

CHAPTER:1:
REVIEWING
MANIFESTATIONS
OF SOCIAL
NETWORKS

CHAPTER:1:
REVIEWING MANIFESTATIONS OF SOCIAL NETWORKS
DETAILED CONTENTS AT A GLANCE

PARA NUMBER		PARTICULARS	PAGE NUMBER
		Executive Summary of Chapter Number One	03
1.0		Introduction	04
	1.0.1	Value	04
	1.0.1.1	Value Delivery Process (VDP)	06
	1.0.2	Technical Developments and the Business Organization	08
1.1		Internet Development from Wire to Wireless	09
	1.1.1	Brief History of the Internet	10
	1.1.2	Brief History of the World Wide Web (www)	10
1.2		Electronic (e) - Commerce and Mobile (m) – Commerce	14
1.3		Social Technology	16
	1.3.1	Etymology	17
	1.3.1.1	Conceptual Definitions	17
	1.3.2	History of Social Technologies	18
	1.3.3	Applications of Social Technologies	20
	1.3.3.1	Social Networks (SNWs)	21
	1.3.3.2	Blogs/ Microblogs	21
	1.3.3.3	Ratings and Reviews	22
	1.3.3.4	Social Commerce	22
	1.3.3.5	Wikis	23
	1.3.3.6	Shared Work-Spaces	23
	1.3.3.7	Discussion Forums	23
	1.3.3.8	Crowd-Sourcing	24
	1.3.3.9	Social Gaming	24
	1.3.3.10	Media and File Sharing	24
1.4		Manifestations of Social Networks in India	25
1.5		Social Networks (SNWs)	27
	1.5.1	History of Social Networks (SNWs)	29
	1.5.2	Importance of Social Networks (SNWs)	29
	1.5.3	Features of Social Networks (SNWs)	30
	1.5.3.1	Information Access	30
	1.5.3.2	Global View	31
	1.5.3.3	Networking	31
	1.5.3.4	Experimentation	31
	1.5.3.5	Activism	31
	1.5.4	List of Social Networks	31
	1.5.4.1	Facebook (FB)	32
	1.5.4.2	YouTube	33
	1.5.4.3	WhatsApp	33
	1.5.4.4	WeChat	34
	1.5.4.5	Instagram	34
	1.5.4.6	QQ	35

CHAPTER:1:
REVIEWING MANIFESTATIONS OF SOCIAL NETWORKS

PARA NUMBER		PARTICULARS	PAGE NUMBER
	1.5.4.7	Q Zone	35
	1.5.4.8	Douyin / Tiktok	35
	1.5.4.9	Sina Weibo	36
	1.5.4.10	Reddit	36
	1.5.4.11	Twitter	36
	1.5.4.12	LinkedIn	37
	1.5.4.13	SKYPE	37
	1.5.4.14	Snapchat	37
	1.5.4.15	Viber	38
	1.5.4.16	Pinterest	38
	1.5.4.17	LINE	38
	1.5.5	Features of Internet affecting Social Networks	39
	1.5.5.1	Accessibility	39
	1.5.5.2	Extensibility	40
	1.5.5.3	Integration	41
	1.5.5.4	Time Convenience	42
1.6		Technology Acceptance Model (TAM)	43
	1.6.1	Perceived Usefulness	44
	1.6.2	Attitude	45
	1.6.3	Behavioural Intention	46
1.7		Value for Customers	47
	1.7.1	Models of Value for Customers (VC)	48
	1.7.1.1	Preliminary Model of Value for the Customers	48
	1.7.1.2	Five Preliminary Forms of Value for Customers (VC)	50
	1.7.1.3	Creating a Customer Value Proposition	51
	1.7.1.4	The Process of Collective Value Creation in Brand Communities	52
	1.7.2	Value Creation	54
	1.7.2.1	Social Networks and Value Creation or Generation for Customers	56
	1.7.2.1.1	Functional Value	57
	1.7.2.1.2	Social Value	58
	1.7.2.1.3	Emotional Value	59
	1.7.2.1.4	Monetary Value	60
	1.7.3	Challenges and Limitations of Social Networks (SNWs)	60
		References	62

CHAPTER:1:

REVIEWING MANIFESTATIONS OF SOCIAL NETWORKS

EXECUTIVE SUMMARY OF CHAPTER NUMBER ONE:

The chapter number one discusses the concept of value, value delivery model, different types of value and the value creation which are important concepts for Customer Relationship Management (CRM). The chapter has covered various technical developments that have taken place over a period of time that has affected way of doing businesses. It offers a comprehensive brief of Social Networks (SNWs) around the world. Its objective was to understand history, expected growth and various other aspects of social networks. The researcher has put an effort to understand the meaning of “Social Technology”, “Social Networks” and use of Internet by the Social Network Users (SNWUs). The researcher has provided a bird-eye view of use of Internet at the Global level, along with its Indian context. The chapter offers a brief review of different areas viz., evolution, growth, characteristics, classification and reviewing use and selective applications of social networks in India as well as social networking, features of Internet affecting growth of Social Network Technology (SNT), Technology Acceptance Model (TAM), value for customers, models for value creation and the different types of value created or generated through in it.

It also implies the core truth that there is a continual increase in the use of social networking applications. Increase in use of social networks is largely driven by the ease in availability of Internet connections, instruments through which it can be accessed, increase in disposable incomes, favourable demographics, and changing lifestyles. India is a fast-developing economy and ranks second in terms of population in the world. Majority of people living in India are youth and is reflective of faster adoption of new technology. India is becoming a promising market for various Social Network (SNW) applications. Use of different social networks application have created various type of values for its users and are increasingly becoming a new source of value creation for different business organizations.

CHAPTER:1:

REVIEWING MANIFESTATIONS OF SOCIAL NETWORKS

1.0: INTRODUCTION:

Business organizations are set up with a profit motive. In order to earn profit, it is important for an organization to create, communicate and deliver value to the customers and manage relationship with them in such a way that, not only this relationship benefits the organization but also to the various other stakeholders attached with it. The business therefore tries to deliver desired customer value for making profit without forgetting their responsibilities towards the society. “Values” are interpreted as the “set of benefits that organization offer to the customers to satisfy their needs” (Kotler, Keller, Koshy, and Jha, 2009).¹ It is very important for the organization to understand customers’ needs and wants after having its clear understanding organization has to evaluate its capacity for building up the resources that would help in meeting the needs and wants of their target customers. Customers are value maximisers, they choose the offer that would give them the best value. Thus, it is important to adopt a value-centric perspective for the growth and development of the organizations (Ramaswamy & Namakumari, 2018).²

Business organizations have five different type of market place (i) “Business to Business” (B2B), (ii) “Business to Consumer” (B2C), (iii) “Consumer to Consumer” (C2C), (iv) “Consumer to Business” (C2B) and (v) “Business to Government” (B2G). B2B consists of the organizations that deal in goods and services that are used by other business organizations. Acquisition of the goods by the organizations can be in the form of selling, renting, or supply by others. Same type of transitions when occur between the organization and the final customer of the product and or services, market is said to be as B2C. In both the above market places, business organization is the producer of product and services who exchanges the same with others. But, in C2C market, business organization facilitates the exchange of product and services among the customers. Here, one customer is the owner of product or holder of services who exchange the same with other customer. C2B transactions occur online when customer sell something to business. To illustrate, when a Blog owner sells advertisement space to business on their Blog or when, someone with a certain skill provides a service to a company without being in business themselves, such as a customer building a website for a local small company. B2G transactions occur when business sell something to the Government (Bell, January, 2016).³ Last two type of market place are comparatively new for the business organizations. In order to survive or grow in any of the markets, organizations therefore need to understand value that they want to be delivered to their target customers (ibid).

1.0.1: Value:

The concept of “Value” first emerged in the field of Economics. Great economist Adam Smith, David Ricardo, and Karl Marx had viewed value as an “intrinsic part of commodities which can be measured and represented via an economic constant” (McKnight, 1994).⁴

Aristotle viewed value as “thing which is more properly perceived via the use' that can be derived from a commodity” (Smart, 1891).⁵ From marketing perspective, Kotler et al., (2009)¹ defined value as “the sum of the perceived tangible and intangible benefits and cost to customers. It is a set of benefits offered by the organization to their target customers to satisfy their needs.” Thus, Buyers’ choice between the different offerings of the companies is based on the perception for the products or services that are capable of delivering them the utmost value. Ramaswamy & Namakumari (2018)² have explained value as “when a customer buys a product or service, they are basically guided by the benefits the product/service brings to them.” Thus, they are guided by the idea of “Utility”. A customer, however, does not stop with utility but consider “several other things”. “Utility” and “several other things” constitute their bundle of benefits. Marketing identifies this bundle of benefits as values.” Customer reckons tangible and intangible benefits from the purchase of products or services. “Functional utility” of the things purchased is tangible benefits while “experience, prestige, brand image” are “intangible benefits” they desire from the purchase of things. Thus, customers do not buy the product but, buy values. While analysing particular offering, customer reckons various benefits and assigned weights or credit to them according to his/her priority. The aggregate of weight or credits so assigned is called Total Customer Benefits (TCB) (Ramaswamy & Namakumari, 2018).² The value is a subjective phenomenon, and each and every user of the product and services of the organization value product and services in different ways. The organization, in order to increase consumption of its product or services, should make every effort to create and build positive perception of value received by the utilization of its offerings (ibid).

Zeithaml (1988)⁶ had defined “Perceived Value” (PV) as “the customers’ overall assessment of the utility of a product or services based on perception of what is received and what is given.” Kotler et al. (2009)¹ had defined it as “a difference between the prospective customer evaluation of all benefits and all costs of an offering and the perceived alternatives.”

Total customer benefits are “the perceived monetary value of the bundle of economic, functional, and psychological benefits customers expect from a given marketing offering because of the products, services, personnel, and image involved” (Zeithaml, 1988).⁶

The Total Customer Cost (TCC) is “the perceived bundle of costs customer expects to incur while evaluating, obtaining, using, and disposing of the given market offering, including monetary, time, energy and psychological costs. It is a trade-off between quality and price of the product and services offered by the business organization and thus implicit as Value-for-Money” (Chain Store Age, 1985; Cravens et al., 1988; Monroe, 1990).^{7,8,9} Porter (1990)¹⁰ held product quality, special features and after-sales services, which are important for delivering superior value to the customers.

Customer value has mainly two components, first, tangibles and second, intangibles. Each component has a definite role, a set of activities and a set of deliverables. Together, it makes up a Value Delivery Process (VDP). Business organisations being different from one another has to understand value which they want to deliver considering its business model and business environment.

Each and every business activity of organization need to be linked for the successful delivery of the required value. The sub-section below describes Value Delivery Process (VDP) (Kotler et al., 2009).¹

1.0.1.1: Value Delivery Process (VDP):

Professor Philip Kotler (2009)¹ have discussed two type of value delivery process a brief about the two type of value delivery process is discussed in this section.

Figure Number:1.1:
Value Delivery Process
(a) Traditional Physical Process Sequence



(b) Value Creation and Delivery Sequence

Choose the Value			Provide the Value					Communicate the Value		
Customer segmentation	Market selection/focus	Value positioning	Product Development	Service Development	Pricing	Sourcing making	Distributing Servicing	Sales forces	Sales promotion	Adversing

Strategic Marketing

Tactical Marketing

Source: Kotler et al. (2009)¹

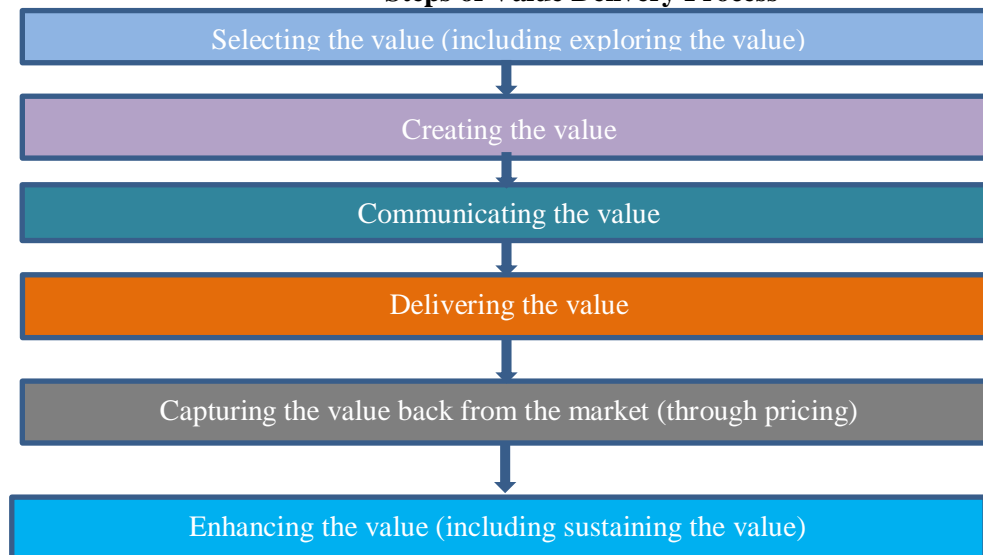
In traditional view of marketing, organizations used to manufacture a product first and then make efforts to sell it. Thus, marketing occurs in the second half of the process. This traditional view does not work when customers have lot of choices and there was a mass market of the product and services, where each customer has his/her own want, perception, preference and buying criteria (Kotler et al., 2009).¹

In this type of market, it was difficult for an organization to sell its product in the entire market, thus organization need to identify the customers who have the needs and wants that can be satisfied by the product or services of the organization. After identifying the needs, organization should design its product in such a manner that shall offer maximum value to the customer who would use it. The value delivered to customers by the organization can be in the form of “products, benefits, attributes, etc.” Anything that creates or generate value for the customer should be included in VDP of the organization (ibid).

According to Kotler (2009)¹ VDP has been divided into “three phases”. First phase includes “Choosing the Value”. It occurs before starting of any business. In this phase, owner of the business with the help of experts decides about the product that should be launched in the market.

Second phase is “Providing the Value” where organization decide upon the product features, price, and distribution through which organization makes every effort that its product with the other attributes has everything that satisfies the needs and wants of the target customers. The third phase includes “Communicating the Value” where organization utilize its “sales force, sales promotion, advertising, and other communication tools to launch and promote the product in the market place” (ibid).

**Figure Number:1.2:
Steps of Value Delivery Process**



Source: Ramaswamy & Namakumari (2018)²

Ramaswamy & Namakumari (2018)² have added three more steps in the VDP as given by Professor Philip Kotler. VDP of Ramaswamy & Namakumari starts with “Selecting the Value” having the same meaning as the first step of Professor Kotler’s VDP where the prospective organization has to explore about the value that is to identify the needs and wants of customers which can be fulfilled by undertaking business activities by them. The second step of VDP includes “Creating the Value” which includes designing and set-up of entire organizations’ function which includes viz., Technology, Design, R & D, Engineering, Manufacturing, Finance, and Marketing, etc.(ibid).

Efforts are put in by the organizations to integrate all above mentioned functions so that each and every employee and stakeholder associated with any of these functions of business shall put efforts that would help in the attainment of common goal of delivery of the value to the customers. The third step of Value Delivery is “Communicating the Value” where organization communicates value proposition by adopting different modes of communication. The fourth step is “Delivery of Value” which includes physical delivery of the value (product) to the target customers. The fifth step of the process is “Capturing Value Back for the Firm from the Market. The organization offers feature, benefits, services, and psychological satisfaction to the target customers by purchase of its product. In return customer pays price which is a rightful due to the organization (ibid).

Organization thus, by proper pricing captures value from the market. The last sixth step of Value Delivery Process is “Enhancing the Value”. Value augmentation helps firm to stay modern and contemporary in the market. In current times, with technology breaking the boundaries of product categories and new product possibilities, organizations need to constantly add values to its offerings to remain alive and grow in the market (ibid).

1.0.2: Technical Developments and the Business Organizations:

According to Benkler (2006)¹¹ human development and freedom is based on the information, knowledge, and culture prevailing and adopted by the society. People over a period of time adopt different type of sources to share the information and knowledge regarding personal and business communication. Business units have adopted different sources of communication for designing its VDP right from designing the “Value to be Delivered” to the “Communication” and “Enhancement” of value with the various stakeholders of the business. In early days, business units communicated through the representative of the organizations. Who actually went to the market in search of information and collected the responses of the customers about their needs and wants. In order to communicate value to the target customers, sales representatives were sent to different places. The sales representatives actually travelled at different places and marketed the organisations’ products and services to the group of people or individuals through face to face communication. But, the method was costly, time-consuming and had a limited reach (ibid).

Due to adoption of mass media by the different stakeholders including customers. Information, and knowledge about the organizations’ product or services were communicated through it. Organizations adopted different mass media like Newspapers, Radio, and Television to communicate value to the various stakeholders. This method was faster than the earlier method as it could address a greater number of people at a time. But, the sources were limited to the people and those organizations who could afford such media for communication. Thus, due to cost factor, limited number of organizations could communicate through such mass media. Still, it was difficult for the small or medium size organization to have such type of communication where they can communicate different information to their stakeholders (Kraut, et al., 1998).¹²

With the passage of time and technological development, business units begun to communicate with its stakeholders through telephone calls. Customers were contacted through telephone for explaining products or services of the organization. This method was time savvy, it also eliminated the limitation of geographical distance where people can be contacted through just one phone call. The method helped in two-way communication where business organization had a chance to get more idea about the individual’s needs and wants due to direct contact with different stakeholders. It reduced the cost of communication compared to earlier method when organisation was emphasizing at one to one communication but had its own limitation of low response from the customer as many customers did not pick up the calls or were not ready to answer them (ibid).

Use of computers in business processes and development of Internet facilitates provided a connection to these people who are having computers; gave the business a new source of value delivery. Business units now had a new mode of value identification, creation, delivery, and communication. Business organizations therefore created Websites for their organization. These websites were accessible by any person having an Internet connection. Anybody having an Internet connection can view the Website and could gather information about the organization. Internet provided ease in accessibility of information to the people around the world. Information about anything was just a click away. Now, it was easy for individuals to compare different product and services available on the Internet and to make informed decisions (ibid).

Internet has opened altogether a new market place for business organization, this new market place is widely been known as “e-Commerce” (Wigand, 1997; Luo, & Seyedian, 2003).^{13,14}

Business organization irrespective of different geographic locations started competing with one another. Business organizations also started offering value-added services that increased and improved the value of the offering of the organizations. In the new market, various Business, Non-Business and Government organization came together for offering products and services to satisfy the needs and wants of their target customers. Among all technical developments discussed above “Internet” brought a sea change in method of conducting and managing business (Wellman, et al., 1996).¹⁵

1.1: INTERNET DEVELOPMENT FROM WIRE TO WIRELESS:

This part of the research study has put efforts to provide content related to Internet development, and also to present a brief history of the Internet and the World Wide Web (www).

Internet has provided ease in connecting and working with different people living at a distance place. Scientists working at different universities in the USA and living in distant places have developed this technology known as Information Technology (IT) which has provided capability to work with each other. IT primarily developed by them was called ARPAnet that provided access only to a few people and worked only with some special software meant for limited users. It continued to grow and in the 1970s, a new communications model “Internet” was developed which used “Transmission Control Protocol” (TCP) and “Internet Protocol” (IP) that could transfer the data between multiple networks and was accessible by the computer users with special wire known as Broadband. The business organization started using Internet for internal and external communication which brought a great speed in internal communication and lead to quick strategic decision-making among the employees of the organization (Science Node, n.d.).¹⁶

1.1.1: Brief History of the Internet:

“Advanced Research Projects Agency” (ARPA) came into existence by the approval of U.S. Secretary of Defence Neil McElroy on February 7, 1958. Research done at ARPA led to the foundation for the creation of the Internet. In 1962, J.C.R. Licklider, a scientist from ARPA and MIT, suggested using ARPA or ARPANet as a Communication Network which was the second form of the Network to allow US Telephone and Wireless Network active in the event of a nuclear attack. In the year 1965 “Packet Switching” made data transmission possible. Military contractor “Bolt, Beranek, and Newman” (BBN) developed an initial form of routing devices “Interface Message Processors” (IMPs), which revolutionized data transmission (ibid).

The “Stanford University Network” was the first “Local Area Network” (LAN) connecting remote workstations, as the first message was sent over the “ARPANET” in the year 1969 from the “University of California, Los Angeles” (UCLA) to the second Network node at “Stanford Research Institute” (SRI). The technology was further developed by the scientists Robert Kahn and Vinton Cerf in 1970s with the use of “Transmission Control Protocol” (TCP) and “Internet Protocol” (IP). The new communication model allowed transmission of data among the multiple networks. TCP/IP was adopted by ARPANET on January 1, 1983. From that time researchers from all around the world started to develop and assemble the “Network of Networks” that gave birth to the Internet technology (History, n.d.).¹⁷

1.1.2: Brief History of the World Wide Web (www):

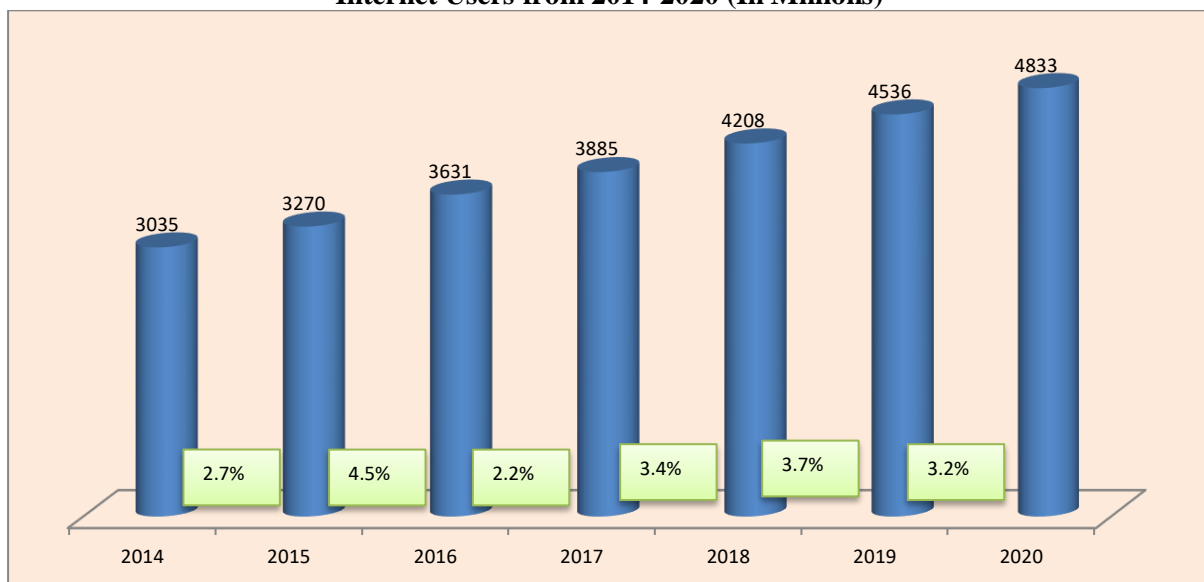
“Hypertext Transfer Protocol” (HTTP) was further technical development in Internet Technology which gave various computer platforms, the capability to access the same Internet web sites. “Hypertext Transfer Protocol” (HTTP) was widely known as the “World Wide Web” (www). Computer scientist Tim Berners-Lee of the “European Organization for Nuclear Research” (CERN), in the year 1989, created the “Hypertext Transfer Protocol” (HTTP) which gave different computer platforms the facility to access the same Internet sites (Science Node, n.d.).¹⁶ “Hypertext Project” was called “World Wide Web” in which a “Web” of “Hypertext Documents” could be viewed by “Browsers”. The first browser developed by the scientist ran on the NeXT computer and thus provided access to very few users. The first Web Server, that provided access to a greater number of Internet users, was designed by Paul Kunz and Louise Addis in December 1991. Thereafter, several computer scientists wrote browsers that were generally for the X-Window System on the request of Berners-Lee. Contribution of Tony Johnson from SLAC was examined to be significant in designing of web browser. He designed the browser named “MIDAS” (CERN, n.d.).¹⁸

Some of the other notable contributions were from Pei Wei who was technical publisher O'Reilly Books and designed “Viola” browser, and the Finnish students from Helsinki University of Technology who designed “Erwise” browser (Science Node, n.d.).¹⁶

The first version of Mosaic browser was released by the “National Centre for Supercomputing Applications” (NCSA) at the “University of Illinois” in early 1993 (CERN, n.d.).¹⁸ “Mosaic browser” was the first in itself to show images with the script. It also offered users with different “graphical interface norms” (ibid).

