

A Review of Indian Mobile Phone Sector

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Abstract: *The Paper Has Attempted To Understand The Indian Mobile Handset Overview, Market Size, Competitive Landscape With Some Of The Category Data. Also Some Relevant Studies On Indian Mobile Handset And Its Global Comparison Have Been Focused With The Impact On Economy And Society.*

Keywords: *India, Mobile handsets, market size, Global Comparisons, GSM*

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I. Introduction

India is currently the 2nd second-largest telecom market and has registered strong growth in the past decade and a half. The Indian mobile economy is growing quickly and will contribute extensively to India's Gross Domestic Product (GDP), according to report prepared by GSM Association (GSMA) in association with the "Boston Consulting Group" (BCG).

The direct and reformist strategies of the GoI have been instrumental alongside solid customer request in the quick development in the Indian telecom division. The administration has empowered simple market section to telecom gear and a proactive administrative and reasonable structure that has guaranteed openness of telecom administrations to the customer at sensible costs. The deregulation of "Outside Direct Investment" (FDI) standards has made the segment one of the top developing and a main 5 business opportunity maker in the nation.

The Indian telecom segment is probably going to create 4 million immediate and roundabout business openings throughout the following 5 years as indicated by figures made by Randstad India. The employments are relied upon to be made because of the mix of government's endeavors to build entrance in provincial zones and the quick increment in cell phone deals and high web utilization.

"Worldwide Data Corporation" (IDC) predicts India to go past the US as the second biggest cell phone showcase all inclusive by 2017 and to proceed with high development rate throughout the following couple of years as individuals change to cell phones and relentlessly move up to 4G.

Market Size

Driven by solid acknowledgment of information utilization on handheld gadgets, the whole portable administrations showcase income in India is relied upon to touch 37 billion USD in 2017, enlisting a 5.2 for each penny (CAGR) in the vicinity of 2014 and 2017, as indicated by research firm IDC.

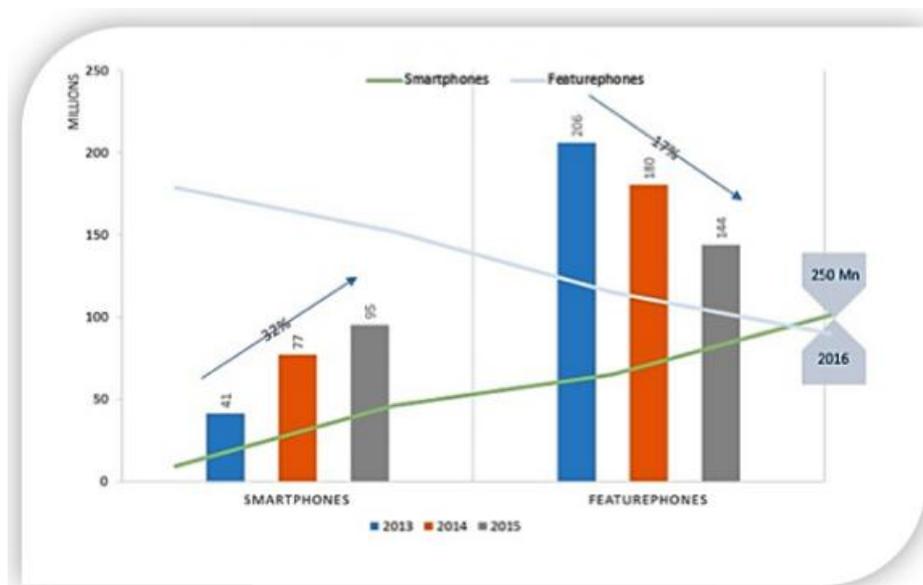
India is required to have more than 180 million cell phones by 2019, contributing around 13.5 for every penny to the worldwide cell phones advertise, in light of rising moderateness and better accessibility of information administrations among different elements. According to a report by top Market research firm, the Indian telecom services market will likely grow by 10.3 per cent YoY to reach 103.9 billion USD by 2020. According to a report by Ericsson Mobility Report India, mobile phones subscriptions in India is expected to increase four-fold to 810 million users by 2021, while the total mobile phones traffic is expected to grow 17 fold to 4.2 Exabytes (EB) per month by 2021.

According to a study by GSMA, mobile phones are expected to account for 2 out of every 3 mobile connections globally by 2020 making India the fourth largest mobile phones market. Total number of 4G enabled mobile phones shipments in India stood at 13.9 million units in the quarter ending Dec 2015, which was more than 50% of total shipments, thereby surpassing number of Third-Generation (3G) enabled mobile phones shipments for the first time. Broadband services user-base in India is likely to grow to 250 million connections by 2017.

