

April 2019

# AWARENESS AND USAGE OF SMARTPHONE APPLICATIONS FOR INFORMATION SHARING TASKS AMONG THE RESEARCH SCHOLARS OF PERIYAR UNIVERSITY- AN ANALYTICAL STUDY

Thenmozhi G  
*Periyar University*

Gomathi Palanisamy  
*Periyar University, gomathi148@gmail.com*

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>

Part of the [Library and Information Science Commons](#)

---

G, Thenmozhi and Palanisamy, Gomathi, "AWARENESS AND USAGE OF SMARTPHONE APPLICATIONS FOR INFORMATION SHARING TASKS AMONG THE RESEARCH SCHOLARS OF PERIYAR UNIVERSITY- AN ANALYTICAL STUDY" (2019). *Library Philosophy and Practice (e-journal)*. 2207.  
<https://digitalcommons.unl.edu/libphilprac/2207>

**AWARENESS AND USAGE OF SMARTPHONE APPLICATIONS FOR INFORMATION  
SHARING TASKS AMONG THE RESEARCH SCHOLARS OF PERIYAR UNIVERSITY-  
AN ANALYTICAL STUDY**

**G.Thenmozhi**  
Ph.D. Scholar  
DLIS, PU, Salem.

**Dr. P. GOMATH**  
Assistant Professor  
Dept. of Library and Info. Science  
Periyar University, Salem-11.  
Tamilnadu, India  
Mail: [gomathi148@gmail.com](mailto:gomathi148@gmail.com)

**Abstract**

*Now a day's Smartphone has been spread among the worldwide. A smartphone is a mobile phone running a complete operating system in a manner similar to a traditional computer, which offers advanced computing abilities and connectivity options. These features enable new kinds of mobile services that in turn shape the usage habits of smartphone users. This paper surveyed students' Smartphone usage and how it affects them. It examines the role which frequent use of Smartphones plays in their studies. Questionnaires were designed and sent out to 240 respondents of the Research Scholars of various departments of Periyar University, Salem. Out of the 240 questionnaires distributed, 237 were completely filled and returned back, giving a return rate of 99%. The data collected were analyzed using frequencies; percentages and graph representations. It was recommended that students should learn to manage their time properly and to promote the learning process.*

*Keywords: Smartphones, Information Sharing, Application Usage, Ph.D. Scholars, Periyar University.*

**INTRODUCTION**

A smartphone is a cellular telephone with an integrated computer and other features not originally associated with telephones, such as an operating system, Web browsing and the ability to run software applications. The first smartphone was IBM's Simon, which was presented as a concept device (rather than a consumer device) at the 1992 COMDEX computer industry trade show. Smartphone apps are defined as software applications that run on a mobile phone

(encyclopedia2.The free dictionary.com), They may include games, diaries, planners, maps and more.

### **About the Periyar University**

The Government of Tamilnadu established the Periyar University Salem on 17<sup>th</sup> as per the provisions of the Periyar University Act, 1997. The University is named after the Great Social Reformer E.V. Ramasamy, affectionally called "Thanthai Periyar". The University has taken the significant step of promoting interdisciplinary study and research. The department has been clustered into schools and departments.

### **REVIEW OF THE RELATED LITERATURE**

**Hee Seo Lee1 et.al (2012)** in this study, to analyze the factors affecting the use of Smartphone applications, research model based on UTAUT (Unified Theory of Acceptance) model was hypothesized and empirically tested. Credibility and personalization were set as factors affecting performance expectancy, and flow was added as an antecedent of usage intention. A survey was conducted with 215 persons who have experience in using Smartphone including college students and office workers. Therefore, it is expected that research findings would provide strategic implications for app developers, mobile telecom providers, and related enterprises.

**Walter UVS, et.al (2013)** this study assesses the use of smartphone applications and specifically social networking applications (SNS) amongst smartphone users, due to the perceived high-level of usage amongst University Students. The data were analyzed looking at key applications and frequency/intensity of usage. These students appear to use SMS for close friends only, and phone calls to loved ones and family; possibly due to the high cost of SMS' and phone calls in South Africa compared to the low cost of SNS.