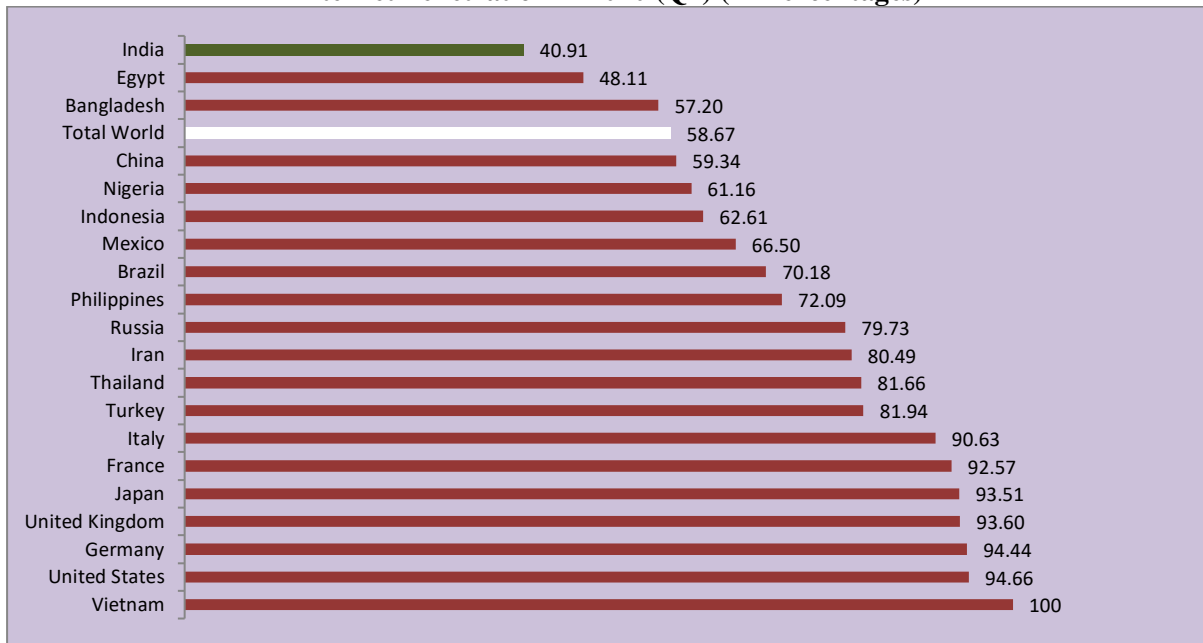
The web was originally conceived and established for the information-sharing between scientists of universities and institutes around the world. Thus, invention on the World Wide Web (www) brought Internet services to be operated by many users of the Internet. “www” provided ease in access to information, knowledge, and culture. People around the world started adopting the Internet as a new source of information, knowledge generation, making connections, marketing of product and service, doing business, etc. Figure Number 1.3 shows an increase in Internet users from year 2014 to 2020 (Internet World Stats, n.d.).¹⁹

Figure Number:1.3:
Internet Users from 2014-2020 (In Millions)



Source: Internet World Stats (n.d.)¹⁹

Figure Number:1.4:
Internet Penetration in 2020 (Q1) (In Percentages)

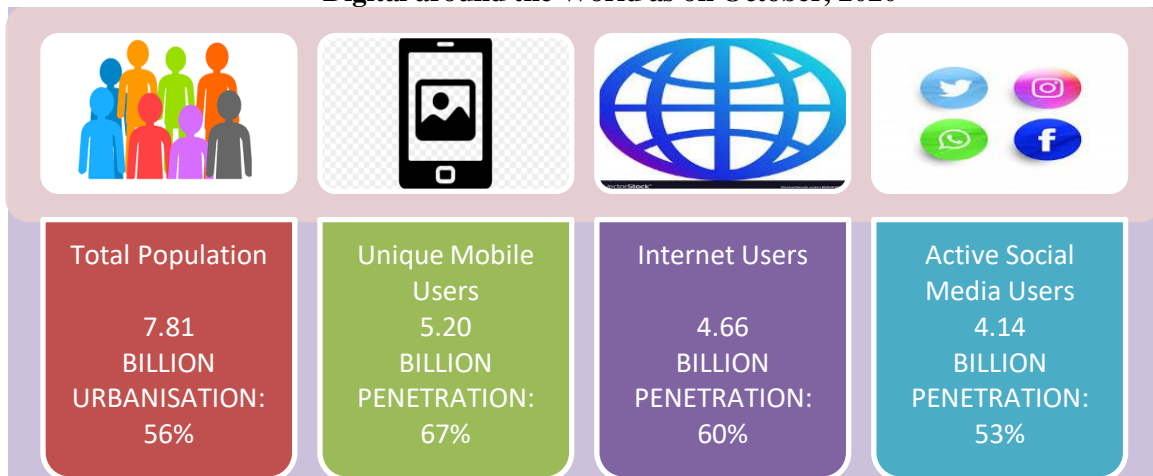


Source: Internet World Stats (n.d.)¹⁹

The Figure Number 1.4 illustrates percentage of people having and using Internet connections in different countries. 58.67 per cent of the world population had an Internet connection. When we look at the percentage of Indian using the Internet, it was observed that 40.91 per cent of people living in India were having an Internet connection (ibid). Internet is operated through different devices like Computer, Smartphone, Laptop, Tablet, etc. But, earlier Internet connections were possible only through cables. Thus, devices like computer and laptops were required to be connected with the cable for accessing different applications of Internet. But, with passage of time wireless technology developed and Internet connections were available without the use of wire through Wi-Fi Network. Internet is now accessible by movable devices like Laptops, Smartphones, Tablets, etc. But, the accessibility was to the limited area where these connections were available. This limitation of accessibility was overcome when mobile service providers started giving Internet connection through data connection. Internet has now become accessible at any place wherever mobile service provider signals are available. People now largely use Internet through their mobile phones (Chui et al., 2012).²⁰

Figure Number 1.5 provides the details of total population and the number of active Internet users in the year 2020.

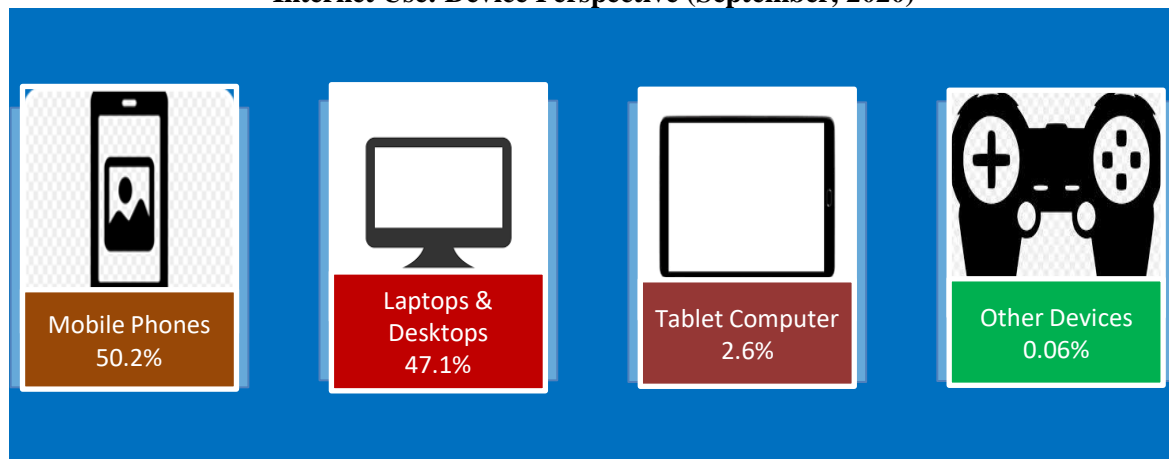
Figure Number:1.5:
Digital around the World as on October, 2020



Source: Datareportal (n.d., a)²¹

A large number of people in the world are using Internet for different purposes. Among 7.81 Billion world population in October 2020, 4.66 Billion, 60 per cent of people used Internet. 4.14 Billion Internet users were found using Internet to access different social applications. Among the total population, 50.2 per cent of people had access to Internet application through their mobile phones (smartphones) in September 2020. Figure Number 1.6 gives the details of different devices used for accessing Internet used by the Internet users in the September 2020 (Datareportal, n.d., a).²¹

Figure Number:1.6:
Internet Use: Device Perspective (September, 2020)



Source: Datareportal (n.d., a)²¹

Due to ease in connecting with people, searching of different things and observing the increase in the number of Internet users, business organizations have identified it as a new market place to do business activity. Business organizations have gradually started using this technology for improving and developing their business processes. Two new modes of doing business transaction have emerged namely Electronic Commerce (e-Commerce) and Mobile Commerce (m-Commerce) respectively (ibid).

1.2: ELECTRONIC (e) - COMMERCE AND MOBILE (m) - COMMERCE:

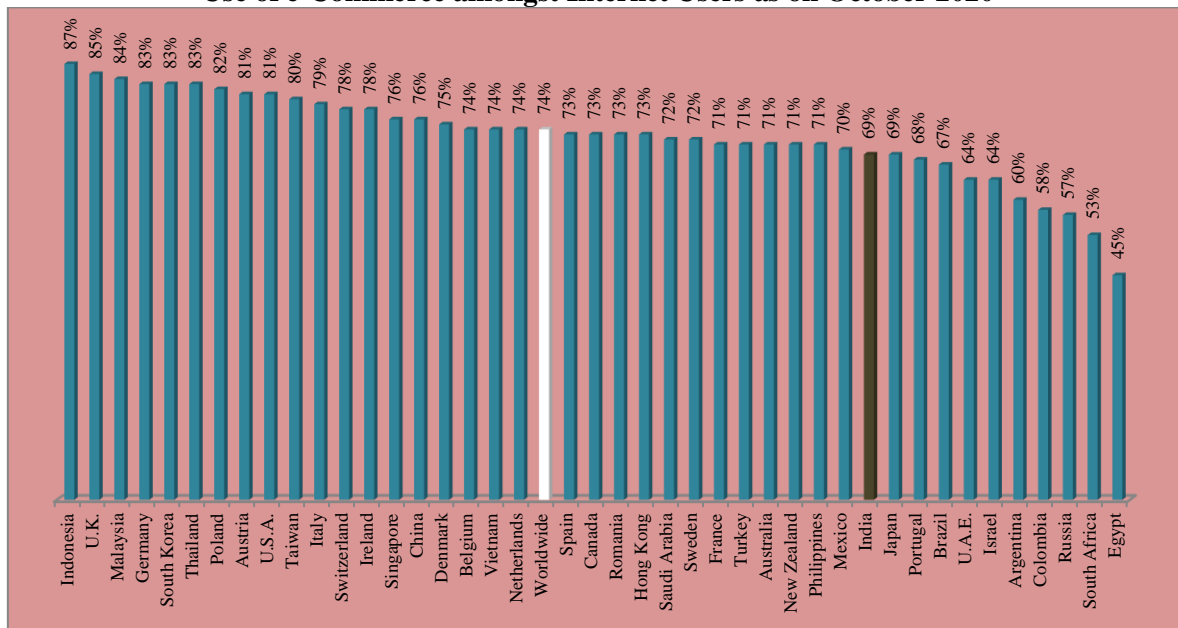
This section provides information on the e-Commerce and m-Commerce. It offers definition on the concept supported with the facts and figures to showcase use of e-Commerce and m-Commerce throughout the world. e-Commerce transaction came much earlier compared to m-Commerce.

Zwass (1996)²² has explained e-Commerce as “the sharing of business information, maintaining business relationships and conducting business transactions by means of Telecommunications Networks”. Thus, any transaction when done electronically on the Internet by the business organization, it is said to be an e-Commerce transaction. While, m-commerce transactions also occur electronically but with the help of a movable device that is mobile device which is mobile or smart phone).

Durlacher Research (1999)²³ has defined m-Commerce transactions as “any transaction with a monetary value that is conducted using a Mobile Telecommunications Network.” Sadeh (2002)²⁴ has defined it as “as the emerging set of applications and services people can access from their Internet-enabled mobile devices.”

Figure Number 1.7 gives indication on number of transactions that has occurred in e-Commerce.

Figure Number:1.7:
Use of e-Commerce amongst Internet Users as on October 2020



Source: Datareportal (n.d., a)²¹

The use of e-Commerce amongst Internet users has been provided in Figure Number 1.7. It was found that nearly 74 per cent of the world Internet users used e-Commerce transactions through use of different devices in Q2 of the year 2020. While, 69 per cent of Internet users in India had engaged into e-Commerce activities (Datareportal, n.d., a).²¹

Selective activities that were undertaken on e-Commerce by the Internet users in Q2 in the year 2020 are demonstrated in Figure Number 1.8. It was observed that 82 per cent of Global Internet users used Internet for search of product and services to buy them, 89 per cent had used Internet to visit online store or any web page, and 74 per cent had purchased online product and services (Datareportal, n.d., a).²¹

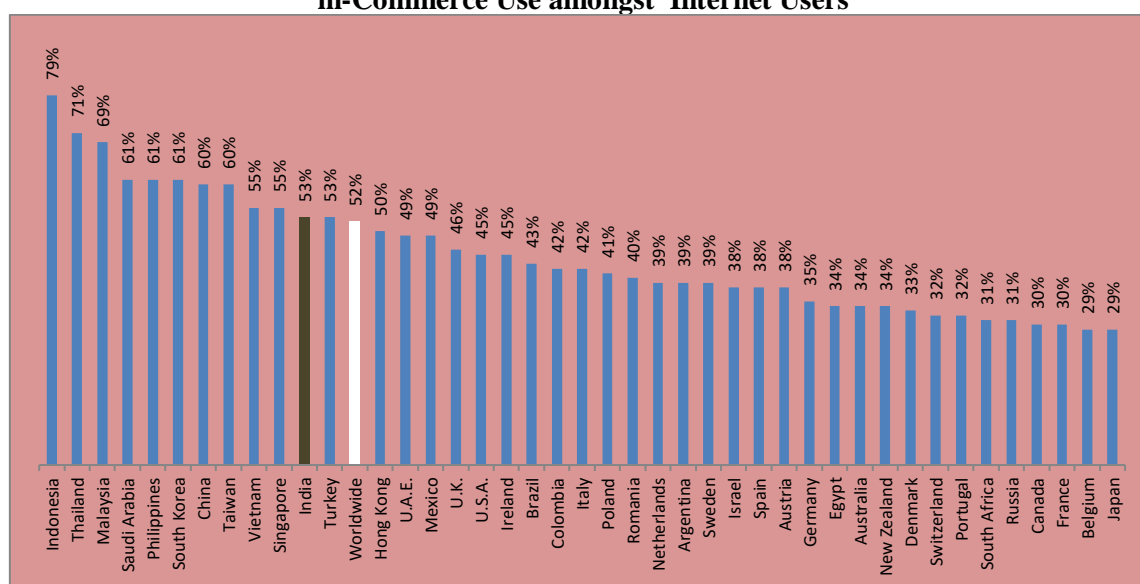
**Figure Number:1.8:
e-Commerce Activities**



Source: Datareportal (n.d., a)²¹

Among 74 per cent of the world Internet users who had performed e-Commerce transaction in Q2 of the year 2020 (Please Refer Figure Number 1.7), 52 per cent of the Internet users had purchased through their mobile phones. And, 53 per cent of 69 per cent of e-Commerce transactions in India were through the use of smartphones. Figure Number 1.9 shows details of buying through use of smartphones (ibid).

**Figure Number:1.9:
m-Commerce Use amongst Internet Users**



Source: Datareportal (n.d., a)²¹

People around the world are continuously joining online communities and using different Internet applications for purposes like collection of information, connecting with people, surfing Internet to feel relax, for entertainment, etc. Social technology applications are one of such applications that help Internet users to engage into all such activities. There are number of social technology applications, which fulfil these needs of the users. People are constantly using social platforms to share updates, to comment, to give information and to consume content on various products and services.

There are different social technologies applications like “Social Networks (SNWs), Blogs/Microblogs, Ratings and Reviews, Social Commerce, Wikis, Discussion Forums, Shared Work-Spaces, Crowd-sourcing, Social Gaming, Media, and File Sharing”. With the adoption of this new source of technology by the people in their daily communication, one finds businesses using social technologies to create value for their business by creating value for their customers. This value is predicated not on the use of social technology alone, but on innovative, considerate, and well-executed plans that may integrate other channels. These applications are very useful for companies that depend greatly on the perception of consumers for product development and marketing purposes. Different business organizations now have an opportunity to create value by engaging customers on social technology and by monitoring social technology conversations to understand consumer insights (ibid).

In this ways, social technologies are increasingly becoming a new source for generating market intelligence and a place where a business organization can market its products and services.

The section below offers information on social technology by providing facts on the emergence of the word, giving understanding about the concept by displaying definitions of different authors, and also through providing a brief history of the emergence and different known applications of social technology.

1.3: SOCIAL TECHNOLOGY:

This part of the chapter provides discussion on the concept of social technology. It has also considered giving factual information on emergence definition and applications of the social technology.

Albion Woodbury Small and Charles Richmond Henderson were the first to use the term "social technology" at the University of Chicago (Skarzauskiene, Tamosiūnaitė & Zalieniene, 2013b).²⁵ Social technology includes all those applications that facilitate communication, association, and enable discussions across stakeholders.

Bryer & Zavattaro had identified "Electronic Blogs, Audio/Video tools (YouTube), Internet Chat Rooms, Cellular and Computer Texting, and Social Networking sites" as some of the applications of social technology (Bryer & Zavattaro, 2011).²⁶

There are many approaches to understand and define social technology. Most of these approaches emphasize social technology as web-based applications, which allow Internet users to generate and circulate web-based contents. Brass and others had examined “Social technology is a set of actors and the set of ties representing some relationship or lack of relationship among the people, organizations and social entities” (Brass, et al., 1998).²⁷

1.3.1: Etymology:

The term social refers to “a characteristic of living organisms human in particular, through biologists also apply the term to populations of other animal. It always refers to the interaction of the organism with other organisms and to their collective co-existence, irrespective of whether they are aware of it or not, and irrespective of whether the interaction is voluntary or involuntary.” (Mathur, 2012).²⁸ While media is widely understood as a communication tool which is used to store and deliver information or data (Techopedia, n.d.,a).²⁹ Social technology has evolved as a combination of personalized media experience, within the social context of participation (Boyd & Ellison, 2008).³⁰

1.3.1.1: Conceptual Definitions:

- Henderson (1901)³¹ had defined social technology as a “system of conscious and purposeful organization of persons in which every actual, natural social organization finds its true place, and all factors in harmony cooperate to realize an increasing aggregate and better proportions of the Health, Wealth, Beauty, Knowledge, Sociability, and Rightness desires”.
- Anderson (2007)³² had defined social technologies as “Internet-based technologies that facilitate creativity, information, knowledge sharing, and collaboration.”
- Blackshaw and Nazzaro (2004)³³ have defined Social technology as a “consumer-generated media which describes a variety of new sources of online information that are created, initiated, circulated and used by customers’ intent on educating each other about products, brands, services, personalities, and issues.”
- Alberghini, Cricelli & Grimaldi (2010)³⁴ have defined social technology as “any technologies used for goals of social or with any social basis, including social hardware (Traditional Communication Media), social software (Computer-Mediated Media), and social media (Social Networking Tools).”
- Chui, Manyika, Bughin, Dobbs, Roxburgh, Sarrazin, ... & Westergren (2012)²⁰ have defined social technologies or social media “are the Information Technology (IT) products and services that enable the formation and operation of online communities, where participants have distributed access to content and distributed rights to create, add or modify content.”
- Skarzauskiene, Tamosiūnaitė and Zalieniene (2013, a)³⁵ have defined social technologies as “information and communication tools that have a range of economic, social, cultural or other public life processes available to each person: computers, smartphones, social networks, etc.”

From the above definitions on social technologies, it can be inferred that social technologies are used with the help of Internet. It empowers Internet users to generate and share contents to the other users of the same or different applications of social technologies. It is a new and quick mode of communication adopted by the Internet users.

The following section throws light on the emergence of social technologies in the world.

1.3.2: History of Social Technologies:

Social technologies begun in the 1970s, through the first interactive computer terminals. These terminals were used by academics and computer scientists to create “Electronic Bulletin Board Systems”. Members used to post short messages about a specific area of interest on a central computer through these terminals. With the introduction of “Usenet” in the late 1970s, the first distributed “Bulletin Board System” (BBS) came into existence, which run on the university, research networks, and “File Transfer Protocol” (FTP) (Dennis, et al., n.d.). Usenet helped to share large content files to computer users. In the 1990s, the Internet brought “Data Networks” (DN) to the masses providing the foundation for social technologies and e-Commerce through Web 2.0 (Ibid).

Anderson (2007)³² had explained “Web 2.0” as “more socially connected Web where everyone can add and edit information in e-space.”

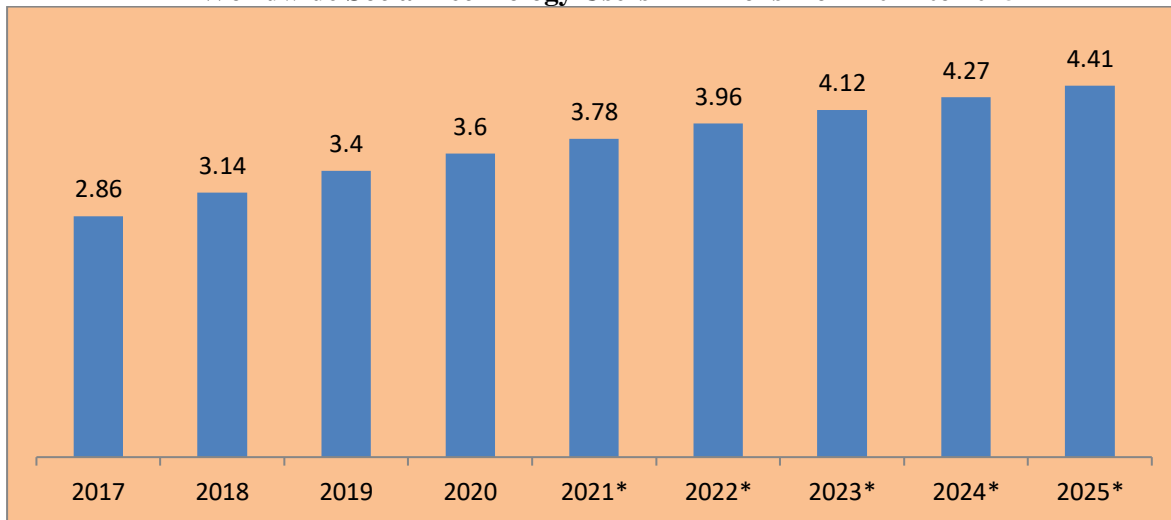
Hoegg with others (2006)³⁷ had defined “Web 2.0” as “philosophy of mutually maximizing collective intelligence and added value for each participant by formalized and dynamic information sharing and creation” (Hoegg, et al.,2006).³⁷

Constantinides and Fountain, (2008)³⁸ have defined Web 2.0 as “collection of open-source, interactive and user-controlled online applications expanding the experience, knowledge and market power of the users as participants in business and social processes. Web 2.0 applications support the creation of informal users’ networks, facilitating the flow of ideas and knowledge by allowing the efficient generation, dissemination, sharing and editing/ refining of informational content.” It enables continuous generation of information and provides easy access for the information to it users. Users can copy, share, edit, syndicate, reproduce and re-mix the information using Web 2.0 (Constantinides, Romero & Boria, 2008).³⁹

Web 2.0 thus has become a social platform that had transform Internet users into content creators and distributors by making them more interactive and social. “Virtual Commons” are increasingly becoming a common platform for sharing of information and content within the community by millions of Internet users. Internet users now use different types of internet applications like Weblogs and Blogs, to display their ideas and thoughts regarding different things to the other Internet users. Different type of social technology applications had led to the increase of social technology users around the world.

Figure Number 1.10 shows the number of social technology users worldwide from the year 2017 to 2025 (In Billions) (Statista., n.d., a).⁴⁰

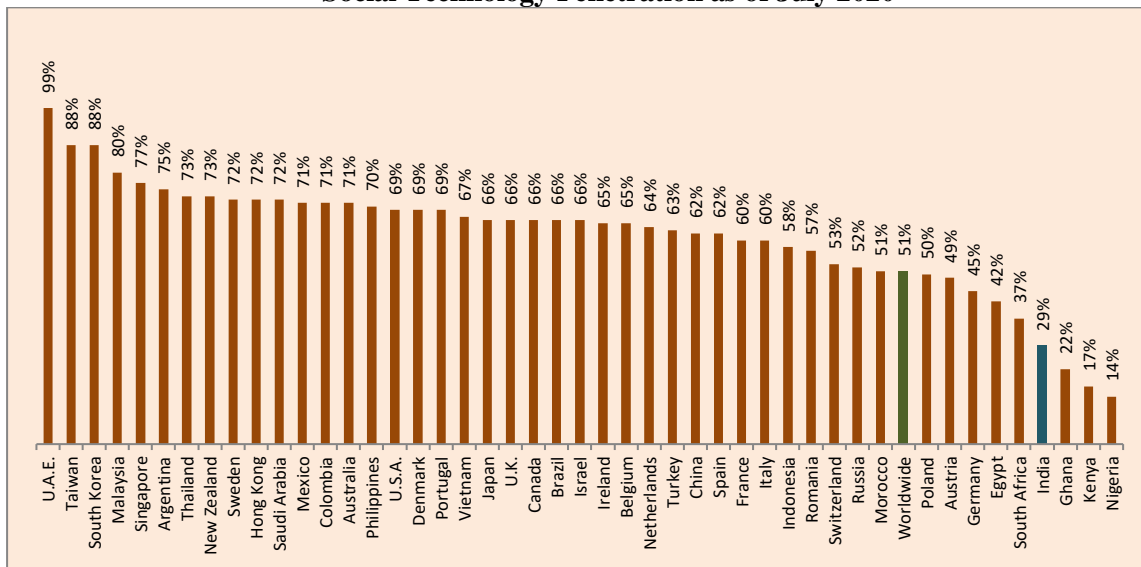
Figure Number:1.10:
Worldwide Social Technology Users in Billions from 2017 to 2025



*Predicted Users

Source: Statista. (n.d., a)⁴⁰

Figure Number:1.11:
Social Technology Penetration as of July 2020



Source:Datareportal. (n.d.)⁴¹

There is a constant increase in the use of social technology users around the world. The Figure Number 1.11 shows the percentage of social technology users compared with total users in different countries and the whole world. It was found that 51 per cent of the world population used social technologies for different purposes. Majority of Internet users who lived in U.A.E where the users of social technology applications, while only 29 per cent of total Indians were the users of one or the other social technology applications. But, as India ranks second in term of population in the world, 29 per cent of total Indian population is also a very huge number of users of the social technology applications (Datareportal, n.d.).⁴¹

The constant increase in the percentage shows continuous adoption of social technology by the people living in the country. Social technologies have different applications which satisfy different type of needs of the users. Some applications of social technologies are purely for communication, entertainment sharing knowledge and information, and group discussion. Some applications of social networks are design in such a way that they can be used for multipurpose by the users (Skarzauskiene, Tamosiūnaitė & Zalieniė , 2013 b).²⁵

The following section describes in brief different applications of social technologies.

