MMA
MOBILE MARKETING ASSOCIATION

MOBILE ECOSYSTEM & SIZING REPORT INDIA 2016

CONTENT PARTNER : groupm

FOREWORD

India is edging towards becoming a mobility superpower, late last year it crossed US to become the second largest mobile economy in the world. India has managed to create a growing and robust economy, with the growing working middle class and generation Y.

Urban India is stepping towards becoming 4G first, however, we will see 3G surge in rural parts of the country. 4G enabled smartphone shipments have risen significantly taking the major chunk in Q4 2015, with players like Asus, Xiaomi, Lenovo and Micromax giving consumers' good quality smartphones at affordable rates.

The smartphone is the singular device which helps rural and tier II /III markets to access the internet; this will drive mobile ad spend growth in sectors like FMCG, e-commerce, auto and mobile wallets to tap the new consumers coming on board. The growth of data led smartphones also likely to lead to an inclusive economy in rural parts of the country, where smartphone will act like a bank, a school, a shop and much more for people.

With this unprecedented mobile growth, we also see dramatic lifestyle changes. It's hard to imagine a day without uploading/sharing a photo with friends/family, navigating the streets without a mobile map, watching your favorite shows at the time and place that you want. And this change in lifestyle is making brands and advertisers in India create immersive experiences for their consumers on mobile using several technologies (Programmatic, location data, audio beacon technology, video, re-targeting, analytics and much more.).

With so much action, it's sometimes hard for marketers to keep pace and comprehend the possibilities of mobile as a marketing medium. Through this report, our attempt is to create the first single source study of the mobile marketing ecosystem in India that can help marketers, students, tech enthusiast and journalists to gain meaningful insights on the entire ecosystem that drives the mobile story in India.

There are several firsts that you will see in this report, which we hope you will enjoy reading – a snapshot guide to the various mobile marketing channels prevalent in India, the evolving mobile marketing landscape, the growth of mobile as a medium and much more.

Hope you like this effort of ours. Happy Reading!

TABLE OF CONTENTS

Key Trends and Insights

Use of mobile in rural media dark markets!

In the last 5 years, rural teledensity in India has increased 60%[1]; rural mobile internet subscriber saw a 90% YOY growth in 2015 and they are coming online primarily with their mobile phones. This growing use of mobile in rural media-dark market has made brand marketers look at increasing their ad spends on mobile marketing. Not only the obvious categories like FMCG who will go beyond SMS and IVR solutions to internet enabled mobile marketing solutions, but e-commerce business will grow their foot hold in rural India with data led advertising.

Increase in 3G and 4G penetration will lead to Data Driven Marketing!

In 2015 no new 2G circles were launched. However, for 4G, 50 new circles were launched. Also, the top 3 private telecom operators in India namely Airtel, Vodafone and Idea launched 4G services in India. In Q4 2015 23% of the devices shipped were 4G enabled.[2]
At the end of 2015,0.5% mobile subscribers were using 4G, 84% 2G and 16% 3G users. Nonetheless, this picture is expected to change in 2020 with majority of connections being 3G enabled at 54%, 4G at 27% and 2G at 19%. The expanding infrastructure is enabling this growth. This will also help in increasing India's internet traffic from 16%4 in 2015 to a 2.5X times more in 2020 at 42%.
This trend of 3G and 4G growth will replace traditional marketing methods and help data driven marketing, especially expanding rural marketers whose first screen is mobile and are adopting to mobile internet faster.

Native and Video formats will dominate Mobile Advertising!

2016 will see surge in mobile ad spends and this will be led by Native and Video platforms. Native advertising came into light when marketers realized that this could solve their rising woes on active ad blocking by mobile users. Now, consumers look at native ads 53%[5] more often than they look at traditional mobile display ad; as this form of advertising generally matches the natural form and function of the user experience of the platform it is served on, thus making it a more acceptable experience for consumers.

25%[6] of total ad spends in 2015 were spent on video. Also, YouTube's total watch-time in India grew 80% over the last one year, out of which 55%[7] of the YouTube watch time comes from mobile. Additionally, in the last one year, several OTT (over the top) platforms have entered the Indian market, namely Hotstar, Ozee, Netflix and Voot that are also driving the overall video consumption.

Thus we see native and video advertising formats gaining significant traction with digital marketers in 2016 in-terms of increased advertising dollar spends.

[1]IAMAI and IMRB Mobile Marketing Report Dec 2015 | [2]IDC May 2016 | [3]IDC May 2016 | [4]BCG 2016 | [5]Sharethrough Ad Effectiveness Study 2016 |[6]FICCI KPMG Media Report 2016 | [7]YouTube Numbers

E-Commerce paves the way for higher Smartphone sales!

In 2015 29%[8] of smartphone sales happened through eTailers and home shopping networks. Newer OEMs like Motorola and Xaiomi entered the Indian market with exclusive sales rights with Flipkart; making established players like Samsung change their marketing techniques and opt for a similar route for their J series smartphones.
Online as a channel has been adopted by consumers due to various reasons, the main reason being festive and end of season sales. Furthermore, with easy returns on online platforms consumers get an extra push to buy smartphones online and not from retail outlets.

Mobile plus, growing Integrated Marketing opportunity!

Evolution of mobile technology has opened new advertising avenues for marketers. With the availability of enhanced targeting parameters on mobile such as location, device, demographics etc., planning mobile with other mediums has helped the brand to find the right audiences for their ads.

Mobile based audio/video streaming apps and mobile news apps provide measurable reach, with 100+ million[9] monthly active user base in India. Top e-com, FMCG players are already using mobile audio/video streaming ad spots to capitalize upon these audiences and do incremental reach at a lower cost in comparison to traditional media costs.

We already see the convergence of news/ information shifting from traditional to mobile app and mobile browsers. We expect digital marketers to start spending on these integrated mobile mediums to supplement traditional media, primarily driven by mobile medium's reach, cost and spends tracking and targeting possibilities.

Targeting online shoppers with advertising!

2015 was a great year for the Indian e-commerce sector as it grew from $5 billion to $8 billion[10] with a significant number of online shoppers who came from mobile.
Emerging from their buy-sell business model, e-commerce players have now started monetizing their audience network. This has led multiple ecommerce players to open up their audience inventory and target them basis their profiling. We see this trend across top ecommerce players where advertisers are allowed to create their own brand pages inside apps/mobile sites and are given positions at the top spot to create brand saliency. Currently few of the top players are monetizing their assets, however we see many more players to open their inventory on mobile for advertisers.

Personalized marketing – advertisers dream now a reality!!

Rise of several data management platforms (DMPs) have made advertisers life easy to get the right message out, in front of the right audience and at the right time. We have moved up a notch from only big data to these platforms that can collect and analyze the data much faster, across broader touch points and in real time. Brands are exploring such tools which are opening new avenues for data management and profiling for their customers on mobile.

Money matters made simple with mobile wallet!

Rise in smartphones is replacing the credit and debit cards by becoming the most convenient medium for making payments via mobile wallet apps. The most popular mobile payment apps in terms of time spent[11], are those that provide services over and above pure payment solutions (like mobile recharging, ability to book movie tickets, shopping etc.).
Mobile payment gateways are becoming popular in rural India where mobile banking as well as ATMs are hard to access. We foresee that mobile wallets will become even more popular for its simple payment solutions, in the coming years.

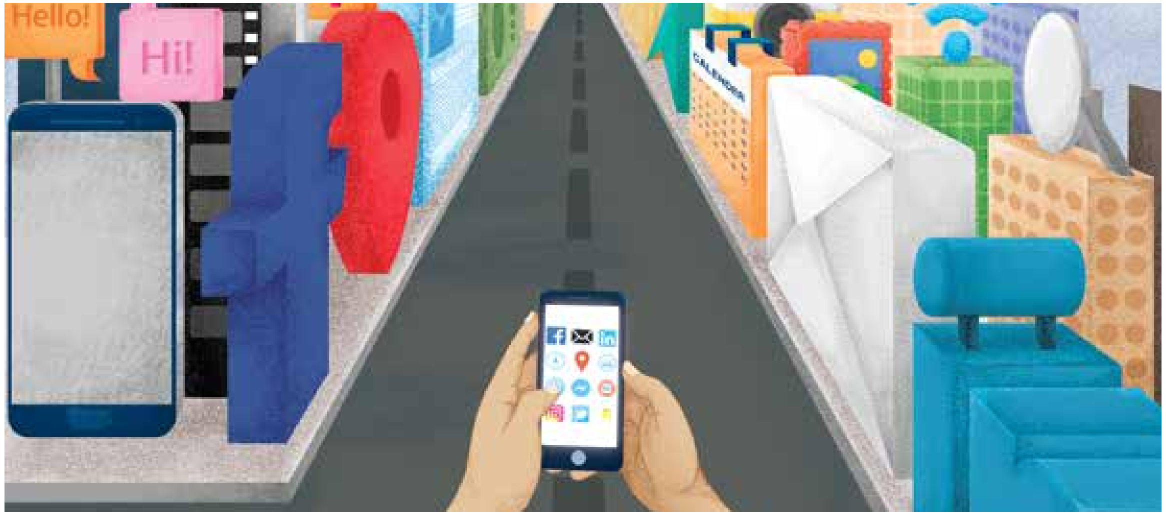
[8]IDC May 2016 | [9]GroupM TYNY 2016 | [10] Industry Data | [11]Nielsen Informate 2016

Part I: Introduction to Mobile Marketing in India

Objective of the Research

2015 and 2016 has been very exciting time for mobile marketing in India. We saw a surge across various dimensions of the mobile ecosystem – be it smartphones, mobile subscribers, mobile data penetration, native advertising on mobile, advertising spends on mobile, video content and much more. There have been several reports that talk about mobile marketing in India. However, we felt there has been no single report that comprehensively covers the mobile marketing ecosystem in India and provides insights to marketers that helps them understand the medium better. This report by MMA (Mobile Marketing Association) in collaboration with GroupM, Madhouse & partners is our attempt to address this gap.

Our objective through this report is to give the readers *a comprehensive view of the mobile marketing ecosystem in India and the various factors that influence it* – various mobile marketing channels, mobile marketing landscape and growing subscriber base, internet and app user base.



What does the report represent?
A bird's eye view

Rohit Dadwal, MD, Mobile Marketing Association,
Asia Pacific Ltd.

It is a collective effort of the industry to help pull together this report to present the huge mobile marketing and advertising opportunity that presents itself in India but more importantly clearly calls out the gaps and the need for even more robust work across segment like measurement etc. I believe as we move forward this will set the benchmark document of how the industry grows from this point on and we can track the progress reflecting on the same. Given mobile is already about 50% of the digital spends and likely to grow to 70+% is very encouraging. A major part of the advertising and marketing community is going to wake up to the reality as it was imperative for the industry to have such data point propel itself into the future. ----------------------------------“”

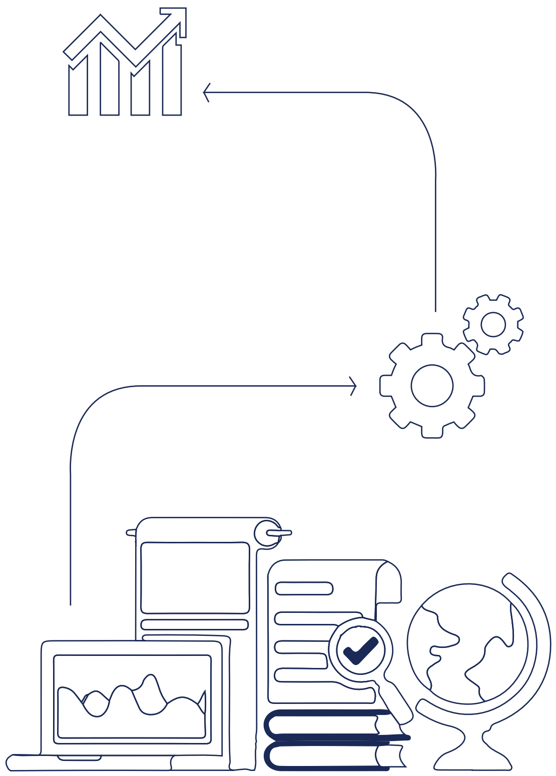
CVL Srinivas, CEO South Asia at GroupM

“It is clear that brands cannot ignore the power of the small screen. It may be the third largest (after TV and Print) in terms of ad spends but is by far the leader in terms of time spent and consumer engagement. India has the potential to become a global leader in mobile marketing innovation and it is our endeavour to work with the rest of the ecosystem to make this happen" ------------------------------------“”

Methodology of the Research

This report is based upon both primary and secondary data sourced from GroupM /Madhouse and various digital media companies. Also primary data shared by IDC has been specifically shared for this report and is not otherwise available. Below is all the list of reports that have been referred to:

1. Telecom Regulatory Authority of India quarterly and monthly reports
2. Cellular Operation Association of India annual report 2015 – 2016
3. KPMG and FICCI Media and Entertainment Report 2016
4. Nokia MBIT Report 2016
5. GroupM TYNY (This Year Next Year) report 2016
6. Madhouse and Millward Brown 'Mobile Pulse Report' 2016
7. Ericsson Mobility Report 2015
8. GSMA Intelligence Report 2015/2016
9. Facebook Ad Manager Insights June 2016
10. Deloitte - Opportunities in Telecom Sector: Arising from Big Data, November 2015
11. IAMAI and IMRB Mobile Internet Report India January 2016
12. eMarketer - Ad Spends and Mobile Internet Users (2016 estimates)
13. Cisco VNI Forecast Report 2015 - 2020
14. IRS 2014 data
15. Device Atlas - Mobile Web Traffic Report, Q3 2015
16. Counterpoint Research February 2015
17. IDC report (not public data, data shared only for the MMA Ecosystem and sizing Report 2016)
18. Gartner Report 2015
19. Google and AT Kearney - Digital Retail in 2020 – Rewriting the Rules, May 2016
20. InMobi's State of App Downloads and Monetization, FY 2015
21. 9 Apps - India App World Year in Review 2015, December 2015



Channels that define Mobile Marketing/Advertising

SMS - A standard for telephony messaging systems that allow sending messages between mobile devices that consists of short messages, normally with text only content.

Benefits:

1. Crisp – Explains purpose & user response expectation in 160 characters
2. Economical - Cheaper than many other digital media vehicles
3. Ease of use – All mobile users are aware of how SMS works
4. Mass reach – 100% of mobile phone users can be reached via this medium
5. Save for later – An SMS gets stored in phone for later reference

Limitations:

1. Linguistic challenge : There are challenges in delivering customized language (script) messages
2. Targeting : Third party databases are not a reliable source for reaching a specified TG
3. Passive communication : Requires user involvement for a CTA fulfilment
4. User Pays : Cost implication for end user

IVR (Interactive Voice Response) - A phone technology that allows a computer to detect voice and touch tones using a normal phone call. The IVR system can respond with pre-recorded or dynamically generated audio to further direct callers on how to proceed. IVR systems can be used to control almost any function where the interface can be broken down into a series of simple menu choices.

Benefits:

1. Reduces operational costs
2. Increase first contact resolution, gives a personal touch from the brand to the customer
3. Best for markets that doesn't use mobile data heavily – majorly rural and tier 3/ tier 4 cities
4. Unlike SMS, IVR is able to communicate in multiple local / vernacular languages

Limitations:

1. The menus are too long, complicated and time consuming, user journeys can create fatigue
2. The information sometimes is too long. Marketers have to be careful in creating crisp content

Industries successfully using SMS & IVR

FMCG

Banking

Cinema

Service

Total participation: 3.3 mn

Unique	Repeat
1.9 mn	1.4 mn (73%)

Performance

Cost per Re. 0.06 - Total Contact - Rs. 0.05 - Unique

[8]

Total User

44 mn

Performance

15 - 18 mins

Avg Engagement Time

Mobile App

Software solutions that power the business logic for mobile marketing initiative(s).

Benefits:

1. Seamless user experience
2. Can serve utility or innovative/experiential engagement
3. Long sustaining customer relationship and sustenance via offers and content
4. High TOM - Users download app for a specific purpose therefore their top of mind recall for the app us high

Limitations:

1. Multiple Operating System
2. Costly application development
3. Driving traffic and downloads requires additional marketing budgets

Mobile Pre-Embeds

Many mobile apps are pre-embedded in smartphone software and is available to all users who buy that particular device. For e.g. – Google applications are present in all android devices. Similarly many external application also have deals with OEMs (Original Equipment Manufacturers) and are pre-burnt or pre-loaded in their devices.

