Internet Users in Damanhur's Town, Characteristics, Problems, and Spatial Variability.

"Geographical Study"

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ABSTRACT

The aim of the study was to identify the factors influencing the use of internet in Damanhur town, analyzing population demographic, economic and social characteristics, and identifying levels of satisfaction with the network and its positive and negative aspects.

The study adopted the analytical inductive approach which detailing and clarifying the phenomenon of internet users to reach the desired results, it also relied on SPSS for many statistical and cartographic methods.

The study resulted in several results, which were:

- Age group (15, less than 30 years old) has the highest internet penetration rate in town.

 - High percentage of low-income network users.

- The use of the network through social networking sites at the top of the reasons for use.

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- Most users were satisfied with the cost and efficiency of internet, despite the multitude of problems.

- Continuation of the sample of the study in the use of internet, despite the problems that may be.

Introduction:

It has been realized that internet technology has become an important method for pushing societies into a knowledge-based economy, as it is an effective way to stimulate trade, provide successful business models, and improve services, as well as a tool to support new ideas, research and innovation, which are needed most for the developing economics (http://www.un.org).

The use of internet began in Egypt since 1992, it was exclusively for universities and the information and decision-making Center, then the ministries and governorates entered the service in 1994, and in 2004 the state launched the high-speed internet service (http://www.sis.gov.eg), and the network is still developing till now.

The study area:

The town of Damanhur is located in the northwest of the Nile Delta, in the center of Damanhur Province, on a latitude of 30º 28` north, and a longitude of 31º 3` east, as it is surrounded by the villages from all sides (Figure 1), the canal of "Elkhandak Elsharky" passes through the town from the southeast to the northwest, And the Cairo / Alexandria railway splits it into two semi-equal parts: the eastern part includes four administrative sectors, which are: Sacaneda,Noqraha,Qortasa and Tamus, and the western includes Shubra sector.

The town is 60 km away from Alexandria in the southeast direction, and its population is estimated at about 280 thousand people in 2016, distributed in an area about 5.5 km^2.

Figure (1): The location of Damanhur town in Beheira Governorate and its administrative divisions 2016

The research problem and importance:

There is no study of internet in Damanhur, which is the capital of Beheira Governorate despite the huge revolution in the field of communications geography, in addition to the impact of internet on individual's behavior and the multiplicity problems of how to use.

Objectives:

The study aims to achieve the following:

1- Explaining the most important factors which are affecting the use of internet in Damanhur.

2- Analyzing the characteristics of internet users in Damanhur.

3- Measuring the levels of user's satisfaction.

4- Identify the problems facing internet users and their proposals.

Methodology:

The study adopted the analytical inductive approach which detailing and clarifying the phenomenon of internet users to reach the desired results, it also relied on SPSS for many statistical and cartographic methods.

The study based on a field study conducted during the period between December 2015 to February 2016, to identify the characteristics of users, their behavior, internet problems, levels of satisfaction with the service provided, and etc., where a questionnaire (Appendix 1) was distributed with a number of 700 questionnaires, incorrect questionnaires were excluded, so that the correct questionnaires rate reached 93.9% of the total numbers, which confirmed the reliability of data obtained and the possibility of generalizing results.

Hypotheses:

- The different reasons for using internet in town.

- Unreasonable behavior in use.

- Dissatisfaction of users with internet.

To achieve the aims of the study, the following elements will be covered:

- The factors affecting the use of internet.

- The behavior of internet users.

- Levels of satisfaction with internet.

- Internet problems and proposals.

I: The factors affecting the use of internet

1- Age and gender composition:

The age and gender composition of internet users is the most important demographic factors affecting the size and diversity of use. Their impact cannot be neglected.

The age groups were divided into five categories for cleared comparison, and that was taken into consideration when distributing the questionnaire forms (Table 1, Figure 2), so the following points were noticed:

- The age group (15-30 years) included approximately three fifths of the sample size in Damanhur, because it was the most familiar on dealing with modern technology, including internet, especially the use of e-mails and social network sites such as Twitter and Facebook, in addition to the network educational services which helped different types of students in many ways ,those students who represented most of this category,(45.4% of the sample size in town), besides this category included the majority of young whom tended to violence and gender sites Which Deployed on the Web.

Table (1): Internet users sample percentages according to age in administrative sectors of Damanhur in 2016

| Age \ Sectors	Under 15 years	15 -	30 -	45 -	60 years and over
Sacaneda	6.2	47.4	29.9	16.5	-
Shubra	12.8	60.6	16.8	7.8	2
Tamus	25.6	51.2	21.7	1.5	-
Qortasa	-	59.1	18.2	22.7	-
Noqraha	2.2	74.5	23.3	-	-
Average	9.4	58.5	22	9.7	0.4

Source: field study.

- The age group (30 - 45 years) occupied the second position with more than one fifth of the study sample size, because of increases with making a living and taking on life responsibilities, so the majority of them used internet for entertainment and spending spare time only, especially in lack of cultural and social means in town, which made internet the easiest way to flush out routine and recreation.

- The age group (under 15 years) came in the fourth place, and it was the most passionate about what internet offered such as various games which brought them a sense of psychological pleasure and excitement, as it was the closest and least expensive entertainment means (Hardly, 2004,572).

- Lack of internet interest in the age group (60 years and over), as they did not exceed 0.4% of the sample, which indicated to their lack of interest in modern technology, either because did not know how to use computers and smartphones, or they believed it was not much useful.

