

# Nudging the Next Billion

## Payal Arora

Erasmus University Rotterdam,  
Rotterdam, the Netherlands

### Key messages

- > Wants and not needs should drive the next billion users (NBU) outreach strategy.
- > We should focus more on the communication rather than the data angle when seeking mobile platform optimization for the healthcare industry.
- > Moral judgement around sex and sexuality needs to be sidelined if we wish to genuinely meet the healthcare demands of the NBU market.
- > All-purpose apps may be more popular for communicating healthcare information than specialized apps designed for health.
- > We should focus on self-care more than on prevention and treatments in order to engage the teen groups among the NBU.
- > We need to cater to a diversity of consumers in the system beyond the middle-class, young white male norm.
- > The NBU market are not second-class consumers who will accept second-hand products: they are demanding, sophisticated consumers who are desperately seeking quality digital products and services.

On 9 May 2019 at the KIT Royal Tropical Institute in Amsterdam, the Financial Times (FT) brought together leading experts including government ministers, health insurers, fintech startups, transnational donors, healthcare companies and NGOs to push the conversation on the 'Future of Health Coverage.' Her Majesty Queen Máxima of the Netherlands, in her position as the United Nations Secretary-General's Special Advocate for Inclusive Finance for Development (UNSGSA), gave the opening speech. She called for the leveraging of mobile tech to advance universal healthcare for all.



Audience at the FT Future of Health Coverage event, 9 May 2019, KIT Royal Tropical Institute, Amsterdam

## “The lower socioeconomic classes have fast come online”

People in low-income countries were the targeted healthcare consumers. This is no coincidence. More than a billion of the world's population are young and about 90 percent of them live outside the West.<sup>1</sup> Following the recent radical price reductions in mobile phones and data plans and diverse digital payment options, the lower socioeconomic classes have fast come online. There are more cell phones than people in several countries including in Namibia, China and India. By 2020, the majority of mobile data will emerge from developing countries. Only two of the top 10 countries with the most Facebook users are from the West – namely, the USA and the UK.<sup>2</sup> Among Saudi Arabia's population, 73 percent are active users of WhatsApp, the highest user rate in the world.<sup>3</sup>

It is no wonder that the healthcare industry is betting hard on the next generation of mobile health apps for these next billion users – the 'NBU' market. Mobile health has drawn investments of about US\$30 billion during the past decade and stimulated a host of novel public-private partnerships.<sup>4</sup> There is hope that these platforms will become efficient and effective delivery mechanisms for healthcare, connecting patients with providers. Innovative mobile payment options promise to resolve the long-standing barrier of access to capital for healthcare. However, as this market matures, what we find is a graveyard of inactive and unused mobile health apps.<sup>5</sup>

.....

## “The NBU demographic has long been a preoccupation of aid agencies and governments but not the market”

.....

The fact is that the success rate of any startup app is 0.01 percent – basically, 1 in 10,000 applications will make it in the market.<sup>6</sup> The miscalculation of who your consumers are and what they want is an important factor in this equation. Neglecting the diversity of consumers in the system contributes to this misalignment. Over 80 percent of clinical trial participants are white, and many are young and male.<sup>6</sup> Moreover, the NBU demographic has long been a preoccupation of aid agencies and governments but not the market. Decades of preconceptions about these users as instrumental and utility-driven have led to the derailing of our understanding of their actual mobile usage and motivations for getting and staying online.

If we are to design future media strategies to nudge these next billion users towards positive healthcare behaviors, we need to reexamine our starting points.

### Wants, not needs

Given the target market at the Financial Times event, I was invited to give a talk on my new book, *The Next Billion Users*, with Harvard Press.<sup>7</sup> My talk was part of the panel on ‘The Value of Data for Health.’ A number of questions dictated the agenda of the panel: How important are mobile tech and data to develop or maintain a viable inclusive health infrastructure? What are the challenges and responsibilities of data ownership in terms of privacy, protection, property rights and value creation – and solidarity/risk sharing? Who has the capabilities and can be

trusted to manage the valuable assets that health data constitute – in the interest of society? What lessons can we learn from front-runner countries in the application of big-data analytics in health financing and delivery?

.....

## “The user continues to be lost in the conversation”

.....

