Access and Speed

Over half of respondents use Wi-Fi, with 24 describing at least occasional use and 13 describing infrequent use. Significant factors limiting Wi-Fi usage are access and quality connection. Users cite a lack of access points or, more commonly, lack of access points with sufficient speed as reasons for their non-use. In one rural township, there is only one point of Wi-Fi access, the local teashop, but its connection is notoriously slow, and so those interviewed say they do not use it. Two users say concerns about their privacy and security prevent them from using public Wi-Fi.

2. Those With Good Access Use Wi-Fi

Of those who use Wi-Fi more than occasionally, most have access through their place of employment or study. Three users have Wi-Fi access in their homes. These sources, although not without speed complaints, are significantly better in the minds of users than public Wi-Fi, which is often described to be frustratingly slow. R3 (male, 24, SEC B, urban) recounts his use: “I usually use Wi-Fi at home that is shared from my uncle’s Wi-Fi. I mostly use it at home. I test the connection first when I find a free Wi-Fi access outside. I decide to continue using it if the connection is good, if not, I do not. I use my mobile data at that time. I am not patient to wait for a public Wi-Fi.”

3. Few Rely on Wi-Fi as Their Primary Mode of Internet Access

Five urban respondents consider Wi-Fi to be their primary means of Internet access. These primary users are familiar with ICTs and are highly educated. One is the founder of an NGO, and uses Wi-Fi at his office. He and another user actively choose shops and restaurants that have good free Wi-Fi. R19 (female, 26, SEC B, urban), who holds a university degree in computer science, finds free Wi-Fi services to use with both her phone and laptop. Another is friends with the owner of an Internet café and enjoys free Wi-Fi access there, where he uses sometimes up to “ten hours a day.” Two have free access at their school, where they enjoy unlimited downloads.

4. Users Increase Data Consumption When on Wi-Fi

Users often describe changes in data consumption when they enjoy Wi-Fi access. Invariably, users describe downloading larger files than they would normally do so on their mobile data. Streaming and downloading video, finding new and updating old applications, and downloading music were all popular uses for Wi-Fi, in contrast to mobile data. R54 (Female, 35, SEC D, urban) describes her use in these terms: “I just watch the video clips through news channels while I am at my adoptive mother’s home because she has Wi-Fi. But I do not watch them if I must use my own money.”

5. Paid Wi-Fi is Uncommon Among Respondents

Only three users describe paying for Wi-Fi. R26 (male, 24, SEC B, urban) subscribes to ADSL in his home. Two other urban respondents will occasionally use paid Wi-Fi at Internet cafes. R25 (male, 33, SEC C, urban) describes his use: “If I want to upgrade my phone, I go Internet café and upgrade it with charges... It costs four hundred Kyats (MMK) per hour... I go there three times a month.”

6. Families Share Mobile Data—Sometimes Unwittingly

Seven urban respondents describe times when they use family members' mobile data via hotspots. Three describe sharing Wi-Fi hotspots when their top-up balance has run out. R34 (Female, 48, SEC B, urban) will use hotspots in this way: "I don't use Wi-Fi. I usually share my personal hotspot with my daughter, but when I have no balance, she will usually share her Wi-Fi hotspot with me." Others describe stealing data from parents without their knowledge. Four users secretly use family data in this way, including R32 (Female, 19, SEC A, urban): "When I use Wi-Fi, I usually use Wi-Fi from my parents' phones by using their data. My father doesn't know that I use Wi-Fi from him. I am very pleased to use this Wi-Fi because it doesn't cost me anything. I always ask for it from my brothers, but they won't give me access. Therefore I always use Wi-Fi from my parents. I prefer my own Internet data because the connection is better, but I am afraid of its cost."

Bonuses

1. Multi-SIM Ownership Enables Users to Change Operators for Bonuses

In addition to free promotions, telecom operators offer a range of content- and time-specific discounts. These promotions change quite often, and those interviewed will quickly respond to news of particular discounts. Users describe changing operators in order to take advantage of a particular bonus; some own SIMs from all three major operators and will switch to whichever currently has the best bonus. R21 (male, 23, SEC B, urban) describes his process: "I change plans if there is a promotion. If Ooredoo gives a promotion, I will change to the Ooredoo plan. If MPT does, I will change to MPT's plan... I use my own data by managing limitation. If the connection is great, I turn off the data [after the page loads]. I am very careful to save money. I can use Wi-Fi at my office... If I spend five hundred kyats (MMK) per day, I will stop using Internet." R17 (Female, 24, SEC A, urban) does similarly: she uses Ooredoo Facebook Plus but, "I also buy Telenor's Zee Kwat night plan and use it because I usually buy packages offered by different operators." Respondents will even buy a new SIM in order to take advantage of a bonus, as R33 (female, 26, SEC B, urban) describes: "I used Telenor before MPT offered a promotion. The promotion was if you top up ten thousand kyats (MMK), you could get ten thousand kyats (MMK) as bonus. At this time, I bought new MPT SIM card and used it. I continue to use the MPT night plan. I use Telenor at other times." [See the dedicated analysis of multiple SIM use in Section 6.](#)

2. Bonuses Affect Users' Choice of When and How Much to Top-up

Decisions of when to top-up and with how much affects bonuses, and users respond accordingly. MPT offers a bonus if users top-up on Friday, and so R3 (male, 24, SEC B, urban) waits for the bonus: "I usually top up MPT on Friday because we can get additional bonus if we top up on that day." More common among those interviewed, however, is a tendency to increase top-up amounts to get bonuses: R19 (Female, 26, SEC B, urban) says, "When the operators offer double bonus promotions, I usually top-up 40,000 kyat (MMK) at once. I can use it for a long time because of these bonus plans... I rarely buy packages at normal times. I usually buy packages when I can get an additional 10,000 kyat (MMK) balance if I top-up 10,000 kyat (MMK)

during MPT promotions. I know what amount I have used, and I am careful to empty the bonus balance before its expiry date.”

3. Bonuses Alter the Way Users Consume Data

Seven users describe increasing data consumption on bonuses. Some describe generally increasing the amount of data they use without changing how they use data (i.e., without changing what content they access), including R49 (male, 36, SEC D, rural) who says, “I have received bonuses before but it just quickly runs out. I use a bit more time when I have bonus but content is the same as I normally explore.” Others describe using more video and downloads during a bonus promotion. R35 (female, 43, SEC A, urban) says, “I let my daughter top-up her phone for ten thousand kyats (MMK). And then I ask her to transfer five thousand kyats (MMK) to me. She downloads foreign movies as well as study English lessons using this bonus. As I am rare to go out frequently, it is difficult to buy top up cards when they gives bonus.” Three users describe being less careful about limiting their data consumption when they have a bonus. They can use data without constantly turning it off once a page has loaded, as explains R36 (Female, 45, SEC B, urban): “When I read news about health and Dhamma using with bonus, I use peacefully. If I use my [ordinary] data, I usually read these news after turning off Internet.”

4. Night Packs Used For Speed and Discount

Of those interviewed, thirteen use night plans from either MPT or Telenor. These plans offer reduced cost voice and data for off-peak hours. The discount appeals to users because, as described by R26 (Male, 24, SEC B, urban), it has a “reasonable price... 1 kyat (MMK) per 1MB.” For many users, these discounts coincide with times when data speeds are fastest. Telenor night plan user, R25 (Male, 33, SEC C, urban) says, “If I want to download applications, I use Internet in the early morning. Most of the people use Zee Kwat (Telenor Night Plan) at night without sleeping. The connection is good because I get up early and use it.”

Getting More With Bonuses

R54 (female, 35, SEC D, urban) recently moved to Yangon and lives with her aunt. She uses her phone to keep in touch with her family and friends back home in Mandalay. She is careful to conserve data by turning it off once content loads. For this reason, speed is quite important to her, as it allows her to quickly turn off data. Similarly, she has not tried MPT Free Basics because, “I am used to turning off mobile data, and I always care about that. Mostly, I try to switch of mobile data after I use anything... If you leave mobile data running, some people have told me that you will be charged... I do not test it because I’m very conscious [of costs].” Yet, R54 uses and is happy with bonus promotions: “I can speak more and can also use Internet. However, it does not make any difference regarding their applied charges. We, users, think it is cheap as soon as we receive the messages accidentally. In my point of view, they just use the win-win way for both themselves and users. Anyways, those messages can make us think of them as an opportunity or advantage. If we consider precisely, rates are not too different to those in the past. I mean the money spent. I am just filling my bill as usual while I can speak more because you have to fill the bills to get [the promotions].”

Zero-Rated Content Users vs. Non-Users

This section compares respondents who regularly use zero-rated promotions with other respondents. Altogether, 31 respondents report regularly using MPT Free Basics and Telenor Free Facebook and Viber. It concludes with a comparison to past research.

1. MPT Free Basics and Telenor's Free Facebook and Viber are 'Walled Gardens'

MPT Free Basics and Telenor's Free Facebook and Viber constitute 'walled gardens'. Both services offer a particular, limited type of content for free, while charging for other data. Telenor's plan, in fact, goes even further: it raises the cost of accessing the 'open Internet' through its zero-rated plan relative to its standard offering. Compared to Telenor's My Internet data plan that offers data at 5 MMK/MB, the Free Facebook and Viber promotion offers non-promotional data at a rate of 6-8 MMK/MB (off/peak hours).

2. Zero-Rated Content Users Spend Less in a Given Time Period

Among those interviewed, Zero-rated content users do not use their phones more often than others: both groups spend an average of about 6 hours per day on their phones. Those who regularly use zero-rated content, however, do pay less for the same period of use: in the focus groups, free-users spend on average 4,000 MMK per month less than their non-using counterparts.

3. Most Respondents Leave the 'Walled Garden'

Of the 31 active zero-rated services users, most use other apps and a variety of Internet services, including Google, email, Wikipedia, and news websites. Varied use is more common among MPT Free Basics users than those on Telenor Free Facebook and Viber; the latter promotion saw users increase data consumption but primarily within the Facebook 'walled garden' (See Section 3). MPT Free user, R25 (male, 33, SEC C, urban) describes using his free service for "reading and giving likes," but he does not simply remain on the service. Instead, he will click external links. As he describes, "I read news posted at Facebook where people share news. I read some news on Google or browser because some media usually publish their news in social network with hyperlink. I usually read 7 Days, Mizzima, RFA, etc." R41 (male, 28, SEC C, rural) is an active user of Telenor's Free Facebook and Viber promotion, yet he too describes looking for "updated news... via Facebook link [to external sites]."