Benefits:

1. Mobile apps that are already present in the device have higher chances to be used by the device owner as the app can't be removed from the device
2. The mobile app gets better visibility and usage if it's pre-embedded in a device

Limitations:

1. The user can't uninstall the app from the devices if s/he doesn't wish to use it.
2. The app stays in the device occupying the space which could have been used for storing something else. This will cause the app to have lesser active users.

Industries successfully using Mobile App & Pre-Embeds

Telecom

Automobile

Mobile TV

Pharma

Add a friend of Facebook
Challenge them & quit smoking together
-7.5 mn campaign reach
-7500 downloads
-3x growth in brand search
-1.8 lakh video views

12 cr embeds
11.5 cr app invokes
98% conversion

5 lac+ downloads
6 months
In – App Events:
-Login
-Registration
-Bill Payment
- Recharges

Native Advertising

Native ads give you the control to design the perfect ad unit for your brand communication (across social, video, audio, search, text and is not limited to a platform) as it matches the natural form and function of the user experience on the platform it is served on

Benefits:

1. It benefits all publishers, advertisers & audiences. It exists across social, video, audio, search & text platform
2. It allows for ads to be unobtrusive and therefore higher audience engagement leading to better CTRs

Limitations:

1. Native is a relatively new advertising format therefore many marketers don't know how to analyze its performance and there are no performance benchmarks present as of now.
2. If you are getting content created from an external agency of the publisher it can be an expensive affair.

Augmented Reality (AR)

The enhanced version of reality created by the use of technology to overlay digital information on an image something being viewed through a device (as a smartphone camera)

Benefits:

1. New and Innovative channel of mobile advertising
2. Immersive and Experiential with a dynamic user journey
3. Shock and Awe – creating curiosity about new engagement medium and then deploy seamless experience

Limitations :

1. AR is costly and requires professional and technical teams
2. Medium understanding is very less by both consumers and marketers
3. AR requires on-ground assistance
4. It has only a single-time user experience

Industries successfully using Native Advertising and Augmented Reality

Auto

QSR

Media & Entertainment

FMCG

Star Plus Ishqbaaz Campaign. The campaign was to launch the new sitcom by Star Plus called Ishqbaaze. The channel chosen was Native advertising for a branding campaign. It performed better than other display and social platforms. 4.16 million Impressions 42.8k clicks 1.04% CTR	KFC WOW@25 AR App and Microsite Campaign Launched in 2015 to let the Indian audience know how affordable in the KFC menu, which they otherwise though was expensive. Scan a currency note and the app will show an AR display on the note on what all you can buy in that amount from KFC 35,000 app downloads | 150,000 microsite visits | No.1 spot in Food Category on iTunes

Note: Please refer annexure for more channels and definitions

Mobilescape in India

Mobile ecosystem development in India

Over the past two decades, mobile telephony has come a long way. From the analog systems of 1995 and the initial projections of 19% tele-density, we are currently sitting at nearly 82% tele-density, with over a billion subscribers and 306 million estimated mobile internet users while 4G is still under implementation.

Mobile advertising and media industry has supported this tremendous growth with technology and process innovations. Over the years, the industry has matured enough to see segmentation within itself and several niche clusters have formed, each fulfilling a specific role.

Currently the landscape is divided into three major clusters, which at times over-lap and supplement each other

1. The client facing industry
2. The ad-tech industry
3. The last mile industry

The client facing industry, primarily consists of agencies and their technology partners. They focus on delivering the best KPI on advertising spends of brands.

The ad tech industry majorly consists of two types of players, the one that work on top of operator delivery pipes – SMS, IVR and OBDs and the other that relies on mobile data to reach out to publishers.

The last mile industry are the ones which are used by end users for accessing any of the digital content or services.

MOBILE SCAPE - INDIA

Note: Definition of the terms used in the Mobile Scape are attached in the Annexure

Mobile Scape 2016 Development

Content Consumption on Mobile

With higher smartphone penetration and availability of higher bandwidths (3G, 4G and 5G) users will consume more rich content pieces on the go. We see a potential of very high consumption of text content, video content and audio streaming content on mobile. Mobile specific content discovery platforms like Daily hunt, Inshorts, OTT players and aggregators like YouTube, Hotstar, Voot etc., mobile audio streaming players like Saavn, Gaana, Guvera etc. will grow and see more traction in the ecosystem.

Measurement, Analytics and Data Driven Approach

Increasing share of mobile spends in a brand's overall marketing budgets will lead to a push for more effectiveness in media buying operations as well as post-delivery analysis. We see a high potential for measurement, analytics and data collection platforms to step up and fill in this need. Platforms like Appsflyer, Apsalar, Tune, Mxpanel, Localytics, Adobe marketing cloud etc. will continue to grow.

Programmatic Media Buying

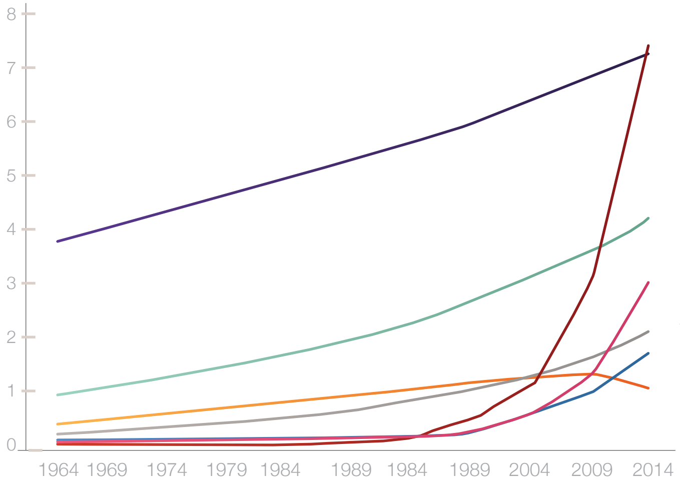
Supported by availability of data from direct / indirect sources and with the infrastructure to support real time buying decisions, programmatic will move beyond being a buzzword to an effectively channel of media buying. More and more marketers will want to automate their media buys and real time optimizations. DSPs, SSPs and DMPs will see tremendous mainline adoption.

We believe that these 3 clusters i.e. Content, Measurement /Data and Programmatic Media buying will be the clusters that will see investments on technology front and tremendous growth.

Part II: Reach of mobile among consumers in India

There are more mobile connections than humans in this world!

In the history of human race no technology has ever surpassed the number of people in the world, not even watches which are said to be omnipresent. However, mobile has been the only phenomena to have created such an effect. By the end of 2014, the global mobile connections surpassed the global human population, where the total mobile connections were at 7.4 billion which was 1.8% more than the global human population at 7.2 billion. This is expected to grow further in future, where it is estimated that the global mobile connections will increase by almost 30% to 9.1 billion by 2021.[1]



Source: World Bank (2014)

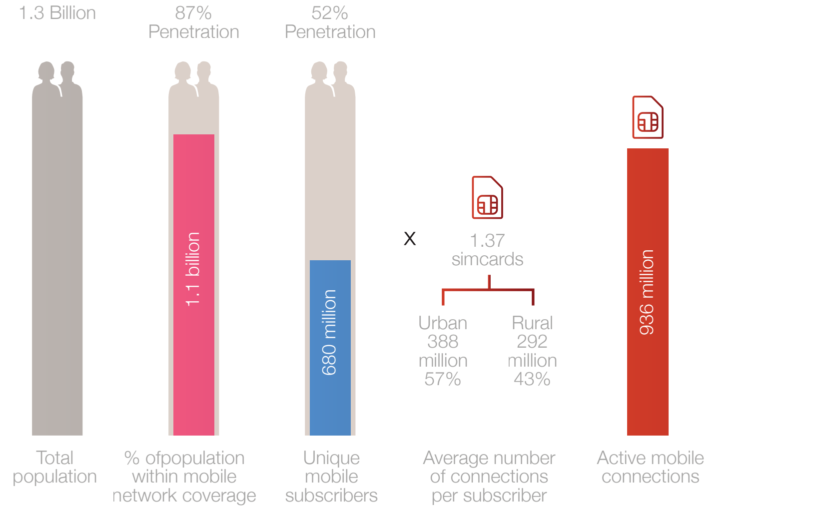
1 billion mobile connections and counting; mobile emerging as the gateway to the connected world

India and China, the world's most populous countries, with over a billion people each have crossed the landmark of 1 billion mobile connections. China reached this benchmark in 2012, while India crossed the 1 billion mark at the end of 2015.

2015 has been a good year for mobile subscriber growth in India. Over 60 million new mobile subscribers were added since the start of year, at an average 5 million subscribers added every month. This was a 20% growth in comparison to 2014 which saw an addition of almost 50 million new mobile subscribers.

Analyzing the number of unique mobile subscribers, we see the continuing prevalence of "dual sim" consumers in India. However, this also seems to be changing and as per the latest industry estimates the number of unique mobile subscribers has substantially increased to 68% in 2015.

Defining mobile penetration in India: population, subscribers and connections



[1] Ericsson Mobility Report 2015

Source: GSMA intelligence and TRAI Dec 2015

Amresh Nandan, Research Director, Gartner India

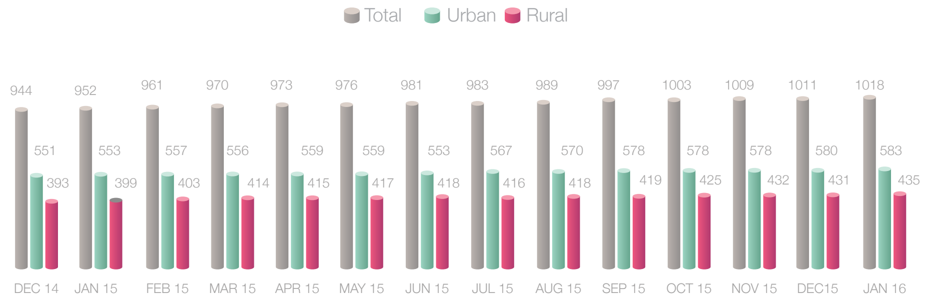
"A big chunk of these billion mobile subscribers will become smart-phone users in the next couple of years that is the thrilling next wav e. From here on, it will be about exploding growth in data usage and internet access through the mobile, which will get millions of Indians conducting business, getting social and participating in governance through their phones." --------------------------"

India fastest growing mobile market in the world

India is currently the country with fastest mobile subscriber growth, growing at the double the size of China in terms of new mobile subscriber additions annually (China added only 30 million mobile subscribers in 2015)

Contributing to this growth is the Urban and Rural story of India. In February 2016 we saw the urban and rural subscriber ratio change to 58%: 42%, from 60%: 40%, a year ago. Rural now accounts for 60% of the total new mobile subscriber growth in the country.

MOBILE SUBSCRIBERS INDIA (IN MILLIONS)

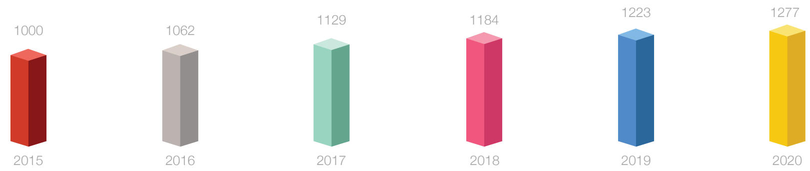


Source: TRAI December 2015

The tele-density in the past one year has also increased from 78% in 2014 to 81% in 2015[3]. Contrary to popular belief, we see both urban and rural tele-density growing in India. Rural India has seen a consistent increase in tele density over the past 5 years (grown by 61%)[3] and we still have a lot of headroom for growth with the current density levels of only 50%. Urban tele-density, while growing at a lesser pace than rural, over the last 5 years has shown an increase of 24%[3], contributed also by the migration of population to urban India.

India will be growing faster, at the rate of 15%, than the global average of 5% to reach 1.2 billion mobile subscribers by 2020 and adding a total of 165 million new mobile subscriptions during this period.

Total Wireless Subscribers - Future Projections (in millions)



Source: TRAI, Ovum, COAI Estimates | COAI Annual Report 2015-16

Ajit Mohan, CEO Hotstar

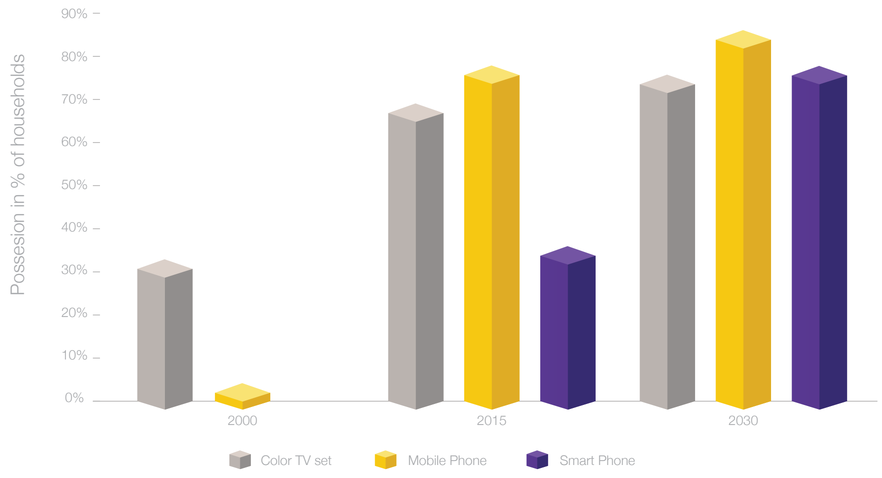
"The power of the mobile is the power of personalization. The most savvy marketers will be those who are able to connect the dots and draw thoughtful inferences from the enormous amounts of signals that the user is giving them on a screen which is deeply personal." ----------------------"

http://www.forbes.com/sites/saritharai/2016/01/06/india-just-crossed-1-billion-mobile-subscribers-milest one-and-the-excitements-just-beginning/#542c0fdd5ac2

[3]TRAI March 2016 | COAI 2015-16 Annual Report

With more mobile phones than TVs, brands and advertisers need to "think mobile, plan mobile, do mobile"

Mobile phones are replacing TVs as an important marketing medium, alongside other traditional communication methods. By 2030, penetration per household of smartphones will also exceed color TV sets!



Source: Euromonitor International, India data.

Case Studies of mobile marketing in Rural India

TATA POWER OF 49

Objective: 49% of Indian population are women, still women are not given equal opportunity to be heard and their issues take a back seat. TATA TEA wanted to change that. TATA TEA launched the 'Power of 49' campaign by using the 'Power of SMS'.

Action: Women across India were asked to call a toll free number and then chose from 6 categories -Health, Women Safety, Education,inflation, Atrocities against women and subscribe for tips, based on their location. During the marketing effort, women got an SMS on the issues they chose. As per their location, information was also shared on local helpline numbers and information of organizations.

Results: The campaign received 47k missed calls per day and a total of 617k issues were raised through this campaign. Women across UP, MP, Maharashtra, Bihar and Rajasthan saw the maximum participation.

HUl's Kan Khajura Tesan

Objective - Hindustan Unilever (HUL) wanted to reach the rural audience in the regions of Bihar and Jharkhand. With a combined population of more than 137 million, these areas were key targets to increase share of voice for select Unilever brands. The challenge would be infrastructure; Unilever wanted to reach an audience that is plagued by daily power disruptions in a landscape where traditional media only reaches 20% of the population.

Action - HUL decided to create its own media channel for mobile. Kan Khajura Tesan (KKT) was launched as a dial-in mobile radio channel offering free on-demand entertainment. The channel offered jokes, music, and the latest Bollywood content all interspersed with radio advertisements for Unilever's mass consumer brands. When a user made the missed call to the toll-free KKT number, his or her phone immediately received a free call back offering access to the entertainment stream. Subscriber was allowed to receive a total of 60 minutes of radio content free per month, brolnen into four capsules of 15 minutes each.

Results - Within six months of the KKT launch, Unilever amassed more than eight million subscribers. As of March 2014, the channel had 12 million subscribers and had served more than 103 million ad impressions. The consumer base is growing at an average of 35,000 g per day, and the project eventually aims to reach 20 million households (equivalent to 50 million mobile numbers).