II. The India Mobile Handset Overview

2015, has seen some tectonic industry. We kept on observing passage of new brands and the development of arrangement of existing ones. From a leap forward perspective, there wasn't anything noteworthy aside from that Samsung's dispatch of the bended plan (Edge arrangement) and Apple's iPhone 6S and 6S Plus with 3D touch usefulness. Both the advancements occurred in the excellent portion (> Rs.50,000), which in India is only 0.6% (Percentage of Unit Shipments) of the market.

Figure 1.1 : India mobile phone versus Feature phones, 2013-2015



Source: CRM (Cyber Media Research Report, 2016)

Along these lines, while it has been on numerous occasions demonstrated India is a low to medium estimated handsets showcase, 2015, has not added some awesome capabilities to client encounter. In any case, the industry has possessed the capacity to offer more to a client for same or even less. Episodically, the ASP (Average Selling Price) for a Mobile telephone in 2013 was Rs.13,000 (vol: 41 mn units), which has come down to Rs.10,700 (vol: 95 mn units) before the finish of 2015. In the meantime, the determinations of a Mobile telephone have enhanced generously. In 2013, just 0.07% of Mobile telephones delivered had 4GB RAM for example, which in 2015, was somewhat more than 0.6%. Also, other real details that trigger the purchaser's choice to buy a Mobile telephone have enhanced while ASPs displayed a subsiding pattern.

Cell phones kept on indicating strength and developed at a yearly normal development of 32% while Feature telephones kept on contracting. The decrease in highlight telephone shipments was 17% on a yearly normal premise. An examination of the present situation, combined with an investigation of chronicled patterns reveals to us that the market for India portable handsets industry will settle around 250 mn units in 2016, a simple 4% development contrasted with 2015. The standpoint appears recommend that this pattern will proceed for a couple of more years, as we move towards a 'Cell phones just' market; this is on account of the anticipated end of Feature telephones does not appear to be likely at whatever time soon.

Mobile Phones in India

- Volume sales of feature phones witness a decline of 17% in 2016 to 98.7 million units
- Increasing popularity of mobile phones underpins decline in demand for feature phones in India
- Volume sales of mobile phones grow by 27% in 2016 to 102.4 million units
- Samsung India Electronics Pvt Ltd maintains its leadership position in mobile phones with a 26% volume share in 2016
- With decreasing unit prices for mobile phones, consumers are shifting from feature phones to mobile phones
- Volume sales of mobile phones are expected to post a CAGR of 7% over the forecast period to reach 277.4 million units by 2021

TRENDS

- Volume sales of mobile phones grew by 1% in 2016, driven entirely by the increase in demand for mobile phones.
- With an increasing number of manufacturers in the mobile phone category, prices of mobile phones have been declining. With falling prices of mobile phones, consumers have started replacing devices such as tablets, portable media players and cameras with mobile phones.
- Mobile phones remained the fastest growing category under mobile phones in 2016. Volume sales of mobile phones grew by 27% in 2016 to reach 102.4 million units.
- Mobile phones provide multiple options including but not limited to taking photographs, playing audio and video files, storing data, playing games, internet connectivity etc. Instead of using multiple devices, consumers are replacing their existing devices with mobile phones.
- In terms of operating systems, Android accounted for 96% of volume sales in 2016 followed by iOS with just 3%. Android-running mobile phones are available across all price ranges and are highly customisable compared to iOS devices. The Android operating system also allows users the option of installing third party apps unlike Apple. iOS is only used on Apple devices and Apple phones are very expensive and targeted at a smaller consumer base.
- Rural India accounted for 40% of mobile phone volume sales in India in 2016. The number of electronics and appliance specialist stores in rural India is on the rise which is increasing the demand for mobile phones. Most consumers in rural India tend to buy mobile phones when they visit cities or tell their friends or relatives working in cities to send them a mobile phone.
- The penetration rate for mobile phones increased from 66.3% in 2015 to 88.3% in 2016 and at the same time the penetration rate of feature phones decreased from 153% in 2015 to 116% in 2016. Many manufacturers have started entering the mobile phones category in India and as a result prices of mobile phones are in decline. With falling prices of mobile phones, consumers have started replacing their feature phones with mobile phones.
- The share of mobile phones with a screen size from 4.7 inch - 5.49 inch increased from 32% in 2015 to 35% in 2016. In addition, demand for mobile phones with a screen size of more than 5.5 inches is also on the rise. With greater numbers of larger-screen mobile phones introduced onto the market, consumers are replacing their tablets with larger-screen mobile phones.
- The average price of a mobile phone in India declined from INR9,268 in 2015 to INR9,006 in 2016. Every year a large number of new mobile models are introduced and prices of these products are expected to drop to sustain demand.
- In India, most consumers use pre-paid mobile services as these can be recharged as per consumers' needs. In this way, customers can change recharge plans frequently based on their usage and availability of money. Post-paid mobile services are typically used by working professionals and they tend to spend more compared to pre-paid users.
- Electronics and appliance specialist retailers accounted for 79% of volume sales of mobile phones in 2016. The internet retailing share increased from almost 15% in 2015 to over 18% in 2016. Internet retailers are offering heavy discounts and also exchange offers which are encouraging consumers to buy from online retailers.