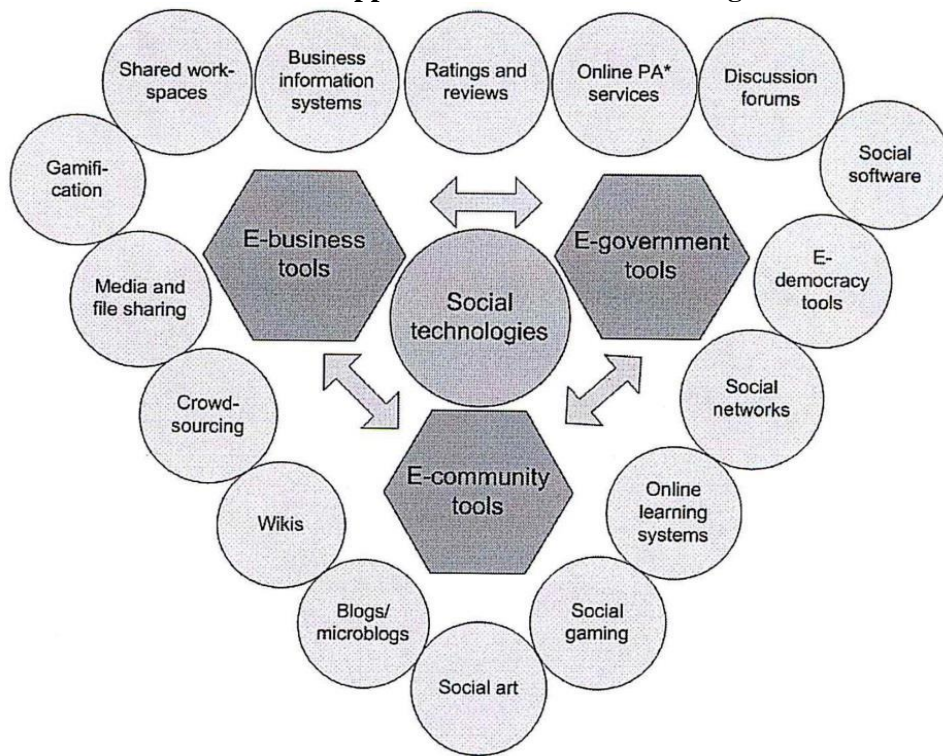
1.3.3: Applications of Social Technologies:

Social technologies are Internet-based technologies. Internet users use social technology to develop relationships, such as friendships and trade relations. It is also used to show affiliation with the individual and organization, and for financial and informational exchange (Grabner-Kräuter, 2009).⁴² Castells (1996)⁴³ had emphasized on the openness of networks, he described networks as an open structure that enable the integration of new actors or nodes as long as they share common communication codes. Communication codes are values or performance goals of the users.

Liebeskind, Oliver, Zucker and Brewer (1996)⁴⁴ have defined the networks as “a collectively of individuals among whom exchanges take place that is supported only by shared norms of trustworthy behaviour.” Social technology connects and satisfies the requirement of users through several applications. It includes a wide range of various applications, which can be used by people, business organization, and Government to interact among themselves (Skarzauskiene, Tamosiūnaitė & Zalieniė, 2013b).²⁵

Different applications of social technologies are shown in Figure Number 1.13. Among all the applications of social technologies, Social Networks (SNWs) are the applications which are widely used by the people around the world.

**Figure Number:1.12:
Selected Applications of Social Technologies**



Source: Skarzauskiene, Tamosiūnaitė & Zalieniė (2013b)²⁵

1.3.3.1: Social Networks (SNWs):

A social network is “web-based service that allows individuals to construct a semi-public or public profile in a bounded system” (Boyd & Ellison, 2008).³⁰ It also articulates a list of other users of the site which help users to “share connections, views and thoughts”. The feature that differentiates social networks from the other social technology application is it not only allows individuals to meet strangers but also enables users to discuss and make visible their social networks. The social networks connect individuals with others through personal and business profiles in networks, which otherwise is not possible through any other media already in existence. The social networks thus increase connectivity among the people by providing them a platform where they can share content with each other. A user by using the social network connects with the people and share things of the common interest. The social networks are the rich source of information generation and a place where a business organization can market their products (ibid).

1.3.3.2: Blogs/ Microblogs:

Blogs are Web page are the social technology application that acts as “a publicly accessible personal journal for an individual or company”. Blogs are examined transcribed in sequential order and displayed in reverse sequential order to the reader (Webopedia, n.d.).⁴⁵ Blogs are used to publish and discuss the opinions and experiences of online communities. Blogging allows users to express themselves in a chatty, conversational manner in as many words as they like. Length of the posts in the blogs depends upon the purpose of the blog (Kaplan and Haenlein, 2011).⁴⁶

Microblogs, on the other hand, allow Internet users to display small content such as short sentences of one or two lines, images, or video links or link to an article (ibid). Microblogs are incorporated in different websites. To display the content on some Microblog, users need to log in, whereas some Microblog allow social login to the users. In a Microblog, the posts are brief that is restricted by a number of characters. Users can send or receive the posts of Microblog using different devices that have internet connections. Twitter is one of the most popular and widely used Microblogging sites by the Internet users. Feature of portability and immediacy of Microblogging make it more popular among the internet users (Techopedia, n.d.,b).⁴⁷

1.3.3.3: Ratings and Reviews:

Ratings and Reviews are mainly assessments and judgments given by customers, clients or consumers to a specific business, professional or service. Ratings and reviews are given by the customer based on their experience and level of satisfaction for the specific product and service that were used by them. Ratings are the customers' assessments and judgments that contain stars, digits or any quantitative number. The rating system has different scale that range from five, ten or hundred. While reviews are displayed as these are written. When customers give feedback by writing their opinion in the form of a text, this text is also termed as a review. Reviews give valuable feedback as customers are given options to write the reason for their likes/dislikes. Rating and Reviews help in boosting organization sales, improve transparency and provide valuable Search Engine Optimization (SEO) insights (Quora, n.d.).⁴⁸ Ratings and Reviews are generally used in an e-Commerce website. It helps to evaluate and improve the services of e-Commerce site by making improvement in the products, services, and experiences as rated by the customers of the website (ibid).

1.3.3.4: Social Commerce:

Social Commerce is a type of "Electronic Commerce" (e-Commerce) that uses "online social networks to help with the buying and selling of goods and services." Yahoo first used social commerce in 2005 to describe "a set of collaborative shopping tools, such as user reviews, shared pick lists, and tips and information posted by other users" (MNB Market Business News, n.d.).⁴⁹

It refers to new online marketing strategies or retail models that incorporate peer-to-peer communication from established social networks, to increase sales (ibid). Social commerce helps users to purchase in groups and share an opinion on social platforms.

Cecere (2010)⁵⁰ had defined social commerce as "the use of social technologies to connect, listen, understand, and engage to improve the shopping experience of the users." Thus, social commerce is electronic commerce that employs social technology to promote online transactions of buying and selling products by utilizing "user ratings, referrals, online communities, and social advertising to facilitate online shopping" (ibid).

1.3.3.5: Wikis:

Ward Cunningham a computer programmer introduced Wiki by creating a groupware (Collaborative Software) named WikiWikiWeb in the year 1995. Wiki word was adopted from the Hawaiian language which meant “Fast or Quick” (Dictionary.com, n.d.).⁵¹ Wikis work on collaborative efforts and trust. It is a knowledge base website where users can search, create and adapt articles. Simple wiki programme allows users to create and edit the content on the website from different computers. While in more advanced wikis content are to be accepted or rejected by the authorised person when they are modified by the other users (Tech Target, n.d.,c).⁵² The most popular wiki web site is “Wikipedia” that is generally used by the users of Internet while searching information. All wikis are an engine that provides rapid access to stored knowledge (ibid).

1.3.3.6: Shared Work-Spaces:

A “collaborative workspace” or “shared workspace” provides inter-connected environment through which members at distinct places can contact and communicate with each other at a given point of time. Shared workplace provides real-time conversation among Internet users that facilitate them to put the collaborative efforts. Virtual interaction among them takes place through real time collaborative space like, Meetings, Whiteboards, Videos, etc. In order to share a workspace among the members, the work environment required to be supported by electronic communications and groupware. Availability of proper Internet connections and electronic devices enable member participant to overcome difference of space and time and help them to put joint efforts (Flexjobs, n.d.).⁵³ Intranet facilities allow the users to “shared mental model, common information, and the understanding of all participants regardless of their physical location.” Shared work-spaces help to co-create content and support in coordinating joint projects and tasks at a distance place (ibid).

1.3.3.7: Discussion Forums:

The idea of Web discussion forums grew out of newsgroups using the Usenet system. It was developed in year 1979 to function as a Bulletin Board System (BBS) and was compatible with UNIX machines.

As technology advanced, discussion forums were developed to work on the web rather than on a UNIX system (Encyclopedia.com, 2002).⁵⁴ Thus, Discussion forums are the online "Bulletin Board" (BB) in general terms. It is a virtual place on the Internet where members engage into discussions and share information among the other Internet users. Discussion forums are generally created about a specific topic of mutual interest or for a precise group of users around a particular job. The topic covered by discussion forums varies in the subject that includes Sports, Health, Business, Current Events, Finance, and Entertainment. It is a place where one can leave a message and expect to see responses to the messages he or she has left. In discussion forums, topics are discussed in open communities and thus give rapid access to expertise (Kstoolkit, n.d.).⁵⁵

1.3.3.8: Crowd-Sourcing:

In crowdsourcing information, opinion or work is obtained from the large group of people. The information is collected by the organisations through the use of different Internet applications like social technology and smartphone applications. Crowdsourcing allows companies to involve Internet users from different places reducing the barrier of time and place and thus help them to get a “vast array of skills and expertise without incurring the normal overhead costs of in-house employees” (Investopedia, n.d.).⁵⁶ Crowdsourcing is defined as “the process of obtaining needed services, ideas, or content by soliciting contributions from a large group of people, especially an online community, rather than from employees or suppliers” (Merriam-Webster, n.d.)⁵⁷. It helps in harnessing collective knowledge and generates collectively derived answers (ibid).

1.3.3.9: Social Gaming:

Social gaming is the video games either partly or mainly played through the Internet by the devices supporting Internet connections. Social gaming activity connects the Internet user with friends and strangers to play games online. It is exclusively for the entertainment purpose of the Internet users. A social network game is a kind of online game that is played alone or with a group of people. The people with which the games are played may be known or the unknown to the users. Social network games are generally found as browser games, but can also be executed through the other platforms such as mobile devices (Gaugh, 7 March, 2019).⁵⁸

1.3.3.10: Media and File Sharing:

File sharing allows access to digital media to the users who have granted access to view or edit the file by the other users. Through file sharing access can be provided to the “computer programs”; to the multimedia like “Audio, Images, and Videos, Documents and Electronic Books” to the number of people having Internet connection. File sharing can be done by adopting common methods of “storage, transmission, and dispersion”. It also includes physical sharing by using “removable media, centralized servers on computer networks, worldwide web-based hyperlinked documents, and the use of distributed peer-to-peer networking”. User “upload, share and comment on Photos, Videos, and Audio” through media and file sharing using Internet facilities (Zhang & Shen, August, 2009).⁵⁹

Each and every application of social technology is unique. Among all the application of social technology, social networks are one of the most widely used application by the users of the Internet. Social networks are used not only by the individual users but also by the business organization to gain marketing insides and generate value for their customers (Chui et al., 2012).²⁰

The section below provides a manifestation of SNWs in India by giving details of the number of Internet users in India, their mode of accessing Internet connection, and a number of Internet users using social network and growth of social networks in India.

1.4: MANIFESTATIONS OF SOCIAL NETWORKS IN INDIA:

This section of the research study has provided the facts and figures to showcase use of Internet and social networks in India.

Use of Internet had gone up in India with more and more people using the Internet on a regular basis. According to “Telecom Regulatory Authority of India” (TRAI) Report, there were 687.62 Million Internet subscribers at the end of September 2019 in India as compared to 665.31 Million Internet subscribers at the end of June 2019. India thus witnessed a quarterly growth of 3.35 per cent in the third quarter of the year 2019. Among the Internet subscriber in India, there were 504 Million active Internet users with the age above five years as on November 2019. Growth in the Internet population was examined to be faster in females compare to males. 26 Million new female Internet users were added in November 2019 in India. The growth in female Internet user was examined to be 21 per cent as compared to 9 per cent increase in male Internet users from March-2019 to November-2019 in India (Telecom Regulatory Authority of India, 8 January, 2020).⁶⁰

Users use to access Internet from different devices in India. Access of Internet from mobile device was examined to be highest which amount to 99 in Urban and Rural India. When the place of Internet access was inspected, it was examined that 93 per cent of the Internet users accessed it from home, 24 per cent from work place, 22 per cent while travelling, 8 per cent from place of study, and 2 per cent from Internet Café.

Internet consumption while travelling was found to be more prominent in Metros or in the cities where population was more than 50 Lakhs. Every 4 out of 10 Internet users access Internet while travelling in such cities (Nielson and IAMAI Report, n.d.).⁶¹

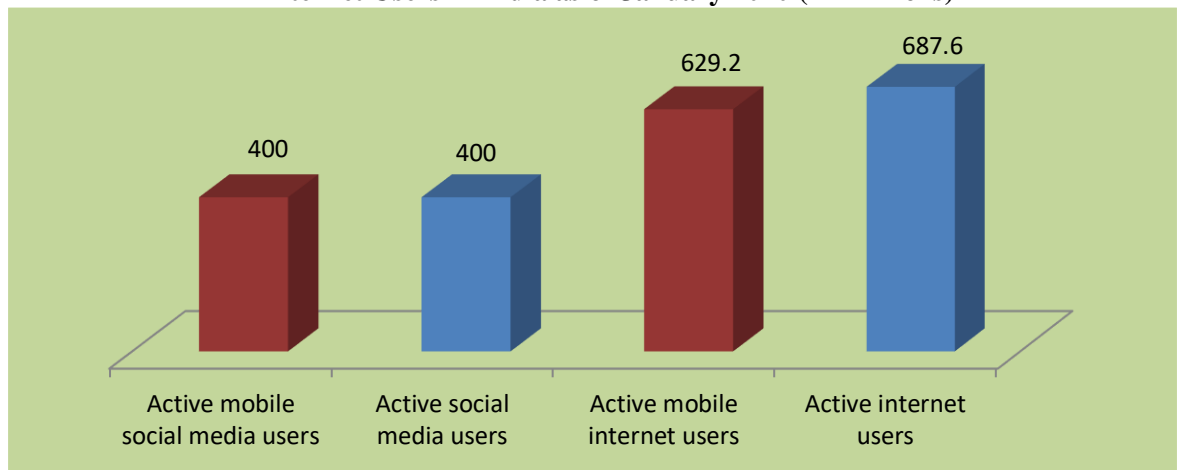
The gap between the urban and rural Internet users has reduced due to increased availability of bandwidth, cheap data plans and increased awareness for the benefits for use of Internet. There were 508.19 Million rural wireless subscribers at the end of June 2019 which increased to 514.56 Million at the end of Sep 2019. Whereas there were 657.27 Million urban wireless subscribers at the end of June 2019 which increased to 659.18 Million at the end of Sep 2019 (TRAI, 8 January, 2020).⁶⁰

Among the total Internet users in India as on July 2020, 23 per cent used Internet for entertainment purpose like watching shows and films. 18 per cent used it to access different social media and on messaging services. 17 per cent used it for listening to music. 13 per cent spent more time on mobile applications, 12 per cent on gaming whereas 7.4 per cent used Internet for uploading Videos and 5.7 per cent had use of Internet for making podcast (Datareportal, n.d.).⁴¹

Thus, people in urban India were examined mainly using Internet for social networking purposes this shows the rapid adoption of social networks by the Internet users in India.

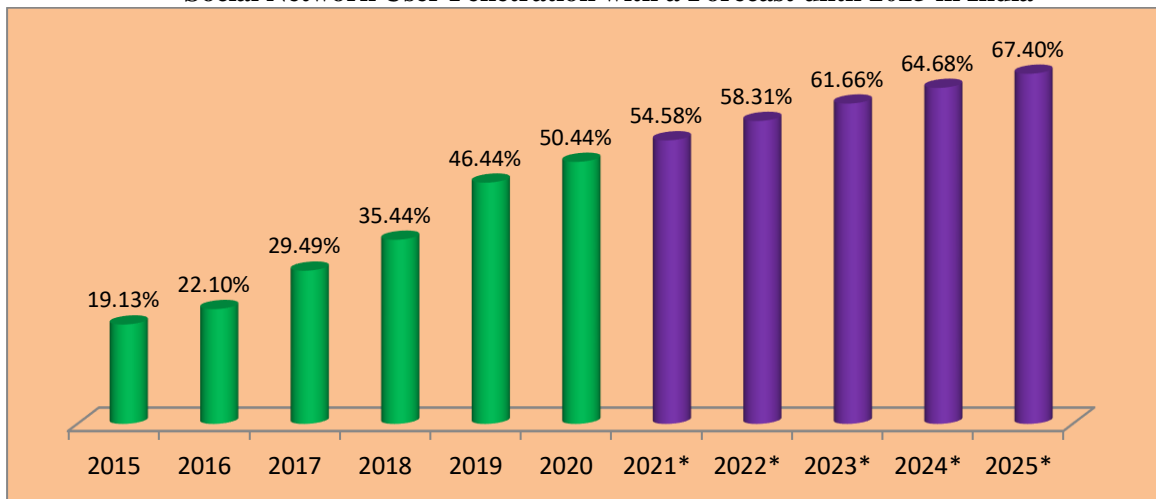
The figure 1.13 shows that Internet users in Millions in India which is further bifurcated in terms of active Internet users, active mobile Internet users, active social media users, and active mobile social media users as on January 2020 and Figure 1.14 presents a number of SNWs users in India.

Figure Number:1.13:
Internet Users in India as of January 2020 (In Millions)



Source: Statista (n.d., b)⁶²

Figure Number: 1.14:
Social Network User Penetration with a Forecast until 2025 in India



*predicted number of users

Source: Statista (n.d., c)⁶³

Majority of Internet users in India use the Internet through their smartphone. More than half of the use of Internet connection is found for the purpose of using social networks (Figure Number 1.13) and there is a constant increase in the users of social networks in India (Figure Number 1.14). Thus, it is important to understand social network applications.

An attempt has been made in the following part to provide details in brief on social network applications in India. It has provided definition to clarify the concept of social network applications followed by its brief history, importance and features of social network applications as well as features of Internet that affects the social networks applications.

1.5: SOCIAL NETWORKS (SNWs):

Social Networks (SNWs) allow Internet and or social media users to “manage, build and represent” their social networks. It is a virtual platform that connects the Internet or social media users with the existing Internet or social users of the social networks. Making and developing friendships and connections with people. Creating an online presence of the Internet or social media users by providing a platform for demonstrating the content created or forwarded by the users. It is helpful in looking the content and finding the information posted by other users; and allows them to create and customize their profile. The feature of social networks like making of profile, developing friends or follower and giving and receiving comment on the profiles differentiate it from the other Internet applications. Some social networks allow any Internet user to view profile of the social network users without their permission and place their comment on such profile. This feature makes the users more visible in the virtual world (Ahmad, 2011, b).⁶⁴

Individuals continuously join social networks as it is easy for the Internet user to create a virtual profile and connect with millions of Internet users across the world. The social networks also provide an opportunity to the users to express their views. It gives them a feeling of independence and self-esteem (Das & Sahoo, 2011).⁶⁵

Other than communication, social networks are increasingly being used for entertainment purposes. Internet users see Videos, listen to the Music, Play Games and brows for News and updates on social network (Orchard, Fullwood, Galbraith, & Morris, 2014).⁶⁶

Boyd & Ellison (2008)³⁰ had explained social network as “Web-based services which allow Internet users to construct a public or semi-public profile within a bounded system.”

Schuler (1994)⁶⁷ had explained it as “a social media which comprises a variety of social software platforms in which people can create, share and exchange user-generated content. Where, social software is computer system and applications that serve as an intermediary or a focus for social relationship.”

Kwon and Wen (2010)⁶⁸ had stated that social network is a “website that allows building online relationships between persons by means of collecting useful information and sharing it with people. Also, Internet users can create groups which allow interactions amongst Internet users with similar interests.”

Arya (2011)⁶⁹ had explained social network as “a media designed to be disseminated through social media interaction, created using highly accessible and scalable publishing techniques. It uses Internet and web-based technologies to transform broadcast media monologues (one to many) into social media dialogues (many to many). It supports the democratization of knowledge and information, transforming people from content consumers into content producers.”

Mathur (2012)²⁸ had defined social network as “a social structure made up of individuals or organization called as “Nodes”, which are tied on connected by one or more specific types of interdependency, such as friendship, kinship, common interest, financial exchange, dislike, sexual relationship, or relationship of beliefs, knowledge or prestige.”

Manjunatha (2013)⁷⁰ had defined social network as “Internet-based social spaces designed to facilitate communication, collaboration, and content sharing across networks of contacts.”

Chhiato (2018)⁷¹ had defined social network as “a web platform where people from different cultural settings can connect and interact with each other.” Social Networks are thus the specific websites and application that helps the Internet and social media users to find and interact with the other similar users.

Use of social network application allows the Internet and social media users to establish and develop contacts by communicating and disseminating information to the other Internet and social media users of the social network. The social network thus combines individuals’ personal experience for the use of media with the social experience form participation and thus provides users with the unique experience for communication and interaction with the use of social network.

Jain, Gupta and Anand (2012)⁷² had found that the features like use of profiles, creation of friends, commenting on the content displayed by other, viewing of the profile of the other Internet and social media users in order to find people of similar interest distinguished social network from other computer-mediated communication. Social networks have become a new source of getting the information about the person and the people connected to them. Such information is examined to be utilized by business organizations for advertising its products to the users who seem interested in using the product or services. Contact information of the social network users are also used to promote the brands. Incentives are also offered by the business organizations to the use who promotes the product and services of the organization with their personal network. Thus, social networks are becoming the new platform for advertisement by the business organizations. Social networks were also examined to assess its help in developing the teacher-student relationship by increasing the connectivity among the knowledge giver and taker. Social networks are the platform where Internet and social media users can demonstrate their creativity without much of the worry to publicise it (ibid).

Social networks provide users with a different mode of communication that is Photos, Videos, Audios, Text, Pdf, etc. It is becoming a powerful new source of communication and expression among the users which make them more socialized (Mooney, 2009).⁷³

The following section offers a brief history of social networks.

1.5.1: History of Social Networks (SNWs):

The first recognizable Social network's website SixDegrees.com was launched in the year 1997. It allowed social media users to create profiles and list their friends and then contact them. From the year 1998 onwards, it started providing services of stuffing friends list to its users. SixDegrees.com promoted itself as a tool which helped social media users to stay connected and send messages to people. From the year 1997 to 2001, social networking websites like Asian Avenue, Black Planet, and MiGente permitted social media users to generate their private and professional profile (Boyd & Ellison, 2008).³⁰

The users of the network thus could identify and connect with the users of similar interest or the users who are known to them without seeking consent of the users to add them in their connections. In the year 1999, Live Journal was launched, it allowed one-directional connections on its user pages. The Korean virtual world's website Cyworld was started in the year 1999 and added social network features of the in the year 2001. Unlike the feature already present in other websites. Swedish web community, Lunar Storm refashioned itself as social network in the year 2000. Another type of social networking website Ryze.com was launched in the year 2001 which helped social media users to leverage their business networks. The other such social networking websites were Tribe.net, LinkedIn, and Friendster. Among all the social networking websites, Friendster, Myspace, and Facebook were the three important social network websites that have changed the way people use to communicate and connect with known and unknown people (ibid).

This part has tried to explain in brief important reasons for the growing importance of social networks for social media users, organizations, and society respectively.

1.5.2: Importance of Social Networks (SNWs):

Any Internet user (or) social media user referred in this research study as synonymous can easily join social networks by creating a profile in a particular social network application. Social networks are the applications, which run through the Internet. An application of social networks opens the door for accessibility of the Internet user. By connection with one or the other application of social network, Internet user can easily connect with their friends and other users of the social network throughout the world. Social network has provided the access to the limitless information from all around the world to its users (ibid).

Lenhart and Madden (2007)⁷⁴ had indicated that the prime purpose of the Internet users to join and use social networks is to stay connected and do further communication regarding different matters with their friends. Social network users used social networks to show their affiliation with the organizations or individuals. Connections through social network fulfil their need for belongingness. Regular post done by the other users of the social network satisfies their need for information. Publicity of the content, money received or saved by the use of social network give the feeling of goal achievement or self-identity to the users. Use of social network is also examined providing the feeling of socially acceptable to its users (Ridings & Gefen, 2004).⁷⁵

Gangadharbatla, (2008)⁷⁶ had found that social networks satisfy cognition need for belongingness and level of collective self-esteem of Internet users.

Lumpkins, Mabachi, Lee, Pacheco, Greiner and Geana (2017)⁷⁷ had found that social networks are effective in creating awareness and passing on the information to the people around the world.

Caton, Haas, Chard, Bubendorfer and Rana (2014)⁷⁸ had observed that information posted on SNWs affects the decision-making process of Internet users. They also found that social networks are effective as it maximizes the impact of the information by allowing integration of information posted on the networks.

