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**AN ANALYSIS ON CONSUMER BEHAVIOR  
TOWARDS ADDICTION AND SUSTAINABLE  
UTILIZATION OF ELECTRONIC GADGETS:  
OPPORTUNITIES AND CHALLENGES**

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# An Analysis on Consumer Behavior towards Addiction and Sustainable Utilization of Electronic Gadgets: Opportunities and Challenges

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**Abstract – Society has always been worrying about the term ‘Drug Addiction’ of our youth but ‘Gadget Addiction’ is a more critical area of concern in the present era and can be observed in today’s scenario where the young generation’s inclination towards the latest gadgets such as Smart Phones, Tablets, Laptops, etc. is posing a threat to the social infrastructure in the future. Teenagers are enthusiastic to remain online all the time so as to share numerous media files in their circle via various social platforms like Facebook, WhatsApp, Viber, Hike, etc. They are in serious relationship with their gadgets instead with their family members by virtue of which they are forgetting to form and maintain human relationships. Each day, millions of messages are sent by users whether it is text, image, audio or video file, which is justified by the telecom operators in terms of a huge growth in data usage in comparison to voice. In a nutshell, we can say that gadgets are becoming like an external body parts. Apart from this, electromagnetic radiations emitted by these gadgets are a vital point of concern. Number of studies and researches are going on to prove the health implications of mobile radiations. There is strong need to aware people about the hazards associated with these unavoidable gadgets and to make their sustainable usage. One has to be clear about the harmful effects and the possible precautionary measures so as to have a de-addicted life. Sustainable usage refers to the usage of all these gadgets in such a way that they don’t harm or disturb someone’s life. Various precautionary measures include usage of headphones, Bluetooth, reducing call durations, limited text messages. These are some measures which we can follow, on the other side, before buying any gadget, apart from other features like RAM, Processor, Operating System, Camera; Specific Absorption Rate (SAR) should be checked to know about its radiation aspect. In our ongoing research, we are carrying out a comprehensive study on the issue to aware the society about the unnoticed ‘Gadget Addiction’ and the possible precautions that the society can take to make sustainable usage of these unavoidable personal electronic gadgets.**

## INTRODUCTION

The consumer electronics industry has witnessed a unique growth over the past few years. This growth can be attributed to the increasing effect of state of the art electronic devices on the market. The consumer electronics industry is ushering in the dawn of Convergence. It is the confluence and merging of hitherto separated markets of digital based audio, video and information technology, removing entry barriers across the market and industry boundaries. This convergence of technologies has resulted in a greater demand for consumer devices, be they portable, in-home (mobile phones, digital camera) or in-car (DVD players), offering multiple functions.

The revolution brought about by Digital technology has enabled the consumer electronics sector to profit from

the growing interaction of digital applications such as: Mobiles, Camcorders, Laptops, Notebooks, Tablet PCs LCD” LED”s etc. It has also witnessed the emergence of mobile telecommunications technology, incorporating both digital visual and digital MP3 capabilities. The computer industry has also benefited by being able to make its way into consumer's living rooms. HDTV”s, with VGA connections and SD/MMC card slots, personal media players, and Microsoft-based Media Center PCs have pushed the two industries even closer together than before.

India has an increasingly affluent middle class population that, on the back of rapid economic growth, has made the country’s consumer electronics industry highly dynamic. The industry has been witnessing significant growth in recent years due to several factors, such as retail boom, growing

disposable income and availability of easy finance schemes. But still, the consumer electronics goods, like refrigerators, microwave and washing machines have low penetration in the country, representing vast room for future growth.

The report finds that since the penetration of several products like LEDs, Refrigerators, A/Cs are reaching saturation in the urban areas, the markets for these products are shifting to the semi-urban and rural areas.

The report thoroughly analyzes the historic performance and future prospects, offering 4-year industry forecast, of following consumer electronics products:

- Mobile Handsets
- PCs (Desktop, Laptops, Notebook & Tablet PCs)
- Digital Camera & Camcorder
- TVs (LCD"s, LED"s, 3D TVs)
- Air Conditioner
- Refrigerator (Frost-free & Direct Cool)
- Washing Machines (Semi-automatic & Fully Automatic)
- Set-top Box
- Microwave Oven
- MP3 Players

The term "gadget" refers to the portable electronic devices that belong to either one or more of the following categories: mobile phones, MP3 players and gaming consoles or any other wireless-enabled devices. This comprises of variety of devices including notebooks, tablets and i-touch. These gadgets can perform a great variety of functions. Mobile phones, for instance, have been transformed into multi-functional devices with cameras, radio/MP3, wireless technology connectivity and more (Angres & Angres 2008).

