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# Blurb

Dear readers,

What will drive the next wave of mobile payments and digital commerce? This edition of Vritti will answer this question on everyone's mind.

First up, we talk about the buzz word of this year 'Conversational Commerce' in the article "Conversational Commerce: The New Kid on the Block"

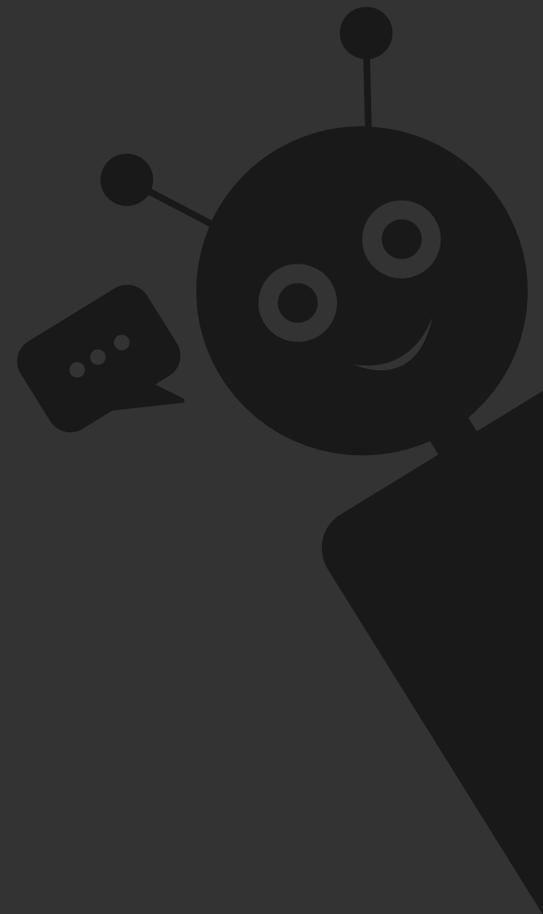
Next we turn our attention to an increasing use of Biometrics in payments in the article "National ID for Payments: The Case of Aadhaar in India"

Further, we discuss the news that made headlines at Mobile World Congress 2017 in "Mobile Payments Takes Centre Stage at the MWC 2017".

Women will constitute majority of the new mobile and mobile money users. In our last two articles we discuss how to increase women's participation in the mobility world in the articles "Reducing Mobile Money Gender Gap" and "Private Recharge: Empowering Women and Ensuring their Security"

I hope you enjoy reading our articles like we enjoy writing them for you.

Happy Reading!



**Srinivas Nidugondi**

SVP and Head of Mobile Financial Solutions  
at Mahindra Comviva



— By Deepak Arora and Nelson Pinto

# CONVERSATIONAL COMMERCE



## THE NEW KID ON THE BLOCK

**One fine Monday Morning;**

**Me** : Hey Bruce! Good Morning!

**Bruce**: Good Morning Nelson! How can I help you today?

**Me** : If you could tell me how much I spent last night?

**Bruce**: Sure. You spent Rs 45,000/-.

I looked for:

Date: 23/04/2017 to 24/04/2017

Transaction Type: Debit

Category: Entertainment

**Me** : Are you kidding me? Is that really how much I spent last night?

**Bruce**: Do you want details of your transactions?

**Me** : No. That won't be necessary? Could you ask Rohan to pay the money he owes me?

**Bruce**: Rohan owes you Rs 50,000. Should I send him a reminder about the same?

**Me** : Just make that 25,000 for now. And do mention it's urgent.

**Bruce**: Message "Hey Rohan! Sorry to bother you on a Monday morning. If you could help me with Rs 25,000/- as I am running short of funds. Warm regards- Nelson" Should I send this message to Rohan?

**Me** : Yes, Please!

**Bruce**: Sent. Anything else I can help you with?

**Me** : Nothing much! I just need to rest. This weekend has been one hell of a ride!

**Bruce**: Do you want me to book an Uber ride for you?

A few years back, I could say the above conversation was a work of my imagination; of how I expect an AI to converse with the user. But today, the fiction is rapidly turning into reality. The current buzz word in the world of ecommerce and customer experience is 'ChatBots'!

Social Media is abuzz with the talks of Facebook's annual developer summit, F8 held on 18th April, 2017 at McEnery Convention Center in San Jose, California; the whole world was watching it live. One key aspect of the announcement made by David Marcus, VP of Messaging Products, was about ChatBots. Facebook Messenger platform has more than 1.2 billion users, transmitting over 2 billion messages monthly, connecting people and businesses, in the presence of 100,000 active bots. Facebook Messenger is not the only messaging app, setting its foot into the futuristic realms of Chatbots. Messaging Apps like WeChat in China, Kik in US, Slack, Amazon's Alexa-enabled Echo, Operator, Google's Allo, Snapchat's Discover

+SnapCash, Telegram, Apple's Siri, Magic, and a few others have already started making phenomenal progress in the field of 'Conversational Commerce', as they call it. But where and why did the scope of conversational commerce through messaging apps arise? According to Statista, in a study of 1000 US customers, 44% said they'd prefer AI chatbots for customer relationship management. A Forrester research stated that upwards of 3 billion consumers in the world are heavy users of messaging platforms and prefer silent conversations over verbal ones. So all it took was, to connect the dots and thus the origin of conversational commerce; where brands connect with consumers on a single messaging platform.

As defined by Social technology expert, Chris Messina, conversational commerce is,

"...utilizing chat, messaging, or other natural language interfaces (i.e. voice) to interact with people, brands, or services and bots that heretofore have had no real place in the bidirectional, asynchronous messaging context. The net result is that you and I will be talking to brands and companies over Facebook Messenger, WhatsApp, Telegram, Slack, and elsewhere before year's end, and will find it normal. " (Read full article here: <https://medium.com/chris-messina/2016-will-be-the-year-of-conversational-commerce-1586e85e3991>)

### The key trends driving this movement are:



Growing usage of messaging platforms



Inflection points being reached in AI and Natural Language Processing (NLP)



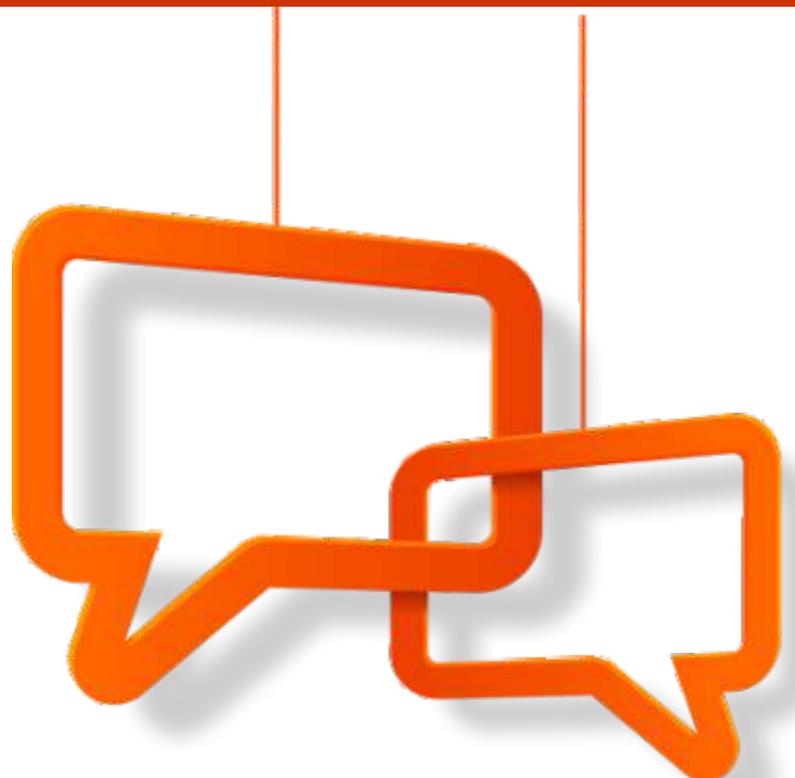
Rise of sensors, wearables and advances in data science and analytics



Integration of seamless payment technology into third party applications via APIs



Increased sophistication of notifications that are context-aware to provide an intelligent interface layer to consumers



Well, what does this mean for the consumers? Simply put, it talks about an era of technological advancement when you will never have to leave a messaging platform in order to perform any daily activity. Shopping, Advertising, CRM, Transport bookings, Banking; every internet service will happen on one platform. Kasisto, the startup that helped create Siri, is working with banks across the globe to provide a simpler way to watch your money- or even control it. Kasisto stated that the essence is to do things that you can't do in other ways. Banks across the globe are jumping on the ChatBot bandwagon to provide Internet services to their customers. Banks today, are already providing their own, voice and text-enabled, digital assistants to help customers in their day-to-day transactions.

