



MONITORING OF INFORMATION TECHNOLOGIES IN BULGARIA

May 2002

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SURVEY METHODOLOGY

The main objective of the IT monitoring conducted by Vitosha Research is to collect and analyze systematic information of the use of PCs and the Internet by the Bulgarian population. IT monitoring findings are based on data from national representative surveys administered by Vitosha Research in the period 2000-2002. The data collection method is face-to-face interview. All of the surveys are based on a random two-stage cluster sample representative of the Bulgarian adult population (18+). Sample size for the respective surveys was as follows:

- *April 2000: N=1161;*
- *September 2000: N=1158;*
- *June 2001: N=1066;*
- *October 2001: N=971;*
- *May 2002: N=1170.*

The indicators monitored were the following:

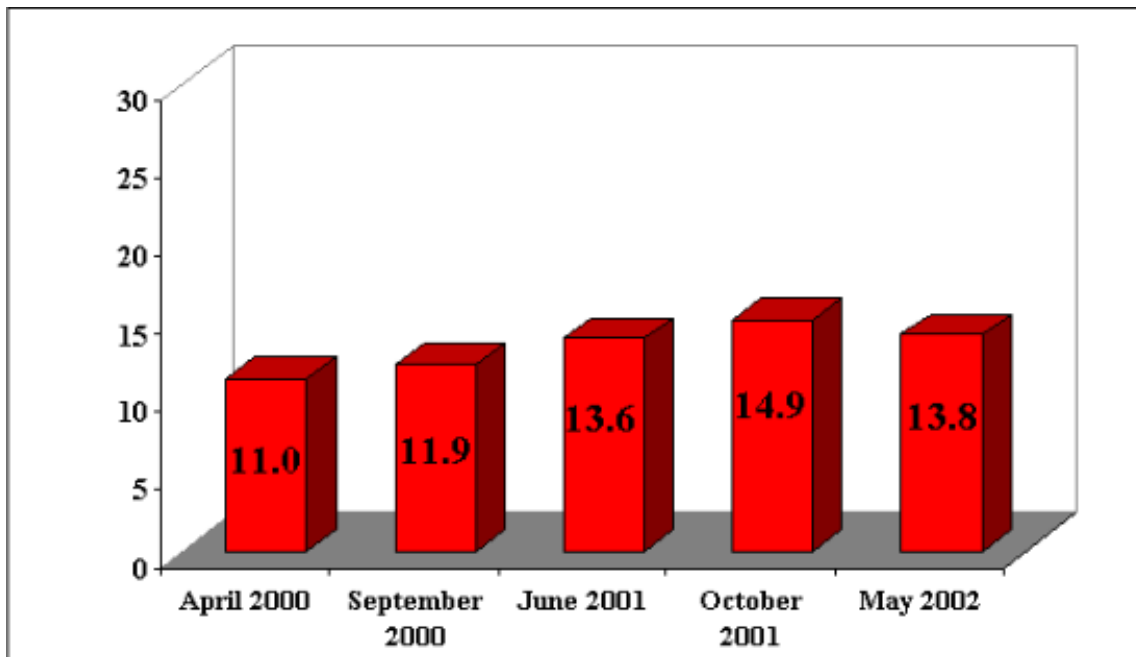
1. **COMPUTER ACCESS:** represents the relative share of people having computer access and the locations where computers are used.
2. **INTERNET USE:** represents the relative share of people using the Internet.
3. **STRUCTURE OF INTERNET USE:** assesses the frequency of Internet and e-mail use, as well as the purposes for which the Internet is used.

1. COMPUTER ACCESS

The level of IT penetration in Bulgarians' everyday life can be evaluated as relatively low (*Figure 1.1*). As of May 2002 the approximate number of PC users aged 18 and over were about 886,000¹ (13.8% of the adult population).

¹ This estimate is based on the data from the population census (March 2001), according to which the total population aged over 18 numbered 6,417,869, and 1% of the sample represents 64,180 people.

FIGURE 1.1. COMPUTER ACCESS



Source : Vitosha Research Omnibus surveys (2000-2002)

Base: All respondents (April 2000: N=1161; September 2000 : N=1158; June 2001: N=1066; October 2001: N=971; May 2002: N=1170)

The socio-demographic structure of the people with computer access features several specific characteristics (*Table 1.1*):

- The people with higher education make up the largest share of those having computer access – in May 2002 49% of the representatives of this group had computer access.
- The highest level of PC usage is observed among the 18-40 age group.
- Whereas in 2000 there were practically no gender differences in terms of computer access, in May 2002 the share of women with computer access was nearly 5% higher than that of men.
- Computer access is concentrated in the bigger cities and mainly in Sofia.