**Saif Ahmed et.al (2015)** this study deals on Mobile Applications (apps) is software developed for use on mobile devices and made available through app stores. Mobile apps have developed into a significant industry and apps stores have become highly competitive places. This research reports the first research done on the behavior of Bangladeshi mobile users and seeks to understand their preferences regarding all things related to mobile applications. Users were asked questions regarding the monetary potential of apps, about how their choices are determined in terms of downloading mobile apps as well as their mobile internet usage.

**Simon L Jones et.al (2015)** in this study, to analyze the Smartphones uses to investigate the question: do smartphones induce usage habits? We analyzed three months of application launch logs from 165 users in naturalistic settings. This study analyzes the distinct clusters of applications and users, which share similar revalidation patterns. On the other hand, on a micro-level, we identify unique characteristics in smartphone usage, and we present a rudimentary model that accounts for 92% in the variability of our smartphone use.

#### **IV. OBJECTIVES**

1. To find out the department wise usage Smartphones
2. To study the gender wise and age wise distribution of the respondents
3. To evaluate the operating system used in Smartphones
4. To examine the use of smartphone applications
5. To identify the purpose, purchase, and use of Smartphones
6. To find out the time spent and money spent on searching the information
7. To examine the bandwidth of your internet connection
8. To calculate the internet service provider
9. To study the awareness of the application of information sharing services
10. To identify the problems of using Smartphone applications

#### **V. METHODOLOGY**

In this study, how Smartphone applications popular among research scholar and the use of Smartphone applications at research scholars of Periyar University. The data have been collected using simple random sampling methods in selected departments of Periyar University research scholars. 240 questionnaires distributed, and 237 were completely filled and returned back, giving a return rate of 99%. The collected data were analyzed using frequencies; percentages and graph representations. It was recommended students should learn to manage their time properly representations. It was recommended that students should learn to manage their time properly and to promote the learning process. The tables clearly depict the use of Smartphone application usage.

## VI. RESULT AND DISCUSSION

**Table -1 Department wise Distribution of Questionnaire**

<b>S. No</b>	<b>Name of the Department</b>	<b>Distribution of Questionnaire</b>	<b>Received of the Questionnaire</b>
1	Biotechnology	32 (13.33%)	31 (13.08%)
2	Chemistry	31 (12.92%)	31 (13.08%)
3	Commerce	32 (13.33%)	32 (13.50%)
4	Computer Science	21 (8.75%)	21 (8.86%)
5	Food Science and Nutrition	20 (8.33%)	20 (8.44%)
6	Microbiology	25 (10.42%)	23 (9.70%)
7	Physics	25 (10.42%)	25 (10.55%)
8	Tamil	22 (9.17%)	22 (9.28%)
9	Zoology	14 (5.83%)	14 (5.91%)
10	Management Studies	18 (7.5%)	18 (7.59%)
<b>Total</b>		<b>240 (100%)</b>	<b>237 (100%)</b>

Table 1 reveals that, the department wise usage of Smartphone applications. Out of 240, 237 questionnaires were completely filled and return back. Among the ten departments, the Commerce was 32 (13.50%), Biotechnology and Chemistry were 31 (13.08%), Physics was 25 (10.55%) of the students are highly accessing the Smartphone applications.

**Table - 2 Gender wise usages of Smart Phones applications**

<b>S. No</b>	<b>Gender</b>	<b>Total no. of Respondents</b>	<b>%</b>
1	Male	124	52.32
2	Female	113	47.68
<b>Total</b>		<b>237</b>	<b>100</b>

**Figure - 2 Gender wise usages of Smart Phones applications**



Table 2 and figure 2.1 shows the gender wise distribution of respondents. A maximum of 124 (52.32%) male respondents are using Smartphone applications followed by female respondents 113 (47.68%). Finally, this study detailed about the majority of male respondents is used in Smartphones.

**Table – 3 Brand wise Smartphone usage**

S. No	Brand-wise Smartphones	Total no of Respondents	%
1	Apple	43	18.14
2	Micromax	68	28.69
3	Samsung	73	30.80
4	Motorola	25	10.55
5	Others	28	11.81
<b>Total</b>		<b>237</b>	<b>100</b>

The above table 3 explains the brand of Smartphones used by the respondents. Among all the brands, a majority of the respondents using a Samsung 73 (30.80%), followed by Micro max 68 (28.69%). Apple 43 (18.14%), Motorola 25 (10.55%) and others were 28 (11.81%). The study concludes that the majority of the users are Samsung mobile phone users.