DBS Singapore is working with Kasisto to integrate banking services in a messaging platform using AI. This, although in its early phase, looks very promising for the banking of the future. DBS talks about banking being embedded in other things of life. Capital One with Amazon's Alexa had provided banking services where customers can check their balance, make payments, review recent transactions and understand their spending habits using voice commands. MasterCard and Amex let customers to access their accounts and perform daily activities through Facebook Messenger.

A few examples of Banks and other FI using chatbots for payments:

Financial Institutions	Chatbot/AI based Banking Applications	Salient Features
Bank of America	Erica	Text and voice enabled chatbot; Sends customer notifications, identifies areas of saving money, provides updates on FICO score, facilitates bill pay within BoFA app.
Capital One	Eno	Text enabled chatbot; Allows customers to find out upcoming bills, check account balances and pay credit card bill using voice
Ally Bank	Ally Assist	Speech and text enabled assistant; Enables customers monitor accounts and transactions, pay bills, make transfers and deposits, and track spending and saving patterns
Barclays Africa	Chatbanking	Extends banking to Social Media platforms; Enables customers to check balance, make payments to friends, review recent transactions, and pay bills and purchase data from Social Media platforms
DBS Singapore	DigiBank	Voice and text enabled assistant; Customers can review their transaction history, check their current interest rate, make payments and money transfers, and answer banking queries

Source: <https://www.abe.ai/blog/10-big-banks-using-chatbots-boost-business/>



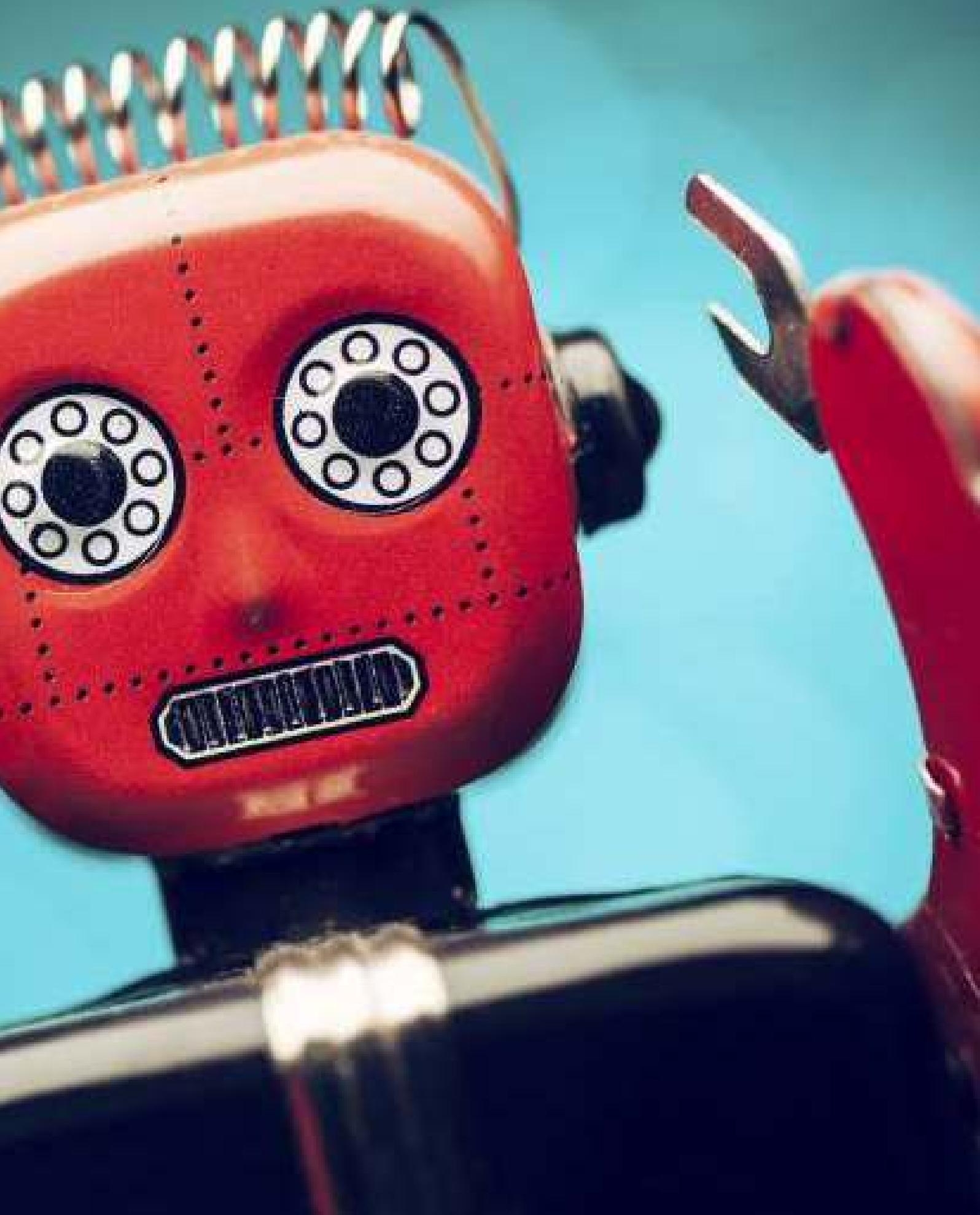
Telecom Operators have used AI for their Customer Service for quite some time now. Now, they are trying to integrate other services including mobile banking through ChatBots. Orange France is launching its own personal assistant 'Djingo' to gain a first movers advantage over others. In light of the launch of Orange Bank, a fully virtual bank to be launched later this year, Djingo will enable its customers to manage all financial services through the mobile banking app. Djingo will also let its customers to control Orange TV. The current trend of conversational commerce will allow a seamless interaction of all services across platforms; Think about being able to

browse through products, get assistance with purchases, pay for services, share the moment on social media, manage your accounts, move money across accounts, register and invite friends on new mobile money platforms, and much more; all while staying on one messaging app. Life seems much simpler, doesn't it? Although the advancement in the field of conversational commerce promises to change the way brands communicate with customers or how consumers will access all internet services on one messaging platform; it's too early to assess the impact of ChatBots on our daily activities and their place in our lives or maybe it's not?

## Conversational Commerce: The New Kid on the Block

**About the author: Deepak Arora** is Senior Business Development Manager in Mobile Financial Solution unit in Mahindra Comviva. He is interested in accelerating growth of mobile payments globally. Currently, he is handling business development in MENA, SSEA and Europe region.

**Nelson** is Business Development Associate in Mobile Financial Solution unit in Mahindra Comviva. His key interest area is strategizing go-to-market for mobile payments.



# National ID for Payments:



**AADHAAR**



— By Hitesh Gulati

National identification number is used by governments in many countries across the world to track their citizens for purposes such as work, taxation, health care, disbursement of subsidies etc. Globally, what once started as an initiative to solve a single problem now caters to multiple dimensions. Following suit, a few years back UIDAI in India also started enrolling Indian citizens through its Aadhaar programme which provides a 12 digit unique-identity number issued to all Indian residents based on their biometric and demographic data.