While these are all essential questions on healthcare information infrastructures, the user continues to be lost in the conversation. The fact is that when we speak of mobile platform optimization for the healthcare industry, we focus more on the data and not as much on the communication angle of this endeavor. This is even more evident in healthcare strategies for developing countries, which are designed to cater to what people presumably need versus what they expressively want. This practice stems from a long legacy of development work that approached nation building from a top-down and paternalistic viewpoint.

A classic example is the approach towards sexuality in healthcare in developing countries. Much money and attention continue to go towards agendas such as population control and family planning.<sup>8</sup> The need to ‘contain’ the demographic growth of low-income people has historically been an implicit driver in shaping strategies towards these populations. This has led to many cruel and inhumane practices, such as forced sterilization in India during the 1970s and the one-child policy in China during the 1980s, and also the continuing damage that US abstinence policies dating from the 1980s inflict on countries in Africa.<sup>9</sup>

The focus on sexuality usually causes a moral panic when pertaining to the world’s poor. The media has long associated sex in developing countries with HIV/AIDS, poverty, population growth, female genital mutilation and rape. This propels the healthcare industry to produce health information and design applications that they believe these populations ‘need’ based on this long-standing profile. Aid agencies continue to frame them as beneficiaries and patients rather than consumers with distinct demands beyond these narrow confines.

The fact is that many of these next billion users are typical young teenagers who are curious and desperate to have romantic encounters. They are at a critical stage in their youth development: they want to discover their sexual preferences, learn about sex and experience romance. WhatsApp and Facebook have given them a rare opportunity to fulfill these desires as they go about friending strangers and building romantic relationships with them.<sup>10</sup> Online platforms become an important outlet for these youths to learn about sexuality, especially given



Payal Arora (left) speaking about her new book, *The Next Billion Users*, at the FT Future of Health Coverage event in Amsterdam, 9 May 2019

that many of these users live in conservative societies where arranged marriages are the norm and dating is forbidden. Porn-hub becomes the main tutor on sexual preferences and behaviors. For instance, in India, most parents believe that children are using their mobile internet for education; however, the fact is that India ranks third in the list of countries that consume the most pornography.<sup>11</sup>

The NBU adult consumer faces a different kind of challenge: one that is contrary to the family planning agendas promoted by aid agencies, governments and the media industry. Many of them are struggling with infertility, which often has a devastating impact on their lives and those around them.<sup>12</sup> Strong cultural norms pressure them to be parents. Childless people suffer deep stigmatization, leading to divorce, abandonment, depression, grief, domestic violence and disrespect. In low-income countries, children are the only form of social insurance, meaning these childless populations are even more vulnerable as they grow older. People mistakenly believe that infertility is the same as sexual impotence, exacerbating this situation. So, while the healthcare industry neglects this high demand, entrepreneurial shamans promise cures and scammers advertise fake infertility treatment purchases on Facebook and 'solutions' circulate behind the encrypted walls of WhatsApp.

### Basics won't bite

Facebook has learnt the hard way to engage the NBU base. It was ahead of the curve in recognizing this demographic as legitimate digital consumers. In the name of altruism, Facebook moved into uncharted territory to capture this 'wild, wild south.' In 2010, it launched 'Facebook Zero,' an initiative in collaboration with telecom companies that allowed them to waive data charges (zero-rate) and offer a stripped-down text-only version of its mobile website. Universal basic internet service is possible, Mark Zuckerberg wrote, but "it isn't going to happen by itself."<sup>13</sup> Its first-mover advantage with the NBU market in Africa, Latin America and Asia translated to most of these consumers equating Facebook with the internet. Along the way, this has gained some serious pushback.

What Facebook got very wrong was its assumption that people with limited resources would have limited demands and aspirations. Without pictures, Facebook Zero did not engage these consumers. Moreover, the users' poor literacy skills demanded a primarily audiovisual experience of the internet. Facebook Zero's latest rebranding, 'Free Basics,' is now too late in the game of treating these consumers as they should be treated – as demanding and sophisticated consumers. The rise of the Indian Reliance Jio mobile platform during late 2015 was a game-changer as it put the NBU market at the center of its innovation and business plan.