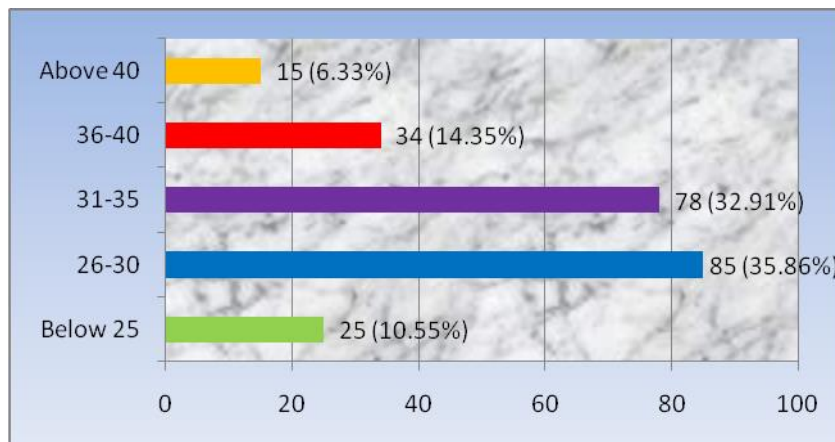
**Table- 4 Age wise distribution of respondents**

S. No	Age	Total. No. of Respondents	%
1	Below 25	25	10.55

2	26-30	85	35.86
3	31-35	78	32.91
4	36-40	34	14.35
5	Above 40	15	6.33
<b>Total</b>		<b>237</b>	<b>100</b>

Table 4 and figure 4.1 shows that age of respondent's. The Maximum number of respondents were in the age group of 26-30 (35.86%) followed by the age 31-35 (32.91%).

**Figure – 4.1 Age wise distributions of respondents**



**Table – 5 Types of operating system used in Smartphones**

S. No	Operating System	No of Respondents	%
1	Android	97	40.93
2	iPhone	45	18.99
3	Blackberry	39	16.46
4	Windows OS	43	18.14
5	Others	13	5.49
<b>Total</b>		<b>237</b>	<b>100</b>

Table 5 shows that the operating system used in Smartphones, most of them 97 (40.93%) were used Android, followed iPhone 45 (18.99%). Windows OS was 43 (18.14%), Blackberry 39 (16.46%) and only 13 (5.49%) of the respondents used other operating systems. Finally, the majority of the respondents is used in the Android operating system 97 (40.93%).

**Table – 6 Use of Smartphones Applications**

<b>S. No</b>	<b>Smartphone Applications</b>	<b>Total no of Respondents</b>	<b>%</b>
1	Aptitude Apps	64	27.00
2	Banking Apps	43	18.14
3	Education Apps	85	35.86
4	Railways Apps	13	5.49
5	Twitter	32	13.50
<b>Total</b>		<b>237</b>	<b>100</b>

Table 6 indicates that respondents are using Smartphone applications. The study found that 85 (35.86%) of the respondents using an education app; followed by aptitude app 64 (27.00%). Banking app 43 (18.14%), Twitter 32 (13.50%) and Railway app 13 (5.49%). Finally, 85% of the respondents are using education apps only.

**Table -7 Purpose of using Smartphones Applications**

<b>S. No</b>	<b>Purposes</b>	<b>Total no of Respondents</b>	<b>%</b>
1	Texting	35	14.77
2	Games	39	16.46
3	Social Media	26	10.97
4	Music/ Audio	14	5.91
5	News	10	4.22
6	Shopping	16	6.75
7	Video/ Movies	10	4.22
8	Surfing the Web	6	2.53
9	Internet	56	23.63
10	Social Networks	13	5.49



11	Voice Calls	12	5.06
<b>Total</b>		<b>237</b>	<b>100</b>

Table -7 Observed from table 56 (23.63%) of respondent were mostly using the applications for Internet purpose, followed by Games 39 (16.46%) and Texting 35 (14.77%). Finally, the majority of the respondents mostly used Smartphones on the Internet.