# The case of Aadhaar in India

As of March 2017, 113 crore Indians<sup>[1]</sup>, which represents about 99% of the Indian population have been enrolled under the Aadhaar initiative. Alongside this, bank accounts of people have been linked to their Aadhaar accounts under the Pradhan Mantri Jan Dhan Yojana (PMJDY). The next logical step that has been thought of by the Indian government is to enable payments using the Aadhaar number. This will directly cater to about 40 crore bank account customers linked to with Aadhaar.

The idea here is to make India a cashless economy and at the same time provide related benefits of curbing black money, corruption and fake currency. Also, the government will also save upon is the cost of creation, maintenance and replacement of cash which amounts to 21000 crore<sup>[2]</sup> a year. But the main issue that comes in this process of digital payments is of digital connectivity.

As on 30th September 2016, 61.98%<sup>[3]</sup> of urban India was internet enabled, leaving 13.65% of rural India without any connectivity. Moreover, what is also seen is that the people in rural India rarely own a smartphone. Then, how can India, a country where 67%<sup>[4]</sup> of the population still resides in rural areas, transacts digitally and become a cashless economy?

It definitely was a great challenge in front of Indian Prime Minister when he announced his vision for digital India a few months back. But by taking a leap of faith and tremendous amount of planning, he communicated the same to 134 crore Indian population. He made payments in India take a revolutionary turn, especially after the recent demonetisation announcement.

The cornerstone is Aadhaar based payments system (AEPS) - A bank led model which allows online interoperable financial inclusion transaction at PoS (MicroATM) through the business correspondent of any bank using Aadhaar authentication. It allows the customer to make purchases using their Aadhaar number linked with their bank account. The transaction just require customer's fingerprint for authentication.

Enrolment for a merchant would be done by either a bank or will be done on apps such as BHIM- Aadhaar Pay. For self-enrolment, the merchant will have to first download the app on their Android or iOS smartphone, and thereafter link their bank account using their Aadhaar number with the app. Or the merchant could call up the bank for the app. The bank would send the link to the app after checking the credentials of the applicant.

Once this is done, the merchant will need the customer's Aadhaar number and a fingerprint biometric reader for completing the payment. All a customer will now have to do is to tell the merchant his Aadhaar number and then place his/her finger on a biometric scanner to make digital payments for the purchase of goods and services.

The process explained above is as simple as it reads. Make payments without remembering any username/password, or any pin. The customer need not even carry a physical card to make card payments or have a mobile with him to make wallet payments.

However, the biggest challenge that we see in the market today is the limited access to data, especially in rural India. Hence, there is a need for merchant app integrated with a USSD backbone. In this case, the entire customer interaction would still be on the mobile application. However, instead of pushing the payment information to the backend over the data channel, the USSD channel will be used for delivering the payload to the server. This would help to support payments through AEPS and NUUP infrastructure without the need for a data connection making digital payments a way of life in rural India.

But, with ease of use and simplicity also comes the risk of security of the information that resides in the UIDAI database. One of the major ethical concerns is what happens if the data gets into the wrong hands. How can it possibly be mishandled is yet to be seen. But considering the amount of thought and design

that has gone into building and maintaining the database, it is highly unlikely that any security breach would happen. Also the same has been said by the UIDAI and the minister of IT.

Last but not the least, we would like to highlight what Aadhaar implementation in India has done to the world. India's biometrics-based system Aadhaar is seeing a global demand with

governments overseas considering adopting the model or a part of it in some form or the other.

A Livemint report says that Russia, Morocco, Algeria and Tunisia have shown interest in Aadhaar. Also the Prime Minister of India has been asked by African leaders if India can guide them to set up similar processes in their nations.

**About the author: Hitesh Gulati** is a Product Manager in Mobile Financial Solutions at Mahindra Comviva. He joined Mahindra Comviva post completion of his masters from NMIMS, Mumbai, India. Prior to his MBA he was a software developer with Accenture. He is deeply interested in technology management.

## R E F E R E N C E S

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# MOBILE PAYMENTS TAKES CENTRE STAGE AT THE MWC 2017



— By Srinivas Nidugondi

Like its predecessors, the 2017 edition of the Mobile World Congress (MWC) didn't fail to impress. Over 108,000 visitors gathered in Barcelona to air and share their views on the likely future of the global telecom space. That being said, it was business as usual. The who's who of the sector put their heads together to discuss the modalities of deliveries, including specific roadmaps, deployment models and investment challenges.

In a nutshell, all discussions were centred on three pillars-investment, innovation and intelligence. It doesn't stop there of course, but, for the sake of simplicity, I shall focus upon trends that are relevant to our business.



## MOBILE MONEY

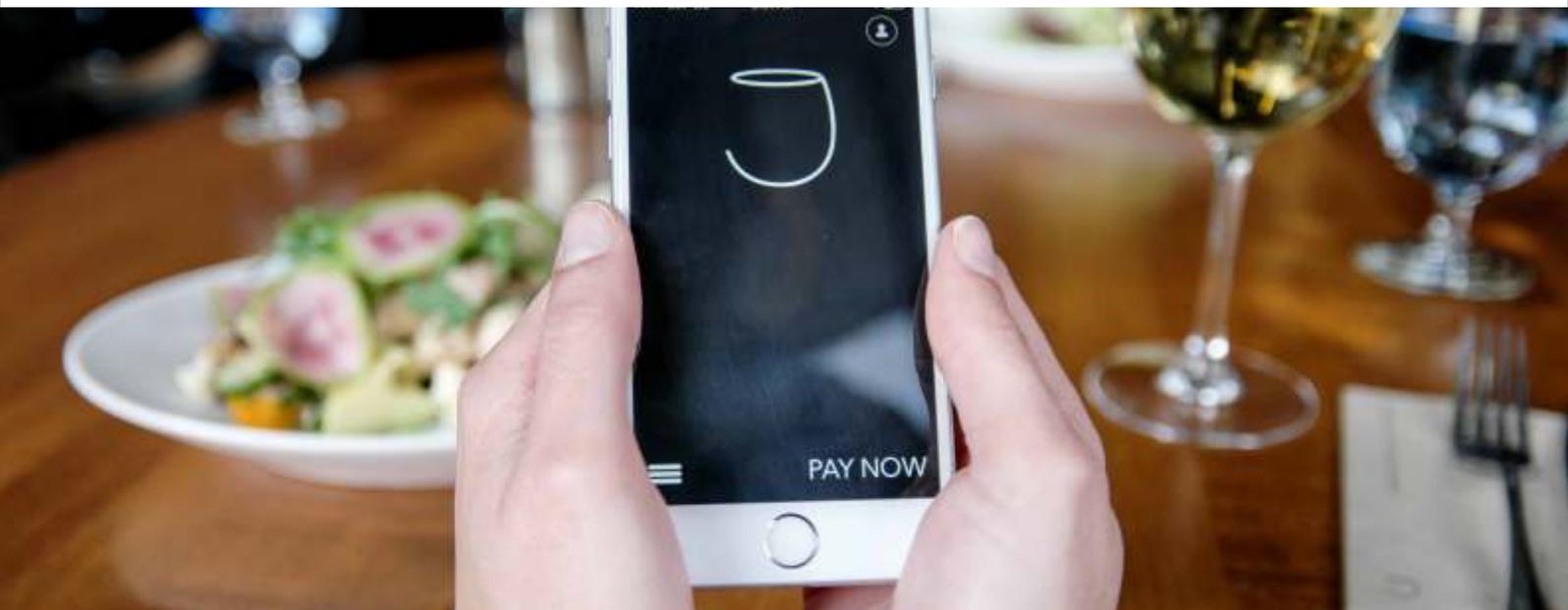
### A DECADE AND STILL GOING STRONG

It would be an understatement to say that mobile money has come a long way, from the 2007 launch of M-Pesa in Kenya.

To illustrate, as per GSMA's State of the Industry Report on Mobile Money: The Decade Edition 2006-2016, a survey undertaken by the Financial Access Initiative in 2009 revealed that 2.5 billion adults globally were unbanked. Cut to 2016-as per the same report, mobile money is available in

two-thirds of low-and-middle-income countries, as of December 2016. Quite a jump, this!