4. Three Respondents Remain in the ‘Walled Garden’

Three users describe using exclusively zero-rated services when accessing the Internet. R22 (male, 22, SEC B, urban) subscribes to Telenor’s free plan and uses data on exclusively Facebook and Viber. Similarly R51 (male, 21, SEC D, rural) and R53 (male, 19, SEC D, rural) use Facebook and Viber while subscribed to Telenor’s zero-rated plan. Both use Viber for calls, which are not free, but do not access other Internet apps or use browsers. It should be noted, however, that several more respondents described similarly limited Internet use while not subscribed to zero-rated content.

5. Some Respondents Fail to Distinguish Between Zero-Rated Content and ‘Open Internet’

Some respondents fail to distinguish between zero-rated promotions and the ‘open Internet.’ This response is found in both urban and rural FGDs. R22 (male, 22, SEC B, urban) refers to the Telenor Free Facebook and Viber plan as simply “Telenor’s 150MB free plan” without acknowledging its limitations. R24 (male, 25, SEC B, urban) echoes this sentiment, saying, “Later I don’t use the 500 MB [open data] plan when [Telenor] offers 150 MB free plan for a day, this plan is convenient for using Facebook and watching movies.” Another user, R46 (male, 42, SEC E, rural) responded to the moderator’s question, “Why do you use the Internet?” with an answer describing use of only Facebook: “I use Facebook to read news. It has both good and bad things. I use it to post my poems. I am passionate about writing them. So I wrote and post it on Facebook...”

This observation is closely linked with a tendency to equate Facebook with the Internet, which is discussed in Section 5.

6. Other, Often Urban, Respondents Do Distinguish Between Zero-Rated Content and ‘Open Internet’

Notably, however, this sentiment was not universal. Several respondents actively distinguished between zero-rated content and the ‘open Internet.’ R24 (male, 25, SEC B, urban) acknowledges that Telenor’s plan “is limited only for Facebook so I use Instagram by using my own data. Urban respondents tend to have a higher technological literacy than those interviewed in the rural FGDs and so are more likely to distinguish between content within and outside of the ‘walled garden’. Nonetheless, this trend was not universal: although he does not use the Internet beyond Facebook, R51 (male, 21, SEC D, rural) recognizes the difference between his access and the alternative: when asked by the moderator, “Tell me about your most visited websites,” he response, “I don’t have any like that. I read my friends’ Facebook posts. I use the Facebook application.”

7. Lack of Billing Information Can Lead to Misperceptions

Billing rates are not necessarily known to users. For pay-as-you-go users, they must replace top-up credits once depleted. They do not have access to itemized deductions from this balance, as described by R25 (male, 33, SEC C, urban), “Sometimes, we don’t know exactly how the operator cut the bill. The operators need to cut bills accurately. Sometimes, it cuts the bill, however we don’t use data. We don’t dare to believe them.” Indeed, when asked factual billing questions, numerous respondents disagreed on data and calling rates, while still others did not know them at all. Perversely, then, less-informed consumers may face reduced cloistering effects from

‘walled gardens’: if they do not know the cost is higher to leave the ‘walled garden’, their decision to do so is unaffected.

8. Given the Choice, What Would Users Prefer?

Amid the controversy around zero-rating, several alternatives have been proposed to bring free Internet access to the unconnected. Song (2015) proposed that Internet data be made freely available for all users at GSM 2G speeds of 9.6kbps. An alternative, trialed by Mozilla and Orange, is ‘equal rating’ whereby users are given a limited amount of free data to access any content on the Internet.

In FGDs, respondents were asked which option they preferred: zero-rated content, unlimited free data at slow speeds, or a limited amount of free, any-use data. Respondents were purposively selected data-users, and thus do not inform the usefulness of these options for connecting the unconnected. Furthermore, the question requires high Internet literacy to answer, and, thus, responses are at risk of response bias. Even with these caveats, the answers are informative.

Respondents wish for an alternative to MPT’s Facebook Free Basics, most poignantly, not because it limits the range of Internet services available, but because it does not offer photos or video within Facebook. As discussed in the previous section, many respondents chose to switch to Telenor when its Free Facebook and Viber promotion began for this very reason.

In rural FGD 8, respondents were asked if they would prefer slow data speeds any content or Free Basics, and six of eight respondents elected for slow speeds over limited content, as R49 (male, 36, SEC D, rural) says, “I will choose the first one that I can access all contents even if the connection is slow. We have experienced this slow Internet connection before and I am used to it.” When respondents were asked about Free Basics vs. limited amount of any-content data, they all preferred the limited data for any content.

Others suggested a further option: paying a reduced rate for unrestricted access. For example, when asked about a preference between Telenor Free Viber and MPT Free Basics, R26 (male, 24, SEC B, urban) responds, “I can use with my data. But I want the operators to give a day plan with the same reasonable price as the Night plan. It is convenient with 1 kyat (MMK) per 1 MB.”

Interpreting these results is difficult beyond respondent’s unhappiness with Free Basics’ lack of photos or video. Internet literacy varied considerably among respondents, and, as discussed in the next section, Facebook has a significant role in Myanmar’s Internet culture. Respondents often took the questions of free alternatives to be asking about not the ‘open Internet’ but Facebook. Nonetheless, perceived content limitations were unpopular. Insofar as slow network speeds preclude full photo or video content, potential users would be unsatisfied with such an option. Users are not happy with a perceived second-class Internet.

9. Findings with Past Research

Kak (2015) interviewed some 20 data users in New Delhi, and found that students with Internet access in places like home or school are more likely to purchase specific use, zero-rated packs for WhatsApp or Facebook, while poorer users chose to limit their data consumption but elected to pay for access to the ‘open Internet’. The options available to Myanmar consumers differ from those in India, and,

unsurprisingly, the present study reveals different findings. Half of the sample can access the Internet through other means: whether at school or work. Yet, almost all respondents considered their phone as the primary means of Internet access (See Wi-Fi analysis in the previous section). No respondents describe their use of zero-rated offers as an on-the-go measure to be used while away from locations with full Internet access. Indeed, respondents in the rural FGDs use zero-rated offers heavily and do not have other means of access.

An Alliance for Affordable Internet (A4AI) survey study of eight countries in the Global South found that 28 percent of zero-rated content users have stopped using the promotions and now pay for data, while 35 percent continue to use zero-rated content alongside paid data. The current work helps inform these statistics. Respondents indicate that they often stop using zero-rated content because of frustration with the user interface and content limitations, although complaints generally focus on a lack of photos or video on Facebook, not that Facebook itself is one of the only services available. Most zero-rated content users interviewed combine free content with paid data. Respondents, with MPT Facebook Free Basics, limit use of zero-rated content to specific tasks, like reading Facebook groups, or specific situations, like keeping in touch when their top-up had run out. Telenor Free Facebook and Viber users use their entire data quota, and then often pay for additional data. Among this work's sample, Wi-Fi access tended to be more limited than in the A4AI study.

Chen et al. (2016) measure mobile data traffic in South Africa to measure the effects of zero-rated promotions and run a follow-up survey in South Africa and Kenya. Survey respondents tend to use normal versions of applications more than their limited, zero-rated equivalents. The authors conclude that respondents use zero-rated content to conserve their paid data—not to replace it. This report confirms their finding among MPT Free Basics users, but not among Telenor Free users. Differences in the promotions lead to different uses.



Internet Use and Perception

This section analyses respondents' use and perception of Internet services and content they access using their phones. In particular, the following are discussed in turn: respondents' motivation to use Internet data, perceptions of and activity on Facebook, choice of search engine, infrequent use of Internet browsers, popular apps, activity on Wikipedia, and consumption of local vs. foreign content.

“Why do you use the Internet?”

In each focus group, participants were asked, “Why do you use the Internet?” Respondents offer a number of deeply informative answers. Several urban users describe the Internet is “essential” or “vital” to everyday life. One respondent who works in the Information Technology sector (R2, male 25, SEC A, urban) says, “Today we stay online all the time, from the morning till evening because it is essential for our daily life. We continue to use it on the bus after work. We can see that most people are using phones on the bus because we need to stay away from stress and relax...” R7 (male, 23, SEC B, urban) notices just how important the Internet is to him when he is deprived of it: “I feel that I know nothing when I go back my hometown because connection is not good there. So I use Internet for communicating with the world.” A discussion of the four main themes in respondents' reasons for using mobile data to access the Internet follows.

1. (Inexpensive) Communication with Friends and Family

Overwhelmingly users cite personal enjoyment as their primary motive for using the Internet. Significant to this enjoyment is the ability to communicate with friends and family by using Facebook Messenger or other chat applications. R38 (female, 49, SEC B, urban) is married to a sailor, and uses data to contact him while he is at sea: “I use Messenger to chat with my husband because it is more convenient. We chat continuously for two hours to three hours as much as he is free. We stop talking [only] when he wants to sleep.” Several users raise the cost savings associated with this means of communication as their reason for using data. R8 (male, 18, SEC D, urban) says, “The cost of phone calling is higher than the cost of using Internet. I use the Internet instead of my phone for connecting with my friends.”

2. Relaxation and Entertainment

The second overwhelmingly popular response is that the Internet serves as a means of relaxation and entertainment. R3 (male, 24, SEC B, urban) describes his motivation along these lines: “I am a gamer, so I usually play online games, Facebook and other media while I use Internet. I mainly use it for my entertainment.” Respondents from all backgrounds use data for entertainment and relaxation by

browsing Facebook, watching videos on YouTube or Facebook, and downloading music. Several urban, affluent, female respondents use data for browsing products and shopping.

