

# CHAPTER-TWO

## REVIEW OF LITERATURE

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#### **2.0: EPILOGUE:**

An attempt has been made by the researcher to put forward a bird eye-view on organization of this chapter entitled as “Review of Literature” as follows.

A well-structured review is literature characterized by a logical flow of ideas; current and relevant references with consistent, appropriate referencing style; proper use of terminology; and an unbiased and comprehensive view of the previous research on the topic (Cooper, H. 2010)<sup>1</sup>. This chapter is an outcome of browsing, classification, compilation and critical examination of theses; dissertations as well as scholarly published articles; research papers; empirical studies; research reports, results of empirical surveys, reference books, and publication of the proceedings of the seminars, conferences and workshops relating to chosen area of the research study.

The researcher has sub-divided this chapter into three parts called as follows.

**PART-I: General Review of Literature;**

**PART-II: Relevant Review of Literature, and**

**PART-III: Specific Review of Literature**

#### **PART-I: GENERAL REVIEW OF LITERATURE**

##### **2. I: 0: GENERAL REVIEW OF LITERATURE:**

The major objective of this part was to offer a socio-economic profiles of India as well as the State of Gujarat on varying aspects as identified and covered by the researcher as follows.

2. I: 1: A Brief Profile of India

2. I: 2: A Concise sketch of State of Gujarat

**It mainly included following.**

##### **2. I: 1: A BRIEF PROFILE OF INDIA:**

##### **2. I: 1:1: A Brief Account of Geo-Demographic Profile of India:**

In all, the geographical area of India is 3,287,240 Square Kilometers. In terms of spread of the geographical area, largest State of India is Rajasthan with 3, 42,239 Square Kilometers whereas the smallest State of India is Goa having area of 3,702 Square Kilometers. As per the Census 2001, total population of India was 1,028,737,436 persons, among which 532, 222,090 were males & 496,223,090 were females. From the perspective of Institutional & Houseless Population, this figure was 1, 943,766 sub-divided as 1,165,167 Population was rural & 778,599 was urban respectively (I-Cube 2009)<sup>2</sup>.

From the following table, we can get details pertaining to literacy summarized as follows.

**Table Number 2. I: 01: Number of Literates & Literacy Rates**

Sr No.	Selected Criteria	Persons	Males	Females
01	Total Number of Literates	560,687,797	336,533,716	224,154,081
02	Literacy Rates [In per cent]	64.8	75.3	53.7
03	Rural Number of Literates	361,870,817	223,551,641	138,319,176
04	Literacy Rates [In per cent]	58.7	70.7	46.1
05	Urban Number of Literates	198,816,980	112,982,075	85,834,905
06	Literacy Rates [In per cent]	79.9	86.3	72.9

Source: [www.censusindia.gov.in](http://www.censusindia.gov.in)<sup>1</sup>

## **2. I: 1:2: A Small Appraisal of Economic Performance of Indian Economy in 2009-2010:**

The Reserve Bank of India (RBI) had estimated that in real Gross Domestic Product (GDP) terms, Indian economy was expected to grow at 6.9 per cent in the year 2009-2010. As per the forecast of the, International Monetary Fund (IMF), Indian economy was expected to grow at 6.75 per cent the year 2009-2010, and 8 per cent in the year 2010-2011 considering its state of private consumption and investment. As per the report of the World Bank entitled "Global Economic Prospects: 2010", it was found that India was expected to grow at 7.5 and 8 per cent in the financial years 2009-2010 2010-2011 respectively ([www.GujaratIndia.com](http://www.GujaratIndia.com))<sup>2</sup>.

As per the estimates of the 'Ministry of Statistics and Programme Implementation', Indian economy was to registered a growth of 7.4 per cent in the year 2009-2010, with 8.6 per cent year-on-year growth in its fourth quarter of the year 2009-2010 that is mainly driven due to robust performance of the Manufacturing Sector on the back of Government and Consumer Spending. The GDP growth rate of India of the 7.4 per cent in the year 2009-2010 has exceeded the Government forecast of 7.2 per cent for the full year 2009-2010. According to Government data, the Manufacturing Sector witnessed a growth of 16.3 per cent during January-March 2010 compared to similar period of 2009. Further, economic activities too have showed significant growth rates in the year 2009-2010 over the corresponding period of last year viz., Mining and Quarrying (10.6 per cent), Manufacturing (10.8 Per Cent), Electricity, Gas and Water Supply (6.5 per cent), Construction (6.5 Per Cent), Trade, Hotels, Transport and Communications (9.3 Per Cent), Financing, Insurance, Real Estate and Business Services (9.7 Per Cent), Community, Social and Personal Services (5.6 per cent). The Gross National Income (GNI) has been estimated to move up 7.3 per cent in the year 2009-2010 as compared to 6.8 per cent of the year 2008-2009. The Per Capita Income (PCI) too has been estimated to grow at 5.6 per cent in the year 2009-2010. India's Industrial Output grew by 17.6 per cent in April 2010. The Manufacturing Sector which accounts for 80 per cent of the Index of Industrial Production (IIP) grew at 19.4 per cent in April 2010, as against 0.4 per cent of April 2009.

The production of Capital Goods grew by 72.8 per cent against a contraction of 5.9 per cent of April 2009 whereas the output of Consumer Durables too continued to grow at a rapid speed of 37 per cent, mirroring higher purchase of goods such as Televisions and Refrigerators.

According Weekly Statistical Supplement released by the Reserve Bank of India's (RBI). The number of Registered Foreign Institutional Investors (FIIs) was 1710 as on May 31, 2010, and the total FII Inflow-In-Equity during January to May 2010 was US\$ 4606.50 Million while it was US\$ 5931.80 Million in debt. Net Investment made by FIIs In-Equity between June 1, 2010 and June 14, 2010 was US\$ 530.05 Million while it was US\$ 875.73 Million in Debt. As on June 4, 2010, India's Foreign Exchange Reserves reached to a figure of US\$ 271.09 Billion, an increase of US\$ 9.88 Billion over the same period last year. Also as per the Department of Industrial Policy and Promotion (DIPP). India had received Foreign Direct Investment (FDI) worth US\$ 25,888 Million during April-March, 2009-2010, taking the cumulative amount of FDI inflows during August 1991 to March 2010 to figure of US\$ 1, 32,428 Million,

The Services Sector comprising Financial and Non-Financial Services attracted 21 per cent of the Total FDI Equity Inflow into India, with FDI worth US\$ 4,392 Million during April-March 2009-2010, while Construction Activities including Roadways and Highways attracted second largest amount of FDI worth US\$ 2,868 Million during the same period. Housing and Real Estate was the third highest sector that attracted FDI worth US\$ 2,844 Million followed by Telecommunications which gained US\$ 2,554 Million during the financial year 2009-2010.

According to the Ministry of Commerce and Industry, exports from India were worth US\$ 16,887 Million in April 2010, showing a figure of 36.2 per cent increase compared to its performance as on April 2009. It reached figure of US\$ 12,397 Million. India's imports during April 2010 were valued at US\$ 27,307 Million representing a growth of 43.3 per cent over April 2009. According to Revised Estimates released by the Ministry of Shipping, India's logistics sector too witnessed flow of increased activities as India's Major Ports handled 560,968 Metric Tonnes (MT) of Cargo during April-March 2009-2010 showing an increase of 5.74 per cent over previous year.

As per the releases of the Ministry of Tourism Foreign tourist arrivals in India during the month of May 2010 were 3, 45,000, an increase of 15.5 per cent over May 2009. Foreign tourist arrivals during January-May 2010 were 2.263 Million, an increase of 11.3 per cent over the corresponding period last year. Foreign Exchange Earnings [FEE] during May 2010 were US\$ 951 Million, an increase of 42.2 per cent over May 2009. FEE during January-May 2010 were US\$ 5822 Million, an increase of 38.3 per cent over the corresponding period last year. According to the figures released by the Telecom Regulatory Authority of India (TRAI), the Total Telephone Subscriber Base in India reached 638.05 Million in April 2010 showing Overall Tele-Density to 54.10 per cent. Also, the wireless subscriber base increased to 601.22 Million.

As per the, Association of Mutual Funds in India (AMFI), the Assets Under Management (AUM) of Mutual Funds were worth US\$ 170.46 Billion in May 2010 as compared to US\$ 135.58 Billion in May 2009.

As per NASSCOM's 'Strategic Review, 2010', the Business Process Outsourcing (BPO) Sector continues to be the fastest growing segment of the industry at around 6 per cent and is expected to reach figure of US\$ 12.4 Billion in the year 2009-2010. As per the data of Society of Indian Automobile Manufacturers (SIAM), the total number of vehicles produced inclusive of Passenger Cars, Commercial Vehicles, Two-Wheelers and Three-Wheelers touched the figure of 14,049,830 in the year 2009-2010 compared to the figure of 11,172,275 produced of the year 2008-2009. According to the Gem and Jewellery Export Promotion Council, the exports of Gems and Jewellery including Rough Diamonds from India increased provided the figure of US\$ 5551.24 Million (57.08 per cent) during April-May 2010. As per the Ministry of Civil Aviation, Domestic Airlines carried 211,380 passengers between January-May 2010 showing an increase of 21.95 per cent over 173,340 passengers carried in the year January-May 2009. The number of corporate Merger & Acquisitions (M&A) and Private Equity (PE) transactions has more than doubled during January to May 2010. 439 M&A and PE deals valuing over US\$ 30 Billion took place between January to May 2010 as compared to 179 deals worth US\$ 8.1 Billion in the corresponding period in 2009. The HSBC Market Business Activity Index which measures business activity among Indian services companies based on a survey of 400 firms moved up to 62.1 in April 2010 which is highest since July 2008, and compared to figure of 58.1 of March 2010.

## **2. I: 1:2: A Brief Account of Agriculture Sector of Indian Economy in 2009-2010:**

The Agriculture Sector of India is one of the strongholds of the Indian economy and accounted for 15.7 per cent of the India's GDP in the year 2008-2009, and 10.23 per cent of the total exports. It provided employment to 58.2 per cent of the work force. In brief, as per second advance estimates, the Production of Food Grains is estimated at 216.85 Million during the year 2009-2010. Mr. Pranab Mukherjee (Finance Minister, India) in the Union Budget for the year 2010-2011, made several announcements for the agriculture sector of India. To illustrate, US\$ 86.89 Million has been provided to increase the Green Revolution to the Eastern Region of India comprising Bihar, Chattisgarh, Jharkhand, Eastern up, West Bengal and Orissa. It has been decided to allocate US\$ 65.17 Million for organizing 60,000 pulses and oil-seed villages in rain-fed areas in the year 2010-2011, and also for an integrated intervention for water harvesting, watershed management and soil health in order to improve productivity of the dry land farming areas. Banks have been consistently meeting the targets set for agricultural credit flow, and the target of US\$ 81.47 Billion has been set up for the year 2010-11. In addition to the 10 mega food park projects already being set up, the Government has decided to set up five more such parks.

External commercial borrowings are available for cold storage for preservation or storage of agricultural and allied products, marine products and meat ([www.ibef.org](http://www.ibef.org))<sup>3</sup>.

## **2. I: 1:2: The Results of 'The Juxt Indian Urbanites, 2009' Study:**

The Socio-Economic Classification (SEC) indicates the affluence level of a household to which an individual belongs. SEC is defined by the education & occupation of the Chief Wage Earner (CWE) of a household. SEC is divided into 8 categories-A1, A2, B1, B2, C, D, E1, and E2 in decreasing order of affluence.

The study entitled Indian Urbanites, 'The Juxt Indian Urbanites, 2009' was undertaken by Juxt Consultants in the year 2009. Accordingly, Juxt classified urban Indians into five SEC classes viz., 'A', 'B', 'C', 'D' and 'E'. SECs are extensively used in the marketing world to identify and derive the consumer worthiness and consumption lifestyle of individuals/family units. However, the descriptions of these SEC classes and their consumption behaviour are often based more on popular perceptions rather than an in depth analysis of factual information([www.juxtconsult.com](http://www.juxtconsult.com))<sup>4</sup>.

**The researcher has made an attempt to offer summary of the results of 'The Juxt Indian Urbanites, 2009' study as follows.**

Accounting for 27 per cent of all urban families, and 25 per cent of all urban individuals, SEC 'E' constituted the single largest socio-economic class of urban India. While SEC 'D' emerged as the second largest at the family count level viz., 23 per cent, SEC 'C' was the second largest the individual count level showing figure of 23 per cent. It implied that on an average, SEC 'C' families had relatively more individuals living in them (4.77) than in SEC 'D', and SEC 'E' families the average number of members was lower than the three higher SEC groups. SEC 'A' is the smallest urban socio-economic class at 12 per cent each of all urban families and all urban individuals. In Indian context the consumers live their lives as 'Families' and not as 'Households'. There are approximately 243 Million families in India subdivided into as 77 Million urban families, and 166 Million rural families in India. The average family size varies from 1 to 6.9 depending on the family composition. Average monthly family income in India was Rs.6, 018 ('per capita' was Rs.1, 384). 70 per cent of all Indian families earned on an average to below-average incomes (Marketing White Book, 2010-2011)<sup>3</sup>.

In terms of the household and per capita incomes of these SEC classes, SEC 'A' clearly towered above the rest with an average monthly household income of Rs. 18,549. On an average, a SEC 'A' household earned 4.4 times more than a SEC 'E' household, and 1.7 times more than a SEC 'B' household. SEC 'B' households had just about 'above-average' income level who earned only marginally more than the overall average urban household income. On the other hand, SEC 'C' households have below-average household incomes and were almost as worse-off income-wise as 'C', 'D' and 'E'. Especially, when compared with incomes of SEC 'A' and 'B'.

SEC 'C' average monthly household incomes were only 1.3 times higher than SEC 'D' and 1.6 times higher than SEC 'E'. Interestingly, while the average monthly household income of SEC 'A' was over Rs. 18,500, only 17 per cent of SEC 'A' households had monthly incomes of Rs. 25,000 or above. This indicated a very high level of inequality of incomes within SEC 'A'(Marketing Whitebook,2010-2011)<sup>3</sup>.

From the following table, one can get factual information on Average Monthly Household Incomes of Urban SECs.

**Table Number 2. I: 02: Average Monthly Household Incomes of Urban SECs**

Economic Status	SEC-A	SEC-B	SEC-C	SEC-D	SEC-E	All Urban Households
Average Monthly Household Income (In Rupees)	18,549	10,911	6,776	5,112	4,219	9,113
Average Per Capita Monthly Household Income	4,678	2,679	1,636	1,235	1,018	2,251
Average Per Capita MHI As Ratio of Urban Average	2.1	1.2	0.7	0.6	0.5	1.0
Average Earning Members In the Household	1.2	1.2	1.2	1.2	1.2	1.2

Source: Juxt Indian Urbanites Study, 2009<sup>4</sup>

If an income increases by 20 to 30 per cent, more of SEC 'A', 'B' and 'C' will improve 'quality' of consumption. SEC 'D' and 'E' will improve quantity of consumption. SEC 'A' individuals tend to spend their spare time relatively more 'together as a family', SEC 'E' do so the least. SEC 'A' and 'B' relate to role of TV in life more in terms of 'entertainment' and 'source of information'. SEC 'C', 'D' and 'E' relate it with 'entertainment' and 'pass spare time'. SEC 'A', 'B' and 'C' relate benefits of Internet more with 'learning' and 'staying updated', SEC 'D' and 'E' relate it with 'entertainment' more(ibid).

The following table offers data on type of families & its composition as follows.

**Table Number 2. I: 03: Type of Families & Its Composition**

Type of Family	Composition of Families	All Indian Families [In Per Cent]	Number of Families [In Millions]
Free Birds	Single independents	01	2.9
Nest Builders	Young married couples without any children	6	15.6
Baby Sitters	Married couples with the eldest child below 12 years	22	52.4
Maturing Mentors	Married couple with the youngest child above 12 years	46	110.8
Vintage Wines	Middle age or elderly married couples living alone	3	6.8
Dynasties	3-generation joint family	21	50.7
Others	Single parent, divorcee, widow, etc.	01	4.6
		100	243.8

Source: Ibid



While 'money', 'family', and 'education' emerged as the top 3 priorities across SEC classes, the relative importance assigned to each of these varied significantly across SECs. To illustrate, though money remained as the chief priority across SECs, it was accorded much higher importance relatively by individuals belonging to SEC 'C' and 'E'. 'Family' is considered far more important by the higher SECs ('A', 'B' and 'C') while education supersedes family among the lower SECs 'D' and 'E'. These priorities were in line with the already higher education levels among SEC 'A', 'B' and 'C' and much lower education levels among SEC 'D' and 'E' (ibid).

The following table provides information on important aspects of life Vis-a- Vis different SECs of India.

**Table Number 2. I: 04: Important Aspects of life Vis-à-vis Different Socio-Economic Classes**

SEC A		SEC B		SEC C		SEC D		SEC E	
Aspects of Life	Top Most Priority (In per cent)	Aspects of Life	Top Most Priority (In per cent)	Aspects of Life	Top Most Priority (In per cent)	Aspects of Life	Top Most Priority (In per cent)	Aspects of Life	Top Most Priority (In per cent)
Money	27	Money	33	Money	41	Money	22	Money	35
Family	22	Family	28	Family	23	Family	21	Education	20
Education	12	Education	09	Education	08	Education	21	Family	12
Children	07	Job Satisfaction	06	Spiritual Experience	07	Job Stability	10	Health	11
Health	06	Children	04	Parents	07	Family	10	Status	07

Source: Ibid

The spending habits were found as different for people belonging to different sections of society. An analysis of consumer spending in the past 10 years revealed that the average consumer has been spending on increasing number of different goods. There are a number of different goods. There are a number of factors affecting the consumer spending pattern in India. It mainly included growing income levels resultant into more disposable incomes; changing attitudes towards consumption, changes in prices; introduction of new products; availability of credit such as loans, mortgages and credit cards; rising aspiration levels, increased literacy; growing brand consciousness, and rapid urbanization (ibid).

The following table offers data on how a family rupee is being spent.

**Table Number 2.05: Spending Pattern of A Rupee of A Family**

Household Consumption on Selected Criteria	Distribution of Spends	All Families** (In per cent)
	Families Who Spends* (In per cent)	
Basic food and clothing	56	56
Rent and utilities	13	06
Transport and conveyance	12	11
Loan and other regular liabilities	11	03
Leisure and entertainment	11	08
Saving and investment	14	10
Other unclassified spends	13	06

Note: Not all families spend money on all heads Taken on valid households' base, so it does not add up to 100 per cent. \*\* Taken on all households base, so adds up to 100 per cent.

Source: Ibid

When it comes to the ownership of most of the regular, modern day 'optional' lifestyle Goods/Durables/Financial Investments such as TV, Cable & Satellite (C&S) Connection, Mobile Phone, Two-Wheelers, Fridge, Washing Machine, Bank Account, Life Insurance, and Debit Card, SEC 'B' is not very far behind SEC 'A'.

Notwithstanding, the SEC group that urban Indians belong to, their consumption was probably found as more driven by their 'felt' lifestyle needs and consumption orientation than by their ability to spend. While the ability to spend may determine the 'value' at which families may buy that particular Product/Assets category, it is their felt lifestyle needs and inclinations which determined what Products/Assets categories they might buy in the first place. For most Products/Assets categories, SEC 'C' was found as closer to the levels of ownership as shown by SEC 'D' than by SEC 'E'. This again put this class almost in the category of 'have-nots'. SEC 'A' and 'B' spent only a marginally lower proportion of their incomes on 'basic food and clothing' as compared to the other SECs (ibid).

From the following table, one can get factual information on asset ownerships by family types

**Table Number 2.06: Asset Ownerships As Per Type of Family**

Household Asset	Per cent of All Families Ownership (All India)(In per cent)	Family Type with Highest Ownership (In per cent)	Ownership (In per cent)
Home	75	Dynasties	81
Color TV	57	Nest Builders	60
21" Plus Color TV (Owners only)	11	Vintage Wines	15
Mobile Phone	48	Dynasties	55
C&S Connection	50	Nest Builders	60
2-wheeler	29	Dynasties	36
Fridge	21	Nest Builders	23
Washing Machine	08	Vintage Wines	10
Fully Automatic WM (Owners only)	02	Nest Builders	36
Computer/Laptop	03	Nest Builders	05
Car	02	Dynasties / Vintage Wines	03

Source: Ibid

While the Chief Wage Earners (CWEs) of SEC 'A' and 'B' households were found as significantly more educated than CWEs of SEC 'C', 'D' and 'E'. But, it was not true when it comes to the 'other family members' of these households. At the CWE level, SEC 'A' households were found as much ahead of the other SECs on 'graduation or plus' education level, followed by a distant SEC 'B' and almost negligible lower SECs. SEC 'B' and 'C' catch up with them significantly at the 'HSC/SSC' level of education of the CWE.

Social Status for SEC 'A', 'B' and 'C' mostly get defined the most by the 'people you move around with'. But, for SEC 'D' it was a mix of the 'people you move around with' and 'education level' and for SEC 'E' it was the 'money you have' and 'education level'. At the same time, 'family prestige' and 'professional achievements' emerged as important status symbols for SEC 'A' and 'B'. On the other hand, 'residence neighborhood' was felt as relatively more important by SEC 'C' individuals (14 per cent). By and large, the educational level of family members was considered as more important in the lower SECs (ibid).

## **2. I: 2: A BRIEF PROFILE OF STATE OF GUJARAT:**

### **2. I: 2:1: A Brief Account of Geographic Profile of the Gujarat State:**

The State of Gujarat has been situated on the west coast of India, bounded by the Arabian Sea in the West, Rajasthan in the North and North-East, and Madhya Pradesh in the East and Maharashtra in the South and South East. It also shares an international border with Pakistan at the north western fringe. It has the longest coastline of about 1600 Square Kilometers representing a third of India's water which is also the longest among all States of India has been strategically positioned to serve the vast north and central Indian hinterland (Socio-Economic Review, 2009-2010)<sup>5</sup>.

### **2. I: 2:2: A Brief Review of Demographic Profile of the Gujarat State:**

According to Population Census, 2001, the population of Gujarat was reported at 5.07 Crores. The decadal growth rate has increased from 21.19 per cent (1981-1991) to 22.66 per cent (1991-2001). It accounts for 6.19 per cent of the area and 4.93 per cent of population of India. The population of Scheduled Castes and Scheduled Tribes in the Gujarat State was found of 35.93 lakh (7.09 per cent), and 74.81 lakh (14.76 per cent) respectively. Its literacy rate excluding children in the age group 0-6 years had increased from 61.29 per cent in the year 1991 to 69.14 per cent in the year 2001. The density of Population of the State of Gujarat had increased to 258 persons per Square Kilometer. Nearly, 37.36 per cent Population of the Gujarat State has been residing in urban areas and the sex ratio was worked out to 920 in the year 2001. According to Population Census 2001, classification of Population by economic activity revealed that out of the total population of 506.71 lakh, 170.25 lakh were 'Main Workers', 42.31 lakh were 'Marginal Workers', and 294.15 lakh were 'Non-Workers'. Thus, main workers constituted about 33.60 per cent of the total Population and marginal workers constituted about 8.35 per cent of the total Population of the State of Gujarat (ibid).

## **2. I: 2:3: A Brief Sketch of the Agriculture and Allied Sectors of the Gujarat State:**

The production of total Food Grains during the year 2008-2009 was estimated at 63.45 lakh tonnes as against 82.06 lakh tonnes in the previous year which indicated a decrease of 22.68 per cent over the previous year. The production of Cotton during the year 2008-2009 was estimated at 70.14 lakh bales (170 kilograms. each) as against 82.76 lakh bales in the year 2007-2008 which was lower by 15.25 per cent over the previous year. The production of Total Oil Seeds during the year 2008-2009 was estimated at 39.32 lakh tonnes, which was 16.32 per cent lower than that of the year 2007-2008 (46.99 lakh tonnes). The productivity of Fruit Crops too was estimated at 17.67 MT/hect. The major vegetables grown in Gujarat are Onion, Potato, Brinjal, Tomato, Okra and Cucurbits. The productivity of vegetables is estimated at 17.24 Metric Tonnes/ hectares. The Gujarat State mainly produces spices viz. Cumin, Fennel, and Garlic.

