
International Multidisciplinary Research Journal

Golden Research Thoughts

Chief Editor
Dr.Tukaram Narayan Shinde

Publisher
Mrs.Laxmi Ashok Yakkaldevi

Associate Editor
Dr.Rajani Dalvi

Honorary
Mr.Ashok Yakkaldevi

Welcome to GRT

RNI MAHMUL/2011/38595

ISSN No.2231-5063

Golden Research Thoughts Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board. Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

International Advisory Board

Flávio de São Pedro Filho Federal University of Rondonia, Brazil	Mohammad Hailat Dept. of Mathematical Sciences, University of South Carolina Aiken	Hasan Baktir English Language and Literature Department, Kayseri
Kamani Perera Regional Center For Strategic Studies, Sri Lanka	Abdullah Sabbagh Engineering Studies, Sydney	Ghayoor Abbas Chotana Dept of Chemistry, Lahore University of Management Sciences[PK]
Janaki Sinnasamy Librarian, University of Malaya	Ecaterina Patrascu Spiru Haret University, Bucharest	Anna Maria Constantinovici AL. I. Cuza University, Romania
Romona Mihaila Spiru Haret University, Romania	Loredana Bosca Spiru Haret University, Romania	Ilie Pinteau, Spiru Haret University, Romania
Delia Serbescu Spiru Haret University, Bucharest, Romania	Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Xiaohua Yang PhD, USA
Anurag Misra DBS College, Kanpur	George - Calin SERITAN Faculty of Philosophy and Socio-Political Sciences AL. I. Cuza University, IasiMore
Titus PopPhD, Partium Christian University, Oradea,Romania		

Editorial Board

Pratap Vyamktrao Naikwade ASP College Devrukh,Ratnagiri,MS India	Iresh Swami Ex - VC. Solapur University, Solapur	Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur
R. R. Patil Head Geology Department Solapur University,Solapur	N.S. Dhaygude Ex. Prin. Dayanand College, Solapur	R. R. Yaliker Director Managment Institute, Solapur
Rama Bhosale Prin. and Jt. Director Higher Education, Panvel	Narendra Kadu Jt. Director Higher Education, Pune	Umesh Rajderkar Head Humanities & Social Science YCMOU,Nashik
Salve R. N. Department of Sociology, Shivaji University,Kolhapur	K. M. Bhandarkar Praful Patel College of Education, Gondia	S. R. Pandya Head Education Dept. Mumbai University, Mumbai
Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai	Sonal Singh Vikram University, Ujjain	Alka Darshan Shrivastava Shaskiya Snatkottar Mahavidyalaya, Dhar
Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College, Indapur, Pune	G. P. Patankar S. D. M. Degree College, Honavar, Karnataka	Rahul Shriram Sudke Devi Ahilya Vishwavidyalaya, Indore
Awadhesh Kumar Shirotriya Secretary,Play India Play,Meerut(U.P.)	Maj. S. Bakhtiar Choudhary Director,Hyderabad AP India.	S.KANNAN Annamalai University,TN
	S.Parvathi Devi Ph.D.-University of Allahabad	Satish Kumar Kalhotra Maulana Azad National Urdu University
	Sonal Singh, Vikram University, Ujjain	

Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India
Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.aygrt.isrj.org

International Recognized Double-Blind Peer Reviewed Multidisciplinary Research Journal

Golden Research Thoughts

ISSN 2231-5063

Impact Factor :3.4052(UIF)

Volume - 4 | Issue - 12 | June - 2015

Available online at www.aygrt.isrj.org

DEVELOPMENT OF PRICING MODEL FOR SMARTPHONE'S BASED ON SPECIFICATIONS IN INDIA



Kunal S Badade

Vice-Principal and Head, Department of College of Commerce, Latur .

Short Profile

Kunal S Badade is Vice-Principal and Head of Department at College of Commerce in Latur .

Short Profile

Jaideep Jadhav

Head, MIT School of Telecom Management, Kothrud, Pune,



ABSTRACT:

This research paper is all about analysis of data on the Smartphone market which has been collected and structured to analyze the whole Market for New product development of Smartphone. To know the trends of the market, researcher undertook survey and collected data. To know the various hardware specifications, launch date, Price, import price of the Smartphone, secondary data has been collected from the relevant magazines, etc. Researcher analysed the data to find out the best three mobile OEMs in India.

KEYWORDS

Development, Smartphone market, personal digital assistant (PDA)

Article Indexed in :

DOAJ
BASE

Google Scholar
EBSCO

DRJI
Open J-Gate

INTRODUCTION

WHAT IS SMARTPHONE?

In simple words, it is a combination of a phone and minicomputer with a touch screen interface.

A Smartphone is a mobile phone built on a mobile operating system, with more advanced computing capability and connectivity than a feature phone. The first Smartphones combined the functions of a personal digital assistant (PDA) with a mobile phone. Later models added the functionality of portable media players, low-end compact digital cameras, pocket video cameras, and GPS navigation units to form one multi-use device. High-speed data access is provided by Wi-Fi and mobile broadband. In recent years, the rapid development of mobile app markets and of mobile commerce have been drivers of Smartphone adoption. Smartphone's are best known for their- Fast Processing Speed, High Speed Connectivity, Multimedia Features, Utility features, etc.