Data prices fell by 90 percent in 2016 as a result of its launch. It publicizes its mobile services as a one-stop-shop platform for these users to fulfill all their desires. Their strategy builds on the fact that many of these users are now accustomed to a context collapse of digital space, given that Facebook and WhatsApp both essentially serve as LinkedIn, Tinder and Amazon rolled into one. The odds are that within the encrypted worlds of entertainment, gaming and socializing, healthcare content will circulate, blurring boundaries and sources.

.....  
**“The fact is that the internet  
 is the prime leisure economy for  
 the world’s poor”**  
 .....

From the onset, Jio rode on the ABCD marketing principle based on what kind of content people mainly consume when they have access to data – Astrology, Bollywood, Cricket and Devotion. The fact is that the internet is the prime leisure economy for the world's poor. As they struggle with their everyday lives, they use this space to be entertained, engaged and informed. In 2019, KPMG released a report that reaffirmed this stance.<sup>14</sup> Indians have adopted online video consumption as a prominent media consumption habit. More astoundingly, the lowest socio-economic classes in India spent a significantly higher share of their data on mobile video consumption than any other class.

To nudge these users towards health messages, products and services, we need to recognize that the industry needs to go where these users actually hang out. The average healthcare consumer in the West has a history of communication experiences with healthcare institutions, and mobile health (mHealth) apps build upon this learnt behavior. However, much of the NBU populace have limited exposure to interactivity with healthcare beyond serving as guinea pigs for the vast piloting of mhealth initiatives that disappear as fast as they begin. This 'pilotitis' of aid agency efforts has resulted in a cynical and fatigued consumer group who are ready to be treated as a legitimate and active user group.<sup>15</sup>

They refuse to be second-class consumers with watered-down versions of mobile applications. They are not mere bodies to be data-mined. After all, they spend a higher percentage of their limited income on these mobile apps compared with their middle-class counterparts.<sup>16</sup> They want content that will entertain while it informs, and safe spaces that will help them explore topics that are taboo in their societies. They have learnt to tune out condescending messages. They also deeply desire to be part of a global public, and consider themselves as global citizens, even if many of them may never step outside their locality.



FT Future of Health Coverage event kickoff, KIT Royal Tropical Institute, Amsterdam

## “The NBU populace consider themselves as global citizens”

They actively seek to connect with strangers around the world, to engage on global health topics and to be exposed to all kinds of products and services that are often beyond their reach. Many of them, being teens, are eager to curate their identities around group affiliations and popular culture. Given their life stage, they are more likely to be drawn towards self-care-oriented mHealth content than more traditional mhealth content on prevention and treatments. Self-care mobile apps are topping the charts as some of the most popular apps among millennials who are obsessed with themselves and their lives.<sup>17</sup> Yet, few health apps cater to the NBU market in this domain.

After almost a decade of such experimentation, the traditional mindset towards the NBU market still persists – that somehow they want practical, functional and utility-oriented products over all else. Nokia recently announced its new feature phone that will give 4G networks to low-income communities in the developing world. While this is typical of good intent, it has continued with the mindset that these users do not care about design or rather cannot afford to care. At first glance, the device appears as “an utterly unremarkable feature phone.”<sup>18</sup> The company hopes that in spite of this, the NBU market will embrace the phone as they desperately yearn to partake in the world of the internet.

There is a good chance that the phone will not be popular as it undermines another fundamental motivation for mobile uptake – social status. The poor have always partaken in conspicuous consumption as social capital builds on how you portray yourself.<sup>19</sup> These aspirational signals allow for socioeconomic mobility. Design matters!

To nudge the next billion consumers, let us first nudge ourselves in the right direction – by acknowledging that these users want what we want, and more.