COMPETITIVE LANDSCAPE

- Samsung India Electronics Pvt Ltd maintained its leadership position in feature phones with a 28% volume share in 2016. The company's share improved from 23% in 2015. With manufacturers sinking production due to falling demand, Samsung was able to see growth in its sales due to enhanced customer service and higher brand value.
- Samsung India Electronics Pvt Ltd also led sales of mobile phones in India with a volume share of almost 25% in 2016. Apple India Pte Ltd saw a 40% jump in sales in 2016 to reach 2.8 million units. The company launched the iPhone 6 and iPhone 6s, which were well received by consumers. With these new launches there was also a drop in the price of the Apple iPhone 5, adding to the demand.
- Sales of mobile phones in India are equally dominated by national and international brands. Among the international players, Samsung India Electronics Pvt Ltd, Lenovo India Pvt Ltd and Xiaomi Technology India Pvt Ltd led the market. Domestic players such as "Micromax Informatics Ltd", Intex Technologies (India) Ltd and Lava International Ltd saw good growth in their sales.
- Reliance Industries and Idea Cellular have become the second and third players, respectively, to launch 4G services in India after Bharti Airtel Limited. With this the prices of 4G services are expected to come down, increasing demand for 4G mobile phones in the country.

PROSPECTS

- Declining unit prices for larger-screen mobiles are expected to drive demand for mobile phones in India over the forecast period. With more larger-screen mobile phones available at economical prices and better specification, consumers will slowly start replacing their tablets with mobile phones, pouring demand for mobile phones in the country
- Volume sales of mobile phones in India are expected to post a CAGR of 18% over the forecast period to reach 231.5 million units by 2021.
- On the other hand, demand for feature phones is expected to decline, with a negative CAGR of 14% over the forecast period, taking sales to 45.9 million units by 2021. With mobile phone prices falling, consumers are replacing their feature phones with mobile phones. Having said that, there are many uneducated people in India who do not know how to use mobile phones and will continue to use feature phones and this will drive demand for feature phones over the forecast period.
- The penetration rate for feature phones is expected to decrease from 117% in 2016 to 90% in 2017. The limited demand for feature phones is expected to be driven by people in rural India and also people who are economically disadvantaged.
- In contrast to feature phones, the penetration rate for mobile phones is expected to increase from 85% in 2016 to 107% in 2017, which will be driven by decreasing unit prices for mobile phones.
- The replacement cycle for mobile phones is expected to remain at 22 months during the forecast period. People spend a large sum of money on a mobile phone and expect to use the product until damaged or new technology is available at an affordable price.
- Rural India's share of retail volume sales of mobile phones is expected to increase from 40% in 2016 to 46% in 2021. Increasing availability of mobile phones in rural India is likely to drive demand for mobile phones in these areas.
- Mobile phones are having a negative impact on sales of tablets. With more larger-screen mobile phones introduced onto the market and at cheaper prices, demand for tablets is expected to decline over the forecast period.
- Android will continue to dominate mobile phone volume sales in terms of operating system during the forecast period.

CATEGORY DATA

Table 1.1 Sales of Mobile Phones by Rural vs Urban: % Retail Volume 2016-2021

% retail volume	2016	2017	2018	2019	2020	2021
Rural	40	41	42	43	44	46
Urban	60	59	58	57	56	54
Total	100	100	100	100	100	100

Source: “Euromonitor International from official statistics, trade associations, trade press, company research, store checks, trade interviews, trade sources”

Table 1.2 Sales of Mobile Phones by Category: Volume 2011-2016

'000 units	2011	2012	2013	2014	2015	2016
Feature Phones	172,052.3	206,462.7	207,082.1	146,278.0	118,229.8	98,721.9
Mobile phones	11,201.6	16,197.6	44,008.8	62,328.0	80,609.1	102,362.5
Mobile Phones	183,253.9	222,660.3	251,090.9	208,606.0	198,838.9	201,084.4