This theme, needless to say, took centre stage at the MWC this year. Various stake holders-from the bigwigs to those just about starting their journey-announced ambitious plans to enhance their mobile money portfolios. The end game? To ensure an optimum customer experience and continuity of mobile money services, of course!



## VISA AND MASTERCARD

### TAKE THE LEAD

It is an interesting fact that when it comes to mobile payments, MasterCard and Visa can't be too far from the discussions. Needless to say, MWC was no exception. Visa chose this platform to announce its plans of expanding its global payment capabilities. The finance major's mVisa QR-based payments service is set to expand

its global footprint. The aim is simple-to provide simple and secure point-of-sale and e-commerce transactions. The company challenged start-ups to bring digital payments into the realm of Internet of Things, with the expansion of its Everywhere initiative to Europe.

Meanwhile, MasterCard made quite a splash with the announcement of its tie-up with Oracle. The partnership is aimed at enhancing the features of the former's retail and restaurant-based applications. This is, needless to say, aimed at enhancing the end-user's experience.

## Chatbots: COMING SOON!

Another interesting revelation uncovered at MWC 2017 was that chatbots are waiting in the wings. Permit me to explain-it is no secret that commerce is steadily increasing its influence on messaging platforms. Why? Well, because brands have woken up to the fact that constant customer engagement is an important ingredient to success. Naturally, then, technology players are going full throttle on creating a platform for e-commerce and on monetizing their subscriber bases.

There is a catch, though. Chatbots, indeed, are chock-full of potential. However, issues related to easy and secure integration of payments is the roadblock. This is why conversational commerce is yet to surprise us (the industry).

Net, net, these are interesting times for the global telecom space. Well, on paper, at least. It remains to be seen how many of these trends fare well in the real world. Bets, anyone?



**About the author: Srinivas Nidugondi** has over 19 years of experience in various industries including financial services, payments and commerce in a variety of business and product related roles and most recently with a specific focus on enabling banking, payments and related services through digital channels. At Mahindra Comviva he heads the Mobile Financial Solutions business unit, which currently has over 130 deployments globally, providing services for more than one billion consumers.

# BRIDGING THE FINANCIAL GENDER GAP THROUGH MOBILE MONEY





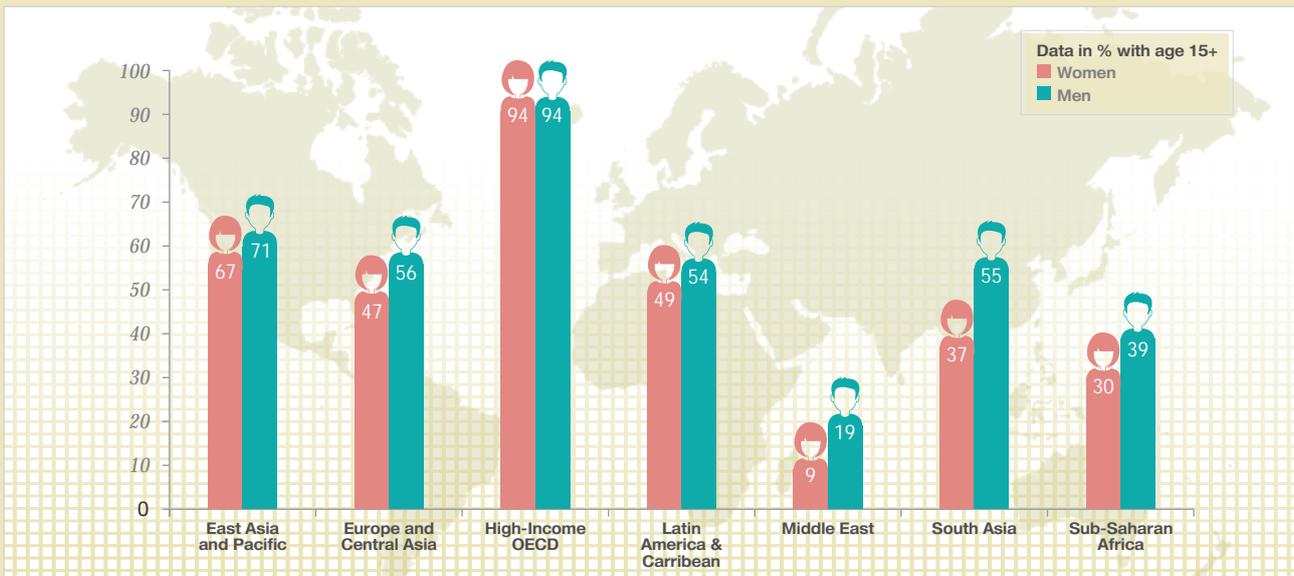
— By Ritvik Sinha

ACCORDING TO THE WORLD BANK'S GLOBAL FINDEX DATABASE, 62 PERCENT OF ADULTS (AGE 15+) ACROSS THE WORLD HAVE ACCESS TO FORMAL FINANCIAL STRUCTURE I.E. HAVING ACCOUNT WITH BANKS, MICROFINANCE INSTITUTIONS OR OTHER FORMAL FINANCIAL INSTITUTIONS. WHILE WOMEN CONSTITUTE NEARLY HALF OF WORLD'S POPULATION, BUT THEIR FINANCIAL INCLUSION IS FAR BELOW COMPARED TO MEN, THUS IMPACTING THEIR CONTRIBUTION TO ECONOMIC ACTIVITIES, WELL BEING AND GROWTH.

Globally, only 58 percent of women access to account in a formal financial institution as compared to 65 percent of men. From 2011 to 2014, there has been a considerable increase of 13 percentage points of women in developing economies having access to formal financial sector. While in relative terms the gains have been comparable to those among the male population during same time period, but in absolute terms half of women in developing economies do not have access to formal financial system. The gender gap in these economies for financial inclusion is 9 percentage points, which is evident from the Global Findex data.

While women constitute nearly half of world's population, but their financial inclusion is far below compared to men, thus impacting their contribution to economic activities, well being and growth. Globally, only 58 percent of women access to account in a formal financial institution as compared to 65 percent of men. From 2011 to 2014, there has been a considerable increase of 13 percentage points of women in developing

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There have been a number of barriers to women's economic empowerment that have constrained their financial inclusion. They are not only restricted to demand side but there are barriers in access to formal financial institutions along with regulatory constraints. There have been number of constraints that have restricted women's access of financial services:



### Regulatory Constraints:

According to the 2016 report of World Bank Group's "Women, Business and Law Project", about 90 percent of 173 economies covered in the project have at least one law impeding women's economic opportunities. For example, in some countries such as Saudi Arabia, women are not allowed to open the bank account. In some countries the women are required to furnish specific permission or documentation which is very difficult to obtain. Property or land is normally not titled in the name of women, which is considered a preferred form of collateral among banks. Bank account opening procedure requires identity documents, thus becoming a major barrier for undocumented women in developing countries. Gender gap related to identity document is significant in Middle East and South Asian countries.



### Social Constraints:

Women in developing nations have lesser control over economic resources. According to a study by United Nations in 2015, one-third women in these economies do not have control over household spending on major purchases. They remain dependent upon their husbands and one-tenth of women are not even consulted over how their own earnings are spent. Therefore, the bargaining power and social status of women within their household is significantly low. Further, women have less access to formal education and are mostly involved in lower-paying economic activities or are not working. Women are more sensitized towards privacy. A study by GSMA in 2015 reveals that women are 14% less likely to own a mobile phone than men and even if they do they are less likely to use it due to privacy issues.



### Supply Side Constraints:

One example of this barrier is that women find it difficult to interact with male point of contact in banks as female point of contact is less. Women find uncomfortable to visit bank branches which predominantly has significant male population coming for their banking needs. Very few banks have women only branches. The product offerings are not targeted for women in developing nations, considering their lesser ability to manage the risk and high cost of bank account ownership. The access channels are also constrained. Women are burdened with household related work and do not have much time to travel to bank branches. The ATMs are sometimes not guarded that prohibit women to withdraw money as possibility of theft is higher. Further, the ATMs located in isolated places prohibit women from venturing there. There are lower rates of cell phone ownership among women so they again are constrained to access digital financial products such as mobile banking.