3. Information Resource

The Internet as information resource manifested in three distinct ways for users in the interviews.

a. Study Resource

The Internet helps users with formal study and research. This use was most common among those who had completed, were currently enrolled in, or going to pursue tertiary education. Such study can take diverse forms, from formal research papers to casually learning foreign languages. R16 (female, 24, SEC A, urban) describes this range: “It’s very vital. We can get all information from the Internet that we want to know. So I always use it as I need... I browse almost all websites concerning with graphic design. I always study lectures of Saya Oo (Christian sermons), Maung Maung One (English lessons) and also Chinese websites. I love that language so much. I don’t remember the exact name, but I really loved to watch and use Chinese language websites.” R18 (female, 30, SEC A, urban) visits online educational websites including Edison and OpenStudy, which she uses for “getting online certificates.” Education-focused Internet users widely use search. [This is discussed in a dedicated search analysis below.](#)

b. News Source

The Internet provides respondents diverse sources of news and information about current events. Unlike the tendency to view the Internet as a method of formal learning, which was concentrated among the highly educated, Internet as news source is a view held among all users—young and old, educated and not, urban and rural alike. Methods of online news consumption vary considerably, with some users searching and downloading PDFs of journals, others viewing videos uploaded to YouTube, and still others simply scrolling through their Facebook Newsfeeds. [The role of Facebook as a news source is analyzed in detail below.](#)

c. General Knowledge

The Internet offers users a resource for general knowledge. R47 (female, 26, SEC D, rural) reads weather news and “sometimes I read about agriculture related content, mostly about areca (betel) planting and also information related to women’s health.” Religion, health, and women’s issues are commonly cited types of general knowledge readily available on the Internet. Others cite “general knowledge” as a category, often in relation to search engines or Wikipedia. This connection is discussed in two dedicated sections below.

4. Work

Among those interviewed, educated, urban users describe using the Internet for their work in offices and organization. These uses include search and Facebook, which are both discussed in detail below, as well as email. R31 (female, 20, SEC B, urban) uses data to run an online shopping business. R20 (female, 20, SEC B, urban) advertises for her brother’s souvenir shop on social media. Stories of Internet use for work were less common in the rural interviews. One exception is R46 (male, 42 SEC E, rural),

who works as motorcycle taxi driver, while earning extra money on the side with his phone: “I have a big family and its economy became disastrous, therefore, I started football gambling services and mobile phone became necessary for that... [to] get information about matches and goal scores. Sometimes I use Facebook to know goal scores.

For some, Facebook is the Internet

Past research has found that people may equate Facebook with the Internet in Myanmar and elsewhere in Southeast Asia.⁷ Several rural users in our interviews describe similar views. When asked about his most frequented “websites,” R46 (male, 42, SEC E, rural) describes his Facebook activity, without seemingly differentiating between his Internet use and the specific use of Facebook: “Because I like poems, I read them. I read news and political knowledge related content. I have no party bias. I like all the good activities of them. When it comes to news, I read everything. I want to know all of the news, both good and bad, without having any bias. I also talk to my Facebook friends...” That said, however, this sentiment is not universal, even among rural respondents. R51 (male, 21, SEC D, rural) responds to the same query about websites by saying, “I don’t have like that. I read my friends’ Facebook posts. I use the Facebook application,” implying knowledge of the difference between websites on the ‘open Internet’ and content inside the Facebook app.

Facebook Use is Not Frivolous

All of those interviewed used or had used Facebook. When asked why they use Facebook, respondents describe a range of activities. This underlies an important point: although a tendency to equate Facebook with the Internet is concerning because it may obscure the editorial power in the Facebook platform, use of Facebook to the exclusion of all else should not be portrayed as frivolous. Indeed, stakeholder interviews reveal that NGOs use Facebook as a primary channel for public awareness campaigns in Myanmar. The November 2015 elections saw heavy campaigning on the platform (Regencia, 2015).

⁷ This phenomenon predates the role out of Free Basics or other zero-rated content, however. Mirani (2015). cites research from LIRNEasia. Zuckerman (2014) observes and quotes observers on the primacy of Facebook in Myanmar.



Respondents Have Many Uses for Facebook

1. Facebook as Social Media

Users keep up with friends in many ways on Facebook. They describing using Messenger, posts that appear in their News Feeds, secret groups they have created, and public groups they have joined. Some users describe Facebook as more useful for contacting friends than through phone numbers. R18 (female, 30, SEC A, urban) who uses MPT, Ooredoo, and Telenor SIMs describes the importance of Facebook when using multiple SIMs: “I mainly use it to keep in touch with my friends because phone numbers are temporary and not useful now. Facebook is more convenient than using numbers. As for me, I usually switch one SIM to another by myself. I can ask help from my friends or I can tell you others when they ask me something through via Facebook.” This quote and the pervasive use of multiple SIMs reveal how telecom operators are under threat of disintermediation, as users rely more heavily on over-the-top Internet services to keep in contact as opposed to traditional telecommunication services, e.g., calling or SMS messaging.

Distance from friends and family also affects use: those with friends abroad or family in distant places within Myanmar often report using Facebook to keep in touch. R3 (male, 24, SEC B, urban) makes a living as a sailor and uses Facebook to keep in touch when he is abroad. Other respondents describe using Messenger to keep in touch with family working as sailors or otherwise live abroad. It is important closer to home as well; one mother (R36, female, 46, SEC B, urban) describes using Facebook to keep track of her daughter: “My daughter always uploads where she is on Facebook. Therefore, I can see where she is by looking at her Facebook page. It is convenient. I needed to call her in the past.”

2. Facebook as News Source

Facebook serves as an important source of news for respondents; indeed, news is as common of a reason for use as keeping up with friends. Users describe a range of methods of reading news on Facebook. Many are passive: they simply scroll through their News Feeds, reading news content shared by their friends or by news publications that they have liked on Facebook. When viewing a new post on Facebook, some users follow links to other websites via browsers, while others simply read the short post within Facebook. R54 (female, 35, SEC D, urban) explains why she only reads the short posts on Facebook: Within the platform, “I also read Mizzima, 7 Days, Mandalay news and domestic scoops like that. I read a lot, as they also upload short posts. To tell you the truth, I cannot spend both time and money to use Internet on a longer basis. So, I just can read the fresh news.”

Other users actively seek news content by searching on Facebook or visiting Facebook pages of news publications or individuals that they have liked. R2 (male, 25, SEC A, urban) describes these notable people in terms of their “Blue Mark” indicating verified Facebook accounts: “We can quickly know something as soon as it happens on Facebook. There are Blue Mark people. For example Steven Zaw Gyi; he may not be famous if he only uploaded on a website. It is easy to use and it is great on Facebook. U Ye Htut and Bullet Hla Swe are also Blue Mark for politics. I am Bullet Hla Swe’s fan. I always visit his page.” Other users rely on their Facebook friends to share local news from their hometowns or, in the case of R49 (male, 36, SEC D, rural), add people on Facebook in order to read specialized content or regional news from across the country: “[I] check weather news on Facebook and agricultural stuffs... I have friends who have degrees in Agriculture and I’ve added them on Facebook... I got many friends but not from nearby towns. I added to those living in different cities like Sagaing, Kalay Myo, and Mandalay so that I can know what’s happening around the country.”

Some users actively share news themselves. R46 (male, 42, SEC E, rural) is particularly interested in health news, and he shares articles he finds useful: “I look at those [posts] shared by my friends. [They] include first aid information for snakebites and medicine to cure cancer. I read those kinds of useful things. If I share it, it will be helpful for others too.” R35 (female, 43, SEC A, urban) similarly shares health news as well as liking and commenting on associated posts. A student and journalist himself, R1 (male, 21, SEC C, urban) uses Facebook to read news, and then Facebook’s social features to confirm its validity: “I only read news that appears in the News Feed. I need to confirm that a news source is believable or not with at least three sources like Ayeyarwaddy. Sometimes, I chat with the Journalist Group and ask them to confirm the news. I read the news that I see on the News Feed as a basic and check with their page.”

3. Facebook as Entertainment

Respondents also describe Facebook as a form of entertainment and relaxation. Responses cover a wide range of activities. R45 (female, 18, SEC D, rural) follows a Facebook page about ghost and other paranormal phenomena. R5 (male, 34, SEC A, urban) browses online shopping groups on Facebook. R46 (male, 42, SEC E, rural) enjoys sharing his poems on Facebook: “I am passionate about writing them. So I write and post it on Facebook. I mostly write Lay-Lone-Sat (four syllable verse) type poems... Whether I get likes and comments or not, I always post it. R15 (female, 22, SEC A, urban) posts poems and song lyrics. Poetry and music are popular means of

entertainment on Facebook, as is photography. Still other respondents find and share links to download music and movies on the platform.

4. Facebook For Work

Several users describe using Facebook in their work. Several of those interviewed are journalists, and they use Facebook to follow the news. Others manage their office's Facebook page; one helps her brother by running his souvenir shop's Facebook page. Three activists describe Facebook as important for networking with contacts in support of their work, including R19 (female, 26, SEC B, urban): "I usually share meeting minutes related to my volunteer works on Facebook and inform them when the meetings are scheduled."

5. Facebook For Study

Current students describe using Facebook to aid their studies. News and NGO updates posted to Facebook are helpful for students who study politics or need to write research papers. Some users read posts about study habits and systematic thinking. One user tags friends in educational content she sees on Facebook, particularly graphic design and language posts. Using Facebook posts to practice foreign languages was common among those who used Facebook for studying. Two students described reading posts from the U.S. Embassy to study English, as posts are written in both English and Myanmar. Facebook Messenger is also used to support studies, permitting users to coordinate group projects and learn what they may have missed in class.

Prevalence of Search

Over half of those interviewed actively seek out information through Internet search engines. Use of search engines, namely Google, is more common among more affluent and urban users in the sample. Affluent, urban users describe searching for their jobs; advanced students widely used search engines in their studies. Among all users interviewed, news is a common focus of searches. R15 (female, 22, SEC A, urban) describes her wide range of uses: "I also use Google; I mostly use it. I use it for many purposes. For example, I search what I want to know on it, especially, searching books. I also search guitar tutorials, lyrics and much more on it. I usually search on the basis of requirement." R20 (female, 20, SEC B, urban) describes a similarly wide range: "First I search on Google, and I continue to go through via relevant search result links. I mainly use it to search product reviews before I go shopping something. And I use it to search some words, for example, if I found a word while I am watching a movie that I cannot find in dictionaries, to know what it means and it would be whether an idiom or not. I mostly use in such manner." LIRNEasia's 2016 national survey found that 23 percent of mobile phone owners use data to search for information, constituting a 156 percent increase from 2015.