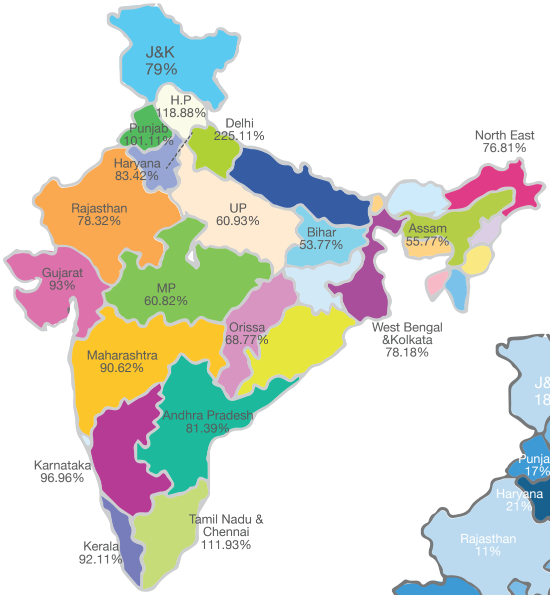
7 states contribute to over 50% of the mobile users of the country"

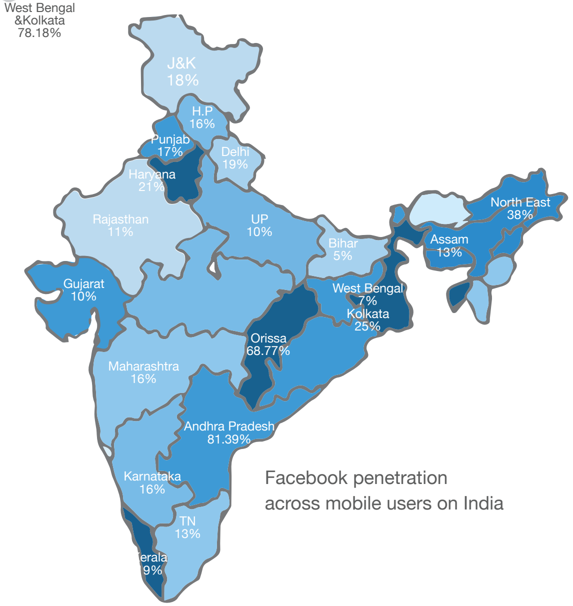
India is a land of diversity and there's a Hindi saying about Indian culture that goes: Kos kos pe badale pani, char kos pe vani (The taste of water changes every 3 kms, and the language changes every 12 km.) And consumer pattern is said to change every 100 kms. So is true for technology and specifically the proliferation of mobile across the states of India.

Top 7 States/circles of India	Middle 8 States/circles of India	Bottom 7 States/circles of India
UP (E): 89 Mn	Gujarat: 62 Mn	Orissa: 28 Mn
Maharashtra: 83 Mn	Rajasthan: 60 Mn	Kolkata: 25 Mn
Tamil Nadu 83 Mn	UP (W): 56 Mn	Haryana: 23 Mn
Andhra Pradesh: 76 Mn	Delhi: 51 Mn	Assam: 18 Mn
Bihar: 72 Mn	West Bengal: 49 Mn	North East: 11 Mn

Source: TRAI December 2015,Numbers indicate mobile subscriber base.

- Some states/ circles have grown faster than others in terms of acquiring new mobile subscribers. Among the top 7 : UP (E), Maharashtra and Madhya Pradesh have grown over 5% in the last one year (Jan 2015 to 2016)
- Amongst metro cities of India – Kolkata growing highest with new mobile subscriber additions in the last one year, but also is on a lower base as compared to other metros
- Amongst other states/circles: UP (W), Kerala and Karnataka are also showing a greater 5%> growth in mobile subscriber base as compared to early 2015.





Facebook penetration across mobile users on India

Source: TRAI (February 2016) and Facebook Ad Manager (June 2016)

Case Studies of Mobile Marketing using Regional Language

Iodex: Marathi OBD Campaign

Objective - Reaching out to the already established Iodex markets in Maharashtra and gratify the loyal customers.

Action - Marathwada and Vidarbha in Maharashtra are the most established markets for Iodex- Since, these markets are bier 3 towns the best way to reach these markets was to do OBDs and also since the majority of the audience is Marathi speaking a vernacular route was taken and the OBD campagna was completely deployed in Marathi. The OBD went through 3 phases. People who heard 25+ secs of the OBD heard the second phase of the OBD and the people who heard 25+ secs of the second phase went to the third phase which was a contest the people who won the contest were true Iodex brand loyalists and were gratified with mobile recharges.

Results - OBD phase 1 and OBD phase got an engagement of 53% and 4796 respectively. Which was way high than the benchmark of 30% to 359s Vernacular content always engages more audiences.
9% participation was seen from the overall OBD listeners for the contest phase. Moore than double of the benchmark which is 3% to 4% . 69% of the content participants were winners.

Google Hangout Election Campaign Leveraging Vernacular Communication

Objective: 70% of the country's population resides in the rural area, hence large chunk of voters. Out of the 5 lac villages in India almost half of them are media dark areas and Non-English speaking audience. These villages do have access to basic feature phones. Through Google Hangout Air these people were targeted using Hindi communication. Google's initiative of 'Hangouts with top Politicians" was to make maximum citizens to take an informed decision. But without a mass reach a medium how could we reach to this audience who were not online.

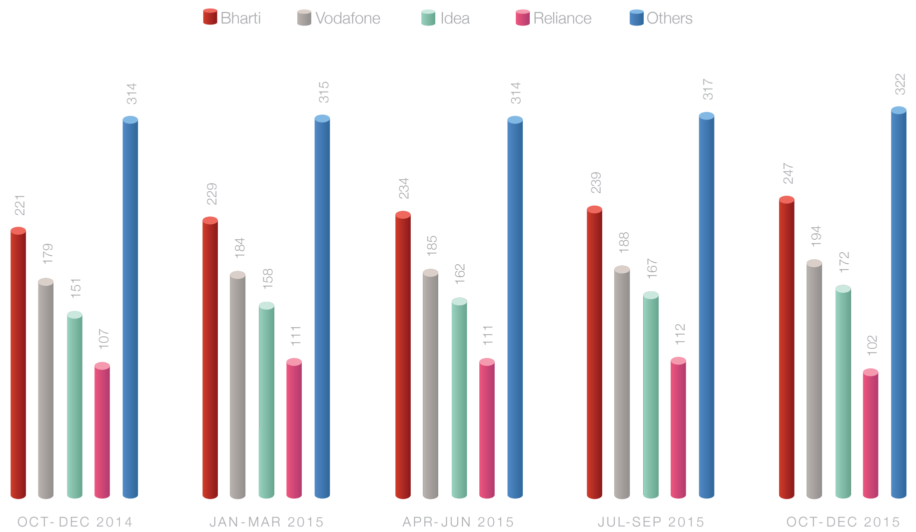
Action: The promotion of the 10 digit number was purely done using mobile media on feature phones plus use of operator radio channels which made a huge pull leading to missed call. To create opt-ins forthis service, three options were use. For mobile radio service Airtel based for audio pre-roll message to communicate the 10 digit voice based hangout service amongst audience. Mobile videos by using Vuclip which is India's largest video prwider to operators, miss call banners were created leading directly user to open dialler on his lecture phone.
Used social platform such as Nimbuzz and Rocketalk and regional news app called as Newshunt to target only feature phone segment with very high reach again using did: to call banners. People then listen to their politicians talk and Google Hangouts made it easier for them to make a voting decision. All this communication was done in both English and Hindi language.

Results: 80k "users opted-in to listen to their favourite politician on Google Hangouts. 0.12mn missed calls generated for 6 hangouts and 0.2 mn minute so listener ship of live +non-Live Hangouts 35% extra engagement rates then the other Hangout session. The Hindi Banners saw 66% higher CRT than the English Banners.

Telco wise mobile subscribers in India

The Big Four for Indian telecom industry Bharti Airtel, Vodafone, Idea and Reliance own 70% of the market in India. Airtel is leading the pack in India and is also the fourth largest telco in the world. In the past year the highest growth is seen by Ideaat 14%, followed by Airtel at 12% and Vodafone by 8.5%. The remaining 30% of the telco industry is owned by Aircel, Tata, Sistema, MTNL, Videocon and Quadrant. Looking at the rural penetration of these Telco's, Bharti Airtel is in the forefront with 27.08% of rural subscribers, followed by Vodafone at 23.68% and Idea by 21.77%.

TELCO SUBSCRIBERS (IN MILLIONS)



Source: TRAI December 2015 | Others include: BSNL, Aircel, Tata, Telewings, Sistema, MTNL, Videcon and Quadrant

Case Studies of telecom user base/data for mobile marketing

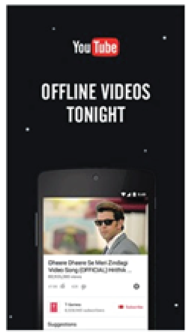
Godrei Aer Print Innovation

Objective - Aer had a print led innovation on Bombay Times in 4 cities Mumbai, Bangalore, Kolkata and Delhi. The innovation was a fragrant strip on the physical newspaper which users could experience the brand and hence consider purchase. Aer wanted to announce the innovation on the day of the launch by reaching out to a profiled base of users.

Action - The medium selected was the humble flash SMS as the T6 in focus were 25-40 Males and Females on the day of the print release. The filtering of the audience was narrowed to reaching out to users who had an ARPU of INR 800/-

Results -The campaign reached out to 8lac users with a string of 3 messages to remind users to grab hold and experience the innovation. There was no call to action on the SMS other than the announcement of the launch to the specified TG.

YouTube 2.5



Objective: The campaign was to promote offline feature of YouTube specifically for Airtel, Vodafone and Telenor users. These telco's introduced a night pack where users could download YT videos.

Action: We targeted users on these telco's only on 3G and WIFI connection and apart from that we did handset targeting of android 4.2 and above as we could deep ink the banner with YouTube application. Since YouTube is one of the major products this was a 3rd phase of the campaigns. The strategy for this campaign was:

1. Awareness of offline feature
2. Re-targeting users from phase 1 and 2 of the campaign
3. New user acquisition

Results:

1. Post campaign, we deliver a reach of 36 million users
2. We could manage to get a eCPC of $0.047

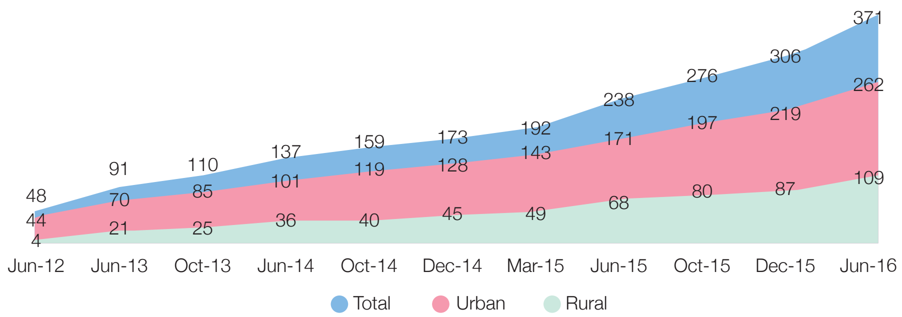
Naveen Gattu, COO, Gramener

"As we see the wave of DATA taking over the VOICE for telecom operators and the fact that every customer is leaving his footprint across various transactions, it is equally important to churn these insights and convert into meaningful consumption form, so that entire team takes decision cohesively. We are seeing great adoption of Analytics and Visualization in Telecom given the disparate sources of data, huge volume, decision cycles reduced and need to combine various functional data (Network and Finance) to get a consolidated view for decision making."[4] ----------------------------------- "

Mobile is driving faster internet adoption!

95% of the new internet users are coming online via their mobile devices. Both amongst urban and rural Indians entertainment has become the prime driver (among top 3 reasons) for accessing internet. Entertainment encompasses music and movies, which are activities that use a lot of data, therefore mobile data access has become a necessity for the Indian population. Also, with the growing OTT (Over the top) video / audio streaming space with brands like Hotstar, Voot, Ozee, Netflix, Gaana, Saavn, Hungama etc. consumers are being spoilt for choice to access video / audio on the go through their mobile devices. This has further led to mobile internet growing three folds in the last 2 years and this growth trend is expected to continue over the next 2 years as well.

URBAN: RURAL MOBILE INTERNET SUBSCRIBERS - INDIA (IN MILLIONS)



Source: IAMAI and IMRB Data December 2015

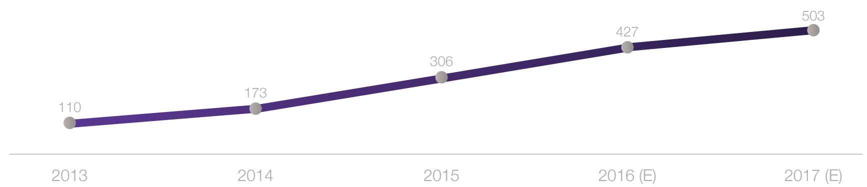
India surpassed all expectations and reached 306 million mobile internet users in December 2015. Urban mobile internet userbase saw a growth of 71 % year-on-year. While on the other hand, the mobile internet userbase in rural India, grew faster at 93% to reach 87 million at the end of December 2015, compared to a year ago.

Growth of rural beyond entertainment

"While lower-cost devices and data are enabling more and more Indians to come online, usage in rural India on the Internet is limited to infotainment. We're focused on bringing fast, high quality Internet access to Indians at 400 railway stations through our partnership with Raitel. We're building products that perform even when there is low connectivity for example lighter search and web pages; Offline Maps and YouTube Offline and Smart Offline. We're making locally relevant products e.g. Voice Search in Hindi and English with an Indian accent to help users in rural India to make the most of the web. There is huge potential for e-commerce in rural India, but Indic web and connectivity challenges still need to be addressed.

We have just announced our skilling program for India, under which we aim to train 2 Million Android developers in India. We believe India is uniquely placed to innovate and shape the internet experience of billions of users who are and will come online on the mobile platform. We're making our world class curriculum easily accessible to millions of students and developers in India and contribute to the Skill India initiative and help make India the global leader in mobile app development." Says Google India

Mobile Internet Users in India (in millions)

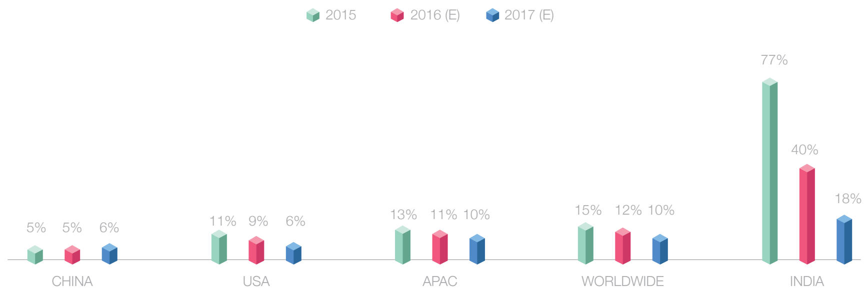


Source: IAMAI and IMRB and eMarketer (Estimates)

[4]Opportunities in Telecom Sector: Arising from Big Data, Deloitte November 2015

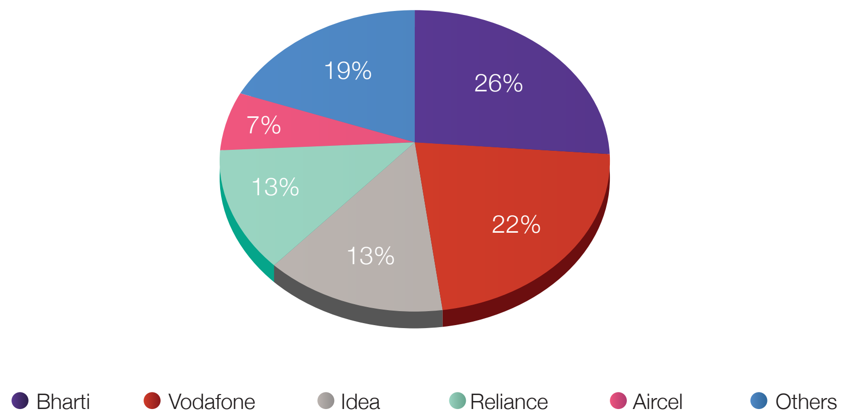
India surpassed USA at the end of 2015 to become the country with the second largest mobile internet user base after China. Currently, India has 13% of the world-wide mobile internet population, which is expected to grow to 18% by 2017.