TABLE 1.1. ACCESS TO COMPUTER BY SOCIO-DEMOGRAPHIC CATEGORIES (%)

	April 2000	September 2000	June 2001	October 2001	May 2002
Gender					
Male	11,1	11,8	13,8	14,9	11,9
Female	10,8	11,8	13,4	15,0	15,7
Education					
Basic and lower	1,2	0,5	1,5	1,8	1,6
Secondary	8,4	11,1	15,6	15,0	12,3
Semi-higher	20,2	13,6	12,0	15,1	19,1
Higher	42,7	51,7	46,1	45,3	49,0
Age					
18-19	28,5	26,8	46,7	47,4	36,4
20-29	19,4	17,4	27,2	27,1	23,0
30-39	14,9	20,2	19,5	22,4	22,0
40-49	17,5	14,5	18,2	27,4	16,1
50-59	8,0	9,8	8,5	9,2	13,3
60-69	2,6	3,2	1,7	3,7	1,7
70-79	0,0	1,4	0,0	1,5	0,8
80 and over	2,5	0,0	0,0	0,0	2,3
Size of settlement					
Up to 999	n/a	0,5	0,5	n/a	1,8
1000-4999	n/a	2,1	0,7	n/a	5,6
5000-19 999	n/a	8,1	5,5	n/a	9,7
20 000-99 999	n/a	12,0	16,4	n/a	12,8
100 000-499 999	n/a	17,6	21,1	n/a	21,5
Sofia	n/a	30,4	34,0	n/a	33,3
Base (all respondents)	1161	1158	1066	971	1170

Source: Vitosha Research Omnibus surveys (2000-2002)

Table 1.2 presents the locations where Bulgarians typically have access to computers:

- The largest part of those surveyed access computers in their workplace.
- The share of PC home users increased steadily in the period 2000-2001. In 2002 this tendency has not been observed.

TABLE 1.2. COMPUTER ACCESS LOCATION (%)

	April 2000	September 2000	June 2001	October 2001	May 2002
Home	2,6	4,4	5,3	7,5	4,8
Work	6,3	7,5	7,2	7,0	9,1*
Other (school, public places, friends, etc.)	3,1	2,1	6,5	4,1	2,5
Base (all respondents):	1161	1158	1066	971	1170

Source: Vitosha Research Omnibus surveys (2000-2002)

* The value for the month of May 2002 indicates the share of people with computer access in their workplace and/or education establishment.

2. INTERNET USE

Although Internet use has generally been on the rise, the share of users among the Bulgarian population remains relatively low. As of May 2002 only 8.9% of the adult population used the Internet (*Figure 2.1*). Compared to April 2000, however, the number of Internet users has almost doubled, reaching nearly 600,000.