**Table – 8 Time spent on searching the information**

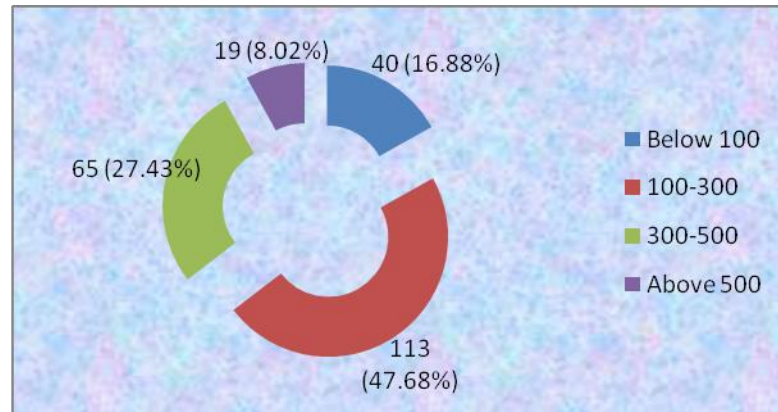
<b>S. No</b>	<b>Time Spent</b>	<b>Total no of Respondents</b>	<b>%</b>
1	Below 1 hour	46	19.41
2	1-2 hours	79	33.33
3	2-4 hours	85	35.86
4	Above 4 hours	27	11.39
<b>Total</b>		<b>237</b>	<b>100</b>

Table 8 illustrated that the majority of the respondents 85 (35.86%) were spent 2-4 hours per day, followed by 1-2 hours 79 (33.33%) per day. 46 (19.41%) were spent 1 hour per day. Finally, the maximum number of respondents were spending 2-4 hours per day.

**Table – 9 Money spent per day**

<b>S. No</b>	<b>Money Spent</b>	<b>Total no of Respondents</b>	<b>%</b>
1	Below 100	40	16.88
2	100-300	113	47.68
3	300-500	65	27.43
4	Above 500	19	8.02
<b>Total</b>		<b>237</b>	<b>100</b>

**Figure – 9.1 Money spent per day**



The above table 9 and figure 9.1 shows the respondents spending the money per month for data usage for Smartphone users. It depicts that majority of the respondents, 113 (47.68%) spent Rs. 100-300 per month for usage. Followed by 65 (27.43%) was spent below Rs. 300-500. 40 (16.88%) are spending 100 per month for usage. 19 (8.02%) are spending 500 per month for usage.

**Table – 10 Purchase and use of Smartphones**

S. No	Purchase and Use	Total no of Respondents	%
1	Current year	46	19.41
2	Two years before	98	41.35
3	Three years before	93	39.24
<b>Total</b>		<b>237</b>	<b>100</b>

Table 10 shows the purchase and use of Smartphones presently. A maximum of respondents 98 (41.35%) has been using it for two years, 93 (39.24%) are using it in the three years before, and 46 (19.41%) have been using it for the current year.

**Table – 11 Bandwidth of your Internet connection**

S. No	Bandwidth	Total no of Respondents	%
1	2 G	64	27.00
2	3G	102	43.04
3	4G	71	29.96

<b>Total</b>	<b>237</b>	<b>100</b>
--------------	------------	------------

It is observed from table 11 that the bandwidth with internet connection used by most of the respondents 102 (43.04%) is 3G, 71 (29.96%) use the bandwidth of 4G, and none of them used 2G is 64 (27.00).

**Table – 12 Internet Service Providers**

<b>S. No</b>	<b>Types of an internet service provider</b>	<b>Total no of Respondents</b>	<b>%</b>
1	BSNL	32	13.50
2	Airtel	46	19.41
3	Aircel	74	31.22
4	Vodafone	25	10.55
5	Idea	23	9.70
6	Others	37	15.61
<b>Total</b>		<b>237</b>	<b>100</b>

Table – 12 shows the internet service provider respondents wise 74 (31.22%) go for Aircel service, 46 (19.41%) use Airtel, 37 (15.61%) others like Docomo, Reliance etc. 32 (13.50%) use BSNL, 25 (10.55%) use Vodafone, only 23 use a (9.70%) Idea.

**Table – 13 Awareness of application of information sharing services**

<b>S. No</b>	<b>Information Sharing Services</b>	<b>Total no of Respondents</b>	<b>%</b>
1	SMS	82	34.60
2	MMS	64	27.00
3	UMS	36	15.19
4	WAP	18	7.59
5	GPRS	37	15.61
<b>Total</b>		<b>237</b>	<b>100</b>

Table 13 observed that whole 82 (34.60%) respondents are aware and use of SMS, 64 (27.00%) of respondents are aware and use of MMS, 37 (15.61%) of respondents are aware and use of GPRS, 36 (15.19%) of respondents are aware and use of UMS and 18 (7.59%) of respondents are aware and use of WAP. Finally, most of the respondents are the use of sharing information on via SMS 82 (34.60%).