MOBILE INTERNET USERS GROWTH



Source: IAMAI and IMRB Dec 2015 and eMarketer April 2016 estimates

Composition of Wireless Internet Subscriptions



Source: TRAI December 2015

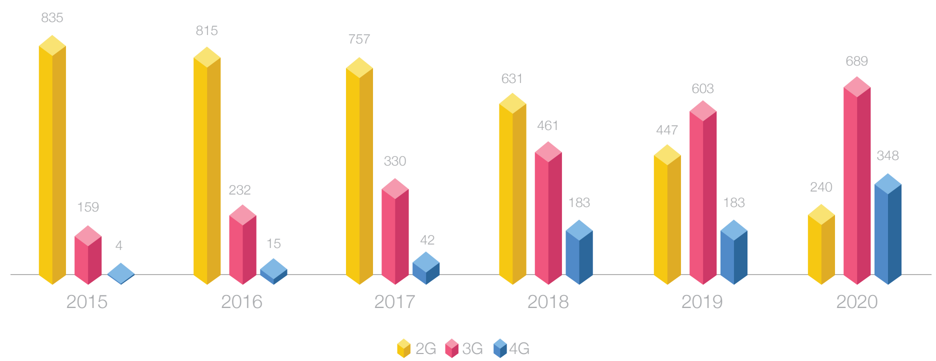
Among service providers for mobile internet - Bharti Airtel and Vodafone lead the market controlling almost 50% of the subscriber base. We expect in the coming year Idea and Reliance Jio will also grow significantly with aggressive price offerings and driven by their 4G strategies.

Globally the world has crossed 1 billion 4G subscribers; will India leapfrog to 4G?

While India is still dominantly a 2G led mobile internet market, we saw 3G data consumption rise in India significantly, 85%[5] Y-o-Y growth in 2015 following 3G expansion and device availability. **Monthly 3G data usage per user passed 750 MB[6], traffic outpaced 2G for first time across all circles**

4G which was launched mid-2015 will also start seeing tremendous growth in latter part of 2016 and 2017. At the end of 2015, there were only 4 million 4G subscribers in India[7]. In the next 5 years industry experts anticipate 2G to decrease by 3 folds and 3G to grow by 4 folds. On the other hand LTE growth is said to be 40x times! We expect users to leapfrog to 4G in the coming years.

2G, 3G, 4G/ LTE Subscribers - Future Projections (in millions)



Source: TRAI, Ovum, COAI Estimates – COAI Annual Report 2015-16

[6]Nokia MBIT Report 2016 | [7]GSMA Mobile Economy 2015 Report

The focus on 4G across service providers far exceeds what has been achieved on 3G so far. In less than a year there will be almost as many 4G circles as 3G (which was launched more than 5 years ago)

Count of Networks across Telecom Circles

Networks	2G	3G	4G
Existing	217	94	38
Newlaunches	0	1	50

Note: 4G counts excludes BSNL, MTNL, Tikona Networks
Source: TRAI (2015), Operators

Bank of America Merrill Lynch

"We estimate the theoretical cost/MB for a data-only operator like Jio to decline from Rs.0.24/GB in FY18 to Rs.0.11/GB in FY25. This may lead, in theory, to the price-point going to Rs.0.10/MB with operator(s) looking to offer Rs.300 per 3GB (vs current Rs.300 for 1GB)"

Ajit Mohan, CEO Hotstar

“As access to data goes deeper beyond the large cities, consumption, and especially video consumption will dramatically go up. We are focused on making sure that we offer a service where people consume less and less data for the same quality of service and that they have control over the quality of the service. We have also had downloads from the beginning allowing users to download movies and TV shows and watch it even when they don’t have access to the Internet.”

[8]CISCO VNI Forecast 2015 – 2020

It’s all about data ahead, and your guess is as good as mine

LTE in India changing the game[8]

- At the rate rural internet users are growing soon the urban rural ratio of internet users in India likely to be 50:50
- 4G/LTE to become mainstream in India, Increasing competition, will help drive down prices and lead to faster adoption. 3G likely to be leapfrogged
- Mobile data traffic will reach 1.7 Exabytes per month in 2020, up from 149 Petabytes per month in 2015. This may lead, in theory, to the price-point going to Rs.0.10/MB with operator(s) looking to offer Rs.300 per 3GB (vs current Rs.300 for 1GB)

Rural India as an enabler for mobile growth – Experts Speak

Shireesh Joshi, Head, Strategic Marketing, Godrej

“Everything we have seen about rural tells us that it’s best to think in terms of continuum with urban and not a discontinuous separate market anymore. Rural markets offer potential both as extended market and as arena for innovation – and not as recipient but as equal partner and contributor. Brands that can engage the rural market in its totality will experience the largest and most sustainable successes.”

Rajiv Mathrani, Chief Brand Officer, Airtel

The real internet revolution in India would be meaningful only with the inclusion of all sections of society. And for that to materialize, the price differential between feature and smartphones needs to dramatically reduce.

Karthi Marshan, Senior Executive Vice President and Head Group Marketing, Kotak

There may be many factors nudging the feature phone users towards an upgrade to smartphones, but I believe it is dumb to “build it only on smartphone, because they will come (sooner or later)”, to paraphrase the myopic marketers of the 20th century. Feature phones have many capabilities, like USSD and multi-lingual SMS, to name just two, that can be put to work to provide a superior experience to data-shy feature phone users while we wait for them to upgrade. See it as a sampling tool, if nothing else. Further, unless somebody solves the “Dumb Battery, Smart Phone” problem pretty soon, every smartphone user will be carrying a feature phone as a backup device anyway. Opening up a whole new segment. The heavy smartphone, light feature phone user, particularly in the rural context, where they might be more utility-focused than image-conscious.

Anusha Shetty, CEO and Co-Founder, Autumn Worldwide

The very definition of smartphones is changing or needs to change. Phones are getting smarter. Downloading apps and usage once upon a time was considered smart. Today most apps like Facebook, Twitter, YouTube and more work extremely well from a browser. So with feature phones getting data enabled, aren’t they getting smarter? The next big jump in Mobile growth will come from Rural.

Amrit Thomas, CMO, Unites Spirits Ltd. and Chairman, Royal Challengers Bangalore

"With only 30% Indian population on smartphone their certainly is a huge gap between feature and smartphone users. And cost could be a big factor in this low adoption. I see this concern addressed at multiple levels:

Firstly, with high adoption and frequency of updating their smartphones in urban India, we will see rural markets flooded with used smartphones which will be available to them at budget and this will enable the switch. Secondly, there is a change in business model of smartphone manufacturers in India- from importers they moved to assembling in India and now graduating to manufacturing them end to end locally. This shift is bringing the cost down drastically. And we see new budget brands being launched more frequently now. Thirdly, with governments push on Make in India and Digital India, the cost of raw materials are expected to come down (driven by demand) the overall costs of smartphones can be well assumed to reduce. These factors will reduce the feature phone to smartphone price gap and drive growth."

Umang Bedi, Managing Director, Facebook India & South Asia

Over recent quarters, feature phone growth trajectory has dipped resulting in an increase in smartphone penetration as costs are coming down tremendously (e.g. Jio Smartphone starting at Rs. 2500). Handset manufacturers should offer a wider range of more affordable smartphones as more people will get access to the internet in India

Priya Nair, Executive Director, Hindustan Unilever

With an increase in the penetration of the mobile in the rural arena we have seen a massive rise in content consumption through mobile in these areas. There is no doubt that mobile marketing campaigns by brands are enabling new avenues to reach out to consumers in rural India and gain a surge in sales. The key lies in identifying the right opportunity and implementation.

Part III: Mobile Handset Eco-system in India

Our obsession with size continues, 5 inches continues to rule

Did you know that India has over 250 smartphone vendors with 120+ unique screen sizes?

When the handset world was striving to get smaller and sleeker – we saw Samsung Note changing the game and making size fashionable again by creating a new category "phablet" and launching 5.3 inch screen phones. Since then others followed suit, and the latest reluctant entry is Apple, that launched iPhone 6S with 5.5 inch screens. We expect that in 2016, India will continue its obsession with 5 inches (currently India smartphone market is ruled by 5 inch smartphones at 26%[1] market share) along with longer battery life.

[1] Mobile Web Traffic Report by Device Atlas (Q3 2015) | 2 Counterpoint Research Feb 2015

India reached another milestone of being the second largest smartphone market in 2015!

2015 has been a great year for India's smartphone industry. Not only did India surpass US to become the second largest smartphone user base in the world, it also saw great momentum on the growth of Indian as well as Chinese OEMs. Growing at a healthy 23% YOY[2] India, only fifth of this population has smartphones, giving enough headroom in terms of growing the smartphone population in the next 3 to 5 years.

Mobile phones have crossed over the 'utility' zone, the screen will see many a battle

Jaideep Mehta, Managing Director, IDC – India and South Asia

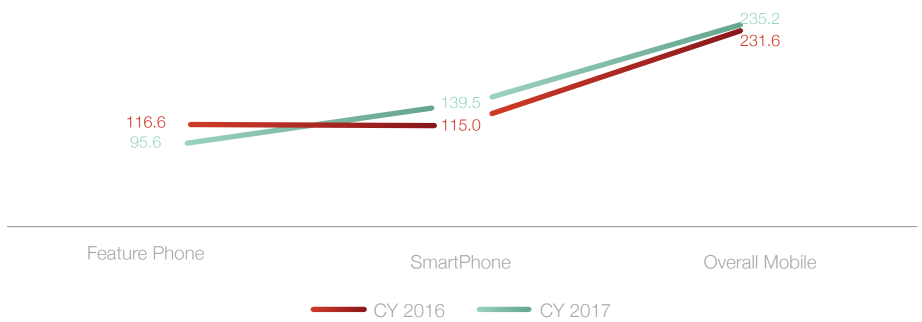
The onset of the mobile age has triggered far reaching changes for marketers. With the younger generation using mobile as their primary screen, and internet consumption eating into traditional media consumption (read: TVs), marketing plans, formats, engagement models and spending structures have all undergone a transformation. The year 2015 ended with a monumental quarter, when 4G based smartphone shipments surpassed 3G volumes for the first time.

The sector has encouraged home grown entrepreneurs. True unicorns have been created: Micromax, Intex and Lava being at the forefront. Meanwhile, maturing home markets have driven Chinese vendors towards India and they have triggered hyper competition with massive ad spends and multiple brand launches.

Job creation is also accelerating in this sector: duty structures and positive incentives under the "Make in India" campaign have propelled local manufacturing of mobile phones for more than 25 vendors. Currently, components are imported from China and assembled in India. But going forward, India will join the league of manufacturers as well enabling more nimble supply chains and setting the stage for the next wave of market growth.

India has also witnessed a significant change in the way Indian consumers are buying a smartphone in India. In 2015, 29% of the buyers had bought their smartphone from eTailers and television shopping channels. As Tier 1 markets saturates in India, the next growth frontiers for smartphone players are clearly the smaller cities and towns who have a low buying power therefore the affordable devices need to expand their offline presence and calibrate products to meet their affordability.
With the onset of 4G technology, and devices continue to develop, rich media, and especially video, consumption is going to further accelerate. The mobile phone will present marketers with unprecedented engagement opportunities and programmatic challenges.

The era of mass smartphones has finally arrived; by 2017 there will be more smartphones that features phones in India

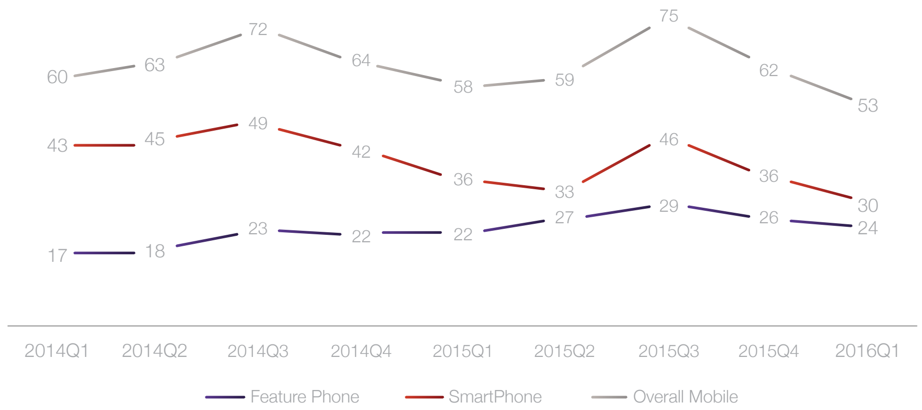


In the year gone by, we saw India adding more smartphones than feature phones. Even as the majority mobile devices shipped are feature phones, the smartphone market is growing at a faster pace. In the last 2 years smartphone share in the total device shipped in India has increased to 44% (23 mn units in Q1 2016) from 38% for the same period a year back.

Source: IDC May 2016 estimates

Massification of smartphones: With only about 20% penetration, and expected growth of 30% annually in 2016, compared to 7% globally [3], affordable smartphones, saw consumers upgrade their feature phone to smartphone more quickly owing to the small price gap between the two.

Affordable smartphones has also resulted in increasing the smartphone penetration in rural part of the country. We saw players like Intex, Lava and Lenovo grow rapidly and take significant market share (approximately 25% together) in the lower end of the smartphone market (under INR 10,000 category)



Source: IDC May 2016

As massification grows, so does premium: Apple, one of the most premium smartphone brands in the world, saw an almost flat sales globally in 2015 but saw India as a potential growth driver market. In spite of increased prices on their flagship launches in 2015, iPhone6 and 6s, sales were among the highest than ever before recording an astonishing 56%4 Y-o-Y leap in iPhone sales in India. Apple's brand association with prestige, the availability of older iPhone's at affordable prices helped drive growth for Apple in India.
Given the pulls at both end of the spectrum, **we expect India will reach the 500 million mark in less than 2 years.**

3 Gartner Report 2015

29% of Smartphone Sales in 2015 happened through e-commerce Channels!

In India 'availability of the latest models'[4] is one of the top reasons why people shop for consumer electronics, also making it the most bought online category. Smartphones take a huge chunk of these sales as many Chinese OEMs entered the Indian market through the online sales channels by undertaking exclusive tie-ups with eTailers. This helped them generate a buzz around their product. Motorola and Xiaomi were very successful in doing this and lately Samsung also stepped onto this bandwagon with its J series only available through eTail channels.

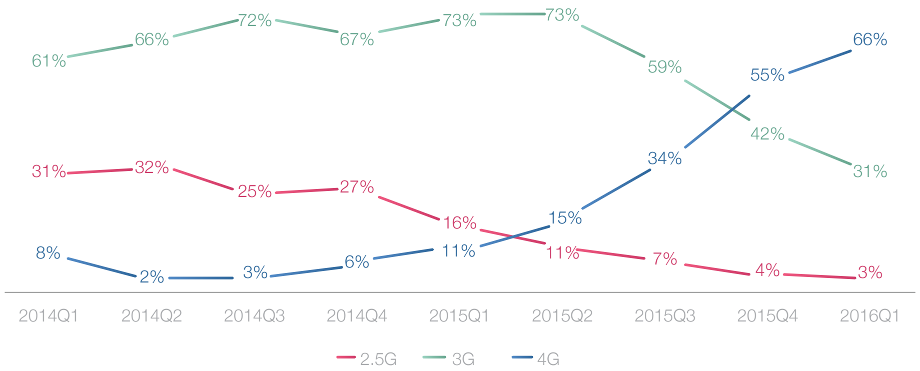
In the above chart we see a surge in smartphone shipments in Q3 2015. October and November are festival heavy months in India and therefore many eTailers have 'Festive Offers' present in abundance before hitting the festive season.

Discounts are one of the biggest reasons why people (56%) [5] shop online and eTailers tap into this behavior by creating end of season and festive sales that makes people buy more online. In this trend clearly online smartphone sales benefit a lot.

Tier 1 markets in India are reaching saturation levels in smartphone penetration. Tier 2, 3 and Tier 4 towns are the future. Hence, either eTailers have to increase their grasp to these areas or OEMs will have to take the traditional route to increase penetration in the rural part of India.