Mobile financial services have become the most promising mobile applications in the developing world. Mobile Money is slowly evolving as an ecosystem spread across commerce, healthcare, agriculture and other sectors. It is driving financial inclusion in developing economies and has tremendous potential in bridging the financial gender gap as well. While urban men have emerged as the early adopters of mobile money, the mobile operators are currently involved in expanding their services to reach to have a wider penetration that encompass rural regions as well. While low levels of literacy and mobile phone ownership among women are barriers, still with much simplified usage it can soon become popular among women as well.

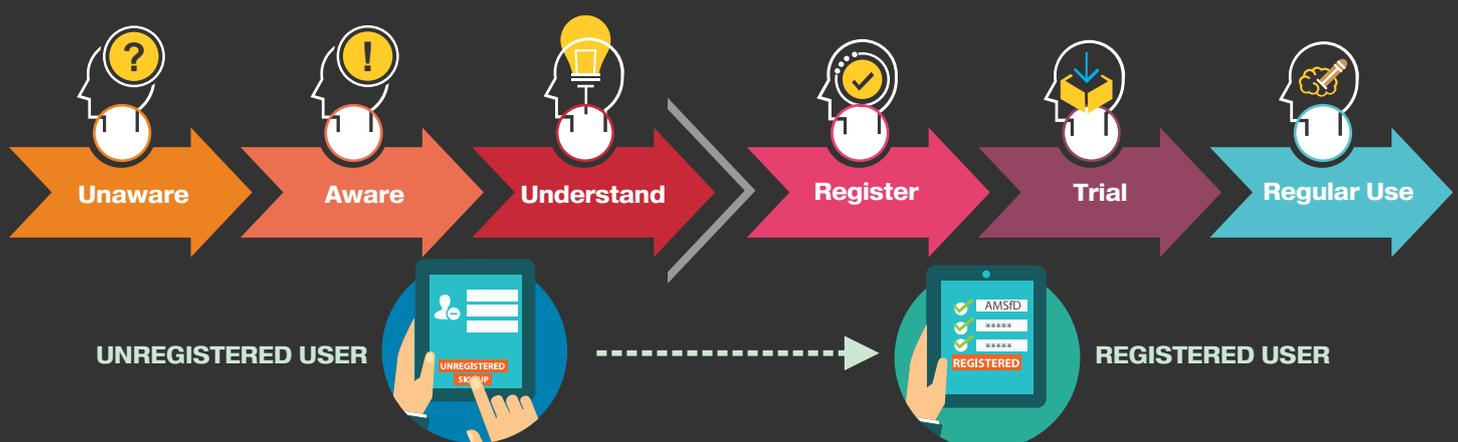
GSMA conducted a study in 2016 to identify the gender gaps in the mobile money usage journey in Kenya that has become the most mature mobile money market in the world. Women have very specific needs for financial management:

- a Convenience:** Since women take care of the household so they are constrained in terms of time and hence they will be more inclined towards a financial product that is easy to use.
- b Reliable:** Women are known to save money for emergencies. So, the financial tool that they use to save money should immediately provide them their savings when they require.
- c Secure:** In many households, women are responsible for budgeting and taking care of essentials such as payment of school fees, etc. Women are concerned that the savings are safe and expenditure can be transacted securely.
- d Privacy:** Women want to independently save and spend the money. They do not like other people interfering with the way they manage the funds.
- e Price Sensitive:** Women are economic and bargain during spending of funds. They require a financial product that is cost effective.
- f Risk Averse:** Women are not known to take risks with their savings. Normally the savings are small and they want to ensure that the same can be liquidated easily as and when required. Women are less likely to try new financial services compared to men as they perceive the risks involved.

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While the ownership of mobile phone among women is cause of concern, the key is to focus transform the women already owning the mobile phone and get them onboarded to Mobile Money platform. Once the women have understood the importance of mobile money the bigger hurdle is crossed and thereafter they can responsibly adopt the mobile money. As per GSMA Report:

**“It is estimated that, globally, 80 million unbanked women receive government wages or transfers in cash, 210 million unbanked women receive cash payments for the sale of**

**agricultural goods, 585 million women pay for utilities in cash, and 225 million women pay school fees in cash.” [5]**

There is a huge opportunity for digitalizing these payments and an estimate suggests that mobile money can unlock an estimated \$20 billion market in Africa if mobile money accounts are opened for women as it will generate new revenue streams. Using mobile money platform, following are the key recommendations that can increase adoption of mobile money usage and thus bridge the gender gap in financial inclusion:

## Women as Brand Ambassadors of Mobile Money:

The key factor that has led to mobile money growth is developing economies is the agent network and its reach in the geographies having no banking infrastructure. The mobile money agents directly interact with consumers by getting them onboarded and doing the KYC (Know Your Customer) verification process to combat frauds. They support the consumers throughout their mobile money journey by disbursing cash or digitizing money. Thus the agent network becomes the backbone of mobile money operations. In 2006, there were only 21584 registered agents in the countries where mobile money services were live. By the end of 2016, this number has gone upto 4.3 million registered agents. To increase mobile money usage among women, it is recommended to have women agents that become representatives or brand ambassadors in the region. Female agents will help to build confidence and trust among women to adopt mobile money and women will be more comfortable in interaction with their female counterpart rather than with male agents. Few key focus points are:

- a** Brand Ambassadors of mobile money representing a specific region that can bring financial literacy among women in that region.
- b** Female agents can be incentivized with attractive commissions when they onboard new women consumers to mobile money. In order to promote usage, the agent who onboards

the consumer can get commission when the consumer does first transaction other than cash in or the commission can be split between first two transactions and so on.

- c** In few countries where women are not allowed to freely move outside their home, female agents can visit their home and get the women onboarded so as to mobilize their savings and secure their money which is stacked at home in the form of cash.
- d** In few countries, women cover their face and they are hesitant to remove the veil in front of male agents so that their photo can be taken. However, if its a female agent then they can get their photograph taken and KYC done.

**Zoona**, a startup in Zambia engaged in building mobile money agent network, has found that women tend to be more organized, better at settling credit and reinvesting in their business. Currently they have 70% of the agents as female.

**“MoMo Angel Campaign”** pilot was launched by Lonestar Cell MTN to recruit and train women as agents in October 2016 in Liberia. This has become quite successful and Lonestar Cell has launched attractive schemes to help women purchase mobile phones. The agents are incentivized by not just commission but also financial aid for the education of their children, preferably a girl child.

# Promotions and Marketing Campaigns around Women

In order to promote mobile money, it becomes essential that women are portrayed in billboards as well as TV and radio ads. The literacy among women is less and it is difficult for them to understand the value of mobile money services through pamphlets. With the presence of women in the campaigns, the female population can easily relate and realize the importance of mobile money. The mobile money providers can run periodic campaigns such as giving bonus money or airtime of specific sum for women who get registered within the duration of promotion. The marketing campaigns should highlight the two very important aspects:

- a** Security of Mobile Money
- b** Convenience of usage by showcasing the consumer journey through the agent network.

Mobile money promotions can also be bundled with selling cell phones to women at attractive discounts. Since women will now see value in mobile money, so they will try to own the mobile phone. Documentation process should be made smooth for women such that women not having ID cards can get the same created through the mobile money agents. There can be a initiative launched by mobile money providers to help women get their national IDs or other KYC proofs at nominal or no cost.

Telesom in Somaliland developed TV advertisements showing women using its mobile money service ZAAD for merchant payments and savings — the two use cases it thought would be most appealing to women.

# Disbursing Government Grants

Government can make use of the mobile money services to transfer grants to the female population which is below poverty line. This becomes a fast, more secure and less expensive way to disburse funds. The funds will be credited directly to the beneficiary's account and then can be put into better use by the beneficiary. In order to promote female literacy, the government can disburse stipends through mobile money which can only be used by parents to pay for school fees or buy books. The government grants getting disbursed through banks make women to travel to bank branches by spending sum in travelling and then queuing up to get the

funds. Further, they can be robbed of the cash on way back to home. When they are disbursed through mobile money, the women can make the better use of funds or get the cashout done through a nearby agent.