The following factors drive the growth of Smartphone - increase in disposable income and changing consumer behavior, introduction and availability of Next Generation Cellular Networks, constant reduction in prices, Advanced features, Applications and Digital Content.

FEATURES OF A SMARTPHONE

At the time of buying a Smartphone's, a buyer may consider any one or combination of features as given in the table below:

1. Brand	2. model	3. OS
4. OS Version	5. Display Size	6. Display Type
7. Protection	8. Screen Resolution	9. Camera
10. Front Camera	11. RAM	12. Internal Memory
13. Ex-Sd	14. Processor Make	15. Processor Model
16. Processor Clock Speed	17. Processor Core	18. GPU
19. 2G Network GSM	20. 2G Network CDMA	21. 3G Network
22. 4G Network	23. 3G Data Transfer Rate	24. LTE data transfer rate
25. SIM slot	26. Launch Date	27. Price
28. Import Price		

Smart Phone Market in India

The Indian Smartphone market grew by 84% year-on-year in 2014. According to IDC Asia Pacific Quarterly Mobile Phone Tracker (excluding Japan), vendors shipped a total of 18.42 million Smartphones in 2014 compared to 10.02 million in the same period of 2013.

The sub \$200 category of the Smartphone market is increasing in terms of the shipment share as the contribution from this category stood at 81 % in 2014.

The shipment contribution of phablets (5.5-inch to 6.99-inch screen size Smartphone's) in 2014 was noted to be 5.4 % of the overall Smartphone segment. Phablet category grew by 20 % in terms of

Article Indexed in :

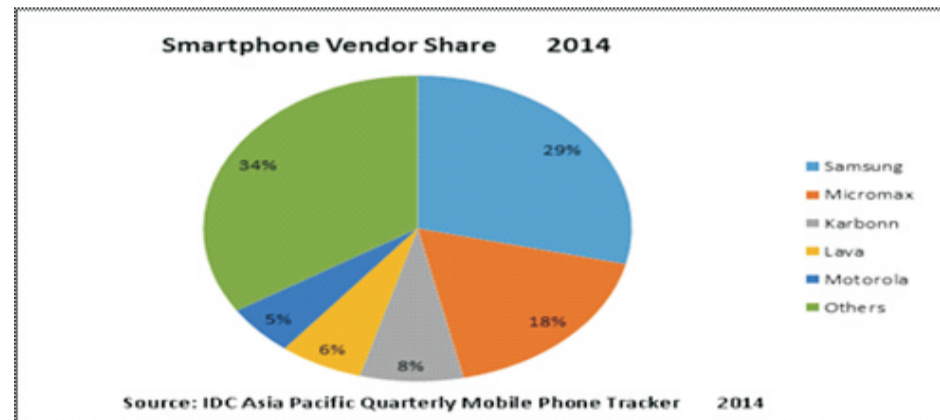
DOAJ Google Scholar DRJI
BASE EBSCO Open J-Gate

DEVELOPMENT OF PRICING MODEL FOR SMARTPHONE'S BASED ON SPECIFICATIONS IN INDIA

sheer volume. More than half of the Phablets shipped are under \$250 price band and Indian vendors are dominant in the noted price segment.

As per IDC, Samsung is the market leader with 29% market share. The maximum sales came from the Smartphone's which are priced below \$150 such as Galaxy Star Pro and Galaxy S Duos. Micromax with 18 % of the market share is at the second spot and has been growing significantly. Karbonn is at third position. However the gap between Micromax and Karbonn has widened significantly. Brand Lava is within the striking distance from Karbonn and it will not be a surprise if Lava topples Karbonn to clinch the third spot in the Smartphone category in the coming days. Motorola has maintained its success story in the Smartphone market in India. Despite being available only through online channel, Motorola has crossed 1 million mark within five months of its launch.

Fig. 1 : Market share of Smartphone's in India



Among the top five sellers, Micromax and Lava were the only ones to have grown at a higher rate than the market growth. Micromax grew by 18 per cent and the Lava by 54 per cent in the overall phone business. Micromax not only toppled Nokia to clinch the 2nd spot but also created a gap between the 2nd and the 3rd spot.

OBJECTIVES OF THE STUDY:

- 1.To determine the features of Smartphone's that affect buying behaviour
- 2.To analyze the market share of Smartphone in India and Pune in particular
- 3.To find out the ideal Smartphone which can sustain in the market according to the specifications
- 4.To determine most preferred Smartphone
- 5.To study the relationship between price and features
- 6.To determine strategies to reduce erosion of price
- 7.To apply backward Integration strategy for Pricing of Smartphone's in India

SCOPE OF THE STUDY

This study focuses on selected smartphones sold in India in general and selected areas of pune

Article Indexed in :

DOAJ	Google Scholar	DRJI
BASE	EBSCO	Open J-Gate

DEVELOPMENT OF PRICING MODEL FOR SMARTPHONE'S BASED ON SPECIFICATIONS IN INDIA

in particular. The study covers only smartphones in the handset segment. The researcher has focussed on price as the most important determinant of demand.

LIMITATIONS

The buyer's preference changes more frequently due to changes in technology. There are many sellers and it is hyper competitive market. So the study of all the brands is not possible.