## “These users want what we want, and more”

**Correspondence:** *Payal Arora,*

*Burgemeester Oudlaan 50, 3062 PA, Rotterdam, the Netherlands*

**Email:** *payal\_arora04@yahoo.com*

### References

01. United Nations. Youth population trends and sustainable development. Population Facts, No. 1; 2015.
02. Statista. Leading countries based on number of Facebook users as of July 2019 (in millions). Internet: [www.statista.com/statistics/268136/top-15-countries-based-on-number-of-facebook-users/](http://www.statista.com/statistics/268136/top-15-countries-based-on-number-of-facebook-users/) (accessed 26 August 2019).
03. Statista. Share of population in selected countries who are active WhatsApp users as of 3rd quarter 2017. Internet: [www.statista.com/statistics/291540/mobile-internet-user-whatsapp/](http://www.statista.com/statistics/291540/mobile-internet-user-whatsapp/) (accessed 26 August 2019).
04. Lisker S. In healthcare these days, ‘There’s an app for that’... unless you really need it. Tech Crunch (21 July 2019). Internet: <https://techcrunch.com/2019/07/21/in-healthcare-these-days-theres-an-app-for-that-unless-you-really-need-it/> (accessed 26 August 2019).
05. Arora P. Prizes for innovation: Impact analysis in the ICT for education sector. Paris: UNESCO; 2016.
06. StartUp Grind. 9,999 in 10,000 Mobile Apps Will Fail: Here’s Why. Internet: [www.startupgrind.com/blog/9999-in-10000-mobile-apps-will-fail-heres-why/](http://www.startupgrind.com/blog/9999-in-10000-mobile-apps-will-fail-heres-why/) (accessed 26 August 2019).
07. Arora P. The next billion users: Digital life beyond the West. Cambridge, MA: Harvard University Press; 2019.
08. BBC. Population control: Is it a tool of the rich? 28 October 2011. Internet: [www.bbc.com/news/magazine-15449959](http://www.bbc.com/news/magazine-15449959) (accessed 26 August 2019).
09. Santelli JS, Kantor LM, Grilo SA, Speizer IS, Lindberg LD, Heitel J, et al. Abstinence-only-until-marriage: An updated review of US policies and programs and their impact. *J Adolescent Health*. 2017;61(3):273–80.
10. Arora P, Scheiber L. Slumdog romance: Facebook love and digital privacy at the margins. *Media, Culture & Society*. 2017;39(3):408–22.
11. Indian Express. India ranks third in porn consumption, yet 9 out of 10 parents believe kids go online for ‘education.’ 14 November 2018. Internet: [www.newindianexpress.com/nation/2018/nov/14/india-ranks-third-in-porn-consumption-yet-9-out-of-10-parents-be-](http://www.newindianexpress.com/nation/2018/nov/14/india-ranks-third-in-porn-consumption-yet-9-out-of-10-parents-be-)

- lieve-kids-go-online-for-education-1898101.html (accessed 26 August 2019).
12. Gerrits T, Van Rooij F, Esho T, Ndegwa W, Goossens J, Bilajbegovic A, et al. Infertility in the global south: Raising awareness and generating insights for policy and practice. *Facts, Views & Vision in ObGyn*. 2017;9(1):39.
  13. Wired. What happened to Facebook's grand plan to wire the world? Internet: [www.wired.com/story/what-happened-to-facebooks-grand-plan-to-wire-the-world/](http://www.wired.com/story/what-happened-to-facebooks-grand-plan-to-wire-the-world/) (accessed 26 August 2019).
  14. KPMG. India's digital futures: Mass of niches. 2018 Report. Internet: <https://assets.kpmg/content/dam/kpmg/in/pdf/2019/08/india-media-entertainment-report-2019.pdf> (accessed 26 August 2019).
  15. Next Billion. Curing Pilot-itis for mHealth. 21 July 2016. Internet: <https://nextbillion.net/curing-pilot-itis-for-mhealth/> (accessed 26 August 2019).
  16. World Wide Web Foundation. 2018 Affordability Report. 23 October 2018. <https://webfoundation.org/research/2018-affordability-report/> (accessed 26 August 2019).
  17. MAPP.MEDIA. Wellness apps: Self-care leads the charts for 2018. 4 January 2019. Internet: <http://mapp.media/2019/01/04/wellness-apps-self-care-leads-charts-2018/> (accessed 26 August 2019).
  18. TNW. The Nokia 220 is a 4G feature phone for the developing world. 24 July 2019. Internet: <https://thenextweb.com/plugged/2019/07/24/the-nokia-220-is-a-4g-feature-phone-for-the-developing-world/> (accessed 26 August 2019).
  19. Postrel V. Inconspicuous consumption: A new theory of the leisure class. *The Atlantic*. July/Aug Issue 2008. Internet: [www.theatlantic.com/magazine/archive/2008/07/inconspicuous-consumption/306845/](http://www.theatlantic.com/magazine/archive/2008/07/inconspicuous-consumption/306845/) (accessed 26 August 2019).

