



## ANALYSIS AND SOCIO-ECONOMIC DETERMINANTS OF TECHNOLOGY CONSUMPTION: IVS STUDENTS

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### ABSTRACT

*Consumption culture is one of the highly debated topics in almost all study areas. Its initiative motives date back to the birth of mass production that started with the Industrial Revolution and urged producers to look for new markets. The emergence of new markets not only increased consumption but also caused changes in consumption habits and culture. These alterations have gone beyond borders in time and outspread throughout today's world that is portrayed as a global village. A distinctive amount of studies have been conducted on this subject in several fields.*

*Accordingly, the high-speed spread of technology and the fact that it is accessible by almost each individual in a society has increased its consumption, too. The group of university students is one of the ones that are highly affected by these new trends. For that reason, technology consumption of university students will be the focus in this study. The socio-economic factors that are effective on technology consumption of Fatih University Vocational School students will be determined via a questionnaire.*

**Keywords:** Consumption, technology consumption, university students

**JEL Classification:** Z13

## 1. INTRODUCTION

### 1.1. Consumption Culture

Our modern world has been a great scene for several devastating changes one of which is the rapid grow of consumption culture. While the previous age was mostly characterized by production; the modern age is surrounded by consumption based theory and practises. This is a new age that 'is related to mass consumption which has occurred as a result of mass production' (Illich, 2011).

'The progressive vanishing of subsistence production, the successive diffusion of monetary relations over all social strata, the complex division of work and the establishment of a modern labour market do not only lead to differentiated forms of production, but also to a generalised, money-mediated form of acquisition and usage of objects (and services). This form of acquisition is, in the European languages, termed as "consumption", "consommation", "Verbrauch" etc.' (Schrage, 2010).

Bauman(2006) describes consumption society as 'a society in which consumers are different individuals from the consumers of any other societies'. 'One of the main characteristics of popular culture is the shift of consumption from a complementary factor to a determining one. This change is an outcome of the fact that traditional consumption, in which needs were the reason to consume, concept has been replaced by today's

consumption concept in which consumption is the need itself' (Baudrillard, 1997). Consumption is no more need oriented but it has evolved into focusing on satisfying psychological demands of human beings, and the first of these demands is individual's identity building. In this post-modern world which is full of emptied identities that can easily be adopted and thrown over, by the help of the symbolic meanings of the goods they consume, individuals come closer to the identities that they wish to build (Best and Kellner, 1998).

### 1.2. Technology Consumption

Being a very wide scope issue, there are several forms of consumption. If one is to make a list of these types, it will be one of the longest ones since consumption is related to almost all of the realms in our daily lives. In this article, the main focus is technology consumption which has spread with an express speed especially in the last decades. Every child is born into a unique environment and inherits the advantages and disadvantages associated to it. Technology enables a world that emphasizes baseline setups and customizations to give its user an advantage (Brash, 2010: 6).

Additionally, our age is also defined by information and the huge capital that is created by information and communication technologies needs a consumer market at least as large as itself. Thus, in information society each



citizen has a client and consumer identity besides his/her citizen identity (Öktem and Seçkiner, 2010).

Ultimately, diversion through technology is becoming increasingly prevalent in daily living. The miniaturization of mobile computing products and the fast pace of electronics development are making the world smaller and smaller' (Hart, 2012). Besides these material outcomes, this high speed grow of technology and its consumption has some significant sociological aspects. Controlling modern man through consumption is best reflected in technology usage. Technologic development has the potential of transforming individual practises, cultural activities and social organizations and structures. The sociological analysis of technology usage reveals that this situation is far beyond being only technic since it entirely organizes a wide social system and imposes a new life standard (Ergur, 1998). In addition to that, consumers of technology bear disparities from traditional consumers of the past. By the help of very dynamic and world wide web, cable TV, networks, phones, satellites etc. instruments, they are able to carry on their lives interactively (Basalla, 1996).

The picture of technology consumption in Turkey is not different from the general condition given above. According to Turkish Statistics Institution's survey on ICT Usage in Households, the highest technology usage is among the citizens at the ages between 16-24. This data lies there as a proof that young people are more into technology than the rest of the population. As stated above, the main reason behind human being's consumption is to gain an identity or to belong to a certain class through the products they use. A product is not simply consumed because of its certain qualities but instead the consumer's feelings about possessing it are the most significant point in terms of consumption culture.

Accordingly, teenagers and young adults are in search for an identity in their social atmosphere and the products they consume play a crucial role in this journey to their self-defining themselves. In addition to that, in our world of information and technology, technology consumption is one of the realms that this group of human beings are concerned with; this is clearly depicted by the survey mentioned above.