4G enabled phones now accounts for 65% of the handset shipments in India

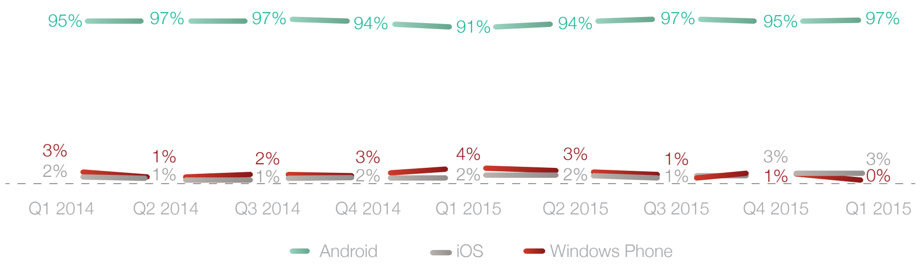
With the aggressive launch of 4G services since mid-2015, by leading telecom service providers of the country (Airtel, Vodafone, Idea and recently Reliance) we saw a spike in 4G smartphone shipments from late 2015 onwards.



Source: IDC May 2016, Smartphone Generation Market share (Shipments)

Android continues to be most preferred OS of choice in India

Android has been reigning the Indian OS industry since last 3 years and will continue to do so, with a 95%+ market share that is continuing to grow Q-o-Q. iOS on the other hand has managed to maintain the same market share of approximately 2.5%.



Source: IDC May 2016, Smartphone OS Market share

The role of Local Language in propagating mobile – An Industry Perspective

Shivakumar, Chairman & Chief Executive Officer, Pepsico India Holdings Pvt. Ltd. and Chairman, MMA India

India will move quickly from a one English language format to a multi lingual format in the next five years. This will have the same impact as local radio, local television and local newspapers. We will see an explosion of content with local language. We will have place for national concepts and adapted local language concepts, like KBC ---------------------------------""

[4]http://www.thehindu.com/business/Industry/apple-q2-iphone-sales-up-56-in-india/article8526823.ece

[5]Digital Retail in 2020 – Rewriting the Rules. A Google and AT Kearney Report (May 2016)

Shireesh Joshi, Head, Strategic Marketing, Godrej

The time for local Indian language content has more than come. A look at our entertainment industry (TV channels, music, movies) tells you how much local language matters in content consumption and associated brand commercial messaging embedded in that content. So much so that international movies are regularly getting dubbed in multiple Indian languages. There is a huge upside for entire mobile ecosystem – operators, handsets, content makers, advertisers in unlocking this incredible potential for mobile. Each major language in India has potential to be as big as or bigger than English

Priya Nair, Executive Director, Hindustan Unilever

With an increase in the penetration of the mobile in the rural arena we have seen a massive rise in content consumption through mobile in these areas. There is no doubt that mobile marketing campaigns by brands are enabling new avenues to reach out to consumers in rural India and gain a surge in sales. The key lies in identifying the right opportunity and implementation.

Sapna Chadha, Head Marketing, Google India

India's mobile internet is growing at an unprecedented pace and in recent times, a large part of this is being spurred by the addition of tens of thousands of rural users. In order to make this growth meaningful and sustainable, it is imperative that both quality of access and content are aligned to the needs of these new users. From a content perspective, local Language users will form the majority of the online population in India reaching an estimated 400 million by 2020. Advancements in Google search with the addition of a Hindi tab and the Indic Keyboard which is available in 11 Indian languages and with over 50 million downloads, are steps forward in ensuring that Indians can enjoy the true power of the internet.

Umang Bedi, Managing Director, Facebook India & South Asia

People are coming online at a staggering rate in emerging markets and in most cases are doing so on mobile. We're continuing to improve Facebook so it works seamlessly and easily for people in all parts of the world, regardless of their device. We know that a lot of people in India write Hindi posts and comments on Facebook using English characters — or Roman script — instead of using Devanagari, the native Hindi script, because they don't know how to type in Devanagari. Additionally, most Android phones sold in India don't have support for typing in the Hindi script. People have to download a separate keyboard app, and may need to switch keyboards when they want to type in a different language. We recently rolled out a lightweight Hindi editor inside the Facebook app for Android phones. When the app setting is turned on, a button is added to the bar where you type updates and comments, which automatically transliterates Roman characters to Hindi script.

Carlton D'Silva, COO & CEO, Hungama Digital Services

Clearly growth is going to come from the non-English speaking markets as I believe the metros and mini-metros are reaching a saturation point. Another proof of the same is that brands are also looking at IVR products that respond to voice rather than key press for interactions. However I do believe that smartphones growth will eventually see life in its trajectory as soon as the price war begins and accessibility becomes a thing of the past. With smartphones as low as Rs.2000 the growth is only inevitable.

Hemant Mehta, Senior Vice President, KANTAR IMRB

There are several reasons which could perhaps have slowed down the smartphone adoption curve – e.g. health of the economy, lesser number of new launches/ models, lower level of discounting, etc. Saturation of English speaking markets could also be one of the reasons. While the non-web English language content is consumed by very small part of the population, it still commands the highest share of content consumed online compared to regional languages. Yet, there is an opportunity for handset manufacturers to make updates to the devices and operating systems to make their smartphone offerings more inclusive. Developing regional language content which caters to the specific needs of the audience would also influence and encourage intenders considering upgrading from a feature phone to a smartphone.
We believe that the language is not the only hindrance. Our research and consumer understanding shows that the selection criteria vary by geographies. For instance, an urban user might look at different features such as number of megapixels, quality of screen (HD, Quad HD etc.) and the amount of RAM. On the other hand, a rural consumer is more likely to evaluate devices from the lens of ruggedness, the ease of servicing a/repairing it, longer battery life (since they live in areas where electricity supply is intermittent), etc.
Type of usage: Rural users want to use phones as a source of entertainment (music, movies games) but they not interested in downloading multiple apps to be able to access content. Just setting up an account on the Google Play Store or iTunes can be a daunting process for someone who has not used this before. Such consumers would prefer if someone would pre-load the content on their devices and provide simple non-web based means of refreshing this content or sharing it within their peer group. -------------------------“”

Anusha Shetty, CEO and Co-Founder, Autumn Worldwide

While the smart phone category will continue to grow, languages will play a significant role in further spikes. Regional languages and content will surely support this growth and we are seeing this happening already, whether it's a Hotstar with regional content or with a Netflix equivalent regional player like Fast Films. -----------------------------------“”

Rajiv Mathrani, Chief Brand Officer, Airtel

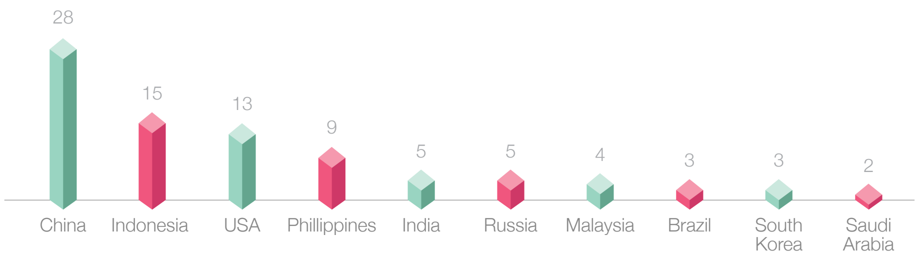
The larger question is not about how much is data growing at but how many more consumers are growing that data usage. Unlocking the language barriers is absolutely crucial to increase mobile internet penetration. Development and adoption of voice recognition and related technologies will be key enablers to achieve these 2020 mobile internet penetration projections.-“”

Part IV: Mobile App Ecosystem in India

While India is amongst top 2 in mobile, smartphone and internet user base; when it comes to app downloads we still have some way to go

In 2015, 5% of the total global app installs came from India.[1] Cumulatively Indians downloaded 9 billion apps in 2015, which is 1.5 times more than in 2014. Burgeoning smartphone and mobile internet usage, a growing developer community and the potential for regional/localised apps are favouring an app revolution in India.

Leading App Download Destinations, 2015
Share of App Instal %



InMobi's State of App Downloads and Monetization, FY 2015

We also see several brands and marketers gearing up to cache in on the growing consumer appetite for mobile apps. When we reached out to leading brands and advertisers, 60% of the marketers, said they have a mobile app for reaching out to their consumers. The proportion was higher for services sectors like Ecommerce, Media, BFSI with over 85% having a mobile app for their business and lowest for FMCG. Of the marketers who didn't, 80% of them had plans to build one in 2016.[2]

What is growing in India?

"Google Play has experienced exponential growth in installs over the last few years in India. We continue to see strong momentum across all categories available. Some of the most popular ones are communication (messaging apps), social platforms, shopping, games, and entertainment and utility apps. Just like in other countries, we really see a mix between local and international game developers growing in India. Subscription models for apps is another area to keep an eye on for fast growth." Says Google India

Over 95% of the mobile apps downloaded in India are free apps and share of paid apps are likely to continue to be lower, however it is estimated that revenues from paid apps in India is will reach USD 318 million by 2016 due to increase in app usage on smartphones.

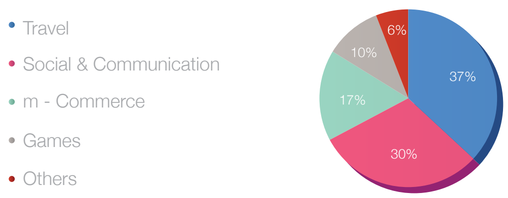
Travel apps (includes ride-hailing apps) witnessed substantial growth in 2015 by over 100% —and was the fastest growing category of the year1, primarily driven by the competition between various cab services, as well as increased popularity of travel-booking apps.

Social & Communication apps continued to grow at a fast pace and overall remained the leading app category. We expect in 2016, the OTT category (entertainment) to become a significant contributor to the growing mobile app download economy.

[1]InMobi's State of App Downloads and Monetization, FY 2015
[2]Madhouse Millward Brown Mobile Pulse 2016 report

With more affordable high end smartphones, more and more apps on the phones

Top Categories of App Installs



Industry experts estimate that Indian users will install more and more apps on their phones as Moore's Law makes high-end smartphones affordable to the masses.
An average Indian user installs no more than 32 apps (lower than the world average).[3]
Male users dominate app usage and installs as compared to Female. 60% of those who use an app are males.
Apps usage is quintessentially an urban phenomenon. The top four Indian cities account for about 43% of App users, followed by next four cities and other metros. Though as the proliferation of smartphones spreads in small towns and hinterland, soon we will see the nascent app. economy will start expanding.
As far as age of app users go, below 25 age category dominates with over 66% users being in that category. But we expect this to change with the changing demographic pattern of smartphone users. Over the last two years, smartphone users in their 30s have nearly tripled their share of the total smartphone internet base.[5]

25% of app installs in India are from paid ads; one of the highest globally

As pretty much any smartphone user has noticed by now, mobile ads with calls to action involving app installs have gained significant traction among brands and app developers. Whether your app exists as an end unto itself—for example, as a game with in-app purchases—or as a means for branding and extra touch-points with customers, getting it into the app store is not enough. You also have to get it onto people's phones.
Paid ads have become popular as a way to get the word out about apps and help distribute them across more handsets. And it is seen that paid ad app installs, across most app categories help contribute to organic app installs. On an average, it is seen that **every paid install an app receives can expect to see an additional 1.5 organic installs.**

This is possibly due to people who download apps based on paid ads spread the word to friends and family—thereby spreading the app awareness and installs via organic means.
However, developers can strive for better organic downloads by making the content within the app more appealing and capturing the psyche of the intended audience. A case in point is the strategy adopted by TrulyMadly app.

The idea of breaking stereotypes has been in the DNA of TrulyMadly. #Breaking-Stereotypes was one such campaign that the startup had launched last year to break the hardened stereotypes. For the campaign, the portal ran a social experiment in Delhi, where it asked boys and girls to share how they've faced generalizations while growing up. As the people of the city opened up to share the stereotypes they faced, the campaign gained pace and controversial stereotypes faced by real people surfaced on social media. TrulyMadly then curated these stereotypes and put up a gallery featuring the commonly faced ones. Over a period of two months, Truly Madly's registrations increased by 20X.

Correlation Between Organic and Paid Mobile App Installs Worldwide, by OS and App Category, Aug 2014

	Organic Installs per paid install
Android	
Transportation	16.6
Racing	13.3
Word	7.2
Music and Audio	6.1
Casual	5.4
Adventure	3.6
Casino	2.1
Business	1.6
Travel and local	1.6
Arcade	1.5
Card	1.4
Shopping	1.0
Strategy	0.6
Tools	0.3
Personalization	0.2
iOS	
Games	5.4
Lifestyle	5.2
Social Networking	4.8
Utilities	3.9
Sports	1.5
Entertainment	0.9

[3] India App World Year in Review 2015, 9Apps, December 2015
[4]Ericsson Changing Mobile broadband landscape, 2015

Standardized Mobile Measurability is the need of the hour – Marketers Speak

Shubhodip Pal, COO, Yu Televentures (Micromax)

As brands begin to apply real-time data to contextualize ad buys, demand and spends will shift from TV budgets to digital video and mobile” – a trend we’re already seeing as mobile programmatic is burgeoning and time spent in desktop and television is shrinking drastically. The root of this transition lies in an increasing need marketers have to make a performance-based impression. As consumers spend more time on their handhelds, a bulk of these opportunities will occur on our mobile devices. It’s no surprise the spotlight has moved to this channel, a medium where consumers can be influenced and then encouraged to act immediately on intent. So, with advertisers seeking touchpoints less fleeting and more measurable, they are increasingly looking at mobile to satisfy this. As we continue to see the forces of mobile growth rising, and with the consumer journey becoming more device agnostic, the importance of capturing the right audience, and most importantly their loyalty, will likely lie in their most personal media devices. Today, as we continue to marvel at the rapid growth of mobile, it seems the channel with which they discover and engage with media will largely begin and in many cases end with the mobile device. Looking closely at the consumer behavior, mobile is usually the first screen that one looks at right at the beginning of the day. We have seen increased spends on mobile marketing and advertising with brands realizing the importance of the screen. While TV continues to be the first screen that most marketers target to grab consumers’ attention, mobile is quickly taking over as the second screen with desktop penetration on a continuous decline. Thus, mobile becomes a very important tool for any successful campaign’s marketing mix. However, with increased growth comes the need to monitor and drive outcomes that are measurable in nature. While Television, Print and Radio have their set of measurable stats, digital advertising (primarily mobileadvertising) has been lacking the same. Television for example is measured in terms of viewership, ratings such as BARC (Broadcast audience Research Council of India-promoted by three industry associations, to develop a reliable television audience measurement system for India) and TRP (a tool provided to judge which programs are viewed the most giving us an index of the choice of the people and also the popularity of a particular channel). Radio also has a standardized way of calculating the listenership (Audience measurement measures how many people are in an audience, usually in relation to radio listenership). Print has IRS figures, AVE stats etc. If you look at mobile, there exists no measurement metrics to gauge the ROI on a said campaign. While there are huge money spends, it is difficult or if I may say impossible at the moment to gauge my campaign’s success on mobile. As a result, we marketers are often stuck with a limited understanding of the mobile customers. At times it is hard to decipher the proportion of the traffic which comes via mobile devices. Hence most of the marketers don’t understand how mobile fit into the customer journey across devices and channels and very few understand the nuances of how customers use tablets and smartphones differently—issues that can all hold back targeting and personalization throughout the customer experience. As an industry platform the need of the hour is to develop a regulatory body that helps marketers and brands to drive real measurable impact for mobile advertising. The step would not only justify the amount of money being spent on mobile campaigns but also help us get deeper consumer and channel insights. As one of the respected body, MMA can help act as a platform to come up with a solution along with the brands and industry leaders to solve this issue.

Sameer Pitalwalla, CEO & Co-Founder, Culture Machine

Engagement metrics around MAU's, DAU's and cohorts on retention, are sound instruments to measure both reach and engagement and are already well established. What's missing is a trusted authenticator who can validate these metrics across devices, OS's and applications. The metrics exist, the validator doesn't.

Amarjit Singh Batra, CEO, OLX South Asia

We are seeing that marketers are integrating newer media platforms into their marketing strategy, but they continue to face obstacles with measurement of mobile marketing effectiveness. While, there are plenty of metrics available to analyse the effectiveness of mobile marketing programs, but those measurement tools and standards are quite similar to the metrics used in print and digital advertising. Brands should be developing ROI metrics which can be used as industry standard specifically for mobile.