# A world free from malnutrition.



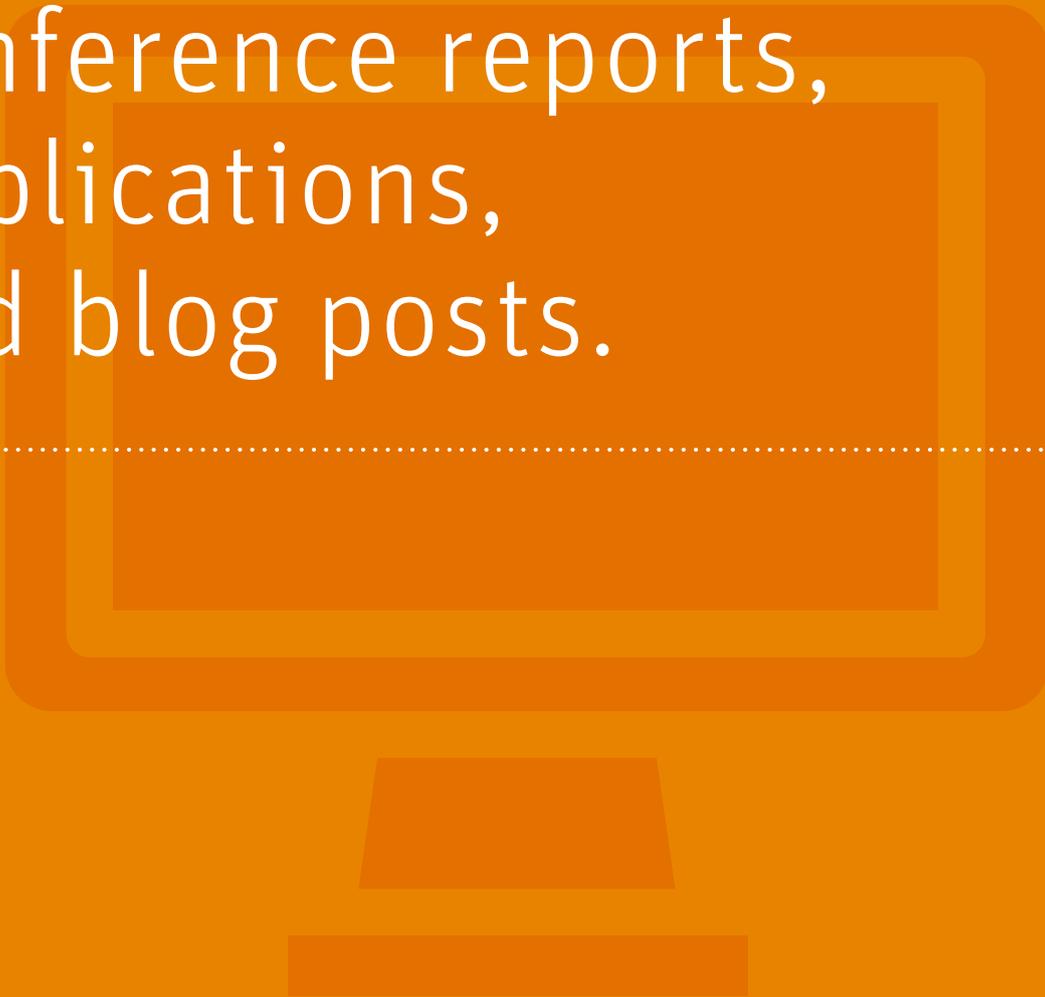
*Sight and Life* is a humanitarian nutrition think tank delivering innovative solutions to eliminate all forms of malnutrition in children and women of childbearing age and improve the lives of the world's most vulnerable populations.

*Sight and Life* provides a range of online educational materials and resources covering a variety of topics in nutrition from strategies to combat malnutrition to behavior change communication.

---

••• Visit  
**sightandlife.org**  
for the most recent  
conference reports,  
publications,  
and blog posts.

---

A stylized graphic of a computer monitor with a thick orange border and a trapezoidal base, positioned behind the text.