Source: Euromonitor International from official statistics, trade associations, trade press, company research, store checks, trade interviews, trade sources

Table 1.3 Sales of Mobile Phones by Category: Value 2011-2016

INR bn	2011	2012	2013	2014	2015	2016
Feature Phones	815.0	929.1	838.9	543.4	408.9	328.6
Mobile phones	153.7	195.8	451.8	601.4	747.2	922.0
Mobile Phones	968.7	1,124.9	1,290.7	1,144.8	1,156.1	1,250.5

Source: Euromonitor International from official statistics, trade associations, trade press, company research, store checks, trade interviews, trade sources

Table 1.4 Sales of Mobile Phones by Category: % Volume Growth 2011-2016

% volume growth	2015/16	2011-16 CAGR	2011/16 Total
Feature Phones	-16.5	-10.5	-42.6

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% volume growth	2015/16	2011-16 CAGR	2011/16 Total
Mobile phones	27.0	55.7	813.8
Mobile Phones	1.1	1.9	9.7

Source: Euromonitor International from official statistics, trade associations, trade press, company research, store checks, trade interviews, trade sources

Table 1.5 Sales of Mobile Phones by Category: % Value Growth 2011-2016

% current value growth	2015/16	2011-16 CAGR	2011/16 Total
Feature Phones	-19.7	-16.6	-59.7
Mobile phones	23.4	43.1	499.8
Mobile Phones	8.2	5.2	29.1

Source: Euromonitor International from official statistics, trade associations, trade press, company research, store checks, trade interviews, trade sources

Table 1.6 Sales of Mobile Phones by Type of Contract: % Retail Volume 2011-2016

% retail volume	2011	2012	2013	2014	2015	2016
Monthly Subscription	2.0	1.5	1.0	0.8	0.6	0.4
Pay as You Go	0.3	0.2	0.1	-	-	-
Phone Only	97.7	98.3	98.9	99.2	99.4	99.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Euromonitor International from official statistics, trade associations, trade press, company research, store checks, trade interviews, trade sources

Table 1.7 Sales of Mobile phones by Operating System: % Retail Volume 2011-2016

% retail volume	2011	2012	2013	2014	2015	2016
Windows	4.5	2.6	3.5	4.8	3.0	1.4
iOS	2.4	2.8	3.5	2.2	2.5	2.7
Android	40.9	65.3	87.8	92.7	94.3	95.8
Symbian	32.7	16.5	4.4	-	-	-
BlackBerry OS	9.2	5.6	0.8	0.4	0.2	0.0
Other	10.3	7.2	-	-	-	-
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Euromonitor International from official statistics, trade associations, trade press, company research, store checks, trade interviews, trade sources

Table 1.8 Sales of Mobile phones by Screen Size: % Retail Volume 2016

% retail volume	2016
<4.7 inch	53.0
4.7 inch - 5.49 inch	35.0
>= 5.5 inch	12.0
Total	100.0

Source: Euromonitor International from official statistics, trade associations, trade press, company research, store checks, trade interviews, trade sources

Table 1.9 NBO Company Shares of Mobile Phones: % Volume 2012-2016

% retail volume	2012	2013	2014	2015	2016
Samsung India Electronics Pvt Ltd	13.8	23.8	19.3	24.0	26.3
Micromax Informatics Ltd	6.6	11.8	15.2	14.4	14.8
Lava International Ltd	5.3	6.5	7.2	10.6	11.6
Intex Technologies (India) Ltd	1.5	2.6	4.9	10.7	11.6
Karbons Mobile India Pvt Ltd	7.7	9.0	9.1	6.2	4.5
Lenovo India Pvt Ltd	-	0.2	0.7	2.0	2.6
Microsoft Corp (India) Pvt Ltd	-	-	11.5	6.7	2.3
Xiaomi Technology India Pvt Ltd	-	-	0.4	1.4	1.7