Rural Respondents Search on Facebook

A number of users, particularly rural users, actively search for information on Facebook's search rather than Google. This is most common when users search for news. R47 (female, 26, SEC D, rural) describes her search process: "If I type 'Weather News', a lot of content appears. I check the weather forecast on a daily basis... I don't check all of the search results. So there are both reliable and unreliable sources."

Sometimes, the weather forecast I look at on the web is not the same as local forecast.” R53 (male, 19, SEC D, rural) describes a similar process: “I surf for political-related content. I type ‘Myanmar News’ on Facebook search and read politics news... I only read those [posts] Facebook chooses to show.”

Respondents Use English Characters and Language to Search

Whether on Facebook, Google, or an unspecified search engine, those interviewed generally search in English, not in Burmese. Only one user, an urban, affluent housewife (R35, female, 43, SEC A, urban), reports searching exclusively in Burmese. R13 (male, 22, SEC B, urban) explains his language choice in terms of numbers of search results: “I mostly use English and not Myanmar much because there are few websites in Myanmar language. So I mostly search in English websites.” Some change languages depending on their search, as does R12 (female, 21, SEC B, urban), “I mostly use English language... but I sometimes use Myanmar language. I use it when I search Myanmar News Websites like 7 days Daily or Eleven media.” For others, this language choice carries over into search for Myanmar content as well. R39 (male, 64, SEC E, rural) searches on Facebook for news: “I only search for local news... I type in English and search.” Notably, however, R39 likely uses English (Roman) characters—in contrast to Burmese script—but still conveys Burmese language. In either case, Myanmar script is used to search infrequently by respondents.

Browsers and Apps

Few Respondents Use Mobile Browsers; All Use Apps

Of the 63 users interviewed, less than one-third uses Internet browsers on their phone. Several users describe using browsers only when using a computer, whether at work, school, or home. In contrast, all 63 users interviewed actively use apps to access the Internet. Among the third that uses browsers, many do so infrequently. Some users only use browsers while studying or searching. Responses similar to R6’s (male, 28, SEC A, urban) are common: “I often use the Facebook application and I use the browser if I want to search something.” Two users said that they had used browsers in the past, but now choose to primarily use the Facebook application instead.

Respondents Prefer Apps for Ease of Use, Speed, and Cost

When asked why they use apps exclusively or prefer them to browsers, users offer several answers. Common responses focused on ease of use. R46 (male, 42, SEC E, rural) describes why he does not use a browser: “Using browser is complicated. Because I can’t use my phone well, I only like those which I can instantly use as soon as I get connected to the Internet. I open Facebook, share good contents and save them in the files.” The second common response focuses on speed: applications load more quickly than browsers, particularly when data signal is weak. R28 (female, 20, SEC A, urban) explains, “I use both browser and application via mobile phone when I use Internet. If connection is poor, I am not patient to use browser. Therefore, I use application most of the time.” Others were concerned with the cost of using a browser. For R21 (male, 23, SEC B, urban), among others, using applications “saves top-up balance.”

Respondents Use Many Apps: Social, Games, Media, News, Education, and More

All 63 users interviewed regularly use apps on their phones. Apps serve as their primary means of accessing the Internet. The most common app—with almost all interviewed users using it—is Facebook. Also popular are a variety of messaging apps. The second most popular app is Viber, which is used by over half of interviewed users. Almost as popular as Viber is Facebook Messenger. Still other social and messaging apps installed on interviewed users' phones include WhatsApp, Line, WeChat, Pintrist, Twitter, Skype, Instagram, SnapChat, Vine, and BeeTalk.

Over one-third of those interviewed use their phones to play games. Popular games include Clash of Clans, Candy Crush, and football games.

Also popular are a variety of applications for downloading media. Most common among users interviewed is Zapy, a popular file-transferring software. Also popular are a variety of applications for downloading video from YouTube and Facebook, including SnapChu, among others.

Twelve of those interviewed have dedicated applications for news. Some of these apps are for foreign news publications, including the New York Times, Xinhua, BBC, and the Washington Post. Others are from Myanmar sources: T-Z, a news aggregating app, and Irrawady News, in particular.

Other apps common on respondents' phones are educational apps. Eleven respondents have dedicated dictionary applications. Several use language apps for studying Japanese and English. Three users have installed religious applications with Buddhist texts and pagoda information.

See Appendix 1 for complete listing of respondents' apps.

Wikipedia

Eighteen respondents report that they use Wikipedia. Interviewed Wikipedia users are current students and affluent, urban young people, aged 30 or under. Two young, urban, SEC B users describe it as their most visited website. R10 (female, 24, SEC B, urban) says, "Wikipedia is the website that I browse most because I can search information, mainly biography, easily." Several others with similar backgrounds describe using Wikipedia several times a week. LIRNEasia's 2016 national survey found that 2 percent of mobile phone owners report using Wikipedia.

No one reports using Wikipedia in Burmese for free through MPT Free Basics. In fact, no users report reading Wikipedia in Burmese; instead, all use it exclusively in English. Telenor offers Wikipedia in any language for free to its users, and two of those interviewed use this free service. R1 (male, 21, SEC C, urban) describes his use: "I am very pleased because I see all of the things... If I search the history of Buckingham Palace or [Queen] Elizabeth, it is underlined with blue lines. I don't need to pay money if I read about Elizabeth by clicking on [internal links on] Wikipedia because it is in it. There are references at the bottom of the page. I rarely look at these. Sometimes I do if I want to know the source exactly."

Some describe the ways in which they use Wikipedia, and these users tend to learn general and popular knowledge from the site. On such user is R6 (male, 28, SEC A,

urban): “I always use it. If I want to know about movies, people and books, I mostly look on Wikipedia.

Foreign vs. Local Content

Respondents Consume News From Both Myanmar and International Sources

Respondents widely describe consuming both local and foreign content on their phones. Many respondents describe reading news on their phones, and this news was primarily domestic, through one of several Myanmar news websites, including 7 Day Daily, Mizzima, Eleven, Irrawaddy, Thit Htoo Lwin, and DVB (Democratic Voice of Burma). Yet, these Myanmar sites were often accessed through the Facebook platform. In contrast, three rural respondents describe using T-Z, a Myanmar news-aggregating app. Some respondents, in addition to local news, use international websites, including RFA (Radio Free Asia), CNN, BBC, Washington Post, and the New York Times.

Aside From News, International Content Dominates

Aside from news, focus group respondents consume very little content from Myanmar on their phones. R40 (male, 20, SEC C, rural), when reading news, says, “I always browse local websites”; yet, when he downloads music, he uses foreign marketplace Mobogenia to download English-language songs. No one reports using Bindez or any other Myanmar-language search engine; instead, they use Google, Facebook, and YouTube. As described above, no respondents reported reading Wikipedia in Burmese; instead, they prefer the English version. Aside from T-Z, only one respondent (male, 25, SEC A, urban) described using Myanmar-developed apps on his phone: “I have a group of social media (apps), a group of lyrics, and then a group related to games, and a group that concerns music news, and a group of software developed by local app developers such as movie apps, MMS or MBS, something like that.” Three respondents describe using religious applications. It is not clear if these are specific to Myanmar, or foreign, however.

International Content Brings Negatives

Respondents describe some foreign content in negative terms. In particular, sex videos and profiles that add respondents on Facebook are of particular annoyance. R16 (female, 24, SEC A, urban) says, “We cannot stop it because everyone can freely access them online in this information age. We must try ourselves not watching them because it is created by others abroad.”

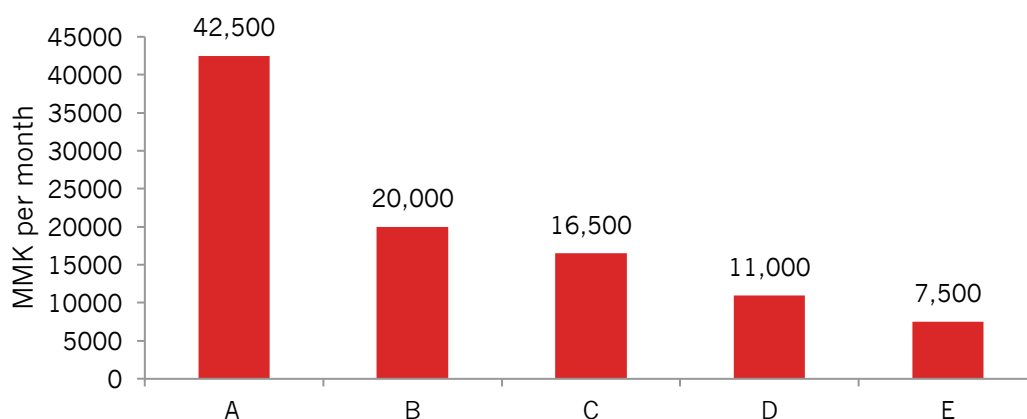


Market and Competition

This section presents analysis on respondents' budget priorities and multiple SIM use. Next, the important role of advertising in zero-rated promotions and Internet access efforts is discussed. Perspectives of street vendors and local content producers from informal interviews conclude.

Budgeting for Phone Use

Figure 4. Sample Median Monthly Phone Budget by SEC



Source: Authors, based on focus group discussions with respondents

Respondents' expenditures on mobile services varied considerably with their household income, as seen in Figure 4 above. The median monthly expense for SEC A is over MMK 42,000 MMK, and that expenditure decreased significantly for each less-wealthy SEC; users in SEC E spend a median of MMK 7,500 per month. Respondents are heavy-users, and as such spend more than the general population: LIRNEasia's 2016 national survey found that the average monthly top-up expenditure was MMK 7,494.

Budget Priorities

Respondents were asked how their phone and data expenses fit into their budgets. In their answers, respondents' budget priorities differ considerably.

1. Young, Urban Professionals Consider Their Phone a Top Priority

Some describe phone expenses as a top priority. These respondents are urban, young, and use their phones for work. R1 (male, 21, SEC C, urban) is a journalist and translator while studying in university. He describes his phone as a “second life for me” and uses it heavily for work, spending 5,000 to 10,000 kyat (MMK) per day. Describing the expense, he says, “I think it costs more than living cost. I spend much money for data rather than I go out and eat at Tea Shop.” Still other young professionals describe their phone expense as “necessary” and a “second life.” One rural respondent (R46, male, 42, SEC E, rural) bought a phone to start a football gambling business in order to earn supplemental income to support his 10 children. He rates phone costs as a top-three budget priority.