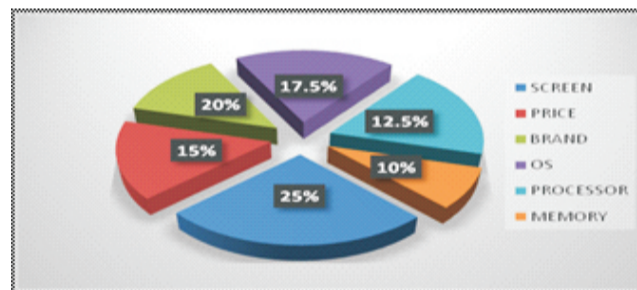
RESEARCH METHODOLOGY

Descriptive and exploratory approach was adopted by the researcher. Researcher focused on the Smartphone users, competitors and all the distributors in selected areas of Pune. The sample unit is retail shops and the sample size is 200. The sample was taken on randomly and questionnaire was designed to determine the buying preference of the customers. Simple Random Sampling technique was adopted and applied. The whole population was divided in subgroups and they all were interviewed resulting in application of Probability Sampling. The primary data was collected with the help of questionnaire. The interview was informal. The secondary data was collected from blogs, Videos etc from relevant magazines, journals and websites.

DATA ANALYSIS AND INTERPRETATION

Table 1: Most Preferred Smartphone according to features:

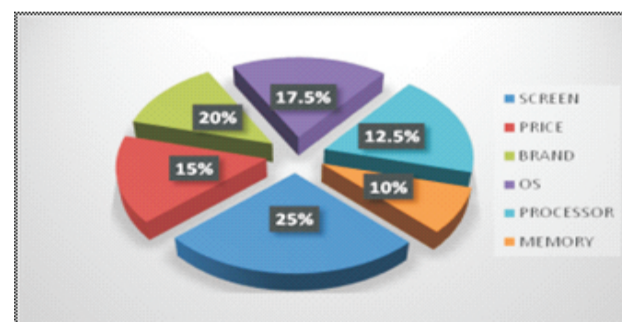
SCREEN	50
PRICE	30
BRAND	40
OS	35
PROCESSOR	25
MEMORY	20



The above table and graph shows around 25% of buyers were interested in screen size than specifications. Secondly, they preferred Android OS with a bigger screen. Customer were least considered about the memory and other specifications like processor.

Table 2: Most Preferred Price range:

5000-10000	35
10001-15000	40
15001-22000	60
22000-30000	35
>30000	30



Article Indexed in :

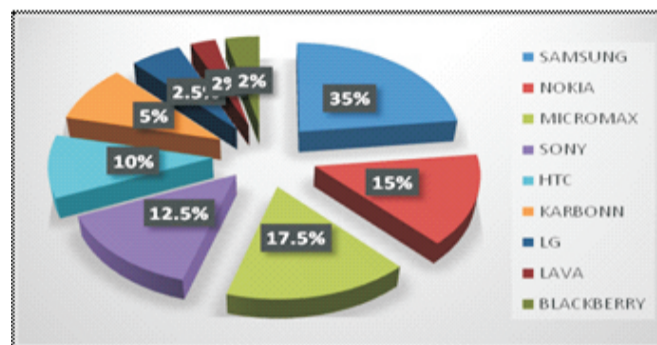
DOAJ Google Scholar DRJI
 BASE EBSCO Open J-Gate

DEVELOPMENT OF PRICING MODEL FOR SMARTPHONE'S BASED ON SPECIFICATIONS IN INDIA

The basic Smartphone which had all the functions was priced in the range between Rs.15001–Rs.22000. Upper middle class preferred this price range.

Table 3: Most Preferred Brand by the retailer's and the Smartphone Buyers:

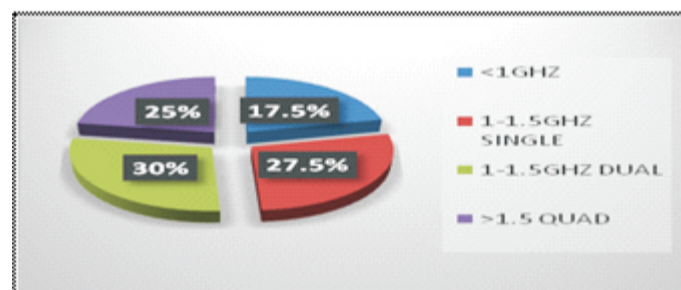
SAMSUNG	70
NOKIA	30
MICROMAX	35
SONY	25
HTC	20
KARBONN	10
LG	05
LAVA	00
BLACKBERRY	05



Samsung was the most preferred brand by the customers. According to market share, Samsung is leading with Micromax at second place. Retailer's mostly preferred brands are Samsung, Nokia and Micromax. Micromax and Karbonn can capture the market by increasing their Product quality with better features. Blackberry and Lava is least preferred due to this brand positioning and specifications of the product.

Table 4: According to Specifications, Most Preferred Processor Clock speed with Core

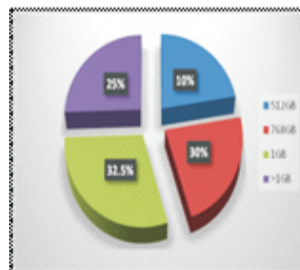
<1GHZ	35
1-1.5GHZ SINGLE	55
1-1.5GHZ DUAL	60
>1.5 QUAD	50



Processor's knowledge was less compared to other specifications. Mostly buyer's preferred Dual Core processor for faster working of Smartphone. Customer needed a processor having clock speed above 1 GHz which could serve their needs.

