

MONITORING OF IT IN BULGARIA

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**Vitosha
Research**

www.vitosha-research.com

METHODOLOGY

The main objective of the IT monitoring conducted by Vitosha Research is to observe periodically and in a systemic way the distribution and use of PCs and Internet by Bulgarians. The main indicators monitored are the following:

1. **ACCESS TO A COMPUTER:** this indicator evaluates the share of people who have access to a computer or to a place when they can use a computer.
2. **USE OF INTERNET:** this indicator measures the share of people who use Internet among adult Bulgarians and among those who have access to a computer.
3. **STRUCTURE OF THE INTERNET USE:** this indicator evaluates the frequency of using Internet and e-mail, and the purposes for using Internet.

The monitoring is based on data from national representative surveys conducted by Vitosha Research from 2000 through to 2002. Data was collected through personal standardized interviews. All surveys were based on a two-step random cluster sample, representative for the adult population of the country. The size of the sample ranges as follows:

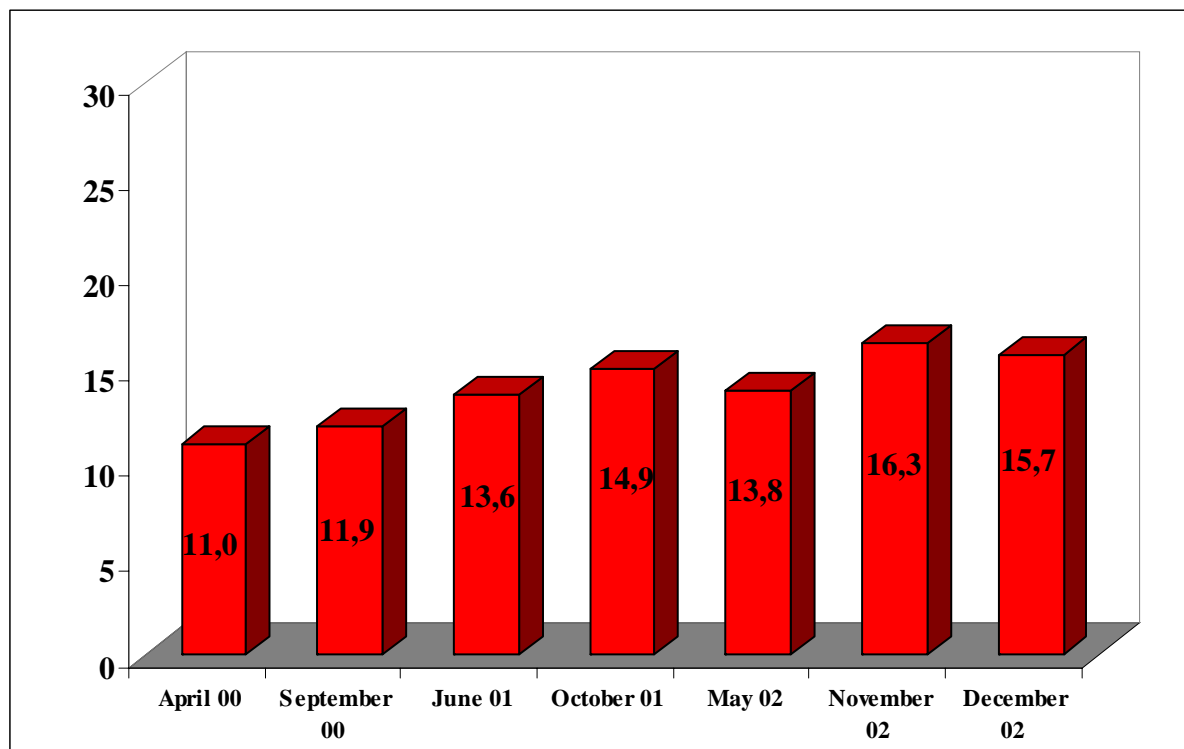
April 2000	N=1161
September 2000	N=1158
June 2001	N=1066
October 2001	N=971
May 2002	N=1170
November 2002	N=1079
December 2002	N=1634

1. ACCESS TO A COMPUTER

General evaluation

The degree of penetration of IT in the daily life of Bulgarians can be assessed as relatively low, but the pace of growth demonstrates the significance of this sector for the Bulgarian society. (*Figure 1.1*). By December 2002 the relative share of computer users grew 1.43 times compared to April 2000 when the monitoring began. The average growth rate for the entire period is 0.91, although it slowed down significantly in 2002.