Figure (2): Age structure of Internet users in administrative sectors of Damanhur in 2016
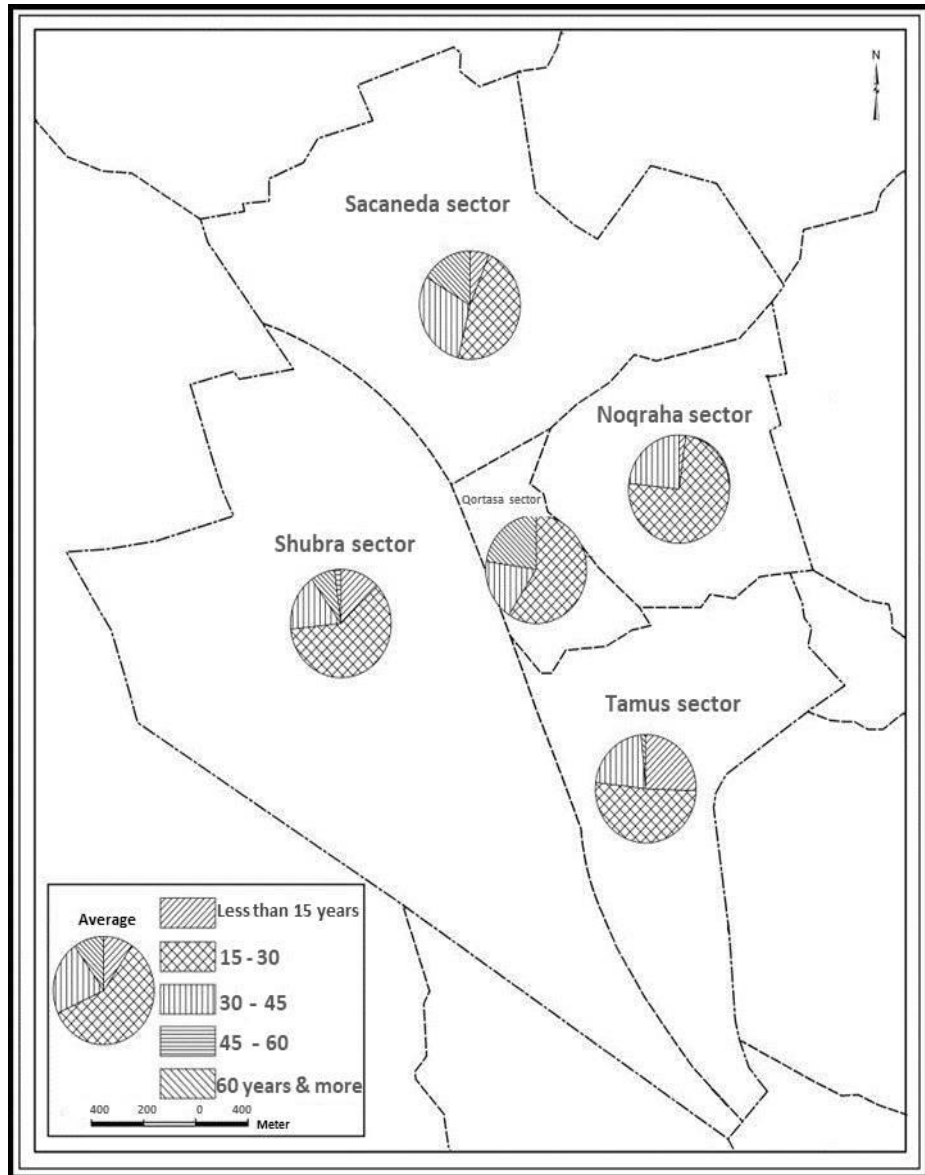
Source: Table (1).

- The percentage of internet users in one age group varied from one sector to another, even if they all had the previous arrangement of age groups, while the age group (60 years and more) did not appear in all sectors except for Shubra (2%), because of the high percentage of retirees, which reached 4.5% of the total sample.

- The field study showed no difference between males and females using internet, and this may be due to the widespread use of smartphones (88.4% of the sample), as they provided applications for social forums that were much easier than on computers.

2- Educational Status:

Education is one of the most important determinants of human development and societal progress, the more educated people, the more innovative they are, and thus becomes richer in all aspects of life (Amartia, 2002, 2).

It is noticed that the study sample did not record those who were unable to deal with computers because they could not read and write.

Individuals who university qualified represented approximately half of the sample size, which was indicated by the age structure study, that confirmed the strong direct correlation between both the level of education and the use of internet, as the correlation coefficient between them was (0.94),so the higher the educational level was, the higher using of the world wide web, that seemed to be clear in Noqraha sector which had the highest percentage of internet users with a university education (table 2).

Perhaps it was useful to arrange the sectors of Damanhur in an ascending order according to the percentage of those who read and write to analyze the relationship between the educational level and the use of internet as follows (Table 3).

- Sectors with a high educational level:

It was the one whose total educational level was less than 8 points, and represented by Noqraha and Qortasa, as the percentage of network users with a category of intermediate and university qualifications increases significantly, reaching 95.6% and 95.4% each, respectively.

- Sectors with intermediate educational level:

Its ranged between 8 and 10 points, and included Sacaneda and Shubra.

Table (2): Internet users sample percentages according to educational status in administrative sectors of Damanhur in 2016

Administrative sectors	Read & Write	Less than university degree	university degree
Sacaneda	8.2	36.1	55.7
Shubra	16.2	36.7	47.1
Tamus	18.7	41.9	39.2
Qortasa	4.6	63.6	31.8
Noqraha	4.4	26.7	68.9
Average	10.4	41	48.6

Source: field study.

Table (3): ranks percentages sample of internet users ccording to educational status in administrative sectors of Damanhur in2016*

| Administrative sectors	Read & Write	Less than university degree	university degree	Total ranks
Noqraha	1	5	1	7
Qortasa	2	1	4	7
Sacaneda	3	4	2	9
Shubra	4	3	3	10
Tamus	5	2	5	12

Source: based on Table (2) data.

*read and write are in an ascending, other educational status is in descending order according to the ranks of those who read and write.

- Sectors with a low educational level:

Its total educational rank was more than 10 points, and it was represented by Tamus, so the percentage of uneducated network users exceeded comparing with other sectors (18.7% of the sample size), and that might be explained by the spread of popular and random housing areas, and hence lower levels of income and education (figure 3).

Figure (3): educational levels of internet users

in administrative sectors of Damanhur in 2016
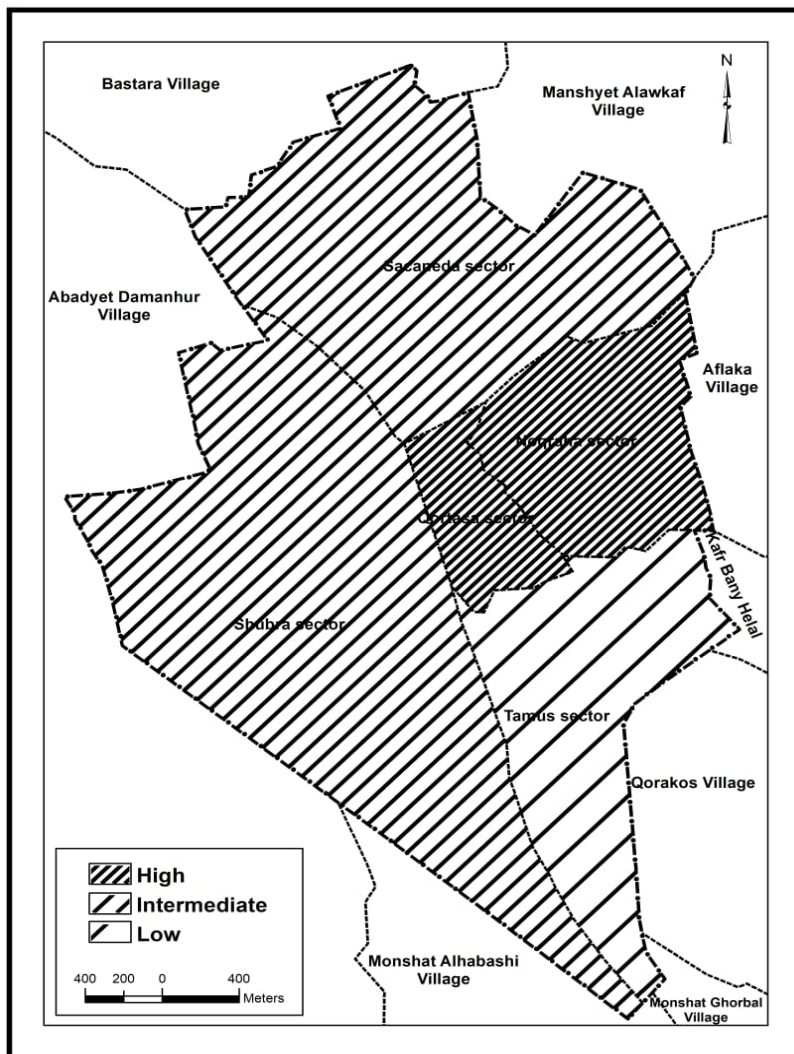
Source: table (3).