During the year 2008-2009, the production of Fruits, Vegetables, Spices and Flowers was reported to 59.97 lakh tonnes, 68.07 lakh tonnes, 9.14 lakh tonnes and 0.85 lakh tonnes respectively, as against the production of Fruits, Vegetables, Spices and Flowers recorded at 60.20 lakh tonnes, 74.03 lakh tonnes, 9.67 lakh tonnes and 0.84 lakh tonnes respectively during the year 2007-2008. During the year 2009-2010, the production of Fruits, Vegetables, Spices and Flowers is estimated at 65.00 lakh tonnes, 69.00 lakh tonnes, 6.50 lakh tonnes and 0.90 lakh tonnes respectively(ibid).

As per the provisional results of Livestock Census 2007, Total Livestock Population including Dogs of Gujarat State was 237.94 lakh. As per the estimates of the Integrated Sample Survey (ISS) of major livestock products, the production of Milk had increased to 83.87 lakh tonnes in the year 2008-2009 from 79.12 lakh tonnes of the year 2007-2008(ibid).

It has a longest coastal-line of 1600 Square Kilometers which is broken by several bays, inlets, estuaries and marshy lands. During the year 2008-2009, total fish production in the Gujarat State had estimated at 7.66 lakh tonnes worth Rs.3, 063.23 Crores. The marine fish production constituted about 89.16 per cent of total fish production of the Gujarat State. As per Livestock Census 2007, there were 34,419 fishing boats out of which 22,305 were mechanized boats, and 12,114 were non-mechanized boats. During the year 2008-2009, through foreign export of 1, 12,800 tonnes of fish and fish products, the Gujarat State had obtained an exchequer of Rs.1, 064.50 Crores. During the year 2009-2010, the total fish production has been estimated at 2.23 lakh tonnes (Marine fish production is 1.86 lakh tonnes and the remaining in land worth of Rs.889.97 Crores (ibid).

The Forests of Gujarat extend over an area of 19131.82 Square Kilometers which constitute 9.75 per cent of total geographical area of the Gujarat State with per capita 0.03 hectare forest area against the national average of 0.07 hectares. The ultimate irrigation potential through surface water as well as ground water resources is estimated at 64.88 lakh hectare.

The total irrigation potential created through surface water and ground water up to June 2009 was 30.99 lakh hectares. The maximum utilization of the irrigation potential created up to June 2009 works out to 23.79 lakh hectares which is 76.77 per cent of irrigation potential created (ibid).

## **2. I: 2:4: A Short Outline of the Infrastructure and Allied Sectors of the Gujarat State:**

Infrastructure is the backbone of progress and the Gujarat State has a fairly well developed infrastructural facilities. The generation of Electricity in the Gujarat State, including the generation of electricity by the Private Sector and Central Share was 68,962 MUs in the year 2008-2009. The per capita consumption of Electricity in the year 2008-09 was 1446 units as per CEA's revised formula.

The total length of railway lines in the State as on 31st March-2007 was 5,309 route Kilometers comprising of 3,100 Square Kilometers of Broad Gauge (BG), 1,422 Kilometers of Meter Gauge (MG), and 787 Kilometers of Narrow Gauge (NG) lines.

The total length of 'Roads' except Non-plan, Community, Urban and Project roads in the Gujarat State had increased to 74,038 Kilometers at the end of 2005-2006 from 73,724 Kilometers at the end of 2004-2005.

Out of the total road length of 74,038 Kilometers at the end of the year 2005-2006, the length of National Highways, State Highways, Major District Roads, Other District Roads and Village Roads was 2867 Kilometers 18,702 Kilometers; 20,707 Kilometers; 10503 Kilometers, and 21,259 Kilometers respectively (Socio-Economic Review, 2009-2010)<sup>5</sup>.

The number of 'Registered Motor Vehicles' had increased from 109.99 lakh at the end of 2008-2009 to 114.65 lakh at the end of October-2009 which revealed a growth of 4.24 per cent. About 73.48 per cent of the total registered vehicles were 'Motor-Cycle Class' (two wheelers) vehicles. During the year 2009-2010 (April-October-2009), the number of registered 'Motor Cycles/Scooters/Mopeds' had increased to 84.24 lakh which showed a rise of 4.16 per cent. During the year 2009-2010, the number of 'Auto Rickshaws, Motor Cars including Jeeps, Goods Vehicles including Tempos, Trailers and Tractors' had registered an increase of 20,547; 62,786; 20,801; 8,062, and 12,459 respectively (April-October-2009).

The State has 41 'Minor & Intermediate Ports', geographically dispersed across South Gujarat (14 Ports), Saurashtra (23 ports) and Kachchh Region (4 Ports). Besides, there is a major Port of Kandla, under the administrative control of the Central Government of India.

The total Cargo handled by the Kandla Port in quantitative terms had increased from 648.93 lakh tonnes in the year 2007-2008 to 722.25 lakh tonnes in the year 2008-2009 that showed an increase of 11.30 per cent over the previous year including transshipment. During the year 2008-2009, Imports & Exports from Kandla Port had increased by 13.86 per cent and 9.18 per cent respectively as compared to the year 2007-2008. During the year 2009-2010 (April-November-2009) the total Cargo handled by major Port of Kandla was 532.52 lakh tonnes including transshipment.

The Intermediate and Minor Ports of Gujarat handled a total Cargo of 1,528.14 lakh tonnes during the year 2008-2009 as against 1,475.98 lakh tonnes handled during the preceding year that witnessed an increase of about 3.53 per cent (ibid).

There were 8972 'Post Offices/Branches' in the Gujarat State. Besides, there were 3,226 'Telephone Exchanges' as on 31st October, 2009. In Gujarat Circle, 'Wireless Segment' that is GSM[Global System for Mobile Communication], CDMA [Code Division Multiple Access ]and FWP [Field Work Proposal] subscriber base reached to a figure of 2.93 Crores, while in case of 'Wire Line Segment' subscriber base reached a figure of 0.21 Crores as on 31st December 2009(ibid).

In the state of Gujarat, the total number of all 'Scheduled Commercial Banks' including private sector, RRBs [Regional Rural Banks], DCCBs[District Central Cooperative Banks], GSCARDB [Gujarat State Cooperative Agriculture and Rural Development Bank] branches had increased from 5,569 branches as on June 30, 2008 to 5,792 branches as on June 30, 2009 comprising 2,685 Rural; 1,422 Semi-Urban; 928 Urban, and 757 Metro Branches respectively.

The aggregating deposits of these banks had increased from Rs. 1, 625, 99 Crores as on June 30, 2008 to Rs. 1, 96,984 Crores as on June 30, 2009 which showed the growth of 21.15 per cent. The advances too had also increased from Rs. 1, 16,176 Crores to Rs. 1, 32,943 Crores during the same period, and registered the growth of 14.43 per cent. The Credit Deposit Ratio of the Gujarat State stood at 67.49 per cent at the end of June 30, 2009(ibid).

The number of 'Educational Institutions' imparting primary, secondary & higher secondary and higher education were 42,035; 9,015, and 903 respectively in the year 2008-2009. The number of students in Primary, Secondary & Higher Secondary and higher education were recorded to 85.72 lakh, 29.90 lakh, and 5.23 lakh respectively in the year 2008-2009. The dropout rate for the standard I to V and I to VII was recorded as 2.29 and 8.87 respectively in the year 2008-2009. During academic year 2009-2010, the intake capacity for degree Engineering, Architecture, Pharmacy, MBA, and MCA was 35,016; 436; 5,678, 7,030, and 3,580 respectively (ibid).

The 'Health Infrastructure' too has achieved a noteworthy improvement in the health status of the people of the State. The 'Birth Rate' has declined from 40.0 (1971) to 22.6 (2008). The 'Death Rate' had decreased from 16.4 (1971) to 6.9 (2008), and the 'Infant Mortality Rate (IMR)' has also come down from 144 (1971) to 50 (2008). The number of 'Community Health Centres, Primary Health Centres and Sub-Centres' functioning in the Gujarat State were 282; 1,084, and 7,274 respectively at the end of December-2009(ibid).

As per 1991 Census, the Government of India has launched a programme viz. AUWSP on sharing basis for providing drinking water to urban area up to population 20,000. The Government of India had sanctioned 70 projects with an estimated cost of Rs. 9316.69 lakh. Out of that, 68 projects have been completed and 02 projects of the Gariadhar and Talaja of Bhavnagar districts are under progress (ibid).

Besides, more than 1.44 lakhs Self Help Groups (SHGs) have been formed as an instrument of poverty alleviation. However, the past experience indicates that only a few SHGs have survived to undertake suitable economic activity for income augmentation. The State Government has also initiated a scheme called as "Sakhi Mandal" with an objective of to revive and provide credit link to 25,000 SHGs, and 1.40 lakh Sakhi Mandal (Women SHGs) being implemented through ICDS (Integrated Child Development Scheme) and NGOs with the support of NABARD (National Bank for Agriculture and Rural Development) and banks. During the year 2009-10, (April October-2009) an expenditure of Rs.23.76 Crores has been incurred and 41,229 Sakhi Mandals have been formed.

The National Rural Employment Guarantee Programme (NREGP) has been implemented from 2<sup>nd</sup> February, 2006 in the Dangs, Dahod, Narmada, Panchmahal, Banaskantha and Sabarkantha districts of the Gujarat State. From 1<sup>st</sup> April, 2008, scheme has been implemented in all districts to offer guarantee of 100 days of wage employment in a financial year, and any adult member ready to undertake manual labour can be eligible to get work.

For this purpose, the household should be registered in the Gram Panchayats. About 3,18,1801 job cards have been issued, and 295.28 lakh man days of employment have been generated and Rs. 346.40 Crores of expenditure under this scheme has been incurred up to October-2009(ibid).

In all, 26,311 houses were constructed against the target of 27,666 houses which included 3,335 houses for Scheduled Caste and 5000 houses for Scheduled Tribe beneficiaries during the year 2008-2009. During the year 2009-2010, at the end of September-2009, 2,963 houses were constructed against the target of 26,437 houses, which included 484 houses for SC and 189 houses for ST beneficiaries. Right from inception of the scheme of SPAY, 3, 16,232 houses were constructed till September-2009. Under centrally sponsored programme "Indira Awas Yojna (IAY)", rural poor are being assisted for construction of new houses and for up gradation of existing houses. Under this scheme, during the year 2008-2009, an expenditure of Rs. 334.53 Crores was made for the construction of 95,989 new houses and for up gradation of 10,424 houses, while in the year 2009-2010 (April-October-2009), an expenditure of Rs.291.30 Crores has been incurred, and the construction of 59,389 new houses and up gradation of 3664 existing houses have been completed (ibid).

## **2. I: 2:5: A Brief Economic Review of the Gujarat State:**

It is one of the most prosperous States of India owing to its agricultural productivity and industrial development. As per the quick estimates, its Gross State Domestic Product (GSDP) at factor cost at current prices in the year 2008-2009 was estimated Rs. 3, 37,217 Crores as against Rs. 3, 03,734 Crores of the year 2007-2008, which showed a growth of 11.02 per cent in the year 2008-2009. Its share of GDP at current prices at all India level was 6.45 per cent in the year 2008-2009.

The PCI at current prices was estimated at Rs. 49251 in the year 2008-2009 which was higher than the national average of Rs. 40,141, as against Rs. 45,433 of the year 2007-2008 which showed an increase of 8.40 per cent over the previous year. It provides about 19.8 per cent of India's total industrial output, and is one of the most industrialized State of India. The per capita GDP of Gujarat State is 2.5 times the India's average GDP. It leads the nation in various industrial sectors such as Textiles; Engineering; Chemicals; Petrochemicals; Drugs and Pharmaceuticals; Dairy, Cement and Ceramics; Gems and Jewellery. With a figure of 8.52 per cent of the industrial growth, the State of is way ahead compared to many other Indian States, and also other Asian giants like Singapore; Malaysia; and Korea (Socio-Economic Review, 2009-2010)<sup>5</sup>.

It has continued to witness impressive industrial development with the receipt of acknowledgments of 9,216 Industrial Entrepreneurs Memorandum (IEM) filed by entrepreneurs till September 2009 with an estimated investment of Rs. 5,76,196 Crores. Board of Approval (BOA) in Ministry of Commerce and Industries (MOCI), New Delhi has accorded approvals to 60 SEZs (Special Economic Zones) till the end of September-2009. The total proposed investment by SEZs developers is around Rs. 2, 67,374 Crores in the Gujarat State. "Vibrant Gujarat Global Investors' Summit - 2009" was organized on 12-13 January-2009 at Science City, Ahmedabad to attract the investors to establish projects in the State. In all, 8,660 MOUs were signed and or announced in 28 different major sectors with total proposed investment of Rs. 12.40 lakh Crores which shall generate employment opportunities for 26.83 lakh persons in the Gujarat State. During the year 2008-2009, 3.31 lakh persons were registered in the employment exchanges, and 1.63 lakh have been already placed in employment. The total employment in public sector and private sector had increased from 18.39 lakh at the end of March, 2008 to 19.04 lakh at the end of March, 2009 (ibid).

As per quick estimates at current prices, GSDP at factor cost in the year 2008-2009 as n estimated at Rs.3, 37, 217 Crores as against Rs.3, 03,734 Crores of the year 2007-2008 which showed a growth of 11.02 per cent during the year. The share of primary, secondary and tertiary sectors was reported at 17.76 per cent, 41.05 per cent and 41.19 per cent respectively to the total GSDP of Rs.337217 Crores at current prices in the year 2008-2009.



It's Net State Domestic Product (NSDP) at factor cost at current prices in the year 2008-2009 was estimated at Rs.2,81,266 Crores as against Rs.2,55,780 Crores of the year 2007-2008 which showed a growth of 9.96 per cent during the year. The PCI that is Per Capita NSDP at factor cost at current prices was estimated at Rs.49, 251 in the year 2008-2009 as against Rs.45, 433 of the year 2007-2008 which showed a growth of 8.40 per cent during the year (ibid).

The total employment in public sector and private sector had increased from 18.39 lakh at the end of March-2008 to 19.04 lakh at the end of March-2009. Employment in the public sector establishments covered under EMI scheme in the State of Gujarat had increased from 7.86 lakh at the end of March-2008 to 7.98 lakh at the end of March-2009. Employment in the private sector too had increased from 10.53 lakh at the end of March-2008 to 11.06 lakh at the end of March-2009. Among the public sector institutions, the largest employment was provided by Local Bodies establishments (3.11 lakh) followed by Quasi Government establishments (2.29 lakh), State Government Establishments/ Offices (1.72 lakh) and Central Government Offices (0.86 lakh) at the end of March-2009 (ibid).

As per the final accounts, the Total Receipts during the year 2008-2009 were Rs.49, 183.52 Crores which was higher by Rs.45, 74.10 Crores than the previous year 2007-2008. Revenue receipt was higher by Rs.2, 985.86 Crores and Capital Receipt was higher by Rs.1, 588.24 Crores than the previous year.

The expenditure during the year 2008-2009 was Rs.51, 919.88 Crores, which was higher by Rs. 9,216.30 Crores than the year 2007-2008. The Revenue Expenditure was higher by Rs. 5201.95 Crores while Capital Expenditure was higher by Rs.4014.35 Crores compared to the previous year, i.e. 2007-2008 (ibid).

## **PART-II: RELEVANT REVIEW OF LITERATURE:**

### **2. II: 0: RELEVANT REVIEW OF LITERATURE:**

The major aim of this part was to offer a comprehensive review of Information Technology (IT) Industry of India, worldwide, and also for the State of Gujarat as follows.

2. II: 1: An Epigrammatic Analysis of Information Technology (IT) Industry of India & Worldwide

2. II: 2: A Crisp Draft Information Technology (IT) Sector of the State of Gujarat

### **2. II: 1: An Epigrammatic Analysis of Information Technology (IT) Industry of India & Worldwide:**

It has mainly included following.

#### **2. II: 1:1: An Introduction:**

Information Technology (IT) is the study, design, development, implementation, support or management of computer based information systems, particularly software applications and computer hardware.

It deals with the use of electronic computers and computer software to convert, store, protect process, transmit, and securely retrieve information. It encompasses many aspects of computing and technology.

IT helps to produce, manipulate, store, communicate, and or disseminate information and is concerned with the dissemination, processing, and storage of information ([www.rediff.com](http://www.rediff.com)). It provides basically the root services that is Networking; Software Installation; System Integration and Operating System (OS) Development. Information Technology Enabled services (ITeS) ITES-Business Process Outsourcing (BPO) segment constitutes the supporting services such as Customer Care; Finance, and Human Resource Development (HRD), Engineering Design; Simulation; Animation & Research & Development activities. One of the opportunities that the growth of Internet has provided is the ability for Internet users to browse commercial products shown on Internet, and also to place an online order using a Personal Computer, Laptop or Mobile Phone. Online communication like e-mail and Chat are the two most common reasons for accessing of Internet followed by Information Search. With the increase in the use of Internet, e-Commerce applications such as online bill payment, online ticket booking have gained more popularity (Vipan Kumar, 2003)<sup>6</sup>.

## **2. II: 1:2: Growth of Internet Users in Asia & Worldwide:**

According to the Internet World Stats the World Population considering Internet usage of Internet users amongst the 35 countries and regions in Asia in the second quarter of the 2009 was 6,767,805,208 out of which the figures for the Asia was 3,808,070,503 [56.30 per cent], and for the rest of the world, it was 2,959,734,705 [43.70 Per cent] respectively.

The total number of Internet Users of the World were 1,733,993,741 [25.60 Per cent] out of which the figures for the Asia was 995,736,511 [19.40 Per cent], and for the rest of the world, it was 995,736,511 [33.40 Per cent] respectively. Average Growth of Internet Users during the year 2000 to 2009 of the whole World was 380.30 Per cent, and for the Asia, the growth was 545.90 percentages Per cent whereas the figure for the rest of the World was 303.70 percentages respectively. The total number of Internet Users for Asia was 42.60 Per cent and for the rest of the world this figure was 57.40 Per cent respectively.

The figures for the total number of Internet users amongst the top 10 countries of Asia in the quarter 2 of the year 2009 revealed that China Topped the list with the figure of 338 Million Internet users whereas Taiwan was at the bottom of the list with 15.1 Million Internet users. Japan was ranked at the second place with figure of 94 Million Internet users whereas India was placed at the third place with the figure of 81 Million Internet users. The figures for the remaining countries were viz., South Korea at the fourth place [37.5 Million Internet users]; Indonesia at the fifth place [25 Million Internet users], and Philippines at the sixth place with 24 Million Internet users. The countries that were placed at the seventh, eight and the ninth rank were viz., Vietnam [21.5 Million Internet users], Pakistan [18.5 Million Internet users], and Malaysia [16.9 Million Internet users] respectively [[www.Internetworldstats.com](http://www.Internetworldstats.com)].

The penetration of Internet in Asia as on June 2009 was 18.50 Per cent compared to the world average of 24.70 Per cent, and the figure for the rest of the world was 32.60 Per cent respectively. The figures of the penetration of Internet in Asia in the month of the September 2009 were 42.20 Per cent compared to the rest of the world of 57.80 Percentages respectively ([www.Internetworldstats.com](http://www.Internetworldstats.com))<sup>5</sup>.

According to Internet World Stats, with more than 3.6 Billion people, Asia has approximately 54 per cent of the world's population. But, only about 10 per cent of them are online. Internet users outside USA accounted for 80 per cent of the world's online population. USA lead with an online population 153.4 Million followed by China with figure of 86.8 Million Internet users, and figure for Japan was 53.6 Million, Germany 32 Million, and UK 30 Million with India was ranked at the eight places. The results of the AC Nielsen Online Consumer Opinion Survey revealed that approximately 10 per cent of the world's population which showed figure of more than 627 Million people shopped online at least once. Europe and North America showed highest number of online shoppers, with Germany, Austria, and UK topped the list with the figure of 95 per cent online shoppers. In Asia Pacific region, South Korea and Taiwan also showed high figure of online shoppers(*ibid*).

## **2. II: 1:3: An Overview of Information Technology (IT) Industry of India:**

The IT Sector of India continues to be one of the sunshine sectors of the Indian economy showing rapid growth and promise. It is one of the fastest growing segments of Indian industry with its major achievements that mainly includes viz., development and tremendous success of the software industry, large-scale computerizations and Internet usage; IT-based automation in various industries, and development of super-computer technology. It has ushered India into an era where various services can now be delivered remotely.

Time and distance barriers have been dismantled as software companies provide Customer Interaction Services; Help Desks; Medical Transcription; Translation; Localization Services; Data Digitization; Legal Databases; Data Processing; Back Office Operations; Digital Content Development; Remote Network Management, and Specialized Knowledge Services to both domestic and foreign customers ([www.planningcommission.nic.in](http://www.planningcommission.nic.in))<sup>6</sup>.

The Planning Commission's in the Eleventh Five Year Plan heavily concentrated on Information and Communication Technology(ICTs) services to realize faster and rapid inclusive growth by aiming at increases in viz., (a) the Tele-Density in comparison with other countries; (b) Rural Tele-Density compared with urban through Private Sector as well as Mobile Telephone Expansions; (c) Internet Connectivity for Text, Data and Image Communications, and (d) larger and speedy connectivity through Wireless Technology, and on Fiber Optic Cables ([www.blonnet.com](http://www.blonnet.com))<sup>7</sup>.

The Government of India had decided to set up the Ministry of Information Technology in October 1999 with a target of 100 Million Internet connections, and 01 Million Internet-enabled IT Kiosks and Cyber Cafes across India to facilitate faster implementation of citizen-based e-Governance applications, and also for providing an easy access of information in the year 2008. It had planned to achieve a target of US \$50 Billion in software exports in the year 2008 ([www.cosmoc.org](http://www.cosmoc.org))<sup>8</sup>.

The development of the Indian Software Industry had a slow and cautious start in the mid-1980s that picked up in the 1990s, and recorded a growth of \$200 Billion in the year 2008-2009. ([www.iimcal.ac.in](http://www.iimcal.ac.in))<sup>9</sup>. According to Gartner, though worldwide IT budgets were expected to increase by 3.3 per cent in the year 2008, slightly higher than the year 2007, the Indian firms had reported stronger-than-average IT budget increase of around 13 per cent. India's software and services exports were expected to reach figure of US\$ 40.8 Billion whereas the domestic market was expected to touch mark of US\$ 23.2 Billion Dollars in the financial year 2008. India's ICT market is estimated to grow by 20.3 per cent annually to reach figure of US\$ 24.3 Billion by the year 2011 ([www.oppapers.com](http://www.oppapers.com))<sup>10</sup>.

During the years from 1960s to 2000, IT Industry sold \$40 Trillion of Hardware, Software as well as Services, and aims achieve sales figure of more than \$15 Trillion by the year 2015. The total number of jobs in the emerging countries was expected to equal to those in the developed countries ([www.IDC.com](http://www.IDC.com))<sup>11</sup>.

By the year 2010, IT/ITES sector is set to grow to \$ 60 Billion, and it shall employ about 2.5 Million persons.

The India's domestic IT and ITeS market is expected to cross figure of Rs. 2, 00,000 Crores by the year 2012 compared to figure of Rs. 90,014 Crores of the year 2007. IT market grew at 22.4 per cent in the year 2007. It had planned to achieve a target of US \$50 Billion in Software exports in the year 2008 ([www.cosmoc.org](http://www.cosmoc.org))<sup>12</sup>.

## **2. II: 1:4: Growth of Internet Users in India:**

The IT Sector of India is one of the fastest-growing sectors in terms of number of Internet users. The Government of India has initiated efforts to reduce barriers for the use of Internet, and a monthly broadband subscription now cost as little as Rs.199/- ([www.dailyreckoning.com](http://www.dailyreckoning.com))<sup>13</sup>. The penetration of Broadband Internet connections in India is still 0.2 per cent as compared to 19.3 per cent of USA. Consumer e-Commerce Market segment in India was estimated to be Rs 7,080 Crores (US \$ 1,770 Million ) which is still small as compared to the average growth rate that was projected as 30 per cent for the year 2008-2009 ([www.hellogiri.com](http://www.hellogiri.com))<sup>14</sup>. India's Internet population had grown at the rate of 700 per cent since the year 2000.