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% retail volume	2012	2013	2014	2015	2016
Gionee Communication Equipment Co Ltd	1.5	1.8	2.0	1.7	1.6
Apple India Pte Ltd	0.2	0.6	0.6	1.0	1.4
Celkon Impex Pvt Ltd	1.0	1.7	1.6	1.4	1.4
Maxx Moblink Pvt Ltd	1.8	2.8	2.0	1.4	1.4
Spice Mobility Ltd	2.9	2.3	2.2	1.5	1.2
LG Electronics India Pvt Ltd	6.0	5.0	3.1	1.7	0.9
Best IT World (India) Pvt Ltd	0.3	0.3	0.4	0.8	0.9
Sony India Pvt Ltd	3.7	1.2	1.2	1.0	0.8
ZTE Corp	1.3	0.9	0.9	0.8	0.6
Videocon Industries Ltd	1.4	2.3	1.8	1.2	0.6
High Tech Computer Corp	0.1	0.1	0.1	0.1	0.1
Motorola India Pvt Ltd	0.8	1.1	0.5	0.1	0.1
Huawei Technologies Co Ltd	0.7	0.2	0.1	0.1	0.1
Kyocera Wireless India	0.1	0.1	0.1	0.1	0.0
Research in Motion Ltd	0.4	0.1	0.1	0.1	0.0
Nokia India Pvt Ltd	21.8	16.7	-	-	-
Pantech&Curitel Communications Inc	-	-	-	-	-
Sony Ericsson Mobile Communications AB	-	-	-	-	-
Others	21.1	8.8	15.0	11.2	13.4
Total	100.0	100.0	100.0	100.0	100.0

Source: Euromonitor International from official statistics, trade associations, trade press, company research, store checks, trade interviews, trade sources

Table 1.10 LBN Brand Shares of Mobile Phones: % Volume 2013-2016

% retail volume	Company (NBO)	2013	2014	2015	2016
Samsung (Samsung Corp)	Samsung India Electronics Pvt Ltd	23.8	19.3	24.0	26.3
Micromax	Micromax Informatics Ltd	11.8	15.2	14.4	14.8
Intex	Intex Technologies (India) Ltd	2.6	4.9	10.7	11.6
Lava	Lava International Ltd	6.0	6.3	10.2	11.2
Karbons	Karbons Mobile India Pvt Ltd	9.0	9.1	6.2	4.5
Lenovo (Lenovo Group Ltd)	Lenovo India Pvt Ltd	0.2	0.7	2.0	2.6
Nokia (Microsoft Corp)	Microsoft Corp (India) Pvt Ltd	-	11.5	6.7	2.3
Xiaomi (Xiaomi Inc)	Xiaomi Technology India Pvt Ltd	-	0.4	1.4	1.7
Gionee (Shenzhen Gionee Communication Equipment Co Ltd)	Gionee Communication Equipment Co Ltd	1.8	2.0	1.7	1.6
iPhone (Apple Inc)	Apple India Pte Ltd	0.6	0.6	1.0	1.4
Celkon	CelkonImpex Pvt Ltd	1.7	1.6	1.4	1.4
Maxx	Maxx Moblink Pvt Ltd	2.8	2.0	1.4	1.4
Spice (Spice Group)	Spice Mobility Ltd	2.3	2.2	1.5	1.2
LG (LG Corp)	LG Electronics India Pvt Ltd	5.0	3.1	1.7	0.9
iBall	Best IT World (India) Pvt Ltd	0.3	0.4	0.8	0.9
Sony (Sony Corp)	Sony India Pvt Ltd	1.2	1.2	1.0	0.8
ZTE	ZTE Corp	0.9	0.9	0.8	0.6
Videocon	Videocon Industries Ltd	2.3	1.8	1.2	0.6
Xolo	Lava International Ltd	0.6	0.9	0.4	0.4
HTC (HTC Corp)	High Tech Computer Corp	0.1	0.1	0.1	0.1
Motorola (Lenovo Group Ltd)	Motorola India Pvt Ltd	-	0.5	0.1	0.1
Huawei	Huawei Technologies Co Ltd	0.2	0.1	0.1	0.1
Kyocera (Kyocera Corp)	Kyocera Wireless India	0.1	0.1	0.1	0.0
Blackberry (BlackBerry Ltd)	Research in Motion Ltd	0.1	0.1	0.1	0.0
Nokia (Nokia Corp)	Nokia India Pvt Ltd	16.7	-	-	-
Motorola (Google Inc)	Motorola India Pvt Ltd	1.1	-	-	-
Motorola (Motorola Inc)	Motorola India Pvt Ltd	-	-	-	-

% retail volume	Company (NBO)	2013	2014	2015	2016
Motorola (Motorola Mobility Inc)	Motorola India Pvt Ltd	-	-	-	-
Pantech (Pantech Group)	Pantech&Curitel Communications Inc	-	-	-	-
Blackberry	Research in Motion Ltd	-	-	-	-
Others	Others	8.8	15.0	11.2	13.4
Total	Total	100.0	100.0	100.0	100.0

Source: Euromonitor International from official statistics, trade associations, trade press, company research, store checks, trade interviews, trade sources