3- Occupation:

The classification of Internet users by occupation referred to the work of the establishment which the individual worked in, not his work.

According to both table and figure (4), the prevalence of internet use in all occupations in Damanhur was clear, even if the percentage of use varied from one profession to another, the student's category came at the top of the list of the users, with approximately half of the sample size, even if their motives in using the internet were either entertainment or scientific purposes. But despite what the network's many information presented to students and the library's role in the educational process, the field study showed that the proportion of those who use internet for chatting, entertainment in this category was more than the proportion of scientific and research purposes, (42.6 %), (30.6%) each, respectively.

Table (4): Internet users sample percentages according to occupation in administrative sectors of Damanhur in 2016

Administrative sectors	Students	Governmental sector	Unemployed	business	Private sector	retired
Sacaneda	31.7	37.1	7.2	10.3	13.7	-
Shubra	52.5	20.2	9.4	7.7	8.8	4.5
Tamus	41.9	19.4	23.3	7.7	7.7	-
Qortasa	50	18.2	4.5	18.2	6.4	1.4
Noqraha	50	21.1	13.3	7.8	7.8	-
Average	45.2	23.2	11.5	10.4	8.5	1.2

Source: field study.

In fact, students of Sacaneda sector were considered the least used of internet among the students of the whole town of Damanhur (31.7%), because most of them did not depend on the community use with low prices (Alwasla), while the highest percentage was in Shubra sector (52.5%), because of the high percentage of the sample size, (45.2% of its total).

Figure (4): Internet users according to occupation in administrative sectors of Damanhur in 2016
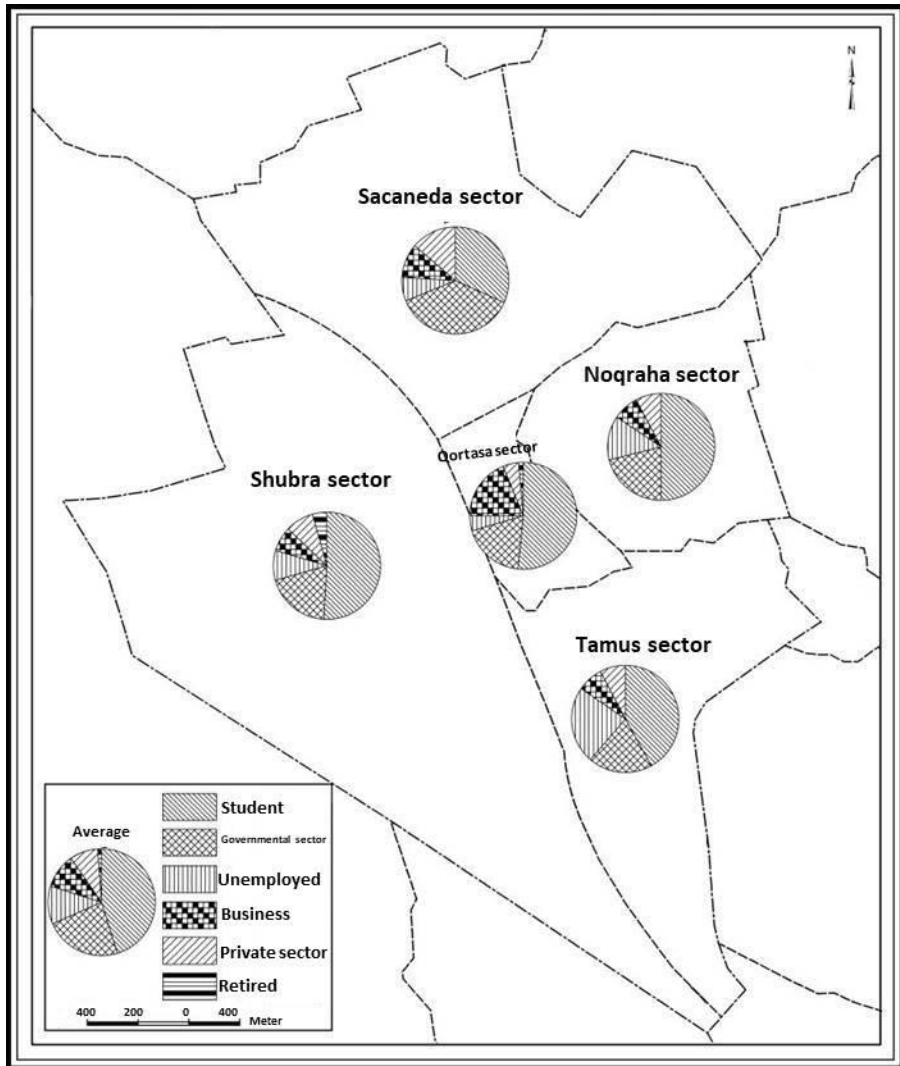
Source: Table (4).

Workers in the governmental sector occupied the second position with nearly a quarter of the sample size, due to the rapid spread of internet applications in factories, administrative works and others, most of the government institutions tended to take advantage of the capabilities of internet in government transactions and replaced manual systems with electronic technology which was known as "e-government".

The unemployed category who used internet came in the third place, and that indicated to the long time for entertainment despite the fact that buying smartphones or computers that received internet was a financial load for them, in addition to the continuous cost of this use.

The retired group of internet users came in the last place with a little more than 1% of the total sample, as it did not appear except in Shubra and Qortasa, due to their lack of interest and their conviction of ineffectiveness of internet, in addition to diseases that might prevent them from sitting on computers for long times.

4- Average monthly income:

Income was one of the main determinants of using internet because of the financial costs it required to purchase a computer or a mobile phone receiving it, besides paying the usage costs.

It was clear from the field study that the percentage of the sample in the category of low-income internet users (less than 750 pounds per month) increased by more than a third of the sample size (Table 5, Figure 5). This percentage reached the maximum height among users in Noqraha, (57.8% of the total size of the sample in it), as it was considered one of the highest educational levels, while Tamus recorded the lowest. That was remarkable because it was normal that the use of internet required costs as previously mentioned, which reflected the individual's preference for using internet to the basic needs of the family, in addition to the competition of service providers to sell what was known as "packages" that allowed access to websites via smart phones

at low costs, as the study showed that 58.3% pay less than 50 pounds per month for their subscription to the service, in addition to the spread of what was known as "Alwsla" or community internet, as a group of users shared one internet link and its financial costs (62.7% of the sample size was belong to the participation category).