Globally an increasing number of people own more than one gadget. In America, young adults aged 18 to 29 years old own four gadgets on average in 2010 (Anderson and Bushman 2001). Indian market has emerged as the second largest market after China for mobile phone handsets. It has been found in various studies that it is difficult to part people from their gadgets even for a second. Gadget usage has both pros and cons. With at a stretch continuous use of gadget many health problems are reported like eye straining, finger pain, backache, neck pain, day time sleepiness and sleep disturbances. Depending on the

amount of time spent on gadget (duration and frequency), there are adverse effects like physiological, psychological, social and emotional (Anderson and Bushman 2001).

Although media is raising the issue of adverse effects of gadget usage, still there are no substantial efforts regarding the proper usage of gadgets.

The different types of Electronic equipments that has invaded our offices and homes these days is also mind boggling. Many things we use at home and office are "remote controlled", for example, Television (TV), Air-Conditioners, Audio equipment, Telephone, etc. It is almost close to "magic" how even a child, now-a-days, can switch channels, or increase decrease the volume of sound in a TV at home by just clicking on a few buttons sitting at the comfort of sofa away from the Television apparently without any physical wiring or connection!

Again, we are astonished, how we are able to talk to our near and dear living several thousands of kilometers away, from wherever we are, at home, office, on the road in a car, or in a classroom –by just clicking a few numbers on our palm sized cellular phones!

In the private sphere childrens' usage is one of the most important use cases. Scientific research has shown that there are numerous problematic areas that should cause concern among parents; aggressive behaviour, obesity, sleep disorders, mental issues, addiction, lower school grades and physical fitness.

For work related situations the scenario is somewhat different compared to personal usage. Gadgets are often marketed by the company to allow the employee a more flexible working time, but in effect the result is an extension of the working time beyond the stipulated amount.

## CULTURAL FACTORS INFLUENCING CONSUMER BEHAVIOR

Cultures, which only goes on to make the marketer's job tougher. Some of the few cultural factors that influence buyer behaviour are:

**Product (colour, size, design, and shape)-** There are many examples that support this point. A good example would be Philips audio systems. Urban India looks at technology with the viewpoint of "the smaller the better". However, in Rural India, the viewpoint is totally opposite. That is the main reason for the large acceptance of big audio systems. Thus Philips makes audio systems, which are big in size and get accepted in rural India by their sheer size.

**Social practices-** There are so many different cultures, and each culture exhibits different social practices. For example, in a few villages they have

common bath areas. Villagers used to buy one Lifebuoy cake and cut it into smaller bars. This helped lifebuoy to introduce smaller 75-gram soap bars, which could be used individually.

**Decision-making by male head-** The male in Indian culture has always been given the designation of key decision maker. For example, the Mukhiya's opinion (Head of the village), in most cases, is shared with the rest of the village. Even in a house the male head is the final decision maker. In rural areas, this trend is very prominent.

**Changes in saving and investment patterns-** From Gold. Land, to Tractors, LED" s, LCD TV" s etc.

## **TECHNOLOGY EFFECT ON CONSUMER BEHAVIOUR**

Technology impact in Electronic items we can find easily what consumer mindset towards electronic items. Because the Technology changes human life from man to machine in their works. With the day by day increasing of technology, consumers mindsets also changes along with technology. Consumers always try to buy new technology Products as well as branded products. This is the reason to increasing the brand market and many companies prove their self before customers with lot of futures lot of models in their products. We can find easily in every day changes in technology in Mobile phones. This is fastest growing industry in India in day by day. Consumers also attracted to technology feels more comfortable as well as for status in market.

## **ADDICTION TO TECHNOLOGICAL GADGETS AND SERVICES**

Recently, every other day information technology or IT invents lucrative gadgets are attracting the attention of the present generation. As a vulnerable group, the youth becomes the largest consumer of such devices and services, which in turn makes them addicted to them at some point of time. Addiction is the continued repetition of a behaviour or an activity independent upon the adverse or negative consequences of the same (Angres & Angres, 2008) or it can be a neurological impairments which leads to such behaviours (American Society for Addiction Medicine, 2012). There is no such limitation of the use of the term addiction to some specific behaviour such as drug addiction, food addiction etc. Psychological control over substance and behaviour, preoccupation with the subject and the continuation of activities despite consequences are generally the symptoms of addiction (Morse & Flavin, 1992). Actually the term addiction means the high degree of likeness towards a particular thing or subject. So if somebody is addicted towards something then he loses control over his own mind and faces difficulties to get rid of the claws of that