Manav Sethi- Group CMO, Getit Infoservices India & Malaysia

The problem is not as much of technology as it is to be with the incumbent ecosystem of ratings/measurement. We all have lived and are still living with imperfect TV rating system. Also remember mobile is a device for content consumption and hence is gripped with same yardstick of "digital". So no merit in isolating mobile for ratings/measurement. In-fact, MOBILE IS THE ONLY MEASURABLE IMPACT ENABLER in history of mankind. It just needs right intent from various stakeholders to embrace it and move beyond status quo (not that easy). "Irony of Digital marketing is that it has to justify itself, coz it can justify itself"

Amrit Thomas, CMO, Unites Spirits Ltd. and Chairman, Royal Challengers Bangalore

"Mobile measurements are still in the early phase. Marketers need to have an iterative pilot – and – test approach to figure out what are the proven growth drivers. Last-click-attribution model may not be the right cadence, and understanding of the full conversion path becomes critical. A latest study indicate that a mobile user visits the store 6 times before conversion. There is a call to rethink tracking metrics – that aren't true KPI's. Time spent, bounce rates, CPA are so-yesterday. Defining mobile metrics to sales or sale assists is linking mobile marketing to business growth. Mobile being a more responsive platform for ad campaigns the metrics have to be fluid and not standard, the campaigns thus should be measured more on conversion parameters than reach or SOV equivalent."

Carlton D'Silva, COO & CEO, Hungama Digital Services

Yes we do require transparency but then again this requires co-operation from all the operators and disclosure of true data that is hard to come by. TV is based on a formula and the digital medium is a lot more quantifiable. This is a double edged sword. This is the same discussion that we were having when the online space was booming and now it's the mobile space.

Prasun Basu, President, Nielsen South Asia

Historically, a medium grows and establishes itself as mainstream once credible and independent measurement is available. An example of this is the launch of Nielsen TV Ratings in the US back in 1950. Today, a similar need exists for measurement in Mobile and Digital, and significant time and effort has been invested by the entire ecosystem in doing so. In India, we've been measuring mobile campaigns after we launched Digital Ad Ratings here, and are now able to provide TV-comparable metrics like GRPs, bringing down walls between measurement of TV and other media.

Hemant Mehta, Senior Vice President, KANTAR IMRB

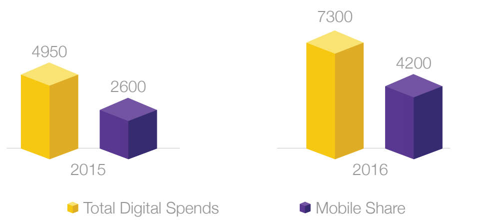
"Unlike TV or Print consumption which is 'scheduled' at certain times of the day, mobile consumption is more fluid. There are two broad metrics that we could look at: Time spent (per day / week and as per property (Facebook, MxPlayer) and Time of day it is being accessed (commuting to and from school/ work, sitting at home). So the value of listening to 30 min of mobile radio while a farmer is working in the field might be different from the same 30 minutes when he is returning home after a day at the market. By understanding what the audience is doing with their phones at key moments of the day – one can derive a set of standards that take into account not just the time they are spending on their device, but also the context in which the device is being used."

Part V: Mobile Ad-Spends

Mobile enabling Digital ad-spends growth with 50% share of pie!

The consumer has shifted to mobile with significant time spent per day on the medium (increased to 178 mins in 2016[1]), higher than any other digital / mass medium. This has led to mobile becoming a significant share of the total digital ad spends and we see this surge continuing for the foreseeable future. Sectors like FMCG, Ecommerce and Auto continuing to be the largest contributors to this growth.

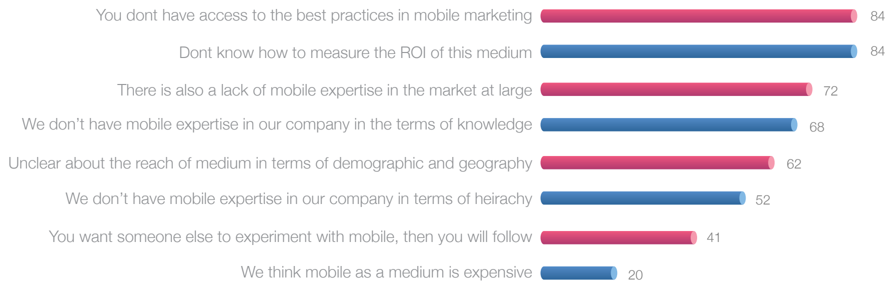
Digital Ad Spends In India - Split (In Crores)



Source: TYNY GroupM/ Madhouse estimates 2016. Mobile share includes all – Display,Banner,Video etc. SMS/IVR and Search/Social

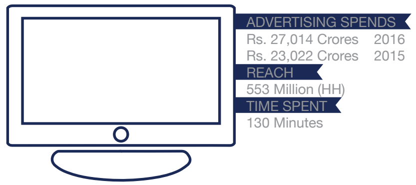
While spends are increasing, organizations are still evolving in terms of familiarity with mobile marketing, with lack of expertise, best practices and understanding of ROI from the medium being the top reasons for impediment of growing further budgets on mobile.

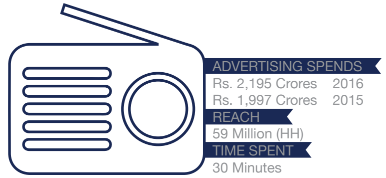
Top reasons for mobile still being a small share of overall media budgets

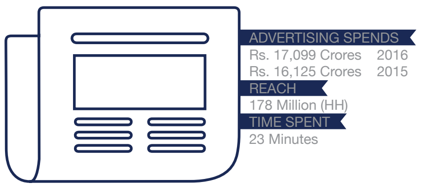


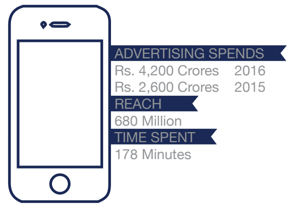
Source: Madhouse and Millward Brown Mobile Media Pulse Report June 2016

A snapshot of mobile vis-à-vis other media









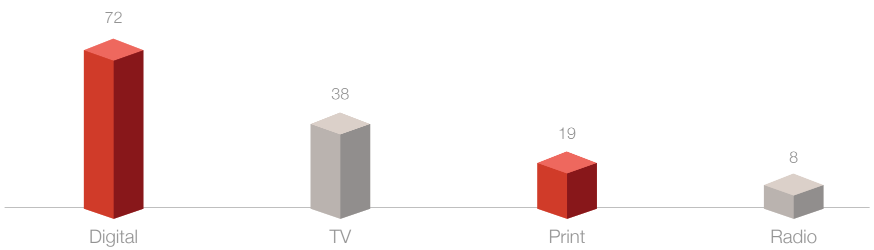
Sources: IRS, NEILSEN INFORMATE 2016, TYNY 2016, TRAI 2016
[1]Nielsen Informate March 2016

Brands adding a mobile twist to their traditional medium campaigns will levitate their current standing

The global cross platform and mobile advertising market is estimated to grow from USD 25 billion[2] in 2015 to USD 80 billion in 2020. While these are global numbers and not estimated for India yet, we see this to become in significant opportunity going forward with the rapid adoption and growth of mobile and mobile internet.

We already see several brands in India experiment with TV plus mobile, however, we also see some green shoots for Mobile audio steaming apps or on demand music apps (including radio) and Mobile print as effective extensions for their radio and print campaigns. Over the next 2 years we see this market grow significantly in India with at-least a 100 million[3] incremental reach opportunity across mobile audio, print and video users.
When we asked marketers in India which medium offers best opportunity for integrated mobile planning, apart from digital, marketers saw opportunities in TV, Print and Radio.

% of marketers most effective intergrated media with mobile



Marketers are running behind millennials – Mobile audio to the rescue

Gaurav Mehta, CMO, OLX India

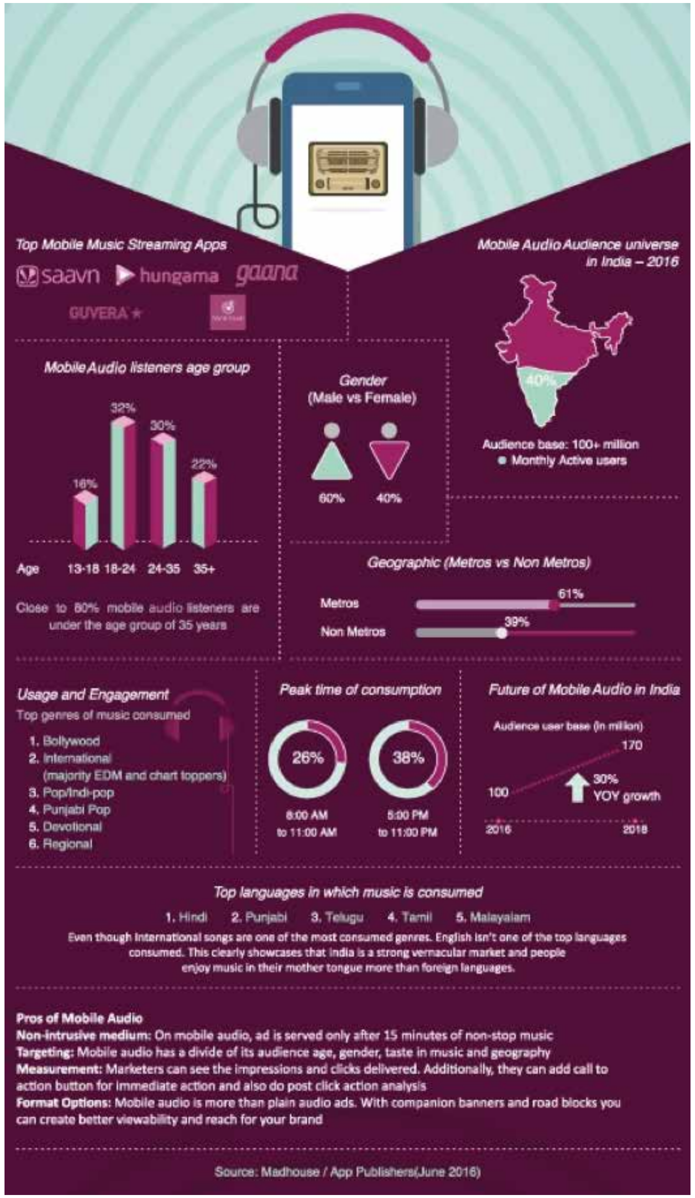
Mobile audio/radio is an extension of terrestrial radio, which complements other mediums. Instead of restricting the audience base, we are instead leveraging them for more precise targeting, which cannot be done on radio. These Apps are no longer limited to urban India and have a robust tier-II audience base as well.
Mobile audio brings the opportunity for brands and advertisers to engage with their consumers using audio content in innovative ways. With non-music audio programs, brands also gain exclusive, native placement opportunities as content creators above and beyond sponsorship. "

Opportunities / Benefits	Mobile Radio	Traditional Radio
Interactivity (Direct Call to Action)	Yes	No
Cos per Impression model	Yes	Yes
Measurability - (Tracking of Full Spot)	Yes	No
Targeting (Geo, Time)	Yes	Yes
Audience Profiling and Targeting (Social logins & listening behavior)	Yes	No
Crestive Flexibility or Customization of creatives	Yes	No

Source: GroupM/Madhouse

We are at the cusp of inflection point for on demand mobile audio in India with an entire ecosystem coming up around such services. Over the next 2 years, we estimate the mobile audio user base to grow to over 170 million users[4].

[2]http://insights.fb.com/2015/06/18/cross-platform-strategies/
[3]Madhouse Estimates (June 2016)
[4]Madhouse Estimates (June 2016)



Vinod Bhat, Co-Founder, President & Chief Strategy Officer, Saavn

India is country that is built on aural traditions based down from generation to generation. There has been a rich history of storytelling and conversation across all kinds of genres - religion, comedy, sports, news, etc. for centuries. Mobile smartphones and data connections in today's era allows those aural traditions to be organized, iterated and amplified. The obvious examples are music albums from 900 labels in 22 languages and 25 dialects, as well as shows such as Neelesh Misra's Qisson Ka Kona and Cyrus Broacha's Cyrus Says. We are excited to see the results of everyday people, major brand advertisers and staff at Saavn melding their minds and creating the future of audio for our country.--------"

MyGov 'mera desh baddal raha hai aaga bhad raha hai'

Objective: NDA W completed 2 years and they wanted to showcase the positive work they have done in and around the semi-urban and rural areas to strengthen the conditions oi people in this area. But, they wanted to target the urban audience and let them know about the successful government initiatives

Action: This was a first time a PM was reaching to people via terrestrial radio through the 'maan ki baat? campaign- However, Reaching to the when audience through terrestrial radio is a little tougher as the time they spend on traditional radio is not very high. On the other hand mobile radio has larger user base in urban audience as well as youth centric.Mobile radio is highly commendable on reaching the apt audiences and unlike terrestrial radio gives the brand the enact profile oi who to reach and where to reach. With age, time, location and frequency capping parameters to reach the exact TG when you want to and where you want to. All this is not available in terrestrial radio

Results: The results were staggering and we reached a unique reach of 14ok people, delivering m audio spots; delivered across Gaana, Saavn and Humma music apps.

Apple 'Back to School'

Objective: The Apple 'back to school 'campaign reaches out to school going kids between the age of 16 to 18 years and reach out to them to buy the Macaook with a special student discount.

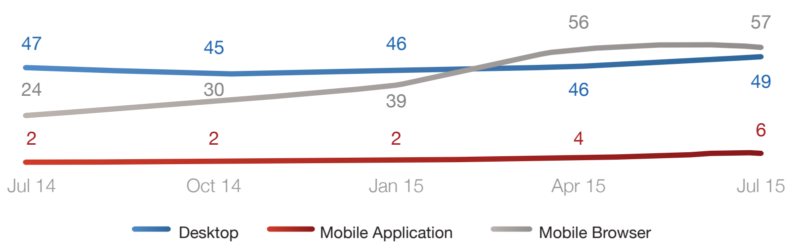
Action: The audience has a highly short attention span and therefore isn't active on traditional radio that spins ads every 10 minutes and has more ad spots that music. Mobile radio apps come to the rescue. These apps give you more music and very less audio ad sots. After every 15 minutes of non-stop music there is a single 20 second non-skippable ad that plays and then you can go back to your music. Therefore, this makes mobile radio the best media options for the 16 to 18 years old young urban T6.

Results: We reached out to the 6 cities - Delhi, Mumbai. Bangalore. Chennai. Hyderabad and Kolkata. We were able to reach 40ok people and 2 million spots were delivered on Hungama, Saavn and Gaana mobile apps.

The ecosystem for mobile print is ready – it is time for marketers to take the leap of faith

While traditional print readership & newspaper circulation continues to witness growth, we see digital news consumption on the rise with mobile leading the way.

News / Information genre unique visitors in millions



Source: GroupM/Madhouse estimates

Top print publications in the country have already grasped on to the bandwagon of mobile and are witnessing robust traffic growth on mobile. This allows publications to grab more audiences and monetize content through digital platforms.

Several print publications have also experimented with mobile technologies beyond the mobile browser and application to bring innovation integrated with mobile. QR codes have been globally seen to be one of the best ways to integrate print and mobile advertising to drive readers to online content. We are yet to see this being adopted as a mainstream practice among brands.

Publishers	Print Reach	Desktop Reach	WAP Reach	APP Reach
दैनिक भास्कर	7.5	5.7	21	0.8
TOI	6.1	15.2	45	4.5
[illegible]	6.5	6.9	16.3	1.5
ht	5.9	6.5	6.2	0.2
TH	2.8	4.9	6.1	0.6

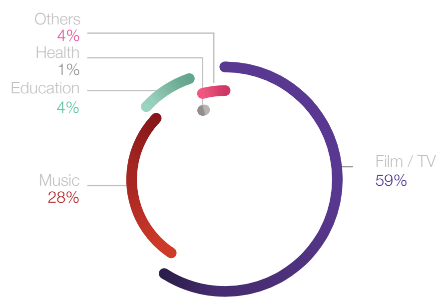
All numbers in millions, 2015-16 Source:
Audit Bureau of Circulation, ComScore and Publisher Data

Other innovations in the space include the use virtual reality and augmented reality with Malayalam Manorama's virtual reality 360 degree app giving an immersive experience for its readers for videos. The publication also launched an Apple Watch app in Malayalam.