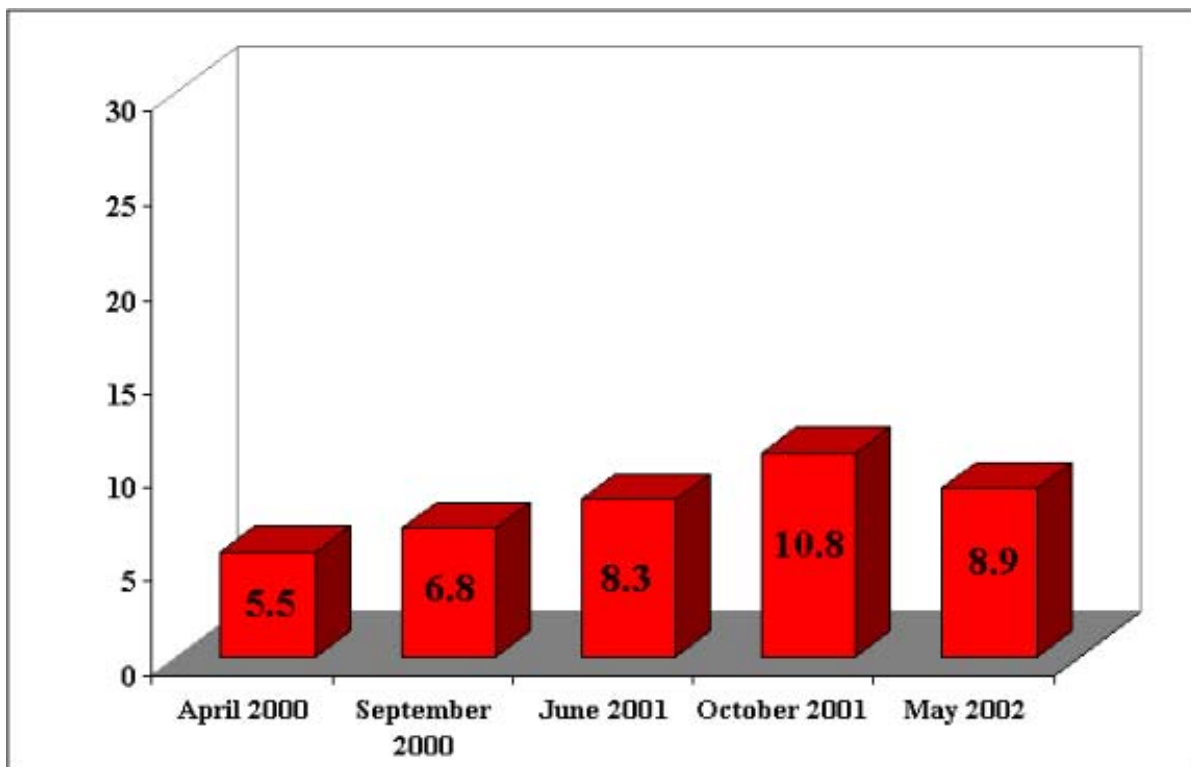
The level of Internet use in Bulgaria can be more adequately evaluated when compared with the number and share of Internet users in some other countries (*Table 2.1*):

TABLE 2.1. INTERNET USERS IN SOME COUNTRIES

Nation	Population	Internet Users (Source)	Internet Users (% of the population)
United Kingdom	59.6 million	33.0 million (<i>Jupiter MMXI</i>)	55.4%
Germany	83 million	26 million (<i>Forsa</i>)	31.3%
Greece	10.6 million	1.3 million (<i>VPRC</i>)	12.3%
Poland	39.0 million	4.9 million (<i>Zycie</i>)	12.6%
USA	278 million	149 million (<i>Computer Industry Almanac</i>)	53.6%
Turkey	66.5 million	3.7 million (<i>IBS</i>)	5.6%
Hungary	10.1 million	730,000 (<i>NetSurvey</i>)	7.2%
Croatia	4.3 million	300,000 (<i>IDC</i>)	7.0%
Czech Republic	10.2 million	2.2 million (<i>GfK</i>)	21.6%

Source: "Cyber Atlas", March 21, 2002

**FIGURE 2.1. RELATIVE SHARE OF INTERNET USERS
(% OF BULGARIAN POPULATION AGED 18 AND OVER)**



Source: Vitosha Research Omnibus surveys (2000-2002)

Base: All respondents (April 2000: N=1161; September 2000 : N=1158; June 2001: N=1066; October 2001: N=971; May 2002: N=1170)

The socio-demographic characteristics of Internet users are similar to those of the people having computer access (*Table 2.2*).

TABLE 2.2. INTERNET USE BY SOCIO-DEMOGRAPHIC CATEGORIES (%)

	April 2000	September 2000	June 2001	October 2001	May 2002
Gender					
Male	6,0	7,4	9,4	12,3	8,0
Female	5,1	6,3	7,3	9,6	9,7
Education					
Basic and lower	0,7	0,5	0,7	1,5	1,3
Secondary	5,0	6,0	9,7	10,0	6,7
Semi-higher	5,4	6,1	8,0	7,5	10,6
Higher	20,6	31,9	28,1	35,8	35,9
Age					
18-19	17,9	23,6	33,3	42,1	33,3
20-29	13,7	11,9	21,0	21,8	18,7
30-39	7,2	9,9	12,6	17,5	13,4
40-49	6,6	9,0	7,7	17,8	8,5
50-59	2,9	3,8	4,8	5,7	5,7
60-69	1,6	1,6	0,0	1,6	1,7
70-79	0,0	0,7	0,0	1,5	0,0
80 and over	0,0	0,0	0,0	0,0	0,0
Size of settlement					
Up to 999	n/a	0,5	0,0	n/a	0,9
1000-4999	n/a	1,6	0,0	n/a	2,5
5000-19 999	n/a	3,4	1,6	n/a	3,6
20 000-99 999	n/a	6,1	8,7	n/a	9,5
100 000-499 999	n/a	9,3	16,1	n/a	13,5
Sofia	n/a	20,2	20,8	n/a	24,1
Base (All respondents):	1161	1158	1066	971	1170