Table 1.11 Distribution of Mobile Phones by Channel: % Volume 2011-2016

% retail volume	2011	2012	2013	2014	2015	2016
Store-Based Retailing	97.5	96.4	94.5	90.0	85.3	81.7
- Grocery Retailers	2.0	2.2	2.3	2.6	2.8	2.9
-- Discounters	-	-	-	-	-	-
-- Hypermarkets	2.0	2.2	2.3	2.6	2.8	2.9
-- Supermarkets	-	-	-	-	-	-
-- Other Grocery Retailers	-	-	-	-	-	-
- Non-Grocery Specialists	95.5	94.2	92.2	87.4	82.5	78.8
-- Electronics and Appliance Specialist Retailers	95.5	94.2	92.2	87.4	82.5	78.8
--- Telco-Operated Stores	1.2	1.4	1.1	0.8	0.5	0.3
--- Other Electronics and Appliance Specialist Retailers	94.2	92.8	91.0	86.7	82.0	78.5
-- Mixed Retailers	-	-	-	-	-	-
-- Other Non-Grocery Specialists	-	-	-	-	0.0	-
Non-Store Retailing	2.5	3.6	5.5	10.0	14.7	18.3
- Direct Selling	-	-	-	-	-	-
- Home shopping	-	-	-	-	-	-
- Internet Retailing	2.5	3.6	5.5	10.0	14.7	18.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Euromonitor International from official statistics, trade associations, trade press, company research, store checks, trade interviews, trade sources

Table 1.12 Forecast Sales of Mobile Phones by Category: Volume 2016-2021

'000 units	2016	2017	2018	2019	2020	2021
Feature Phones	98,721.9	83,518.7	71,158.0	61,053.5	52,750.3	45,892.7
Mobile phones	102,362.5	126,232.1	151,667.1	178,073.9	204,864.6	231,496.9
Mobile Phones	201,084.4	209,750.8	222,825.1	239,127.4	257,614.8	277,389.7

Source: Euromonitor International from trade associations, trade press, company research, trade interviews, trade sources

Table 1.13 Forecast Sales of Mobile Phones by Category: Value 2016-2021

INR bn	2016	2017	2018	2019	2020	2021
Feature Phones	328.6	257.1	203.7	163.3	132.3	108.0
Mobile phones	922.0	1,057.5	1,187.6	1,311.1	1,425.1	1,522.0
Mobile Phones	1,250.5	1,314.6	1,391.3	1,474.3	1,557.4	1,630.0

Source: Euromonitor International from trade associations, trade press, company research, trade interviews, trade sources

Table 1.14 Forecast Sales of Mobile Phones by Category: % Volume Growth 2016-2021

% volume growth	2016/17	2016-21 CAGR	2016/21 Total
Feature Phones	-15.4	-14.2	-53.5
Mobile phones	23.3	17.7	126.2
Mobile Phones	4.3	6.6	37.9

Source: Euromonitor International from trade associations, trade press, company research, trade interviews, trade sources

Table 1.15 Forecast Sales of Mobile Phones by Category: % Value Growth 2016-2021

% constant value growth	2016/2017	2016-21 CAGR	2016/21 TOTAL
Feature Phones	-21.7	-20.0	-67.1
Mobile phones	14.7	10.5	65.1
Mobile Phones	5.1	5.4	30.3

Source: Euromonitor International from trade associations, trade press, company research, trade interviews, trade sources

Table 1.16 Forecast Sales of Mobile phones by Operating System: % Retail Volume 2016-2018

% retail volume	2015	2016	2017
Windows	3.0	1.4	0.5
iOS	2.5	2.7	3.0
Android	94.3	95.8	96.5
Symbian	-	-	-
BlackBerry OS	0.2	0.0	-
Other	-	-	-
Total	100.0	100.0	100.0

Source: Euromonitor International from trade associations, trade press, company research, trade interviews, trade sources

Table 1.17 Forecast Sales of Mobile phones by Screen Size: % Retail Volume 2016-2021

% retail volume	2016	2017	2018	2019	2020	2021
<4.7 inch	53.0	45.0	39.0	32.0	26.0	21.0
4.7 inch -- 5.49 inch	35.0	41.0	45.0	51.0	56.0	60.0
>= 5.5 inch	12.0	14.0	16.0	17.0	18.0	19.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Euromonitor International from trade associations, trade press, company research, trade interviews, trade sources

III. Review of Relevant Studies on Indian Mobile Handset Sector

The competitiveness of Indian mobile hand set sector is very broad multi-dimensional concept that holds numerous aspects such as quality, price, technology, efficiency and macro-economic environment.