Table – 14 Application for instant messaging

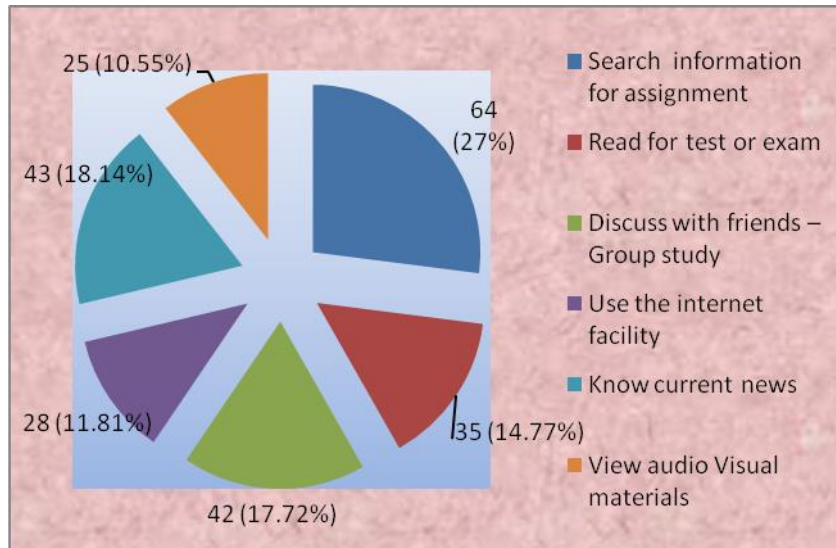
S. No	Instant of Messaging	Total no of Respondents	%
1	Whatsapp	42	17.72
2	Yahoo messenger	34	14.35
3	We chat	28	11.81
4	Chat on	25	10.55
5	Google talk / Hangout	37	15.61
6	Skype	28	11.81
7	Facebook Messenger	43	18.14
<b>Total</b>		<b>237</b>	<b>100</b>

It is observed that 43 (18.14%) of respondents are mostly using Facebook messenger, followed by what's app 42 (17.72%), Google Talk / Hangout 37 (15.61%), Yahoo messenger 34 (14.35%), we chat and Skype 28 (11.81%) respondents, and chat on 25 (10.55%).

Table - 15 Useful of Smartphone applications

S. No	Useful of Smartpnone application	Total no of Respondents	%
1	Search information for an assignment	64	27.00
2	Ready for test or exam	35	14.77
3	Discuss with friends – Group study	42	17.72
4	Use the internet facility	28	11.81
5	Know current news	43	18.14
6	View audio Visual materials	25	10.55
<b>Total</b>		<b>237</b>	<b>100</b>

**Figure – 15.1 Useful of Smartphone applications**



It is observed, 64 (27.00%) of respondents are feeling very useful of smartphone applications, followed by Know current news 43 (18.14%) of respondents, discuss with friends – group study 42 (17.72%), ready for text or exam 35 (14.77%) of respondents.

**Table – 16 Problems of using Smart Phones**

S. No	Problems	Total no of Respondents	%
1	Slow in Learning apps	43	18.14
2	Availability of more apps	25	10.55
3	Slow intent speed	32	13.50
4	Unable to download apps	44	18.57
5	Virus Problems	13	5.49
6	Connectivity Problems	18	7.59
7	High Internet Charges	24	10.13
8	Unwanted apps	28	11.81
9	Battery backup	10	4.22

<b>Total</b>	<b>237</b>	<b>100</b>
--------------	------------	------------

Table 16 shows that 44 (13.50%) of respondents stated that enable to download app (43 respondents), Slow intent speed (32 respondents), Unwanted apps (28 respondents), availability of more apps (25 respondents), High internet charges (24 respondents), Connectivity Problems (18 respondents), Virus Problems (13 respondents), Battery backup (10 respondents), This study finalized the maximum of the respondents are facing in respondents stated that enable to download app.