In June 2014, Easypaisa signed an agreement with Sindh Education Reform Program (SERP) for educational stipend disbursements. Under the SERP program, Easypaisa is providing disbursement services for stipends. The stipend is offered to more than 400,000 girls studying in classes 6 through 10, subject to 80% attendance. In this way they are able to reach rural areas.



# Disbursement of Medical Aids by NGOs

Women health conditions are quite poor in developing nations that are due to maternal deaths, poor nutrition among girls and high prevalence of HIV. The NGOs and UN can partner with mobile money services so that the aid reaches directly to the beneficiary. This not only reduces the cost to disburse financial aid but also prevents corruption and ensures that full money reaches the women in need. Women can then make use of the money to purchase for medicines. Mobile money providers can also collaborate with insurance companies and launch micro savings and micro insurance product for women. The women can save small portions of money on which insurance cover is provided and premium gets deducted

automatically every month from the new micro savings mobile money account. Crowd funding can also be done through mobile money

Organizations like World Food Program are disbursing aid in countries like Kenya, Cameroon and Zimbabwe, as mobile money to women's account which cannot be cashed out. It can only be used to purchase meal vouchers so that the problem of malnutrition among women gets addressed.

Vodacom Lesotho has collaborated with Lesotho Ministry of Health, so as to disburse aids to pregnant mothers and HIV positive children. Through this initiative, not only the disbursement of aid but tracking of patients and sending reminders to them is also done.

## Family Wallet

Family wallet is a concept where a single mobile money account can be shared between the members of the family. In economies where mobile phone ownership is quite less among women, family wallet concept can be used where women can be onboarded on a mobile money account owned by their husbands. The access of services and limits on mobile money usage can be controlled for each family member.

The women can thus deposit their savings in cash to this common family account which can then be put into various uses such as paying for bills, purchasing goods etc. Family wallet can have another variant where single mobile money account is linked to multiple mobile numbers of the family. With the family account, women can do better planning and budgeting and control the expenditure.



# Differential Pricing of Mobile Money Services

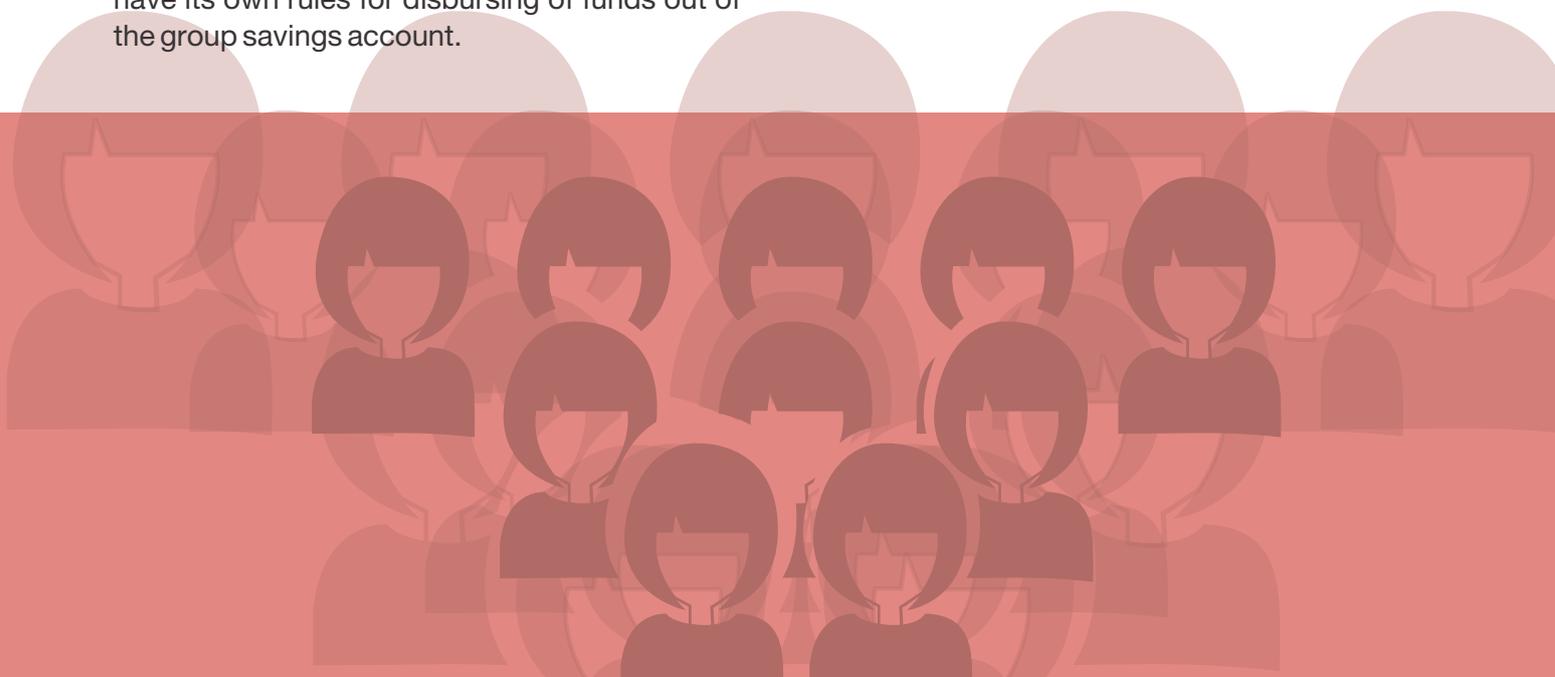
Women are more price sensitive than men and look for cheaper alternatives while making transactions. Therefore, mobile money providers can charge less for same service if the consumer is a woman. Gender based differential pricing can attract a large number of women to get registered to the mobile money services. The family can encourage the women to open mobile money accounts to get same service delivered at lesser rates. Merchants can provide cash back and loyalty points to women on making purchases. Mobile operator can distribute free

airtime or joining bonus to women that register to mobile money services. Similarly attractive interest rates can be offered on micro loans disbursed using mobile money. Mobile money providers can also provide interest on the savings by women in their mobile money account. Special campaigns can be launched during International Women Day, Mother's Day etc where charges can be waived off for transactions done by women consumers so as to make them feel special and also promote the usage of services.

## Group Savings

Informal saving groups have come up in the absence of banking infrastructure. Mobile money providers can launch group savings product so as to move away from traditional pooling of cash by the groups that becomes difficult to operate and manage. Women can form groups within the locality and pool funds in a group account. All members of the groups can view the balance and transactions done on group account so that transparency is maintained. Borrowing can be done on a rotating basis and each group can have its own rules for disbursing of funds out of the group savings account.

Econet has launched a similar product known as "Savings Club" on its mobile money (Ecocash platform). There is a Club Chairman who is the owner of club account. There is one club secretary and a club treasurer. Club member can place a request to borrow a certain sum from the club. The request is required to be approved by club chairman, treasurer and the club secretary. Post which funds can be disbursed and the club statement can be accessed by any club member. 60% of all Ecocash Saving Club users are women.



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PRIVATE RECHARGE:  
EMPOWERING  
**WOMEN**  
AND ENSURING  
THEIR SECURITY





— By Mohit Bhargava

Access to mobile phones has benefited women in multiple ways from enabling them to remain connected with their family to helping them to access information available through internet. However, mobile has also become a channel through which women experience harassment from strangers, especially men.