Table 5: Most Preferred RAM within the Smartphone according to the customer

512GB	20
768GB	60
1GB	65
>1GB	55



Article Indexed in :

DOAJ Google Scholar DRJI
 BASE EBSCO Open J-Gate

DEVELOPMENT OF PRICING MODEL FOR SMARTPHONE'S BASED ON SPECIFICATIONS IN INDIA

Android consumes more Random Access Memory (RAM) than windows phone. So customer had a perception to have high memory which can do tasks more efficiently. 1 Gigabytes (GB) of memory was preferred for playing games. But due to the new Android Operating System (OS) Jelly Bean, 512 Megabytes (MB) and 768 MB of memory was compatible to work faster.23%

Table 6: Analysis according to the Product Range

Price Points	2001-5000	5001-10000	10001-18000	18001-25000	25001-35000	>35001	Total
Samsung	-	60	10	10	20	10	140
Nokia	-	25	20	15	05	05	70
Sony	-	15	25	15	15	05	85
Micromax	25	40	15	-	-	-	55
HTC	-	10	25	15	25	14	90
Karbon	20	45	10	-	-	-	55
LG	-	30	15	05	25	-	85
Blackberry	-	05	05	15	10	05	40
Lava Xolo	-	10	15	05	-	-	30

Samsung has mainly concentrated on the Rs.5001-10000 price point, which has maximum product. Micromax and Karbonn are not extending their price point more than Rs.18000 for better reach in market. Sony has exactly targeted the consumer price point which is Rs.10000-18000 for a Smartphone. HTC is consistent throughout its product line with quality growth rate; whereas one can see that they have not target Lower price band customers.

Table 7: Product Range according to Screen Size

Brand	2.8"-3.5"	3.5"-4.5"	4.5"-4.7"	4.2"-5"	5"-5.5"
Samsung	60	40	10	20	10
Nokia	25	20	15	05	05
Sony	15	35	15	15	05
Micromax	10	20	25	40	15
HTC	10	25	15	25	15

According to the display, Micromax has mainly concentrated on it, for better Multimedia experience for the user. Samsung has increased its price point according to the display size, which made customers think more about:

- o The screen size
- o Price Range
- o Quality and Performance Product

Article Indexed in :

DOAJ Google Scholar DRJI
 BASE EBSCO Open J-Gate

DEVELOPMENT OF PRICING MODEL FOR SMARTPHONE'S BASED ON SPECIFICATIONS IN INDIA

Micromax has actually catered to the needs of customers which is the screen size as expected by the customers. Samsung is well established brand and well diversified with their models. Sony has its maximum products in range of screen size 3.5" – 4.5" which is the perfect size for a Smartphone according to customers. Nokia has kept the screen size up to the mark as they have been perfectly differentiating it from tablets.

Table 8: Product Range according to Chipset and Processors

Brand	Total	Chipset	GPU	Processor
Samsung	60	BCM2763/MSM7627	Video Core III/Adreno 200	800 MHz – 1 GHz
	40	BCM2763/MSM7627 A	Video Core III/Adreno 200	832 MHz – 1Dual GHz
	10	APQ8060/8225Q	Adreno 203-220	1.2 D – 1.4Q
	20	MSM8960	Adreno 305	1.4 Q – 1.6Q
	10	APQ8064T	Adreno 320	1.6 Q
Micromax	25	MSM7627A	Adreno 200	832 MHz – 1 GHz
	40	MSM7627A	Adreno 200	1 – 1 D GHz
	15	MT6589	Power VR SGX 5 Series	1D – 1.2 Q GHz
Nokia	25	MSM7227A MSM 8960	Adreno 220-305	800 MHz – 1D
	20	MSM8960/MSM7227A MSM8255	Adreno 205-305	1.4 GHz – 1D
	15	MSM8960/MSM8225 MSM8255	Adreno 205-305	1D – 1.5 D
	05	APQ8055	Adreno 205	1.4 GHz
	05	MSM8960	Adreno 305	1.5 D
Sony	15	MSM7225A/MSM7227A	Adreno 200	800 MHz – 1D
	35	MSM8225/MSM7225A	Adreno 200	1 – 1 D GHz
	05	MSM8230/MSM8960T	Adreno 220-305	1D-1.7D
	05	MSM8260	Adreno 220	1.5D-1.5Q
		APQ8064	Adreno 320	1.5 Q

Samsung has good combination of CPU and GPU which gives more multiple range of products.

Micromax has mainly concentrated on Clock speed and Multimedia processors. Nokia has a great hardware which is better than other OEMs, because of its GPU and smooth working processors. From the above table, it can be observed that the maximum products of Chipset, belongs to Qualcomm Snapdragon family.