Table (5): Internet users sample percentages according to average monthly income in administrative sectors of Damanhur in 2016 (Egy. pounds)

| Administrative sectors	Less than 750	750 -	1500 -	2250 -	3000 and more
Sacaneda	35.1	4.1	9.3	10.3	41.2
Shubra	37.4	14.5	9.1	19.2	19.8
Tamus	20.2	13.9	10.1	30.2	25.6
Qortasa	40.9	4.6	9.1	22.7	22.7
Noqraha	57.8	20	1.1	7.8	13.3
Average	36.7	13	8.2	18.7	23.4

Source: field study.

On the other hand, the relative rise in the sample of the high-income internet user's category (3000 pounds per month and more) was observed by nearly a quarter of the sample size, indicating to the convenience of internet subscription prices to all population levels.

From calculating the value of the median income, which divided the sample items into two parts, the first was greater than it, and the second was less than it, has reached 1165.8 pounds, meaning that half of the sample's monthly income was less than the minimum wage that was applied as of the first of January 2014 (www.rawateb.org), noting that some of these data may be inaccurate because some considered their income a personal matter and were afraid of mentioning the actual

income, or they were owners of shops and small services and could not accurately estimate their income.

Figure (5): Internet users according to average monthly income in administrative sectors of Damanhur in 2016
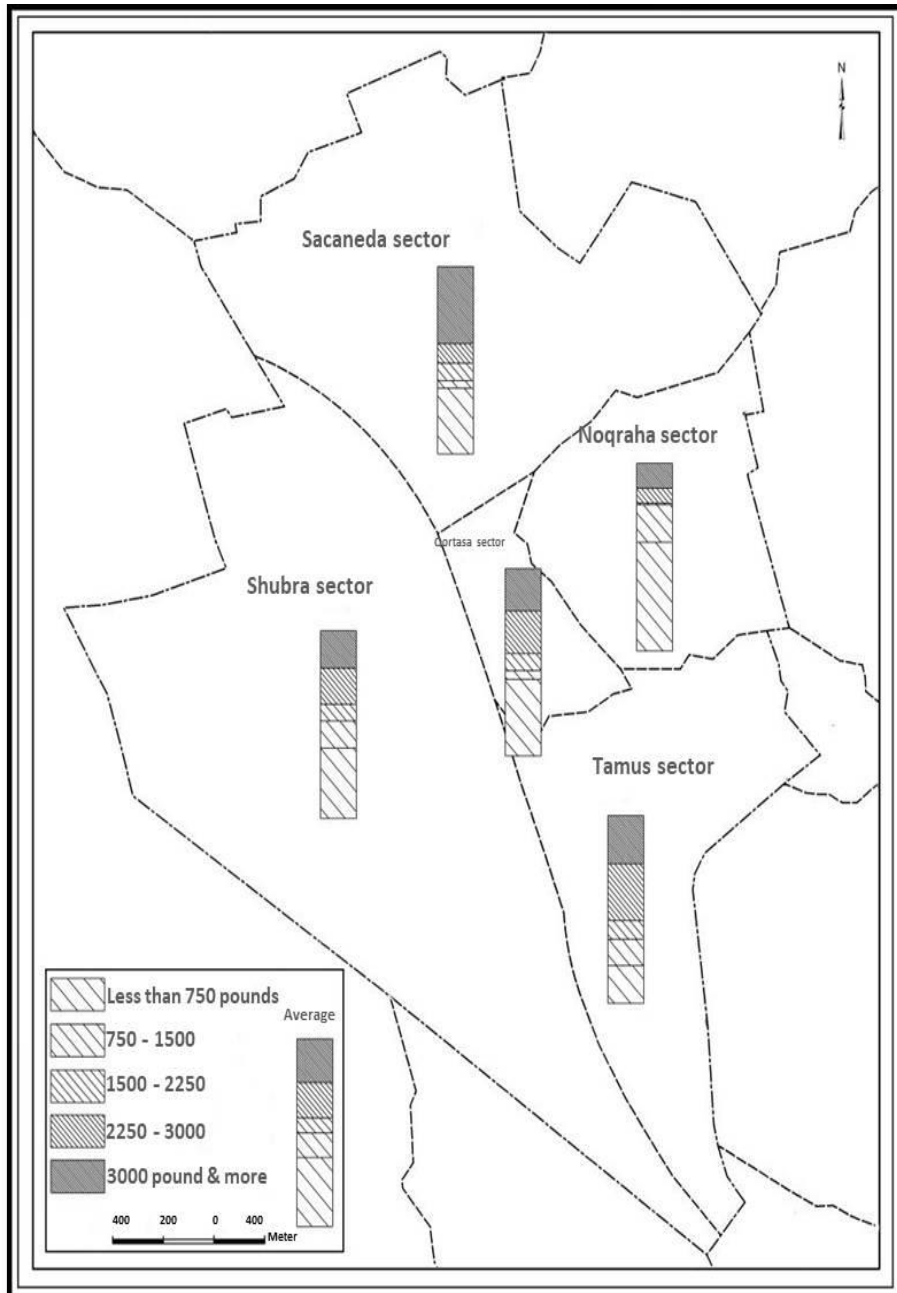
Source: Table (5).

II: The behavior of internet users

The behavior of internet users in the town of Damanhur reflected the cultural, economic, health and religious awareness of the population. In more urbanized societies, that behavior was more balanced. That type of behavior explained the means of obtaining the service, the reasons for its use, and the preferred times of use.

1- Method of obtaining the internet:

The means of obtaining internet in the town of Damanhur were as follows:

A- Community access "Alwasla":

Damanhur internet users preferred to access internet through groups which was known as "Alwasla", where a group of users shared one internet access and its cost, so it was noticed a high percentage of its use that was more than a half of the sample size and varied from one sector to another (Table 6) And it reached its maximum in Noqraha because of the decrease of the monthly income average. About 57.8% of its users had less than 750 pounds a month, as that was the best way to get an internet with an acceptable speed and the cheapest price (about 50 pounds per month), while The lowest percentage was in Sacaneda (37.7%), as it achieved the highest average monthly income in Damanhur (3000 pounds and more), with 41.2% of internet users.

B- Mobile:

It was easy to connect to internet from smart mobile devices that used an advanced operating system, and browsing internet and E-mails, WhatsApp and other applications, in addition to communications, they were not very different from personal computers except for a full keyboard (http://www.traidnt.net).

Table (6): Internet users sample percentages according to communication method in administrative sectors of Damanhur in 2016

Administrative sectors	"Alwasla"	Mobile	Router	Fixed phone	More than one means
Sacaneda	37.7	32.8	22.7	1.7	5.1
Shubra	62.4	22.6	7.4	1.1	6.5
Tamus	58.1	21	14.2	1.4	5.3
Qortasa	62.6	14.2	17.5	2.3	3.4
Noqraha	74.5	8.4	8.9	1.9	6.3
Average	59.1	19.8	14.1	1.7	5.3

Source: field study.