FIGURE 1.1. ACCESS TO A COMPUTER



Source: Omnibus surveys conducted by Vitosha Research (2000-2002) Base: All respondents

Social and demographic structure

IT users have specific social and demographic characteristics (*Table 1.1*); these can be summarized as follows:

- The age group with the largest number of users is that of people aged between 18 and 40. Among them, the most active are those in the lowest age range – 18-19. The share of the latter continues to grow very fast. It doubled during the last year only.
- Information technologies continue to be accessible predominantly to people with a higher level of education. The share of users who have the highest degrees remains almost unchanged during the entire monitoring period.
- Access to computers is most widespread in large cities and mainly in Sofia. Despite the rise in the number of respondents from mid-sized cities who use computers, their share is still limited. Thus they are at a disadvantage position regarding the access to new information technologies.

TABLE 1.1. BREAKDOWN OF ACCESS TO A COMPUTER PER SOCIAL AND DEMOGRAPHIC GROUPS (%)

	April 2000	September 2000	June 2001	October2001	May 2002	November 2002	December 2002
Gender							
Men	11.1	11.8	13.8	14.9	11.9	15.0	16.5
Women	10.8	11.8	13.4	15.0	15.7	17.6	15.0
Education							
Basic or lower	1.2	0.5	1.5	1.8	1.6	4.1	2.8
Secondary	8.4	11.1	15.6	15.0	12.3	14.2	17.2
College degree	20.2	13.6	12.0	15.1	19.1	29.1	20.0
University degree	42.7	51.7	46.1	45.3	49.0	50.3	48.9
Age							
18-19	28.5	26.8	46.7	47.4	36.4	60.0	50.5
20-29	19.4	17.4	27.2	27.1	23.0	32.0	28.2
30-39	14.9	20.2	19.5	22.4	22.0	20.5	22.8
40-49	17.5	14.5	18.2	27.4	16.1	23.0	18.1
50-59	8.0	9.8	8.5	9.2	13.3	10.7	9.3
60-69	2.6	3.2	1,7	3.7	1.7	4.0	2,5
70-79	0,0	1.4	0.0	1.5	0.8	1.7	0.8
80 +	2.5	0.0	0.0	0.0	2.3	n/a	0.0
Population of location							
Up to 999	n/a	0.5	0.5	n/a	1.8	1.5	2.7
1000-4999	n/a	2.1	0.7	n/a	5.6	7.0	4.8
5000-19,999	n/a	8.1	5.5	n/a	9.7	15.5	16.5
20,000-99,999	n/a	12.0	16.4	n/a	12.8	16.2	19.2
100,000-499,999	n/a	17.6	21.1	n/a	21.5	24.8	22.9
Sofia	n/a	30.4	34.0	n/a	33.3	36.1	34.7
Base (All respondents)	1161	1158	1066	971	1170	1079	1634

Source: Omnibus surveys conducted by Vitosha Research (2000 - 2002)

Points of access to a computer

Table 1.2 shows the distribution of the main points of access to a computer:

- Access to a computer at the office remains traditionally high in December 2002 too. No significant changes were observed compared to the previous month.
- In 2002 the share of “household” users was relatively stable. Regardless of the rise registered in the end of the year, it is still too early to talk about a growth trend similar to the one observed in 2000 and 2001.
- The number of people who use a computer in public places grew significantly. There are two reasons for this process. In the first place the number of clubs, libraries and other similar places for IT access is growing and the price is relatively low. Simultaneously, these places offer more and more new technical options, such as working in a network environment, faster access to Internet etc., that often determine the user’s choice.