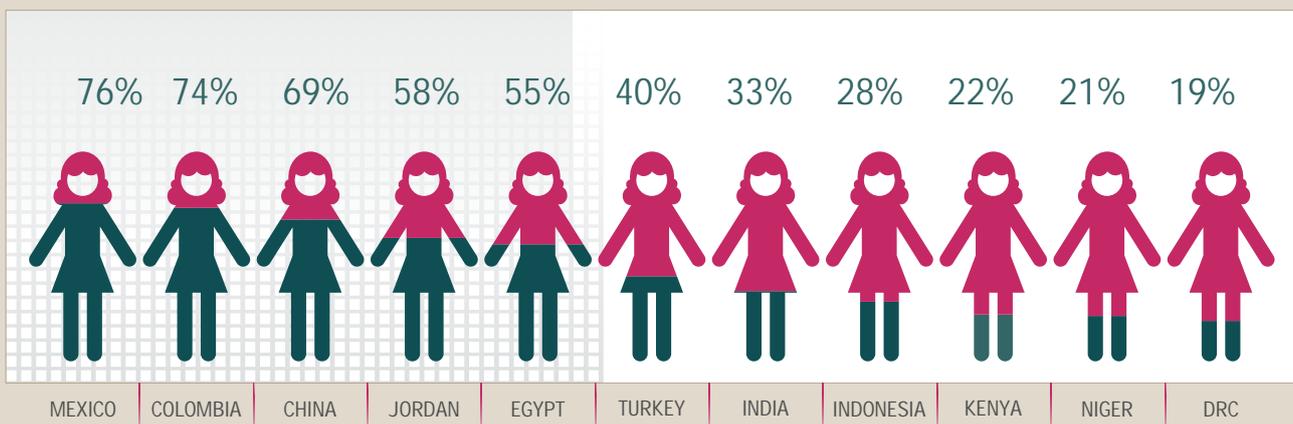
In some Middle Eastern countries, men randomly dial mobile numbers till they reach a woman. In many emerging markets in Asia, Africa and Latin America, women have to think twice before sharing their number with retailer because of the fear of being overheard by a stranger. Often the number is sold by the retailer to miscreants, multiplying the problem. These miscreants are known to call up women frequently and pass derogatory comments, leading to a feeling of fear and insecurity in these women. For example, in India's largest state Uttar Pradesh, some recharge retailers are known to sell mobile number of their women customers for a hefty price. The mobile number of women can fetch a price ranging from INR 50 (US\$ 0.77) to INR 500 (US\$ 7.72), depending on looks. This has led to sharp increase in harassing and abusive calls in the state. Between 15 November 2012 and 31 December 2016, Uttar Pradesh Police received 582,854 complaints on Women's Help Line 1090

related to harassment on phone. Complaints related to harassment on phone constitute 88% of the total complaints received by police on Women Help Line 1090.[1]

In case male members of the family come to know about the harassment calls, they usually suspect the women of being a willing victim. Thus, restrictions are put on women and they become dependent on the men in their family for recharge. As men recharge women's phone as per their convenience, women have zero balance for long duration leading to decline in their mobile usage. In some cases, women are completely restricted from using the mobile phone broadening the mobile ownership gender gap. GSMA report 'Bridging the Gender Gap: Mobile Access and Usage in Low- and Middle-Income Countries' also highlights harassment from strangers as one of the key barriers for women in owing or using a mobile phone. The issue is experienced globally as shown in figure 1. [2]

FIGURE 1

**Female respondents who agree or strongly agree that harassment from strangers is a barrier to owning or using a mobile (%)**



Source: GSMA<sup>[2]</sup>



# PRIVATE RECHARGE

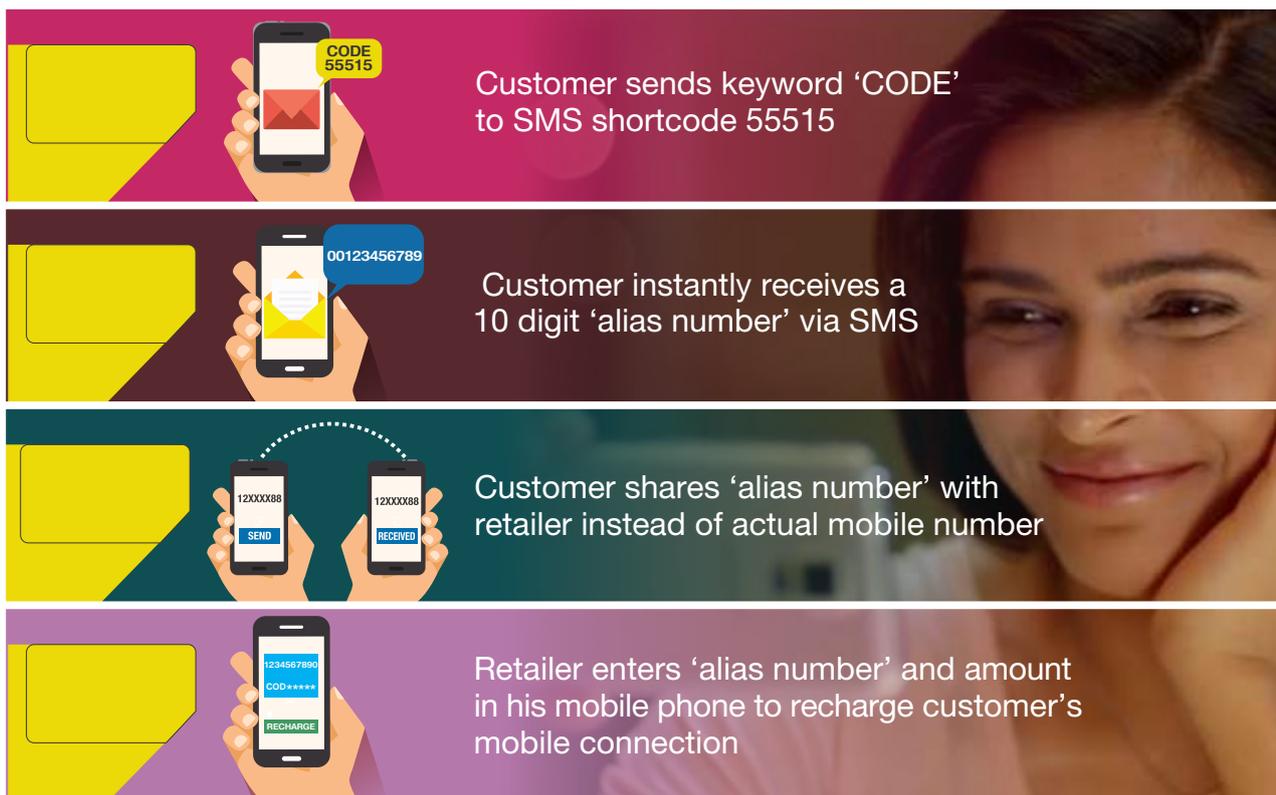
## C O N C E P T

Mobile operators globally are concerned about secrecy of women’s mobile number and related harassment issues as it negatively impacts their subscriber base and revenue. To ensure secrecy of women’s mobile number and project themselves as a woman-friendly brand, mobile operators have started offering Private Recharge service. Private Recharge enables women to recharge at retailers without disclosing their mobile number. Private Recharge service masks

woman’s actual mobile number and enable her to share an ‘alias number’ with retailer for recharge. To get the ‘alias number’ (also called as Private Code or OTP) the female customer has to send a keyword to SMS shortcode. The female customer receives the ‘alias number’ as a reply SMS. The female customer shares the ‘alias number’ with retailer for electronic recharge concealing her actual mobile number.

FIGURE 2

### Example of Idea Cellular India customer recharging using private Recharge



### The USPs

#### Overcomes educational and financial constraints:

As customers just need to send a simple SMS to generate 'alias number', hence, anyone can use this service. Unlike mobile apps which require smartphone and internet, SMS-based Private

Recharge works with both feature-phones and smartphones. Moreover, SMS to generate 'alias number' is offered free of cost by operators, eliminating any financial burden on customers. Thus, Private Recharge can be used by all women irrespective of their age, education and financial status.

**A proactive approach:**

There are a number of mobile security apps or services that allow women to block unwanted callers or seek help through SOS Messages during danger or emergency. However, most of these services are reactive, which women use during distress. On other hand, Private Recharge is a proactive service as it enables women to prevent exposure of their mobile number thus helping them to proactively avoid harassment and spam calls. Private Recharge is a unique

service as it addresses the basic concern of maintaining secrecy of a lady's mobile number during recharge.