2. Students and Those Living Away From Family Also Consider Their Phone a Top Priority

Students and other respondents who use their phones to keep in touch with family and friends living far away also consider their phone expense a top budget priority. Many students in the focus groups left behind families in distant regions and states within Myanmar in order to study in Yangon. Mobile phones offer a lifeline of communication to their hometowns. R9 (female, 21, SEC B, urban) considers her phone bill to be a high priority, second only to buying food: “I usually use 1000-1500 kyats (MMK) per day. I mostly use [my phone] for calling. I use it to call my family.” It is similarly important for R54 (female, 35, SEC D, urban), who says, “If it is to say by monthly expense, expenses related to my phone can be the number one position.” She lives with an aunt who provides food and lodging, but she is geographically removed from many people in her life: “The key point is that I have friends in the countryside. And some friends are also in Mandalay. So, I used to talk with them on [the] phone as we are friends. Sometimes, it seemed to be more frequent and longer talking on phone especially at the promotion time such as these days.”

3. Zero-Rated Content Users Do Not Prioritize Phone Differently

Respondents who regularly use zero-rated data do not prioritize phone expenses differently than those who do not use such promotions.

4. Greater Use and Expense Associated with Higher Prioritization

Respondents who spend more on mobile top-ups per month are somewhat more likely to rank such expenses as a higher priority. Similarly, respondents who spend more time on their phones in a day were more likely to prioritize associated expenses. That said, some respondents contradict this trend, including R48 (male, 18, SEC E, rural) who spends 10 hours a day on his phone and MMK 30,000 per month on top-ups yet only considers such expenditure to be a moderate priority.

5. Rural and Older Respondents Consider Phone a Low Priority

Other users rated phone costs as a low budget priority. These users tended to be either older or rural. R34 (female, 48, SEC B, urban) is a housewife from Yangon who spends eight to nine hours a day on her phone, yet says the budget priority of her phone “rates at the last. I spend much for kitchen expenses, pocket money for my children. I spend less for my phone.” Among rural respondents, three respondents

rated phone expenses as their third priority, while the remaining rural respondents ranked phone expenses as considerably lower priorities than their urban counterparts.

Change in Use Over Time

Respondents were asked to describe their data and phone use shortly after they first got a phone. They were later asked to describe their current use. Additional reflective questions were sometimes asked as well. This section draws on these self-reported use and expense information to analyze changes in use over time.

1. Increased Time Spent on Phone

The overwhelming trend among those interviewed was to greatly increase use time on their phone. R23 (male, 22, SEC C, urban) explains, “I didn’t use it too much before. I used it only for thirty minutes to an hour [per day]... I used it only for calling and I wasn’t interested to use the Internet.” But, “Now when I get back from the office, I use it whenever I am free. I play CoC (Clash of Clans) and use Facebook.” R34 (female, 48, SEC B, urban) describes something similar: “I didn’t use mobile phone too much when I started to use it [in 2014]. I rarely uploaded photos. I use it more in 2016. I like to browse the stories with respect to health and religion. I also like to chat with my friends. Sometimes I upload my family photos. I didn’t use Internet too much when I started to use it. Mostly I use for calling. At that time, I spend about two hours for calling and three hours for Internet per day. Total of 6 or 7 hours a day before. Now I spend more time for Internet. Now I spend from eight hours to nine hours per day to use both Internet and making calls.”

2. Decreased Expenditure

Due to changing pricing and user behaviors, respondents often describe costs associated with their phones as decreasing over time. R22 (male, 22, SEC B, urban) exemplifies both: “It costs less because the calling rate went down. I think it’s also reduced because I don’t want YouTube or videos anymore.” R25 (male, 33, SEC C, urban) changed what he did on his phone over time: “There were no interesting things when I started to use. Therefore, I didn’t use it too much. I used phone just for listening music. I spent about 20,500 kyats (MMK) per month to make calls. Later, I used Internet when I got my smartphone. [Today,] I use the Internet more and calling less.”

Still others decreased costs by using free data options. R10 (female, 24, SEC B, urban) uses her phone for “about 6 hours” per day. In the past, “It cost over 1,000 kyats (MMK) per day before. Since MPT give free service for Facebook, I spend between 5,000-10,000 kyats (MMK) per month.”

3. A Few Respondents Increased Data Usage and Cost

Others do not conform to this trend. Instead, their phone costs went up considerably over time. This generally is due to a very large increase in data use, in particular. R29 (female, 24, SEC C, urban) describes her experience: “When I started to use, I didn’t use too much because I didn’t know how to use Facebook. I used it about an hour per day for playing games. At that time I spent about 5,000 kyats (MMK) only per month. Now I am using my phone about 4 hours per day and spend about 15,000 kyats (MMK) per month.”

Multiple-SIM Use Make for a Competitive Market

Nearly two-thirds of those sampled have used multiple SIMs. Multiple SIMs are notable for two reasons. One, they distort the traditional measure of mobile penetration, ratio of SIMs to population. Two, multiple-SIM ownership promotes a competitive mobile network, as users can switch operators with minimal transaction costs. The widespread availability of dual-SIM smartphones further reduces the transaction costs to zero. LIRNEasia's 2016 national survey found that 70 percent of phone-owners owned a dual-SIM capable phone and that 27 percent actively use more than one SIM.

Reasons for Multiple SIM Use

1. Switch Operators for the Best Deal

Urban respondents commonly describe using multiple SIMs to switch between operators for promotions. When asked which mobile operators she uses, R12 (female, 21, SEC B, urban) says, "I use all three operators, depending on bonus that they offer... Telenor is for making calls. Ooredoo is used for Internet. MPT is used for night package." R19 (female, 26, SEC B, urban) echoes this sentiment: "I use Telenor for using call packages than data packages. I sometimes buy MPT's plan when it gives additional 1 GB bonus for 1 GB package buying." R17 (female, 24, SEC A, urban) does similarly: she uses Ooredoo Facebook Plus but, "I also buy Telenor's Zee Kwat night plan and use it because I usually buy packages offered by different operators." R33 (female, 26, SEC B, urban) uses her MPT SIM for the MPT night plan, but says, "I use Telenor at other times."

2. Have Coverage Wherever They Go

Respondents also commonly describe switching SIMs for better signal as they move between coverage areas. R18 (female, 30, SEC A, urban) and several other respondents switch when they travel outside of Yangon. She says, "In my experience, the Telenor SIM is convenient when I go to other towns. MPT is not convenient because I do not hear voice clearly... [Ooredoo] is also not convenient when I go to other towns." Signal strength also varies considerably between respondents' homes and their places of study or work. As R23 (male, 22, SEC C, urban) describes, "I can't use MPT at the office. I use Telenor because Telenor transmission towers are placed on our office roof. I can use both SIMs at outside."

3. Use One for Calling, Another for Data

Respondents' contacts may know them by a particular number associated with a SIM or Internet calls may be discounted. If this is the case, respondents describe choosing to use one SIM for phone calls and another for Internet data. R54 (female, 35, SEC D, urban) uses her MPT SIM to call her relatives because they know the number. She uses an Ooredoo SIM for Internet because "it seems fast to browse data when I switch on to use the Internet... pages are opened fast and then I switch it off again. I am used to doing like that." R14 (male, 21, SEC C, urban) does similarly: "I use both MPT and Telenor. I use MPT for phone calling and use Telenor for Internet."

4. Second SIM for Free Data as Backup

Two respondents, R22 (male, 22, SEC B, urban) and R31 (female, 20, SEC B, urban) describe switching from Telenor to MPT SIMs after they exhaust their 150MB free Facebook data on Telenor. On MPT, they use Free Basics until the following day when their Telenor quota renews. R9 (female, 21, SEC B, urban) does similarly, but less frequently: “I use both MPT and Telenor. Mostly, I use Telenor for phone calling and Internet usage. I keep MPT as just a reserve. I use MPT only when my Telenor top-up has run out.”

Corollary: Facebook More Important Than Number for Consistent Contact

An additional outcome of heavy multiple-SIM use is the importance of Facebook in providing a consistent means of contact. R18 (Female, 30, SEC A, urban) who uses MPT, Ooredoo, and Telenor SIMs describes the importance of Facebook when using multiple SIMS: “I mainly use it to keep in touch with my friends because phone numbers are temporary and not useful now. Facebook is more convenient than using numbers. As for me, I usually switch one SIM to another by myself. I can ask help from my friends or I can tell you others when they ask me something through via Facebook.” This sentiment is not universal, however. R16 (female, 24, SEC A, urban) wishes she could switch from MPT to Telenor, “but I cannot because most of my business contacts only know this number.”

MPT ဖြင့် Facebook ကိုအခမဲ့အသုံးပြုနိုင်ပါပြီ။ ဓာတ်ပုံ၊ ဗွီဒီယိုကြည့်ခြင်းမှလွှဲ၍ messenger အသုံးပြုခြင်းအပါအဝင် Facebook ၏ အခြားfunctionများကို အခမဲ့အသုံးပြုလိုက်ပါ။ MPTနဲ့ဆိုရင်အင်တာနက်သုံးစွဲခအတွက်စိတ်ပူစရာမလိုပဲ Facebook သုံးနိုင်ပါပြီ။

Figure 5. June 6 SMS from MPT to subscribers

“You can use Facebook free with MPT. Except for viewing photos and videos, you can use Facebook and other features including messenger. You don’t need to worry about data usage when you use Facebook with MPT”

MPT ၏ Free Basics www.freebasics.com ကိုသုံးပြီး 7Days Daily မှသတင်းများ၊ wikipedia တို့အပါအဝင် အသုံးဝင်သည့် Websites များစွာကို အခမဲ့ လေ့လာဖတ်ရှုနိုင်ပါပြီ။ အသေးစိတ်ကို <http://bit.ly/1RV0gaT> တွင် ကြည့်ရှုပါ။

Figure 6. July 24 SMS from MPT to subscribers

“You can use Facebook free with MPT. Except for viewing photos and videos, you can use Facebook and other features including messenger. You don’t need to worry about data usage when you use Facebook with MPT”

Figure 7.