In this section, various studies on the Indian mobile hand set sector are reviewed, under different heads pertaining to competitiveness, namely, global comparisons, on- going technology, Revenue and investment trends, Mobile contributing to jobs and economic growth, Employment and public funding, Contribution to public funding and Outlook and trends for 2016–2020 of Indian Mobile handset sector

Global Comparisons

As stated by GSMA's "The Mobile Economy Report" (2017), two-thirds of the world's number at that point required A membership with portable by those wind from claiming 2016, what added up to 4. 8 billion selective subscribers. There may be a self-evident geographic shift underway, for APAC area set will represent two-thirds of the 860 million new subscribers needed Comprehensively Toward those wind of the decade. Toward 2020, Practically three-quarters of the world's people – alternately 5. 7 billion people, will subscribe to portable benefits. Those estimates about territorial infiltration rates might go from 87% On Europe to half On sub-Saharan Africa. Ten nations will represent 72% of Growth On new mobile subscribers around the world. There is an acceptable geographic movement done progress, with Asia situated on represent two-thirds of the incremental membership Growth through the estimated time. India, as of now the world's second-biggest portable market, will make those enter driver for this growth, for 310 million new select subscribers required in the period with 2020, aided Toward enhancing technology, affordability, bring down gadget costs What's more superior organise scope. This is trailed towards China and fast-growth Asian business sectors including Indonesia, Pakistan Furthermore Bangladesh.

GSMA (2017) examination says that there were 3. 8 billion cell phone associations during the conclusion for 2016, helping to A large portion about downright associations around the world (excluding M2M). Acknowledgement rates need to top 65% of the joined build over created businesses. Similarly as with membership growth, Creating business sectors What's more especially Asia may be driving the present period of cell phone Growth. In Creating business sectors cell telephone subscriptions arrived at 47% of the aggregate build at the wind for 2016 and would forecast on scope dependent upon 62% Toward 2020. Done general,

Asia-Pacific district will represent half of the 1.9 billion new cell telephone subscriptions conjectured comprehensively by 2020. India surpassed us should get the second biggest cell phone showcase on 2016, with 347 million cell telephone associations. India will representable simply bashful of one-fifth for new wireless memberships universally in the 4 quite some time will 2020; its wireless build will twofold on 686 million through those time. Moderateness may be getting to be Lesquerella of a boundary should cell telephone selection Likewise incomes climb Also there is proceeded development for sub-\$100 devices, headed by Chinese makers, for example, Oppo, OnePlus, Huawei, Also Xiaomi. Same time China, Japan and South Korea need being those customary cell telephone manufacturing hubs Previously, Asia Pacific region, nearby Makers would also pick up importance to India, Indonesia and the Philippines.

Ongoing Technology shift

The generational (2G, 3G, 4G & 5G) move will versant broadband frameworks through that world continues picking dependent upon catalyst, driven Toward an improved extent for higher pace systems, every last one of All the more alluringly esteemed majority of the data levies What's more noticeable approachability What's more sensibility for cell phones. In the wind from claiming 2012, versatile broadband associations (3G Also 4G technology) accounted for a quarter about downright associations (excluding M2M). This enhanced on 55% eventually Tom's perusing the limit for 2016, with 4 billion mobile broadband associations.

An extra to existing 2.3 billion portable broadband associations is gage the middle of 2016 Furthermore 2020, with those rate of the aggravator rising with 73%. The quick development with 4G stayed a magic part over 2016, for 4G associations stretching 55% in the quite a while should 1.7 billion. To sure, those degrees of 4G associations around the world may guess will extremely about twofold the middle of 2016 Also 2020 from 23% to 41%. Accordingly, by 2020, 2G will during no run through later on make those generally improvements in regards to acquaintanceships.

Operators need contributing profoundly in LTE system rollouts, which bring been instrumental moulding for driving those push previously, 4G Choice. Beginning during 2016, 580 LTE frameworks required been presented in 188 countries. The making scene spoke to 3 fourth of the new framework dispatches done 2016 and presently identifies with essentially under those parcel from claiming aggravator LTE systems, up starting with one-quarter over 2012. 4G frameworks went with really About 60% of the aggregate people over 2016, up from A large portion Previously, 2015 Furthermore 11% over 2012. In the making scene, A large portion of the people will be secured by 4G; this will be depended upon on augment will precise almost 70% by 2020. Conversely, 4G scope levels in the made world, toward 93% of the populace, are recently foreseen that might upgrade toward two rate concentrates to 95% toward 2020.