Wang, Jackson, Gaskin and Wang (2014)⁷⁹ had found that social networks satisfy the social needs of the Internet users by connecting them with other Internet users, eliminating the limitation of distance and time. Social networks are useful not only for the Internet users but also to the group of Internet users and organizations. It is a rich source of value creation for all of them. Social networks due to its accessibility, extensibility, integration and time convenience provides ease in connecting with Internet users, developing contacts, providing knowledge and information, offering ease in development of business and, promoting innovation and creativity among the Internet users. Due to all these reasons, social networks play an important role in the development of society.

The following part of the chapter describes in brief various features of the social networks.

1.5.3: Features of Social Networks (SNWs):

The various features of social network websites make it useful for Internet users. Attitude and behaviour intention of Internet users are based on their experience of usefulness of social networks (Ghazizadeh, Lee & Boyle, 2012).⁸⁰

Internet users perceive SNWs as useful considering its features of applications. There are certain features of social networks due to which Internet users use social networks and receive the perceived benefits. The features of social network websites can be classified as information access, global view, experimentation and activism (Prahalad & Ramaswamy, 2004).⁸¹

An attempt has been made by the researcher to describe in brief various features of social network websites as follows.

1.5.3.1: Information Access:

The social network websites provide access to unprecedented amounts of information to Internet users. The information received from the social networks enlarges the thinking of the Internet users and assist them to view the things or situation holistically. Thus, information from the social networks helps the Internet users to increase their knowledge and make more accurate and informed decisions (ibid; García-Peñalvo, 2012; Ariff, et al., 2014).^{81,82,83}

1.5.3.2: Global View:

The social network websites have global access and thus have information from all around the world. Information on social networks is readily accessible with the click of the button. Internet users of social network can have information on different areas relating to Society, Business, Government, new invention, different cultures, skills, etc. which are posted or created by the Internet users of different countries. In this way, use of social networks provides a global view for the contents or situations (Pralhad, et al., 2004; Marshall, et al., 2012; Al-Aufi, et al., 2015).^{81,84,85}

1.5.3.3: Networking:

The social network websites are used by the Internet users who can access the application when S/he is connected to the Internet. Many social networks' application allows Internet users to find and connect users of their similar interest. This feature of social networks helps in increasing connectivity of the users. Similarly, there are many applications of social network, which allow posting of contents in a group. Due to this feature, all the Internet users among the group can view the content together. In this way, Internet user can stay updated about one another using social networks. Both the above-mentioned features are helpful in increasing networking of the Internet user using social networks (Pralhad, et al, 2004; Hughes, et al., 2012).^{81,86}

1.5.3.4: Experimentation:

The social network websites provide an open stage to demonstrate innovative things of creative Internet users who can be encouraged by the likes, comments, views, and subscription to the channel. Experimentation feature of the social network allow Internet users to intermix various features to be more effective and presentable in the social networks. Thus, it aids in promoting creativity, innovation, and demonstration of the same in front of the world (Pralhad, et al, 2004; Lerman, 2007).^{81,87}

1.5.3.5: Activism:

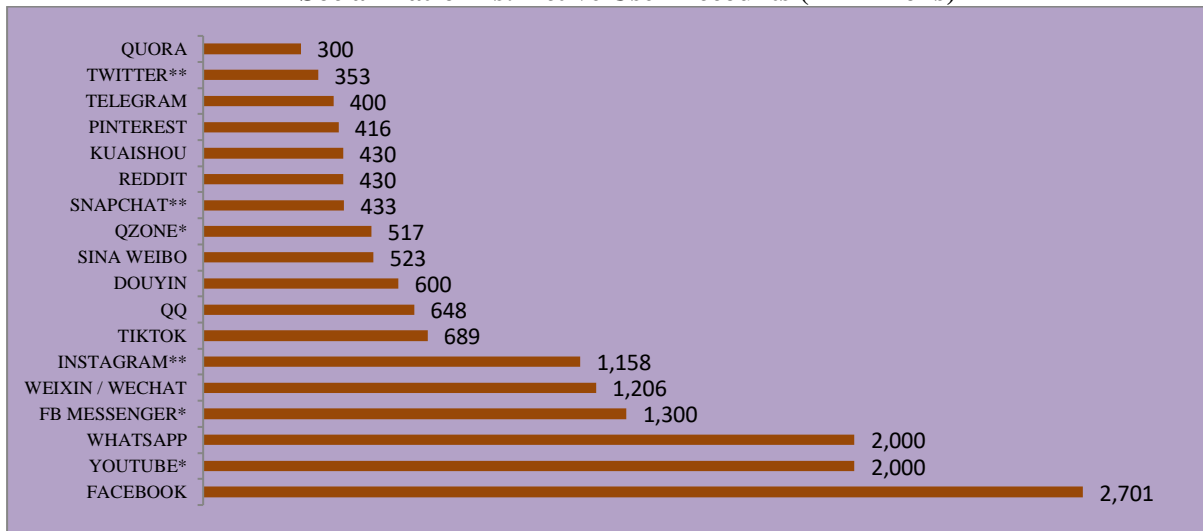
Dialogues among the users of social networks provide unsolicited feedback and opinion regarding commodity, services, situation, policies, practices, etc. The unsolicited feedback and opinion help other users of the social networks to take informed decisions regarding different matters. This feature of the social network website is called activism. Activism supports the user to discriminate and make choices of the things offered to them. There are many social networks which offer above mentioned features to the users of the social network (Pralhad, et al, 2004).⁸¹

The following part provides details of some of the most popular social network website of India.

1.5.4: List of Social Networks:

The different types of applications of social networks are available to Internet users to fulfil their diverse needs. The Figure Number 1.15 shows some of the most popular and used social network application of the world as on October 2020.

Figure Number:1.15:
Social Platforms: Active User Accounts (In Millions)



Note: (*) Have Not Published Updated User Numbers in the Past 12 Months

(**) Are Based on the Latest Advertising Audience Reach Figures Reported in Each Respective Platform's Self-Service Advertising Tools (Oct 2020)

Source: Datareportal (n.d., a)²¹

Figure Number 1.15 shows 18 most popular social network applications with the combination of pure social network and the messenger social network applications. Facebook has secured the first rank in terms of popularity and usage with 2,701 Million active Internet users, while Quora was ranked at the 18th most popular application with 300 Million active Internet users as on October 2020 (Datareportal, n.d., a).²¹

Each social network application is different from other in terms of way of using it. But, all of these applications allow networking on a large scale, where Internet users of the application can communicate with others users based on their offline friendships, shared interests, common professional objectives, or mutual acquaintances. Similar to “Blogs” and “review sites”, “social network applications” allow Internet users to give “comments, place photos, videos and Web links on each other’s pages”. It helps Internet users to share information and topic of interests with dozens of other users of the sites. Thus, many times it is found that hundreds and thousands of Internet users are depending upon the single click of one’s network (Datareportal, n.d.).⁴¹

The researcher has described in brief applications of selected social networks as follows.

1.5.4.1: Facebook (FB):

The Facebook (FB) was introduced at Harvard University in the year 2004 for connecting the friends studying in the university (Ahmad, 2011, b).⁶⁴ Thereafter gradually, it expanded globally and became the largest social networking website of the world, with more than 2.3 Billion social media users. The website of the Facebook has been translated to 111 languages and its access is free with easier registration process for opening an account to use it (Fick & Dave, 23 April, 2019).⁸⁸

The Facebook is generally used by social media users to share content like Videos, Pictures, and News, sending messages and chatting with one another (ibid).

Companies too have started taking commercial benefits of Facebook and are increasingly using the Facebook in formulation and implementation of its marketing strategy. It provides companies the capability where users can register themselves as fan of the product or services offered by the organisation. Internet users when like the page of the organization it demonstrates the affiliation of the user with the organisation. Information so collected by the organisation is then further used for advertisement and promotional efforts of the organization (Loechner, 2010).⁸⁹ With fan pages, companies can post messages to stay connected with their fans. When, social media users like the fan page of the company, their friends see it in their newsfeed, which again benefit the organization by increasing the awareness about its product and services to the other users of the social networking website (Facebook, n.d.).⁹⁰ “Facebook” social network application can be downloaded through https://play.google.com/store/apps/details?id=com.facebook.katana&hl=en_IN&gl=US (Google Play, n.d.).⁹¹

1.5.4.2: YouTube:

YouTube is a Video-based online application. It was launched in May, 2005. It allows its users to upload and access the Videos through different devices with Internet connectivity. Individuals can also download the Video to watch it when they are offline. It is accessed by the Internet users for learning different skills, for enhancing the knowledge, for purpose of entertainment, etc. Internet users can search for different Videos in the application considering his or her interest. Its search, application shows the list of Videos available for the user to view. In this way, YouTube application allows Internet users to search, watch and share originally-created & uploaded Videos. YouTube enables its users to “upload Video with a forum where they can connect, inform, and inspire other users across the globe”. Thus, YouTube is proven distribution platform for original content creators and advertisers (YouTube, n.d.).⁹² The social network application can be installed using the link, <https://play.google.com/store/apps/details?id=com.google.android.youtube> (Google Play, n.d., a).⁹³

1.5.4.3: WhatsApp:

WhatsApp is one of the widely accepted messaging social network application and it is the third widely used application by the Internet users in the World. It was founded by Jan Koum and Brian Acton which was later on acquired by Facebook in the year 2014 but the application has been operated as a distinct application as a messaging service that works fast and is reliably for the users who are operating it from different parts of the world. It is a mobile app. which is primarily designed as an alternative to Short Messaging Services (SMS). Those Internet users who are having an account on WhatsApp are able to use this application. It allows Internet users to form a group, where a message posted by one member reaches to all other members of the WhatsApp group. It also offers the facility to be operated on a one-to-one basis. Thus, the application has increased the connectivity of the social media users as he/she can have a conversation in a WhatsApp group (WhatsApp, n.d.).⁹⁴ With the passage of time this application has constantly got itself upgraded to facilitate sending and receiving messages in a variety of media (ibid)

Internet users of WhatsApp are able to communicate not only with text messages but also with Photos, Videos, Documents, Location, as well as Voice and Video Calls (ibid). Internet users can download the “WhatsApp” application for Mac and Windows PC using the link, <https://www.whatsapp.com/download> (Whatsapp, n.d., a)⁹⁵ and install the “WhatsApp” application for Android phones using the link <https://play.google.com/store/apps/details?id=com.whatsapp> (Google Play, n.d., b).⁹⁶

1.5.4.4: WeChat:

WeChat was developed by Tencent in the year 2011 as a “multi-purpose messaging, social media and mobile payment app”. It has combined features of both Facebook and WhatsApp application. In order to use this application Internet user, need to sign in and open an account on WeChat. It can be downloaded as a mobile application and is free of cost to use. The social networking applications offer its users with the features that facilitate users to make “Video and Voice Call, place Emoticons or Stickers, to do QR Coding and Capture, Gaming, Geolocation Searching (Shake), Blog Posts (Moments), making Brand Channels and perform Mobile Commerce” and perform much more with the use of application. Since its inception, “more than 600 Million Internet users have downloaded the app, and there are over 300 Million active Internet users that are engaged with the daily use of this app” (WeChat, n.d.).⁹⁷ WeChat application can be downloaded using the link, <https://www.wechat.com/en/> (WeChat, n.d., a).⁹⁸

1.5.4.5: Instagram:

Instagram was launched in October 2010 by Facebook, Inc as a “Photo and Video-sharing social network services”. It is an iOS Mobile Application created by Kevin Systrom and Mike Krieger (Instagram, n.d.)⁹⁹. To improve its reach and compatibility with the Android devices, a new version was released in April 2012, followed by a feature that limited website interface in November 2012, and application for Windows 10 Mobile and Windows 10 in April 2016 and October 2016 respectively.

Application provide user with the features where they can upload their Photos and Videos. Users of the application can also be tag and the location of the users can also be known with the use of application. Application provides option to the users where they can use the social networks to publicise their identity by making their profile open to view by any user of the network. Users of the application can search for the trendy content in the application and can also search the information based on the tags and the location of the other users (Bergström & Bäckman, 2013).¹⁰⁰ Internet users can login or download the application using the link, <https://www.instagram.com/accounts/login/> (Instrgram, n.d., a).¹⁰¹

1.5.4.6: QQ:

QQ is a Chinese social network application but now it is used all around the world. It provides the facility of instant messaging to its Internet users. The application was developed by Shenzhen Tencent Computer System Co., Ltd and it was launched in February 1999. The social network application can be downloaded and used by the users without making any payment and it is available in seven different languages viz., “English, French, Japanese, Spanish, German Korean and Chinese” respectively. It had a unique feature of translation of languages and hence connects users of different languages with the use of application. The users of application can communicate in 50 different languages with the help of this social network application. The application also had additional features which enable the users to Video chat which 20 different social network users at a time. Users can transfer the file online as well as offline with the use of application. Application claim to have more than 100 such features which help in satisfaction of the needs of the users of the application (QQ International, n.d.).¹⁰² Internet users in India were able to login in the website through the link https://play.google.com/store/apps/details?id=com.tencent.mobileqq&hl=en_IN&gl=US (Google Play, n.d., c).¹⁰³ The application has been banned in India from July 2020.

1.5.4.7: Q Zone:

Qzone too is a Chinese social network application. It is web as well as Blogging application where users can express and share content with the other Internet users. It is based in China and available in Chinese language only. It was created by Tencent in the year 2005. Internet users can freely register to use this application which provides some basic features that are free for every user of this application. It is having a personal Blogs where user can customize the background of their Blog. Feature for maintenance of diary, uploading the photos and listening to different type of music. The paid membership of the application is known as "Canary Yellow Diamond". Paid member can access more feature of the application which includes background Music and theme customization for their Blog. Paid Users who stay with the social network application for longer time are rewarded with providing access to more feature of the application (China Internet Watch, 13, September, 2013; Tech Target, n.d., a).^{104,105} Internet users can login to the social network application using the link, <https://qzonedownload.com/download-qzone-links> (Qzone, n.d.).¹⁰⁶ This application too has been banned in India from July 2020.

1.5.4.8: Douyin / Tiktok:

Bytedance the tech giant of China owned the Douyin/Tiktok social network application. Douyin is the Chinese application and operational only in China. The application allows the users to post small video. Users create, edit, and share short Videos through the social networking application. The application allows live streams which are regularly featured by Music background. Tiktok application is compatible with the iOS and Android. With the help of Tiktok Internet users can “create and post short music Videos of 3 to 15 seconds and short looping Videos of 3 to 60 seconds for the other users to view it” (whatsonweibo.com, n.d., a).¹⁰⁷

Android users can download the application using the link, <https://douyin.en.softonic.com/android> (Softonic n.d.).¹⁰⁸ The application has also been banned in India from July 2020.

1.5.4.9: Sina Weibo:

Sina Weibo too is a Chinese Micro-Blogging Website. It was launched by Sina Corporation on 14th August, 2009. It is often simply called “Weibo” and “Chinese Twitter”. But, actually, it is more versatile. It’s platform functions as a combination of Facebook and Twitter. But, ultimately both are a unique one. It has a 140-character limit to each post and Internet users are part of a “Follower-Follower Network”. The relationship between followers and followers is uni-directional; one can “follow” an individual and read his or her “Weibos” (Posts), s/he can like and share post, without being followed back. It is possible for Internet users to upload Videos, Images, and Gifts in this web applications (Whatsonweibo, n.d., b).¹⁰⁹ The social network application for Android can be downloaded using the link, <https://weibo.en.uptodown.com/android> (Uptodown, n.d.).¹¹⁰ This application has been banned in India from July 2020.

1.5.4.10: Reddit:

Reddit social networking application came into existence on 23, June 2005. It was created by Alexis Ohanian and Steve Huffman who were roommates and associated with University of Virginia (Maina, 2018, June, 6)¹¹¹. It is a news related social network application. Users of the application can read different type of news based on the voting of the members of the application. The new that received more vote are flash at the top of the other news. The social network application name is a play on the words "I Read It"(Tech Target, n.d., b).¹¹²

The application provides users with different types of news. Internet users can provide news content through direct link and the text in the social network application. Application users can organize and determine his or her position on the website’s pages by vote given by other users of the network. News that received highest positive votes appears in the top category or the main page of the application (Maina, 2018, June, 6).¹¹¹ The social network application can be install using the link, https://play.google.com/store/apps/details?id=com.reddit.frontpage&hl=en_IN&gl=US (Google Play, n.d., d)¹¹³ or <https://reddit-official-app.en.uptodown.com/android> (Reddit, n.d.).¹¹⁴

1.5.4.11: Twitter:

Internet users can send short messages up to 140 characters using the Twitter social network application. Short messages can be sent by users on the social network are called “Tweets”. In order to Tweet in the application users are required to be register under the application. Tweets done under the application can be viewed by any Internet users through the website interface, SMS or mobile device application. Users of Twitter can thus instantly share their ideas and information with the users of Internet. Twitter is one of the most popular social network applications having more than 300 Million active monthly social network users (Twitter, n.d.).¹¹⁵ Twitter application can be downloaded for Android, iOS, Window Phones and other using the link, <https://twitter.com/settings/download?lang=en> (Twitter, n.d.,a).¹¹⁶

1.5.4.12: LinkedIn:

LinkedIn is popular known social network application used for professional purposes. The social network application is used by the social network users of more than 200 countries. The application can be used by social network users of different languages as it is available in 24 languages. Any Internet user can register under the social network application. LinkedIn is generally used by Internet user who wants to connect with other Internet users who are working in similar industries. It helps professional users for networking with other local and international professionals. It helps businessman to share business-related information and statistics with other Internet users of the social networks. It begun in co-founder Reid Hoffman's living room in the year 2002 and was officially launched on May 5, 2003. Microsoft acquired this application in December, 2016 (LinkedIn, n.d.).¹¹⁷ The social network application can be downloaded from Google play store using the link, https://play.google.com/store/apps/details?id=com.linkedin.android&hl=en_IN&gl=US (Google Play, n.d., e).¹¹⁸

1.5.4.13: SKYPE:

Skype is a division of Microsoft Corporation founded in the year 2003. Social network users of the application can text to the other users, make Voice and Video call and thus can communicate and stay connected with one another. Skype allows the users to make group calling and thus allows them to do collective things. Skype is used by the Internet users for social as well as business purposes. Users can share the social celebrations like marriage function, birthday party, house warming party, get-together etc with the other members using Skype. Business organizations use it for conducting meeting and for joint working of the colleagues who are at distinct places. The social networking applications can be accessed through the different electronic devices like Smart Phone, Computer or a TV having the Internet connection and the Skype application installed on it (Skype, n.d.).¹¹⁹ The social network application for the Desktop and the Mobile phones can be downloaded through <https://www.skype.com/en/get-skype/> (Skype, n.d., a).¹²⁰

1.5.4.14: Snapchat:

Snapchat was developed by Evan Spiegel and Bobby Murphy in Santa Monica, California on September 16, 2011. It is an American technology and camera company offering four products viz., Snapchat, Spectacles, Bitmoji, and Zenly. Users of Snapchat can share Photos and Videos using their mobile devices. The social network application also allows its users to make text messages to the other users of the social network. S/he can prepare different type of drawings on the images and the text messages using different features of the application. The messages sent through this application disappears from the devices of the recipient after few seconds, this unique feature of the application differentiate it from the other social networking applications (Webwise, n.d.).¹²¹ Snapchat social network application can be downloaded through the link, <https://www.snapchat.com/download> (Snapchat, n.d.).¹²²

1.5.4.15: Viber:

Viber was created by Viber Media and was launched on 2nd December 2010 as a Voice over Internet Protocol (VoIP) and instant messaging application. (Maina, 2018, June, 6).¹¹¹ It was founded by Talmon Marco and bought by Rakuten a Japanese company in the year 2014 (BBC News, 2014, February, 14)¹²³. It is free to download app. that allows Internet users to make free calls, send Texts, Pictures and Video messages to other Viber users who can also make low rate voice calls to Non-Viber users with Viber Out. It works well on mobile and computer. Internet users can be use Viber from any part of the world and can connect with any other user of Viber worldwide. Thus, this application had increased the connectivity of the Internet users staying across the world (Viber, n.d.).¹²⁴ Viber social network application can be downloaded through <https://www.viber.com/en/download/> (Viber, n.d., a).¹²⁵

1.5.4.16: Pinterest:

Ben Silbermann, Paul Sciarra, and Evan Sharp were the creator of Pinterest social network application (Savchuk, 2016, March, 1).¹²⁶ It was launched in the year 2010 (Rodriguez, 2019, March, 29).¹²⁷ It allows sharing of images or Videos with its users which are popularly known as “Pinning” in the application. The collections of such “pins” are known as “Boards”. Application forms the common Board for the similar types of “Pins” done by different users of the application. In this way users of the application can view different “pins” which are on similar theme that they have “Pined”. Common “Board” for similar “pin” increases the accessibility for the users for like-minded people in the social network. Pinterest allow users to share their tastes and interests with the other user of the social network. The social network application helps in connecting users of similar interest. Users can follow the Board of the other users and can give comment and like or dislike the message “pined” by the other user of the social network. The message “pined” in the social network can also be shared by the users using other web applications (Meng, 2019, January, 14).¹²⁸ Pinterest social network application can be downloaded through https://play.google.com/store/apps/details?id=com.pinterest&hl=en_IN&gl=US (Google Play, n.d., f).¹²⁹

1.5.4.17: LINE:

Line application was created by NHN Japan Corporation, and it was launched in March, 2011 (Lomas, 2013, March, 17).¹³⁰ It is free to use application which can work through multiple platforms like Computers, Smartphones and Tablets. It is available in a variety of smartphone devices viz., iPhone, Android, Windows Phone, BlackBerry, and Nokia. Before operating the application, Internet users need to register for it. Users can share variety of messages using the social network application. Application allow user to share message in Text, Image, Audio and Video format. Other than messaging feature it also allows user to do VoIP Conversations and Video Conferences with the other users of the social network. The social network application provides users digital wallet facility known as “Line Pay” (Line, n.d.; Russell, 2016, July, 14).^{131,132}

Users can stream the news using “Line Today”, can watch different Video on “Line TV”, and read the comic in digital format using “Line Manga” and “Line Webtoon”(ibid).

From the above brief description about the application of various social networking websites it can be inferred that certain applications differs in case of each of the social network. There are many Internet users who are using multiple and different social networking websites to satisfy his or her diverse needs. It thus becomes important to understand the factors that are influencing the Internet users in deciding and using various social networking applications. The social network application can be downloaded through <https://line.me/en/download> (Line, n.d., a).¹³³

An attempt has been made by the researcher to identify and discuss selected features affecting use of social networks as follows.

1.5.5: Features of Internet Affecting Social Networks:

Individuals can access anything that is in electronic format with the help of Internet connection. It could be News, Information, any document, Audio, Video etc. An act of offering access to different things is called as “Accessibility”. Internet allows functioning of different types of applications. When Internet users have an advantage of accessing social network which is other than the user’s network such feature of Internet is called as “Extensibility”. When Internet users can create or forward any content after intermixing it through different features to make the thing more presentable it is called as “Integration”. Internet is operated through different devices and can be accessed at any time by the Internet users. This feature of Internet is called as “Time Convenience” (Wixom, et al., 2005; Di Gangi, 2010; Balasubramanian, et al., 2002).^{134,135,136} The social networks being the part of Internet also have the similar features viz., Accessibility, Extensibility, Integration and Time Convenience that are described in brief as follows.

1.5.5.1: Accessibility:

Access to electronic resources can be referred as “the ease with which information, expertise, and Internet users” can access within the user-generated content websites (Wixom, et al., 2005).¹³⁴

Social networks, when provides access to the individual or group or critical mass is called as “Social Accessibility” and when it provides access to the different things than, it is called as accessibility of those things.

Accessibility of Internet plays a crucial role in the use of Internet as it improves the effectiveness of Internet users’ in search of information, expertise and other Internet users without any limitation of time and place (Chen & Nath, 2004).¹³⁷

Wang, Lai and Sui (2003)¹³⁸ had explained the distance decay effect on information access using Internet connections by the Internet users. Social network technologies provide social accessibility to the Internet users, which is its ability to access social resources for engaging Internet users. Internet users’ perceived accessibility of information, people and opportunity are important for the use of a social network and the experience of the same is important for intention to future use.

Sledgianowski and Kulviwat (2009)¹³⁹ had found that the critical mass of social networks is important to predict use intention of Internet users of social networks. Critical mass in this study was explained as other Internet users of social networks, which were communicated, by the Internet user for information, association, expertise, etc.

Dickinger et al., (2008)¹⁴⁰ had examined the importance of critical mass in the constant engagement of Internet users in SNWs, which provides real-time interaction, and experience of enjoyment to the Internet users (Prahalad & Ramaswamy, 2004).⁸¹ Real-time interaction put Internet users of SNWs in such a place where s/he can feel more connected, informed and opportunity oriented. S/he participates in a social network to seek experiences that match his or her personal interests and desires. S/he can participate to seek access to expertise and personal friendships that facilitate the development of values, which are important for the individual Internet user. Accessibility of social network thus plays an important role in building up the perception of the usefulness of the technology (Wellman, 1999, 2001; Wellman, et al., 2003).^{141,142,143}

1.5.5.2: Extensibility:

Social network when are able to meet varieties of needs of the Internet users are flexible enough to adjust new demands or conditions and are versatile in addressing the needs as arises than this system of social network is considered to have feature of extensibility (Di Gangi, 2010).¹³⁵

Number of Internet users use social network technologies to get access to the knowledge, information, and expertise of other Internet users with in the social network. In social network, Internet users' need of knowledge, information, and expertise are ever changing. Social network application in order to meet the ever-changing demand of the Internet users developed their system in such a way that could provide flexibility to the application (ibid).