About a fifth of the sample size used internet from smartphones, it increased to a third in Sacaneda, that was because of the high percentage of users in the age group (30 - 45 years), which represented about 30% of the total internet users in the sector, where the majority of them were busy with work and did not have enough time to sit on computers, so smartphones could connect to internet anytime, anywhere without going back to computer.

C- Router:

It is a device like a computer used in the connection between different networks, where it directs data and converts it to receivers from computers, mobile phones, tablets, etc., and it has a number which is the computer's address on internet, and it may be connected to the computer via a wired cable or it may communicate wirelessly (Zyab, 2010, 13).

The use of "routers" came in the third place (14.1%), despite its multiple speed and its specificity, because its high costs prevented it from spreading, especially among people with low incomes, where its average cost for the lowest speed was 85 EP. per month (with a maximum of 10 GB Per month).

It should be noted that the percentage of internet users from fixed phones without "routers" by connecting the phone cable directly to the computer was (1.7%), due to the multiplicity of its negatives, as it was not possible to use the phone while the line was busy with internet and vice versa, in addition to slow speed.

2- Reasons for use:

The reasons for using internet were multiple, as a result of different objectives, cultures and customs. Those reasons could be classified as follows:(table 7, figure 6).

Table (7): Internet users sample percentages according to reasons for use in administrative sectors of Damanhur in 2016

Administrative sectors	Social Media	Entertainment	Follow-up events	Work & study	Contact & shopping
Sacaneda	51.3	30	9.7	7.3	1.7
Shubra	42.3	41.7	7.1	9.5	3
Tamus	42.4	40.1	15.4	-	2.1
Qortasa	46.7	45.2	-	6.7	1.4
Noqraha	70	23.9	5	-	1.1
Average	50.5	36.2	7.4	4	1.9

Source: field study.

A- Social media:

It was one of the modern technologies that individuals used to interact and communicate with each other via computers and smartphones, the most famous of were Facebook, Twitter, YouTube, and others, as cultural tools have become the fastest in dialogue, self-identification, communication with others, and attracting friends and others.

Figure (6): Internet users according to reasons for use in administrative sectors of Damanhur in 2016
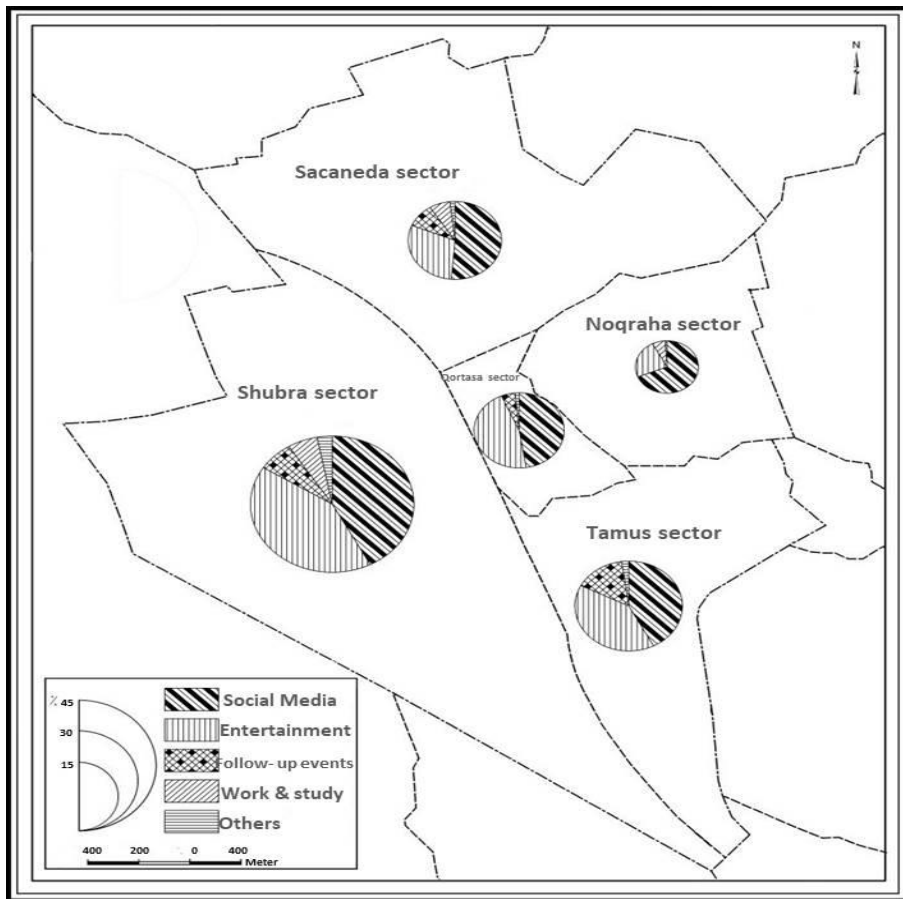
Source: Table (7).

The use of internet via social media came at the top of the reasons for use, with more than half size of the study sample, Noqraha recorded the highest percentage of users of those sites, that might be due to the high percentage of users with university qualifications (68.9% of the total internet users in the sector), where those sites were a quick source of news and information, and have opened up a new avenue for protests, popular unrest, and creation social and political blogs that appealed to this category.

There was no doubt that social media has contributed to activate societal participation that might affect decision makers if it was well utilized and well directed so that ideas and directions could be turned into projects ready for implementation, which might raise the level of development in the town.

B- Entertainment:

Online entertainment is growing more and more, especially with the increasing of games and programs and its sites and users. It is defined as the activity that individuals undertake in their spare time, whether by playing games, watching programs or chatting with the intention of recreating themselves (Abdel Majid and Shafiq, 2003, 29).

Entertainment has registered the second object of using internet in Damanhur with more than a third of the sample respondents, it was obvious that games attracted the majority of age groups except for the elderly (60 years and more), with varying degrees, but they increased in the age group (more than 15 years), which was the most familiar and knowledge category of electronic gaming sites and their developments, besides it increased in the category of users of the intermediate and upper intermediate qualifications, the results of the statistical analysis showed a strong direct correlation between the entertainment use of internet and those with intermediate education (0.81), as the sectors with a higher ratio of intermediate qualifications were the same sectors with the increased use of internet.

Despite undesirable effects of online entertainment, the problem was not internet itself but how to use it, so it could be positive if it was rationalized. Generally, running free times in a planned manner helps a lot in modifying the user's behavior, as it contributes to satisfying psychological needs and develop different skills and hobbies in addition to gaining many experiences that are reflected positively at the level of development which aims to develop the capabilities of the individual and achieve his goals according to the conditions of his society (Abdel Razek, 2015, 221).