object. Most of the teens today spend too much of their time with their faces buried in technological gadgets. According to Kimberly Young (1998), addiction to technology is a habitual compulsion to engage in using technology instead of using it to address life's problems. They use technology as a coping mechanism to avoid conflict. Long term compulsions can lead to psychological problems such as insomnia, irritability and depression. For example, compulsion to use technology in favor of rare and exciting life events such as parties or vacations might signify addiction. Attitude changes in teens, sudden depression, loss of self-esteem, and problems in paying attention to study, are often symptoms of Internet addiction (Young, 1998). According to Young, teens are particularly vulnerable to technology addiction. Teens have poor coping mechanisms. When they face stress, they often chose what is comforting to them, usually something easy to focus on such as online videos or social media sites. Also in the teen years, self-identity is uncertain. Most teens struggle to understand how to present themselves and by the mean time technology help them in doing so.

## **FACTS ABOUT THE TECH-GADGETS AND SERVICES USED BY THE PRESENT GENERATION**

**Mobile/cell phone** - Mobile phone or cell phone is a device that can make and receive telephone calls over a radio link while moving around a wide geographical area. Besides telephony it can also provide a variety of other services like text messaging, playing music, e-mail, internet access, infrared, Bluetooth, business applications, gaming and photography etc. It was first introduced in 1973 and in 1983 the first mobile phone was commercially available (Heeks, 2008). From 1990 to 2011, the number of world-wide mobile phone users grew from 12.4 million to over 6 billion, covering about 87% of the global population (Saylor, 2012).

**Computer/laptop** - Computer is a general purpose device that can be programmed to carry out a finite set of erythematic and logical operations. Computer can solve more than one kind of problem at a particular time as a sequence of operations can be readily changed. A laptop is a type of computer that can be folded and easily carried out due to its' small size and battery support for energy, required to run it. The first laptop was invented in 1979 by British Designer Bill Maggridge. For the laptop producers the year 1989 was quite successful. Now the laptops are generally used for making programs, storing data, entertainment (music, videos), accessing net etc. Currently the number of computer users in the world is 900 million to 1 billion i.e. around 80% of the world

population are using or having computers (Woyke, 2012).

**Smart Phone** - A smartphone, or smart phone, is a type of mobile phone built on a mobile operating system with more advanced computing capability and connectivity than a feature phone. In early 2013 worldwide sales of smart phones exceeded those of feature phones. As of July 18, 2013, 90 percent of global handset sales are attributed to the purchase of I-Phone and Android smart phones (The Gurdian, 22 Dec, 2013).

## METHODOLOGY

This study is based upon the intensive fieldwork conducted in Visakhapatnam. The choice of both the study area and purpose are also dependent upon the previous observation. The sampling method used to select the study area was purposive one. Both the quantitative and qualitative methods were used for the analysis of the data. Ms Word and Ms Excel were used for the data analysis.

### Sampling-

A purposive sampling method was followed to collect information from 150 students of the randomly selected institutes of Visakhapatnam out of which 90 were male and 60 were female students. The age range varies from 18 to 26 years. The average age of the total sample was 21 years. The average age of both male and female sample is 21 years. Being a technical institute the representation of the female students is less. That is why there is a disparity in the number of samples of male and female students in present study. The education of the sampled students varies from B.Tech (Engineering) to Ph.D (Engineering, Science and Social Sciences). The numbers of participants from each category of courses are 80, 65 and 5 respectively. In the present study participants, students and respondents are used interchangeably.

### Methods of Data Collection -

The questionnaire used in this study is a structured one. The first part of the questionnaire is consisting of the declaration and the demographic profile of the participants followed by four sections. The latter four sections were containing close ended questions regarding the use of the technological gadgets and the present health status of the participants.

Semi-structured and unstructured interviews were conducted with the students regarding the use of the tech-gadgets and services and its impact on their health and social status. These types of interviews were chosen for this study because the study deals with the youth and it also consists of the information about health. On spot changing of the question is required for getting correct information from the

participants. The data collected through this process was helpful for qualitative analysis in the study.

## CONCLUSION

Despite the basic characteristics of consumers the behavior pattern of consumers are more or less similar to each other, particularly in the aspects like quality, preference and decision making. However it is evident that the present approaches to draw the attention of customers are not adequate. The consumers are particular about the appropriate system of distribution and hence there is a great need for change in the distribution system. It may not be always correct to say that consumers behave in the same way as it much depends on type of products, quality of the products and price of the products.

The present study is a promising study in the sense that we are living in a world of knowledge and technology. Changes in the scientific world are very fast. Keeping ones speed along with the change is definitely a challenging task. Hence, one must learn how to exercise control and to know what is important and what is not important at a specified time. Knowledge management, time management and setting the priorities of life should guide our behaviour in using the technological gadgets and services.

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