Article Indexed in :

DOAJ Google Scholar DRJI
BASE EBSCO Open J-Gate

Table 9: Phase I - Analysis on Pricing Strategies related to Smartphone features

Screen	3.3"	UPGRADED	4.3"
OS Android	2.3 v		4.0
Processor	800 MHz		1GHz
RAM	256 MB		512 MB
Storage	1.5 GB		4 GB
Camera	3.15 MP		5 MP
Communication	Wi-Fi		EDGE 3G

- As the screen size increases, there are other features which also get updated like:
 - o Screen type: From TFT to LCD 2, Amoled, and Gorilla Corning Glass
 - o Resolution: From 240 x 320 to 480 x 800
- Along with above features storage & Memory also increases for faster processing.
- Thus updating from Basic Smartphone, costs around Rs.7500 – Rs.9500
- The Functionality of Smartphone also changes.
- Basic Smartphone are not upto the satisfactory of the customer.
- Customer mostly preferred Average Smartphones than basic due to its robustness and low-end specifications.

Table 10 - PHASE II Analysis on Pricing Strategies related to Smartphone features

CATEGORY	Average	upgraded	Good
Screen	4.3"		5"
OS	v 4.0		v 4.1
Processor	1GHz		>1.2 Dual
RAM	512 MB		1 GB
Storage	4 GB		8/16 GB
Camera	5 MP		5 MP
Communication 3G GPS	NFC		

- Here screen type is again affected and more features are added to it like:
 - o Retina Display, IPS, Twisted nematic, S-LCD3, S-Amoled
- Memory and Storage has to be increased with OS update, which need high processing capability
- Multimedia experience also increases
- Thus upgrading from Medium Smartphone to above features, costs around Rs.3500- Rs.8500
- Smartphone is medium of entertainment, so updating to better GPU capability processors is needed
- Camera also plays a major role
- A Good Combination of CPU & GPU will actually be much cost effective and better working product in the market
- Customers can shift from one Brand to another due to :

Article Indexed in :

DOAJ Google Scholar DRJI
 BASE EBSCO Open J-Gate

DEVELOPMENT OF PRICING MODEL FOR SMARTPHONE'S BASED ON SPECIFICATIONS IN INDIA

- o Increased Megapixel
- o Better Camera lens
- o Video Capturing Capability

Table 11: PHASE III - Analysis on Pricing Strategies related to Smartphone features

CATEGORY	GOOD	UPGRADED	BEST
Screen	5"		5"
OS	v 4.1		v 4.1
Processor	>1.2 Dual		Quad
RAM	1 GB		2 GB
Storage	8/16 GB		32 GB
Camera	5 MP		>8 MP
Communication	GPS, NFC		4G

- In case of high-end Smartphone the most important feature that matters is the processor's core and the speed capability
- High speed needs more memory and storage with more improved quality
- Multimedia experience is best like FULL HD, Gaming and Interaction
- Thus upgrading to the Best Smartphone, costs around Rs.12000- Rs.22000
- Near Filed Communications (NFC) is the method which can transfer at higher rate and is deployed in the present Smartphone's
- Best Smartphone not only satisfies need but also desires
- High- end phones are priced high due to its many capable features

Table 12: Increase in Cost from Basic to High-End Smartphone

Basic Smart Phone	Price	Price added
LAVA Iris 349	INR 3999	INR 9,816
LG Optimus L3 E400 6299	INR 8,200	
Average INR 9,008		



Medium End Smart Phone	Price	Price added
Galaxy S Duos	INR 13815	INR 3,775
XPERIA J	INR 14499	INR 7,001
Average INR 5,388		



Article Indexed in :

DOAJ Google Scholar DRJI
 BASE EBSCO Open J-Gate

DEVELOPMENT OF PRICING MODEL FOR SMARTPHONE'S BASED ON SPECIFICATIONS IN INDIA

Moderately High Smart Phone	Price	Price added
LG Optimus L9 P765	INR 17590	INR 20,500
Galaxy Grand Duos	INR 21500	INR 20,000
Average INR 20,250		



High End Smart Phone	Price
XPERIA Z	INR 38,090
Galaxy S4	INR 41,500

Table 13: Analysis in Production Cost of Smartphone's

SAMSUNG GALAXY	S4	Amt in (\$)	S3	Amt in (\$)
Memory	16GB eMMC + 2GB LPDDR3	28.00	16GB eMMC + 1GB LPDDR2	29.00
Display & Touchscreen	5" 1920x1080 Super AMOLED(441ppi), w/ Gorilla Glass 3 by corning	75.00	4.8" 1280x720 Super AMOLED, w/ Gorilla Glass 2 by Coming	65.00
Processor	Samsung Exynos 5 Octa (5410)	30.00	Samsung Exynos 4 quad	17.50
Camera	13 MP + 2 MP	20.00	8 MP + 1.9 MP	19.00
Wireless Section	Intel PMB9820 + PMB5745 +Front End	16.00	Intel PMB9811 + PMB5712 + Front End	14.50
User Interface & Sensors	accelerometer, RGB Light, ecompass,Gyro, Barometer, Temperature & Humidity, IR Gesture	16.00	Capella CM3663 ALS/Proximity, STLSM330DLC Accelerometer / Gyro,AKM AK8975C e-Compass, & STLP331AP BarometerSensors	12.70
WLAN/BT/FM/GPS	Broadcom BCM4335 +BCM47521	9.00	Broadcom BCM4335 +BCM47521	8.20
Power Management	Samsung PMIC (TBD)	8.00	Maxim PMIC	7.00
Battery	3.8v, 2600 mAh w/ NFC Antenna(TBD)	5.60	3.8v, 2100 mAh, w/ NFC Antenna	4.90
Mechanical Electro-mech		22.00		21.40
Box Contents		6.00		6.00
Bill Of Material		235.60		205.20
Manufacturing Cost		8.50		8.00
Total (BOM+ MC)		244.10		213.20