Revenue and investment trends

Income development in created businesses need to stay generally plane In the most recent couple years, Likewise decreasing incomes Previously, Europe was offset Eventually Tom's perusing improvements On other guideline made markets, for example, those US, Japan and South Korea. In 2016 vital European businesses for example, such that Germany, Spain Furthermore Italy come back to development. Those prime driver from claiming this turnaround may be duty readjustments, which particularly offer more excellent information remittances toward higher cosset & have been executed done an amount for European business sectors. Close-by Extending premium to information, and the sure impact of the former union, these worth adjustments will drive higher pay advancement Previously, 2017. By complexity, those us showcase need to turn into dependably in the span of The majority late few from claiming quite some time yet may be presently entering An additional stale improvement stage, Similarly as robust contention weighs on incomes. From 5% improvement seen in 2014. (YoY), those us showcase produced by 1.7% to 2015, Furthermore, Eventually Tom's perusing An unimportant 0.1% done 2016. T-Mobile USA Also Sprint continue acting Concerning illustration contenders in the market, for that past particularly demonstrating compelling Previously, drawing customers starting with AT&T What's more Verizon. Bringing then afterwards two quite some time from claiming low development, which indicated a Uni for made markets, the making scene bounced back to 2016, for growing incomes 5.3% year-on-year. Macroeconomic headwinds facilitated, with China Furthermore India those key drivers for development; growing enthusiasm for the majority of the data and supporter doorway accelerated advancement rates clinched alongside both countries. Wage improvement clinched alongside making businesses is figure should direct All around those accompanying four a considerable length of time Likewise raised contention to enter business sectors (India What's more Malaysia) Furthermore managerial slices should compact conclusion rates in Brazil weigh with respect to improvement.

Mobile contributing to jobs and economic growth

This esteem included impression changes crosswise over areas. High-salary nations have progressed in computerised economies, gifted work and capital so have a tendency to practice more on esteem creation in

zones, for example, content and administrations. Medium pay markets have upper hands in assembling gadgets (work costs specifically). Low-wage nations have on a normal a less talented workforce, so their biological community design ordinarily depends more on the parts of the esteem chain that are more work serious, especially appropriation and retail.

Notwithstanding their direct financial commitment, firms in the portable environment buy contributions from their merchants in the production network. For instance, handset producers obtain contributions from microchip suppliers and portable substance suppliers require administrations from the more extensive IT segment. Besides, a portion of the benefits and income produced by the environment are spent on different merchandise and administrations, animating monetary action in those divisions. In 2016, this extra financial movement collected a further \$430 billion in esteem include (or 0.6% of GDP). The utilisation of portable innovation additionally drives changes in proficiency and profitability for specialists and firms. The effect of this profitability created around \$1.85 trillion in 2016 (or 2.5% of GDP). By and large, considering the immediate, circuitous and efficiency impacts, in 2016 the portable business made an aggregate commitment of roughly \$3.3 trillion in esteem included terms, proportional to 4.4% of worldwide GDP.

Employment and public funding

In 2016 mobile operators and the ecosystem provided direct employment to more than 11 million people globally. Financial movement in the biological system additionally produces occupations in different parts. Organisations that give merchandise and administrations as generation contributions for the portable biological system (for instance, microchips) will utilise more people thus of the request brought about by the versatile part. What's more, the wages, open subsidising commitments and benefits paid by the business are spent in different areas, which give extra employments. In 2016, around 17 million additional employments were in a roundabout way upheld along these lines, bringing the aggregate effect (both immediate and circuitous) of the versatile business to more than 28 million occupations. The portable biological system likewise makes a noteworthy commitment to the financing of the general population part by means of general tax assessment. In many nations, this incorporates esteem included duty, partnership charge, wage imposes and government-managed savings from the commitments of firms and workers. The biological system made an assessment commitment to people in general funds of legislatures of around \$450 billion in 2016.

Contribution to public funding

Besides the public funding contributions through general taxation, mobile operators made further contributions via two additional channels. In 2016, range barterers created incomes of nearly \$19 billion – half of which was from the sale in India. In a few nations, versatile administrators are likewise subject to part particular expenses, for example, income share charges, social commitment support commitments, SIM and broadcast appointment voucher assessments or yearly range charges.

IV. Conclusion

It is anticipated that worldwide financial commitment of the versatile business with keep on expanding on both relative and supreme terms. Previously, worth-included terms, It's gauged that those biological communities will produce more than \$4.2 trillion by 2020 (4.9% about GDP) up starting with \$3.3 trillion (4.4% of GDP) in 2016. The vast majority of this expand will be expected will benefit additions. In the created world, the selection from claiming M2M results will drive expanded benefit development, profit Growth will be determined by those selections for mobile web benefits.

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