TABLE 1.2. POINTS OF ACCESS TO A COMPUTER (%)

	April 2000	September 2000	June 2001	October 2001	May 2002	November 2002	December 2002
At home	2.6	4.4	5.3	7.5	4.8	5.2	7.5
At the office	6.3	7.5	7.2	7.0	9.1*	7.3	7.1
Elsewhere (school, public place, friends' home etc.)	3.1	2.1	6.5	4.1	2.5	2.5	6.8
Base (All respondents):	1161	1158	1066	971	1170	1079	1634

Source: Omnibus surveys conducted by Vitosha Research (2000 - 2002)

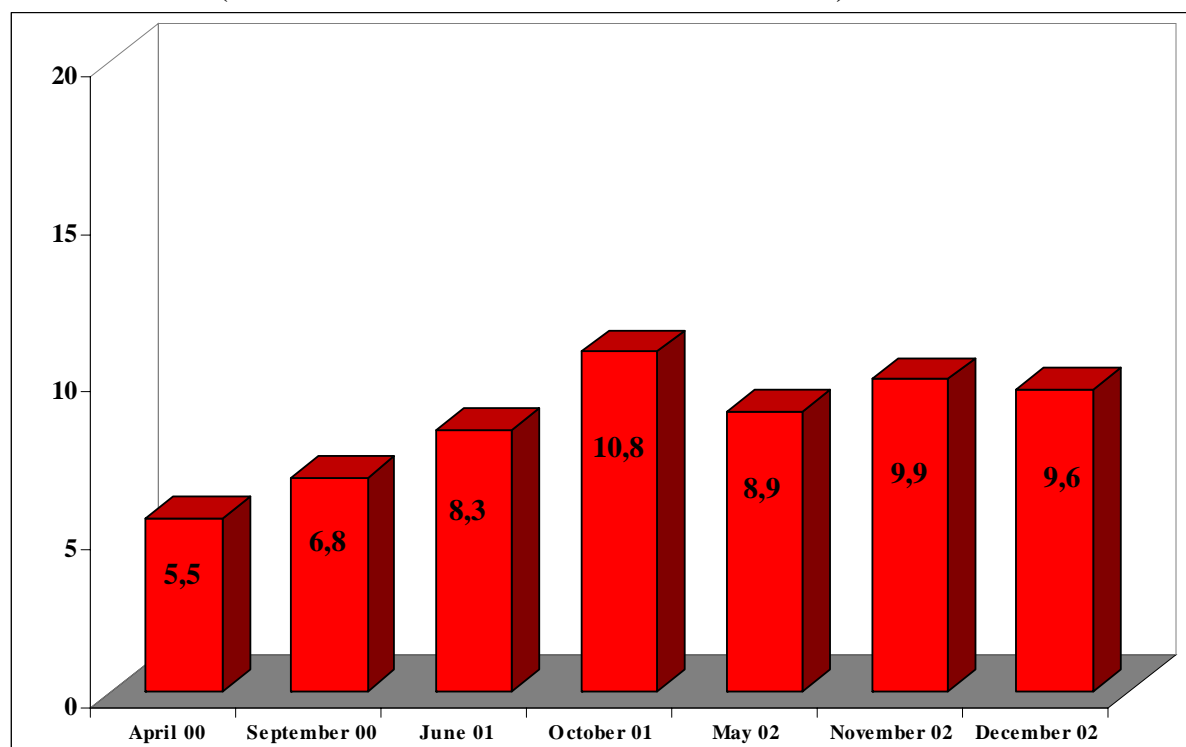
* The value for May 2002 reflects the share of people who have access to a computer at the office and/or at school.

2. USE OF INTERNET

Level of Internet Use

The growth of Internet use was slightly slowed down in 2002. In absolute figures the number of Internet users during the last quarter of 2002 ranged between 620,000-645,000 people (9.6-9.9% of the country's population aged above 18). As a whole the trend of Internet use in this country is ascending (*Chart 2.1*). Compared to technologically highly developed countries (*Table 2.1*) Bulgaria lags behind, but is close to Croatia, Greece and Poland.