India's Internet population had grown at the rate of 700 per cent since the year 2000. There were 60,000,000 Internet users in India which showed 5.2 per cent penetration of Internet as on March 2008.

There was 13.54 Million Internet subscribers at the end of March 2009 compared to figure of 12.85 Million at the end of December 2008 which showed a growth of 5.30 per cent. The total Population of India was 1,156,897,766 as on September, 2009. The number of Internet users was 5,000,000 in the year 2000. Although, the data on the total Internet users considering usage of Internet India provided figure of 81,000,000 showed the penetration of 7 Per cent population from its total population as on September, 2009 ([www.Internetworldstats.com/asia](http://www.Internetworldstats.com/asia))<sup>5</sup>.

According to I-Cube 2008, a survey that was conducted jointly by IMRB (Indian Market Research Bureau), and International and Internet and Mobile Association of India (IAMAI), India had 45.3 Million active Internet users, and 62.5 Million claimed Internet users in September 2008.

India has witnessed continuous growth in Internet adoption in certain sections of society -predominant patterns exist mostly in urban areas. These Internet users have started utilizing this technology as an interactive medium. Such Internet users utilize Internet not merely for information search or communication but also for leisure activities. Urban Internet users continued to dominate use of Internet with a figure of 42 Million out of the 45.3 Million active Internet users. The number of claimed Internet users in urban India in September 2008 was 57 Million compared with figure of 48 Million as on September 2007 which showed a growth rate of 10 per cent ([www.alootechie.com](http://www.alootechie.com))<sup>15</sup>. There were 3.3 Million active Internet users in rural India as on March 2008. With the figure of 250 Million urban populations in India, 82 per cent of Internet users were amongst literate, and only 31 per cent were English-speaking. However, out of 77 Million (38 per cent of 205 Million), 84 per cent were found as PC-literate. India had an online Internet community of 40 Million in the year 2000 ([www.zonkerala.com](http://www.zonkerala.com))<sup>16</sup>.

In one of the study jointly conducted by the IAMAI and IMRB International based on 65,000 individuals from 16,500 households who were surveyed from amongst 26 different cities across the India revealed that average time spent on Internet, in terms of minutes per week, showed an increase with the increasing age of an Internet user. It was also found that the older population spent more time on Internet as against the younger Internet users who are generally considered as Internet-savvy. The school going children spent an on average of 322.3 minutes a week on Internet whereas the College going students spent an on average of 433.2 minutes per week on Internet, and the older men spent an on average of 580.5 minutes a week of use of an Internet. Working women spent 535.3 minutes per week while non-working women spent an on average of 334.5 minutes per week on Internet ([www.iamai.co.in](http://www.iamai.co.in))<sup>17</sup>.

Different online applications like Entertainment Gaming; Movies and Music as well as User-Generated Content on Internet have made Internet a virtual world. Over Internet, Internet users are interacting, learning and building relationships. The key drivers for online shopping in India are viz., easier access of information and communication; rising penetration of Personal Computers, and the proliferation of cybercafés in India.

Though, rural part of India however has just started to recognize the importance of IT. Various technological developments are in the offing. It is fact that ICTS are expected to play a vital role in enabling improved adoption of the Internet across different geographies.

The emerging technologies include WiMAX, 3G and Wipro which promise to provide last mile connectivity and new access points as PDAs and kiosks [www.Internetworld stats.com]<sup>5</sup>.

## **2. II: 2: A Crisp Draft on Information Technology (IT) Sector of the State of Gujarat**

### **2. II: 2:0: An Introduction:**

The State of Gujarat is the land of enterprise; of spirit of co-operation; of pragmatism, and practical wisdom, and it is one of the most prosperous States of India. The major objectives of the Gujarat State include viz., to inculcate scientific temper among masses and particularly the youth and students; to encourage research and application of emerging technologies for welfare of the people in the State; to promote investments in emerging technology areas; to act as anchor organization for promoting citizen centric e-Governance initiatives in the State; to position Gujarat as a key State in the knowledge economy sectors of India; to create employment opportunities in the knowledge economy sectors including promotion of Semi conductor; Micro; Nano, and Bio-Technology based manufacturing units in the State; to improve the availability of skilled man-power in the emerging areas of technology through training; industry institute partnership, and to make Government citizen interface more effective, efficient and transparent (www.ibef.org)<sup>3</sup>.

With 4.93 per cent population, the Gujarat State contributes about 16 per cent of India's manufacturing GDP. It has emerged as India's most preferred destination for investments with availability of an excellent physical infrastructure. It has made rapid strides in the field of Information Technology (IT) and IT Enabled Services (ITES), and e-Governance.

It has all the favourable factors to make IT, a frontline industry as it offers stable and reliable power, best of infrastructure, and lower cost of commercial and residential real estate as compared to other States of India (www.epwrf.res.in). It has exceptional Road Network, Railway Connectivity, Air Linkages, Ports and Telecommunication Facilities as well as presence and functioning of reputed Academic And Research Institutions supported with good quality Educational Infrastructure. It offers good living conditions with high quality of urban services viz., Electricity; Water; Cleanliness; Education as well as Health Care, and Entertainment facilities. The basic telephony infrastructure of the Gujarat State carries more than 3.5 Million landlines with a Tele-density of 7 supported with 4 operators with more than 1.1 Million subscribers. It also has an extensive bandwidth infrastructure with a capacity of around 72 MB; 5 International Gateways with 1 more proposed, and 90 per cent of its Taluka are connected through an OFC(Optical Fiber Communication) cable network.

It has 35 Operational Internet Service Providers (ISPs), and Software Technology Park of India (STPI) with 295 approved units that accounts for 5 per cent of the approved STPI units in India, and 3 other IT Parks known as Info City at Gandhinagar as well as GNFC Tower, and Astron Tech Park located at Ahmedabad respectively ([www.ibef.org](http://www.ibef.org))<sup>3</sup>.

## **2. II: 2:1: The IT Policy (2006-2011) of the Gujarat State:**

Though, Gujarat is a relatively small player in the total IT businesses of the India, it offers an attractive IT Policy. It has set up Gujarat Informatics Ltd. (GIL) for effective implementation of the IT initiatives, and IT Policy with an emphasis on speed, efficiency and for promotion of e-governance. **The State of Gujarat has launched a comprehensive IT Policy: 2006–2011 with a vision for rapid expansion and growth of knowledge based economy that envisages for attracting investments in IT sector by promotion of urban based IT infrastructure, enhancement in employment and supply of skilled manpower and promotion of IT and related industries in the State of Gujarat ([www.gujaratbusinessindia.com](http://www.gujaratbusinessindia.com)).** Its IT Department has created an Information Corridor called as Gujarat State Wide Area Network (GSWAN) for connecting the State capital, Gandhinagar with the district headquarters and Taluka headquarters. Its IT Policy was announced in the year 1990 in order to help and improve processes by using computing devices such as communication systems associated electronics and software to provide better delivery systems to the citizens' resultant into an overall growth of IT Sector in the State of Gujarat. It aims to facilitate information outlets at the doorstep of common man with a focus on creating enormous new employment opportunities and, training and development facilitates for increasing availability of skilled manpower required for IT Sector in the State of Gujarat. To facilitate people at large, it now offers easier access of information related to education, technical and non-technical educational courses being offered by various institutions, admission procedures, admission list, results, and information also related to health services, such as available medical expertise at different hospitals, and on line medical services through use of websites.

It also provides information on transport service information like Bus Arrival and Departure Timings, Reservation Facilities. To ensure proliferation of IT, the department has created the information corridor to connect its State Capital called as Gandhinagar right up to Taluka headquarters. Initially, one per cent of the State Government budget was marked for IT related activities that were expected to reach to figure of 3 per cent in the year 2005. It aims to encourage the participation of the private sector by creation of information corridor, setting up of information kiosks; provision of services for creation of database oriented services meant for the Government Departments, and setting up of other Info-infrastructure. It had submitted an IT Plan to National Task Force with target of allocation of 01 PC per 50 persons by the year 2008.

The Government of Gujarat has also set up Venture Capital Fund for development of IT services, IT software and IT products ([www.gujexim.com](http://www.gujexim.com)).<sup>18</sup> It had launched IT Industry Incentive Scheme 1999-2004 in the year 1999 to accelerate development of IT industry.

Some of the salient features of the IT Incentive Policy are viz. capital subsidy at 25 per cent of eligible total capital investment or, Rs. 2.5 Million, whichever is less for new units.

It also offers subsidy between Rs. 2.5 Million to Rs. 10 Million for units with large turnover. A turnover incentive of 5 per cent in the first Accounting Year, and subsequently on incremental turnover subject to a ceiling of Rs. 5 Million admissible only during the operative period of the scheme. The Sales tax holiday on all software for the next 5 years; incidence of sales tax on computer hardware, peripherals is to be reduced.

To an extent of 50 per cent Government subsidy for leased line rental up to 500 kilometers. Units are to be completely spared from power cuts. 50 per cent higher FSI for technology parks and info-cities in Gandhinagar ([www.gujexim.com](http://www.gujexim.com))<sup>18</sup>.

## **2. II: 2:2: The Gujarat State Government's Initiatives for Promotion of the IT Sector:**

An attempt has been made by the researcher to outline in brief various steps that have been taken for attracting and increasing in the directions of IT investment for the development of the IT infrastructure of the State of Gujarat as follows.

One major initiative that was undertaken known as 'Vibrant Gujarat: IT Summit: 2009' has lead to 20 Memorandum of Agreements (MOAs) worth Rs 46,457 Crores that were signed with IT Infrastructure Developers, and ICT Investors with an expected potential investment of Rs.15, 000 Crores and employment generation of 3.3 lakh persons ([www.vibrantgujarat.com](http://www.vibrantgujarat.com)).The Government of Gujarat is committed to promote Gujarat as an attractive IT and ITES destination in India.

As Gujarat State is one of the most urbanized States of India having 37 percentages of population located in the urban area, it is therefore logical to encourage setting up of IT infrastructure in form of IT Parks in urban conglomerates that are strategically identified for promotion of IT parks at Ahmedabad, Gandhinagar, Vadodara, Rajkot and Surat by Expression of Interest (EOI) that was invited from reputed IT infrastructure developers for development of IT Parks at aforesaid locations. It has taken varying steps for the development of IT infrastructure such as purchase of private land in accordance to Land Acquisition Act through GIDC (Gujarat Industrial Development Corporation of India)for the development of IT Parks in the State of Gujarat ([www.mit.gov.in](http://www.mit.gov.in)).

Besides, its various other policy incentives mainly includes viz., Mega IT Projects; High-Tech Park; Stamp Duty; Special Economic Zones (SEZ). Electricity Duty Exemption from power cut, and waiver of No Objection Certificate (NOC) from the Gujarat Pollution Control Board (GPCB) as well as simplification of Labour Laws for promotion of IT sector in the State of Gujarat.



It has determine to facilitate grant of SEZ IT sector which is manpower intensive, and is capable of generating large number of employment opportunities wherein urban centers are pre-dominant source for its requirement of skilled manpower, and such urban centers also generally possess required infrastructure to support IT sector ([www.govtofindia.com](http://www.govtofindia.com))<sup>19</sup>.

Special incentives too have been offered for Mega IT Projects, employing more than 1,000 persons in the case of an IT unit, and 1,500 persons in the case of an ITeS unit. Other incentives includes for projects with an investment of US\$12.20 Million and above. Financial assistance is to be given at 50 Per cent on fixed capital investment in land, buildings and infrastructure facilities to IT park developer up to a maximum of US\$0.61 Million. Stamp Duty Exemption shall be on purchase of land for IT Park developers. It shall facilitate grant of SEZ status to IT Industry, IT parks considering provisions of the SEZ(Special Economic Zone). Additional Floor Space Index (FSI) is to be allowed for IT and ITES Parks located in urban centers. Nomination of one escort officer is approved for each IT mega project including IT Parks. Various other Incentives for IT and ITeS units include exemption of IT and ITeS units from zoning regulations applicable under the Town Planning Schemes; Stamp Duty Exemption of 50 Per cent for IT and ITeS units in IT Parks. All new IT units are to be exempted from the payment of Electricity Duty for a period of five years and exemption from power cuts. The waiver of 'No Objection Certificate' from Gujarat Pollution Control Board (GPCB) for IT and ITeS units engaged in provision and production of IT services & IT Software. It has been decided to initiate simplification of labour laws, and permission has been granted for round the clock operations. It has also assured for continuous support for enhancement and development of quality manpower in IT and ITeS industry.

It has created an IT Fund with a corpus fund of US\$5.85 Million to provide financial support for development of IT, ITeS and IT Products industry ([www.mit.govt.in](http://www.mit.govt.in)). The Special incentives for Mega-IT projects creating employment of more than, 1,000 persons in case of IT unit and 1,500 persons in case of an ITeS unit. Special incentives for projects with investment of US\$ 12.2 Million and above.

Financial assistance of Fixed Capital Investment in Land, Buildings and Infrastructure facilities to IT park developer up to a maximum of US\$ 0.61 Million ([www.Governmentofbelize.gov.bz](http://www.Governmentofbelize.gov.bz)). The Capital Subsidy has been decided at 25 Per cent for eligible new IT units on total eligible capital investment. Special Incentives have been decided inform of capital subsidy to be offered to large units on graduated scale. Turnover Incentive is to be given at 5 Per cent on eligible annual turnover with a ceiling of US\$ 1.2 Million incidence of Sales Tax on Computer Hardware and Peripherals has been reduced. Connectivity incentive where the State Government would offer subsidized leased line rental up to 500 kilometers to an extent of 50 per cent of the lease rentals ([www.mit.govt.in](http://www.mit.govt.in))<sup>20</sup>.

A brief review of the performance of the IT sector of the Gujarat State has revealed that during the years 2002 to the year 2007, Software Exports had registered a Compounded Annual Growth Rate (CAGR) of 47 per cent. Exports from 295 approved STPI in the Gujarat State which were 5 per cent of India had registered growth of a CAGR of 47 per cent. Gandhinagar-Ahmedabad Knowledge Corridor and Vadodara are poised to be the major IT destinations with big developers setting up IT SEZs.

The ICT Sector of Gujarat is projected to witness investments up to US\$3.7 Billion by the year 2011. IT and ITeS Sector turnover showed the projection of growth from US\$ 60 Million in the year 2005 to US \$ 2.4 Billion in the year 2010-2011. Software exports from the Gujarat State showed a growth rate of 107.3 Per cent to reach US\$ 134 Million in Financial Year 2006-2007. However, the Gujarat State is yet to realize its true potential in IT, and ITES Sector ([www.gujaratbusinessindia.com](http://www.gujaratbusinessindia.com))<sup>21</sup>. It's IT sector shall grow by about 100 per cent by the year 2015 which shall be much above the anticipated national average of 20 to 30 per cent. ITeS which includes Knowledge Process Outsourcing (KPOs), and Business Process Outsourcing (BPOs), and IT Hardware Industry are the focus growth areas of the Gujarat State (Ibid). It is projected to receive investments of US\$ 307 Billion by the year 2010. Its exports were US\$ 86.12 Million for the year 2007-2008. Its ICT Sector has projected to receive investments amounting US\$3.7 Billion by the year 2011 ([www.gujaratbusinessindia.com](http://www.gujaratbusinessindia.com))<sup>21</sup>.

The turnover of IT Sector is expected to reach figure of US\$2.4 Billion, as well as for ITeS sector US \$ 2439.02 Million in the year 2010-2011. IT and ITeS Sector is set to grow to \$ 60 Billion, and would employ about 2.5 Million Persons by the year 2010. Its Software Exports recorded a growth rate of 107.3 percentages to reach figure of US\$134 Million in the year 2006-2007. ([www.gujaratindia.com](http://www.gujaratindia.com)). Global sourcing of technology related services was estimated to grow by about 30 per cent to reach figure of US\$ 70 to 76 Billion in the year 2007. The Software Exports of IT and ITeS Sector from units registered under STPI scheme stood at Rs 1,063 Crores that showed a jump of 48.05 per cent as compared to exports of the year 2007-2008. The Software Exports of ITeS Sector were expected to reach the figure of Rs 1,200 Crores in the year 2008-2009 (<http://www.indianexpress.com/>)<sup>22</sup>.


It has over 350 registered units, and 172 operational units in the STPI located at Gandhinagar. The IT Sector of Gujarat is poised to become a major employment generator as many big IT companies have begun to explore and expand its operations during 2010 to 2015. To illustrate, M/S Tata Consultancy, a service has set up their plant known as Garima IT SEZ Park at Gandhinagar. It has excellent telecom network and all major towns and cities are connected through land line and mobile network. It has successfully attracted players of national and international repute in the Gujarat State. To illustrate, companies like M/S. Patni Computers Ltd; M/S. Mphasis are already functioning in the Gujarat State whereas M/S. Syntel Inc.; M/S. Vora Technology Park; M/S. e-Infochips; M/S. Collabera and several others are either likely to set up or expand its development Centres.

All major telecom operators of India viz., M/S. Vodafone Essar; M/S. Bharati Airtel; M/S. Reliance Communications; M/S. Tata Communications; M/S. Idea Cellular, and M/S. BSNL are having its operations in the Gujarat State.

Besides, exiting IT parks such as Info city, Gandhinagar & GNFC Info Tower, Ahmedabad, and recently 2 IT Special Economic Zones (SEZ) viz., "Mind space", Gandhinagar by M/S. K Raheja and Knowledge Park, Vadodara by M/S. L&T have also become operational. During March 2007, the Government of India had announced Semiconductor Policy and Gujarat being one of the preferred manufacturing destinations, it has also decided to outspread the benefits of IT Mega Projects policy, on case to case basis, to these industries as well. Ahmedabad – Gandhinagar Knowledge Corridor- I shall become a IT SEZ hub in addition to the proposed Gujarat International Financial Tec City (GIFT) Project to be set up in between Gandhinagar and Ahmedabad. Other well known IT Park includes viz., M/S.DLF; M/S. Raheja; M/S. Hiranandani; M/S. Vascon as a co-developer with S. City gold for setting up IT SEZ/ IT parks at Ahmedabad and Gandhinagar. Several local IT park developers such as M/S. Ganesh Housing; M/S. Adani; M/S. Shivganga; M/S. Calica; M/S. SGV are also setting up IT SEZs in this corridor. In addition, Gujarat Industrial Development Corporation (GIDC) has also set up Electronics SEZ at Gandhinagar, and another IT SEZ for IT Mega projects are likely to become operational in the IT zone at Gandhinagar. Similarly, M/S. Larsen & Toubro has set up IT SEZ at Vadodara. The State Government has proposed to set up IT Park on available land of Priyalaxmi Mills at Vadodara by inviting bids from eligible IT park developers and anchors of IT Company. Besides, IT SEZ is to be set up near industrial town of Vapi. In order to promote balanced growth of IT Sector, the Government of Gujarat has received approval for setting up of STPI at Surat which is likely to be operational in the year 2010-2011. It is also planning to set up STP Centres at Rajkot, Jamnagar and Bhavnagar. To bring about uniformity in the technical education and also for improving the quality of technical education, the Government of Gujarat has set up the Gujarat Technical University in September 2007 to help in streamlining the admission, academic activities as well as examination of Technical Institutions operating in the State of Gujarat (Government of Gujarat, Science and Technology Department, November, 2006)<sup>7</sup>.

## **2. II: 2:3: The Gujarat State Government's e-Governance Initiatives:**

The Government of Gujarat is fully aware that information is not enough to meet ever-growing needs for Government services. e-Governance has emerged as strong tools there are more than 250 websites that provides information on various aspects of Governance in the State of Gujarat.



A number of initiatives to provide quicker delivery of the Government services to the citizens have been therefore initiated that mainly includes viz., e-Dhara related to computerization of land records; e-municipality for delivery of citizen centric services through municipalities; e-gram for delivery of village Panchayats level services, and SWAGAT that uses ICT and acts as a grievance Redressal system in the State of Gujarat (<http://portal.gujarat.gov.in>)<sup>23</sup>. It encourages its line departments for developing back-end application software for improving internal efficiencies by way of better monitoring and supervision of their activities and programmes. e-Procurement system has been introduced for all the purchases and procurements in all the Government departments. The Finance and Home Departments have appointed M/S. Tata Consultancy Services to develop integrated application software for these departments. It has undertaken two major initiatives. First; to provide VSAT(Very Small Aperture Terminal) based broadband connectivity to all the 13,716 Village Panchayats in the Gujarat State through e-Gram Vishwagram Society under the Panchayats& Rural Housing Department. Second, providing of computers, printers and other necessary hardware to all of its Village Panchayats so as to enable the village level computer operators to deliver Government Services to its people. It has set up Common Service Centers (CSCs) in 6,000 villages. It has also planned to use State Portal to accept citizen's request for various services viz., copies of land records, applications for ration card, varieties of certificates, and for implementation of beneficiaries oriented schemes such housing schemes for poor, old age pension, widow pension scheme, and deliver these services through front ends such as broad band connected village Panchayats, CSCs, Cyber Cafes in the Gujarat State.

As per the e-Readiness Assessment 2005, the Gujarat State was positioned in the category of Aspiring Leader. The major initiatives of Government of Gujarat towards its e-Readiness includes viz., announcement of IT Policy 2006- 2011; preparation of IT Action Plan by its Departments; allocation of at least Two to three per cent of the State Government budget for IT related activities, and an appointment of Chief Information Officer (CIO), and various other technical persons in each of the Government Departments. The CIO has to report directly to Secretary of the Department in order to ensure smooth implementation of e-Governance projects in the State of Gujarat Largest WAN (Wide Area Network) has been also created. All the State Departments are in process of creating shareable databases of rules and other related information viz., budget, recruitment, service rules, and plan achievements for various schemes. Integrated Workflow and Document Management System (IWDMS) is being implemented across the Government Secretariat to ensure standardization of application and database.

More than 4,000 users of 127 Government offices at State capital Gandhinagar, and more than 10,000 users of 2,800 District and Taluka level offices of different Departments have been directly connected to GSWAN. More than 5,500 Offices have been also provided GSWAN voice facility ([www.gujaratindia.com](http://www.gujaratindia.com))<sup>24</sup>.

## **PART-III: SPECIFIC REVIEW OF LITERATURE**

### **2. III: 0: SPECIFIC REVIEW OF LITERATURE:**

An attempt has been made by the research scholar to collect various kinds of information and data from the available books; research journals; business newspapers; and reports published by various State and the Central Government of India as well as other Agencies. The Research Scholar has gathered material available in e-libraries in the form of e-books; and e-journals which are accessed using websites and search engines. Review of existing information based on other researches undertaken by other researchers has been accepted in order to identify the gap considering research work carried out in past and the present research as well as it emphasizes the need of further research.

**This part has focused to offer a brief sketch with its implications on those conceptual aspects which are related to Internet; Cybercafés; Internet Users' Behaviour as follows:**

### **2. III: 1:0: A Review of Literature on Internet:**

Internet has emerged as widely accepted form of data collection because it is capable of administering complex questionnaires more quickly, flexibly, and inexpensively than conventional survey methods. However, Internet is restricted to individuals with access to computer networks. Thus, causal inferences to the general population from analyses of Internet samples necessarily rest on two untested assumptions: First whether that the decision-making processes of Internet users are similar to those used by the general population, and second, whether one could draw that representative samples of Internet users or not?