MPT billboard in central Yangon advertising Facebook Flex, part of Free Basics.

Mobile Operator Advertising

Advertising Shapes Consumer Awareness of Zero-Rated Promotions

Vendors often decorate their stalls with promotional material from the telecom operators. Umbrellas emblazoned with the logos and corporate colors of MPT, Telenor, and Ooredoo are ubiquitous on the streets of Yangon, as are bright blue and red informational banners from Telenor and Ooredoo, respectively. Cars marked with the logos of all three operators and MPT-decaled buses are also common sights in the city. One vendor echoes the research team's observations in the difference in advertising: MPT tend towards branding without detailed description of offerings, while Telenor and Ooredoo put more information about promotions on their advertisements. Indeed, Yangon has only one billboard advertising MPT Free Basics, which itself only describes the promotion as Free Facebook (Figure 7).

Advertising is essential to raising awareness of the offers and limits associated with zero-rated and other promotional content. When MPT launched Free Basics, it used SMS, Facebook posts, billboards, and fliers to market the promotion, but focused messaging only on Facebook. MPT sent a SMS to all of its subscribers on June 6 advertising the launch of Free Basics, but only described Facebook and Messenger as free offerings (Figure 5). MPT did not send out a second SMS about the promotion until over a month later, during fieldwork. The second SMS described MPT Free Basics included a URL and more details of additional offerings, explicitly mentioning 7 Days Daily and Wikipedia (Figure 6).



Vendors' Perspective

During fieldwork, the team ran five informal interviews with street vendors selling SIM cards and top-ups along two streets in central Yangon.

Vendor's Business Model

Vendors generally sell all three major telecom operators, with some carrying offerings from the fourth, smaller military-connected MEC. Vendors describe the same business model: they receive top-ups and SIMs from a licensed middleman who serves all of the operators. Increasing with their sales volume, vendors can keep a greater proportion of their sales. A MMK 10,000 top-up, for instance, yields MMK 600 in income, while a MMK 5,000 top-up brings in MMK 250. One vendor describes her relationship with her middleman as “flexible.”

Observing Changes in Demand

Vendors are well positioned to notice when customers demand a particular top-up or a different operator over time. One vendor recalls that in June, the month that MPT launched Free Basics, he saw a large spike in MPT SIM and top-up sales. Another recounts a large spike in Telenor SIM sales in July, after Telenor launched its Free Facebook and Viber plan.

Why Customers Buy New SIMs

Vendors offer a number of explanations as to why customers buy new SIMs, which were stocked for all operators by all interviewed street vendors. People lose phones or break their SIMs while switching them in and out of their phones. Others want to take advantage of a new promotion on another operator. Some wish simply to have a

backup or to have a covert SIM, for an affair or other reasons. Some are looking for a “good” phone number. Still others will borrow top-up credit from operators and then discard the SIM to avoid paying back the debt.

Low-Denomination Top-Ups Most Popular

Vendors stocked top-ups in 1,000, 3,000, and 10,000 MMK denominations.⁸ All say that MMK 1,000 kyat top-ups were most popular.

Content-Competitors’ Perspectives

During fieldwork, the team met with stakeholders in the local information technology community in Yangon. Of particular use were two conversations with a large Myanmar-based Internet company that elected not to launch on MPT’s Facebook Free Basics and a publishing firm that did launch with the platform.

Resource Commitment Required to Meet Free Basics Standards Not Worth The Benefits

Although Facebook no longer determines which firms can and cannot host content on Free Basics, they retain technical standards that require significant effort to meet: the content must be correctly formatted on a wide-range of feature phones and smartphones. The company that declined to work with Free Basics thought it too large of a resource commitment for the potential benefit of some new users.

Free Basics Permits Content Creators to Earn Ad Revenue

The publishing company, in contrast, wanted to pursue all possible channels for distributing its content, and so jumped at the chance to be on Free Basics. Within the technical guidelines set by Facebook, they were able to place small-sized image advertisements within the free content, and keep all accrued ad revenue. The guidelines did not prove to be difficult for this company because they were already focused on developing for a wide range of mobile phones. In addition to possibly increasing readership, the company expected a benefit to its brand associated with being on Free Basics.

⁸ Ooredoo also offers top-ups of MMK 500, although no interviewed vendors sold them.

Recommendations

This section synthesizes research findings to offer recommendations, addressed to stakeholders in government, civil society, and industry.

Table 5. Summary Recommendations to Stakeholders

	Recommendation	Telecom Operators	Internet Services	Civil Society	Policymakers
1	Promote Full Range of Zero-Rated Content	Yes	Yes		
2	Increased Scrutiny of Design of Zero-Rated Promotions is Warranted	Yes	Yes	Yes	Yes
3	Lower Barriers to Local Content	Yes	Yes	Yes	
4	Support Internet Literacy	Yes	Yes	Yes	
5	Don't Perpetuate a Second-Class Internet	Yes	Yes	Yes	Yes

1. Promote the full range of existing zero-rated content

Respondents who use Free Basics on MPT use only Facebook and Messenger on the platform. While 40 respondents have used Free Basics, only four know of free content available on the platform aside from Facebook and Messenger. Facebook promotes Free Basics to international stakeholders as a means to introduce people to the 'open Internet', yet this rhetoric does not translate into practice in Myanmar. When MPT launched Free Basics, it used SMS, Facebook posts, billboards and fliers to market the promotion, but focused messaging exclusively on Facebook—and not the other free resources. Only nearly two months later did MPT advertise other content on the platform by SMS and Facebook post. Awareness is a precursor to use, and advertising done by the telecom operator is important in creating this awareness. Mobile operators and Internet services are responsible for ensuring zero-rated promotions live up to their stated goals by establishing broad awareness.

2. Increased scrutiny of design of zero-rated promotions is warranted

Zero-rating complicates the Net Neutrality debate. Advocates on both sides of the debate often forward their arguments with theoretical models that are grounded in empirical assumptions. This report demonstrates that reality is more nuanced than the debate would have one believe.

MPT Free Basics and Telenor Free Facebook and Viber, the two zero-rated promotions considered in this report, are used differently by respondents. The absence of photos and video, frictions experienced switching between free and paid mode, and slow data speeds lead respondents to use Free Basics in limited ways, e.g., to message friends between top-ups and to read only Facebook group posts. These respondents do not mistake Free Basics for the ‘open Internet’. Telenor Free Facebook users, however, do conflate the promotion’s free full-content Facebook data with open access data. Among those we interviewed, Telenor Free ‘on-ramps’ respondents to paid consumption, but not to the ‘open Internet’: most users increase data consumption and pay for this increase, but they only use the data to access Facebook.

Respondents use other Internet data aside from zero-rated content, but do not necessarily perceive the difference. Seeing the ‘garden walls’ or, for that matter, determining if users understand the difference in content has significant implications for consumer choice and Net Neutrality, but has as of yet gone unaddressed in the debate. More data is needed to reflect the nuanced reality of zero-rating.

These nuanced outcomes arise from user experience. Our research points to design choices related to the service offering and local context (such as literacy or expectations of the users) can lead to differentiated use—in the case of our sample, one service offering encouraged general data use while another locked users within a ‘walled garden’. While our results are in no-way representative, such patterns could be more pervasive in the general population. Policy makers and civil society who have an interest in people accessing diverse content should try to understand if such patterns are pervasive/broad patterns across the populations. Internet services and telecom operators who wish to foster a diversity of content should scrutinize their design choices and use-contexts accordingly.

3. Lower Barriers to Local Content

The primary focus of zero-rated content and other promotions considered in this report is on Facebook and not on Myanmar-specific content. Facebook Free Basics on MPT includes only four local websites, and no respondents use these resources. Telenor Free Facebook does not zero-rate any Myanmar websites (though one could argue that Facebook is form of local content, if one considers updates from one’s contact list on Facebook as local/locally relevant content). More should be done to promote local content, particularly by telecom operators who zero-rate select content and by the Internet services that design such zero-rated content. Facebook no longer determines who can partner with Free Basics; any developer who meets the technical standards of the platform can launch zero-rated content. Yet, interviews with stakeholders indicate that these technical standards still pose a hurdle for content producers. Insofar as up-start companies must dedicate resources to develop for a range of feature phones and smartphones to meet these standards, such an undertaking requires a significant commitment of resources to launch on the Free

Basics platform. In Myanmar, where 78 percent of phone-owners own a smartphone (LIRNEasia, 2016), this requirement dissuaded one company from accepting an invitation to join Free Basics. Greater efforts should be made to permit more local content producers on existing zero-rated platforms. Permitting local content producers to receive ad revenue from such content, as is currently possible on Facebook Free Basics on MPT, is a positive step in promoting local content producers. Further assistance from Internet services and telecom operators could be provided to help bring more local content onto Free Basics. Similarly, local industry groups or civil society could provide guidance on achieving standards required to launch on the platform.

Expanded efforts on localization are needed as well. Myanmar fonts, for example, exist in two standards, Unicode and Zawgyi, an older local standard, that are incompatible across devices and Internet services. To truly solve this particular problem, a broad coalition of content providers, technical standards organizations, and, ultimately, users will be needed.

Stakeholder interviews also reveal that Internet service advertising corporate regulations on character-count are not particular to the Myanmar language. Greater focus on the particular context in which international Internet services are operating is warranted.

4. Support Internet Literacy

Respondents, particularly those from less affluent or rural backgrounds, demonstrate low knowledge of the Internet and mobile phones. Greater efforts should be taken to raise Internet literacy as access expands in Myanmar. Zero-rated content, particularly Facebook Free Basics, is promoted as a means to bring users onto the ‘open Internet’, but it fails to provide appropriate resources to help in the process. Free Basics contains only one Internet educational resource, UNICEF’s Connect Smart, which was unknown to and unused by all respondents. If zero-rated promotions are to be permitted, then they should prioritize more Internet educational resources, particularly ones that account for local context. Mobile operators publish useful video tutorials for comprehending their range of services, but video streaming remains expensive. Operators with current zero-rating promotions should consider zero-rating such help videos. Operators should also increase billing transparency, as respondents do not understand how their balance is deducted; this uncertainty undermines consumer trust and market competition. Civil society has a responsibility here as well. Myanmar ICT for Development Organization (MIDO) and Telenor have established a series of educational telecenters across Myanmar, and this effort is laudable. But further educational efforts and partnerships at scale are needed.