Traditional TV players getting more vertical with OTT driving the case for mobile as the stronger secondary screen

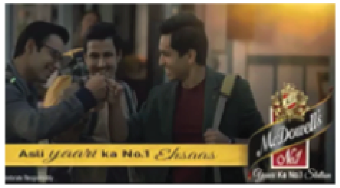
TV, the all-time favorite medium for brands and consumers alike, continues to grow in reach and ad spends even though the consumer spends double the time on their smartphones than on TV.
Competition in the video space has intensified significantly beyond the leading players like YouTube and Hotstar and now including everyone from Traditional TV broadcasters/ distributors to international Video on demand players. This is likely to change how consumers view TV content, as more and more of the TV content becomes available on OTT platforms.

YouTube 100 channels categories by viewership



Source: KPMG and FICCI 2016

YouTube's total watch-time in India grew 80% over the last one year, of which 55% of the watch time was on mobile. 90% content upload on YouTube was from mobile as well.
Mobile is already supporting TV advertising in-terms of targeting the TV audience with beacon technology to maximize reach while the consumers are on both screens at the same time.



USL Audio Beacon Campaign

Objective - To reach out to the 25+ Male audience and share with them the McDowell's anthem that couldn't be aired completely on a NC. The insight was 8596 at the audience use mobile phones while watching TV. so how do we cash on this insight and reach the maximum number of people.

Action - McDowell's was the first brand to use Audio Watermarking. The mobile phone reads the high frequency sound TV produces. When the NC is played and the McDowell's anthem video was simultaneously viewed by the audience on their mobile phones.

Results - The anthem was played on 1000 apps and reached to over 50 million viewers
Audio Watermarking created a new metric to analyse and track TV reach
1.5 million unique device IDs were captured with 5 million impressions delivered
14k people downloaded and viewed the video

A Crystal gazing into Future of Mobile Marketing

Shivakumar, Chairman & Chief Executive Officer, Pepsico India Holdings Pvt. Ltd. and Chairman, MMA India

India is a unique mobile market and one where the mobile ecosystem is playing a hugely influential role in transforming the lives of its citizens, and driving economic growth.

Amrit Thomas, CMO, Unites Spirits Ltd. and Chairman, Royal Challengers Bangalore

India is a unique mobile market and one where the mobile ecosystem is playing a hugely influential role in transforming the lives of its citizens, and driving economic growth. India is a unique mobile market and one where the mobile ecosystem is playing a hugely influential role in transforming the lives of its citizens, and driving economic growth. The new generation of India, has skipped the desktop phase and leapfrogged into mobiles. On the supply side, plummeting data connectivity charges and raft of sub $100 smart phones will break the dam of internet mobile penetration (currently at 22%). Both entertainment and utility factors will fuel demand. For marketers, mobile is not merely a channel but a ‘state of being’. It’s a part of the context of the user. His device, his location, his day-part, his situation – all are relevant data signals that will enable to deliver rich personalized experiences like never before. Mobile will not be first but the ‘only’ channel.

Carlton D’Silva, COO & CEO, Hungama Digital Services

Videos will play a key role in Mobile Marketing. With Reliance Jio making the accessibility of data cheap this will only see a surge in content creation in the space.

Amarjit Singh Batra, CEO, OLX South Asia

With over a billion mobile subscribers in India, mobile marketing revolution is just about to begin. The size of population coming on mobile will make data driven marketing a norm for brands. While developments in the mobile technology such as high data speed, better form factor on the back of 4G roll out will guide marketers to bring innovative content and consumer experience. At its core, mobile marketing will center around skillful and impactful storytelling. Marketers need to focus on delivering high impact messaging topped by the right mobile experience, to narrate a brand's story in an immersive way.

Hemant Mehta, Senior Vice President, KANTAR IMRB

"Enough is being written on the how mobile can be used to understand and reach out to the urban consumer. But it is the rural audience that provides the largest untapped market for mobile marketers. Marketing to rural mobile users requires a fresh perspective on how these audiences can be engaged continuously. Doing this will require creativity, and addressing issues such as the cost of smartphone ownership, lack of web connectivity etc. But most importantly, it will require a firm understanding of the role of mobile in the life of the rural consumer. Marketers must be prepared to upend existing business models and look at alternative ways to engage their audiences. For example, providing access to content without requiring them to invest in the content that is being consumed. With internet penetration still relatively low, they must be willing to look at alternative methods of disseminating their message.

- Could recharge centers be the new hubs of consumer data?
- Could the SD carrying the content, also record how often a piece of content is being played? (Mobile GRPs)

Giving away content (games, music, movies, TV shows) for free while embedding the content with non-skippable advertising will not only encourage usage by consumers, but increase the size of the audience consuming that content and thus exposure to the marketers products and services. If one were to push this idea further – we could envision a scenario where the device, content and the accompanying internet connect are provided free of cost to the consumer.In return, the marketer is provided with a captive audience who is always reachable and whose mobile behavior can be tracked over an extended period of time – allowing for greater reach, more accurate targeting, and in time the development of new customized products / services that the rural consumer will want to engage with."

Umang Bedi, Managing Director, Facebook India & South Asia

People have shifted to mobile transforming the way people around the world connect, share experiences and discover new things. It’s the fastest adoption of a communication technology in history, and it’s changing how we connect with each other and discover new things. Time once spent listening to radio or watching TV is now spent interacting on mobile. Apps account for 54% of all time spent on digital platforms and approximately 45% of all video views are on mobile devices. The mobile shift isn’t coming. It’s here and businesses, however, are still making the shift. In short, mobile is no longer where we’re headed, but where we are. For brands, there has never been a stronger motive to make the move to mobile. But advertising on mobile is a little different from other media. Primetime on mobile is any time as the mobile is always with us, making media and information accessible from virtually anywhere at any time, it turns the idea of traditional primetime on its head. What this means for advertisers is that we now have the ability to reach people in more places, to tell more meaningful stories, build more meaningful connections. The rise of the small screen presents a huge opportunity to transform the way we build brands.

Anusha Shetty, CEO and Co-Founder, Autumn Worldwide

Young India (18 to 24 years) spends an average of 6 – 8 hours on a digital/ social platform every day, logged in primarily from a mobile. India is a young nation and media habits of this young nation is changing dramatically. As marketers, we have no choice but to be where our audiences exist. With TV being a White Noise, Marketing will need to go completely digital and social and Mobile will be our enabler.

Annexure 1

Mobile Channel Definitions

Traditional Mobile Advertising Formats

Channel	Definitions	Benefits	Limitations
SMS[2]	A standard for telephony messaging systems that allow sending messages between mobile devices that consists of short messages, normally with text only content	Crisp: Conveys USP & expectation from user within 160 characters Economical: Cheaper than other digital media vehicles Ease of use: All mobile users are aware of the SMS mechanics Mass Reach:100% of mobile phone owners can be reached via SMS Save for later: Gets stored in phone for later reference	Linguistic challenge: Difficult to communicate in regional script Third party database: Not a reliable source for reaching a specified TG Limited analytics: Very basic metrics for measurement
IVR[2] (Interactive sVoice Response)	A phone technology that allows a computer to detect voice and touch tones using a normal phone call. The IVR system can respond with pre-recorded or dynamically generated audio to further direct callers on how to proceed. IVR systems can be used to control almost any function where the interface can be broken down into a series of simple menu choices.	Cost effective: Reduces operational costs Customized communication: Increase first contact resolution, gives a personal touch from the brand to the customer Best for media dark markets: majorly rural and tier 3/ tier 4 cities	User journey: The IVR menus can be long, complicated and time consuming thereby creating fatigue Clarity: Quick menus and sub menus within the user flow sometimes confuses the user Communication protocol: Poorly drafted scripts of dialogue creates bad experience for user.

Channel	Definitions	Benefits	Limitations
RBT[7] (Ring Back Tone)	A ring back tone (RBT, alternatively ringing tone) is an audible indication that is heard by the originator of a telephone call while the destination being called is ringing.	Completely non-intrusive as the caller is taking an action him/herself and then RBT is played Reach is huge and the communication is direct and not prone to a call drop	The subscription is auto renewed every month and hence unsubscribing can cause discomfort to the users
OBD[3]	Outbound Dialers are recorded calls made from an application to pre-defined recipients through their mobile phone.	Message delivery strength: Delivers a branded voice message in under 1 min Cost effective: Cheaper than many digital media vehicles Reach & Awareness: An OBD can be sent to any mobile subscriber not in DND Multi-lingual experience: An IVR can talk in multiple languages Dynamic user journeys: The IVR journey can be tailor-made for the brand basis objective and information that it is seeking e.g. referral, contest participation etc.	Similar to IVR; complicated and time consuming user journeys can create fatigue -Excessive telemarketing calls can be annoying to consumers and businesses
MMS[2]	A message sent via a Multimedia Messaging Service that contains multimedia objects. A MMS Banner is a transparent advertising screen image that is inserted with text onto an MMS message. This image will be displayed as the subscriber is viewing the complete MMS message. A Complete MMS ad could be the result of a WAP Banner click or a free message sent to subscribers who have opted-in to receive news about the advertiser.	Variety: It has more styles and formats then a simple SMS Functional benefit: It also supports voice, video and images messages. ation that it is seeking e.g. referral, contest participation etc.	Compatibility issue: Only works on multimedia enabled mobile devices and not all feature phones Higher costs: It costs more than a regular SMS

New Mobile Advertising Formats

Channel	Definitions	Benefits	Limitations
BANNER[2]	A graphic mobile ad represented by a banner featuring an image. Similar to a web banner, but with lower size constraints.	Creative & visual communication: Innovative with varied formats Extremely targeted: Audience can be selected on various parameters High Reach: All publishers have mobile banner ads, so the reach is incredible for this channel Quick tip: If you are on a tight budget, mobile banners are the way to go	Measurement Metric: Accidental clicks can skew your reach numbers Limited space: You can't get very creative with your messaging. It has to be crisp and to the point
INTERSTITIAL[2] (it is a form of a banner ad)	Interstitial ads are full screen ads that cover the interface of their host app. They're typically displayed at natural transition points in the flow of an app, such as between activities or during the pause between levels in a game.	Disruptive: Interstitials a clutter breaking incremental inventory format Size does matter:The direct call to action and larger size combine to make interstitials a particularly effective form of mobile advertisement. Quick Tip:They are very effective for branding, building traffic and conducting transactions	Reach:Inventory isn't present with all publishers Intrusive:If not crafted carefully, the can hinder user experience Data Usage:It consumes more data thereby incuring cost on end user
Motion Mobile Ads[4] (it is a form of banner ad)	With motion ads i.e. gyroscope technology, users now can perform movements such as a "shake" to respond or a "tilt" to change the view. It's not just convenient without the need for fingers tapping; it also engages users with high interactivity.	Immersive format:Highly interactive edge of the ad makes it unique Novelty:The native features being invoked by the banner make it an feel good experience Dial up communication USP:The innovation possibilities can bring out the brand proposition better	Trial & Error:The ad creative is tricky to make, many time the creative is not able to do justice to the motion
RICH MEDIA[5]	Rich media is a digital advertising term for an ad that includes advanced features like video, audio, or other elements that encourage viewers to interact and engage with the content.	Interactive & Dynamic capability:High on interaction catering to audio, video, animation. Play me:The RM banner can be a playable format with a gratification fulfilment Powerful branding:Even if the ad isn't clicked on, viewers are still more likely to see and remember the ad than traditional display advertising	Size heavy:Takes time to load, need good internet connection to work seamlessly High risk on ad blockage

Channel	Definitions	Benefits	Limitations
CAROUSAL ADS[6] (it is a form of rich media)	Carousal ads lets advertisers showcase multiple images and links in one ad. They support up-to 5 images in one ad.	Interactive:Carousel ad format is interactive, attention-grabbing and helpful for both direct response and brand awareness marketing Catalogue Format:The format of the ad allows product to display more than one feature at the same time	Navigation:The user interface for carousal ads aren't easy to navigate for all users and it becomes tougher if mobile data is slow
VIDEO[5/6]	Video as a creative type overcomes one of the biggest objections to mobile ads: using sight, sound, and motion to tell a brand's story overcomes the limitations of screen size. Moreover, it builds a dynamic, immersive, rich media ad that works across the fragmented mobile interactive landscape.	A stunning and captivating way for publishers and content creators to share immersive stories -Increased share-ability -Marketers can take a deep dive into analytics – shared, views, complete views, likes and other social interaction all metrics that marketers love to know about -With vertical video now rising, more and more people will consumer videos on mobile as they usually use mobile without tilting the screen horizontally	Viewer has an option to skip the video ads -Non skippable video ads may make the user hop onto another video -Many ads are inserted in single video so there is a lot of competition. Therefore, marketers have to go that extra mile to create great content
INTERSTITAL VIDEOS	Video as a creative type overcomes one of the biggest objections to mobile ads: using sight, sound, and motion to tell a brand's story overcomes the limitations of screen size. Moreover, although rich media creative tools are steadily improving, porting a PC or a TV spot to mobile (making sure the content suits the unique aspects of mobile) can be easier than building a dynamic, immersive, rich media ad that works across the fragmented mobile interactive landscape.	More in less:The interstitial video brings alive the static. It gives the user more information in the same time and better size Engaging:As video is a better engagement format ads that speak have better engagement time spent	Data usage:They take a long time to load and consumes data thereby incurring a cost on the user

Channel	Definitions	Benefits	Limitations
Pre/mid/post roll video	The video ad can appear when a user initiates video play either in the beginning (pre-roll), at points in between (mid-roll), or after (post-roll). Video ads are offered as either skippable or non-skippable. In skippable video ad the viewer has an option to skip an ad after 5, 10 or 15 seconds as defined by the brand or the platform. In non-skippable apps the viewer has no choice but to watch the ad completely.	Receptive mindset-Since the user has searched/streaming for a video, he is in receptive mindet & threfore the pre/mid/post rolls have a strong impact on the user Get there faster:The pre/mid/post rolls are seen as a timer due to their short duration format	Intrisive:If not planned carefully the pre/mid/post rolls can become annoying if the same message is played for the user at a very high frequency capping
MAST HEAD	Mast heads are ads that present on the homepage of video publishers like Vuclip and YouTube. They are the most seen ads on the platform and are present on the spot for a complete day.	Paint the town:The mastheads are premium property as the skin of the web/mobile destination sets the tone/mood for the user experience on it Impact:Mastheads are high impact properties as they cover 75% of the area on the page and leave a lasting message	Expensive:Due to the high impact nature of mast heads, they are expensive within a digital plan
TRUE VIEW ADS	These ads are the ones that viewers actively want to see. They appear on Google search when a viewer is searching for a topic. This is an example of active advertising where the user opts in to watch an ad. These ads are run on YouTube and GDN (Google Display Network).	Challenge creativity: The true view ads are a challenge for the creative team to deliver a message in a short time but maintaining the stickyness of the communication so user doesn't skip Accurate impact measurement: True view ads measure the real impact of the communication as users choose and continue to watch the ads they like	Skippable: User is not bound to view the whole ad and can skip it
360 VIDEO ADS	As the video plays, watch the scene come alive. Turn your mobile device or drag your finger to move around within the video and explore every angle.	3D Experience: Breaking the clutter of 2D and static ads, 360 degree ads give a 3D experience to the user which is novel Immersive: Ads are crafted with delivering an immersive experience to the user	Expensive: It's difficult to get the 360 degree creative and user experience right.