Internet is commonly called as the Net. Accordingly, it is a large network of computers. A more accurate description would be Internet is a network of computer networks. Almost, all of these networks use a computer Protocol called TCP/IP. In the UK, the vast majority of people who has access to Internet, were using the Joint Academic Network (JANET) linked Universities, Government, and other research agencies. Internet users are required to know how these networks are connected together. Of course, an awareness of the Interconnections shall be helpful in better use of Internet though it often create performance bottlenecks. Just as the roads between different places vary in its ability to cope up with the traffic, so do is the case of network connections that make up Internet. The advent of Internet has broken down the barriers of communication, and has enabled the access of information from anywhere in the world. It is fast, reliable and free from restrictions on content or format, and also has limitless range of facilities, that assists Internet users to access voluminous information available on Internet; it further offers the opportunity to access latest reports and knowledge worldwide (Ojedokun, 2001)<sup>8</sup>.

An Internet revolution is one of the greatest changes of modern world; It is one of the fastest growing consumer services that the world has so far experienced since the industrial revolution two centuries ago. It is also one of the most advanced technologies of modern times (Mutula, 2002)<sup>9</sup>.

According to Mutula (2002), Internet is a global super-highway through which decisions are now being made more quickly than ever before and it has had powerful and pervasive effects on every part of our lives including business, education, health, transport, communications and industry amongst others. It has enabled availability of information on all areas of human endeavor.

Although, it is not the size of Internet that is of interest to Internet users, but its socio-economic implications on businesses & human lives. Internet is a source of information and is probably the largest intellectual information resource in the world. The computers on Internet contain gigabytes of available information, which has been published thereafter to anyone from anywhere around world.

Most of this information is being provided without any financial charge considering it as a service to the community, but a growing number of commercial information providers make their information available on Internet, for a fee.

Internet users themselves are very crucial source of information. Many of them have taken part in one or more of the thousands of different electronic discussion groups supported by Internet. The subjects discussed vary from Agriculture and Archaeology to Zen and Zoology. Very few of the topics relate to computers or to networks.

There is no Internet equivalent of the library catalogue or ISBN and ISSN numbering schemes. Resource discovery is the issue. Unfortunately, there is no single piece of computer software that can be used to find and access all the information on Internet. There is not even one that can be used for all the information relating to a particular subject area. Different kinds of information must be accessed in different ways. Now Internet is being seen as a web of information, rather than a network of computers, it has attracted the interest of both Commercial Organizations and Government.

Much existing research on Computer- Mediated Communication (CMC) and online behaviour has laid out differences between CMC and Face-to-Face Communication. It has also provided in-depth reports on Online Communities. Whereas important research has been done from this perspective, its concentration on CMC Versus Face-to-Face, Online Versus Offline, and Virtual Versus Real has perpetuated a dichotomized view of human behaviour. These dichotomies pit one form of CMC against another. To illustrate, Synchronous Chat Versus Asynchronous Communication such as e-mail and Text Versus Graphics, as well as one category of human endeavor against another, such as computer use at work versus home, online content for Adults versus children, and computer and Internet users and non-Internet users.

**A growing body of research has examined more integrative views of CMC, looking at how online time and use fits with and complements other aspects of an individual's everyday life.**

Nie & Erbring, (2000)<sup>10</sup> had discussed on a few large and important trends that were making it difficult to continue to interpret their sample based on 2,500 adults in the USA in the year 1995, based on a sample of 1,305 adults in the year 2000. Those who used Internet showed an increased exposure and commitment to Internet-based activities. It was estimated that on an average American used Internet more than 9 hours a week (Center for Communication Policy [CCP], 2000).<sup>11</sup>

Although, a large proportion of use of Internet can be attributed to work (UCLA CCP, 2000), a third trend showed increased domestication of Internet. It implied the presence & use of Internet in the homes (Kraut, Kiesler, Mukhopadhyay, Scherlis, & Patterson, 1998)<sup>12</sup>.

These trends combined with other societal pressures have blurred the boundaries between domains of activities. Such pressures included longer work hours, 14 to 16 per cent of those used Internet for more than 1 hour a week, reported longer working hours. (Nie & Erbring, 2000)<sup>10</sup>. Use of Internet in conjunction with School Work by Adult Learners, University Students, and Households with Children. The presence of Children in the household was as a key reason. Many adults have invested in Computers and Internet access (Kraut, Kiesler, et al., 1998<sup>12</sup>; Statistics Canada, 2000<sup>13</sup>). A need to keep up was reported by Non-Internet Users as the number one reason for becoming an Internet user (Katz & Aspden, 1997)<sup>14</sup>.

Anderson & Tracey (2001)<sup>15</sup> showed that Internet is a complex landscape of applications and purposes and Internet users and should be studied that way. They had in common the acceptance of the wholeness of human experience and the idea that Internet cannot be separated from ongoing activity. The work to be done was to build a picture that separated use of Internet in the rest of individuals' lives, including the people with whom they interact, the technologies they have around them, their life stage and lifestyle, and their offline communities (Hampton & Wellman, 2001<sup>16</sup>; Kavanaugh & Patterson, 2001<sup>17</sup>; Matei & Ball-Rokeach, 2001)<sup>18</sup>.

The use of Internet could not be estimated without considering Internet users' attributes and behaviour (Nie, 2001)<sup>19</sup>. The way statistics on Internet use and reach has been predicated on the behaviour of Internet users has already provided Internet users' demographics, that is, those with higher incomes and higher education levels or that already distinguished behaviour offline. To illustrate, the way in which women and men communicates cannot be ignored (Boneva, Kraut, & Frohlich, 2001)<sup>20</sup>.

There is a felt need for considering the multiplicity of online and offline interactions and responsibilities composed of Activities, Relationships, and Community that look for patterns of successful integration has cautioned against unsuccessful ones (Kraut, Patterson, 1998<sup>12</sup> & Howard, Rainie, & Jones, 2001<sup>21</sup>; Kazmer & Haythornthwaite, 2001<sup>22</sup>). However, the picture and task shall remain incomplete without considering those who are suffering on account of lack access of Internet, or has a very little use of Internet or who have lost access to it (Katz, 2001)<sup>23</sup>.

It is important to examine how the increasing presence and importance of Internet in the everyday lives of those with access separates them from others considering their Social, Economic, And Commercial Lives & Activities that are supported by Internet and has created or perpetuated an existing social divide. Whatever could be its consequences, all have agreed that Internet is remain to stay and shall spread rapidly, creating a pressing need to understand and prepare for its impact. The heterogeneous statistics available about Internet, and those presented in many of the studies, document the rapid growth in use of Internet (Nie, 2001)<sup>19</sup>.

**There had been a great deal of interest in the creation of data or information highways.**

Tony Addyman (1994) mentioned about Information Highways for Internet to draw parallels between the highways used for road traffic and the proposed information highways. Fortunately, there is no need to speculate on this as one can find existence of a very large information highway network. But, neither Internet has reached to everybody, nor does it have the capacity to deliver some of the services that were being suggested for future information highways. However, **it is to remain and works, that has affected the lives of Millions of people throughout the world** (Tony Addyman, 1994)<sup>24</sup>.

Bakardjieva & Smith (2001) offered the findings of an ethnographic study on use of Internet that was conducted in Vancouver, Canada which examined how Non-Professional Internet users interpret, domesticate and creatively appropriate (Feenberg, 1999)<sup>25</sup> Internet in order to integrate it into the relevant structures and activities of everyday lives. They identified new cultural practices that were emerging on this basis and reflected on what these practices meant for the social shaping of Internet as a medium of communication. The methods of data collection included ethnographic interviews, and 'tours' of the home and computer space of 30 domestic Internet users of Internet in different socio-biographical situations. It suggested a democratic counter-project for the shaping of Internet as a medium of communication to be conceived on the basis of a careful study and emphatic understanding of the alternative rationality embodied in what the ordinary Internet users currently are trying to do with it (Bakardjieva & Smith, 2001)<sup>26</sup>.

The increasing presence of Internet in our everyday life has raised important questions about what it means for access to resources, social interaction, and commitment to local community. The special issue of the American Behavioural Scientist, Caroline Haythornthwaite (2001), brought together seven US, one U.K., one Canadian, and one North American study that attempted to examine the way in which Internet competes with and complements everyday life. It showed that Internet is a complex landscape of applications, purposes, and Internet users. It provided an overview of Internet population and Internet related activities, supported with statistics that highlighted the nature of the digital divide. The authors moved from there to consideration of the social consequences of adding Internet related activities to our daily lives.



It attempted to explore how use of Internet has affected traditional social and communal behaviours such as communication with local family and commitment to geographical communities. It concluded favourably on integration of Internet into our everyday lives (Caroline Haythornthwaite, 2001)<sup>27</sup>.

Barrie Gunter, Chris Russell, Richard Withey and David Nicholas (2004), undertook an online survey that evaluated Broadband Internet Users in Britain based on a sample of 1,594 Internet Users who responded to questions about their different uses of Internet and reasons for using Internet. Broadband Internet users were more likely to be male and older than narrowband Internet users. They were found as more experienced with longer Internet access having frequent uses of Internet. Besides, they were more advanced Internet users than Narrow-Band Internet users, who were more likely engaged in consumer and financial transactions online and to exchange software and files with other Internet users. It offered empirical support that emerged among all Internet users that online behaviour was displacing off-line media use. Internet users felt that they had reduced the time they spent in reading newspapers and watching television. Virtually, all Internet users used e-mail and used Internet for information about hobbies, interests and news. Most of them also used Internet to search for product-related information. The significant proportions of Internet users' Broadband and other shared that they had visited Central and Local Government Websites. In this respect, British Broadband Internet users resembled their American Counterparts. The findings of this survey too supported earlier American findings and indicated a clear pattern of more complex and advanced Internet-related behaviours among Broadband Internet users compared with Narrow-Band Internet Users. Broadband Internet users also reported software exchanges and use of Internet Technology for viewing of Movies and Videos, and also for development of photographs and engaged also in consumer and financial transactions (Pew Institute, 2002)<sup>28</sup>.

The use of Internet occupies time and it seems that this time has been taken away from certain other media consumption activities, most especially, reading newspapers and watching Television. This effect is magnified among Broadband Internet users. It offered empirical support for the displacement of traditional media behaviours by online media behaviour. Displacement is not simply a matter of one medium occupying the time (Kayany and Yelsma, 2000 & Perse and Dunn, 1998; Robinson, 1997)<sup>29</sup>.

There was also some evidence from the survey that Internet connections at home might results in more home working. It offered promising signs for the future of the Broadband Internet (Barrie Gunter, Chris Russell, Richard Withey and David Nicholas, 2004)<sup>30</sup>.

Lorin Hitt, Prasanna Tambe (2007) examined how access of Broadband has driven changes in the quantity and diversity of consumption of online content using panel data that described household Internet usage before and after Broadband adoption. The goal of this study was to provide evidence on how providing access to Broadband had impacted utilization of information and which Internet users benefit the most.

It was suggested that on an average, Broadband adoption had increased use of Internet by over 1,300 minutes per month. It was also found that utilization of information was more evenly distributed within the population, driven in part by post-adoption use of Internet gained almost 1,800 minutes per month amongst selected individuals who were in the lowest usage quintile before adopting Broadband.

After adopting Broadband, this pre-adoption lowest-usage quintile consumed content in greater quantities than Internet users in neighboring quintiles, passing both the second and third quintiles in terms of absolute usage. It was also suggested that Internet users had strong preferences for high-bandwidth content that was too costly to use in a Narrow-Band environment. It showed that Broadband adoption had increased the variety of content that Internet users used.

Although, many of these gains appeared to be associated with an increase in the variety of websites visited, within previously visited content categories rather than an expansion in the types of content consumed (Lorin Hitt, Prasanna Tambe (2007)<sup>31</sup>.

Scott J. Savage & Donald Waldman (2005) collected data based on a nationwide survey of US residents during September and October 2002 to assess household awareness of high-speed Internet access, profile and use of Internet in order to develop an insight on degree of importance of viz., price; speed; installation, and reliability attributes were in the choice of service of selected respondents. Preliminary analysis suggested relatively high awareness of Cable Modem and DSL availability. Almost, 19 per cent of the selected respondents had high-speed connectivity, and the mean price paid per month for dial up and high-speed access of Internet was \$19.76 and \$42.36, respectively. Preference for high-speed access was apparent among selected respondents who had higher income and college education. About 63 per cent of high-speed Internet users reported more than five years of online experience, compared to 48 per cent of dial-up Internet users, and high-speed Internet users were twice shared music files and photos, bank, trade stocks. They also paid bills many times a week than dial-up Internet users. Willingness-to-pay estimates indicated the reliability of service, speed, and always-on connectivity as an important Internet access attributes. Although, the main purpose of this study was to provide timely empirical data for policy discussion, it was possible to make some general inferences about residential awareness of high-speed Internet service availability and the marketing and promotion of high-speed e-services. The respondents were found as reasonably well aware of high-speed service availability. In most urban neighborhoods, awareness and access did not appear as a significant inhibitor to high-speed uptake. Its estimates indicated that Internet users value a reliable, faster service with always-on connectivity. Higher income respondents valued attributes more highly than lower income Internet users, and those with a college degree valued speed more, always on less, and reliability about the same as those without a college degree.

Marketing strategies needed to be more effective in highlighting reliability of service and the current real benefits of high-speed access. A killer application may go a long way toward stimulating interest and demand for high-speed e-services. Universal service policies would have promoted wider adoption but advocates of these policies needed to demonstrate public benefits and appropriate funding mechanisms (Scott J. Savage & Donald Waldman, 2005)<sup>32</sup>.

Anderson, C Gale, M L R Jones and A McWilliams (2002) reported analysis of a range of survey, interview and usage-log data on the level of use of Broadband Internet by households in the UK and Europe. It provided a picture of the current state of play in the domestication of Broadband Internet access in Europe. It had brought together several different data sources, each of which provided a distinct but complementary view of what people did with Broadband Internet. It discussed the discernable differences between PSTN and Broadband Internet users in mid of the year 2001.

Its analysis suggested that, while there were few socio-economic and demographic differences, Broadband Internet users tended to use a wider range of applications, access them more frequently and for longer. However, because most Broadband Internet users had been, on average, Internet users of Internet for longer than PSTN Internet users, these effects might had to do with their Internet competencies rather than the nature of Broadband Internet itself. It also suggested that interaction of speed, flat rate and always on is a key feature of Broadband. It was a key value model to Internet user and concluded by discussing the implications of the usage patterns of these early adopters for current and future portal, application and service investment strategy (Anderson, C Gale, M L R Jones and A McWilliams2002)<sup>33</sup>.

## **2. III: 1:1: A Review of Literature on Cyber Cafes Worldwide:**

Information Technology [IT] has become pervasive activity of our daily lives that has influenced all aspects of human lives from education to trade, to engineering and military. It has certain requirements of technological infrastructures to facilitate use of Internet, such as Digital Telephone Dial-Up System, Ethernet Card or Fax-Modem; Sound Card, Web Cam Etc, and Internet Packet from a service provider. Initially rates of Internet connection were too high, & therefore everyone could not have access it which leads to setting up of Cyber Cafes, Net Cafes, Bistros, and Cyber Cafes to provide access to Internet (Laegran, 2000)<sup>34</sup>.

Huang (2005) its central theme was to explore the unique socio-political role of Cyber Cafes in China's informatization efforts impact of Internet and Cyber Cafes on China's democratization and the authorities' dilemma between promoting informatization and resisting democratization. It discussed four related issues viz.; first, the swift development of Cyber cafes; second, the unique socio-political importance of Cyber Cafes in China; third, the Governments split policy on Internet and Cyber cafes; and lastly fourth was the conflict between the public concern and the authorities' concern on the impact of Internet and Cyber cafes.

It primarily relied on first hand data and research materials obtained through field research in China, including archive research of Government documents, survey results, and interviews of relevant Government officials, Cyber Cafes owners, communication scholars, and Internet and Cyber Cafes Internet users (Junhao Hong & Li Huang(2005)<sup>35</sup>.

Mehmet Gu"rol & Tuncay Sevindik (2006) assessed Cyber Cafes owners' obedience to the legal system, and its technological standards in the research. Cyber Cafes were first of all founded at Turkey and various other big cities and afterwards in Anatolia. It became the means of communication for people. Though the number of Cyber Cafes has increased, one finds deterioration in its quality of services because it has been founded for financial motives. The misuse of Cyber Cafes forced the Turkish Government to take some precautions and Government has come up with legal regulations having positive outcomes.

Besides the number of Cyber Cafes has gradually declined; the aspects of spaces regarded as Cyber Cafes have become legally more defined; and with the quality of the service it provide to people for access to Internet have moved up gradually. Legal regulations have divided Cyber Cafes into two types. First, Internet Cafes, and second as Playrooms. There are limitations & restrictions on the opening and closing hours of Cyber Cafes (Mehmet Gu"rol & Tuncay Sevindik, 2006)<sup>36</sup>.

Peter G. Mwesige (2004) examined the prospects and problems of Internet use and access in Africa, on a profiling of Cyber Cafes Internet users in Uganda, which concluded that initiatives such as Cyber Cafes have brought Internet and Information Communication Technology closer to people in developing countries. But, it has increased digital divide within poor countries. The Cyber Cafes phenomenon has been described as a resurgence of the original notion of the coffee-house where people gathered to read newspapers, gossip and what is now called as networking (Lee, 1999)<sup>37</sup>.

At many places, the Cyber Cafes have combined the culture and social dynamics of the traditional Cyber Cafes with its global perspective (Peter G. Mwesige, 2004)<sup>38</sup>.

Kishorpradhan (1999) based on survey of Internet users in the April, 1998 developed an insight into the perspective of Internet use in Nepal. Its results provided information on various aspects of use of Internet and Internet related activities, such as frequency of Internet use, benefits of use of Internet, application of Internet in development and management of communications. It identified opinions on how use of Internet should be promoted in Nepal, and gathered opinion on the North South balance of use of Internet, social effects of Internet, and various other aspects (Kishorpradhan, 1999)<sup>39</sup>.

Sarah Lee (1999) with the help of an empirical study offered that Internet users of Cyber Cafés in South East England examined some of the key distinctions between Internet usage within domestic spaces and as a technology access in a public economy of consumption. The research findings were contextualized and tested against existing work on public Internet access.

The material derived from interviews with customers were used to explore the ways in which Internet was differently perceived, used and gendered in the public spaces of an Internet cafe. It was argued that the public use of Internet was not just a transitional phenomenon which precedes home Internet adoption.

It revealed that Internet café provided a distinct and dedicated use of space which was intimately bound up in the domestic and work routines of its Internet users (Sarah Lee, 1999)<sup>37</sup>.

Laite (2000) provided the results of a survey on use of Internet amongst selected graduate and undergraduate students from Shippensburg University. It was found that the majority of them used Internet for 1 to 2 times per week. E-mail was found as the most common Internet service by them (Laite, 2000)<sup>40</sup>.

Yong J. John and G.E. Gorman (2002)<sup>41</sup> provided an insight on how South Koreans accessed Internet and used Internet services such as Banking and e-Commerce. It showed use of Internet in relation to its Internet users and their behaviour.

Samuel J. Best, Brian Krueger, Clark Hubbard and Andrew Smith (2005) found mixed support for the assumptions viz;(a) the decision-making processes of Internet users were similar to those used by the general population, and (b) representative samples of Internet users can be drawn. It was found that sampling techniques only permitted the generation of diverse, and not representative, samples. However, comparing samples which were drawn simultaneously using Internet and other possible probabilistic telephone methods, demonstrated that the psychological mechanisms underlying common political decisions did not differed between Internet users and the population. It suggested that Internet samples were useful in investigation of how individuals generated certain types of attitudes. Internet users and non-users used similar psychological mechanisms to arrive at common political decisions such as vote choice and candidate performance evaluation. Although, they founded evidence of parallel psychological mechanisms for political candidate evaluations, there was no assurance that decision-making processes underlying other judgments, political or non-political, were similar.

It was unlikely that Internet users and non-users who were drawn on similar factors to generate preferences toward technology policy, feelings of social connectedness, or beliefs about the trustworthiness of various news sources. (Samuel J. Best, Brian Krueger, Clark Hubbard and Andrew Smith, 2005)<sup>42</sup>.

Bukaza Loth Chachage (2001) conducted a survey of Internet users in Cyber Cafés in Dares Salaam, Tanzania, to assess the knowledge and awareness of Internet users showed that Internet users were largely males, and used Internet mainly for personal communication and visited recreational websites that mainly consisted of obscene materials. Lower level of awareness and training among end-Internet users and staff were noticed. It recommended for informing awareness, need of training & sensitization to the staff of Cyber Cafes(Bukaza Loth Chachage, 2001)<sup>43</sup>.

Caroline E. Akporido and Abraka, Nigeria (2005) examined use of Internet in Nigeria which revealed that the average Internet user tended to exploit the services of Internet mainly supported with use of Yahoo search engine for sending & receiving e-mails; research, and gathering latest data and information. The major problems encountered by them were relating to infrastructure and technical bottlenecks as well as human and personnel issues. It was found that not all the problems such as national grid power failures were strictly within the power of the cybercafé' operators. Although, the Cybercafés provided a useful service to its potential Internet users to facilitate use & access of Internet. It also recommended that the relevant Government Agency should improve the electricity supply from the national grid so as to cut down the cost of running a stand-by electricity generator in Cyber cafés.

Besides, Internet Service Providers (ISPs) should work towards increasing the bandwidth or speed of Internet that would enable a reduction in access time, Cyber Cafe operators should employ the services of skilled staff to handle the equipment and assist Internet users when in difficulties ( Caroline E. Akporido, and Abraka, Nigeria ,2005)<sup>44</sup>.

T.O. Oyebisi (2001) found that the socio-economic benefits of Internet cannot be over-emphasized. Its importance to the commercial life of any country is compelling. It attempted to examine the contributions of Internet to the Nigerian Commercial Sector, and its policy and technology management implications. The policy and technology management implications formed the basis for maintaining an operative balance between the ISPs, and the corporate Internet users to carry out SWOT analysis, and the effective monitoring of the ISPs by the National Communications Commission (NCC) (T.O. Oyebisi, 2001)<sup>45</sup>. Since the evolution of Cyber Cafes initially in Europe and thereafter it has increased across the world, including many developing countries, like China. However, Cyber Cafes carried a vital socio-political significance in China compared to many other economics. Cyber Cafes in China showed the fastest development in China and have the largest number in the entire world, considering China's unique economic, political and social situations. In a nutshell, Cyber Cafes have been viewed as an important vehicle for accelerating China's formation of information society and also as a catalyst for China towards a democratic society.

Junhao Hong and Li Huang (2005) appraised China's approach in building of an information society by using Cyber Cafes with an objective to explore socio-political role of Cyber Cafes in China's efforts of informatization, to assess impact of Internet and Cyber Cafes on the country's democratization and the Governments' dilemma between promoting informatization and resisting democratization. It focused on four related issues viz; First, the swift development of Cyber cafes; Second, the unique socio-political importance of Cyber Cafes in China; Third, the Government's split policy on Internet and Cyber Cafes, and Fourth, the conflict between the public concern and the Government concern with the impact of Internet and Cyber cafes.

It primarily relied on primary data and research materials obtained through field research in China, including archives; research of Government documents, results of surveys, and interviews of relevant Government officials; Cyber Cafes owners, scholars of communication, and Internet and Cyber Cafes Internet users.

Its Information technology (IT) has begun to bring out changes in China's political system, which provided a place to the people of China to express their views on sensitive political issues. It gave them giving more open room to participate in political communication, and promoted the democratization process. But, till today the people of China still have to use Internet under the strict regulations and enjoy only limited freedom of expression (Junhao Hong and Li Huang, 2005)<sup>46</sup>.

## **2. III: 1:2: A Review of Literature on Use of Internet & Behaviour of Internet Users:**

Tshteo, Vkglimandryclai (1997) undertook an online survey to study use of Internet in Singapore. Its results showed that Internet users in Singapore were generally comprised of teenagers and young adults.

Messaging and browsing activities were performed more frequently than downloading or buying activities. The bandwidth of an Internet connection for access was rated as highly important amongst Internet users (Tshteo, Vkglimandryclai, 1997)<sup>47</sup>.