Article Indexed in :

DOAJ Google Scholar DRJI
 BASE EBSCO Open J-Gate

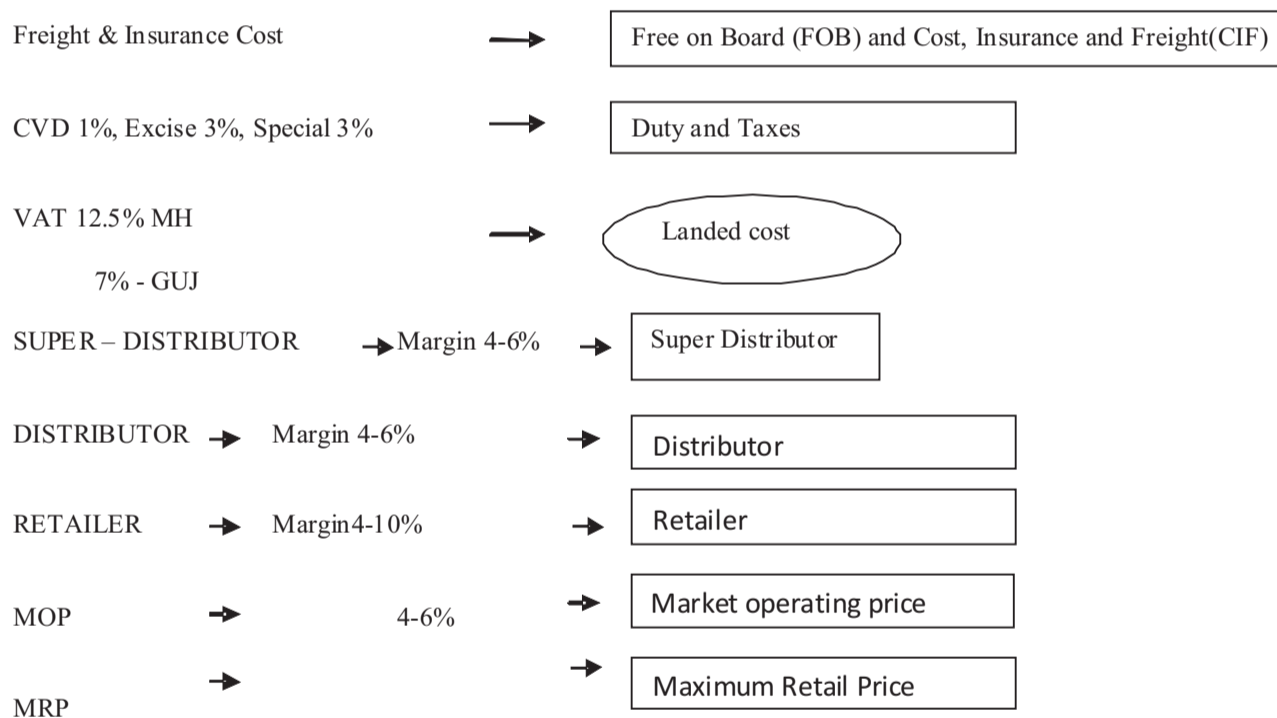
DEVELOPMENT OF PRICING MODEL FOR SMARTPHONE'S BASED ON SPECIFICATIONS IN INDIA

(Source: IHS iSupply Research, March 2013)

Apple (2007) sold the iPhone 3G for \$500 and the Gross Profit was \$150 per unit (30%). iPhone manufacturing costs include engineering, sales, marketing and warranty as expenses.

- From the above production costing table, it can be observed that the main CPU covers around 7% - 13% on total costing
- The display and touch screen costs around 25-30% of the total cost
- It also shows that the profit making on processors is less compared to display
- Display making companies are more focused into making high quality display due to its significant cost
- Processor with high capabilities still have lesser cost compared to the other wireless and display section

Fig 2: Backward Integration Pricing Strategy through Distribution



In the above market pricing method, it is observed that Smartphone has been priced to MRP by calculating at each and every point, margin and taxes which is given to different channel partners during the movement of finished product from the manufacturer to the consumer through multiple intermediaries. Importing and Exporting of Smartphone's which actually fluctuates the costing and the Market Operating Price which needs to be known by the manufacturer before and after making of Smartphone.