FIGURE 2.1. RELATIVE SHARE OF INTERNET USERS (% OF THE COUNTRY'S POPULATION AGED ABOVE)



Source: Omnibus surveys conducted by Vitosha Research (2000 - 2002) Base: All respondents

TABLE 2.1. ABSOLUTE NUMBER AND RELATIVE SHARE OF INTERNET USERS IN SOME COUNTRIES

Country	Population	Internet users (Source)	Internet users (% of Population)
Great Britain	59.6 mln.	33.0 mln. (Jupiter MMXI)	55.4%
Germany	83 mln.	26 mln. (Forsa)	31.3%
Greece	10.6 mln.	1.3 mln. (VPRC)	12.3%
Poland	39.0 mln.	4.9 mln. (Zycie)	12.6%
USA	278 mln.	149 mln. (Computer Industry Almanac)	53.6%
Turkey	66.5 mln.	3.7 mln. (IBS)	5.6%
Hungary	10.1 mln.	730,000 (NetSurvey)	7.2%
Croatia	4.3 mln.	300,000 (IDC)	7.0%
Czech Republic	10.2 mln.	2.2 mln. (GfK)	21.6%

Source: Cyber Atlas, 21 March 2002

Social structure of Internet users

The social and demographic characteristics of Internet users (Table 2.2) are similar to those of people who have access to a computer. The peculiar features of the Internet users make it possible to describe them as a specific social group: the most active Internet users are the young (the age group: 18 to 30) who live in big cities and in the capital Sofia. This group comprises over 50% of all people using computer and Internet. There are no considerable differences among the Internet users regarding gender. People with university degrees are the most active Internet users.

TABLE 2.2. BREAKDOWN OF INTERNET USE PER SOCIAL AND DEMOGRAPHIC GROUPS (%)

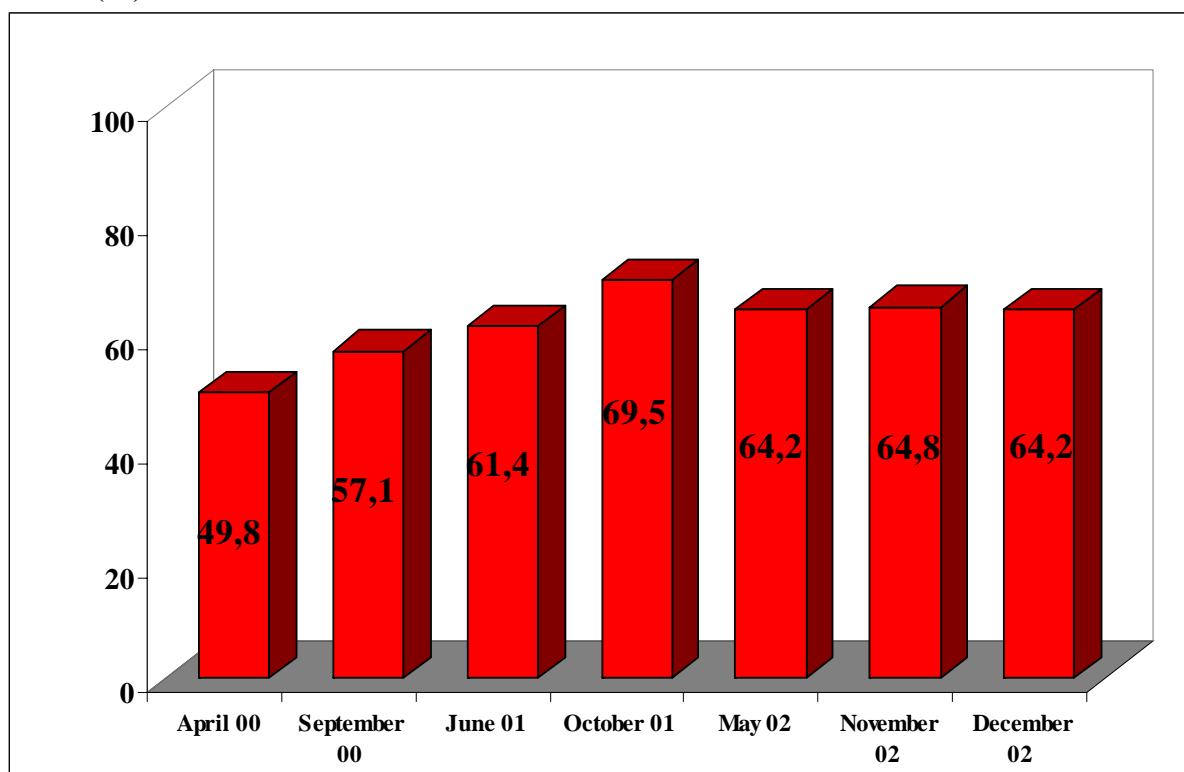
	April 2000	September 2000	June 2001	October 2001	May 2002	November 2002	December 2002
Gender							
Men	6.0	7.4	9.4	12.3	8.0	9.1	9.0
Women	5.1	6.3	7.3	9.6	9.7	10.9	10.1
Education							
Basic or lower	0.7	0.5	0.7	1.5	1.3	1.7	1.6
Secondary	5.0	6.0	9.7	10.0	6.7	8.6	9.1
College degree	5.4	6.1	8.0	7.5	10.6	16.8	16.9
University degree	20.6	31.9	28.1	35.8	35.9	34.5	34.5
Age							
18-19	17.9	23.6	33.3	42.1	33.3	44.3	33.3
20-29	13.7	11.9	21.0	21.8	18.7	28.5	18.3
30-39	7.2	9.9	12.6	17.5	13.4	11.4	12.9
40-49	6.6	9.0	7.7	17.8	8.5	12.3	10.2
50-59	2.9	3.8	4.8	5.7	5.7	3.1	6.1
60-69	1.6	1.6	0.0	1.6	1.7	1.1	1.6
70-79	0.0	0.7	0.0	1.5	0.0	n/a	0.0
80 +	0.0	0.0	0.0	0.0	0.0	n/a	0.0
Population of location							
Up to 999	n/a	0.5	0.0	n/a	0.9	0.5	2.2
1000-4999	n/a	1.6	0.0	n/a	2.5	3.1	2.5
5000-19,999	n/a	3.4	1.6	n/a	3.6	8.4	6.9
20,000-99,999	n/a	6.1	8.7	n/a	9.5	8.5	9.5
100,000-499,999	n/a	9.3	16.1	n/a	13.5	16.3	15.3
Sofia	n/a	20.2	20.8	n/a	24.1	26.2	26.4
Base (All respondents)	1161	1158	1066	971	1170	1079	1634