There are several determinants of technology consumption as it is the case for other types of consumption but in this article the focus is on the socio-economic determinants.

## 2. Method

Data used in this paper is gathered from the questionnaire that has been conducted among Fatih University Vocational School students. 215 students answered the questions but 210 of them are available for evaluation. This number is %20 of all the students. The data is analyzed by SPSS.

### 2.1. Analysis

156 female, 54 male students participated in the survey. According to the general findings of the survey, all the students have mobile phone and computer. The average monthly income of their families' is 2850 TL.As it is shown at figure 4, 26.2% of the participants have a monthly income of 800-1500 tl, 31.9% of them have one of 1501-3000, 22.9% of them one of 3001-5000tl and 17.2% of the students' monthly income is above 5000. It has been observed that most of the participants have low or middle income.

Figure - 4: Monthly Income of the Family

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	800-1500	55	26.2	26.7	26.7
	1501-3000	67	31.9	32.5	59.2
	3001-5000	48	22.9	23.3	82.5
	5001-8000	22	10.5	10.7	93.2
	Above 8000	14	6.7	6.8	100.0
	Total	206	98.1	100.0	
Missing	System	4	1.9		
Total		210	100.0		



Average monthly expenditure of the participants is 200 TL. Their average monthly mobile phone expenditure is 22 TL, internet expenditure is 40 TL. Mobile phone expenditure is 11%, internet expenditure is 20% of their total monthly expenditures.

Average daily length of talk on mobile phone has been detected as 30 minutes and average daily length of internet use has been detected as 120 minutes. The number of average daily SMSs is 32.

About following technologic developments, 80% of the participants gave a positive answer to that question while 20% of them gave a negative one.

**Figure - 8: Following Technologic Developments**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
No	42	20.0	20.0	20.0
Yes	168	80.0	80.0	100.0
Total	210	100.0	100.0	
Total		100.0		

The reasons why the participants change their mobile phones are given at the figure below. According to that analysis, the utmost reason is lost, be stolen or be broken down. 33.8% of the participants have stated that they change their mobile phones to be updated and to satisfy themselves.

**Figure - 8: The Reason of Changing Mobile Phones**

The Reason of Changing Mobile Phones	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6	2.9	2.9	2.9
Because my friends use a similar one	1	.5	.5	3.3
Lost, Stolen or Broken Down	132	62.9	62.9	66.2
To be updated	57	27.1	27.1	93.3
To satisfy myself	14	6.7	6.7	100.0
Total	210	100.0	100.0	

**2.2. Technology Consumption and Its Determinants**

Consumption is a realm which has sociologic aspects besides having economic ones. In economic terms, technology consumption refers to technology usage expenditures whereas it is more related to the length of time spent on using these technologic devices and services. The importance of drawing attention to differences among the determinants of both approaches has been emphasized.

It has been tested that there is a meaningful relation between family’s monthly income and participants’ monthly mobile phone expenditures. Participants of the lowest income group have a low mobile expenditure, too. More than half of the participants whose family’s income is between 1500-3000 TL, have monthly mobile phone expenditure between 20-30 TL.

**Figure - 9: Family’s Monthly Income \* Monthly Mobile Phone Expenditure**

Family’s Monthly Income	Monthly mobile phone expenditure	Total
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	0-20 TL	21-30TL	31-50 TL	51-70 TL	70 TL - ...	1
800 – 1500	36	11	6	1	1	55
	65.5%	20.0%	10.9%	1.8%	1.8%	100.0%
1501 – 3000	29	24	8	3	3	67
	43.3%	35.8%	11.9%	4.5%	4.5%	100.0%
3001 - 5000	12	15	10	10	1	48
	25.0%	31.3%	20.8%	20.8%	2.1%	100.0%
5001 – 8000	1	9	10	0	2	22
	4.5%	40.9%	45.5%	.0%	9.1%	100.0%
Above 8000	0	5	3	1	4	13
	.0%	38.5%	23.1%	7.7%	30.8%	100.0%
Total	78	64	37	15	11	205
	38.0%	31.2%	18.0%	7.3%	5.4%	100.0%

The relation between internet expenditures and monthly income is also meaningful. The survey has revealed that 58% of the participants of low income families spend 20-50 TL on internet every month.