Xiang Fang, David C. Yen (2006)<sup>48</sup> conducted an empirical research on the demographic and behavioural trends of Chinese Internet users that had helped both researchers and practitioners to understand the changing nature of Chinese Internet users that After China's accession to the World Trade Organization (WTO), Internet service markets opened for foreign investment. An increasing number of Chinese people and organizations have been using Internet for varying purposes, understanding on the relations between demographic data and behavioural patterns of Internet users in China. Its findings facilitated the development and construction of websites capable of reaching Millions of existing Internet users. The main objective of the study was to analyze and identify emerging patterns among Chinese Internet users may delineate the changing nature of the Internet users' considering their demographics and online behavioural patterns. Another objective of the study was to explore the implications of the patterns. Early adopters of new technologies, including Internet were more likely to be young, males, better educated, more affluent, urban, and not members of a racial or ethnic minority group [Rogers W, Beale EM, 1995 and Norris P. , 2001)<sup>49</sup>.

Several studies have been conducted at Georgia Institute of Technology to understand US Web consumers' demographics and resulting attitudes toward online activities and behaviour. Socio-economic and demographic differences in the use of computers and Internet were vital measures because the ability to use these technologies has become increasingly critical to economic success [National Telecommunications and Information Administration (NTIA), 1999]<sup>50</sup>.

To illustrate, Pitkow and Kehoe (Pitkow J, Kehoe C., 1996; and Pitkow J, Kehoe C, 1997)<sup>51</sup> examined emerging trends among Internet users in the US, and found that they shifted rapidly from originators of the technology to initial Internet users in education and research settings. They were also the ones who provided connectivity at work and school, and also actively sought Internet connectivity.

It could also found a shift toward younger Internet users, the increased acceptance and use of the Internet by women, and greater availability of the Internet for median income Internet users.

Yael Fisher, Orit Bendas-Jacob(2006)<sup>52</sup> had described two instruments for measuring use of Internet and the changes in respondents' use of Internet following a controlled intervention. It had focused on the use and lack of use of Internet for measuring the digital gap.

The digital gap was defined as the gap between individuals with and without access to technology such as use of telephones, computers, Internet and other Internet related activities. Since its emergence, Internet has become the most important form of Information and Communication Technology (ICT).

With a goal to develop ways of measuring use of Internet for different segments of the Israeli population, which was 45.8 per cent compared with 68.2 per cent of the US population. It had witnessed a significant increase in the number of Internet users in the West in general and especially in particular in case of Israel that showed an increase of 152 per cent in the number of Israeli households connected to Internet during 2000 to 2005. However, large differences were apparent between the stronger and weaker sections of the Israeli population is concerned, and controlled intervention has been therefore regarded as a very important means of reducing these discrepancies. It has described two measurement instruments. The first instrument examined on-line proficiency, where as the second one has determined pattern of use of Internet and the stage of respondents' awareness on Internet. The instruments were built to determine the reduction in the digital divide associated with use of Internet followed with controlled intervention, and the population's Internet usage status before and after intervention. The difference between these two measurements represented the increase or decrease in use of Internet. That might be used by agencies making decisions about resource disbursement to reduce the digital divide in a variety of populations (Yael Fisher, Orit Bendas-Jacob, 2006)<sup>52</sup>.

Noam Kaminer (1997) undertook a survey of Faculty members from a college in a major university to explore the possible relationship between use of Internet and identified and selected dependent variables viz., use of computer in terms of length of time and perceived expertise, as well as length of time of use of Internet, perceived expertise in use of Internet and perceived utility of Internet.

97 per cent of faculty members had an Internet account. Furthermore, computer literacy and the time one had used computers were correlated with early adoption of Internet, Perceived utility of Internet was correlated with computer literacy and use of Internet. It was correlated with perceived Internet expertise but not with the length of time the faculty member had used Internet.



Highly skilled computer Internet users were more likely to use the network in a more intensive way and have higher appreciation of the network's potential was found among them (Noam Kaminer, 1997)<sup>53</sup>.

Primoz Juznic, Maja Blazic, Tanja Mercun and Barbara Plestenjak (2006) revealed that though in modern society, there was a prevailing belief that computers and Internet were mainly used by younger generations, who grew up with modern technology, and were info-savvy, but in past more and more older people have begun to learn how to use computers and Internet. The researcher had analyzed use of Internet among seniors in Slovenia using a survey that was carried out with the help of a questionnaire. It was found that among the seniors, only one third were active Internet users. It was less than expected, as Slovenia had quite high use of Internet among its citizens. Education and partly age were found as important factors in use of Internet.

Public libraries played a particularly vital role in offering information on literacy courses, space and other services to them. Although, it was not confirmed by the results of the study (Primoz Juznic, Maja Blazic, Tanja Mercun and Barbara Plestenjak, 2006)<sup>54</sup>.

Judy Chuan-Chuan Lin and Hsipeng Lu (2000) had attempted to develop an understanding of the behavioural intention to use a website. The growing popularity of Internet has lead to offering of excited opportunities for companies to reach out to its target customers with very little additional costs.

In order to communicate with the potential customers through Word Wide Web effectively, a well-designed Web page is needed. Yet, those factors that affect Internet users' perception on the acceptance or rejection of a Website were unclear. They addressed issue of why Internet users accepted or rejected a Website and how Internet users' acceptance was affected by the features of the website that is information quality of a Web site, response time and system accessibility offered by it. Its results showed that the Technology Acceptance Model (TAM) fully mediated the usage behaviour even in Internet environment, which accounted for 64 per cent of the variance in use of Internet. Furthermore, response time of a Web site emerged as an important factor that affected the Internet user's beliefs on such a Web site.

It showed that Web page providers not only had to make the content informative and timely, but they were needed to design a speedy Web page by not putting an unnecessary pictorial data as it might jeopardize the display time. Although, the results showed that quality of information, response time and system accessibility affected Internet user's belief on Web site, it is important to realize that other factors also played vital role in affecting Internet user's beliefs. To Illustrate factors such as norms and peer influence (Karahanna & Straub, 1999)<sup>55</sup>, Computer experience (Igaria, 1993)<sup>56</sup>, and innovation characteristics (Agrawal & Prasad, 1997<sup>57</sup>; Liao, Shao, Wang & Chen, 1999)<sup>58</sup>. Future research should therefore gear up towards the search of the roles affecting user's beliefs (Judy Chuan-Chuan Lin and Hsipeng Lu, 2000)<sup>59</sup>.

Chien Chou, Linda Condron, and John C. Belland (2005) revealed that maladaptive patterns of use of Internet constitute behavioural addiction. It explored the research on the social effects of addiction to Internet.

This has reviewed research findings and focuses on several key factors related to Internet addiction, including Internet use and time, identifiable problems, gender differences, psychosocial variables, and computer attitudes and considered the addictive potential of Internet in terms of Internet, its Internet users, and the interactions of the two. It had also addressed on current and projected treatments of Internet addiction, and suggested for future research agendas by offering implications for educational psychologists. The use of Internet on school campuses in society had increased dramatically. Whereas the academic use of Internet is primarily intended for learning and research, Internet has also become an important part of student life (Chien Chou, Linda Condron, and John C. Belland, 2005)<sup>60</sup>.

Chou et al. (1999) found that in one residence hall at the university, four roommates were busy, quietly working on their computers. They logged on to Internet to chat with other people, whom were no other than their roommates. Some College students remain connected to Internet as long as they were awake. Teachers noticed that fewer and fewer students were willing to take early morning classes, and some of those who registered for morning classes regularly came late. It had also came to the attention of some school administrators that some students obtained poor grades or were placed on academic probation because they spent too much time on Internet rather than on their studies. In view of these observations, they examined how and why the Internet hooked students so tenaciously, which lead them to new behavioural patterns, and resultant in to Internet addiction. Indeed, academic attention has been given in recent past to what some researchers termed as Internet addiction. Although, the concept is still evolving and debated, some empirical studies have been carried out in the recent past (Chien Chou, Linda Condron, and John C. Belland, 2005)<sup>61</sup>.

Thompson S.H. Teo & Margaret Tan (1998) undertook an empirical study of adopters and non-adopters of Internet in Singapore based on a questionnaire survey to study on the organizational characteristics, benefits of adopting Internet, reasons for not adopting Internet, criteria for selecting Internet access service providers to better understand Internet phenomenon in Singapore (Thompson S.H. Teo & Margaret Tan, 1998)<sup>62</sup>.

The Internet had its origins in the early 1960s, when the US Department of Defense realized the need for a decentralized computer network that provided the Pentagon with a command and control communications system in the event of contingencies such as nuclear war [1]. This early network, known as the Advanced Research Projects Agency network (ARPANET), gradually appeared in University and Government research laboratories, and eventually became the technological underpinnings of Internet.

Programs were written to enable people to exchange electronic mail, tap into remote databases, run Super-Computers at a distance, and brainstorm via electronic bulletin boards. The most powerful innovation was the communications protocol that gave Internet its name Internet Protocol.

For potential adopters of Internet, the findings were instructive as to the common objectives of Web sites, potential benefits of Internet adoption as well as the need for a champion to promote the adoption of Internet. For IASPs (Internet Access Service Providers) and policy makers, this study provided insights as to why some firms did not adopt Internet. The study also examined the criteria for selecting IASPs. Policy makers could perhaps use similar criteria to evaluate current and potential IASPs as to their suitability as providers of Internet services.

Existing IASPs should continue to provide competitive price, high access reliability, excellent customer service and technical support if they wanted to retain existing customers as well as to attract new customers (Thompson S.H. Teo & Margaret Tan, 1998).<sup>62</sup>

## **2. III: 1:3: A Review of Literature on Concept of Flow:**

Various research have studies reported that flow experience in numerous activities including rock climbing, dancing, chess, reading. (Csikszentmihalyi, 1975<sup>63</sup>; Csikszentmihalyi and LeFevre, 1989<sup>64</sup>).

Csikszentmihalyi (1975) introduced the concept of flow, as the holistic experience that people feel when they act with total involvement. When in the flow state, people were absorbed in an activity, their focus of awareness was narrowed, they lose self consciousness, and they feel in control of their environment.

Several authors have suggested that the concept of flow has been useful for understanding consumer behaviour in computer-mediated environments, (Csikszentmihalyi, 1990<sup>65</sup>; Trevino and Webster, 1992<sup>66</sup>; Ghani and Deshpande, 1994)<sup>67</sup>.

Csikszentmihalyi (1975) was the first one who identified four flows of components viz., control; attention; curiosity; and intrinsic interest. These were afterwards replaced by Csikszentmihalyi (1993), with eight dimensions of the flow experience viz., clear goals and immediate feedback; equilibrium between the level of challenge and personal skill; merging of action and awareness; focused concentration; sense of potential control; loss of self-consciousness; altered sense of time; and experience becoming auto telic or self-rewarding. There were two methodological problems with empirical research of flow concerning the nature of the concept and the timing of the research. This research adopted the approach that in order to identify and illuminate the experience of flow, the concept itself needed to be discussed with respondents.

The timing problem was that if there is a delay between the experience of flow and the interrogation of the respondent, there was a loss of information through memory decay, on the other hand respondents were found irritated if interrupted and questioned while in the flow-state (Csikszentmihalyi, 1975)<sup>63</sup>.

The size of that section of the electronic market place, known as Internet substantially depends on how many people acquire and retain access of Internet. This core of Internet users has been the bedrock on which electronic commerce is to be built.

More attention has been given to the reasons why individuals join Internet community than to their motivation for leaving it. Research can be helpful in determination of those variables that relates to a consumer's propensity to enter the flow-state.

Hoffman and Novak (1997)<sup>68</sup> identified flow as a key characteristic of consumer behaviour on Internet.

The flow is the glue holding the consumer in the hypermedia Computer Mediated Environment. Hoffman and Novak applied the concept of flow with reference to repeat usage. Such information is useful in development of marketing efforts. Commercially, the concept of stickiness has been described as a crucial element of Web design; this includes features such as updating of regularly content and online diaries.

**Alternatively, Men tend to be more interested in computers than Women on an average, gender differences contributes in use of Internet Gender differences of computers use in classrooms and at home and studies on this might provide interesting results on use and access of Internet (Shashaani, 1997)<sup>69</sup>.**

Paul Kingsley and Terry Anderson (1998)<sup>70</sup> carried out exploratory research on some of the likely Internet defectors in order to identify intelligent questions that could form the basis for subsequent experimental hypotheses.

They examined possible critical mass effects in the adoption of Internet as a piece of an innovative technology, and also to shed some light on the question of knowledge gaps, problem of the information rich and the information poor. One of the main purposes of this research was to ask intelligent questions. Prior to the formulation of detailed hypotheses that embodied these questions it was often necessary to explore the ground in a more tentative way in order to identify areas where more rigorous experimental work might be justified. It was found that in their own university large numbers of individuals left Internet before graduation. Its findings had suggested the value of opening up a new field of research into the problem of such gaps and there was scope for further research to better identify how interest in information can be generated.

It showed that it cannot be assumed that everyone will see information as having a self-evident value. In some situations, the acquisition and retention of information will be viewed as a burden. There would seem to be opportunities here for the providers or sellers of information to package and customize their products in such a way as to minimize this burden.

If people do not necessarily have unlimited interest in looking for information, then there could be good business to be done by dropping the right product in their laps (Paul Kingsley and Terry Anderson, 1998).

Ruth Rettie (2001) suggested that the concept of flow was useful for understanding consumer behaviour in Computer Mediated Environments. Previous Internet flow research has used self-completion questionnaires.

This research study used focus groups to facilitate the identification and discussion of respondents' Internet experience. It attempted to explore respondents' awareness and experience of flow found that half of the respondents recognized Internet flow experience and that Internet flow seemed to prolong use of Website. It had identified several factors that promoted or inhibited Internet flow. To help practitioners to design Websites that shall stimulate flow and encourage Internet users to stay on the website (Ruth Rettie 2001)<sup>71</sup>.

## **2. III: 1:4: A Review of Literature on Gender & Use of Internet:**

Gender differences in use and access of Internet has been important because groups that have lower usage rates risk were being excluded from job and educational opportunities as well as they lose political influence as Internet has become increasingly important to how people live and work (Norris, 2001)<sup>72</sup>.

Such intergroup differences tend to eventually diminish. Although, it is not necessary that it shall disappear altogether, as technology diffuses over a period of time (Compaine, 2001b)<sup>73</sup>.

Kenneth C.C. Yang (2002) investigated factors influencing Internet users' perceived credibility of news-related blogs in Taiwan. It identified Internet users' beliefs about credibility of news-related blog. It also examined whether these belief factors could predict their perceived credibility of news-related blogs. It explored whether Internet users' individual characteristics; Internet use motivations; Internet use behaviour, and innovative characteristics is helpful to predict their perceived credibility on news-related blogs. Four belief factors about news-related blog credibility were extracted from 13-item five-point Likert questions that accounted for 57 per cent of the variance. Two out of four belief factors contributed significantly to the prediction of Taiwanese Internet users' perceived credibility of news-related blogs. These predictor factors altogether explained 18.3 per cent of the variance in Internet users' perceived credibility on news-related blogs. The full model explained 29.1 per cent of total variance in Taiwanese Internet users' perceived credibility of news-related blogs. After controlling all possible confounding variables, the predictive impacts of credibility factors on Taiwanese Internet users' perceived credibility of news-related blogs remained powerful and stable (Kenneth C.C. Yang, 2002)<sup>74</sup>

Hiroshi Ono (2003) examined whether there were differences in men's and women's use of Internet and whether any such gender gap had changed or not by using data from several surveys during the period 1997 to 2001 to showcase trends in use of Internet to estimate regression models of Internet usage that control for individuals' socio-economic characteristics. Women were found as significantly less likely than men to use Internet at all in the mid-1990s. But, this gender gap in being online was to disappear by the year 2000.

However, once online, women remain less frequent and less intense Internet users of Internet. There had been a little reason for concern about sex inequalities in access and use of Internet, but gender differences in frequency and intensity of Internet usage shall remain. Gender differences in adoption rates too may also exist because men and women differ, on an average, in socioeconomic status and that influenced use and access of computer (Hiroshi Ono, 2003)<sup>75</sup>.

Gradations in frequency of use of Internet from non and low Internet users through to weekly and daily Internet users were found to map onto a progression in the take-up of online opportunities among young people from basic through moderate to broad and then all-round Internet users. Thus, it offers explanation on differences in use of Internet use matter that contributes to inclusion and exclusion.

Demographic, use and expertise variables play crucial a role that has in accounted for variations in the breadth and depth in use of Internet. A digital divide threatens to exacerbate already-wide gaps between rich and poor, within and among countries. The stakes were high indeed. Timely access to news and information could promote trade, education, employment, health and wealth. One of the hallmarks of the information society is openness which is a crucial ingredient of democracy and good Governance. Information and knowledge are also at the heart of efforts to strengthen tolerance, mutual understanding and respect for diversity (Annan, 2003)<sup>76</sup>.

Padmini Patwardhan (2004) worked upon Exposure, Involvement and Satisfaction with Online Activities within a context of primary online activities such as e-Commerce, information search, communication and entertainment to explore exposure in terms of time and frequency; cognitive and emotional involvement, and post-exposure satisfaction with online activities among Internet users in the US and India. It was found that US and Indian Internet users displayed similar patterns of activity engagement. Informative and communicative use of Internet, as compared to commercial and recreational use appeared to be more prevalent at that point of time. It repeated that satisfaction for information search and communication activities for which higher levels of cognitive and emotional involvement and exposure were reported. By comparison, lower satisfaction levels were reported for e-Commerce and online entertainment, with lower levels of involvement and exposure as well. A notable exception was high cognitive involvement in e-commerce, an activity in which higher levels of cognition might be expected. Indian Internet users appeared to be leapfrogging in the digital divide. However, use of convenience sampling and likelihood of respondents being early Internet adopters in India had influenced findings and further research is required to validate initial results (Padmini Patwardhan, 2004)<sup>77</sup>.

## **2. III: 1:5: A Review of Literature on Information Search Behaviour of Internet Users:**

**Many studies have attempted to the information search behaviour of Internet users.**

It has covered a number of studies that goes beyond discussions of information search behaviour itself, and into its applications to closely related topics, such as patterns of information search behaviour and uses of Internet.

**Little academic and policy attention has been accorded.**

Sonia Livingstone and Ellen Helsper (2007) focused to study on the digital divide among students and young people to analyze findings from a National Survey in UK 9 to 19 years old that revealed inequalities by in terms of age, gender and socio-economic status in relation to their quality of access and use of Internet.

Since both the extent of use and the reasons for low and non-use of Internet varies as per age, and hence different explanation for the digital divide is highly essential for children compared to adults. Looking beyond the idea of a binary divide, the researchers proposed instead a continuum of digital inclusion (Sonia Livingstone and Ellen Helsper, 2007)<sup>78</sup>.

Young individuals' lives were increasingly mediated by Information and Communication Technologies (ICTs) at home, at school and in the community. Yet, very few research studies has addressed an inequalities in children and young individual's access and use of Internet, or the reasons why some of them make little or no use of Internet ( Sonia Livingstone and Ellen Helsper, 2007)<sup>78</sup>.

Mohammad Nazim (2008) explored to assess Information Searching Behaviour in Internet Age based on a survey that was conducted at Aligarh Muslim University (AMU) to determine the extent to which Internet users were aware and made use of Internet resources and services. It was found that the majority of respondents had a 5 year history of access of Internet. The Academic Staff spent more time on Internet than the Students and Research Scholars. Although, Internet search engines were reported as the most preferred information search tool, apart from use of a Databases, Gateways and World Wide Web (WWW) that were part to use. Online Journals and Databases too were reported as the preferred information sources amongst Internet users. Respondents chose e-Mail, WWW and Search Engines as important Internet services. About 60 per cent of them believed that the good quality of information on Internet can make it a useful tool for education and research. Slow speed, lack of training and information overload was indicated as some of these factors that were adversely affecting use of Internet. It recommended a well-planned Internet literacy program and preparation of subject gateways. The digital format of the library consists of various electronic resources, such as electronic or e- books, e-journals and e-reports. Institutional repositories as well as archives are some of the important contributions of Information prevalent Internet or technology.

A new class of digitized documents has been added to the electronic resources category which comprises of those documents either originally published in print or other formats that has been converted now into the digital format (Asemi, 2005)<sup>79</sup>. Internet has become a major source of information for a large number of people, especially for the academic community (Spink, Bateman, & Jansen, 1999)<sup>80</sup>. As a result of ever growing sources of information on Internet; it has become difficult to ascertain the quality and authenticity of such information. In addition, a user or information searcher needs to have basic skills to find relevant information in Internet.

Therefore, it is highly essential for the information professionals to study the information search behaviour of academic communities. It necessitates the regular study and development of new facilities to maximize the use of Internet services by Internet users for education and research. The rapid growth of Internet use has created a need for an Internet users' study to assess the quality of search requirements, Internet users' search habits and the problems encountered while assessing and using Internet resources and services (Mohammad Nazim, 2008)<sup>81</sup>.

Mahajan and Patil (1999) conducted a study to examine the purpose of uses of Internet by research workers at Pune University. It was found that researchers used Internet primarily for conducting literature search (Mahajan and Patil, 1999)<sup>82</sup>.

Bavakutty and Salih (1999) conducted a study at Calicut University which showed that students, research scholars and teachers used Internet primarily for the purpose of study, research and teaching (Bavakutty and Salih, 1999)<sup>83</sup>.

Naushad Ali (2000) conducted a study at AMU, Aligarh which showed that more than 50 per cent of the respondents were found as satisfied regarding the amount of time allowed on Internet. But, they were found as dissatisfied with the staff's cooperation and with the unavailability of reservations. The majority of them were found as dissatisfied with the availability of number of nodes (Naushad Ali, 2000)<sup>84</sup>.

Chandran (2000) conducted a study to examine use of Internet Resources and Services in S.V. University, Tirupathi, which indicated that more than 56 per cent of respondents used Internet to access information. It was found that the majority of respondents used Internet for e-mail services (Chandran, 2000)<sup>85</sup>.

A survey of use of Internet facility at the Guru Nanak Dev University, Amritsar which was conducted by Kaur (2000) provided that all respondents used Internet to send e-mail and 82 per cent of them used Internet for browsing. More than 60 per cent of the respondents used Internet for collection of primary information, 38 per cent for secondary, and only 15 per cent used it for consulting OPACs (Online Public Access Catalog) (Kaur, 2000)<sup>86</sup>.

Mahajan (2006) conducted a study on use of Internet by researchers in Punjab University, Chandigarh, which was aimed to analyze the convergence of Information and Communication Technologies (ICTS), as embodied by Internet that has transformed the modern society into a knowledge society.



The respondents considered Internet as the most valuable computer technology as available to society (Mahajan, 2006)<sup>87</sup>.

**One can find studies on 'Information Search Behaviour' of Internet users that have been conducted worldwide.**

James Katz and Philip Aspden (1995) analyzed a national random telephone survey on the motivations for and barriers to use of Internet. It provided empirical evidence of a digital divide and brought out that Internet users were generally wealthier and more highly educated, as well as Blacks and Hispanics were found as disproportionately unaware of use of Internet.

Social and Work networks appeared vital for stimulating interest in use of Internet. Social and personal development emerged as to the key driver, while non-users had exhibited a different set of beliefs on value of Internet.

Further, in case of barriers to use of Internet, even experienced Internet users found it difficult to get started, which confirmed findings of earlier other studies. Barriers included cost and difficulties in understanding use of Internet. It favourably concluded that individuals strongly desired an easy to use Internet. The demographics of Internet users and non-Internet users showed marked differences.

To illustrate, the demographics of the five categories of respondent viz.; current long-time & recent Internet users, former Internet users, non-Internet users who have heard of Internet, and non-Internet users who have not heard of Internet were found as very different. The current long-time Internet users were mainly males & somewhat younger than average, very well-educated, and very much better off. The Former Internet users too were more likely to be males and they too were very much younger than the average Internet user, slightly better educated with average household incomes of Internet users. The non-users who had heard of Internet were more likely to be females but otherwise they were found close to average in terms of age, educational level and household income. A disproportionate number of Black and Hispanic respondents showed that they were unaware of Internet. In addition, members of this group were more likely to be females; older, less well-educated, and less well off (James Katz and Philip Aspden, 1995)<sup>88</sup>.