Source: Omnibus surveys conducted by Vitosha Research (2000 - 2002)

Access to a Computer and Use of Internet

No change in the share of Internet users among those who have access to a computer in general was registered in 2002. The growth of this share, which was characteristic for 2000 and 2001, slowed down in 2002 considerably; the relative size of this consumer group is now stabilized at a constant level. (Figure 2.2). The stabilization can be considered as an indirect indicator for a certain saturation of the Internet services market. It is expected that in order to overcome this hindrance in the future Internet providers will encourage the users of Internet services by facilitating their terms and conditions of use, providing new technological capabilities, active marketing strategies and other actions which would stimulate the dynamic and rapidly changing market of high technologies in Bulgaria.

FIGURE 2.2. SHARE OF INTERNET USERS AMONG THOSE WHO HAVE ACCESS TO A COMPUTER (%)



Source: Omnibus surveys conducted by Vitosha Research (2000 - 2002) Base: Respondents who have access to a computer (April 2000: N=127; September 2000: N=136; June 2001: N=145; October 2001: N=145; May 2002: N=162; December 2002: N=302)

3. INTERNET USE

Frequency of use

In December 2002 the typical Internet user browsed the virtual space at least once a week (Table 3.1). The share of the most active Internet users (those who surf a couple of times a day) is growing constantly, although slowly. These two observations are reliable indicators of the increased penetration of Internet and the psychological acceptance of alternative forms of communication, data exchange and entertainment.

TABLE 3.1. FREQUENCY OF INTERNET USE (%)

	April 2000	September 2000	June 2001	October 2001	May 2002	November 2002	December 2002
A number of times a day	0.4	0.9	0.9	1.4	1.3	1.9	1.3
At least once a day	1.0	1.4	2.5	1.9	1.4	2.5	2.6
At least once a week	2.2	1.6	3.2	3.8	3.8	2.9	3.1
At least once a month	0.9	0.8	1.0	1.1	0.8	1.2	1.3
Rarely	1.0	2.1	0.7	2.6	1.6	1.5	1.2
Total	5.5	6.8	8.3	10.8	8.9	10.0	9.4
<i>Base (All respondents):</i>	<i>1161</i>	<i>1158</i>	<i>1066</i>	<i>971</i>	<i>1170</i>	<i>1079</i>	<i>1634</i>

Source: Omnibus surveys conducted by Vitosha Research (2000 - 2002)

Use of e-mail

The frequency of use of electronic mail is similar to that of Internet use (*Table 3.2*). As a whole, the group of people for whom using the worldwide net (Internet in general and in particular e-mail) turns into a daily routine is expanding.