Wixom, et al., (2005)¹³⁴ had observed the term extensibility as the term flexibility of the social technology. Social network being Internet application has varied Internet users from different countries, culture, age group and occupation, etc. As there is more heterogeneity in the group of Internet users of social network s/he would be having different requirement. Social networks in order to satisfy needs of different Internet users has to develop its application in such a way that it could fulfil varied needs of its maximum Internet users. Social network systems can be used and accessed through different electronic devices (Caton, et al., 2014).⁷⁸

Magnitudes of content of social network are accessible as per the access given by Internet users to access the same to the other Internet users of the social networks. It also provides an option with the difference in the access of content to the different Internet users. There are many Internet users of social network around the world. As there are more Internet users, social network's spread and its impact are also wide (Li & Bernoff, 2008; Powell, 2009; Tapscott, 2008).^{144,145,146}

Social networks are being used by many Internet users which gives wide options for connectivity to the Internet users of social networks. Unlimited access of connections depends upon a number of Internet users of the social networks. When Internet users find more members in the particular social network technology, s/he perceives more help from these networks in becoming acquainted and fulfilling his or her different needs. Social network technology gives access to the network other than the individual network which helps Internet users in further expanding his or her connections like “Fans page and finding more enjoyment by interacting and sharing messages with more members” or Internet users (ibid).

Katz and Shapiro (1985)¹⁴⁷ and, Lin and Bhattacharjee (2008)¹⁴⁸ had shown the importance of “network externalities in increasing Internet users’ perceived benefits”. Social network technology also has a capability of building trusted relationships outside traditional social circles which is best appealing for the users of the networks (Sledgianowski & Kulviwat, 2009).¹³⁹

With more members in the circle, the Internet user can use a different feature of the social network technology in a more creative way. This feature of the social network assists and helps in generating more value from the use of the technology.

Thus, extensibility provides a unique experience to the Internet users of existing functionalities of social network technologies, which again helps in building perception of the usefulness of this technology (Prahalad & Ramaswamy, 2004).⁸¹

1.5.5.3: Integration:

The social networks are increasingly being used for different purposes by the social network users of the network. They are increasingly being used for gathering information, developing skill, connecting with other Internet users, disseminating information and unique skill of the Internet users who are allowed to give comments, opinions, likes, dislikes and s/he can share the things with other Internet users which s/he has searched on the social network and has found interesting to them. Social technology allows intermix of various features of technology which make the Internet user more presentable and effective in sharing his or her opinion, comment, skill or any creative things. “Photos Sharing, Message Sharing, and Video Sharing” are some of the features which help Internet users to “present themselves, share information, and interact with their friends and other” Internet users in different ways. These supporting applications increase the effectiveness of users by allowing them to reach the audience through the use of different ways (Powell, 2009; Tapscott, 2008).^{145,146} Using the different type of sources to intermix the contents in order to reach more effectively to the other Internet users of the network is defined as integration by Wixom, et al. The availability of the feature to integrate the content makes social network technology more effective for the users in order to reach the mass and thus help in creating value for the users of the network Wixom, et al. (2005).¹³⁴

Caton, et al. (2014)⁷⁸ had emphasized on the role of integration of various social media technologies to provide better services to Internet users. Thus, it can be inferred that the feature of integration plays significant role in the perception of the usefulness of social network technologies.

1.5.5.4: Time Convenience:

Internet is accessible by the Internet users at any given point of time. The social networks as the part of social technologies being functional with the help of the Internet are also accessible at any given point of time. Time is a non-renewable resource Internet user uses this resource with most care (Newell & Lemon, 2001).¹⁴⁹ Those Internet users who want to access information or want to drop a message to his or her friends but is preoccupied with some commitment and so cannot act at a particular point of time.

Social network technologies allow Internet users to do the same thing at a convenient time. When Internet users access the technology at their convenient time, the technology is being perceived as a time convenient. Internet users, who are highly conscious about the time, give high importance to time convenience technology (Conte, Mathieu & Landy, 1998).¹⁵⁰

Social network technologies are accessed by Internet users at anytime from anywhere in the world, using diverse portable devices. Moreover, social network technologies with its features deliver things more efficiently and timely providing utilitarian value to its Internet users (Childers et al. 2001).¹⁵¹

The social networks allow Internet users to operate any feature at his or her convenience and are thus perceived being time convenient technology by Balasubramanian et al. (2002)¹³⁶ and Nysveen et al. (2005).¹⁵²

Newell and Lemon (2001)¹⁴⁹ had argued that “in a time-sensitive marketplace, companies compete for time.”

Shankar, O’Driscoll and Reibstein. (2003)¹⁵³ had observed importance of mobility in creating value for the user of mobile device. They had examined mobility offered by the devices help in accomplishment of consumption goals and are viewed more economical than other channel of communication. Social network applications being operated through mobile devices thus also are economical in context of time. Time convenience feature of social networks thus plays crucial role in perceiving technology to be useful and creating values for the Internet user of social technology.

Thus, accessibility, extensibility, integration and time convenience plays an important role in perceiving technology to be useful by the Internet users and thus affects attitude and behaviour intention for adoption and future usage of technology.

An attempt has been made by the researcher to discuss on the Technology Acceptance Model (TAM) with an emphasis on role of perceived usefulness in the adoption of different social technologies.

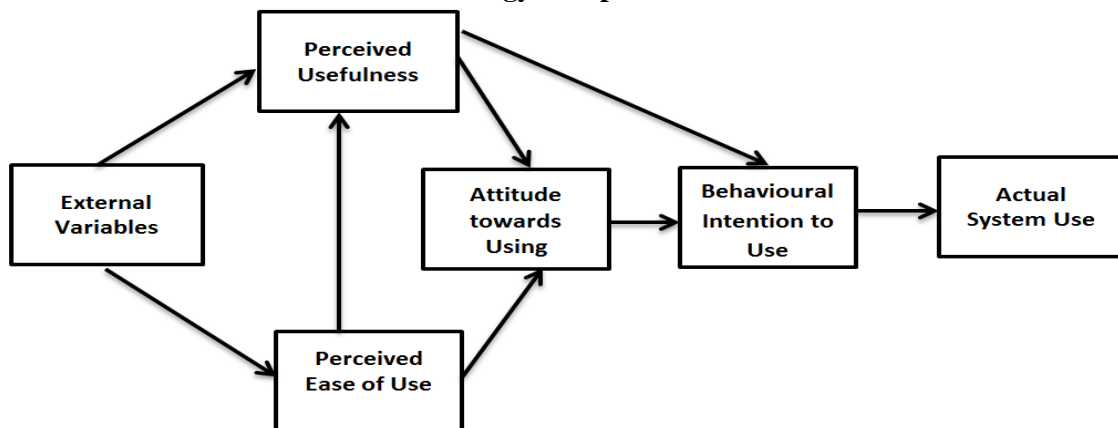
1.6: TECHNOLOGY ACCEPTANCE MODEL (TAM):

This part has provided details about the development and research that took place by selective authors taking “Technology Acceptance Model” (TAM) that had tried to predict use of technology by the users. It has also offered discussion on the construct of TAM viz., “Perceived Usefulness, Attitude and Behavioural Intention” for predicting the future use intention of technology.

The “Technology Acceptance Model” (TAM) was developed by Davis in the year 1989. The TAM was particularly developed to explain behaviour for use of computer. Davis has identified “perceived usefulness” and “perceived ease to use” as two important factors affecting “attitude” and “behaviour intention” of individuals who use computers.

According to Davis (1989),¹⁵⁴ individuals would accept the technology only when they find it easy to operate and useful for the achievement of their desired result. TAM is one of the most extensively used and accepted models for explaining IT and Information Systems (IS) acceptance and usage (Davis 1989).¹⁵⁴

**Figure Number:1.16:
Technology Acceptance Model**



Source: Davis et al. (1989)¹⁵⁴

Different authors have tested acceptance of technology by the Internet users of such technology, using the construct of TAM. The different authors have also extended TAM by adding new construct in the model.

Lu, Lu, Yu and Yao (2003)¹⁵⁵ had extended TAM by studying “mobile wireless Internet acceptance”. Chau (1996)¹⁵⁶ has extended TAM by observed perceive usefulness into two ways, “near-term perceived usefulness” and “long-term perceived usefulness”. Significant effect of “near-term perceived usefulness” was found than “long-term perceived usefulness” on “behaviour intention” to use technology.

Lu, et al. (2003)¹⁵⁵ had revised TAM to show some distinctive features of the “wireless system” under their study. The study was undertaken using the “individual differences, technology complexity, facilitating conditions, social influences, and wireless trust environment” as the constructs that determines “user perceived short- and long-term usefulness, and ease of using Wireless Internet Via Mobile devices” (WIMD). These in turn determine “user intention and willingness to adopt WIMD”.

Liang, Xue and Byrd (2003)¹⁵⁷ had modified TAM to examine actual use of “Personal Digital Assistant” (PDA) in a healthcare setting. They had included variables such as “personal innovativeness” as a determinant of use of new technology.

In addition, they added “job relevance” and “compatibility” affecting “perceived usefulness” of social media technology which in turn affects “actual use” of technology (ibid).

Mao, Srite, Thatcher and Yaprak (2005)¹⁵⁸ used TAM to test “advanced mobile phone services” viz., “mobile Internet access, e-mail, and payments as well as adoption and acceptance”. In addition, to “perceived ease of use” and “perceived usefulness”, they had found support for variables measuring “efficacy” and “personal innovativeness”.

Kim and Garrison (2009)¹⁵⁹ had introduced “Mobile Wireless Technology Acceptance Model” (MWTAM) by incorporating three additional theoretical constructs “job relevance” which was related to cognitive influence process, “perceived ubiquity” and “perceived reachability” which were related to technological influence process. Moreover, a significant body of TAM research has shown that “perceived usefulness was a strong determinant of user acceptance and usage behaviour” (Agarwal & Prasad 1999; Hu Chau, Sheng, & Tam, 1999; Taylor & Todd, 1995).^{160,161,162}

“Perceived usefulness” has been observed as an important determinant for “acceptance of technology” by the users. The researcher has put efforts to offer discussion on the concept of perceived usefulness with the support of available literature to describe importance of perceived usefulness on acceptance of particular technology.

1.6.1: Perceived Usefulness:

Perceived usefulness is the consumers’ subjective perception about the usefulness of using any particular technology. Technology is perceived to be useful when consumers find it useful in increasing their performance (Yang, 2006).¹⁶³ Increase in use of technology is dependent upon the perception of usefulness of technology by people.

Lee (2009)¹⁶⁴ had found a significant positive relationship between the adoption of Information Technology (IT) and Internet user's perception of the usefulness of a system.

Gefen and Straub (2000)¹⁶⁵ had found dependency of perceived usefulness on the extrinsic characteristics for the adoption of e-Commerce which included Task-oriented outcomes, achieving Task-related objectives efficiently and effectively. Venkatesh and Davis (2000)¹⁶⁶ had explained “perceived usefulness” and “usage intentions” in terms of “social influence” and “cognitive instrumental processes” for adoption of technology.

Lee, Park, and Ahn (2001)¹⁶⁷ and Pavlou (2003)¹⁶⁸ had expounded perceived usefulness as one of the factors affecting the adoption of “e-Commerce”.

Oh, Ahn, and Kim. (2003)¹⁶⁹ had examined perceived usefulness as one of the important factors for the adoption of broadband technology at individual level.

Selim (2003)¹⁷⁰ had described perceived usefulness as an important factor for the acceptance of course websites by students of the university.

Suh and Han (2003)¹⁷¹ had explained perceived usefulness as one of the factors affecting the adoption of Internet banking in Korea.

Brown Sr., Alkadry and Resnick-Luetke (2013)¹⁷² had found perceived usefulness as an important factor for participation in social networking activities.

Perceived usefulness thus affects attitude and behaviour intention of Internet users of the technology. Attitude towards the technology was in turn found affecting actual use of social network technology.

The researcher has provided discussion on the term attitude with the support of available literature to demonstrate effect of attitude on use of social network technology as follows.

1.6.2: Attitude:

Fishbein (1963)¹⁷³ had defined attitude as it “symbolizes the overall level of favourability or unfavourability toward any external stimulus.” It is “an indicator that reflects the liking or disliking of a person regarding any object” (Ajzen & Fishbein, 1980).¹⁷⁴ It is a cause of intention and is classified into two constructs, attitude towards objects and attitude towards the person. Positive or negative attitude towards the thing leads to the behaviour intention for doing or not those things (Fishbein & Ajzen 1975).¹⁷⁵ The literature on TAM has reported a significant effect of “perceived usefulness” and “perceived ease to use” on “attitude towards the adoption” of technology. Thus, perceived usefulness and perceived ease of use the social network technology affects the attitude towards the favourable or unfavourable feelings of using such technology. Internet users use social network technology as it allows them to stay connected with other Internet users, give access to unlimited information, give him or her new business opportunity, enhance his or her creativity and thus increases the effectiveness of Internet users. Effectiveness of Internet users has increased in social networking. Social network not only allow for building and maintaining of relationships with other Internet users but it also allows strangers to become acquainted and keep in touch (Li & Bernoff, 2008; Pfeil, et al., 2009).^{144,176}

The usefulness of the new information system helps in developing a favourable attitude towards the system. The favourable attitude of the Internet users, in turn, increases his or her “willingness to use the system”. Thus, “favourable attitude and willingness drive Internet users to make changes in their practices and use their time and put efforts for using the information system” (Succi & Walter, 1999).¹⁷⁷ The attitude of Internet users towards an acceptance of the information system has a critical impact on the successful adoption of the technology (Davis et al., 1989; Davis & Venkatesh, 1996).^{154,178}

Lin and Lu (2000)¹⁷⁹ had found variables of social network technology like quality, information quality, response time, and system accessibility as an important variable affecting attitude and perceived usefulness of the Internet users for the particular website.

Information access and information adoption behaviour of the Internet user is the principal activities that people do in virtual communities. Thus, information posts by the people on social networking websites assist the Internet users to form an opinion about the product and thus aid in purchase decisions and post-purchase satisfaction. The usefulness of the social network technology is thus affected by the features of information access, accessibility, extensibility, integration and time convenience.

These features play an important role in affecting the attitude of the Internet users and thus perceived the usefulness of the social network technology in fulfilling the desired needs of the Internet user. Attitude towards the social network technology, in turn, thus affects the behaviour intention of the Internet user for use, frequency of use, features to be used or non-use of social network technology (Di Gangi, 2010)¹³⁵.

The researcher has attempted to deal with the concept of behavioural intention of Internet users to demonstrate the effect of behavioural intention on the use of social network technology.

1.6.3: Behavioural Intention:

Fishbein and Ajzen (1975)¹⁷⁵ had defined behavioural intention as “agent's subjective probability that he or she will perform the behaviour.”

Warshaw and Davis (1985)¹⁸⁰ had defined behaviour as “the degree to which a person has formulated conscious plans to perform or not perform some specified future behaviour” that is how near Internet users have come to a decision.

Ajzen (1991)¹⁸¹ had defined behavioural intention as “how hard people are willing to try” and “how much of an effort they are planning to exert” (Page. 181). “Intentions” are viewed in different senses that would influence in a different way by expected deterrents to the behaviour. High behavioural intention is understood as people would try to perform the behaviour with the necessary amount of effort or are ready to invest the required time and money. Moderate behaviour intentions refers to doing comparatively less effort, giving less time and are ready to part with some amount of money to have and or use the things. Weak behaviour intention refers to doing very fewer efforts, giving less time and not has much desire to pay for the things. “A person holds various behavioural beliefs with respect to the behaviour but only a small number of relative behaviours are readily accessible at a given moment”.

It is assumed that the “accessible beliefs” of the Internet users determine the “prevailing attitude which is a degree to which performance of the behaviour is positively or negatively valued by the users”. Thus, “attitude toward behaviour is determined by the total set of accessible behavioural beliefs linking the behaviour to various outcomes and other attributes”. On the other hand, the “intention is the motivational factors for Internet user that influences his or her actual behaviour” (Kim & Malhotra, 2005; Weerasinghe & Hindagolla, 2018).^{182,183}

The intention of the Internet user indicates “how hard he or she would try to put the effort in order to perform the actual behaviour”. Thus, “stronger the intention to engage in actual behaviour, more likely would be its performance” (actual behaviour) (ibid).

Ajzen (1985)¹⁸⁴ had discussed the “availability of requisite opportunities and resources like time, money, skills, cooperation of others as important factors affecting behavioural intention and thus affecting usefulness of the social network technology”. Thus, behavioural intention was found as highly affected by perceived usefulness of the social network technology.

Positive behaviour occurs when Internet users find the social networks useful and S/he finds social network useful only when S/he is capable enough to create value for its Internet users (ibid).

The researcher has deployed efforts to offer in brief an explanation on the concept of value for customers, selective models for value and different types of value that can be created with the help of the use of social network as follows.

1.7: VALUE FOR CUSTOMERS:

This part of the research study has tried to provide explanation in brief on the concept of value for customers followed by the discussion on the selective models viz., (i) “Preliminary Model of Value for the Customers”, (ii) “Five Preliminary Forms of Value for Customers”, (iii) “Creating a Customer Value Proposition” and (iv) the “Process of Collective Value Creation in Brand Communities”. It has also offered discussion on the concept of value creation followed by the discussion on the five different values viz., “Functional Value, Social Value, Emotional Value and Monetary Value” created from use of social networks. It has also considered offering explanation in brief on challenges and limitations of social networks.

Holbrook and Corfman (1985)¹⁸⁵ and Zeithaml (1988)⁶ were the pioneer for consideration and working on the concept of “Value for the Customer”. “Value for the customer” is understood as things viz., “feature, experience, time, cost, etc.” Value for customer is the customer’s perception of advantage or reduction in sacrifice due to the use of product or services offered by the company.

It is customer’s perceive occurrence of benefit either to attributes or outcomes by the consumption of the offerings of the companies. It is the result of any weighted combination of sacrifice and benefits which can be expressed rationally or intuitively, or as an aggregate of any or all of these as the case may be. Each and every individual is different from one another and so s/he can use product and services of company to satisfy their diverse needs.

Companies while designing the product and services generally takes these things into consideration. Product and services so designed and delivered have capacity to deliver different types of values to the customers (ibid).

According to Ramaswamy and Namakumari (2018)², values so created can broadly be classified into two as first “Tangibles” which are physical and quantifiable in nature, that can be pinpointed and its effect can be explained in rational terms, and second, “Intangibles” that are largely psychological in nature. Functional, Economic, Convenience, Sensory or Aesthetic and Service, is some of these tangible values.

Social, Prestige/Status, Sentiment, Experience and Belief are some of the intangible values. The type of value as desired by the customer differs from product to product or from one service to another service as offered by the company (ibid). Thus, individuals using different social networks also desire different type of value from the use of different type of social networks. Internet users using “LinkedIn” application has more desire for information, increase in professional contacts or creating monetary value of this social network application but when same Internet users uses “Facebook” or “WhatsApp” s/he desires for and look for social connection than the other values.

But, if the application delivers such values which are not expected from the use, it increases the perception of usefulness and the actual use behaviour of the Internet users of that particular social network application. Hence, value for customer plays an important role in future use of the product and services offered by the companies. The concept of value for a customer is growing and it is drawing significant attention in the companies due to its importance in delivery of desired satisfaction and loyalty of the customers. The concept of value thus is being found as complex and requires further research for exploring the richness, nature, influence, and its measurability (Oliver, 1999; Parasuraman, 1997; Woodruff; 1997).^{186,187,188}

Different type of models has been developed by the different authors for measuring the value for the customers. The selective models of value for the customer are explained as follows.

1.7.1: Models of Value for Customers (VC):

Four models of value for customers are explained as follows. First model of value for customers is called as “Preliminary Model of value for customers”, second is called as “Five Preliminary Forms of Value for Customers”. The third model is called as “Creating a Customer Value Proposition” and the fourth model is called as “The Process of Collective Value Creation in Brand Communities” (Woodall, 2003).¹⁸⁹

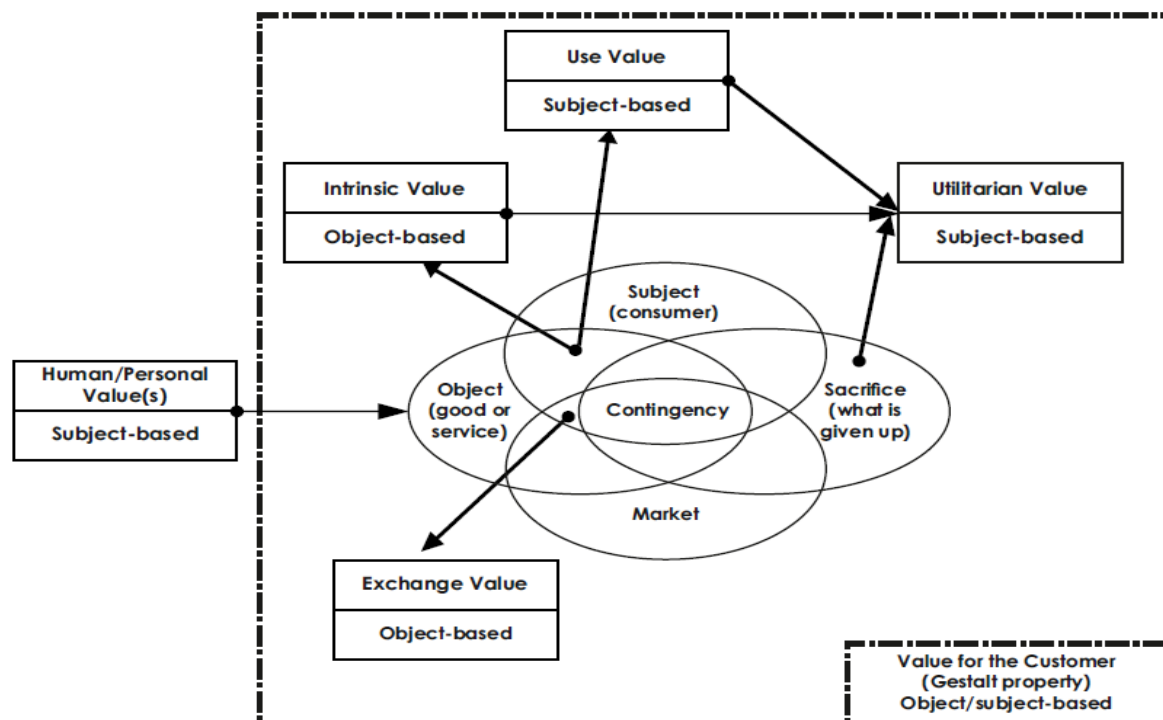
1.7.1.1: Preliminary Model of Value for the Customers:

Woodall (2003)¹⁸⁹ in his research study “Conceptualizing Value for the Customers: An Attributional, Structural and Dispositional Analysis” had discussed different types of values for customers’ models based upon the work done by different authors on it. In this research study, two models from the literature of Woodall are discussed that are important to understand the concept of value for customers for social network technology Internet users.

Fekete (1987)¹⁹⁰ had viewed value for customers from two different perspectives, that is Economic perspective and Philosophical perspective. The economic perspective comprises of exchange, use and utilitarian factors while the philosophical perspective consists of the factors, which form and drives an individual tendency of the customers. Philosophical factors provide an explanation on the nature of personal relationships of the customers with the goods and services consumed by them.

Smith (1987)¹⁹¹ had considered “Value” as contingent which means valuing the same things differently and valuing different things at different times in different ways. Thus, value is judge within a context of “environmental, social, cultural and economic conditions”. Subsequently, it is personal and exists at a number of different levels. The “object” that is “product and services” and the “subject” that is “customers are indivisibly connected, and value is recognized only at the point of evaluation or union between the two”.

Figure Number:1.17:
A Preliminary Model of Value for Customers



Source: Woodall (2003)¹⁸⁹

The first model discussed by Woodall in the research study is called as “Preliminary Model of Value for the Customers” which identifies “four distinct interpretations” of value, any or all of which may be recognized and or expressed individually or collectively. The interpretations of values in the model are “exchange value” which is based on the product and services offered by firms at a particular price. The “exchange value represents the idea that value is measurable (Countable) and it is predicated upon both cost and scarcity”. Cost of the product and services is perceived in a variety of ways by the consumer depending upon “place, time, cultural and socio-political agenda” (Amin, 1978).¹⁹²

Fronidzi (1971)¹⁹³ had claimed that value-oriented characteristics may also reside within the product and services offered by the company. These object-related characteristics are termed as an intrinsic value which is perceived when an object and subject interact either before, or during consumption.