Weiner and Brown (1995) examined several societal changes that were likely to contribute to growing acceptance of electronic commerce amongst the consumers. Demographic shifts, a greater focus on saving of time, and an increasing product and information proliferation represented some of these changes that are likely to take place amongst in Western society (Weiner and Brown, 1995)<sup>89</sup>.

It appeals to, and was taken advantage of for leisure purposes by, all family members. That is in sharp contrast to the personal computer, which initially was brought in to the home for the male household member for work purposes (Venkatesh 1996)<sup>90</sup>.

The travel industry consistently has been identified as one of the industry which is likely to be affected most by the advance of Internet. This proposition is said to be applicable also to both Advertising and Selling on Internet. Travel Industry is usually rated among the top three products and a service categories purchased via Internet, as it has indicated by several consumer surveys (Heichler 1997)<sup>91</sup>

Karin Weber and Wesley S. Roehl (1999)<sup>92</sup> argued that Internet and the World Wide Web (WWW or the Web) in particular, represented a recent technological innovation that has had a profound impact on all facets of lives of people's. The potential of Internet for businesses to conduct electronic or e-commerce has received even greater attention in the literature (Alba et al. 1997)<sup>93</sup>.

Singh (1998) offered the results of a research study on the use of Internet by the librarians in Malaysia which revealed that 90per cent of the respondents used Internet for work related purposes (Singh, 1998)<sup>94</sup>.

Becker (1998) conducted an empirical study on use of Internet amongst public and private school teachers in US which indicated that 90 per cent of the respondents had accessed Internet. The majority of the teachers had Internet access at home. They used Internet to search for information resources for preparing their lessons (Becker, 1998)<sup>95</sup>.

David W. Cheung, Ben Kao and Joseph Lee (1998) argued that the World Wide Web has provided its Internet users with almost unlimited access to documents on Internet. The suggested use of intelligent agents to assist Internet users in order to locate documents related to their interests instead of browsing of Internet via primitive search engines. A number of key components in such intelligent systems were identified and system architecture was also proposed by them. In particular, a learning agent was designed along with the underlying algorithms for the discovery of areas of interest from Internet users' access logs. The discovered topics could be used to improve the efficiency of information retrieval by perfecting documents for the Internet users and storing then in a document database in the system. A prototype system that was implemented to illustrate the various concepts. Experiments were performed which showed that the area of interest discovered can in fact be used to improve the efficiency of information retrieval on a distributed information system such as Internet(David W. Cheung, Ben Kao and Joseph Lee,1998)<sup>96</sup>.

Karin Weber and Wesley S. Roehl (1999) offered a profile of such consumers. It outlined their demographic characteristics, their Internet use behaviour and attitudes, and data on Internet shopping behaviour. It not only provided a demographic profile of consumers who searched for travel information on-line but also compared it with those people who searched for this information off-line(Karin Weber And Wesley S. Roehl,1999)<sup>92</sup>.

Voorbij (1999) examined the use of Internet amongst Students and Academicians in the Netherlands, which revealed that both the groups faced number of problems while searching general, factual, ephemeral or very specific information on Internet (Voorbij , 1999)<sup>97</sup>.

Thompson S. H. Teo, Vivien K. G. Lim, Raye Y. C. Lai; Omega (1999) focused on both intrinsic that is perceived enjoyment and extrinsic that is perceived usefulness motivation for the use of Internet. An electronic Webpage survey was used for the data collection based on total number of 1,370 usable responses. Its results provided that local Internet users used Internet mainly because they perceived Internet as more useful to their job tasks and secondarily, because it was enjoyable and easy to use. It was found that while perceived usefulness had consistently strong effects on all usage dimensions that are frequency of Internet usage, daily Internet usage and diversity of Internet usage, perceived ease of use and perceived enjoyment affected each specific Internet usage dimension differently.

This research examined three motivators relevant to explaining the acceptance of information systems in general, namely viz., perceived usefulness, perceived enjoyment and perceived ease of use.

Its results indicated that local Internet users use Internet mainly because they perceived Internet to be more useful to their job tasks and secondarily because it is enjoyable and easy to use. Hence, researchers, practitioners and policy makers seeking to facilitate the adoption of Internet should emphasize the usefulness of Internet in assisting Internet users in performing their job tasks more efficiently and effectively. Since perceived usefulness has been generally more important than perceived ease of use and perceived enjoyment in affecting Internet usage, this might imply that systems at first seems easy to use and enjoyable may in the long run be abandoned if they do not provide critically needed functionality. Although the results showed that extrinsic motivation is generally stronger than intrinsic motivation, it is important to realize that other factors may also play an important role in affecting usage. Illustrations of such factors include computer experience and anxiety, computer skills, organizational support and social pressure, self-efficacy and user training (Thompson S. H. Teo, \*, Vivien K. G. Lim, Raye Y. C. Lai; Omega, 1999)<sup>98</sup>.

Christos Emmanouilides & Kathy Hammond (2000) looked at two major aspects of Internet usage behaviour; active (current) versus lapsed Internet usage and Internet usage frequency among current Internet users. It was found that the main predictors of active or current use of Internet were Time since first use of Internet. Pioneers (very early adopters) were most likely to be active Internet users.

However, the relationship was not linear one Middle adopters were more likely than other groups who had not used Internet in the previous month. Social use at home, especially with two or more other people. Personal communication was the most popular activity used by just over half the sample, but the best predictors of active Internet users were use of information services. The main predictors of frequent or heavy Internet use (201 times per month) were viz., broad applications, e.g., business e-mail followed by personal e-mail. The relationship was linear; the longer someone had used Internet, the more likely s/he was to be a heavy user. Use at work and use at home with two or more other people emerged as strong predictors of heavy usage (Christos Emmanouilides, & Kathy Hammond, 2000)<sup>99</sup>.

Kalichman (2002) undertook a survey on access and use of Internet for health information amongst people living with HIV-AIDS. It was found that the majority of respondents were found as unaware on the availability of health information on Internet (Kalichman, 2002)<sup>100</sup>.

Xiaoyingdong (2003) examined the use of Internet resources and the evaluation of its usefulness from the perspectives of Chinese students and academics. The questionnaires were distributed at Peking University, ISTIC, and at the Information Institute of Science and Technology of Zhejiang Province, where 706 valid responses were gathered.

The data was analyzed considering the background variables of Internet users; the standard of Internet resources; Internet information-seeking behaviour; Internet users' evaluations of Internet resources, and their perceived expectations about future Internet services. It was found that Internet users with higher educational degrees spent more time on Internet, and Internet resources were found more useful by them than less educated Internet users. Although, Internet search engines were felt as the most preferred information retrieval tool, compared to other traditional or informal retrieval methods that were also used. Many respondents agreed that Internet was helpful in narrowing the knowledge gap between developed and developing countries.

Besides, its richness and high speed, accuracy and authority were found as the most important factors when Internet users judged the quality of Internet; but, more specialized information filtering and navigation services were required. The scholars on the frontiers of academic research and teaching have increasingly relied on use of Internet resources. The younger generations with advanced educational degrees usually spend more time on Internet, and give higher evaluations on its usefulness. Income was not the key factor affecting use of Internet.

Although, the cost of accessing Internet was still an issue, it was found that lower incomes were not a major barrier in use of Internet. For the faculty & researchers, universities as well as institutions mainly provide free access of Internet. The groups most affected by Internet charges are students or the unemployed individuals. Subject backgrounds do not affect the use of Internet and time spent on it. Although, scholars with educational backgrounds in Science & Technology consists of a major part of the Internet user population. It does not mean that they spend more time on Internet. It was found that the Internet users from the humanities were supposedly more oriented toward traditional publications.

They comparatively spent more time on Internet compared to Internet users belonging to the Applied Sciences. Nearly, two thirds of Internet users believed that Internet was useful or is very useful to their work or study. To learn the latest developments in disciplines and professions is one of the crucial motivation behind accessing of an Internet. One of the major attributes of Internet is its bandwidth or the speed of disseminating information.

Many scholars had agreed to the statement that Internet is a supplement to other information resources, rather than a replacement of traditional resources and ways as well as means of communication. Using Internet as an efficient way for communicating with colleagues both at home and abroad was found as commonly employed technique amongst the Professors and senior researchers. It was found that the Internet users with advanced degrees tended to discuss or share ideas communities with common interests (Xiaoyingdong, 2003)<sup>101</sup>.

Abdul Razeq Mustafa Younis (2002) reviewed the extent of Internet utilization in Jordanian University Libraries and also discussed use of Internet, its benefits, services and applications as well as the effect on acquisitions, the libraries', organizational structure, administration cost, and services, as well as problems and solutions. It investigated 13 libraries linked to Internet by employment of technical functions, information services, and Web pages.

The Heads of librarians perceived Internet as a supplement to libraries' collections, as a substitute for databases on CD-ROMs, and also as one of the ways of saving on subscription charges for printed journals, but not as a replacement for printed books. They perceived Internet's main administrative effect on staff's satisfaction; motives; speed, and ease of services, Internet users' satisfaction, and turnouts, but have been based on the least effect on libraries' budgets. Lack of experience, misconceptions about Internet, and misuse of Websites, information in authenticity, censorship, copyright, insufficient high quality terminals and language problems are, inter alia, prime reasons that limits the optimal use of Internet (Abdul Razeq Mustafa Younis (2002)<sup>102</sup>.

Gifty Adika (2003) worked to study on the role of Internet in the Universities of Ghana. Lack of access to current materials in libraries of universities in developing countries has been a major problem that has hindered research and teaching. Internet has made it possible for its Internet users to have access to large volumes of information irrespective of their geographical location. The three older universities in Ghana are all linked to the Internet. The assumption then was that which their faculty members now have access to current information through Internet. Its results showed that in spite of the benefits of Internet; its use among faculty members still very low. The main reasons for its lower use of Internet was largely lack of access to Internet and the need for training (Gifty Adika, 2003)<sup>103</sup>.

Manuel J. Sanchez-Franco and Joaquina Rodriguez-Bobada Rey (2004) undertook study to evaluate the mediating role of personal factors affecting the Web behaviour and in turn the length of Web sessions as a highly-subjective variable among individuals. This could be used to explain and improve the Internet users' experience of being and acting in the Web. The study used a flow- versus goal-directed theoretical and practical approach to determine the influence of personal factors on Web behaviours and session lengths.

A field study of 209 Web Internet users was conducted to validate measures used to operationalized model variables and to test the hypothesized network of relationships using partial least squares (PLS) as a second-generation multivariate analysis technique.

The findings indicated that experiential behaviour, followed by goal directed behaviour, had the largest influence on the lengths of Web sessions (Manuel J. Sanchez-Franco and Joaquina Rodriguez-Bobada Re, 2004)<sup>104</sup>.

Spink and Jansen (2004) assessed the changes in Internet search trends during the year 1997 to 2003 and pointed out some patterns and trends in General Web Searching (Spink and Jansen, 2004)<sup>105</sup>.

Hung-Pin Shih (2004) conducted a study by combining the Davis's Technology Acceptance Model (TAM) and the Information Behaviour Model for development of an Extended TAM related to use of Internet. The theoretical model was tested supported with use of a questionnaire survey of 203 Taiwanese office workers.

The empirical results confirmed TAM, and also confirmed that the relevance of information needs strongly determines perceived usefulness, perceived ease of use, and Internet users' attitudes toward use of Internet for information seeking, as well as it strongly influences individual performance during the information use stage. More importantly, relevance has greater positive effect on perceived performance and usefulness for enterprise Intranet Internet users than for simple or interactive Intra-web Internet users. An Enterprise Intranet user showed more positive attitude towards Internet and also revoked positive perceptions of system effectiveness for supporting office tasks than simple or interactive Intra-web Internet users. Furthermore, perceived ease of use of Internet was the strongest determinant of Internet users' attitude toward Internet use in both enterprise Intranet and simple or interactive Intra-web applications. Overall, the extended TAM explained the behaviour of enterprise Intranet Internet users better than that of simple or interactive Intra-web Internet users.

The major contribution of TAM is that it is capable of measuring development of the identification of two key beliefs viz., perceived usefulness and perceived ease of use of Internet (Hung-Pin Shih, 2004)<sup>106</sup>.

Badu and Markwei (2005) carried out a study to find the extent of awareness and use of Internet and its resources amongst academic staff and postgraduate students of the University of Ghana. The main findings of this study indicated that both staff and students were fully aware on use of Internet and most of its services. E-mail emerged as most commonly found as purpose amongst both staff and students who found Internet as very useful resource. The main reason for non-use of Internet was inadequate training. Both staff and students needed appropriate education and training to ensure effective use of Internet in all their academic pursuits a survey of 81 Internet users of a Cyber Café who owned and run the Delta State University (Badu and Markwei, 2005)<sup>107</sup>.

Abraka Igun (2005) undertook study to examine the self-reported level of Internet skills. Its results showed that 71 per cent of respondents rated their Internet skills between averages and very high; 78.8 per cent had acquired Internet skills either online or through teaching by colleagues or friends. Computing skills emerged as the most sought after additional skill (73 per cent). Continuing education and self-study too were found as the most preferred ways to acquire new skills (Abraka Igun, 2005)<sup>108</sup>.

Sara Nephew Hassani (2006) through the research study attempted to study the differences in connection speed, Internet users' skill, and experience as mechanisms affecting digital divide among Internet users, it tried to explore whether location of use can be considered as one of the factor that might limit or can facilitate individual efforts to apply and use Internet toward beneficial activities. At some locations, Internet users enjoy high levels of autonomy, while at others; they might be regulated by restrictions or concerns about surveillance. Its results of data analysis on Current Population Survey (CPS) showed that Internet users who had multiple connection points including home were most likely to conduct four particular activities for which previous research has demonstrated some tangible benefit to Internet users: searching for health and product information online, making purchases online, and online banking. More broadly, its results supported the proposition that differences in Internet access point quality could be identified as a previously unexplored digital divide among Internet users, and also that differences in locations of use of Internet explained gaps in participation in some beneficial activities considering Internet users' background variable such as income and education (Sara Nephew Hassani, 2006)<sup>109</sup>.

Ran Wei (2006) examined the relationships between the lifestyles of urban Chinese consumers and the adoption and use of pagers and mobile phones. Its results showed that the respondents were identified as yuppies that tended to integrate pagers and mobile phones into their conspicuous, westernized and socially active lifestyle. Adopting a pager and mobile phone was found to be a means to achieve social differentiation and identity among this lifestyle segment. It showed the utility of segmentation analysis in delineating complex relationships among demographics, lifestyles and adoption and use of new media called as Internet.

It sought to expand the diffusion of innovation research by linking lifestyles specifically with the adoption and use of wireless communication technologies. Its findings provided empirical support to MacEvoy's proposition regarding the critical role of lifestyles in the adoption of new media beyond demographics. By successfully identifying six lifestyles and clustering urban Chinese consumers into five lifestyle segments, each with distinctive demographic and psychological characteristics, the study revealed that the adoption and use of pagers and mobile phones was motivated by the pursuit of a particular lifestyle (Ran Wei, 2006)<sup>110</sup>.

Zheng Yan (2006) aimed at analyzing complex relationships among Internet users by using Path Models to examine factors related to uses of Internet duration of use of Internet; frequency of use of Internet; and informal Internet classes as well as age and genders impact on use of Internet on uses of Internet users as well as understanding of the technical and social complexity of Internet on 322 elementary and middle school students. The findings of this research study indicated that the age of young Internet users had predominant effects on both the technical and social understanding about Internet.

The frequency of use of Internet and informal Internet classes had through small but significant effects on social understanding, but no effect on technical understanding which had a unidirectional effect on social understanding. (Zheng Yan, 2006)<sup>111</sup>.

Nathan Greenauer, Kristin Macaluso and Christian End (2007) assessed the tendency of individuals to be unrealistically optimistic about Internet related activities. 97 participants estimated their chances of experiencing thirty one positive and negative Internet events compared to the average student at their school. The data indicated that students believed that positive Internet events were more likely to happen to them and negative events were less likely to happen to them compared to the average student. Heavy Internet users reported comparatively more optimistic responses than did light Internet users.

Perceptions of event characteristics such as controllability, desirability, and personal experience also were found as significantly correlated with optimistic bias (Nathan Greenauer, Kristin Macaluso and Christian End (2007)<sup>112</sup>.

Anna Lund Jepsen (2007) argued that Internet has opened new opportunities also for pre-purchase information search. Lower search costs have been found to affect use of Internet for this purpose. Benefits in terms of the large amounts of information available and freedom from physical contact with sales staff have also been found which positively affects the use of Internet for information search. The researcher had put low costs and benefits together in a model that was tested by means of Structural Equation Modeling (SEM) on a sample of Danish Internet users.

The main result of this research study was that the amount of uses of Internet affected use of Internet for pre-purchase information search more than perceived low search costs and perceived availability of information. Further, the test of the model did not support that pleasure in shopping and a preference for personal contact to sales staff affect the use of Internet for information search. In spite of the limitations, this study showed that the amount of use of Internet was the main factor that affected use of Internet for this purpose.

Other factors affecting use of Internet for information search were product interest and inclination to do in-home shopping. Both of these factors augment the consumer's ability to cope with the large amounts of information (Anna Lund Jepsen, 2007)<sup>113</sup>.



Pew Internet & American Life Project, May (2008) had classified Internet users such as Newcomers, Experimenters, Utilitarian's, and Netizens based on their time of adoption and attitudes toward Internet. It had consistently reported on type of Internet usage over time. To illustrate; extent of videogame usage, visits to news sites, and visits to chat rooms. However, few had analyzed a profile of Internet users by type of uses of Internet. The Pew survey argued that as divergent to the image of Generation Y as the Net Generation, Internet users in the decade of 1920s does not dominated every aspect of online life.

Generation X has been the most likely group to bank, shop, and look for health information online. Boomers were just as likely as Generation Y to make travel reservations online. The Silent Generation Internet users were competitive when it comes to email although, teens might point out that this is proof that email is for old people (Pew Internet & American Life Project, 2008)<sup>114</sup>.

Pew Research Center's Internet & American Life Project surveys taken from 2006 to 2008 stated that Internet continuously being populated by younger generations, as compared to half of the adult Internet population that has aged between 18 to 44 years old. However, larger percentages of older generations are online at present as compared to the past, and they had been doing more activities online regularly. The biggest increase in use of Internet was noticed in the year 2005 amongst the age group of 70 to 75 year-old generation that is 26 per cent were online and 45 per cent of them were found online in 2007.

Much as demographic and age groups move up in degrees of access on the thermometers, it could be probably expected to experience such bars becoming more level as time goes on. However, young people dominate the online population at present.

Instant messaging, social networking, and blogging have gained ground as communications tools, but email remains the most popular online activity, particularly among older Internet users. Fully 74 per cent of Internet users aged 64 years and older send and receive email, making email the most popular online activity for this age group. At the same time, email has lost some ground among teens; whereas 89 per cent of teens claimed to use email in 2004, just 73 per cent currently say they use email (Ibid).

## **2. III: 1:6: A Review of Literature on Extended Uses of Internet:**

**The researcher has attempted to outline extended and varied uses of Internet as follows.**

### **2. III: 1:6:1: Teens and Generation Y Find Entertainment And Social Networks Online:**

Teens and Generation Y that is Internet users aged between 18 to 32 years were more likely groups to use Internet for entertainment and communicating with friends and family. These younger generations were more likely to be significant as compared to their older counterparts to seek entertainment through online videos, online games, and virtual worlds, and they also download music. Internet users ageing 12 to 32 years read other users' blog and write their own blogs as compared to older Internet users. They were considered to use social networking websites and to create profiles on such websites than older generation of Internet users.

The Younger Internet users often use personal blogs to update friends on their lives, and they use social networking sites to keep track of and communicate with friends. Teen and Generation Y Internet users significantly send instant messages to their friends as compared to older generations. Teen Internet users' favorite online activity has been game playing comprising of 78per cent of 12 to 17 year-old Internet users, as compared with that of 73per cent of online teens who preferred to email; the second most popular activity for this age group.

Online teens have also been significantly more likely to play games than any other generation, including Generation Y, only half that is 50per cent of whom play online games (Ibid).

## **2. III: 1:6:1: 2: Older Generations Uses of Internet For Research, Shopping & Banking:**

As compared to teens and Generation Y, older generations uses Internet less for socializing and entertainment and more as a tool for information searches, emailing, and buying products. It was found that older Internet users have been significantly search for health related information on Internet as compared to younger generations. Health questions drive Internet users age 73 and older to Internet just as frequently as they drive Generation Y Internet users, outpacing teens by a significant margin. Researching health information is the third most popular online activity with the most senior age group, after email and online search. Internet users aged between 33 to 72 years were also significantly more likely than younger Internet users to use Internet for gathering religious information and they were more likely to visit Government websites in search of information. Generation X comprising of Internet users aged between 33 years to 44 years continued to lead in online shopping. Fully 80per cent of Generation X Internet users buy products online, compared to 71per cent of Internet users aged between 18 to 32 years. Interest in online shopping has been significantly lower among the youngest and oldest groups that are 38per cent. Generation X comprising of 67 per cent Internet users' access online banking, as compared to any other generation group. As Generation Y grows older, the use of online banking has increased that is in the year 2005 38 per cent of Generation Y used online banking and by the year 2008 it has increased to 57 per cent. There has been no significant growth among older generations when it comes to banking online (Ibid).

## **2. III: 1:6:1: 3: Review of Literature on Video Downloading, Online Travel Reservations:**

A few online activities that were dominated by both older generations and younger generations have now being done more equally across all generations under 73 years old. One of the activities is downloading videos, an activity that was popular in the year 2005 amongst teens and Generation Y than with any other generation. In the year 2007, it was found that 31 per cent of Generation X has been increasingly downloading the videos, compared to 38 per cent of Generation Y.

It was found that 13 per cent of Internet users aged 73 years and above reported downloading videos, up from 1 per cent in 2005, and another 13 per cent of the online Silent Generation aged between 64 to 72 years stated that they download videos, up from 8 per cent in 2005. Perhaps, Generation Y is also gaining significant ground in some activities previously dominated by Generation X and older. Generation Y has shown a growth in making their travel reservations online. In 2005, 50 per cent of Generation Y Internet users had booked travel arrangements online, and, in 2008, that number rose to 65 per cent. During the same time, the percentages of Generation X and older generations to make online travel reservations were same. The online network increasingly expanding to include more Generation Y Internet users. Internet users aged between 18 to 32 years were going online more than ever to do research for their jobs. In 2007, 51 per cent stated that they used Internet for their jobs other than for email, compared with 44 per cent of the same group in 2005. Internet has been given a great deal of attention around the world and the number of host computers and Internet users on Internet has been increasing approximately at an exponential rate (Ibid).

## **2. III: 1:7: Review of Literature on Profile of Internet Users:**

A Survey conducted by Juxt Consult Online Research & Advisory (2007) explored data and information on Overall Status and Uses of Internet in India based on a survey that was conducted during December 2008 to January 2009 among 1,35,000 individuals from 16,000 households in 40 Cities and over 12,000 households in 480 villages spread across all the 4 regions of India. Its findings on uses of Internet Dynamics were based on a sample of over 50,000 active online panel members with Juxt Consult with a focus on popular online activities and website preferences that were based on an online survey among more than 12,500 individuals.

Out of these active panel members in February to March 2009 & their socio-economic status, online shopping behaviour, and website and media preferences had been reported on the most used basis. The survey covered towns and villages of all population strata, and households across different socio-economic classes (SEC) within each of these towns and villages. All Internet users down at 47 Million sub-divided as (39 Million Urban and 8 Million Rural Users). Its findings revealed that 1 out of 4 computer users had not used Internet, most new broadband connections were 'replacement' connections, and only 4 Million Internet users had access of through mobile phones. Only 13 per cent of existing Internet users preferred to read in English, 4 out of 5 online Indian were in the prime phase of their life 19 to 35 years, 3 out of 4 of them belong to the consuming and aspiring social classes.