## **FINDINGS**

1. The data will be collected using a simple random sampling method in selected department research scholars of Periyar University. Totally 240 questionnaires distributed and 237 were completely filled and returned back, giving a return rate of 99%.
2. Gender wise distribution of respondents of Periyar University research scholars in Salem. In the use of Smartphone applications. A maximum of male 124 (52.32%) respondents is used in Smartphones.
3. Brand of Smartphones used by the respondents. Among the all brands, a majority of the respondents using a Samsung smartphone 73 (30.80%).
4. Type of operating systems used in the Smartphones, finally the majority of the respondent is used in Android 97 (40.93%) operating system. It's found that 85 (35.86%) of the respondents using an education app.
5. This study observed from the table that 56 (23.63%) of respondents are mostly using the applications for Internet purpose, a majority of the respondents responded 85 (35.86%) are spent 2-4 hours per day.
6. The majority of the respondents spending the money per month for data usage for Smartphone Rs. 100-300 per month.
7. This study identified the purchase and use of Smartphones presently. A maximum of respondents 98 (41.35%) has been using it for two years, It is observed the bandwidth with internet connection used by most of the respondents 102 (43.04%) is 3G, internet service provider respondents wise 74 (31.22%) go for Aircel service.
8. This study determines that whole 82 (34.60%) respondents are aware and use of SMS, It is observed that 43 (18.14%) of respondents are mostly using Facebook messenger.

9. The study observed, 64 (27.00%) of respondents are feeling very useful of smartphone applications, then 44 (13.50%) of respondents stated that enable to download an app (43 respondents), This study finalized the maximum of the respondents are facing in respondents stated that enable to download an app.

## CONCLUSION

This study concludes that the majority of the researchers were found that the Smartphones are acting as a great medium for view mobilization. These Smart phones are providing themselves an advantage, at least in bringing opinion of people on these issues. Smartphones refer to a process of relationship building among a group of people who have a common interest. This site enables a platform for the user community. Smartphones are useful for academic activities, chatting and sharing information is very useful for everyone.

## REFERENCES

1. Hee Seo Lee, et.al (2012), "A study on the factors affecting smartphones application acceptance ", *2012 3<sup>rd</sup> International Conference on e-Education, e-Business, e-Management and e-Learning IPEDR*, vol 27 IACSIT Press, Singapore.
2. Walter UVS, et.al (2013), "Smartphone application usage amongst students at a South African University", *IIMC International Information Management Corporation*, 2012, ISBN: 978-1-905824-34-2. pp 1-11.
3. Saif Ahmed, et.al (2015), "A study of mobile application usage in Bangladesh", *SSRG International Journal of Computer Science and Engineering (SSRG-IJCSE)*, Vol 2(4), pp 1-13.
4. Simon L Jones et.al (2015), "Revisitation analysis of Smart phones app use", *UBI Comp*, 15 September, OSAKA, JAPAN, pp 7-11.
5. Jung-Tae Kim (2009), " Informatization essay: The readiness and prospect of 2009 IT industry", *Journal of Local Informatization*, Vol 54, pp 84-91.
6. Gefen, D. Karahanna, E., and Straub, D. W (2003), "Trust and TAM in Online Shopping: An Integrated Model", *MIS Quarterly*, Vol 27(1) pp 51-90.
7. Charng HW, Piliavin JA, Callero PL (1988), " Role identity and reasoned action in the prediction of repeated behavior", *Soc Psychol Q* Vol 51(4) pp 303–317.

8. Fogg B, Hreha J (2010), “ Behavior wizard: a method for matching target behaviors with solutions”, *In Proceedings of persuasive 2010*, pp 117–131.
9. LaRose R, Lin CA, Eastin MS (2003), “Unregulated internet usage: addiction, habit, or deficient self-regulation”, *Media Psychol*, Vol 5(3)pp 225–253.
10. Towers I, Duxbury L, Thomas J (2006), “Time thieves and space invaders: technology, work and the organization” *Management*, Vol 19(5), pp 593–618.
11. Verkasalo H (2009), “ Contextual patterns in mobile service usage”, *Pers Ubiquit Comput* Vol 13(5), pp 331–342.
12. <https://gigaom.com/2012/10/22/the-average-us-subscriber-owns-1-57-mobile-devices/>
13. <https://www.netmarketshare.com/operating-system-market-share.aspx?qprid=8&qpcustomd=1>
14. [http://www2.berkeley.intel-research.net/~tlratten/public\\_usage\\_data/](http://www2.berkeley.intel-research.net/~tlratten/public_usage_data/).
15. <http://www.knowyourmobile.com/glossary/android>.