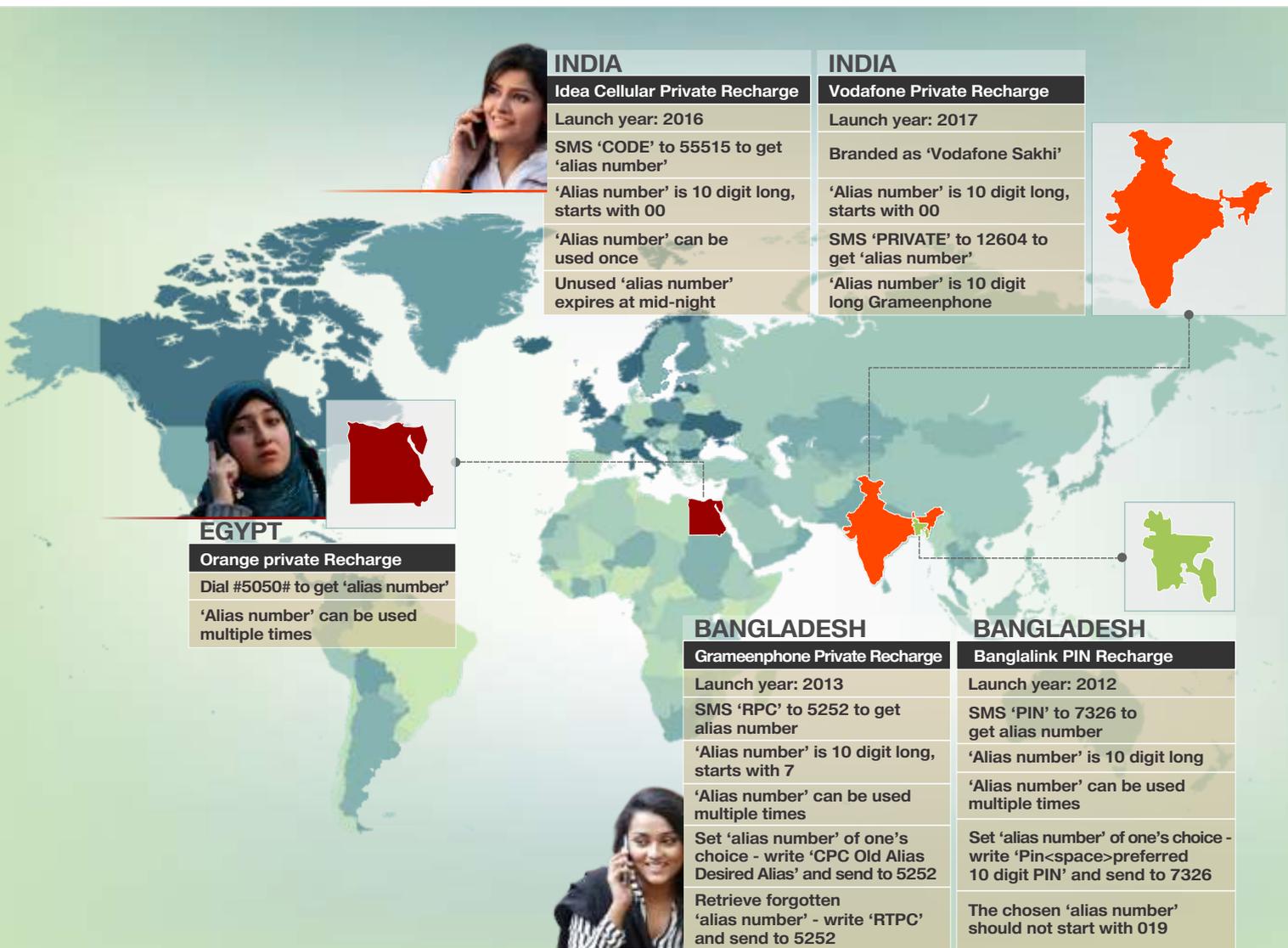
**Complete secrecy:**

Exposure of mobile number can be prevented even at channel-user level that is operator's administrative users and distributors. The reports generated for channel-users show 'alias number' instead of customer's actual mobile number, ensuring complete secrecy.

# COMMERCIALLY LIVE PRIVATE RECHARGE SERVICES

FIGURE 3

Private Recharge Services



Private Recharge service has seen positive uptake in all countries. In Bangladesh, where the service is available from many years, more than 795,000 mobile users have got 'alias number'. In India, though Private Recharge is new, it has seen keen interest from not only women, but also government bodies. In Indian state of Kerala, Cyber Cell of state police is working with Idea cellular to spread awareness about Private Recharge service. Kerala Police's Cyber Cell and Idea Cellular have held workshops at women polytechnic institutes. The workshops were addressed by police officials who educated women about female security and benefits of Private Recharge. Posters and

pamphlets explaining the Private Recharge service were also distributed.

Vodafone India in February 2017 launched a special women package 'Vodafone Sakhi', aimed at empowering women in rural towns of states of Uttar Pradesh (West) and Uttarakhand. 'Sakhi' in Hindi language means female friend. 'Vodafone Sakhi' package includes Private Recharge facility, 10 minutes free talk-time during zero balance, free health and beauty tips for 90 days and an on-boarding call in vernacular language. The package is targeted at women who follow a shared phone concept and do not get their own mobile phone due to security concerns.

FIGURE 4

Private Recharge marketing material



## BENEFITS OF PRIVATE RECHARGE FOR WOMEN

### Ensuring security

By closing all possibilities of exposure, Private Recharge ensures that complete secrecy of mobile number is maintained. Miscreants can no longer access woman's mobile number, preventing any unwanted incident and ensuring security.

### Enabling unrestricted access to mobile services

Private Recharge creates trust & confidence in woman's family that her mobile number is secure and unknown men cannot call her. They allow her unrestricted access to mobile services. On a whole, Private Recharge helps in closing the mobile ownership gender gap.

### Empowering women:

To maintain anonymity, female subscribers would ask the men to recharge for them. With Private Recharge, women are now recharging on their own. They feel independent and confident. In some countries religious norms do not allow women to share their private information like mobile number and photo. Private Recharge has enabled women to overcome this norm, as technically they are sharing a random number and not their actual mobile number.

### Reducing spam calls and messages:

Recharge retailers often sell the mobile number of customers to local sales agents for money. This leads to customers receiving lot of spam calls and messages, irritating them. Private Recharge prevents exposure of mobile number to sales agent, thus leading to reduction in spam calls and messages.

## BENEFITS OF PRIVATE RECHARGE FOR MOBILE OPERATORS

### Competitive advantage and retention:

Private Recharge conveys operator's seriousness in respecting women's privacy. It strengthens women's trust in operator, helping them to retain female customers especially in markets where churn rate are high.

### Acquiring new customers:

Women who frequently change their number to escape harassing calls are opting for operators offering Private Recharge and using the service to keep their mobile number secret.

### Reducing zero-balance and increasing ARPU:

Many women do not go to retailer for recharge, because of the fear of divulging their number to strangers. To maintain anonymity, women ask the men in their family to assist with the recharge. As a result, many of these women have zero-balance for long period of time as their brothers, father or husband are too busy to go to the retailer. However, with Private Recharge, they are able to recharge by themselves whenever they want, leading to reduction in zero-balance and increase in mobile service usage. Overall, this results in increased ARPU.

Mobile operators globally are appreciating Private Recharge concept and recognize the need for it in their country. They believe Private Recharge is a simple yet effective service that decreases barriers to adoption of mobile amongst women. Also, Private Recharge helps in realizing the United Nation's Sustainability Development Goal number 5 of achieving gender equality and empowering women.

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**About the author: Mohit Bhargava** has over eight years of work experience in product marketing and research in the telecom domain. At Mahindra Comviva, he is serving as Manager in product marketing for the mobile financial solutions portfolio. His areas of function primarily include evangelizing Mahindra Comviva's mobile financial products and their impact on transforming the financial landscape globally.

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