Almost, half of them belong to SEC 'A' and 'B' and half of all of the Internet users were employed. Its findings related to online shopping also showed that most of the Internet users used window shop online, 20 per cent of them bought online in last 1 year 89 per cent of them were regular online Indians who shopped online, searched or purchased using Internet.

Out of which 65 per cent of online buyers had bought online a travel product, and 50 per cent had bought online a non-travel product, 74 per cent of travel buyers bought online train tickets, 34 per cent air tickets, Credit card was found the most popular mode of online payment 50 per cent (Ibid).

The AOL Study conducted by Images Market Research, USA in the year 2005 found that African Americans spent nearly double the time online than the general population. The study also revealed that African Americans embraced the Internet as an indispensable lifestyle tool and a tremendous resource.

They were far more likely to use Internet to access a variety of information such as news (68 per cent versus 56 per cent), entertainment (55 per cent versus 26 per cent), health related issues (72 per cent versus 53 per cent), financial questions/needs (60 per cent versus 40 per cent) and sports (39 per cent versus 26 per cent). Other popular activities included such as using a search engine (92 per cent); communicating with family and friends (86 per cent); using of Internet to get driving directions (85 per cent); opening a Bank Account or online banking (62 per cent); and listening to music online (62 per cent). In addition, 62 per cent of African Americans felt that Internet was helpful with Individual Career Advancement and is also as useful education tool (80 per cent) for all ages. The study clearly revealed that African Americans had turned to Internet in order to save time. Internet had made their lives more efficient, enjoyable and proven to be a life enhancement tool that they were using to attain their goals and realized their dreams. However, the study also found that an overwhelming number of African Americans stated that there was not enough online content that speaks to them as a distinct culture with its own dynamic needs and values ([www.imageusa.com](http://www.imageusa.com)).

Alok Gupta (2001) examined two parametric approaches and one non-parametric approach to estimate Internet users' value-of-time, an important characteristic of demand for Internet services. The advantages of these approaches were made clear and their limitations were discussed. The models that were tested with data generated using Simulation Model of Internet Economy. The researchers initially examined parametric count-data models. While reasonably good results were received by them on all medium and large-sized jobs, the method failed in case of small-sized ones. Second, they had developed a nonparametric quasi-Bayesian update algorithm for retrieving the underlying distribution function of Internet users' Value-of-Time purely based on observations of their own choices. Compared with the parametric count-data models, good results were received in every case by the researchers (Alok Gupta, 2001).<sup>115</sup>

Ian C. Grant (2005) compared young peoples' relationships with new digital and more traditional forms of media. The study explored a mediated relationship that has been emerging in the everyday lives of older adolescent teenagers, who were aged between 13 to 17 years.

The study also utilized Multiple Methods of Inquiry, to seek out holistic depictions of young peoples' multi-media experiences rooted in their everyday lifestyles. The self-completion questionnaires were used combined with use of Mini Focus Groups across three diverse types of school. The quantitative findings of this study confirmed that Internet was used for a diverse range of motivations. To illustrate, one of the least powerful being commercial contact. The qualitative findings highlighted the intensity of young peoples' concern over commercial intrusion that was experienced online.

It highlighted the growing conflict between marketing practitioners who seek to harness digital media for targeted communication and the uses of digital media by young people for non-commercial purposes (Ian C. Grant, 2005)<sup>116</sup>.

Patrick Mitzi, (2002) made an attempt to understand how different cultures influences use of Internet as well as their perceptions on websites that could be translated on global e-Commerce. It was found that the online behaviours of consumers were subtly different in nature compared to traditional consumer behaviour due to the unique characteristics and interplay of technology and culture. Although, commercial use of Internet had been increasing at an exponential rate.

How the multidimensional aspects inherent in traditional consumer behaviour would change in the context of e-commerce was sparsely researched, despite its importance to understand consumers' online behaviour. It was argued that marketer must be fully aware of two different, if not opposite trends. While the patterns of online consumer buying were gradually becoming standardized as evidenced by increasing large number e-retailers following Amazon's Retail Processing Business Model that has localized consumer interfaces with an emphasis on local consumer preferences too were found as also increasing.

It was found that consumers in different countries with different ethnic origins not only used Internet for different purposes, but these different purposes might also lead them to have different impressions on similar Websites. Even though, these might also be due to differences in diffusion or development of e-commerce in different places, the findings suggested that there are alternative strategies available to e-retailers (Patrick Mitzi, et al, 2002)<sup>117</sup>.

Mark A. Bonn, H. Leslie Furr, And Alex M. Susskind (1990) attempted to offer a behavioural profile of pleasure travelers who were segmented on basis of uses of Internet, amongst selected 5,319 pleasure travelers who were interviewed. Initially, the respondents were classified as an Internet user or Internet non-user based on whether or not they used Internet to seek travel related information. Using Discriminant Analysis, Chi Square, and Analysis of Variance (ANNOVA) statistical techniques, a profile of Demographic and Behavioral characteristics was created. The results of this study suggested that those people who used Internet to search for travel-related information were likely to be people who were (a) college-educated owners of computers; (b) aged less than 45 years, (c) stayed more often in commercial lodging establishments, and (d) spent more money each day while traveling.

It identified three mutually dependent congregations viz.; Academic Researchers, Marketing Managers, and Pleasure Travelers, who were not ordinarily perceived as possessing common, much less interdependent, interests (Mark A. Bonn, H. Leslie Furr, And Alex M. Susskind, 1990)<sup>118</sup>.

Karin Weber and Wesley S. Roehl (1999) explained a profile of those people who used Internet to gather travel related information or to buy travel arrangements.

Compared to other World Wide Web users, those who search for or purchase travel on-line were more likely to be in the age group of 26 to 55 years; had higher incomes; were employed in management profession or computer related occupations; and as well as having more years of online experience. Concerns about credit card security, evaluation of product quality, and privacy issues were those problems that were faced by online retailers of travel products at that point of time (Karin Weber and Wesley S. Roehl, 1999)<sup>119</sup>.

The distribution of travel products was in a state of flux. In the United States of America, suppliers had lowered the commission rates paid to travel agencies. At the same time, new technology, which had arrived, offered alternatives to the traditional distribution channels. These changes offered both opportunities and challenges. Some notable differences were observed among a sample of relatively experienced Internet users in travel information search and travel product purchases.

Those who searched for travel information or purchased travel products online were formed as having higher incomes, higher status occupations, and more years of experience with the Internet than did those who did not either searched or made purchase of travel products online.

By contrast, those who did not use the Web to search for or purchase travel products tended to be younger ,25 years of age or under or older ,over 55 years of age. In some ways, these differences were similar to the differences between Internet users and nonusers in general (Times Mirror, 1995<sup>120</sup>, Yankelovich Partners 1995<sup>121</sup>).

Bikson TK, Panis CWA, (1995)<sup>122</sup> and Kominski R, Newburger E. (1999)<sup>123</sup> found that women were more likely than men to use computers and Internet at work, because of occupational differences. Bellman studied a variety of personal characteristics that can be used to predict the likelihood that people will shop on Internet. It was found that typical Internet users gradually moved toward a wired lifestyle, and were time-starved. It claimed that the most important information for predicting shopping habits, either online or offline was an analysis of past shopping behaviours, instead of demographics (Xiang Fang, David C. Yen, 2006)<sup>124</sup>.

Media Matrix [Media Matrix Top rankings, 2000.], drawn a random sample of 10,000 US households who owned a computer and presented key findings about American Internet users, including critical factors that affect shopping behaviour such as gender distribution, median household income, etc.

Some of the studies investigated on the factors and considerations that affect online shoppers' shopping or buying behaviour. Forrester [1999] found that a lack of security was one of the main factors that prohibit consumers from purchasing online products (Media Matrix Top rankings, 2000)<sup>125</sup>.

Similarly, Salkin S (1999)<sup>126</sup> and Cockburn C, Wilson T, (1999)<sup>127</sup> revealed that a lack of security and network reliability were the two most important obstacles that prevented the advancement of online shopping.

Liu C, Arnett K, (1999) conducted a survey with the help of an European Electronic Messaging Association found that more than 79 per cent of respondents indicated that security had a top concern when conducting electronic marketing activities on the Web (Liu C, Arnett K, 1999)<sup>128</sup>.

Liang and Huang (1998) asserted that the adoption of online shopping was dependent on such attributes such as product type, perceived risk, and shoppers' past shopping experience (Liang and Huang, 1998).<sup>129</sup>

Butler P, Peppard J (1998)<sup>130</sup>; Raman NV, Leckenby JD, (1998)<sup>131</sup> have accentuate the need for further longitudinal studies to better comprehend the related characteristics of online population.

Ono and Zavodny (2003)<sup>132</sup> had examined whether there were differences in men's and women's use of Internet and whether gender differences have changed in recent past or not? Many other attributes of Internet users and their behaviour were not covered in these kinds of studies.

Ho CF, Wu WH (1999)<sup>133</sup> stated that presentation format, style, and timely updating of homepage positively affect Web Internet users' satisfaction and the popularity of Web pages.

**Several conclusions could be drawn from above-mentioned studies.**

First, research on Internet users' demographics and behavioural patterns was still in its infancy stage, as most of the studies were completed in the late 1990s. The literature currently available is rather incomplete, and IS professionals and practitioners still lack sufficient understanding of the necessary attributes of Internet users such as demographics, attitude, and behaviour. More importantly, IS professionals and practitioners did not understand these attributes in the context of developing countries like China. Most research in this area, if not all, has focused on Internet users in North America and Europe. Second, most of these studies were of cross-sectional nature. Consequently, the results or findings did not understand the time-varying nature of attributes such as the online population's demographics, behaviour, and attitudes.

## **2. III: 1:7:1: Effect of Demographic Variables on Uses of Internet:**

Thompson S.H. Teo (1998)<sup>134</sup> examined the differential effects of occupation on use of Internet in Singapore based on online collection of primary data that were collected using a questionnaire from three main occupational groups' viz., students, Non-IT personnel and IT personnel respectively.

The researchers attempted to examine the differential effects of occupation in terms of patterns of use of Internet, tasks preferences and factors that affected an enjoyable Internet experience amongst the selected respondents. Its results suggested that Internet had permeated to the general population in Singapore, instead of only the technically inclined segment comprising of IT personnel. In general, IT personnel had relatively more experience of frequently using Internet compared to students and Non-IT personnel. It offered that efforts are needed to educate and persuade students and Non-IT personnel to make frequent use of Internet. It was found that for all the three occupational groups, browsing and messaging activities were generally carried out more frequently than downloading and shopping or buying activities.

It implied that Internet Access Service Providers (IASPs) sought to increase their number of subscriber which perhaps could highlight the usefulness of Internet in terms of keeping in touch with friends as well as browsing the wide range of available information. The relatively low incidence of buying activities on Internet calls for promoting online businesses as well as indicative, of policy makers more efforts that were required to encourage the proliferation of electronic or e-commerce on Internet. Since, there were no differential effects of occupation on various gimmicks, Website or Webpage designers should realize that such gimmicks were relatively less important than ensuring adequate information content. They should ensure that gimmicks, when presented should not drastically slow down speed of accessing Internet. This study provided some insights pertaining to the differential effects of occupation on the Patterns of use of Internet as well as activities on the Internet and also on factors that affected an enjoyable Internet experience amongst selected respondents in Singapore. (Thompson S.H. Teo, 1998)<sup>134</sup>.

Thompson S.H. Teo (2001) had also examined demographic variables viz.; gender, age, educational level and motivation variables such as perceived ease of use, perceived enjoyment, as well as perceived usefulness associated in use of Internet and activities that were defined in terms of messaging, browsing, downloading and shopping or buying. A total number of 1,370 usable responses were gathered using an online Web page Survey. Its results provided that males were more likely to engaged in downloading and buying activities while females were more likely to engage in messaging activities. Younger users engaged in messaging and downloading activities to a greater extent compared to old aged Internet users. The perceived usefulness was found as associated with the four activities, while perceived ease of use and perceived enjoyment were found as associated with messaging, browsing and downloading activities. Its results suggested that males were more likely to engage in downloading and buying activities compared to female Internet Users. In addition, younger users engaged in messaging and downloading activities to a greater extent than old aged users. Surprisingly, it was found that educational level had little effect on messaging, downloading and buying activities probably because Internet has diffused widely across various sectors of the population.



The perceived usefulness was found as had been significantly associated with the four generic activities while perceived ease of use and perceived enjoyment are associated with only three generic activities such as ;messaging, browsing and downloading (Thompson S.H. Teo ,2001)<sup>135</sup>.

Zemke and Connell an (2000).found that perceived usefulness played relatively a more significant role compared to perceived ease of use or perceived enjoyment in the use of computers. One explanation that was found as plausible that users were unlikely to continue to make use of Internet after the initial novelty wears out if they fail to find that Internet was useful to them.

Hence, it had become important that Web page or website designers should ensure that Web pages had been useful to Internet users in providing up to date and relevant information. In fact, useful content coupled with excellent e-service was found as often associated with stickiness of the Website amongst Internet users(Zemke and Connellan, 2000)<sup>136</sup>.

Magdalini Eirinaki and Michalis Vazirgiannis<sup>2</sup>(2003) had studied on Web personalization which is a process of customizing a Website according to the needs of its specific Internet users.

It is designed by taking advantage of the knowledge acquired from the analysis of the user's navigational behaviour, usage data, in correlation with other information collected in the Web context, namely, structure, content, and user profile data. Due to the explosive growth of the Web, the domain of Web personalization has gained great momentum both in the research and commercial areas. In this article authors presented a survey of the use of Web mining for Web personalization. More specifically, they introduced the modules that comprised a Web personalization system, emphasizing the Web usage mining module.

A review of the most common methods those were used as well as technical issues those occurred were given, along with a brief overview of the most popular tools and applications available from software vendors.

Moreover, the most important research initiatives in the Web usage mining and personalization areas were presented (Magdalini Eirinaki and Michalis Vazirgiannis ,2003)<sup>137</sup>.

Thompson S.H. Teo (2006) empirically observed that the demographic and behavioural trends of Chinese Internet users helped both researchers and practitioners to better understand the changing nature of use of Internet amongst Chinese Internet users. After China's accession to the World Trade Organization (WTO), Internet service markets opened to foreign investment, and for other varying purposes, for which understanding the relations between demographic data and behavioural patterns of Internet users in China was highly essential.

The study also offered guidance to ISPS for developing an effective strategies and tactics to penetrate highly competitive, developing cyber-markets.

In this trend analysis of Chinese Internet users', demographics and behaviour during 1997 to 2004; the researchers found that Internet users of China were very different in the year 2004 compared to those in the year 1997. It implied that the infusion of Telecommunications Technology and rapid economic growth immediately before and after China's accession to the WTO, had made an obvious impact on the surveys and interviews. Internet technology was found as rapidly developing while changes were taking place in the social environment such as a macro economy and Internet population. It called for continuous efforts that were required from both that is academicians and practitioners, which in turn would result in a cumulative collection of findings about Internet users' demographics and behaviour (Thompson S.H. Teo, 2006)<sup>138</sup>.

## **2. III: 1:7:2: Internet, Gender & Health Inequalities:**

A survey of Nielsen Media Research conducted by Nielsen Media Research, 1996 provided that one in four Americans had access to Internet access and it was estimated that more than 50 Million people in the USA and Canada surfed Internet on a regular basis. Once dominated by males, Internet community has now attracted about 21 Million women in the USA and Canada. It identified three main types of Internet activity or service. First, social that included viz.; chat, discussion groups, people-address seeking; second, information that covered, work, or studies-related information seeking; and the third, leisure that included sex website and random surfing. It was found that scores on extroversion were positively correlated with use of leisure services for men, and negatively correlated with the use of social services for women. Scores on the neuroticism scale were positively correlated with use of social services for women, and negatively correlated with the use of information services for men.

Joinson and Banyard (2002) found that for Internet users, self-enhancement motive had been clearly relevant for both choice of Internet service and behaviour using that service. To illustrate, lurking on a Social Support Bulletin Board to engage in downward comparisons. A self-protection motive was found as associated with the use of Internet among socially anxious and shy people and also those individuals who had low self-esteem.

Thus, Internet users with low self-esteem were more likely to choose e-mail over direct communication when the chances of negative feedback, or the need to disclose intimate details about one's private life were high (Joinson, 2002)<sup>139</sup>.

Louis Leung (2003) examined the Internet-generation attributes and its relationships in use of Internet in a sample of teenagers and young adults at the Net generation. Internet-generation is a new generation who was born between 1977 and 1997. But unlike their parents, they were not defined by demographics alone, but rather by a combination of their demographic cohort, values, life experiences, and behaviour. Based on differences in lifestyles, values, and life experiences, this study offered a reliable measure of Internet-generation attributes.

Based on exploratory factor analysis, it could successfully identify four attribute clusters within this cohort, which by and large confirmed Tappscott's (1998)<sup>140</sup> characterization of the Internet-generation in the USA. Its findings suggested that Net-geners were generally found as strong principled and believed in fundamental rights to information. They were found as emotionally open or uninhibited on Internet, technology savvy, as well as independent, confident, and preoccupied with maturity. There was strong support for expectation that these attributes were found as associated with Internet-geners Internet use. The researchers found it easier, comfortable, and even entertaining to reveal their feelings, freely express their views, and care for others online.

Similarly, innovative and investigative Internet-geners were those who reported more use of Internet to show affection, to feel important, or also to look fashionable to others(Louis Leung 2003)<sup>141</sup>.

Colin G. DeYoung, Ian Spence (2004) studied on the initial stages in the development of a Technology Profile-Inventory (TPI), and its potential use in a variety of contexts, including dynamic personalization. The initial version of the TPI was constructed based on the responses of 318 participants. Factor analysis was applied to establish the major components of individuals' attitudes towards Information Technology (IT). The factors extracted demonstrated the utility of updating measures of computer attitudes to include items related to Internet, and to a broader range of attitudes. The factors of the TPI were correlated with a variety of demographic and usage variables. Gender differences were found for most TPI factors, though not for approval of Information Technology, and possible explanations of these differences were also discussed. Correlations with usage variables provided both convergent and divergent validation, as both past experience and present use of computers and Internet were associated with more positive TPI attitudes, but use of cellular phone was found as unrelated in case of all TPI factors. The role of IT in society has expanded at a remarkable rate. Interactions with computers and Internet have become a standard component of life for a large segment of the population in Western society. So profound is the influence of IT that the current era has been widely dubbed as the "Information Age."

Any phenomenon that gains such influence in our lives is worthy of study, and the methods of psychology may shed some light on this kind of new relationship with IT, particularly with regard to the question of how people should respond to this addition to their lives(Colin G. DeYoung, Ian Spence ,2004)<sup>142</sup>.

Silje C. Wangberg, (2007) attempted to explore the relations between use of Internet; socio- economic status (SES), social support and subjective health based on participants that were drawn from representative samples who were called in the age group of 15 to 80 years from seven different European countries. It used two different survey datasets viz.; e-Health trends and the European Social Survey.

Internet users who had used the Internet for health purposes were compared with those Internet users who had not used Internet for health purposes. Structural Equation Modeling (SEM) was used to assess the relationships between SES; use of Internet; social support, and subjective health.

It also used other media to compare it with use of Internet in relation to social support and subjective health. It was found that the use of Internet was found as more closely related to social support and subjective health than use of other media. The use of Internet was also found to be a plausible mediator between SES and subjective health, especially through interacting with social support (Silje C. Wangberg, 2007)<sup>143</sup>.

Sally Lindsay, Simon Smith, Frances Bell & Paul Bellaby (2007) examined how the Internet might help in tackling health inequalities by improving communication of risk and providing support for those who were most susceptible in changing their behaviour. The researchers provided a descriptive account of whether facilitated access of Internet improved the capacity of older men to manage their heart conditions. 09 men who were aged in between 50 to 74 were provided high computers, access of Internet and training for the six months. Interviews and qualitative data were gathered to assess the influence the Internet had on the management of their heart conditions before they were provided with the computers. After six months and three years, its results suggested that interactive learning was worthwhile because it was helpful in strengthening social support and influenced behaviour change in them. Access of Internet at home via their own personal computer was found as having beneficial influence in building confidence and facilitated healthy behaviour change in them. Although, less than half of the participants who had ever used Internet before this study, the majority of them reported use of Internet and e-mail regularly after their involvement in this project (Sally Lindsay, Simon Smith, Frances Bell & Paul Bellaby, 2007)<sup>144</sup>.

Since the World Wide Web was launched, the only certainty that marketing managers have been facing is uncertainty. A major strategic thrust of business, Government, and Non-profits organizations has been implementing technology-based service systems that have transformed each aspect of human lives inclusive of how individuals' socialize; manage their money; buy goods and services; and gather information. The pace of change had accelerated because of human a convergence of cutting-edge technologies, millennial lifestyles, and technology-related demographic shifts in the world of e-services from evolution to revolution.

Researchers in their efforts in the form of article "E-volution" to Revolution have tried to emphasize that marketers must prepare themselves for an e-services revolution, fueled by Information Technology changing lifestyles, and demographic shifts. The fueled by Web-based models for e-services are part of an embryonic phase preceding an era of rapid transformation, challenge, and opportunity.

It is, therefore, necessary to understand the varying technology landscape and the psychosocial dynamics behind consumer adoption. Making bold decisions in how to deliver e-services and learning to partner with customers is highly essential in near future (Regina D. Woodall, Charles L. Colby, and A. Parasuraman, 2007)<sup>145</sup>.

Valerie L. Vaccaro, Kean University, Deborah Y. Cohn (2007), conducted a survey in order to generate a greater understanding of the global phenomenon of consumers' unauthorized peer-to-peer (P2P) file-sharing of Music on Internet. Diffusion of Innovation Theory was put to use in order to interpret perceptions of the global consumer on this widespread online behaviour.

It was based on consumers who were drawn from nine nations viz.; (U.S.A, Russia, Croatia, Turkey, Bulgaria, Venezuela, and Mexico). Its characteristics indicated that similarities among global values and consumer behaviour on Internet were related to Diffusion of Innovation. Global consumer values on Internet were also found to be related to Internet lifestyle themes , attributes of trustworthiness, and perceived risk (Huff 2000)<sup>146</sup>(Valerie L. Vaccaro, Deborah Y. Cohn ,2007)<sup>147</sup>.

H.M. Nithya, Sheela Julius, (2007)<sup>148</sup> undertake study to identify the influence of personality structure of an individual that is extroversion, neuroticism and self-concept with reference to use of Internet in India. It also attempted to find out the correlation between the three above-mentioned variables in the light of Internet usage. Exploratory research design was applied in this research study and the tools that were used included viz.; Eysenck Personality Inventory and Mohsin Self-Concept Inventory. Internet was used as the medium for collection of the primary data and individuals were invited via e-mail to participate in the study. The random sampling method was applied for drawing and samples of 200. Further, Internet users were classified as heavy or light users based on the number of hours they spent online. While study failed to find out any significant difference between heavy and light Internet users of Internet on extroversion and neuroticism.

It was found that the heavy Internet users scored high on self-concept. Its purpose was to find out whether use of Internet in India was influenced by personality dimension of an individual, more specifically extroversion, neuroticism and self-concept or not .In India, individuals and companies use the Internet for communication, information seeking, and also for business or commercial purposes (H.M. Nithya, Sheela Julius, 2007)<sup>148</sup>.

## **2. III: 1:7:3: Internet-Related Activities Among Selected Internet Users in the USA and India:**

Padmini Patwardhan(2004) within a context of primary online activities such as e-commerce, information search, communication and entertainment explored exposure in terms of time and frequency as well as involvement sub-divided as cognitive and emotional and post-exposure satisfaction with online activities among Internet users in the USA & India.