Daniel Bernoulli, an economist in 18th century stated that the major purpose of customers was to maximize expected “Use Value” rather than maximize material wealth (Fishburn, 1987).¹⁹⁴

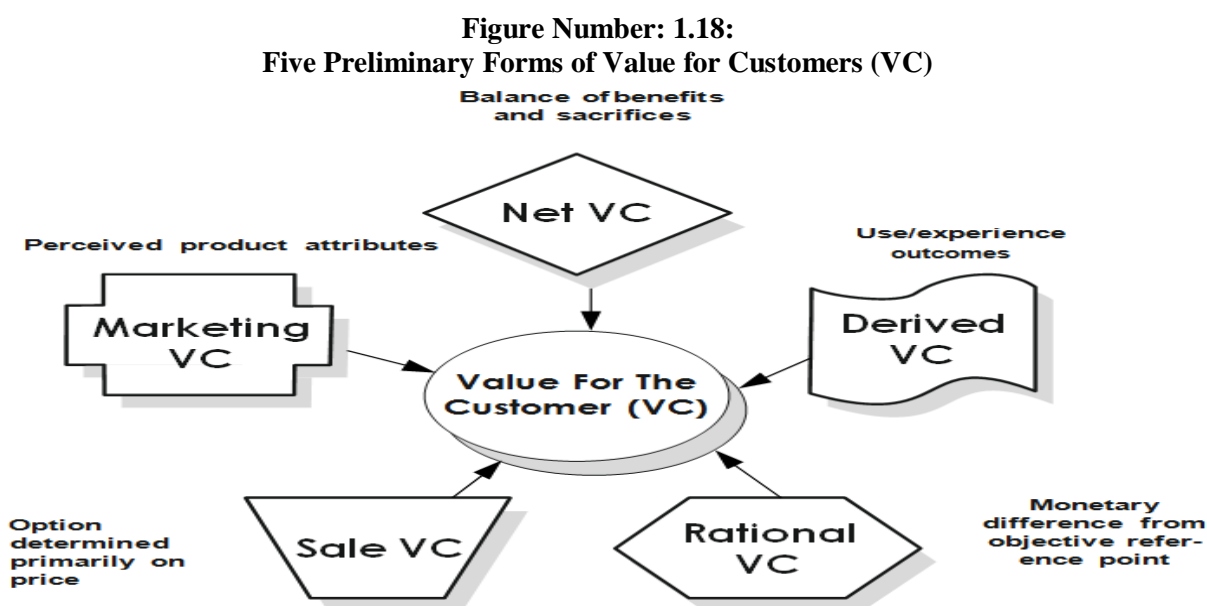
Smart (1891)⁵ had suggested “use value” as more suitable valuation for the value for customers. The use value is perceived by the customer either during or after the consumption of product and services offered by the organization.

“Utilitarian value”, on the other hand, is identified at “the point when intrinsic and use-value is compared with the sacrifices” that are made by the customer in order to experience those forms of values. Customers only use those products and services which are useful or their product and services consumptions give them a pleasure. The maximum value is proposed to be achieved when pain is at its least and pleasure is at its greatest (Eatwell, Millgate & Newman, 1987).¹⁹⁵

Value for a customer therefore, “may also be perceived as the outcome of a personal comparison of sacrifices and benefits, an outcome that is essentially utilitarian in nature” (Woodall, 2003)¹⁸⁹.

1.7.1.2: Five Preliminary Forms of Value for Customers (VC):

The second model identified as shown is five primary forms of value for the customers which is helpful in value creation for the companies. The five different forms of value include “Net Value for the Customers” which is received when benefits form the use of products and services are more than sacrifices made to achieve the same. It is calculated by subtracting sacrifices from benefits or by dividing benefits with sacrifices (Lai, 1995; LaPierre & Denault, 1997; Heskett, 1997; Grönroos, 1997).^{196,197,198,199}



Source: Woodall (2003)¹⁸⁹

“Derived Value for the Customers” is based upon consumption experience of the consumer. It is the experience, achievement, happiness (outcome) that the consumer gets from the consumption of the product and services of the company. “Marketing Value for the Customer” is related to the supplier perspective and it is a concern with ways that company adopts to go in the market.

“Marketing Value” for a customer is obtained by adopting marketing techniques which are cost-effective or help the company to gather information about the current and prospective customers.

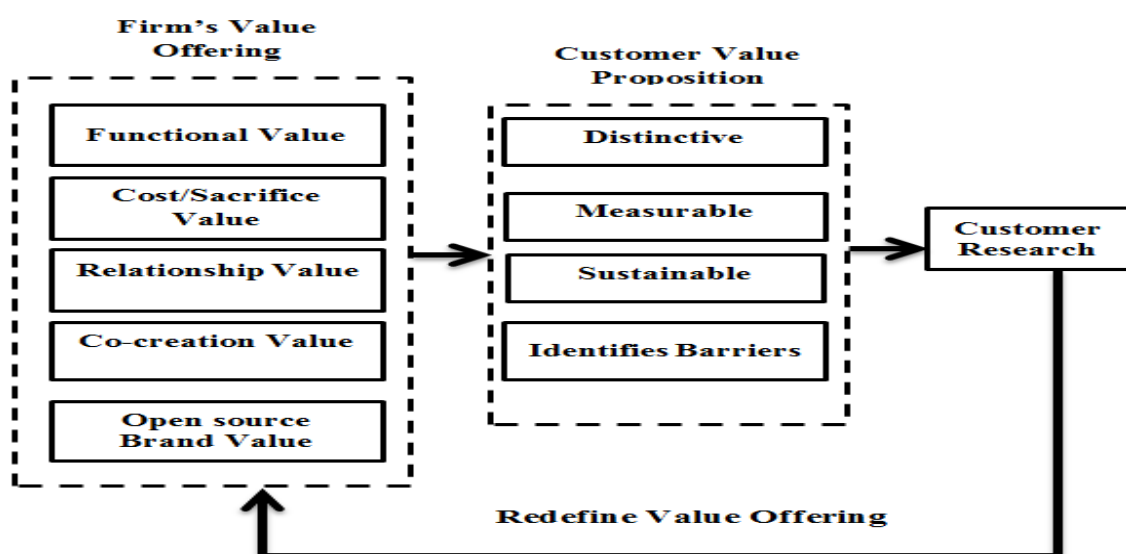
“Sale Value for the Customer” is based upon the price and reduction in sacrifice by the customers. Sale value creation for the customers is possible by the relatively low price within a competitive environment. The sale value for a customer is however more properly associated with a reduction of sacrifice than with the increase in monetary gain. The last form of value is “Rational Value for the Customers”, which combines the notions of exchange value and intrinsic value with net value for the customers (Woodall, 2003).¹⁸⁹

Rational value is derived by computing a fair price by the customers based upon the perceived benefits or attributes of the product and services under consideration. The fair price is determined by the customers based upon either “tolerable price” (Liljander & Strandvick, 1992),²⁰⁰ “market price” (Anderson, 1995)²⁰¹ or “reservation price” (Reichheld, 1996).²⁰²

1.7.1.3: Creating a Customer Value Proposition:

The value proposition as developed by Shanker (2012)²⁰³ for development of open source software. Business has to concentrate on firms’ value offering which are values associated with the product or services offered by the organization. Firm value offering includes viz., “functional value, cost/sacrifice value, relationship value, co-creation value, and open source brand value” (ibid).

**Figure Number:1.19:
Creating a Customer Value Proposition**



Source: Shanker (2012)²⁰³

“Functional value” includes the “product attributes” that help in creating value and includes “cost, quality, reliability, security, and performance” (Morgan & Finnegan, 2008).²⁰⁴

“Cost/Sacrifice value” is the “customer’s evaluation of what they get in return for what they give” (Zeithaml, 1988)⁶.

“Relationship value” is “overall customer’s experience during interactions with the supplier of the product and includes product quality, service support, delivery performance, supplier know-how, time-to-market, personal interaction, price, and process costs” (Ulaga, 2003).²⁰⁵

“Co-creation value” allows modification in the product according to the customer requirement, which is related to software supplier developing process (O’Cass & Ngo, 2011).²⁰⁶

Open source brand value can be developed by deploying marketing effort to make the software known to the world or making collaboration with the already well-known company (Bonaccorsi, Giannangeli & Rossi, 2006).²⁰⁷

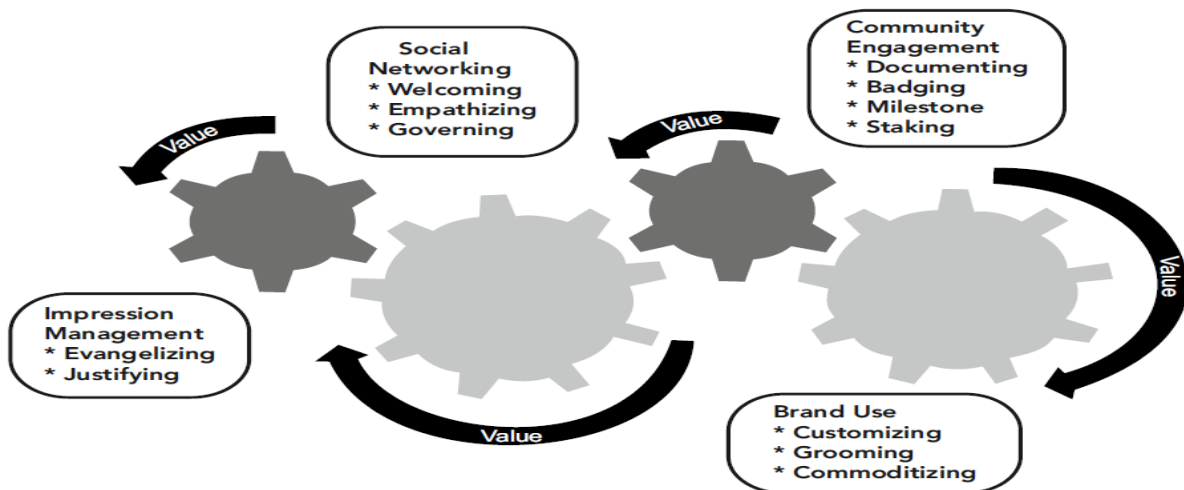
Customer value proposition includes the values which are required, to fulfil the customer’s needs. It should be developed on the basis of “points of value that a company can create and that matter to, customers” (Shanker, 2012).²⁰³

Shanker (2012)²⁰³ had examined that customer would value the software if it is different from the other software in terms of features available “Distinctive”. Customers should be easily able to measure the benefits from the application or use of the software “Measurable”. Software so developed should be flexible enough to meet the changing requirement of the company or able to handle different needs of the users “sustainable” and when the customer can easily identify the barriers in application or use of the software it “Identifies Barrier”. The four most common barriers identified are insufficient wealth, access, skill, and time respectively (Johnson, Christiansen, & Kagermann, 2008).²⁰⁸

1.7.1.4: The Process of Collective Value Creation in Brand Communities:

Schau, Muñiz and Arnould (2009)²⁰⁹ had revealed the process of “collective value creation” within “brand communities”. The authors had organized these practices into “four thematic categories” viz., “social networking, impression management, community engagement, and brand use” respectively.

**Figure Number:1.20:
The Process of Collective Value Creation in Brand Communities**



Source: Schau, Muñiz and Arnould (2009)²⁰⁹

First, “social networking practices” performed by the organization focuses on “creating, enhancing, and sustaining ties” among Internet users of the product and services. These include a way of welcoming the customers, empathizing, and governing them to select the product or services when firms offer a variety of them.

Second, “impression management practices” are those that have an “external, outward focus on creating favourable impressions of the brand, brand enthusiasts, and brand community in the social universe beyond the brand community.”

Third, “community engagement practices” are those that “reinforce members” escalating engagement with the brand community” which can be done through documenting the record for further communication, Badging the records so relevant customers can be contacted in future for enhancing customer value, setting up a milestone in delivering customer desire value and staking which would be helpful in generating ideas for values expected and can be delivered to the customer. Fourth, “brand use practices” are specifically related to “improving or enhanced use of the focal brand to deliver the maximum customer desire value” (ibid).

Value for customers includes different types of values viz., “Use Value, Intrinsic Value, Utilitarian Value, Exchange Value, Net Value, Derived Value, Marketing Value, Sales Value, Rational Value, etc.” These different forms of value help companies to understand different things that are valuable for the customers. It aids to the company to follow the practices which helps in delivering “Superior Customer Values” (SCV) by creating value for the customers. As each and every company is different from one another, they have to concentrate on different types of value to enrich customers’ experience on the use of the product or services creation (Woodall, 2003).¹⁸⁹

The following sub-section describes the concept of value creation.

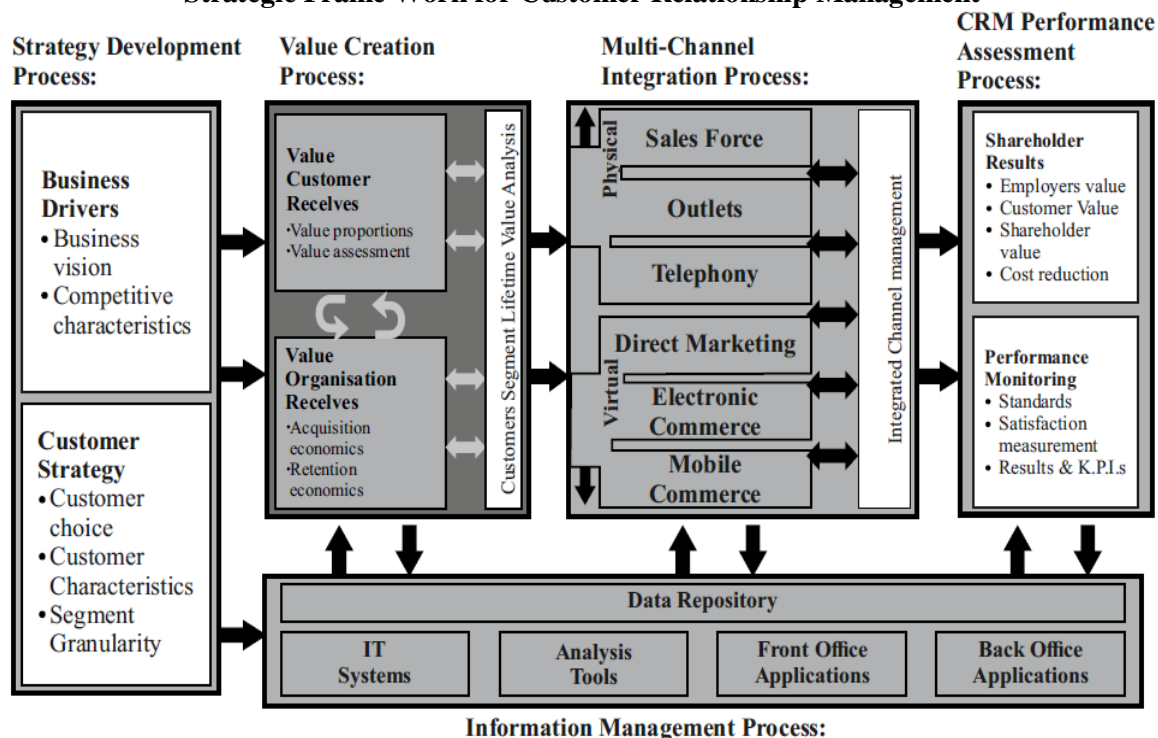
1.7.2: Value Creation:

Value creation is the basic thing in “Customer Relationship Management” (CRM) and a key source of competitive advantage. It involves “innovation that establishes or increases the customer’s valuation of the benefits of consumption (Use Value)”. It is the value that the customer receives from the products which is “the total package of benefits derived from the core product and the product surrounded or added values that enhances the basic features such as services and supports” (Payne, 2002).²¹⁰

The aim of companies is to create a “value proposition” for its customer whether implicit or explicit. Value proposition of the company should be superior and more profitable than of the competitors. When value is created by the company, “customers’ either are willing to pay for a novel benefit, willing to pay more for something perceived to be better or will choose to receive a previously available benefit at a lower unit cost.” All this would often result in a “greater volume purchased, or spend more time and money” with the product and services offered by the company leading to more perceived benefit from the use of product (ibid).

Value proposition starts from the strategic planning for the business and shows the following strategic framework for CRM which companies should adopt for creating value for the customers (ibid).

**Figure Number:1.21:
Strategic Frame Work for Customer Relationship Management**



Source: Payne (2002)²¹⁰

Value creation by companies include “identifying customer benefits from the customers’ point of view, utilizing core competencies from its business domain and selecting and managing business partners from its collaborative networks.” (ibid)

For creating value for customers, companies should know what customers think about, what they want, what are their activities, what are things that bother them and who are the people to whom they admire, interact or are influenced by, and knowledge of all these would help companies in identification and generation of value for the customers. The value that companies want to deliver should be the mission and the basic competitive characteristics that should differentiate it from the others. Companies should convey this to its employees and the other various stakeholders so that they function in a seamless way for the generation of value for the customers to offer products or services. Companies with the help of various communication technologies should be able to convey this to its target customers, so that they are aware of the value that s/he would receive from the use of the product and services offered by the companies (Kotler, et al., 2009).¹

From the customer's viewpoint, "value creation involves increasing use value or decreasing exchange value, each of which can increase the consumer surplus (V (Value)-P (Exchange Value))" (Priem, 2007).²¹⁰

The value is a relative term or concept that not only differs from one customer to another but it is also affected by the different situation being faced by the customer during acquisition, consumption or disposal of the products and services offered by the companies. Value is thus, "a trade-off between the costs and benefits perceived by the customer from the use or consumption of product and services of the companies" (Brady, et al., 2005; Holbrook, 1999).^{212,213}

Brady et al. (2005)²¹² and Sweeney et al. (1999)²¹⁴ had conceptualized value in two ways. First, it is the "generic value" which is "cost and benefit trade-off", and the Second, value is the "service value" which is "between service quality attributes and sacrifice made by the customers of the product or services". Value creation for the customers of the technology occurs when S/he feel getting something more by the use of such technology, which is understood as a successful outcome of the process than just an experience of using it (Mathwick, et al. 2001).²¹⁵

Payne (2002)²¹⁰ had examined value creation as a critical component for the strategic framework of CRM in a company as process that has been divided into three key elements. First, "identifying the value that company can provide to its customers, it is the value that a customer receives from consumption of product and services. Second, detecting the value that organization receives from its customers and third, by successfully managing this value exchange, maximizing the lifetime value of desirable customer segments."

Squire, et al. (2004) had developed a responsive agility tool for measuring the effect of mass customization in value creation for the customers. The tool differentiated number of value criteria and a method of selection between them. Further, it identified four levels viz., "customized distribution, assembly, fabrication and design" which can be adopted by a company for value creation for the customers.

Prahalad and Ramaswamy (2004, a)²¹⁷ had discussed the value creation of customers by co-creating unique value with the customers. They had suggested creating these values by framework which included “Dialogue, Access, Risk and Assessment (DART Model)” which is helpful in providing personalized interactions that are meaningful and sensitive to a specific customer.

Smith and Colgate (2007)²¹⁸ had discussed the concept of value creation for the customers. The research work had identified the framework for value creation which is helpful for the company. The framework is having four major types of value created by companies. These are “Functional or Instrumental Value, Experiential or Hedonic Value, Symbolic or Expressive Value, and Cost or Sacrifice Value.” These values are created by five major sources of value viz., “information, products, interactions, environment, and ownership” respectively. The research work is useful for describing and documenting “customer value creation strategies”. It is also useful for “opportunity recognition and product concept specification”. Their research paper thus had provided a foundation for “measuring or assessing value creation strategies” (ibid).

1.7.2.1: Social Networks and Value Creation or Generation for Customers:

In the modern world, where most of the individuals are using Internet and smartphones to connect with other people or for search of information, online friends and reviews are examined to be a major source of information. Individuals are also found using social networking websites like Facebook to connect with old friends, to known people and to make new contact with individuals around the world (Hulme, 2010).²¹⁹

Joinson (2008)²²⁰ had identified, to make contact, keeping in touch and to communicate as a major purpose for the use of Facebook. His study had examined that individuals use Facebook have been benefited to derive different types of values from its use. They had added that Facebook has helped individuals in the development of “social capital” which in turn has helped them to widely share information and also to contribute to the Word-of-Mouth and recommendations (Ellison, et al., 2007).²²¹

De Valck, et al. (2009)²²² had identified the significant role of the social network in “need recognition, actual behaviour and post-purchase evaluations” of the products or services. They had found that social networks are more powerful than the established virtual communities.

Harris and Dennis (2011)²²³ had found that information and recommendations on the social network technology affect decision making process of the individuals. They had found influence of, information post and the recommendation on the decision-making process of active users of the social network affecting, consumption of diverse product or services being offered by the companies.

Jones (2007)²²⁴ had suggested social technology as collaborative efforts of people and a source for generating information literacy in the students. They had observed that a social network provides a community platform for information to its users. Moreover, they had also suggested the use of social technology as a resource for the development of ideas and research.

Their work particularly focused on librarians, as social network users and the way they can use such network in building information literacy among the students (ibid).

Gomez-Arias and Genin (2009)²²⁵ had discussed different sources of value creation through social networking websites for the companies. The value was divided into the monetary and non-monetary for companies.

Monetary value included “side payments, buy-clubs and affiliate programs, access controls, aggregation of content and integrated mobile platforms that rely on the transfer of all or some of that value to third parties in exchange for cash or other compensation”. Knowledge management was the non-monetary value which allowed “the owner of the social network to leverage value in its own production process or its relationship with its customers”. Non-monetary value aided in “attaining social network value multipliers higher than a monetary one, where the value of a social network is not sold but leveraged internally, creating a higher profit potential” for the companies.

Burns, Craig, Friedman, Schott, and Senot (2011)²²⁶ had examined the integration of social networking and unified communications. They had studied social networking as an application which helped employees to “build collective wisdom and work more effectively by discovering implied relationships through shared social data” in the organization. Individuals are “the first and most important beneficiaries of social network technologies”. Individuals use social networks only when they receive some value from its use. Otherwise they will not use these social network technologies or the other forms of technology, if it fails to offer them certain value from its use.

They had examined that “users received great personal satisfaction from the relationships which they were able to maintain, the information they can gather, and the communities they formed through the use of social networking technologies”. These features of social networks thus contributed in value creation of users (Boulding, et al., 2005).²²⁷

The social networks thus deliver different type of value to its users. The different types of values delivered and created by the use of social networks are explained in brief as follows.

1.7.2.1.1: Functional Value:

Functional value is “ability of a product to meet a given task or need. Factors such as usefulness, reliability, durability, performance, resale value, delivery and maintenance etc. constitute functional value for the offerings that is product or services being offered by the companies” (Ramaswamy & Namakumari, 2018)². Functional value is defined as “a utility derived from the perceived quality and expectation of the product and services” (Sweeney & Soutar, 2001)²²⁸. Expectations of the users for the quality and technical support from the use of social network technologies derive the functional value for the users of these technologies that are accessible at any time and from any place implies that the functional (Utilitarian Value) value is derived from the use of social network technology (Balasubramanian, et al. 2002)¹³⁶.

Chen, Sharma and Rao (2016)²²⁹ had examined importance of information in use of social network applications. Leung (2013)²³⁰ had found that social network helps in broadening the knowledge base of the users.

Lin, Fan and Chau (2014)²³¹ had examined system quality and awareness important for use of particular social network. Bhattacharjee (2001)²³² had examined functions/features of product and services that are important for use of product. Di Gangi (2010)¹³⁵ had found importance of technical features viz., granularity, extensibility, integration and evolvability for positive use experience of social networks.

Neelamalar and Chitra (2009)²³³ had found important role of the features of social network on use intention of individuals using social networks.

Leung (2013)²³⁰ had inferred that the basic use of social networks by the users for improving relationship among the users.

Yang (2006)¹⁶³ had concluded that the functional value of technology is important in perception of usefulness of social network technology. Through its technical features such as ability to update information through various modes, reach of the information to a greater number of individuals at different place in shorter time duration, ability to connect network at users' convenient time and place provides practical and technical benefits to the users which would be helpful in creating functional value for the users of social networks.

1.7.2.1.2: Social Value:

A product has social value when its use confers social acceptance or social desirability on the customer (Ramaswamy & Namakumari, 2018).² The product has social acceptance, when it used by a large number of individuals in society. Uses of social networks have increased the access of the Internet users. Social network connection provides Internet users with the feeling of being connected and accepted by a large number of people. Social value is obtained when Internet users feel to be connected with other Internet users by using the product or service of the organization (Sheth et al., 1991).²³⁴

Social psychology research shows that individuals have more opportunities to gather information about one another in long-term relationships. Long-term relationship also motivates Internet users to acquire information about each other (Berscheid, Graziano, Monson & Dermer, 1976).²³⁵

Thrust to acquire more information increase integration of that information into coherent representations (Murray & Holmes, 1993).²³⁶

Lin, et al. (2014)²³¹ had revealed that feature of connectedness is important for use of social network. It means that Internet users use the social network in order to stay connected with the known people or for building a relationship with unknown Internet users. Use intention of social networks was found to be affected by interactions that take place between members of social network, in addition to those between member and social network technology (Han, 2012).²³⁷

Internet users use social network to stay connected and develop a new connection (Parks, 2011; Di Gangi 2010)^{238,135}.

Neelamalar and Chitra (2009)²³³ had identified that Internet users mainly join social networks to maintain existing friends and or contacts. They had also found that social networks help Internet users to make new connections.

Yang (2006)¹⁶³ had found that social value affects perception of usefulness of technology. Social network technology through its features helps the Internet user to communicate not only to the specific group but to any other Internet users of the social network.

Thus, social network technology helps in creating social bondage among the Internet users of the social networks which is a reason for social value creation for the Internet users of the social network (Chan, et al. 2010; Patterson & Smith 2001, 2003; Sharma & Patterson 1999).^{239,240,241}

1.7.2.1.3: Emotional Value:

Ramaswamy and Namakumari (2018)² had defined sentiment value as “a product’s capacity to stimulate some sentiments or memories or past association while using the product. Emotional value refers to the meeting of mental or psychological needs of the customers of the product or service offered by the companies. Emotional value is generated through the emotional experience of the users of social network technologies.”

Lin, et al. (2014)²³¹ had stated that feeling of pleasure to use the social network plays an important role in the use of social networks.

Arnould and Thompson (2005)²⁴³ had emphasized on emotional experiences or creating a good customer culture in “Consumer Culture Theory”. Emotional experience is an important predictor of purchase intention and repeated use of the services by the customers. Many times, it is seen that “the customer does not seek emotional benefits intentionally during the consumption experience but the positive feeling aroused from the experience plays an important role in the further decision” for the use of product and services of the companies.

Yang (2006)¹⁶³ had found that emotional value is important for perception of usefulness of social technology. The feelings of Internet users of technology being enjoyable make them feel relaxed and feel good after the use of social technology.