C- Follow-up events:

Internet was the main means for fast news and following events of all kinds, but this goal was not widely accepted by a few users, and that might be due to either the lack of the interest or just follow the most important events via social media with friend's comments.

D- Work and study:

Despite the wide work via internet, it was a good and a fast way for development, especially in electronic education, providing great benefits to students, as it was considered an educational method that complemented traditional education. In fact, the percentage of internet users for that purpose in the town of Damanhur was low, not exceeding than 4 % Of the respondents, and the reason for that was multiple factors, such as work required special skills for users, besides it was not continuous, and online learning had its problems such as high costs, difficulties in management, lack of student's awareness of its importance and others, but many specialists in the education field saw that studying online would have a great impact in changing public education in general and university education in particular (Al-Ghadian, 2010, 7).

The study went further, it showed the relative importance of the factors affecting internet and the reasons for its use in Damanhur by using factor analysis based on the calculation of correlation coefficients between the various variables, through a matrix of factors (appendix 4), it was found that the most influencing factor in using internet, which had a relative importance (28.6%) of the total influence of factors, included two main variables, first, was how to access to **social media**, with saturation degree (0.96), and second, **entertainment** with saturation degree (0.84), while the second factor, which included three variables, (24.5% of the total factors), consists of **age** with a saturation degree (0.90), **average monthly income** with a saturation degree (0.75), and **educational status** with a saturation degree (0.26), and the last factor came with (6.8%) of the total factors and included three variables, were **sex-ratio** with a saturation degree (0.81), **communication and shopping** with a saturation degree (0.42) and **occupation** with a saturation degree (0.29), which indicated that the use of internet was a result of sum of interrelated factors, but the most common importance and impact variables were chatting through social network sites, especially entertainment games to spend free times, mostly between the age groups under 30 on one hand and average monthly income on the other hand.

3- Preferred times for use:

The study tried to find out the preferred time for use internet throughout the day, so the evening period came at the top (table 8), which was considered normal after finishing work and study (42%), followed by different times, as it was found that more than a third of the users did not have a specific daily timetable, as they used internet in different times of the day according to their wishes and special circumstances, and that percentage varied from administrative sector to another, but it reached its maximum in Sacaneda (70%), and that might be due to its occupation of first place in mobile internet use among the town sectors, which was often used in different times of the day, noting the scarcity of

internet use in the afternoon times, because of studying or working, as the percentage of both students and workers reached 45.2%, 42.1% of the total sample in the town, respectively.

Table (8): Internet users sample percentages according times of use in administrative sectors of Damanhur in 2016

Administrative sectors	Different times	Morning	Afternoon	Evening	Night
Sacaneda	70	5	5	-	2
Shubra	9.1	26.4	-	9.1	55.4
Tamus	31.9	21	-	-	47.1
Qortasa	33.3	16.7	-	-	50
Noqraha	45	15.9	-	1.6	37.5
Average	37.9	17	1	2.1	42

Source: field study.

The study confirmed the continuous great increase in the percentage of the users of the web in recent years, reaching 76% of their total in Damanhur during the period 2010-2015.

III: Levels of satisfaction with the internet

The concept of customer satisfaction could be defined as his conviction to receive a good service that he expected or more (Ismail, 2004, 3), and measuring the level of satisfaction of internet users was an indicator of its success in Damanhur, as it depended on efficiency and costs. User's opinions showed different levels of satisfaction with the internet as follows (table 9):

1- Half of the sample of the users agreed that the efficiency of the internet was generally acceptable, that reflected a decrease in the satisfaction rate of the sample of users in "a good way" (17.4%), while about a third of them expressed their dissatisfaction with internet, describing it badly, and that might explain facing technical problems such as high prices, slow speeds, and internet crashes that might happen from time to time.

Table (9): Internet users according to levels of satisfaction in administrative sectors of Damanhur in 2016

Administrative sectors	Efficiency			Cost		
	Good	Accepted	Bad	Good	Accepted	Bad
Sacaneda	11.3	57.7	31	49.5	44.6	5.9
Shubra	13.5	54.2	32.3	45.4	40.2	14.4
Tamus	13.2	56	30.8	41.1	46.6	12.3
Qortasa	4.5	60.9	34.6	45.5	48.2	6.3
Noqraha	44.5	51.1	34.4	21.1	65.5	13.4
Average	17.1	50	32.6	40.5	49	10.5

Source: field study.

2- More than half of the sample size of the users were satisfied with internet cost, they described it between low and acceptable cost, while the percentage of those who considered it costly high reached 40.5% of the sample size.

3 - Despite problems facing internet users in the town, the majority of its users did not show their complaining about it widely, so the average overall satisfaction comprised approximately two thirds of the sample size, while those who were not satisfied with it represented the rest.

4- Noqraha came first with internet approval levels, in both efficiency and cost, where the average percentage of those between accepted and good was 72.7% of the total users in the sector, while the

average percentage of those between bad and high cost was 27.8% of them, that was because about three quarters of internet users got it through "Alwasla", or the community internet, where a group of users shared a single internet link, which was considered the best way to get an internet with reasonable speed and price.

IV: Internet problems and proposals

There were many problems that prevented users from accessing internet with a high quality level in Damanhur, so they could be classified into three main groups, the first was: economic problems by 56.8%, the second was human diseases as a result of excessive use (16.5%), and the third was social problems (15.9%), that was related to the morals and beliefs of internet users.

The study tried to analyze these problems (Table 10, Figure 7), and proposals to overcome them as follows:

1- Economic problems:

It was considered to be one of the most important weaknesses of internet, and electronic tread. The high prices of internet, with lack of quality, might reduce the numbers of subscribers and might not encourage many who wish to use that method. The economic problems facing the web users in Damanhur town could be classified into the following:

A- High cost:

It came at the top of this pattern of problems (40.5%). Although TE Data, the internet monopolist in Egypt, announced that internet prices had been reduced to less than a half starting from April 2015, those prices were not applied, as they start with 100 pounds for a speed of 1 megabyte, and ending with 700 pounds for a speed of 8 megabytes, as well as the mobile internet starting from 50 pounds for the package 1 megabyte with a capacity of 5 gigabytes, and ending with 85 for a speed of 2 megabytes with a capacity of 10 gigabytes, in addition to the low

average income per capita and high unemployment rate that reached between a university qualifications about 38% in 2016 (Al-Buhaira Governorate General Bureau, 2017), which had the most impact on the complexity of this problem.

B- Slow speed:

The percentage of users who faced problems from slow internet and difficulties in browsing has exceeded a third of the sample size of economic problems, due to two reasons: the first: the spread of what was known "Alwasla",(three fifths of the sample size was from that category), which might reduce the speed, especially if the members used the network at the same time, and the second: the internet device, which was the "router" responsible for receiving internet, as some malfunctions might occur. It should be noted that the slow speed and the high cost represented about three quarters of the economic problems faced users in the town.

C: Network crashes:

It came in the second place with 13.4% of the total economic problems, and it indicated to the internet being interrupted while searching, browsing and sending messages, forcing the user to return again to the starting point, and he might lose the data he dealt with, and in most cases it was difficult to enter the network or return to the search sites he was browsing.