5. Don’t Perpetuate a Second-Class Internet

Respondents describe frustration with limitations of zero-rated content as well as slow speeds and limited availability of public Wi-Fi. Given the choice between zero-rating, limited data to access unrestricted content, or unlimited access to open content but at slow speeds—three widely proposed models for spreading access—respondents prefer unrestricted content. Some respondents interject that they will pay for a quality

connection. Efforts at expanding and promoting Internet access should give users what they want, and not lock them in a second-class Internet.

Users want Internet access that is affordable and of reasonable quality. Both are within the power of regulators and telecom operators to deliver. Myanmar has already taken the most important step towards lowering prices—the liberalization of the market has lowered prices as one expects in non-monopoly markets. But further action by the regulator is needed (such as encouraging infrastructure sharing, enabling easier access to rights of way to operators), and can help bring down prices. In addition, now that the market has competition, monitoring and publishing quality of service (e.g., upload and download speeds) could be useful to consumers—if they don't like the data speeds their operator offers, they can switch to another operator. Such reporting can lead operators to scrutinize the data quality they offer.

Parting Thoughts

Call for Further Research

This report has provided evidence for the debate surrounding zero-rated and subsidized data in Myanmar. More work is needed, however, to better understand the role of these promotions in emerging economies. This report samples few users who went online for the first time using zero-rated promotions. To better understand 'on-ramping' dynamics, more precise sampling is required. To understand if behaviors seen among our sample are generalizable, random sampling is needed. In order to interrogate the viability of local content producers, research should explore their business models and investigate relevancy of online advertising for users, something that this report does not do.

Let's Expand Our Net Neutrality Vocabulary

Net Neutrality and the 'spirit' of Net Neutrality are two distinct concepts: the former describes technical prioritization of some network traffic over others, while the latter is a social or rights-based claim to a flat and open Internet. Yet, these two concepts are often used interchangeably.

The 'spirit' of Net Neutrality is important, as it addresses informational power wielded by gatekeepers or censors on the Internet. But the term appears to be used only selectively: search engines too wield this same informational power but are not often considered as an affront to Net Neutrality or the 'open Internet'. Google determines—for all intents and purposes—what users see on the Internet. And users in different countries see different search results for the same queries. But advocates do not charge Google's takedowns from U.S. Digital Millennium Copyright Act claims or the E.U. Right to Be Forgotten as violating the 'spirit' of Net Neutrality. Furthermore, all mobile apps—aside from Internet browsers—limit users to a 'walled garden' separate from the 'open Internet'. Is the rise of apps a phenomenon to be banned because it violates the 'spirit' of Net Neutrality?

Transparency is a more useful concept. Transparency yields data for a more nuanced debate about Internet services and efforts to connect the billions yet unconnected. Transparency, as a netizen principle, helps ensure accountability from gatekeepers, Facebook, Google, app developers, and telecom operators alike.



References

- Alliance for Affordable Internet (A4AI). (2016). The Impacts of Emerging Mobile Data Services in Developing Countries. <http://a4ai.org/is-zero-rating-really-bringing-people-online/>.
- Aung Kyaw Nyunt. (2015). Telcos Roll Out Their Thingyan Bonuses. *Myanmar Times*. <http://www.mmtimes.com/index.php/business/technology/14014-telcos-roll-out-their-thingyan-bonuses.html>.
- . 2016. “Ministry Puts Mobile Penetration at 90 Percent.” *Myanmar Times*. <http://www.mmtimes.com/index.php/business/technology/21466-ministry-puts-mobile-penetration-at-90-percent.html>.
- Bangkok Post. (2016). Myanmar’s Mobile Revolution. Mizzima. <http://www.mizzima.com/business-domestic/myanmar’s-mobile-revolution>.
- Body of European Regulators for Electronic Communications (BEREC). (2016). Report on the Outcome of the Public Consultation on Draft BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality rules. http://arstechnica.co.uk/wp-content/uploads/sites/3/2016/08/6161-berec-report-on-the-outcome-of-the-publi_0.pdf.
- Chen, A., N. Feamster, and E. Calandro. (2016). Exploring the Walled Garden Theory: An Empirical Framework to Assess Pricing Effects on Mobile Data Usage. *CPRsouth*.
- Eisenach, Jeffrey A. (2015). The Economics of Zero Rating. *NERA Economic Consulting*. www.nera.com/content/dam/nera/publications/2015/EconomicsofZeroRating.pdf.
- Galpaya, H., A. Zainudeen, and S. Perampalam. (2015). A baseline survey of ICT and knowledge access in Myanmar. http://lirneasia.net/wp-content/uploads/2015/07/LIRNEasia_MyanmarBaselineSurvey_DescriptiveStats_V1.pdf.
- Galpaya, H. (2015). Reducing inequalities to universal & affordable access to ICTs. Presentation, UN-DESA/International Telecommunication Union Expert Group Meeting on Advancing a Sustainable Information Society for All, New York, June 8-9. <http://workspace.unpan.org/sites/Internet/Documents/2015-05-UNDESA-Galpaya-V5.pptx.pdf>.

- Harpur, P. (2016). Myanmar (Burma) Telecoms, Mobile, Broadband and Digital Media – Statistics and Analyses.
<https://www.budde.com.au/Research/Myanmar-Burma-Telecoms-Mobile-Broadband-and-Digital-Media-Statistics-and-Analyses>.
- Hicks, M. (2010). Fast and Free Facebook Mobile Access with 0.facebook.com.
Facebook.
<https://web.archive.org/web/20150330032841/http://www.facebook.com/notes/facebook/fast-and-free-facebook-mobile-access-with-0facebookcom/391295167130>.
- Internet.org. (2016). Where We've Launched.
<https://info.Internet.org/en/story/where-weve-launched/>.
- . (2015). Free Basics: Myths and Facts.
<https://info.Internet.org/en/blog/2015/11/19/Internet-org-myths-and-facts/>.
- Internet Society. (2016). Zero-Rating: An Internet Society Public Policy Briefing.
<http://www.Internetsociety.org/sites/default/files/ISOC-PolicyBrief-ZeroRating-20160803.pdf>.
- Kak, A. (2015). The Internet Un-Bundled: Locating the User's Voice in the Debate on Zero-Rating. *MSc Dissertation, University of Oxford*. <http://www.cprsouth.org/wp-content/uploads/2015/08/Amba-thesis-complete.pdf>.
- LIRNEasia. (2016). Mobile phones, Internet, information, and knowledge in Myanmar: Results of a nationally representative survey. http://lirneasia.net/wp-content/uploads/2016/12/LIRNEasia_MyanmarSlides2016_MediaVersion.pdf.
- Matsui, M. (2016). Mobile Revolution Lifts Myanmar Out of Telecom Time Warp.
Nikkei Asian Review. <http://asia.nikkei.com/Business/Trends/Mobile-revolution-lifts-Myanmar-out-of-telecom-time-warp>.
- Mirani, L. (2015). Facebook Is Bigger Than the Internet. *The Atlantic*
<http://www.theatlantic.com/technology/archive/2015/02/facebook-is-bigger-than-the-Internet-whoa/385350/>.
- Regencia, T. (2015). In Myanmar campaign, face-to-face still beats Facebook.
Aljazeera. <http://www.aljazeera.com/news/2015/10/myanmar-election-campaign-151029114144682.html>.
- Sen, R. et al. (2016). On the Free Bridge Across the Digital Divide: Assessing the Quality of Facebook's Free Basics Service. *Proceedings of the 2016 ACM on Internet Measurement Conference*.
- Song, S. (2015). Zero-rating: a modest proposal.
<https://manypossibilities.net/2015/11/zero-rating-a-modest-proposal/>.
- Studio D. (2015). Afford Two, Eat One: Financial Inclusion in Rural Myanmar.
<http://www.studiodraturans.com/s/AffordTwoEatOne-FinancialInclusionInRuralMyanmar.pdf>.

- Tan, M. (2014). Telenor Partners with Opera in Myanmar to Help Relieve Bandwidth Overload. *CNET*. <https://www.cnet.com/news/telenor-partners-opera-in-myanmar-to-help-relieve-bandwidth-overload/>.
- Tech Desk. (2016). TRAI supports Net Neutrality, effectively bans Free Basics: All that happened in this debate. *The Indian Express*. <http://indianexpress.com/article/technology/tech-news-technology/facebook-free-basics-ban-net-neutrality-all-you-need-to-know/>.
- Viezens, M. and F. Callorda. (2016). The Digital Divide in Latin America: Broadband Price, Quality and Affordability in the Region." *DIRSI*. <http://dirsi.net/web/web/en/news-and-events/news/new/dirsi-presents-analysis-on-broadband-price--quality-and-affordability-in-latin-america>.
- Zuckerman, E. (2014). Myanmar, no longer closed, still complicated. <http://www.ethanzuckerman.com/blog/2014/03/12/myanmar-no-longer-closed-still-complicated/>.