Frison and Eggermont (2015)²⁴⁴ had studied individuals using social network to come out of depressing mood by getting social support from the use of social networks. Social network technology helps in creating bondage among the users of the social network which in turn satisfies the emotional need of the users of the social network. When the use of particular technology gives a sense of enjoyment, accomplishment, prestige, personal growth or pleasure, it is perceived to be helpful in creating emotional value for the Internet users (Becker 1970; Rogers 1995).^{245,246} The research studies had categorized the feelings as “intrinsically motivating factors for customers who are considering the initial trial of engaging in co-creation via self-service technology” (Meuter, et al., 2005).²⁴⁷

1.7.2.1.4: Monetary Value:

When a customer sees price advantage in a product or brand, when s/he is of an opinion of superior profit feasibility compared to the other product or mode of services than it is termed as an economic value (Ramaswamy & Namakumari, 2018).²

Monetary value is determined and created on the basis of the “satisfaction of customer regarding cost, time or effort being spent in using a product or a service of the organization” (Sweeney & Soutar, 2001; Bolton & Drew, 1991; Monroe, 1990; Cravens, et al., 1988).^{228,248,9,8}

Use of social network technology is based upon the availability of the Internet facility and the equipment through which it can be accessed. Money is required to be paid by users for both Internet facility and the purchase or hiring of the equipment. Internet users while using the social network technology are spending their time which is irreplaceable in nature and thus most valuable asset for any person. These are the different costs that are incurred by the Internet users of the social network in order to have access to the group or the other users of the social network (Kleijnen, et al., 2007)²⁴⁹.

Neelamalar and Chitra (2009)²³³ had found that Internet users are increasingly using social network for business networking for marketing their products or services. Based on the data generated by the social networks, they add popups while Internet users were using different social network applications. This type of marketing helps companies to reach to their target customers. Internet users have also started using messenger services like “WhatsApp” for business purpose. Small businessmen make a “WhatsApp” group of customers and send them updates as the new stock arrives. In these way Social networks has been found as helpful in generation of monetary value for the Internet users. Social network with a feature of group discussion or communication also helps in savings of money of the companies. By posting the message in a group all other Internet user become aware of the development taking place in the market or companies which helps them in taking informed decisions. Various features of the social network technology when satisfy customer for paying a fair price for the use and is perceived as useful for its future growth, monetary value is said to be created for the Internet users of the social networks (ibid).

Yang (2006)¹⁶³ had found monetary value as important for perception of usefulness of technology. Each and every social network application is different from one another due to features and majority of social networks have focused upon the Internet connectivity of the Internet users who uses the application. With connectivity, social network application also tries to satisfy diverse needs of the Internet users by constant updating these applications to help them to create a different type of value from its use (Chui et al., 2012)²⁰.

1.7.3: Challenges and Limitations of Social Networks (SNWs):

The social networks provide unlimited connectivity to social network users who are at distance place. As social networks are the application accessible thorough Internet any individual from the world can access the information posted at any time and from anywhere where Internet connection is available.

Social network users access information available on Internet or social networks for different purposes viz., for benefit of society, for earning money, to increase their knowledge, to know what is happening in the world and some for malaise intention. It is difficult for a social network provider to identify individuals with malaise intention, and stop their access to the social networks. If social networks restrict access to the information for reason of privacy or preventing unauthorized use, it will reduce quantum to information available on social networks (Kraut, et al., 2002; Constantinides, 2002; Ariff, et al., 2014; Chang & Heo, 2014)^{250,251,83,252}.

Variety of information is available on social networks which are posted by Internet users and therefore social network users are always in a dilemma for authenticity of the information available on the social media networks (ibid). This type of behaviour of social network users no doubt helps in increasing relationships or connections with people who are at distance but do a lot of harm in maintaining the relationships with the people who are nearby. Thus, social networks are reducing, diminishing and even destroying the quality of face-to-face communications and are making human relationships more formal (Kubicek, 1988).²⁵³ Social network users are engaged also into personal chat on social networks by creating his or her profile through sharing his/her personal details that are many times viewed by many other social network user's resultants into a reduction of privacy of the social network users of the social networks (Liebermann & Stashevsky, 2002).²⁵⁴

Profile data and chat data of Social network users are stored by the social network provider, and if proper security is not provided to such servers, this data can easily be hacked by the hackers and can be used for their malaise intentions. It is therefore a big challenging task for social network providers to continuously update its security features of social networks (ibid).

There is constant up-gradation in technology and the social networks now take all the precautionary measure to give protection from hacking of data and thus ensure safety of the data generated by the social network users. It is really challenging for the social network providers to keep pace with such technological up-gradation to remain effective in satisfying the ever-increasing needs of its current users of the social network (Chen, 2013).²⁵⁵

REFERENCES

1. Kotler, P., Keller, K. L., Koshy, A., & Jha, M. (2009). *Marketing Management-A South Asian Perspective* (13th ed.). New Delhi: Dorling Kindersley (India) Pvt. Ltd.
2. Ramaswamy, V. S., & Namakumari S. (2018). *Marketing Management Indian Context Global Perspective*. 6th Edition. Sage Publication
3. Bell, C. (January, 2016). *E-Commerce Models - Business to Consumer - B2B | B2C | C2B | C2C | B2G*. Retrieved from <https://chrisbell.com/SNHU/IT-647-website-construction-and-management/ecommerce-models-business-to-consumer-B2C.php> (accessed on 08/05/2019)
4. McKnight, D. (1994). The Value Theory of the Austrian School. *The Appraisal Journal*, 62(3), PP. 465-469.
5. Smart, W. (1891). *An Introduction to the Theory of Value*. London: MacMillan & Co.
6. Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *The Journal of Marketing*, 52(3), PP. 2-22.
7. Chain Store Age. (1985, May 14). Value is a complex equation. PP. 4-15.
8. Cravens, D. W., Holland, C. W., Lamb, C. W., & Moncrief, W. C. (1988). Marketing's Role in Product and Service Quality. *Industrial Marketing Management*, 17(4), PP. 285-304.
9. Monroe, K. B. (1990). *Pricing: Making Profitable Decisions*. (2nd ed.), New York: McGraw-Hill Book Company.
10. Porter, M. E. (1990). The Competitive Advantage of Nations. *Harvard business review*, 68(2), PP. 73-93.
11. Benkler, Y. (2006). *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. Yale University Press.
12. Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukophadhyay, T., & Scherlis, W. (1998). Internet paradox: A Social Technology that Reduces Social Involvement and Psychological Well-Being? *American Psychologist*, 53(9), PP. 1017-1031.
13. Wigand, R. T. (1997). Electronic Commerce: Definition, Theory, and Context. *The Information Society*, 13(1), PP. 1-16.
14. Luo, X., & Seyedian, M. (2003). Contextual Marketing and Customer-Oriented Strategy for E-Commerce: An Empirical Analysis. *International Journal of Electronic Commerce*, 8(2), PP. 95-118.
15. Wellman, B., Salaff, J., Dimitrova, D., Garton, L., Gulia, M., & Haythornthwaite, C. (1996). Computer Networks as Social Networks: Collaborative Work, Telework, and Virtual Community. *Annual Review of Sociology*, 22(1), PP. 213-238.
16. Science Node. (n.d.). Retrieved from <https://sciencenode.org/feature/a-brief-history-of-the-Internet-.php> (accessed on 29/04/2019)

17. History. (n.d.). Retrieved from <https://www.history.com/news/who-invented-the-Internet> (accessed on 29/04/2019)
18. CERN. (n.d.). Retrieved from <https://home.cern/science/computing/birth-web/short-history-web> (accessed on 29/04/2019)
19. Internet World Stats. (n.d.). Retrieved from <https://www.internetworldstats.com/emarketing.htm> (accessed on 09/10/2020)
20. Chui, M., Manyika, J., Bughin, J., Dobbs, R., Roxburgh, C., Sarrazin, H., ... & Westergren, M. (2012). *The Social Economy: Unlocking Value and Productivity through Social Technologies*. McKinsey Global Institute, 4, PP. 35-58.
21. Datareportal. (n.d., a). Retrieved from <https://datareportal.com/reports/digital-2020-october-global-statshot> (accessed on 24/01/2021).
22. Zwass, V. (1996). *Electronic Commerce: Structures and Issues*. International Journal of Electronic Commerce. 1(1), PP. 3-23.
23. Durlacher Research. (1999). *Mobile Commerce Report*. London: Durlacher Research.
24. Sadeh, N. (2002). *M-commerce: Technologies, Services, and Business Models*. New York: John Wiley & Sons.
25. Skarzauskiene, A., Tamosiūnaitė, R., & Zalieniene, I. (2013b). *Defining social technologies*. The proceeding of 4th international conference on Information systems management and evaluation, At RMIT University Vietnam, Ho Chi Ming Sity, Vietnam. PP. 239- 246.
26. Bryer, T. A., & Zavattaro, S. M. (2011). *Social Media and Public Administration: Theoretical Dimensions and Introduction to the Symposium*. Administrative Theory & Praxis, 33, PP. 325-340.
27. Brass, D. J., Butterfield, K. D., & Skaggs, B. C. (1998). *Relationships and unethical behaviour: A social network perspective*. Academy of Management Review, 23(1), PP. 14-31.
28. Mathur, P. K. (2012). *Social Media and Networking: Concepts, Trends and Dimensions*. Kanishka Publishers, Distributors. New Delhi.
29. Techopedia. (n.d., a). *Communication Media*. Retrieved from <https://www.techopedia.com/definition/14462/communication-media> (accessed on 21/12/2020)
30. Boyd, D. M., & Ellison, N. B. (2008). *Social Network Sites: Definition, History, and Scholarship*. Journal of Computer-Mediated Communication, 13(1), PP. 210-230.
31. Henderson, C. R. (1901). *The Scope of Social Technology*. The American Journal of Sociology, 6(4), PP. 465-486.
32. Anderson, P. (2007). *What is Web 2.0? Ideas, Technologies and Implications for Education*. JISC: Bristol, 1(1), PP. 1-64.

33. Blackshaw, P., & Nazzaro, M. (2004). Consumer-Generated Media (CGM) 101: Word-of-mouth in the age of the Web fortified consumer. Retrieved from <http://www.nielsenbuzzmetrics.com/whitepapers> (Accessed on April 09, 2013)
34. Alberghini E., Cricelli L., & Grimaldi M. (2010). Implementing Knowledge Management through IT Opportunities: Definition of a Theoretical Model Based on Tools and Processes Classification, The Proceedings of the 2nd European Conference on Intellectual Capital, Lisbon, Portugal, 29-30 March, 2010, PP. 22-33.
35. Skarzauskiene, A., Tamosiūnaitė, R., & Zalieniė, I. (2013a). Defining Social Technologies: evaluation of social collaboration tools and technologies. *Electronic Journal of Information Systems Evaluation*, 16(3), PP. 232-241.
36. Dennis, M.A., Augustyn, A., Chopra, S., Gaur, A. & Young, G. (n.d.). Internet Computer Network. *Britannica*. Retrieved from <https://www.britannica.com/technology/Internet> (accessed on 23/12/2020)
37. Hoegg, R., Martignoni, R., Meckel, M., & Stanoevska-Slabeva, K. (2006): Overview of Business Models for Web 2.0 Communities, in: *Proceedings of GeNeMe 2006 Conference*, Dresden.
38. Constantinides, E., & Fountain, S. J. (2008). Web 2.0: Conceptual Foundations and Marketing Issues. *Journal of Direct, Data and Digital Marketing Practice*, 9(3), PP. 231-244.
39. Constantinides, E., Romero, C. L., & Boria, M. A. G. (2008). Social media: a new frontier for retailers. In *European Retail Research* (pp. 1-28). Gabler Verlag, Wiesbaden.
40. Statista. (n.d., a). Retrieved from www.statista.com/statistics/278414/number-of-worldwide-social-network-users (accessed on 09/10/2020)
41. Datareportal. (n.d.). Retrieved from https://datareportal.com/?utm_source=Reports&utm_medium=PDF&utm_campaign=Digital_2020&utm_content=DataReportal_Promo_Slide (accessed on 09/10/2020)
42. Grabner-Kräuter, S. (2009). Web 2.0 social networks: the role of trust. *Journal of business ethics*, 90(4), PP. 505-522.
43. Castells, M. (1996). *The Rise of the Network Society*. Blackwell, Cambridge, MA.
44. Liebeskind, J. P., Oliver, A. L., Zucker, L., & Brewer, M. (1996). Social Networks, Learning, and Flexibility: Sourcing Scientific Knowledge in New Biotechnology Firms. *Organization Science*, 7(4), PP. 428-443.
45. Webopedia. (n.d.). Retrieved from https://www.webopedia.com/quick_ref/history_of_blogging.asp (accessed on 10/05/2019)
46. Kaplan, A. M., & Haenlein, M. (2011). The Early Bird Catches the News: Nine Things You Should Know About Micro-Blogging. *Business Horizons*, 54(2), PP. 105-113.
47. Techopedia. (n.d., b). Retrieved from <https://www.techopedia.com/definition/4946/microblog> (accessed on 10/05/2019)

48. Quora. (n.d.). Retrieved from <https://www.quora.com/What-are-the-differences-between-ratings-and-reviews> (accessed on 10/05/2019)
49. MNB market business news. (n.d.). Retrieved from <https://marketbusinessnews.com/financial-glossary/social-commerce-definition-meaning/> (accessed on 10/05/2019)
50. Cecere, L. (2010). The rise of social commerce. A Trail Guide for the Social Commerce Pioneer. Retrieved from www.supplychainshaman.com/wpcontent/uploads/2010/11/rise_of_social_commerce_final.pdf, Stand, 19, 2013.
51. Dictionary.com. (n.d.). Retrieved from <https://www.dictionary.com/e/wikileaks-wikipedia/> (accessed on 10/05/2019)
52. Tech Target. (n.d., c). Retrieved from <https://whatis.techtarget.com/definition/wiki> (accessed on 10/05/2019)
53. Flexjobs. (n.d.). Retrieved from <https://www.flexjobs.com/blog/post/shared-workspaces/> (accessed on 10/05/2019)
54. Encyclopedia.com. (2002). Gale Encyclopaedia of E-Commerce. Retrieved from <https://www.encyclopedia.com/economics/encyclopedias-almanacs-transcripts-and-maps/discussion-forums> (accessed on 10/05/2019)
55. Kstoolkit. (n.d.). Retrieved from http://www.kstoolkit.org/discussion_forums (accessed on 10/05/2019)
56. Investopedia. (n.d.). Retrieved from <https://www.investopedia.com/terms/c/crowdsourcing.asp> (accessed on 10/05/2019)
57. Merriam-Webster.com. (n.d.). Retrieved from www.merriam-webster.com/dictionary/crowdsourcing (accessed on 21/05/2016)
58. Gaugh, C. (2019, March, 7). Social gaming - Statistics & Facts. Statista. Retrieved from <https://www.statista.com/topics/2965/social-gaming/> (accessed on 23/12/2020)
59. Zhang, H., & Shen, H. (2009, August). A social network based file sharing system in mobile peer-to-peer networks. In 2009 Proceedings of 18th International Conference on Computer Communications and Networks (pp. 1-6). IEEE.
60. Telecom Regulatory Authority of India. (2020, January, 8). The Indian Telecom Services Performance Indicators.
61. Nielson & IMAI (n.d.). Digital in India 2019- Round 2 Report. Retrieved from <https://cms.iamai.in/Content/ResearchPapers/2286f4d7-424f-4bde-be88-6415fe5021d5.pdf> (accessed on 11/10/2020).
62. Statista. (n.d., b). Retrieved from www.statista.com/statistics/309866/india-digital-population (accessed on 11/10/2020)
63. Statista. (n.d., c). Retrieved from <https://www.statista.com/statistics/240960/share-of-indian-population-using-social-networks/> (accessed on 11/10/2020)

64. Ahmad, A. (2011, b). A Short Description of Social Networking Websites and its Uses. *International Journal of Advanced Computer Science and Applications*, 2(2), PP. 124-128.
65. Das, B., & Sahoo, J. S. (2011). Social Networking Sites-A Critical Analysis of Its Impact on Personal and Social Life. *International Journal of Business and Social Science*, 2(14), PP. 222-228.
66. Orchard, L. J., Fullwood, C., Galbraith, N., & Morris, N. (2014). Individual Differences as Predictors of Social Networking. *Journal of Computer-Mediated Communication*. DOI: 10.1111/jcc4.12068.
67. Schuler, D. (1994). Social computing. *Communications of the ACM*, 37(1), PP. 28-29.
68. Kwon, O., & Wen, Y. (2010). An Empirical Study of the Factors Affecting Social Network Service Use. *Computers in Human Behaviour*, 26, PP. 254-263.
69. Arya N. (2011). *Social Media*. Anmol Publications Pvt. Ltd. New Delhi.
70. Manjunatha, S. (2013). The Usage of Social Networking Sites among the College Students in India. *International Research Journal of Social Sciences*, 2(5), PP. 15-21.
71. Chhiato, L. (2018). Use of Social Networks for Dissemination of Information by Media Professionals in Mizoram. Dissertation for Master of Philosophy in Library and Information Science.
72. Jain, M. R., Gupta, P., & Anand, N. (2012). Impact of Social Networking Sites in the Changing Mindset of Youth on Social Issues-A Study of Delhi-NCR Youth. *Researchers World Journal of Art, Science & Commerce*, 3(2(2)), PP. 36-43.
73. Mooney, C. (2009). *Online Social Networking*. Greenhaven Publishing LLC.
74. Lenhart, A., & Madden, M. (2007). *Teens, privacy, & online social networks*. Pew Internet and American Life Project Report.
75. Ridings, C. M., & Gefen, D. (2004). Virtual community attraction: Why people hang out online. *Journal of Computer-Mediated Communication*, 10(1), jcmc.indiana.edu/vol10/issue1/ridings_gefen.html.
76. Gangadharbatla, H. (2008). Facebook Me: Collective Self-Esteem, Need to Belong, and Internet Self-Efficacy as Predictors of the iGeneration's Attitudes toward Social Networking Sites. *Journal of Interactive Advertising*, 8(2), PP. 5-15.
77. Lumpkins, C. Y., Mabachi, N., Lee, J., Pacheco, C., Greiner, K. A., & Geana, M. (2017). A Prescription for Internet Access: Appealing to Middle-Aged and Older Racial and Ethnic Minorities through Social Network Sites to Combat Colorectal Cancer. *Health Communication*, 32(7), PP. 916-920.
78. Caton, S., Haas, C., Chard, K., Bubendorfer, K., & Rana, O. F. (2014). A Social Compute Cloud: Allocating and Sharing Infrastructure Resources Via Social Networks. *Services Computing, IEEE Transactions*, 7(3), PP. 359-372. DOI: 10.1109/TSC.2014.2303091

79. Wang, J. L., Jackson, L. A., Gaskin, J., & Wang, H. Z. (2014). The Effects of Social Networking Site (SNS) Use on College Students' Friendship and Well-Being. *Computers in Human Behaviour*, 37(2014), PP. 229-236. DOI:10.1016/j.chb.2014.04.051
80. Ghazizadeh, M., Lee, J. D., & Boyle, L. N. (2012). Extending the Technology Acceptance Model to assess automation. *Cognition, Technology & Work*, 14(1), PP. 39-49.
81. Prahalad, C. K. & Ramaswamy, V. (2004). *The Future of Competition: Co-Creating Unique Value with Customers*. Boston, MA: Harvard Business School Press.
82. García-Peñalvo, F. J., Colomo-Palacios, R., & Lytras, M. D. (2012). Informal Learning in Work Environments: Training with the Social Web in the Workplace. *Behaviour & Information Technology*, 31(8), PP. 753-755.
83. Ariff, M. S, Shan, T. K., Zakuan, N., Ishak, N. & Wahi, M. R. (2014). Examining Users' E-Satisfaction in the Usage of Social Networking Sites; Contribution from Utilitarian and Hedonic Information Systems. *IOP Conf. Series: Materials Science and Engineering*, 58, PP. 1-10.
84. Marshall, G. W., Moncrief, W. C., Rudd, J. M., & Lee, N. (2012). Revolution in Sales: The Impact of Social Media and Related Technology on the Selling Environment. *Journal of Personal Selling & Sales Management*, 32(3), PP. 349-363.
85. Al-Aufi, A., & Fulton, C. (2015). Impact of Social Networking Tools on Scholarly Communication: A Cross-Institutional Study. *The Electronic Library*, 33(2), PP. 224-241.
86. Hughes, D. J., Rowe, M., Batey, M., & Lee, A. (2012). A Tale of Two Sites: Twitter vs. Facebook and the Personality Predictors of Social Media Usage. *Computers in Human Behaviour*, 28(2), PP. 561-569.
87. Lerman, K. (2007). Social Information Processing in News Aggregation. *IEEE Internet Computing*, 11(6), PP. 16-28.
88. Fick, M. & Dave, P. (2019, April, 23). Facebook's flood of languages leaves it struggling to monitor content. Reuters. Retrieved from <https://www.reuters.com/article/us-facebook-languages-insight-idUSKCN1RZ0DW> (accessed on 23/12/2020)
89. Loechner, J. (2010, September, 15). Brand discounts win Facebook fans. Media Post Blogs. Retrieved on 25th May 2016 from www.mediapost.com/publications/article/135743/brand-discounts-win-facebook-fans.html
90. Facebook. (n.d.). Retrieved from <https://en-gb.facebook.com/business/help/461775097570076?id=939256796236247> (accessed on 23/12/2020)
91. Google Play. (n.d.). Retrieved from https://play.google.com/store/apps/details?id=com.facebook.katana&hl=en_IN&gl=US (accessed on 30/01/2021)
92. YouTube. (n.d.). Retrieved from www.youtube.com/yt/about/ (accessed on 23/05/2016)

93. Google Play. (n.d. a). Retrieved from <https://play.google.com/store/apps/details?id=com.google.android.youtube> (accessed on 30/01/2021)
94. WhatsApp. (n.d.). About. Retrieved from <https://www.whatsapp.com/about/> (accessed on 13/11/2018)
95. WhatsApp. (n.d. a). Retrieved from <https://www.whatsapp.com/download> (accessed on 30/01/2021)
96. Google Play (n.d. b). Retrieved from <https://play.google.com/store/apps/details?id=com.whatsapp> (accessed on 30/01/2021)
97. WeChat. (n.d.). Want to Know About WeChat? Retrieved from <https://www.whatiswechat.com/all-about-wechat/> (accessed on 13/11/2018)
98. WeChat. (n.d., a) Retrieved from <https://www.wechat.com/en/> (accessed on 30/01/2021)
99. Instagram. (n.d.). About Us. Retrieved from <https://www.instagram.com/about/us/> (accessed on 13/11/2018)
100. Bergström, T., & Bäckman, L. (2013). Marketing and PR in Social Media: How the Utilization of Instagram Builds and Maintains Customer Relationships. Bachelor Thesis.
101. Instagram. (n.d., a). Retrieved from <https://www.instagram.com/accounts/login/> (accessed on 30/01/2021)
102. QQ International. (n.d.). About. Retrieved from <https://imqq.com/html/about/about.html#/> (accessed on 10/05/2019)
103. Google Play. (n.d., c). Retrieved from https://play.google.com/store/apps/details?id=com.tencent.mobileqq&hl=en_IN&gl=US (accessed on 30/01/2021)
104. China Internet Watch. (2013, September, 13). The Story of China's Biggest Social Network: Qzone. Retrieved from <https://www.china Internetwatch.com/3346/tencent-qzone/> (accessed on 10/05/2019)
105. Tech Target. (n.d., a). Retrieved from <https://whatis.techtarget.com/definition/Qzone> (accessed on 10/05/2019)
106. Qzone. (n.d.). Retrieved from <https://qzonedownload.com/download-qzone-links> (accessed on 30/01/2021)
107. Whatsonweibo.com. (n.d., a). Are Douyin and Tiktok the Same? Retrieved from <https://www.whatsonweibo.com/are-douyin-and-tiktok-the-same/?print=print> (accessed on 10/05/2019).
108. Softonic. (n.d.). Retrieved from <https://douyin.en.softonic.com/android> (accessed on 30/01/2021)

109. Whatsonweibo.com. (n.d., b). Retrieved from <https://www.whatsonweibo.com/sinaweibo/> (accessed on 10/05/2019).
110. Uptodown. (n.d.). Retrieved from <https://weibo.en.uptodown.com/android> (accessed on 30/01/2021).
111. Maina, A. (2018, June, 6). 20 Popular Social Media Sites Right Now. Small Business Trends. Retrieved from <https://smallbiztrends.com/2016/05/popular-social-media-sites.html> (accessed on 10/05/2019).
112. Tech Target. (n.d., b). Retrieved from <https://searchcio.techtarget.com/definition/Reddit> (accessed on 10/05/2019)
113. Google Play. (n.d., d). Retrieved from https://play.google.com/store/apps/details?id=com.reddit.frontpage&hl=en_IN&gl=US (accessed on 30/01/2021)
114. Reddit. (n.d.). Retrieved from <https://reddit-official-app.en.uptodown.com/android> (accessed on 30/01/2021)
115. Twitter. (n.d.). Retrieved from about.twitter.com/company (accessed on 23/05/2016)
116. Twitter. (n.d., a). Retrieved <https://twitter.com/settings/download?lang=en> (accessed on 30/01/2021)
117. LinkedIn. (n.d.). About. Retrieved from <https://about.linkedin.com/> (accessed on 10/05/2019)
118. Google Play. (n.d., e). Retrieved from https://play.google.com/store/apps/details?id=com.linkedin.android&hl=en_IN&gl=US (accessed on 30/01/2021)
119. Skype. (n.d.). About. Retrieved from <https://www.skype.com/en/about/> (accessed on 13/11/2018)
120. Skype. (n.d., a). Retrieved from <https://www.skype.com/en/get-skype/> (accessed on 30/01/2021)
121. Webwise. (n.d.). Explainer: What is Snapchat? Retrieved from <https://www.webwise.ie/parents/explainer-what-is-snapchat-2/> (accessed on 13/11/2018)
122. Snapchat. (n.d.). Retrieved <https://www.snapchat.com/download> (accessed on 30/01/2021)
123. BBC News. (2014, February, 14). Viber messaging app bought by Japan's Rakuten. Retrieved from <https://www.bbc.com/news/business-26186031> (accessed on 11/05/2019)
124. Viber. (n.d.). Retrieved from https://support.viber.com/customer/en/portal/articles/2917030-welcome-to-viber?b_id=3838 (accessed on 11/05/2019)
125. Viber. (n.d., a). Retrieved <https://www.viber.com/en/download/> (accessed on 30/01/2021)
126. Savchuk. K. (2016, March, 1). Pinterest Founders Are Among The World's Youngest New Billionaires. Forbes. Retrieved from <https://www.forbes.com/sites/katiasavchuk/2016/03/01/pinterest-founders-new-billionaires/#2bc9feb67864> (accessed on 11/05/2019)