The study indicated that 14.5% of the total internet users in Damanhur recommended that the internet company should improve its quality to solve that problem, and this percentage has increased in Noqraha (18.5%), where more than half of the sample size of its users suffered from slow network.

It was expected that problem would be overcome after the development achieved by the company by replacing optical fiber cables instead of copper to raise the efficiency of the network in Damanhur town (http://te.eg/press_release/ContentDynamictab).

Table (10): the problems of internet users in administrative sectors of Damanhur in 2016

Admin. sectors	Economic problems				Human diseases				Social problems			
	High cost	Slow speed	Network crashes	Multiple problems	Muscles pain	Visual impairment	Psychological diseases	Others	Depraved behavior	Extreme thoughts	Wasting time	Multiple problems
Sacaneda	49.5	25.8	8.2	16.5	49.5	20.6	14.4	15.5	13.4	22.7	1	62.9
Shubra	45.4	30.4	13.8	10.4	38.7	51.9	6.1	3.3	33.3	14.2	9.8	42.7
Tamus	41.1	44.2	5.4	9.3	65.9	25.6	4.6	3.9	14.7	21.7	2.3	61.3
Qortasa	45.5	13.6	22.7	18.2	54.5	36.4	-	9.1	31.8	9.1	31.8	36.3
Noqraha	21.1	56.7	16.7	5.5	41.1	41	12.2	5.7	32.2	17.8	2.2	47.8
Average	40.5	34.1	13.4	12	50	35.1	7.5	7.4	24.9	16.8	9.1	49.2

Source: field study.

Figure 7: the problems of internet users in administrative sectors of Damanhur in 2016
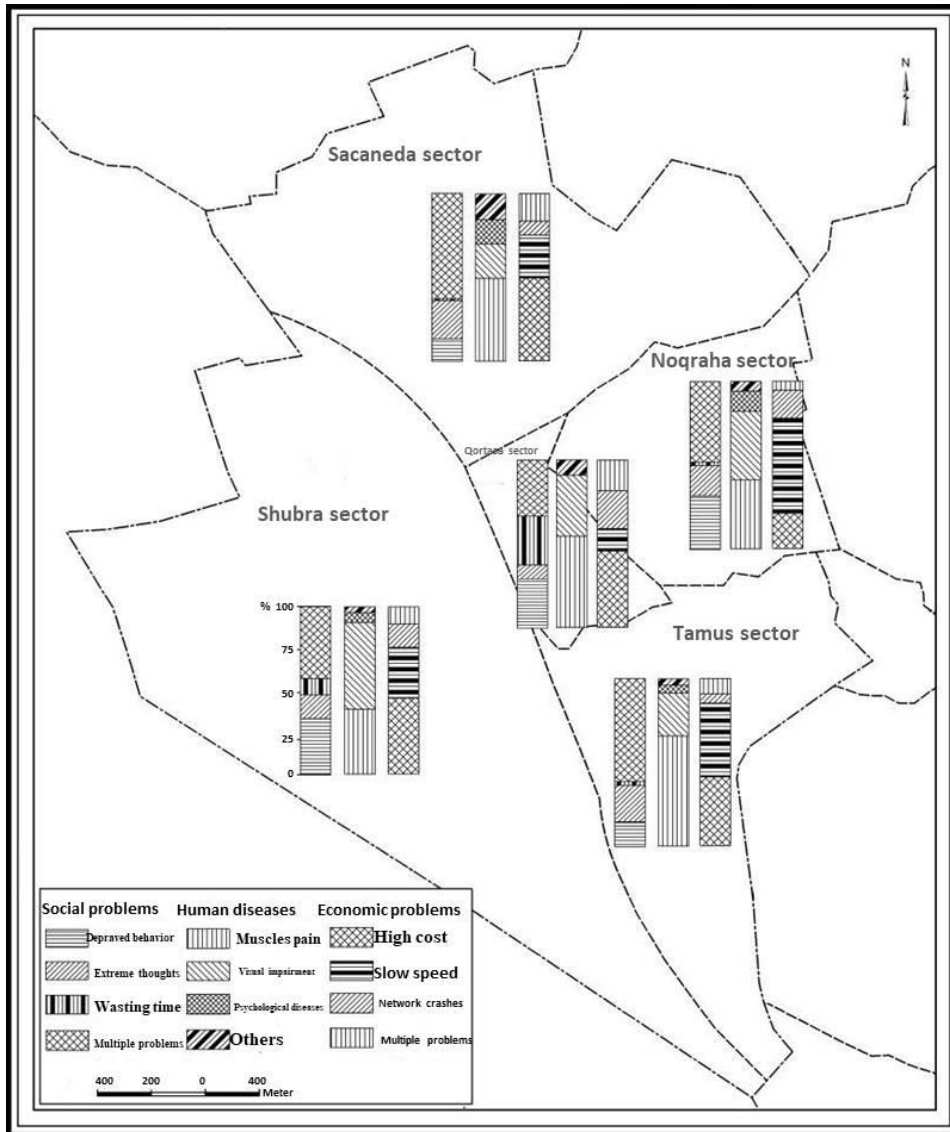
Source: Table (10).

2- Human diseases:

It referred to health problems that the computer user might have because of computer working for a long time in an incorrect way. There was no doubt that there was a clear direct relationship between levels of both health and development in society, the unhealthy were less able to participate in the development of their societies, that reduced the possibility of providing the necessary treatment and health facilities. Among the most important of these problems are the following:

A- muscles pain:

Half of the sample of the users who faced health problems suffered from these pains, where excessive use of the computer was a reflection of internet addiction, as the user needed to bend towards the computer screen and its components for a long time, or holding the mobile for long periods, which might cause health problems and pain at the top back, especially in the neck and shoulders, as well as wrist pain (Iverson and others, 2008, 701).

B- Visual impairment:

More than a third of the sample who faced health problems in the town of Damanhur suffered from what was known as "computer vision syndrome", which was a degenerative problem in eyes that might end with severe visual impairment, blurring of vision and complete eye fatigue, and might lead to a cataract disease. (Clayton and others, 2005, 253).

Computer vision syndrome was a comprehensive term for many problems, but its causes could be easily identified and cured. It was necessary for the user to be at least two feet from the screen when performing any actions, especially in old-fashioned screens due to the increased amount of screen glare and poor quality. Although those problems were more common in older-style computers, the newer

models were also not without those problems (Andersen and others, 2008, 126).

C- Psychological diseases:

It was ranked third in the health changes that facing the internet addicts (7.5%), such as mental disorders and conflicts, isolation, loss of focus, and etc., that was because the mixed illusion which the user sensed of the interaction with the virtual internet world, which might happen through discovering different types of societies that might allow sexual, homosexual pornography and etc., which against his religion and society traditions and pushing him into psychological struggles (Bassiouny, 2003, 206).