Channel	Definitions	Benefits	Limitations
LIVE VIDEO	Live Video is a platform where a user can create a video of their experience and share it on the spot. If you are at a concert or doing an adventure sport you can share your live experience with your friends, fans, followers etc. Live Videos is more of a content platform rather than a direct advertising platform.	No Royalty: Since its user generated content and user is willing uploading the vid as a participation criteria, the content repository can be reused by the brand with no additional costs incurred on content licensing Trendy & Targeting: Ad campaigns cater to a segment of users with smartphones and willing to uplaod their work of art. Thereby addressing a targeted audience with a contemporary offering	Data Only: Caters to only market with mobile internet penetration Junk master: A lot of junk comes in as a part of the campaign if the CTA is not clearly defined
In Game advertising[7]	In-game advertising (IGA) refers to advertising in mobile video games. IGA differs from advergaming, which refers to a game specifically made to advertise a product. IGA allows brands to have their name or products featured in digital games. Huge billboards placed in virtual cities can feature the logos of major corporations.	Not at all intrusive and places your brand name in the user experience in an organic fashion -High on creativity as gives the brand several ways to integrate themselves in a game -The gamer while playing the game sees a brand placement in high on purchase intent	Choosing the right game to advertise your brand is a critical issue. The game that is relevant for your brand may not have many users but these users will have high intent on purchase. Look less for mass reach, look for targeted reach -In-game have engaged user that will have high intent for your brand. On the other hand, the users are so engrossed in playing the game may sometimes miss your brands placement as well
ROAD BLOCK[8]	When a brand occupies all of the home page inventory on major mobile sites and apps for a single day, so a user is confronted with the same ad everywhere with the ultimate objective, of obtaining 100% share of voice for the brand.	It's the one stop shop for branding exercise for major campaigns like a new product launch -A brand reaches all kind of audiences and creates a buzz around its campaign very quickly and effectively -Many ad formats available with rich media, interstitial, homepage take over etc.	Very expensive and marketers end up putting money on properties i.e. apps and websites that are totally contradictory to your brand message and TG

Channel	Definitions	Benefits	Limitations
NATIVE ADVERTISING[6]	Native ads give you the control to design the perfect ad units for any channel (across social, video, audio, search, text and is not limited to a platform). With our Native Ad API, you can determine the look and feel, size and location of your ads. Because you decide how the ads are formatted, ads can fit seamlessly in your application.	Native advertising benefits publishers, advertisers and the audience -Allows for advertisements to be unobtrusive -Higher audience engagement leading to better CTRs	Native is a new advertising format and therefore marketers don't know how to read its performance and where to benchmark it -Higher spends on creating good content
NATIVE CONTENT CREATION	Native advertising has another side to it that is content creation. You can create original content like video, audio or text sponsored by your brand that is read, heard or viewed by audiences on different channels.	Control communication protocol:When content is curated basis brand guidelines there a quality control that the brand has in place Exploratory:The branded content finds its place subtly within a useful article that user is browsing, therefore the user stumbles upon the discovery of the advertising	Expensive: Its expensive to create native content which addresses not just the branding objective but also the fits the platform tonality
EMOTICONS	Emoticons are visual representation of your feelings and emotions. Brands either use existing emoticons for their campaigns or create branded emoticons for themselves to break the clutter.	Monkey see monkey do:They go viral easily My own lingo:They set you apart from other brands Strong non-verbal que:Easily used by consumers What's hot:Trendy and popular with the youth audience	Get it right:If used very casually or in a wrong connotation can create a bad reputation for the brand, the entire message can be taken out of its original context
MOBILE BROWSER	Mobile browsers don't exactly have ad formats, they are prevalent for content partnerships which helps you promote your brands in-terms of increase in number of users accessing your content. If you are a news aggregator you can partner with a browser to push your content, this is viable for any category that is content lead be it shopping, video streaming, music etc.	Instant reach:It is used by everyone with a smartphone, so usage is high Choose what you say:You can become an exclusive partner with a browser to create a particular content and all users will consume your content for the said category	Ad blocker:Browser ad blocks are prevalent No new:Limited options on ad formats

Channel	Definitions	Benefits	Limitations
AUDIO	Music is amongst the top consumed media by people which has led to a tremendous growth in music streaming apps and hence the growth of audio advertising. Here you can advertise in 2 ways – Only audio ads and audio + companion banner ads	Tune me in:Highly engaged audiences Non-Intrusive: Placed after the listener has consumed a good amount of uninterrupted music makes these ad spots nonintrusive 2 in 1:The companion banner solves the problem of no CTA in audio ads	Missing the mark:People are using the apps while working on driving the car then they aren't able to see the companion banner.
ONLY AUDIO ADS	Audio ads which are basically in-stream ads for music listeners on music streaming apps		
AUDIO + COMPANION BANNERS	With the audio ad you get banners placed when the audio spot is running which gives your brand more visibility		
PUSH NOTI FICATIONS	Push notification is the message you get from an app or browser in your mobile devices notification center. It can be an update, an ad or a piece of information.	Captive audience: You can reach your apps/browsers entire user universe at once Now you see me:It is displayed even on lock screens (if user has that setting on) when your app or browser isn't been used by the user Post it: It is non-intrusive and doesn't hamper user experience	Turn off: The user can switch off the notifications Don't overdo:If you push many notifications in a day the user can also uninstall the app

Channel	Definitions	Benefits	Limitations
MOBILE SEARCH[5]	A type of AdWords ad that can appear on webpages and apps that are viewed on a mobile device like a cell phone or tablet. For AdWords, "mobile" is defined as where the ad can appear: on "mobile" devices. These include high-end mobile devices with smaller screens, such as smartphones.	Just google it:More than half the Indian population uses mobile devices to make their primary research, making mobile search highly apt and effective for any brand Be where you want to be:Heightened keyword targeting available. You are charged on a click therefore you know action was took by a consumer	Info overload:Too much competition with both paid and organic results. It takes time to start performing, it’s more of a long term investment.
LOYALTY PROGRAM	A loyalty program is a rewards program offered by a company to customers who frequently make purchases in this case purchased on the mobile app. A loyalty program may give a customer advanced access to new products, special sales coupons or free merchandise.	Brand love:Caters to loyal users who want to be a part of the brand platform Stickyness:Increases repeat usage with engaging content and useful info Gold class:Increase customer loyalty and future sales, helps in up-selling VIP feel good:No problems of carrying cards and coupons they are present in your app virtually	Notional value:Many coupons are available only if you make a bigger purchase, the consumer may feel cheated and hence uninstall your app
LOCATION BASED[6]	In Location targeting section, you can select the name of one or more countries, states, provinces, cities, congressional districts, zip codes (US only) or post codes (internationally) to show your ads to people in those locations. You can also choose a radius within which the ads should be displayed.	Sharp targeting:Targets the customer when near the store helps increase customer’s intention of a buy Share of competition:Marketers can target their competition’s locations and try and get their customers as well Here i am:Improves your businesses search results as well	Limited reach: Area to which you can target your consumers is restricted Data usage:Needs strong mobile data to use maps Limited market landscape:Not vastly available everywhere

Channel	Definitions	Benefits	Limitations
MOBILE APPLICATION[2]	Software solutions that power the business logic for mobile marketing initiative(s).	Seamless:User experience Defined engagement:Can serve utility or innovative/experiential engagement Stickyness:Long sustaining customer relationship High Top of mind recall:users download app for a specific purpose therefore their top of mind recall for the app us high	Downlaods:Driving traffic and downloads requires additional marketing budgets making it an expensive asset to promote for marketers Variety engagement:Further budgets required to keep the users engaged Shelf life:User uninstalls If the app if it doesn't serve their interest anymore, therefore need to always have new content on the app
IN-APP ADVERTISING[5]	Showing ads in mobile apps. You can reach a growing audience of people using mobile phones and tablets by showing your ads in apps.	Highly Targeted and Innovative -Captivated audiences -Better performance metrics can be recorded Too much advertising within the app can push consumers to uninstall the app	Too much advertising within the app can push consumers to uninstall the app
PRE-EMBEDS	Many mobile apps are pre-embedded in smartphone software and is available to all users who buy that particular device. For e.g. – Google applications are present in all android devices. Similarly many external application also have deals with OEMs (Original Equipment Manufacturers) and are pre-burnt or pre-loaded in their devices.	Mobile apps that are already present in the device have higher chances to be used by the device owner as the app can't be removed from the device -The mobile app gets better visibility and usage if it's pre-embedded in a device	The user can't uninstall the app from the devices if s/he doesn't wish to use it -The app stays in the device occupying the space which could have been used for storing something else. This will cause the app to have lesser active users.

Channel	Definitions	Benefits	Limitations
QR CODE[10]	A one-dimensional bar code conveys information by the width of its bars and spaces, or the difference in their horizontal dimension. In contrast, a two-dimensional matrix bar code like the QR code communicates information by the arrangement of dark and light elements in columns and rows. The position-detection patterns, located in three corners of each QR code, allow the code to be read quickly and from any angle.	Accurate monitoring and measurement -Dynamic user journey -Economical, anyone can create a QR code online for free and use it as per need -Integrated medium, works best with OOH and Print	Dependent on Print media for fulfilment of CTA -Requires user to have a QR code scanner app
AUGMENTED REALITY[11]	An enhanced version of reality created by the use of technology to overlay digital information on an image of something being viewed through a device (as a smartphone camera).	New & Innovative channel of mobile advertising -Immersive and Experiential with a Dynamic user journey -Shock and Awe - creating curiosity about new engagement medium and then deploying a seamless experience	Costly requires professional and technical teams -Medium Understanding is very less by both consumers and marketers -Requires on ground assistance -Single time user experience
VIRTUAL REALITY[11]	An artificial world that consists of images and sounds created by a computer and that is affected by the actions of a person who is experiencing it	Virtual reality creates a realistic world which is an exciting place to be for consumers -It enables consumers to explore things like never before where they can experiment with an artificial environment -It's a disrupting idea where consumers will remember your brand for a long time	The equipment used in virtual reality is very expensive -The technology is not understood by consumers as well as marketers -There is no metrics to measure its success

Channel	Definitions	Benefits	Limitations
NFC[12]	NFC Is short range wireless technology to exchange data among various devices with various usages.	Can be used for store theft detection, utility and security based for access cards etc. -NFC technology essentially converts smartphones into loyalty cards, single-tap location 'check in' devices, concert tickets, coupon carriers, contactless payment devices, transit tickets, and secure keys to access cars, hotel rooms, buildings, and computers—the possibilities are endless	Phones with NFC readers are expensive -Cost of installation and campaign design is very high

[1]TRAI \| [2]MMA \| [3]Airtel \| [4]Mobile Lead Blogs \| [5]Google \| [6]Facebook \| [7]Wikipedia \| [8]Clickz Blog \|
[9]Invertiopedia Blog \| [10]Merriam Webster \| [11]Sony

Annexure 2

Mobilescape Definitions

- *Media Agencies* – An agency works with brands owners to identify a brand's position, messaging and creative communication.
- *DSPs* – Demand Side Platforms which focus on buying media for clients with an aim to increase the return on spends. They generally comprised of a manual trading desk as well as a programmatic buying channel called real time bidding platform.
- *Ad networks* – Advertising networks were the purest form of networks, where a single network would interact on both sides the brands and publishers and would then match the demand to supply. The DSP, SSP and trading desks are the evolved versions of the ad-networks.
- *Exchanges* – Exchanges are the platforms which are connected to several DSPs and SSPs. They are generally used for increasing the reach on either the demand or supply side.
- *DMPs* – Data Management Platforms are platforms that aggregate user level data and help DSPs as well as SSPs in making bid level decisions of pricing, biding, bid winning probabilities as well as the conversion probabilities at each impression level.
- *SSPs* – Supply side platforms are the counter parts of the DSPs. They are the media selling platforms, with a focus on increasing the publisher revenue. They generally comprised of a manual trading desk as well as a programmatic selling channel called real time auction platforms.
- *Social Media and Instant Messaging platforms* – a dedicated website or other application which enables users to communicate with each other by posting information, comments, messages, images, etc.
- *Content Aggregators* - A content aggregator is an app or a web service that gathers content from different sources for reuse or re-monetization.
- *Mobile Gaming* – A video game played on mobile phone, tablet or portable media player
- *Mobile Browsers* – A mobile browser is a web browser designed for use on a mobile device such as a mobile phone or PDA. Mobile browsers are optimized so as to display Web content most effectively for small screens on portable devices.
- *Rich media platforms* – They are the creative suits required to create, host and manage the delivery of the specialized ad units. The rich media ad units allow a user to interact with the elements of the creative.
- *Location Tech* – Ad technology platforms used for enriching the targeting and decision making part of the ad serving using location data of the users.
- *Measurement and Analytics platforms* – Third party measurement and attribution platforms which act as an unbiased delivery measurement tools.
- *Carriers/ISPs* – Wireless communication service providers which owns or controls all elements necessary to sell and deliver services to the end user.
- *Devices* – Manufacturers or marketers of portable computing devices like smartphones and tablets.
- *Operating System* – Software specifically designed to run on mobile devices such as mobile phones, smartphones, tablets, etc
- *App Stores* – Digital distribution platform for mobile apps.

Acknowledgement

We would like to acknowledge the efforts put in by:
From MMA: Preeti Desai
From GroupM: Tushar Vyas | Mausumi Kar | Parveen Sheikh
From Madhouse: Arjun V Chadha| Liza Gogoi | Milind Pathak| Sameer Jain and Madhouse team

Special thanks to our key partners:

From IDC: Jaideep Mehta | Navkendar Singh | Jaipal Singh
From InMobi: Shamla Dn | Supriya Goswami

RESEARCH TEAM:

Akila Jayaraman
Director Marketing, Madhouse India

Sahiba Sachdev
Manager Marketing & Research, Madhouse India

About GroupM:

GroupM is the leading global media investment management company serving as the parent to WPP media agencies including Mindshare, MEC, MediaCom, Maxus, and Motivator in India, as well as the programmatic digital media platform, Xaxis, each global operations in their own right with leading market positions. GroupM's primary purpose is to maximize performance of WPP's media agencies by operating as leader and collaborator in trading, content creation, sports, digital, finance, proprietary tool development and other business-critical capabilities. GroupM's focus is to deliver unrivaled marketplace advantage to its clients, stakeholders and people.

About Madhouse India:

Madhouse India was established in 2012, in collaboration with Madhouse China and WPP. In the last 4 years Madhouse India has grown to become the leading 'Data Driven Mobile Marketing Solutions Company' in South Asia. Madhouse's mission is to 'Make Brands Love Mobile', Madhouse is actively evangelizing the journey of 'Mobile First to Mobile Most' among brands and advertisers in India.
Madhouse India has been a pioneer by introducing many 'firsts' in terms of mobile marketing innovations in India that has helped brands and advertisers tap the right audience and establish a greater connect with their consumers. It has also enabled creating several platforms for marketers which answers all their questions relating to Mobile Advertising, Mobile Marketing and Optimizing Mobile Media.

About MMA:

The MMA is the world's leading global non-profit trade association comprised of more than 800 member companies, from nearly fifty countries around the world. MMA Member companies hail from every faction of the mobile media ecosystem. Our consortium includes brand marketers, agencies, enabling technologies, media companies and others. The MMA's mission is to accelerate the transformation and innovation of marketing through mobile, driving business growth with closer and stronger consumer engagement.

Disclaimer

The information contained in this Mobile Ecosystem and Sizing Report India 2016 ("Report") provides the readers a comprehensive overview of the mobile marketing ecosystem in India and the various factors that influence it. The information contained herein is purely for information purposes only and we assert that no business or investment decisions be made solely based on the information presented in the Report. If any such decisions are made based on the contents of the Report, then we shall not be responsible for the same.

The information provided herein is on "as is" basis and is based on data sourced from, or provided by, third parties or publicly available sources, *for which prior express consents have been obtained*. While reasonable endeavours have been made to present accurate data in the Report, no representation or warranty, express or implied, is made or claimed as to its accuracy, completeness, correctness or merchantability and fitness for a particular purpose. Accordingly, Madhouse Mobile India Private Limited and GroupM Media India Private Limited including its directors, subsidiaries, associates, and employees shall not be in any way responsible for any loss or damage that may be caused to any person from any error in the information, views and opinions expressed in the Report.

The logos, trademarks, and any other marks used in the Report belong to their respective owners and have been reproduced in this Report with their prior permission.

The contents of this Report are confidential in nature and without prejudice. No part of the Report may be divulged to any third party, reproduced or transmitted in any form or by any means, electronic, photocopying, mechanical, recording or otherwise without our prior express written consent. Appropriate express written consent be sought from various publishers/individuals who have been quoted in the Report prior to borrowing/using/quoting their content.

The views expressed in the Report are based on the information available to us as of the date of the Report and are subject to change from time to time without notice. We do not accept the responsibility to update this Report nor do we accept any liability arising from the use of this Report in any manner whatsoever.

groupm

MMA
MOBILE MARKETING ASSOCIATION