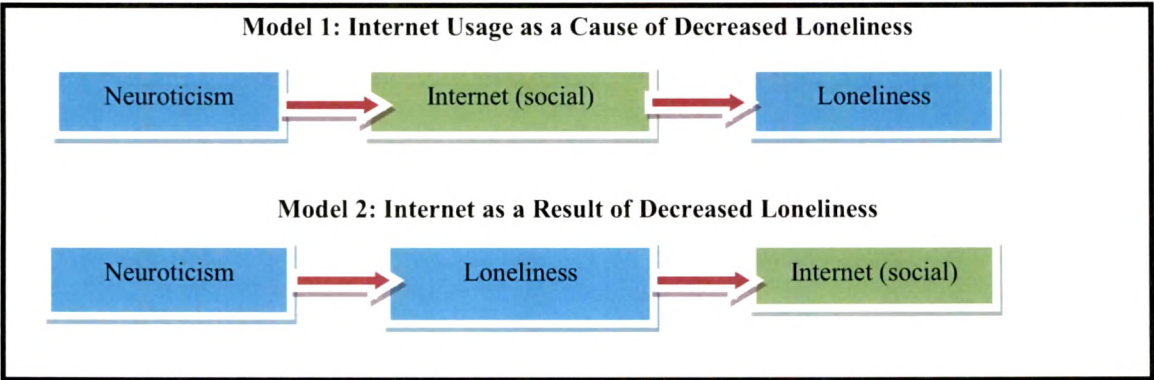
The primary data were collected through a cross-sectional online survey that was administered based on non-probability sampling on USA & Indian Internet users (N = 700). Internet users of both the countries that are USA & India displayed similar patterns of activity engagement. Informative and communicative use of Internet, as compared to commercial and recreational use that was appeared to be more prevalent at that point of time. It reported highest satisfaction for information search and communication, activities for which higher levels of cognitive and emotional involvement and exposure were required. By comparison, lower satisfaction levels were found for e-commerce and online entertainment, with lower levels of involvement and exposure. A notable exception was high cognitive involvement in e-commerce, an activity in which higher levels of cognition was expected. Indian users appeared to be leapfrogging the digital divide.

However, use of convenience sampling and likelihood of respondents being early Internet adopters in India might aforesaid have influenced findings and further research that may validate the aforesaid results (Padmini Patwardhan, 2004 )<sup>149</sup>.

**2. III: 1:7:4: Impact of Use of Internet on Social Ties:**

Hamburger and Ben-Artzi's (2000)<sup>150</sup> found that extroverts and introverts use different services of Internet. It demonstrated that not only those personality characteristics were related to differential Internet use, but it also showed clearly the relationship between personality characteristics and loneliness as one of the important indicator of well-being. Its results lead to a rejection of the negative generalization of Internet made by Kraut et al. (1998). The case of neurotic women was the only one in which a link was found as loneliness and even in this case it was in direct contradiction to that found by Kraut et al (1998).

**FIGURE 2.1: Competing Models for Social Services Usage on Internet & Loneliness**



**Source:** Kraut et al (1998).

It clearly demonstrates that it is lonely women who has been attracted to Internet, rather than as was previously argued by Kraut (1998) that Internet is the cause of their loneliness (Kraut et al., 1998)<sup>12</sup>.

Loneliness has been associated with increased Internet use. Lonely individuals may be drawn online because of the increased potential for companionship, the changed social interaction patterns online, and as a way to modulate negative moods associated with his or her loneliness. Online, social presence and intimacy levels can be controlled; Internet users can remain invisible as they observe others' interactions, and can control the amount and timing of their interactions. Anonymity and lack of face-to-face communication online can also cause a decrease in self-consciousness and social anxiety, which could facilitate pro-social behavior and enhance online friendship formation.

Above model received an empirical support in a survey of 277 undergraduate Internet users whose differences were assessed considering his or her loneliness and non-loneliness in the context of Patterns of use of Internet. Those students who reported the highest level of loneliness who had not reported loneliness.

It was found that lonely students used Internet and e-mail more and were more to emotional support receive compared to others. Social behaviour of lonely students was consistently enhanced online, and they were found as making online friends and reported heightened satisfaction with their online friends. They used Internet to modulate negative moods, and use of Internet caused disturbances in their daily functioning (Janet Morahan-Martina & Phyllis Schumacher, 2003)<sup>151</sup>.

Personal values have been widely used to examine consumer behaviour in many product and service categories, little research had been devoted to the relationship between values and usage of Internet. Leon G. Schiffman, Elaine Sherman and Mary M. Long (2001) examined the association between consumers' personal values and their attitudes, preferences, and activities associated with using Internet.

With the use of survey data gathered from 506 Internet users, the relationship between selected Internet activities and specific personal values, and the association between two technological paradoxes with relevance to the Internet and specific personal values as measured by the Kahle, 1983, LOV inventory were explored. The Internet activities included (a) business-related uses of the Internet, (b) information and research related uses of the Internet, (c) e-commerce and related uses of the Internet, and (d) fun and entertainment-related uses of the Internet. The results highlighted the differences in behavior and feelings about the Internet based on personal values. This research also considered respondents' feelings about Internet in terms of factors that they identified as being related to technological paradoxes "enabling" and "incompetent." Specifically, consumers who had chosen "self-fulfillment" as their most important value were more likely to agree with the positive aspects of Internet usage related to "enabling one to perform tasks more efficiently" and "communicate with others." Those who had chosen "a sense of accomplishment" as their most important value disagreed the most strongly with this negative aspect of Internet usage.

Similar to those who had chosen “self-fulfillment,” for the “enabling” dimension, it was unlikely that those who value accomplishment would waste their time on an activity which would not lead to satisfaction of this value (Leon G. Schiffman, Elaine Sherman and Mary M. Long, 2001)<sup>152</sup>.

Anne Goulding (2002) concluded that the rapidly growing numbers of individuals who have been using Internet had turned attention increasingly away from the mechanics of access to Internet access to the impact of the Internet on society, with questions relating to how Internet has affected individuals’ mental and physical well-being and how it shall be changing communities. This concern had been made more acute by the spread of use of Internet simply away from purely home access to its access feasible at public spaces, such as public libraries, Internet cafes and supermarkets. The findings of some research studies have suggested that, while expanding individuals’ ability to communicate far and wide, Internet could cause a decline in their communication with family members, and the size of their social circle, because of a tendency to increase own depression and loneliness.<sup>153</sup>

However, some of the suggested researches are here it with the Internet becoming part of individuals’ lives with gradual disappearing of the negative or adverse impact of Internet compelled with its sophisticated use. The proliferation of Mobile telephones and the readiness of Mobile phone users to talk endlessly and without inhibitions too has suggested that Internet might not have the dramatic impact on the process socialization that some have feared (Anne Goulding, 2002)<sup>153</sup>.

Y. Amichai-Hamburger, E. Ben-Artzi (2003) argued that Internet has increasingly become influential, but some observers had noticed that heavy Internet users seemed to be alienated from normal social contacts and might even cut these off as Internet shall emerged to become the predominant social factor in their lives.

Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay, and Scherlis (1998) carried out a longitudinal study to conclude that use of Internet lead to loneliness among its Internet users (Y. Amichai-Hamburger, E. Ben-Artzi, 2003)<sup>154</sup>.

Shanyang Zhao (2006) conducted research study to examine the impact of use of Internet on social ties that generated conflicting results. Based on the Primary data that were collected from the 2000 samples, it was found that different types of usages of Internet were related in a varying way to its social connectivity. While non-social Internet users of the Internet did not differed significantly from nonusers in network size, social users of Internet had more social ties compared to its nonusers. Amongst the social Internet users, heavy email users had comparatively more social ties than did the light e-mail users. There was an indication that, while e-mail Internet users communicated online with people whom they also contacted offline; chat users maintained some of their social ties exclusively online. These findings called for differentiated analyses on uses of Internet and its effects on interpersonal connectivity.



It was found that the relationship between time spent online and interpersonal connectivity differed as per the type of uses of Internet. In the case of solitary Web surfing, heavy users of the Internet tended to have fewer social ties compared to its light Internet users. With regard to social use of Internet, particularly an e-mail exchange, heavy Internet users were found as associated with more social ties compared to its light Internet users. The third finding of this study was that Internet user groups also differed in the number of social ties maintained offline.

Although, chat users had at least as many social ties as e-mail users did, the number of friends and relatives with whom they regularly maintained touch through traditional media of communication was much smaller than compared to e-mail users. This suggested that chat users tended to maintain some of their social ties exclusively via Internet (Shanyang Zhao, 2006)<sup>155</sup>.

Zheng Yan (2006) studied about the introduction of new technologies such as Internet into the household potentially changed the quality of family relationships.

The researchers had developed and tested a Family Boundaries Approach to suggest that frequency and type of use of Internet has negatively related to Internet users' family time and positively related to family conflicts, yielding a low overall perception of family cohesion. The researchers also tested a compositional approach suggest the effects on family cohesion was the result of a predisposition in individuals' low self-esteem to be frequent Internet users.

The Conceptual Model was tested by Structural Equation Models and cross-sectional data from the Israeli National Youth Survey based on 396 respondents of adolescents who aged between 12 to 18 years. The results supported for the perspective of family boundaries. The compositional approach received partial support, but it did not substantially change the link of use of Internet to family time and family conflicts (Zheng Yan, 2006)<sup>156</sup>.

Gustavo S. Mesh (2006) too attempted to explore Family Boundaries Approach. It was advocated that the introduction of new technologies such as Internet into the household has potentially changed the quality of family relationships. It was suggested that frequency and type of use of Internet were found as negatively related to family time and as positively related to family conflicts that yielded a overall low perception of family cohesion. The researcher tested a Compositional Approach that suggested that the effects on family cohesion were the result of a predisposition in individuals of low self-esteem to be frequent Internet users. Gustavo S. Mesch, 2006)<sup>157</sup>.

Valerie L. Vaccaro, Deborah Y. Cohn (2007) worked upon Polychronicity which is time-use preference, which individuals acquire through process of socialization. The review of literature showed that polychromes, favor simultaneous activities whereas monochromes favor linear activities; exhibit different perceptual and behavioural patterns. The researchers attempted to examine the relationship among polychronicity, Internet skills, use of Internet, and their perception on Internet.

It also tested the hypothesis that use of Internet displaces other activity. A total of 1,048 adult Singapore citizens and permanent residents participated in a computer-assisted telephone interview and out of it, 380 were non-Internet users whereas 668 were Internet users. Finally, responses of 668 Internet users were considered in the data. Two-stage least squares regression analyses provided that polychronicity was not associated with the use of Internet, but it predicted Individuals' perception on Internet. Internet skills were found as positively predicting use of Internet and perception. Internet neither displaced nor promoted viewing of T.V., listening of radio, and reading of newspaper. However, there was some indication that polychronicity suppressed viewing of T.V. Valerie L. Vaccaro, Deborah Y. Cohn ;2007)<sup>158</sup>.

## **2. III: 1:7:5: Self-fulfillment Motivation in Shaping Lifestyles:**

Carton, Jouvent, and Widloecher (1994)<sup>159</sup> offered a similar pattern in case of tobacco smokers who were more susceptible to boredom than were non-smokers. Likewise, Heroin Addicts, Pathological Gamblers (Blaszczynski, McConaghy, & Frankova, 1990<sup>160</sup>; Dickerson, Hinchy, & Fabre, 1987<sup>161</sup>), and substance abusers in general (Gordon & Caltabiano, 1996<sup>162</sup>; Iso-Ahola & Crowley, 1991<sup>163</sup>) had shown a greater intolerance for boredom than individuals without these problems. Other researchers had implicated boredom as a causal factor (or the need to alleviate boredom) in such maladaptive behaviours as drug addiction (Rahman, 1992)<sup>164</sup>, marijuana use (Cheek, 1973)<sup>165</sup>, tobacco smoking (Ho, 1989)<sup>166</sup>, gambling (Carroll & Huxley, 1994)<sup>167</sup>, and dropping out of high school (Bearden, Spencer, & Moracco, 1989<sup>168</sup>; Tidwell, 1988)<sup>169</sup>. The problems of boredom had not only pushed individuals toward engaging in maladaptive behaviours but it has also may lead to interference with their treatment as noticed by Cernovsky, O'Reilly, and Pennington (1997)<sup>170</sup>, who too found and that drug addicts and alcoholics were highly susceptible to boredom were less satisfied with their drug treatment programs.

Given these findings that relate boredom to subsequent maladaptive behaviours, one hypothesis was that Internet has lead to impairment in some individuals because, similar to other potentially addictive behaviours, it provides an easily accessible and individually tailored escape from boredom (Leon & Rotunda, 2000)<sup>171</sup>.

Wiesbeck (1996)<sup>172</sup> found that a group of alcoholics scored higher on a scale measuring boredom susceptibility than did a control group.

Leon & Rotunda (2000)<sup>173</sup> examined the symptoms and behavioural consequences that were found as associated with certain disorders such as Schizoid Personality Disorder and Obsessive-Compulsive Anxiety and Personality Patterns which were possibly are important to examine its in relationships in use of Internet.

To illustrate; criteria for the Schizoid Presentation characterized the stereotype of the Introverted Computer-oriented Individual and included a pattern of Detachment from social relationships and a restricted range of emotional expression in interpersonal settings, lack of desire for or enjoyment of close relationships, emotional coldness and detachment, little interest in having sexual relations, and an exclusive interest in solitary activities. The personality characteristic of boredom proneness (BP), or having a low tolerance for monotony, has been studied frequently in connection with addictions and other self-destructive behaviours.

Robert Rolynda (2003) explored an empirical inquiry based on survey in to issues such as Internet-use patterns, psychological characteristics, and negative consequences which were found as associated with online activities of 393 college students using the online questionnaire. Its results indicated that students spent an average of 3.3 hours per day on Internet during the past 12 months for various purposes.

Although, students reported the occurrence of some potentially negative consequences related to use of Internet, the prevalence rates for most problematic behaviours were generally found as low (Robert J. Rotunda, Steven J. Kass , Melanie A. Sutton, David T. Leon, 2003)<sup>174</sup>.

Leo Sang-Min Whang, and Geunyoung Chang (2004) conducted research study to explore the lifestyles of online game players who had adopted the virtual world as part of their life. An online survey was conducted on players of an Internet-based game, Lineage. Lineage is the largest online game where people assume new identities and play various roles in a virtual environment, accommodating over 6 Million users worldwide. A total of 4,786 game players participated in this online survey, and their lifestyles were compared with their values and attitudes in the virtual world. Upon classification of their real world lifestyles, their tendencies and desires were compared to lifestyles in the virtual world. It was found that game players had developed their own distinctive lifestyles, and had a strong criterion for explaining behaviour patterns and desires in the virtual world. Lifestyles were classified into three general categories viz.; (1) Single-oriented player,(2) Community-oriented player, and (3) Off-Real world player. Each group displayed distinct differences in their values and game activities, as well as in their anti-social behaviour tendencies and differences were found as reflective of not only their personality but also about their socio-economic status within the virtual world, which was constructed through game activities. This study served as a model to understand how players from different real-life backgrounds had behaved in various game features and how they had adopted the virtual world for the new social identities (Leo Sang-Min Whang, and Geunyoung Chang,2004)<sup>175</sup>.

Jason Bennett Thatcher, Misty L. Loughry; Jaejoo Lim and D. Harrison McKnight (2007) examined sources of Internet anxiety; specifically modeling the ties from broad dispositional traits viz., computer anxiety, computer self-efficacy, and personal innovativeness with IT, beliefs about the work environment ,about the adequacy of resources and trust in technology.

It also examined two forms of social support for IT to individuals' anxiety about using Internet applications. They tested the model using respondents who had participated in virtual teams during a 16-week period. Their findings suggested that Internet anxiety was affected both by Internet users' personality and by beliefs that was influenced by providing adequate resources to support the technology, encourage trust in technology, and working to assure Internet users that leaders and peers were supportive of their using the technology( Jason Bennett Thatcher, Misty L. Loughry; Jaejoo Lim and D. Harrison McKnight; 2007)<sup>176</sup>.

Although, lifestyles were not predictive as to whether Internet users would adopt online news, they were found as the strongest predictors for the enjoyment of interactive capability of online news for adopters. Specifically, whether interactivity could satisfy the need for seeking fun among strivers, a desire for self-expression among makers and aspiration for new ideas on the part of innovators. Furthermore, as practical people, makers enjoyed multimedia features for their functional purpose.

In conclusion, some of the implications for news publishers in offering personalized editions of online news were offered. It was inferred that a key time period for online news consumption has arrived, as web surfers in the workplace have begun to use Internet for getting news and information in quick news summaries. With the Internet following Radio and Newspapers as the third major source of news information with TV being the first, the need to capture and engage newsreaders in the workplace is crucial.

A variety of marketing strategies, news organizations had been finding their way to determine how best to reach the elusive Internet news audience who historically might have read a newspaper or watched a little TV in the morning and listened to the Radio on the way to work, but then were largely inaccessible until the end of the work day. With Internet-wired computers on the desks of so many consumers, undoubtedly this group is to be considered as a potential target for online news providers. As online newspapers have strengthened their presence on Internet further, they are now forced to rethink and enhance their position in Internet market so as to attract more online newsreaders.

Earlier research studies on in online newsreaders have focused on demographic variables, access, use and preferences (Chyi and Lasorsa, 1999)<sup>177</sup>, how online newsreaders read online news (Johnson, 2001<sup>178</sup>; Tewksbury, 2003)<sup>179</sup>, and the displacement effect of online news.

It was found that people often use online news to supplement, and not to replace, their core news consumption (Althaus and Tewksbury, 2000)<sup>180</sup> and how online newsreaders were first attracted to text headline rather than pictures or graphics (Davis, 2000)<sup>181</sup>. To conclude, very little amount of research has been carried out to explore further on the profiles of this cohort of Internet users in order to examine the relationships between the characteristics of this group and their online news-reading behaviour.

In the information without borders world, we are just beginning to understand the exciting possibilities for journalism and news users. Strategically speaking, in a business that increasingly values audience socio demographics over simple server hits, psychographics have become increasingly more important which is an extension of demographics and is used to determine values and lifestyle characteristics that can be correlated into targeted marketing programmes. VALS (Values and Lifestyle Segmentation) has contributed much to marketing research (Pitts and Woodside, 1984) but has been rarely investigated in communication contexts.

The VALS idea, offers that consumers buy products in part to reflect their values and enact their lifestyle that has been supported by much research (Grunert et al., 1997; Leung, 1998; Pitts and Woodside, 1984)<sup>182</sup>. VALS proponents have argued convincingly that values directly influence interests, time–use activities and roles, which in turn influence consumer behaviour (Carmen, 1978)<sup>183</sup>.

Earlier research studies have suggested that a variety of specific consumer behaviours were related to mass-media usage (Becker and Connor, 1981<sup>184</sup>; Leung, 1998<sup>185</sup>), purchase of computers (McQuarrie and Langmeyer, 1985<sup>186</sup>) and charitable contributions (Pitts and Woodside, 1984)<sup>187</sup>. Additional theorizing on the profiles of newsreaders has been important, given that changes in audience consumption and viewing patterns influences Internet that might alter the news environment. This exploratory research shall investigate the predictive power of values and lifestyle orientations on online news adoption behaviour, with particular emphasis on the links between the adoption behaviour and reliance on traditional news media, attributes of online news, traditional mass media use and demographic characteristics (Joey Ka-Ching Chan; Louis Leung, 2005)<sup>188</sup>.

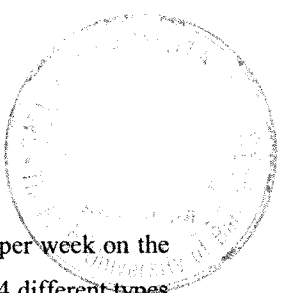
## **2. III: 1:7:5: Lifestyles of Internet Users on the Basis of Uses of Internet:**

Many of the earlier research studies have reported on the demographics of Internet users. Some of the research studies dated to 2000 or before, were focused on the gender, age, and socioeconomic gap between users and nonusers (Hindman, 2000<sup>189</sup>; Hoffman, Kalsbeek, and Novak, 1996<sup>190</sup>; Hoffman and Novak, 1997<sup>191</sup>; Times Mirror, 1995<sup>192</sup>; Yankelovich Partners, 1995<sup>193</sup>). By the year 2001, some studies had reported a significant decrease in the digital divide (Katz, Rice, and Aspden, 2001)<sup>194</sup>.

### **Few if any studies have focused on a profile of heavy Internet users.**

Henry Assael (2005) developed a demographic and lifestyle profile of heavy web users (those using the web for 20 hours a week or more) based on a survey of over 5,000 respondents. It has also identified six key web usage categories viz., Web Generalists, Downloaders, Self-Improvers, Entertainment Seekers, Stock Traders, and Socializers, and developed a profile of each (Henry Assael, 2005)<sup>195</sup>.

The range of questions were asked from board through this survey regarding media usage, purchase behavior, lifestyles (attitudes, interests, opinions), and demographics. The key dependent variables were frequency and type of Internet usage.



Heavy Internet users were defined as those respondents usually spent 20 hours or more per week on the Internet. The questionnaire also asked whether respondents used the web frequently for 14 different types of uses. These 14 items were factor analyzed utilizing a Varimax rotation resulting in 6 factors identifying types of uses. He identified Internet-specific lifestyles; the web usage groups have more favorable attitudes toward the Internet, were more likely to visit key Internet websites, and were more likely to rely on the Internet for information on a variety of product categories.

Most studies using psychographics to describe Internet usage had focused on web shopper types as an extension of the development of psychographic profiles of offline shoppers (Bhatanagar and Ghose, 2004<sup>196</sup>; Kau, Tang, and Ghose, 2003<sup>197</sup>; McKinney, 2004).<sup>198</sup> A number of these studies had taken a cross-cultural approach in defining psychographic shopper profiles (Brenngman, Geuens, Weijters, Smith, and Swinyard, 2005<sup>199</sup>; Shiu and Dawson, 2002).<sup>200</sup>

Few of the research studies have also used psychographics to offer profiles of Internet users in non-shopping dimensions. In one of such research study, Dutta-Bergman (2002)<sup>201</sup> applied an Attitude Interest-Opinion (AIO) inventory to determine orientation to innovativeness, opinion leadership, community involvement, and health consciousness of a random sample of 3,870 respondents that was drawn at the national level and found that innovativeness and certain components of health consciousness were positively associated with use of Internet while opinion leadership was related negatively. Community involvement had no effect. It was concluded that opinion leaders relied more on directly related personal sources of information compared to Internet. It was thus, the inverse relationship between uses of Internet and opinion leadership was found by the researcher. It is interesting that the psychographic applications cited above all had cited post-2000 references, which suggested that the broader use of psychographic descriptors as demographics have began to reflect general characteristics of population. Perhaps, the most systematic application of psychographics in describing Internet users has been by commercial firms and syndicated services.

The Pew survey had classified Internet users such as Newcomers, Experimenters, Utilitarian, and Netizens based on their time of adoption and attitudes toward Internet. Claritas (year) had associated its PRIZM zip-code clusters to uses of Internet in order to identify high web penetration segments such as "Upward Bounds" and "New Eco-topia" based on both demographic and, implicitly, lifestyle criteria. Forrester's (year) Technographic segments were based on attitudes toward technology and were found as directly related to web usage. Burson-Marsteller (year) developed a categorization of influential, that is, those most likely to disseminate influence on Internet based on a battery of 11 questions which identified those who were most likely to make social, community, and business contacts on Internet.

Survey organizations such as the Pew surveys, GfK, and Jupiter had consistently reported on type of Internet usage over time.

To illustrate; extent of videogame usage, visits to news sites, and visits to chat rooms. But, few had analyzed a profile of Internet users by type of uses of Internet. One exception was Schiffman, Sherman, and Long (2003) that reported on the values of respondents by five types of Internet usage. Although, the study was based on a convenience sample comprising of 506 students whomever drawn and called as Internet users it is noteworthy in using a psychographic measure to describe types of Internet users.

Despite an impressive array of earlier studies that have used demographic and psychographic variables, the fact still remains that none of the studies have found that identified heavy Internet users by its descriptors.

Further, with the exception of the Schiffman, Sherman, and Long (2003)<sup>202</sup> study which were based on a convenience sample of 506 respondents, there are no studies that have found that profiled Internet user types by psychographic variables.

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