Article Indexed in :

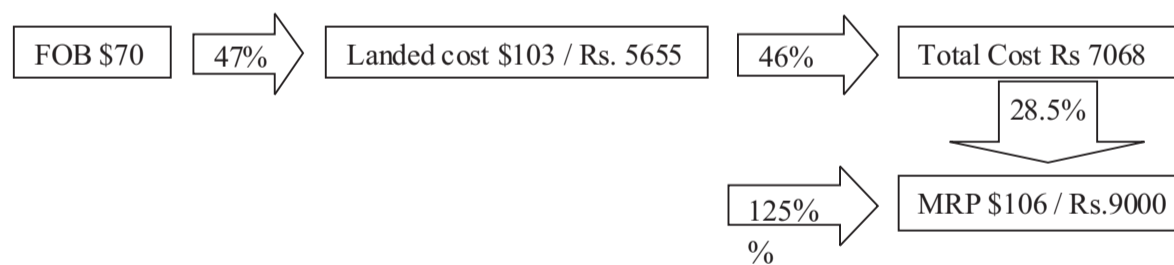
DOAJ	Google Scholar	DRJI
BASE	EBSCO	Open J-Gate

Table 14: Calculation of Pricing after Product reaching the Port

Smartphone	(In %)	
FOB (USD)		70.00
CIF		95.00
Accessible Value (USD)	1	95.95
CVD	1	0.96
Central Excise Edu Cess	3	2.91
Spl Duty	3	2.99
Total Duty		6.86
Landed Cost (USD)		102.81
Landed Cost (INR)		5654.62
Finance Cost	3	169.64
Service Cost	3	169.64
Local Freight	4	226.18
Distributor's Profit	15	848.19
TOTAL COST		7068.28
Super Distributor's margin	6	424.10
Distributor's Margin	6	449.54
Retailer's margin	6	476.51
Avg. Marketing cost	5	420.92
OBSOLENCE COST	2	176.79
MRP(INR)		9016.14
MRP (USD)		163.93

- Maximum Price level is increased during the distribution of products at different location for penetrating the markets
- Central Excise Duty is a bit lower compared to tablets and Personal Computers
- Price increase after landing cost is around 20% on total cost before distribution

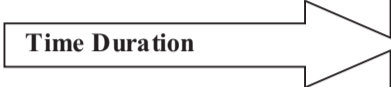
Fig 3: Flow chart from the time it Lands at the place of Import



Article Indexed in :

DOAJ Google Scholar DRJI
 BASE EBSCO Open J-Gate

Table 15: Analysis of Price Erosion Pattern

POPULARITY	Time Duration 		
	1 Months	3 Months	6 Months
HIGH	Rs. 500	Rs.500	Rs.1500
MEDIUM	Rs.1000	Rs. 1500	Rs. 1500
LOW	Rs. 1500	Rs. 2500	Rs. 3500

Price Erosion means decline of Market Operating Price during a time period until the production of that particular model is not stopped. It is mainly divided and measured into two factors i.e.

- Popularity and
- Time Duration

If the Smartphone is compatible with the needs and desires of customer than its clear that it is gaining popularity and price erosion phase will not happen easily.

- Manufacturers / Distributors have to take into account the price erosion, the specification and the launch of the Smartphone
- Time Duration and technology advancement also affects the erosion of price

FINDINGS :

- Smartphone with bigger screen should be manufactured by OEMs.
- Basic Smartphone should meet the specifications like
 - oAndroid OS (4.2.2 Jelly Bean)
 - oBigger Screen (4.5 – 5 inches)
 - oMemory (1 – 1.5 GB RAM and16 - 32 GB of Internal)
- Processor which can actually sustain in the market should be produced
- The Price Band between Rs.10001- Rs.15000 should be focused.
- Better specification should be given to customer in this price range.
- Large numbers of customer’s are brand conscious and loyal. So performance should be kept according to their expectation
- Micromax and Karbonn can capture the market by improving their product quality with more features
- Dual core processors are better and preferred as compared to Single core.
- Smartphone with updated OS should have a memory of about 768 MB minimum and maximum upto 1.5 GB
- 1GB RAM should be preferably installed in all the new Smartphone Models
- HTC should come up with more budget phones
- LG has rightly tapped the price range but they can improve their specifications.
- Manufacturer need to concentrate mainly on high end clock speed with Multi core

Article Indexed in :

DOAJ Google Scholar DRJI
 BASE EBSCO Open J-Gate

DEVELOPMENT OF PRICING MODEL FOR SMARTPHONE'S BASED ON SPECIFICATIONS IN INDIA

- According to running market trend
 - o Quad Core
 - o Clock speed up to 1.6 GHz
 - o Better GPU (PowerVR Series/ Adreno 320/Video Core III)

RECOMMENDED SMARTPHONE

OS	ANDROID 4.2	ANDROID 4.0
SCREEN	5"	4.5"
CAMERA	8MP	5MP
PROCESSOR	1.4 GHZ QUAD	1 DUAL GHZ
RAM	1GB	768 MB
INTERNAL	16 GB	8 GB
PRICE	15000-22000	RS 10000- 15000

REFERENCES:

- 1.Cole, Marion, Introduction to Telecommunications: Voice Data and the Internet, Pearson Education Pvt.Ltd., New Delhi, 2002
- 2.Desai, Ashok V, India`s Telecommunication Industry: History, Analysis, Diagnosis, Sage Publication, New Delhi, 2006
- 3.Desai, Ashok, India's Telecommunications Industry, SAGE Publications India Pvt.Ltd., New Delhi, 2006
- 4.Gautam, Vinayshil & Sinha, Sanjay, Understanding Telecom Management, Concept Publishing Company, New Delhi, 2011
- 5.Garg, Vijay K. & Wilkes, Joseph E., Principles and Applications of GSM, Pearson Education Pvt.Ltd., New Delhi, 1999
- 6.Fransman, Martin, Telecoms in the Internet Age, Oxford, New York, 2002
- 7.Lu William, W., Broadband Wireless Mobile, John Wiley and Sons, Inc., England, 2002
- 8.Prasad, R.U.S., Resolving Disputes in Global Practice and Challenges Telecommunications, Oxford, New Delhi, 2012
- 9.Richardson, Andrew, WCDMA Design Handbook, Cambridge University Press, New York, 2005
- 10.Richardson, E. G., H.264 and MPEG - 4 Video Compressions: Video Coding for Next Generation Multimedia, John Wiley and Sons, Inc., England, 2003
- 11.Sisodia, Amit Singh.& Rao N. Janardhan, Global Telecommunications, ICFAI University Press, Hyderabad, 2008
- 12.Sridhar, Varadharajan, The Telecom Revolution in India, Oxford, New Delhi, 2012
- 13.Taher, Nasreen, Indian Telecom Industry: Trends and Cases, ICFAI University Press, Hyderabad, 2005,

Article Indexed in :

DOAJ Google Scholar DRJI
BASE EBSCO Open J-Gate

Journals and Magazines :

- 1.i-manager's Journal on Mobile Applications & Technologies (JMT)
- 2.Inventi Impact: Telecom
- 3.My Mobile, May 2015, pp. 38-40, 46-61,68-69,76-94
- 4.Telecom Era, Global Creations Group Institution, Jan 2015, Vol 6 Issue 03, pp. 26-27
- 5.Tele.net, Jan 2015, Vol 16, Issue no 1
- 6.Telecom Live, March 2015
- 7.Voice & Data, Vol 22, Issue 05, May 2015

Website Consulted :

- 1.<http://www.flipkart.com>
- 2.<http://www.snapdeal.com>
- 3.<http://www.gsmarena.com>
- 4.<http://www.micromaxinfo.com>
- 5.<http://www.samsung.com>
- 6.<http://www.qualcomm.co.in>
- 7.<http://www.mediatek.com>
- 8.<http://www.broadcom.com/>
- 9.<http://www.expertreviews.co.uk/smartphones>
- 10.<http://www.mobilepriceindia.co.in/price-list>
- 11.<http://www.marvell.com/>
- 12.<http://www.xolo.in>
- 13.[http://en.wikipedia.org/wiki/Snapdragon_\(system_on_chip\)](http://en.wikipedia.org/wiki/Snapdragon_(system_on_chip))
- 14.<http://www.comscore.com/Insights>
- 15.<http://venturebeat.com>

**Appendix
Questionnaire for Retail Shop Owners**

1.On what basis Buyer's make an inquiry for Smartphone's ?

Price	Brand	OS	Screen size	Processor	RAM & storage	Others
-------	-------	----	-------------	-----------	---------------	--------

2.What is the PRICE range preferred by customers ?

Rs.7000-1000	Rs.10001-15000	Rs.15001-22000	Rs.22000-30000	Above 30000
--------------	----------------	----------------	----------------	-------------

3.Which is the most preferable BRAND?

SAMSUNG	NOKIA	MICROMAX	SONY	HTC	KARBONN
LG	LAVA	APPLE	BLACKBERRY	OTHERS	

Article Indexed in :

DOAJ Google Scholar DRJI
BASE EBSCO Open J-Gate

4. Most Preferred OS at your place ?

Android	Windows	iOS	BB OS	Symbian
---------	---------	-----	-------	---------

5. Most Preferred Screen Size during buying ?

Below 3.5''	3.5''-4''	4''-4.5''	4.5''-5''	Above5''
-------------	-----------	-----------	-----------	----------

6. Do people ask for processor, if YES then which is the most demanded speed and Core?

800MHz-1GHz	1GHz-1.5GHz	Above1.5GHz
Single	Dual	Quad

7. Do people ask for RAM size? If YES then which is the most preferred RAM size?

512MB	768MB	1GB	1.5GB	2GB
-------	-------	-----	-------	-----

8. Do people ask for INTERNAL MEMORY STORAGE size ? If YES then what is the most preferred size?

2-4GB	8GB	16GB	32GB
-------	-----	------	------

9. Which is most preferable BRAND for greater margins?

SAMSUNG	NOKIA	MICROMAX	SONY	HTC	KARBONN
LG	LAVA	APPLE	BLACKBERRY	OTHERS	

10. What is the % of margin you keep for Smartphone's ?

SAMSUNG	NOKIA	MICROMAX	SONY	HTC	KARBONN
LG	LAVA	APPLE	BLACKBERRY	OTHERS	

11. No. of sales in a month ?

SAMSUNG	NOKIA	MICROMAX	SONY	HTC	KARBONN
LG	LAVA	APPLE	BLACKBERRY	OTHERS	

Article Indexed in :

DOAJ Google Scholar DRJI
 BASE EBSCO Open J-Gate

Publish Research Article International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Book Review for publication, you will be pleased to know that our journals are

Associated and Indexed, India

- * International Scientific Journal Consortium
- * OPEN J-GATE

Associated and Indexed, USA

- EBSCO
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Database
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Golden Research Thoughts
258/34 Raviwar Peth Solapur-413005, Maharashtra
Contact-9595359435
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com
Website : www.aygrt.isrj.org