127. Rodriguez, S. (2019, March, 29). Pinterest quietly elevates co-founder Evan Sharp to board of directors. CNBC. Retrieved from <https://www.cnbc.com/2019/03/29/pinterest-quietly-elevates-co-founder-evan-sharp-to-board-of-directors.html> (accessed on 11/05/2019)
128. Meng, A. (2019, January, 14). What is Pinterest, and How Does It Work? In front webworks. Retrieved from <https://www.infront.com/blog/the-blog/what-is-pinterest-and-how-does-it-work> (accessed on 11/05/2019)
129. Google Play. (n.d., f). Retrieved from https://play.google.com/store/apps/details?id=com.pinterest&hl=en_IN&gl=US (accessed on 30/01/2021)
130. Lomas, N. (2013, March, 17). Line: We're A Social Entertainment Platform, Not Just A Free Calls Messaging App. Tech Crunch. Retrieved from <https://techcrunch.com/2013/03/17/line-Retrieved-from-the-social-entertainment-platform/> (accessed on 11/05/2019)
131. Line. (n.d.). Retrieved from <https://line.me/en/> (accessed on 11/05/2019)
132. Russell, J. (2016, July, 14). Understanding Line, the Chat App Behind 2016's Largest Tech IPO. Tech Crunch. <https://techcrunch.com/2016/07/14/understanding-line-the-chat-app-behind-2016s-largest-tech-ipo/> (accessed on 11/05/2019)
133. Line. (n.d., a). Retrieved <https://line.me/en/download> (accessed on 30/01/2021)
134. Wixom, B. H., & Todd, P. A. (2005). A Theoretical Integration of User Satisfaction and Technology Acceptance. *Information Systems Research*, 16(1), PP. 85-102.
135. Di Gangi, P. M. (2010). *The Co-Creation of Value: Exploring Engagement Behaviours in User-Generated Content Websites*. The Florida State University.
136. Balasubramanian, S., Peterson, R.A.P., & Jarvenpaa, S.L. (2002). Exploring the Implications of m-Commerce for Markets and Marketing. *Journal of the Academy of Marketing Science*, 30 (4), PP. 348-361.
137. Chen, L. D., & Nath, R. (2004). A Framework for Mobile Business Applications. *International Journal of Mobile Communications*, 2(4), PP. 368-381.
138. Wang, Y., Lai, P., & Sui, D. (2003). Mapping the Internet using GIS: The death of distance hypothesis revisited. *Journal of Geographical Systems*, 5(4), PP. 381-405.
139. Sledgianowski, D., & Kulviwat, S. (2009). Using Social Network Sites: The Effects of Playfulness, Critical Mass and Trust in a Hedonic Context. *Journal of Computer Information Systems*, 49(4), PP. 74-83.
140. Dickinger, A., Arami, M., & Meyer, D. (2008). The Role of Perceived Enjoyment and Social Norm in the Adoption of Technology with Network Externalities. *European Journal of Information Systems*, 17, PP. 4-11.
141. Wellman, B. (1999). *Networks in the global village*. Boulder, CO: Westview.
142. Wellman, B. (2001). Physical place and cyberplace: The Rise of Personalized Networking. *International Journal of Urban and Regional Research*, 25(2), PP. 228-252.

143. Wellman, B., Quan-Haase, A., Boase, J., Chen, W., Hampton, K., Díaz, I., & Miyata, K. (2003). The Social Affordances of the Internet for Networked Individualism. *Journal of Computer-Mediated Communication*, 8(3).
144. Li, C., & Bernoff, J. (2008). *Groundswell: Winning in a World Transformed by Social Technologies*. Boston, MA: Harvard Business School Press.
145. Powell, B. J. (2009). *33 Million People in the Room: How to Create, Influence, and Run a Successful Business with Social Networking*. NJ: FT Press.
146. Tapscott, D. (2008). *Grown Up Digital: How the Next Generation is Changing Your World*. New York: McGraw-Hill.
147. Katz, M. L., & Shapiro, C. (1985). Network Externalities, Competition and Compatibility. *American Economic Review*, 75, PP. 424-440.
148. Lin, C. P., & Bhattacharjee, A. (2008). Elucidating Individual Intention to Use Interactive Information Technologies: The Role of Network Externalities. *International Journal of Electronic Commerce*, 13, PP. 85-108.
149. Newell, F., & Lemon, K. N. (2001). *Wireless Rules*, New York: McGraw-Hill
150. Conte, J. M., Mathieu, J. E., & Landy, F. J. (1998). The Nomological and Predictive Validity of Time Urgency. *Journal of Organizational Behaviour*, 19 (1), PP. 1-13.
151. Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001). Hedonic and Utilitarian Motivations for Online Retail Shopping Behaviour. *Journal of Retailing*, 77(4), PP. 511-535.
152. Nysveen, H., Pedersen, P. E., & Thorbjørnsen, H. (2005). Intentions to Use Mobile Services: Antecedents and Cross-service Comparisons. *Journal of the Academy of Marketing Science*, 33(3), PP. 330-346.
153. Shankar, V., O Driscoll, T., & Reibstein, D. (2003). Rational Exuberance: The Wireless Industry's Killer "B". *Strategy & Business*, 31, PP. 68-77.
154. Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), PP. 319-340.
155. Lu, J., Lu, C., Yu, C. S., & Yao, J. E. (2003). Exploring Factors Associated with Wireless Internet via Mobile Technology Acceptance in Mainland China. *Communications of the IIMA*, 3(1), PP. 101-120.
156. Chau, P. Y. K. (1996). An Empirical Assessment of a Modified Technology Acceptance Model. *Journal of Management Information Systems*, 13(2), PP. 185-204.
157. Liang, H., Xue, Y., & Byrd, T. A. (2003). PDA Usage in Healthcare Professionals: Testing an Extended Technology Acceptance Model. *International Journal of Mobile Communications*, 1(4), PP. 372-389.
158. Mao, E., Srite, M., Bennett Thatcher, J., & Yaprak, O. (2005). A Research Model for Mobile Phone Service Behaviours: Empirical Validation in the US and Turkey. *Journal of Global Information Technology Management*, 8(4), PP. 7-28.

159. Kim, S., & Garrison, G. (2009). Investigating Mobile Wireless Technology Adoption: An Extension of the Technology Acceptance Model. *Information Systems Frontiers*, 11(3), PP. 323-333.
160. Agarwal, R., & Prasad, J. (1999). Are Individual Differences Germane to the Acceptance of New Information Technologies? *Decision Sciences*, 30(2), PP. 361-391.
161. Hu, P. J., Chau, P. Y., Sheng, O. R. L., & Tam, K. Y. (1999). Examining the Technology Acceptance Model Using Physician Acceptance of Telemedicine Technology. *Journal of Management Information Systems*, 16(2), PP. 91-112.
162. Taylor S., & Todd P.A. (1995). Understanding Information Technology Usage: A Test of Competing Models. *Information Systems Research*, 6(2), PP. 144-176.
163. Yang, K. (2006). The Effects of Consumer Perceived Value and Subjective Norm on the Adoption of Mobile Data Services: A Cross-Cultural Comparison of American and Korean. Ph.D. Thesis
164. Lee, M. C. (2009). Factor Influencing the Adoption of Internet Banking: An Integration of TAM and TPB with Perceived Risk and Perceived Benefit. *Electronic Commerce Research and Applications*, 8, PP. 130-141.
165. Gefen, D., & Straub, D. W. (2000). The Relative Importance of Perceived Ease of Use in IS Adoption: A Study of E-Commerce Adoption. *Journal of the Association for Information Systems*, 1, PP.1-28.
166. Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, 46(2), PP. 186-204.
167. Lee, D., Park, J., & Ahn, J. H. (2001). On the Explanation of Factors Affecting E-Commerce Adoption. *Proceedings of Twenty-Second International Conference on Information Systems*, 14, PP. 109-120.
168. Pavlou, P. A. (2003). Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model. *International Journal of Electronic Commerce*, 7(3), PP. 101-134.
169. Oh, S., Ahn, J., & Kim, B. (2003). Adoption of Broadband Internet in Korea: The Role of Experience in Building Attitudes. *Journal of Information Technology*, 18(4), PP. 267-280.
170. Selim, H. M. (2003). An Empirical Investigation of Student Acceptance of Course Websites. *Computers & Education*, 40(4), PP. 343-360.
171. Suh, B., & Han, I. (2003). Effect of Trust on Customer Acceptance of Internet Banking. *Electronic Commerce Research and Applications*, 1(3), PP. 247-263.
172. Brown Sr, M. A., Alkadry, M. G., & Resnick-Luetke, S. (2014). Social Networking and Individual Perceptions: Examining Predictors of Participation. *Public Organization Review*, 14(3), PP. 285-304.

173. Fishbein, M. (1963). An Investigation of the Relationships between Beliefs about an Object and the Attitude toward that Object. *Human Relations*, 16, PP. 233-240.
174. Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behaviour*. Englewood Cliffs, NJ: Prentice-Hall Inc.
175. Fishbein, M. & Ajzen, I. (1975). *Belief, Attitude, Intention and Behaviour: An Introduction to Theory and Research*, Addison-Wesley, Reading, MA
176. Pfeil, U., Arjan, R., & Zaphiris, P. (2009). Age Differences in Online Social Networking: A Study of User Profiles and the Social Capital Divide among Teenagers and Older Users in Myspace. *Computers in Human Behaviour*, 25, PP. 643-654.
177. Succi, M.J. & Walter, Z.D. (1999). Theory of User Acceptance of Information Technologies: An Examination of Health Care Professionals. *Proceedings of the 32nd Hawaii International Conference on System Sciences (HICSS)*, PP. 1-7.
178. Davis, F.D., & Venkatesh, V. (1996). A Critical Assessment of Potential Measurement Biases in the Technology Acceptance Model: Three Experiments. *International Journal of Human-Computer Studies*, 45, PP. 19-45.
179. Lin, J. C. C., & Lu, H. (2000). Towards an Understanding of the Behavioural Intention to Use a Web Site. *International Journal of Information Management*, 20(3), PP. 197-208.
180. Warshaw, P. R., & Davis, F. D. (1985). Disentangling Behavioural Intention and Behavioural Expectation. *Journal of Experimental Social Psychology*, 21(3), PP. 213-228.
181. Ajzen, I. (1991). The Theory of Planned Behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), PP. 179-211.
182. Kim, S. S., & Malhotra, N. K. (2005). A Longitudinal Model of Continued IS Use: An Integrative View of Four Mechanisms Underlying Postadoption Phenomena. *Management Science*, 51(5), PP. 741-755.
183. Weerasinghe, S., & Hindagolla, M. C. B. (2018). Technology Acceptance Model and Social Network Sites (SNS): A Selected Review of Literature. *Global Knowledge, Memory and Communication*, 67 (3), PP. 142-153.
184. Ajzen, I. (1985). *From Intentions to Actions: A Theory of Planned Behaviour*. Action control. Springer Berlin Heidelberg, PP. 11-39.
185. Holbrook, M. B., & Corfman, K. P. (1985). Quality and Value in the Consumption Experience: Phaedrus Rides Again. *Perceived quality*, 31(2), PP. 31-57.
186. Oliver, R. L. (1999). Value as Excellence in the Consumption Experience. In Holbrook, M. B., (Ed), *Consumer Value: A Framework for Analysis and Research*. New York: Routledge, PP. 43-62.
187. Parasuraman, A. (1997). Reflections on Gaining Competitive Advantage through Customer Value. *Journal of the Academy of Marketing Science* 25 (2), PP. 154-161.

188. Woodruff, R. B. (1997). Customer Value: The Next Source for Competitive Advantage. *Journal of the Academy of Marketing Science*, 25(2), PP. 139-153.
189. Woodall, T. (2003). Conceptualizing 'Value for the Customer': An Attributional, Structural and Dispositional Analysis. *Academy of Marketing Science Review*, 2003(12), PP. 1-42. Retrieved from <http://www.amsreview.org/articles/woodall12-2003.pdf>
190. Fekete, J. (1987). Introductory Notes for a Postmodern Value Agenda. Fekete, J. (Ed.), *Life after Postmodernism: Essays on Value and Culture*. Montreal: New World Perspectives, PP. i-xix.
191. Smith, B. H. (1987). Value Without Truth-Value. Fekete, J. (Ed.), *Life after Postmodernism: Essays on Value and Culture*. Montreal: New World Perspectives. PP. 1-21.
192. Amin, S. (1978). *The Law of Value and Historical Materialism*. New York: Monthly Review Press.
193. Frondizi, R. (1971). *What is Value?* (2nd. Ed.). Illinois: Open Court Publishing Company.
194. Fishburn, P. C. (1987). *Utility Theory and Decision Theory*. Utility and Probability. London: Macmillan, PP. 303-312.
195. Eatwell, J., Milgate, M., & Newman, P. (1987). *Utility and Probability*. London: Macmillan
196. Lai, A. W. (1995). Consumer Values, Product Benefits and Customer Value: A Consumption Behaviour Approach. *Advances in Consumer Research*. Kardes, F. R., and Sijan, M., Eds. Association for Consumer Research, 22, PP. 381-383.
197. LaPierre, J., & Deneault, D. (1997). Customer Perceived Value: A Demand-Side View of its Antecedents and Outcomes in High Technology. *Proceedings of the Annual Conference – European Marketing Academy*, 26 (4), PP. 1831-1840.
198. Heskett, J. L., Sasser, W. E., Jr., & Schlesinger, L. A. (1997). *The Service Profit Chain*. New York: The Free Press.
199. Grönroos, C. (1997). Value-Driven Relational Marketing: From Products to Resources and Competencies. *Journal of Marketing Management*, 13, PP. 407-419.
200. Liljander, V., & Strandvik, T. (1992). Different Types of Customer Service Expectations in Relation to Perceived Value. *Proceedings of the Annual Conference – European Marketing Academy*, 21 (2), PP. 1351-1354.
201. Anderson, E. W. (1995). An Economic Approach to Understanding How Customer Satisfaction Affects Buyer Perceptions of Value. *Proceedings of the AMA Winter Educators Conference*, 6, PP. 102-107.
202. Reichheld, F. (1996). *The Loyalty effect: The Hidden Force behind Growth, Profits, and Lasting Value*. Boston, Harvard Business School Press.
203. Shanker, A. (2012). A Customer Value Creation Framework for Businesses that Generate Revenue with Open Source Software. *Technology Innovation Management Review*, 2(3), PP. 18-22.

204. Morgan, L., & Finnegan, P. (2008, October). Deciding on Open Innovation: An Exploration of How Firms Create and Capture Value with Open Source Software. In IFIP Working Conference on Open IT-Based Innovation: Moving Towards Cooperative IT Transfer and Knowledge Diffusion (PP. 229-246). Springer, Boston, MA.
205. Ulaga, W. (2003). Capturing Value Creation in Business Relationships: A Customer Perspective. *Industrial Marketing Management*, 32(8), PP. 677-693.
206. O'Cass, A., & Ngo, L. V. (2011). Examining the Firm's Value Creation Process: A Managerial Perspective of the Firm's Value Offering Strategy and Performance. *British Journal of Management*, 22, PP. 646-671.
207. Bonaccorsi, A., Giannangeli, S., & Rossi, C. (2006). Entry Strategies Under Competing Standards: Hybrid Business Models in the Open Source Software Industry. *Management Science*, 52(7), PP. 1085-1098.
208. Johnson, M. W., Christensen, C. M., & Kagermann, H. (2008). Reinventing Your Business Model. *Harvard Business Review*, 86(12), PP. 57-68.
209. Schau, H. J., Muñiz Jr, A. M., & Arnould, E. J. (2009). How Brand Community Practices Create Value. *Journal of Marketing*, 73(5), PP. 30-51.
210. Payne, A. (2002). The Value Creation Process in Customer Relationship Management. *Insight Interactive*, PP. 1-17. Retrieved from <http://faculty.mu.edu.sa/public/uploads/1361950725.7537customer%20relationship27.pdf>
211. Priem, R. L. (2007). A Consumer Perspective on Value Creation. *Academy of Management Review*, 32(1), PP. 219-235.
212. Brady, M. K., Knight, G. A., Cronin, J. J., Tomas, G., Hult, M., & Keillor, B. D. (2005). Removing The Contextual Lens: A Multinational, Multi-Setting Comparison of Service Evaluation Models. *Journal of Retailing*, 81(3), PP. 215-230.
213. Holbrook, M.B. (1999). *Consumer Value: A Framework for Analysis and Research*, New York: Routledge.
214. Sweeney, J. C., Soutar, G. N., & Johnson, L. W. (1999). The Role of Perceived Risk in the Quality–Value Relationship: A Study in a Retail Environment. *Journal of Retailing*, 75 (1), PP. 77-105.
215. Mathwick, C., Malhotra, N., & Rigdon, E. (2001). Experiential Value: Conceptualization, Measurement and Application in the Catalogue and Internet Shopping Environment. *Journal of Retailing*, 77 (1), PP. 39-56.
216. Squire, B., Readman, J., Brown, S., & Bessant, J. (2004). Mass Customization: The Key to Customer Value? *Production Planning & Control*, 15(4), PP. 459-471.
217. Prahalad, C.K. and Ramaswamy, V. (2004, a). Co-creating Unique Value with Customers. *Strategy & Leadership*. 32 (3). PP. 4-9

218. Smith, B. J., & Colgate, M. (2007). Customer Value Creation: A Practical Framework. *Journal of Marketing Theory and Practice*, 15(1), PP. 7-23.
219. Hulme, M. (2010). *Your Brand: At Risk or Ready for Growth? Building Relationships with Your Customers in an Era of Social Change*. Chicago : Alterian.
220. Joinson, AN. (2008). Looking at, looking up or keeping up with people: motives and use of Facebook. *Proceeding of the twenty-sixth annual SIGCHI conference on Human factors in computing systems*, 5–10 April, Florence, Italy. ACM: New York; PP. 1027-1036.
221. Ellison NB, Steinfield C, & Lampe C. (2007). The benefits of Facebook “friends:” social capital and college students’ use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), PP.1143-1168.
222. De Valck K, Van Bruggen GH, & Wierenga B. (2009). Virtual Communities: A Marketing Perspective. *Decision Support Systems*, 47(3), PP. 185-203.
223. Harris L. & Dennis C. (2011). Engaging Customers on Facebook: Challenges for e-retailers. *Journal of Consumer Behaviour*, 10, PP. 338- 346.
224. Jones, K. (2007). Connecting Social Technologies with Information Literacy. *Journal of Web Librarianship*, 1(4), PP. 67-80.
225. Gomez-Arias, J. T., & Genin, L. (2009). Beyond Monetization: Creating Value through Online Social Networks. *International Journal of Electronic Business Management*, 7(2), PP. 79-85.
226. Burns, M. J., Craig, R. B., Friedman, B. D., Schott, P. D., & Senot, C. (2011). Transforming Enterprise Communications Through the Blending of Social Networking and Unified Communications. *Bell Labs Technical Journal*, 16(1), PP. 19-34.
227. Boulding, W., Staelin, R., Ehret, M., & Johnston, W. J. (2005). A Customer Relationship Management Roadmap: What is Known, Potential Pitfalls, and Where to Go? *Journal of Marketing*, 69(4), PP. 155-166.
228. Sweeney, J. C., & Soutar, G. N. (2001). Consumer Perceived Value: The Development of a Multiple Item Scale. *Journal of Retailing*, 77(2), PP. 203-220.
229. Chen R., Sharma S. k. & Rao H. V. (2016). Members' Site Use Continuance on Facebook: Examining the Role of Relational Capital. *Decision Support Systems*, 90, PP. 86-98.
230. Leung, L. (2013). Generational Differences in Content Generation in Social Media: The Roles of the Gratifications Sought and of Narcissism. *Computers in Human Behaviour*, 29(3), PP. 997-1006.
231. Lin, H., Fan, W., & Chau, P. Y. (2014). Determinants of Users’ Continuance of Social Networking Sites: A Self-Regulation Perspective. *Information & Management*, 51(5), PP. 595-603.
232. Bhattacharjee, A. (2001). Understanding Information Systems Continuance: An Expectation-Confirmation Model. *MIS Quarterly*, PP. 351-370.

233. Neelamalar, M., & Chitra, P. (2009). New Media and Society: A Study on the Impact of Social Networking Sites on Indian Youth. *EstudosEmComunicac, ~ao*, 6, PP. 125-145. Retrieved from www.ec.ubi.pt/ec/06/pdf/neelamalar-new-media.pdf
234. Sheth, J. D., Newman, B. I., & Gross, B. L. (1991). Why We Buy What We Buy: A Theory of Consumption Values. *Journal of Business Research*, 22(2), PP. 159-170.
235. Berscheid, E., Graziano, W., Monson, T., & Dermer, M. (1976). Outcome Dependency: Attention, Attribution, and Attraction. *Journal of Personality and Social Psychology*, 34(5), PP. 978-989.
236. Murray, S. L., & Holmes, J. G. (1993). Seeing Virtues in Faults: Negativity and the Transformation of Interpersonal Narratives in Close Relationships. *Journal of Personality and Social Psychology*, 65(4), PP. 707-722.
237. Han, B. (2012). An investigation of factors influencing the user's social network site continuance intention. University of North Texas.
238. Parks, M. R. (2011). Boundary conditions for the application of three theories of computer-mediated communication to MySpace. *Journal of Communication*, 61(4), PP. 557-574.
239. Chan, K. W., Yim, C. K., & Lam, S. S. K. (2010). Is Customer Participation in Value Creation a Double-Edged Sword? Evidence from Professional Financial Services across Cultures. *Journal of Marketing*, 74(3), PP. 48-64.
240. Patterson, P. G., & Smith, T. (2001). Modelling Relationships Strength across Service Types in a South-East Asian Context. *International Journal of Service Industry Management*, 12(2), PP. 90-113.
241. Patterson, P. G., & Smith, T. (2003). A Cross-Cultural Study of Switching Barriers and Propensity to Stay with Service Providers. *Journal of Retailing*, 79(2), PP. 107-120.
242. Sharma, N., & Patterson, P. G. (1999). The Impact of Communication Effectiveness and Service Quality on Relationship Commitment in Consumer, Professional Services. *Journal of Services Marketing*, 13(2), PP.151-170.
243. Arnould, E. J., & Thompson, C. (2005). Consumer Culture Theory (CCT): Twenty Years of Research. *Journal of Consumer Research*, 31(4), PP. 868-882.
244. Frison, E., & Eggermont, S. (2015). The Impact of Daily Stress on Adolescents' Depressed Mood: The Role of Social Support Seeking Through Facebook. *Computers in Human Behaviour*, 44, PP. 315-325.
245. Becker, M. H. (1970). Factors Affecting Diffusion of Innovations among Health Professionals. *American Journal of Public Health*, 60(2), PP. 294-305.
246. Rogers, E. M. (1995). *Diffusion of Innovations*, 4th ed. NY: The Free Press.
247. Meuter, M. L., Bitner, M. J., Ostrom, A. L., & Brown, S. W. (2005). Choosing among Alternative Service Delivery Modes: An Investigation of Customer Trial of Self-Service Technologies. *Journal of Marketing*, 69(2), PP. 61-83.

248. Bolton, R. N., & Drew, J. H. (1991). A Multistage Model of Customers' Assessments of Service Quality and Value. *Journal of Consumer Research*, 17(4), PP. 375-384.
249. Kleijnen, M., De Ruyter, K., & Wetzels, M. (2007). An Assessment of Value Creation in Mobile Service Delivery and the Moderating Role of Time Consciousness. *Journal of Retailing*, 83(1), PP. 33-46.
250. Kraut, R., Kiesler, S., Boneva, B., Cummings, J., Helgeson, V., & Crawford, A. (2002). Internet Paradox Revisited. *Journal of Social Issues*, 58(1), PP. 49-74.
251. Constantinides, E. (2002). The 4S Web-Marketing Mix Model. *Electronic Commerce Research and Applications*, 1(1), PP. 57-76.
252. Chang, C. W., & Heo, J. (2014). Visiting Theories that Predict College Students' Self-Disclosure on Facebook. *Computers in Human Behaviour*, 30, PP.79-86.
253. Kubicek, H. (1988). Telematische Integration: Zurück in die Sozialstrukturen des Frühkapitalismus? Verdatet und Vernetzt Sozialökologische Handlungsspielräume in der Informationsgesellschaft. Frankfurt: Fischer, 17-42. In *The Network Society* by Jan Van Dijk, 2012, Sage Publications Ltd.
254. Liebermann, Y., & Stashevsky, S. (2002). Perceived Risks as Barriers to Internet and E-Commerce Usage. *Qualitative Market Research: An International Journal*, 5(4), PP. 291-300.
255. Chen, R. (2013). Member Use of Social Networking Sites- An Empirical Examination. *Decision Support Systems*, 54(3), PP. 1219-1227.