TABLE 3.2. THE FREQUENCY OF USE OF E-MAIL (%)

	April 2000	September 2000	June 2001	October 2001	May 2002	November 2002	December 2002
A number of times a day	0.7	1.0	0.8	1.0	1.1	0.8	0.7
At least once a day	1.1	1.4	1.3	1.8	1.2	2.1	2.1
At least once a week	2.0	1.8	2.3	3.2	3.0	3.0	2.8
At least once a month	0.3	0.5	1.0	0.7	1.1	0.6	0.6
Rarely	1.2	1.3	1.4	2.6	1.3	1.0	1.5
Total	5.3	6.0	6.8	9.3	7.7	7.5	7.7
<i>Base (All respondents):</i>	<i>1161</i>	<i>1158</i>	<i>1066</i>	<i>971</i>	<i>1170</i>	<i>1079</i>	<i>1634</i>

Source: Omnibus surveys conducted by Vitosha Research (2000 - 2002)

Structure of the Internet use

Browsing the Web in search of information and as an effort to develop the users' professional and educational interests can be determined as the main thematic aspects of Internet use. Other activities such as entertainment, communication, hobby, tourism etc., are placed further down the list of consumer habits (*Table 3.3*). The key consumer interests in surfing Internet can be summarized as follows:

- **Source of information.** A considerable part of Internet users is comprised of people searching for information (check facts, read news, find analysis of current events etc.).
- **Career development and education.** This category covers most often looking for information directly related to the users' activities, education, browsing through job ads, etc.
- **Means towards entertainment.** Growth in new forms of use was observed in December 2002 among those people for whom Internet is a means for entertainment (chat, discussion groups, games, other entertaining activities). New forms included in this group are watching films, listening to music, and other forms of interactive entertainment, which although covered by the monitoring for the first time, have very high significance in the assessment made by the respondents. In this respect the World Wide Web fulfills important social and psychological functions. Net applications are gaining in popularity, which leads to the establishment of separate

social groups of people with similar interests and way of thinking. These particular forms of communication are “fun”, user-friendly and relatively cheap. Communities established on this base are a fact of life not only among the youth, but are expanding to cover wider circles of Internet users.

TABLE 3.3. STRUCTURE OF INTERNET USE (%)

	April 2000	September 2000	June 2001	October 2001	May 2002	November 2002	December 2002
Entertainment/ games	1.7	1.9	3.6	3.2	3	4.4	3.5
Research	2.7	3.3	4	5.5	4	4.2	3.0
Watch films	n/a	n/a	n/a	n/a	n/a	n/a	1,4
News	1.9	3.1	3.8	4.5	3.9	2.8	2.5
Investment	0.7	0.4	0.5	1.5	0.4	0.6	0.0
Activities related to one's job	2.9	5.1	4.1	6.8	5.6	5.6	4.5
Shopping	0	0.1	0.3	0.5	0.2	0.1	0.1
Chat, discussion groups	1.8	1.9	3.5	4.2	3.6	4	2.9
Search for information	4.5	5,1	6.6	8.2	7.5	7.5	4.9
Travel arrangements	n/a	n/a	n/a	n/a	n/a	n/a	0.5
Listen to music	n/a	n/a	n/a	n/a	n/a	n/a	2.5
Activities related to one's education	n/a	n/a	n/a	n/a	n/a	n/a	2.6
Looking for a job, browsing through ads	n/a	n/a	n/a	n/a	n/a	n/a	1.9
Other	0	0.4	n/a	2.3	0.1	0.2	0.3
Base (All respondents):	1161	1158	1066	971	1170	1079	1634

Source: Omnibus surveys conducted by Vitosha Research (2000 - 2002)

Bulgarian users still make a very limited use of the new technologies available through Internet, such as financial operations and online shopping (*Table 3.3*). There are a number of reasons for this slack activity. In the first place some of the reasons are related to the quality of link to the Internet, the facilities of Internet providers and the small number of organizations providing such services. Other factors are related to peculiarities of the economic culture of Bulgarians, insufficient information, apprehensions about the reliability and the risk involved in online money transfers etc.