Respondents' Apps

List of Apps Used or Mentioned by Respondents

Category	App
Social Media	Facebook
	Instagram
	Pinterest
	Twitter
	Snapchat
	Vine
Messaging / VOIP	Facebook Messenger
	Viber
	BeeTalk
	Line
	WeChat
	WhatsApp
	Flash
	Skype
	Tango
	G-Talk
	Telegram
News	TZ News Myanmar
	Xinhua
	New York Times
	BBC
	Irrawady
Video	YouTube
	MX Player
File-sharing	Zapya
	Snapchu
	TubeMate
	Advanced Download Manager

	Videoder
Search and Browsers	Google
	Firefox
	UC Browser
	<i>unspecified</i>
Email	Gmail
Photo	<i>unspecified</i>
	B612
	Camera effect
	Winner Camera
Resources	<i>unspecified</i> dictionary
	Wun Zinn (Burmese books)
	IMDB
	Google Translate
	<i>unspecified</i> language education in: English, Japanese, Chinese
	Google Maps
	<i>unspecified</i> antivirus
	MasterKey
	Wikipedia
App Market	Google Play Store
	Mobeginie
Games	Clash of Clans
	Candy Crush
	<i>unspecified</i> football games
	Guitar Effect
	<i>unspecified</i>
Song lyrics	<i>unspecified</i>
Ringtones	<i>unspecified</i>
Radio/Podcasts	<i>unspecified</i>
Shopping	Zalora
Telecom operator	MPT
	Telenor
	Ooredoo
Cloud Storage	Dropbox
Karaoke	Singplay
Religious	Bible
	Pagodas
	Dhamma

Focus Group Questionnaire

1. Introduction

1.1. Family, job, education, migration

2. Phone use (ask them to tell a story, give example from your experience)

2.1. What type of phone do you own?

2.2. Who is your mobile carrier? Do you have a pre-paid/top-up or a monthly plan?

2.2.1. Which plan is it?

2.2.2. Why did you choose this plan?

2.3. Do you have multiple SIMs?

2.4. When did you first get a phone? What led you to get one?

2.5. What things do you use your phone for?

2.6. How much kyat do you spend a day on your phone service?

2.6.1. How long does a top-up last?

2.7. How much time do you spend a day on your phone?

2.8. Where is your phone throughout the day?

3. Data

3.1. Do you use your phone to browse the Internet?

3.1.1. (Here try to get a sense of what users think of the “Internet” as different than other things on their phone – use term explicitly, and pay attention to how different users react—probe)

3.1.2. How do you access the Internet?

3.1.2.1. (Phone: Apps? Browser? Computer?)

3.1.3. Why do you access the Internet?

3.1.4. Top 5 websites?

3.2. What apps are installed on your phone?

3.3. Do you use wifi on your phone?

3.3.1. How often? Where? (do you pay, or free?) What do you do with wifi connection?

3.4. Do you use mobile data on your phone?

3.4.1. How often? More / less than wifi?

3.5. Walk us through your decision to use wifi or mobile data? (contexts)

3.5.1. In your life, why do you use one and not the other?

3.6. Is the speed of your data sufficient?

3.7. What is the cell signal strength at your home? Where you work?

3.8. Do you buy mobile data?

3.8.1. How often do you top up?

3.8.2. Where / how do you top up?

3.8.3. Have you started buying more data than you once did? If so, how/when did this change happen?

3.9. Why did you choose your current mobile carrier? Your current mobile plan?

3.10. How does mobile data fit into your household budget?

3.10.1. Is mobile phone and Internet access a priority for your? For your family?

3.11. How do you generally hear about new apps, websites, or other things you can do with your phone?

3.11.1. Do you think that is how most people in Yangon find out?

4. Facebook Free Basics / Flex (MPT) (we want to understand the mix between paid and free content; how people mix and match—probe for this whenever you can)

4.1. Have you heard of Facebook Free Basics

4.2. Have you used Facebook Free Basics?

4.2.1. If so, *why* did you choose to start using it?

4.2.2. *How* have you used it?

4.2.3. Which apps do you use?

4.2.3.1. Ask if people have used current list of offered apps: (then follow up: ask how, when, which contexts have they used them)

4.2.3.1.1. Connect Smart (Learn 10 top Internet tips);

4.2.3.1.2. Facebook – Free Data (simple yes or no here—we'll ask more below)

4.2.3.1.3. Messenger

4.2.3.1.4. Free Books by Worldreader

4.2.3.1.5. Mathematics by TeachMe.com

4.2.3.1.6. Wikipedia (through Free Basics; we will ask about Wikipedia more generally below)

4.2.3.1.7. 7 Day Daily (news)

4.2.3.1.8. Girl Effect

4.2.3.1.9. ShweProperty.com

4.2.3.1.10. JobNet.com.mm

4.2.3.1.11. ALL IN – By and for Adolescents

4.2.3.1.12. BabyCenter

4.2.3.1.13. Emergency Information

4.2.3.1.14. Facts for Life

4.2.3.1.15. wikiHow

4.2.3.1.16. MayMay

4.2.3.2. Why do you use the Free Basics apps you use?

4.2.3.2.1. When do you find yourself using them?

4.2.3.2.2. Which apps within Free Basics do you use the *most*?

4.2.3.3. Are women and children-specific apps helpful to you? How?

4.2.3.4. Why don't you use more Free Basics apps?

4.2.4. Do you find yourself clicking links that leave Free Basics / require data?

4.2.4.1. When you do and see the screen telling you "Standard Data Charges" and asks if you wish to continue, do you always continue to paid content?

4.2.4.1.1. Or do you think twice? In which situations do you not continue to paid content?

4.2.5. Have Free Basics changed the way you use mobile data?

4.2.5.1. Any stories?

4.2.5.2. (we want to understand the mix of free/paid data options here)

4.2.6. Have you changed the way you use Free Basics (or apps within Free Basics) over time?

4.2.6.1. If you stopped using Free Basics, why did you stop?

4.3. Have you heard of Facebook Flex

4.3.1. How did you hear about it?

4.4. Have you used Facebook Flex? (we want to understand the mix of free/paid data options here)

4.4.1. How do you use it?

4.4.2. How often do you use it?

4.4.3. Do you switch to pay mode? What motivates you to switch to pay?

4.4.4. Has Facebook Flex changed the way you use mobile data?

- 4.4.4.1. Any stories?
 - 4.4.5. Have you changed the way you use Facebook Flex over time?
 - 4.4.5.1. If you stopped using Facebook Flex, why did you stop?
- 5. Facebook (all users)**
 - 5.1. What do you use Facebook for?
 - 5.1.1.1. (If news, what type of news?)
 - 5.2. Content is in which language(s)?
 - 5.3. When did you join Facebook?
 - 5.3.1. Did you create your own account? If not, who did?
 - 5.3.1.1. Is it under your name?
 - 5.4. Do you post things on Facebook? If so, what do you post?
 - 5.5. How often do you check Facebook?
 - 5.5.1. How many times a day?
 - 5.6. Do you understand privacy settings on Facebook?
 - 5.6.1. Have you changed them?
- 6. Access to information**
 - 6.1. Do you use search engines? What for? Often?
 - 6.1.1. When you search, do results from Wikipedia come up?
 - 6.2. Have you heard of Wikipedia?
 - 6.3. Have you used Wikipedia?
 - 6.3.1. What for? How often?
 - 6.3.2. Which language?
 - 6.3.3. Have you followed links / references off Wikipedia to other websites?
 - 6.3.4. Do you edit/contribute/make an account on Wikipedia?
- 7. Facebook Zero / Free Wikipedia (Telenor)**
 - 7.1. Have you heard of Facebook Zero? (all users)
 - 7.2. Have you used Facebook Zero?
 - 7.2.1. To do what? How often?
 - 7.2.2. Do you click links that display photos/videos or leave Facebook and charge data?
 - 7.2.2.1. In which situations do you do this?
 - 7.2.3. When you click to leave Facebook – free data, and see the screen telling you “Standard Data Charges” and asks you if you wish to continue, do you always continue to paid content?
 - 7.2.3.1. If not, which situations do you not continue to paid content?
 - 7.2.4. If you once used it but stopped, why did you stop using Facebook Zero?
 - 7.3. Have you heard of Telenor’s Sate Kyite plan (that offers free Facebook and free Viber for set periods based on top-up amount?)
 - 7.3.1. Have you used Sate Kyite free Facebook and free Viber?
 - 7.3.2. If so, why; if not, why not?
 - 7.3.3. If yes, have you/will you continue to use it? Why/why not?
 - 7.4. Have you heard that Telenor offers free access (no data charge) to Wikipedia?
 - 7.4.1. If so, where/when did you hear this?
 - 7.4.2. Have you used free Wikipedia on Telenor?
 - 7.4.2.1. If so, in which situations, to do what?
 - 7.4.2.1.1. Ever follow links off of site into paid content?
 - 7.4.2.2. If not (of Telenor users), why not?
- 8. Facebook Plus (Ooredoo promotion)**
 - 8.1. Have you heard of Ooredoo’s promotion Facebook Plus?
 - 8.2. Have you purchased a Facebook Plus pack?
 - 8.2.1. If so, why? If not , why not?

- 8.3. Would you prefer to pay discounted rate of 1Ks/Mb for Facebook data (with videos and photos) or use Facebook – Free Data (no videos or photos for free, but easily switch back and forth), which would you choose?

8.3.1. Why?

9. Catch all – free, discounted content/data we might have missed

- 9.1. We're interested in ways you use free data and discounted data—that's why we've asked about Free Basics, Facebook Flex, Facebook Zero, free Wikipedia, and Facebook Plus. Do you use any free data or discounted data promotions that we haven't asked about?

9.1.1. If so, which ones?

9.1.2. In which contexts and how often do you use them?

- 9.2. How many minutes per day do you spend on free/subsidized data promotions compared to paid data? (very important question—please probe)

10. Zero-rating / data change over time

- 10.1. Has the way you used *your phone* changed over time? How?

- 10.2. Have you changed the way you use *mobile data* over time? How?

- 10.3. Did you use data before you were offered free or discounted data promotions? Did you start using data after using one of those promotions?

- 10.4. Have you stopped using a free / discounted data promotion? Why did you stop using it?

- 10.5. Do you use more, less, or the same amount of data as you did one month ago?

10.5.1. What, if anything, has led to this change for you?

10.5.2. Tell us about your data use one year ago. Was it very different than your use today?

10.5.2.1. If so, why did this change over the past year?

11. Option to users (explain Facebook Free Basics' mission to provide free access to important Internet resources. Then explain that this is one way to do so; we're curious what they think of all the options that we'll present, and which one they like the most)

- 11.1. If you could choose between a small data allowance for any website/app or Facebook Free Basics (unlimited data for only a few websites), which would you choose?

11.1.1. Why?

11.1.2. What would you do with the open Internet you cannot with Free Basics?

- 11.2. If you could choose between unlimited data on any website/app at slow speeds for free or Facebook Free Basics (unlimited data for only a few websites), which would you choose?

11.2.1. Why?

12. Free Basics: Non-users

- 12.1. If your mobile carrier were to offer free data to you, what would you use it for?

- 12.2. Do our questions about Free Basics make you want to try it? Why do you say that?

13. Open-ended

- 13.1. Is there anything about your phone in your everyday life that we have not asked you but you think we should know?

About the Authors

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