Despite the importance of health problems, the percentage of internet users' proposals to solve them was decreased, reaching 3.5% of their total, and that might be due to a lack of awareness of the health damages resulting from excessive use of internet.

3- Social problems:

It referred to things that were not familiar to society, the most important of them were:

A- Depraved behavior:

It could be every bad behavior issued by the individual and returned with a direct harm to himself and others, as some studies indicated that the more the individual increased his use of internet, the more negative effects he got such as isolation, and moved away from the family, friends and relatives, and became a bad moral, and isolated gradually Outside his community, having a state of self-neglect, noting that about a quarter of the sample of users with social problems had the rational use of internet by roaming around pornographic sites that posed a direct threat to religious values and societal traditions which might reflect a moral breakdown.

B- Extreme thoughts:

Which were everything that contradicted moderation, such as deviating from the values, norms and common customs in society and adopting values on the contrary.

Although that problem did not exceed than 17% of the total social problems resulting from the excessive internet use, it was one of the most serious problems threatening societies, as it represented the dangerous problems that leaded to terrorism, when the individual rejected any beliefs that differ from his, the extremist turned from thought to action. He might use force and violence in order to achieve his beliefs.

C- Wasting time:

The misuse of internet became the most negative distraction that affected individuals and social networking sites (Facebook - Twitter - Instagram and others) were the most time-wasting sites, as the individual spent most of his time on those networks without great benefits, so he would not be able to do the implemented tasks of life (http://www.almaaref.org). In fact, wasting time ranked third among the social problems in Damanhur (9%), nearly half of them had more than one problem.

The study showed that users' suggestions for solving internet problems in Damanhur were focused on overcoming social problems more than others, (30.1%) of them indicated to the necessity of family awareness and reducing time on the web, while (42.6%) said government censorship on websites should be more active, the remaining percentage (9.3%) indicated to more than one proposal to overcome the social problems of internet, topped by rationalizing the use and spreading awareness, especially among young people about the optimal use of internet and activating the role of education scientists in the society.

CONCOLUSION

The findings of this study were as follows:

- The largest age group (15-30 years) acquired the largest percentage of internet use in the town of Damanhur, where included students and adolescents, noting the high percentage of males comparing to females.

- The strong direct correlation between both level of education and the use of internet in Damanhur (0.94), as the study sample did not record those who could not read and write due to their inability to interact with the computer, as the higher the educational level went with the average use of the web, and that was clearly evident in Noqraha sector.

- The student category came at the head of the users, including nearly half of the sample size, and that might be because that category was an extended age group that included students from the age of 6 years until the early twenties and with different motives of use such as entertainment and scientific purposes, while retired users came at last with a little more than 1% of the total sample, as they did not appear except in Shubra and Qurtasa, due to their lack of interest in internet because they did not much care about modern technology, either because of ignorance of using computers and smartphones, or they believed it was not much useful while suffering from aging diseases at the same time .

- The increase of the percentage of low-income users (less than 750 pounds per month), they were more than a third of the sample size, despite costs required, individuals preferred using internet to the basic family needs, as well as the spread of what was known as: Alwasla" or the community internet with low cost (62.7% of the sample size), that was confirmed by the low rate of usage "routers" (14.1%).

- The use of internet via social media came at the top of the reasons for use, with more than half size of the study sample, as those sites were a quick source for obtaining news and information, recording protests and popular unrest, and creating social and political blogs.

- The correlation of entertainment with the intermediate qualifications users. The coefficient of correlation between them reached (0.81), which was a strong positive correlation. Administrative sectors with a higher percentage of the intermediate qualifications were the same which the recreational use of the internet increased.

- There were different levels of user's satisfaction with internet, where two-thirds of them expressed their satisfaction with the cost and efficiency, while the remaining percentage grumbled, describing it badly because of its economic problems, especially high prices, slow speed and interruption of service from time to time.

- The majority of users confirmed that they should continue to use internet, whether through smartphones, "routers", or any other devices, while some indicated that they would depend on smartphones only if technical and economic problems related to other devices such as increasing of prices and service crashes.

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6- http://www.un.org

Appendix (1): A questionnaire on using internet in Damanhur

I: User characteristics:

1 - Place of residence: Sacaneda   Shubra   Tamus   Qortasa   Noqraha

2- Sex-ratio: male   female

3- Age: Less than 15 years   15- 30   30- 45   45- 60   60 and more

4-   Educational status: ignorant   read& write   Less than university degree   university degree

5- Occupation: Government sector   Private sector   business Student   retired   unemployed

6- Average monthly income: Less than 750 pounds

750 -1500   2250 -3000   3000 & more

II: Internet user's behavior:

7- Internet subscription method: fixed phone   Mobile Laptop   Tablet   Computer   More than one device

8- The most important sites that you like to access: (More than one site can be selected).

- Social media (Facebook, WhatsApp, etc.)

   News sites (newspapers, magazines, etc.)

- Game sites   Educational sites   Purchasing sites (Souq.com, etc.)   other sites (mention them)

9- Times you prefer to use internet:

   Morning   noon   afternoon   evening   night

III: Levels of satisfaction with the internet:

10- Strongly Agree   Agreed   Neutral

    Disagreed   Strongly Disagreed

11- If the answer is " disagreed", what are the reasons for dissatisfaction? (More than one reason can be selected).

 - High cost   Slow speed   Network crashes physical pain   Visual impairment   Psychological diseases Depraved behavior   Extreme thoughts   waste of time Others (mention them ....).

12- Line speed used:

Less than 1Mega Bites   1: 4   4: 8   more than 8MB.

13- Internet subscription type: Single   group

14- The cost monthly subscription:

Less than 50 pounds   50: 100   more than 100

15- costs are: Suitable   high

16- Are you satisfied with the efficiency of the service?

Yes   No

17- Level of service efficiency.

Weak   Moderate   Good   Very Good   Excellent

18- Do you intend to continue using the internet?

 Yes   No

19- If the answer is yes, which means will you continue to use?

- Smartphone   "Router"   "Alwasla"   Others

20- What are your suggestions to avoid damages of using internet and improving the service? (More than one proposal can be chosen).

- Increasing the efficiency of the network   Reducing prices   Rationalizing use   closing pornographic sites   Family control   Wearing eyeglasses   Family &community awareness   Seating moderately during use   Spreading moderate thoughts

others (mention them ....)

Appendix (2): The degree of saturation of factors affecting the use of the internet in Damanhur 2015

(Rounded Matrix Matrix)

variable	1	2	3	4	5	6
Age		0.90082			0.91487	
Type			0.67485	0.46279		0.81833
Educational Status		0.26848				
Occupation				0.26808		0.29893
Income		0.75292				
	Reasons for using the internet					
Social Media	0.96002					
Entertainment	0.84300					
Follow the events				0.22043		
Work and study					0.63684	
Contact& shopping						0.42591
Relative importance	28.6	24.5	17.5	12.1	10.5	6.8

Source: Statistical analysis results.