**Figure - 10: Family’s Monthly Income \* Internet Expenditures**

Family’s Monthly Income	Internet Expenditures				Total
	0-20 TL	21-40 TL	41-60 TL	Above 60 TL	
800- 1500	18	18	13	4	53
	34.0%	34.0%	24.5%	7.5%	100.0%
1501- 3000	13	20	24	9	66
	19.7%	30.3%	36.4%	13.6%	100.0%
3001 – 5000	3	13	21	11	48
	6.3%	27.1%	43.8%	22.9%	100.0%
5001 – 8000	1	4	10	7	22
	4.5%	18.2%	45.5%	31.8%	100.0%
Above 8000	3	4	3	2	12
	25.0%	33.3%	25.0%	16.7%	100.0%
Total	38	59	71	33	201
	18.9%	29.4%	35.3%	16.4%	100.0%

A meaningful relation between monthly expenditure and internet expenditure has been found out. As it is shown at the figure below, internet expenditure increases in paralel to monthly expenditure.

**Figure - 11: Monthly Expenditure \* Internet Expenditure**

Monthly Expenditure	Internet Expenditure				Total
	0-20 TL	21-40 TL	41-60TL	Above 60 TL	
40 – 200	23	25	22	6	76
	30.3%	32.9%	28.9%	7.9%	100.0%
201 – 400	9	24	25	11	69
	13.0%	34.8%	36.2%	15.9%	100.0%
	4	7	19	8	38



	401 – 800	10.5%	18.4%	50.0%	21.1%	100.0%
		2	3	8	8	21
	Above 800	9.5%	14.3%	38.1%	38.1%	100.0%
Total		38	59	74	33	204
		18.6%	28.9%	36.3%	16.2%	100.0%

Additionally, the relation between mobile phone expenditures and monthly expenditures is also meaningful. The group of participants whose monthly expenditure is low also has a low mobile phone expenditure.

**Figure - 12: Monthly Expenditure \* Monthly Mobile Phone Expenditures**

Monthly Expenditure	Monthly Mobile Phone Expenditures					Total
	0-20 TL	21-30 TL	31-50 TL	51-70 TL	Above 70 TL	1
	49	17	11	1	0	78
40 - 200	62.8%	21.8%	14.1%	1.3%	.0%	100.0%
	21	28	13	6	2	70
201 - 400	30.0%	40.0%	18.6%	8.6%	2.9%	100.0%
	6	13	10	7	2	38
401 – 800	15.8%	34.2%	26.3%	18.4%	5.3%	100.0%
	2	7	4	2	7	22
Above 800	9.1%	31.8%	18.2%	9.1%	31.8%	100.0%
Total	78	65	38	16	11	208
	37.5%	31.3%	18.3%	7.7%	5.3%	100.0%

70% of the participants who think that they don't want people to pay attention to their mobile phones change their mobile phones because they are lost, stolen or broken down, whereas only 21% of them change their mobile phones for the reason that they want to be updated. 50% of the participants who would like people to pay attention to their mobile phones change their mobiles in order to be updated..

**Figure - 13: Would you like people to pay attention to your mobile phone's brand \* The reason why you change your mobile phone**

Would you like people pay attention to your mobile phone brand?	Why do you change your mobile phone?					Total
		Because my friends use a similar one	Lost, Stolen or Broken Down	To Be Updated	To Show Off	
No	4	1	120	37	8	170
	2.4%	.6%	70.6%	21.8%	4.7%	100.0%
Yes	2	0	12	20	6	40
	5.0%	.0%	30.0%	50.0%	15.0%	100.0%



Total	6	1	132	57	14	210
	2.9%	.5%	62.9%	27.1%	6.7%	100.0%

When the relation between participants' length of computer use and their departments has been looked through, it has been revealed that computer programming students spend more time on their computers than the others do. The opposite is true for child development students according to the data gathered.

### 3. CONCLUSION

This survey has revealed that there are meaningful relationships between technology consumption and income; technology consumption increases with the amount of income. However, another significant outcome of this study is that technology consumption of students of low income families is on middle levels. This controversial state can be interpreted from two different perspectives; economic and sociological. In economic terms, this shows that technologic devices are at the prices that can be available to all layers of a society. In sociological terms, people tend to spend on technology in order not to be way behind their social group even if they don't earn much. On the contrary to the expectations, it has been detected that the length of computer use of the participants who follow technologic developments is not long.

The answers to questions searching for the motives behind demand for technologic goods and services have pointed out that it is mostly related to meeting needs, whereas one's changing his/her mobile phone because of being updated and to be satisfied supports the idea that the need for consumption has strong bounds with being socially accepted and enjoying oneself.

Also, it has been found out that internet use via mobile phones is so widespread that it is the second reason why participants use mobile phones after talk. On the other hand, there has been detected no meaningful relation between place of accommodation and internet use.

In accordance with the expectations, computer programming students' length of computer use is long while the one of child development students' is the shortest among all students.

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