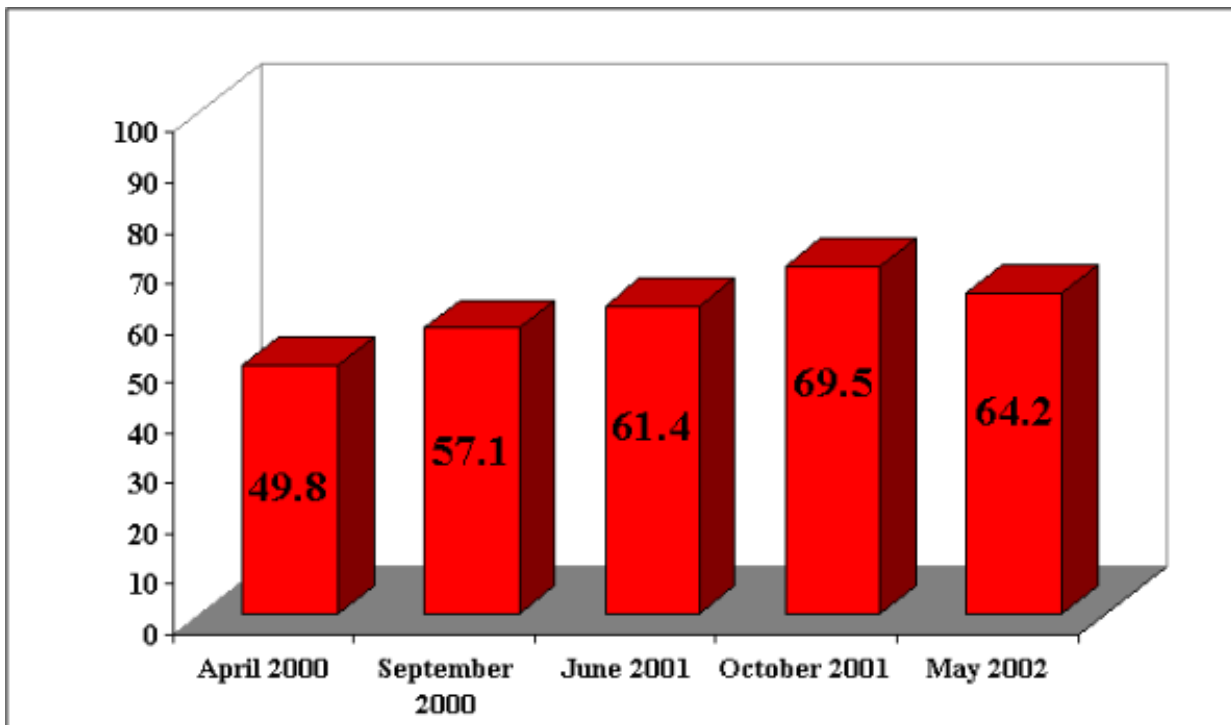
Source: Vitosha Research Omnibus surveys (2000-2002)

Data suggest the following more important conclusions:

- There are n substantial gender differences in Internet use.
- The people with higher education are the most active Internet users.
- The Internet is mainly used by young people - more than half of those having computer access and using the Internet are aged 18-30.
- The larger part of Internet users live in the bigger cities and in Sofia. About one fourth of all Internet users are concentrated in the capital.

In the period April 2000 – May 2002 the share of Internet users among those with computer access rose by about 20% (Figure 2.2).

FIGURE 2.2. SHARE OF INTERNET USERS AMONG PEOPLE WITH ACCESS TO PCS (%)



Source: Vitosha Research Omnibus surveys (2000-2002)

Base: People with PC access

*(April 2000: N=1161; September 2000 : N=1158; June 2001: N=1066;
October 2001: N=971; May 2002: N=1170)*

3. STRUCTURE OF INTERNET USE

The typical Internet user visits the virtual space at least once a week (*Table 3.1*). The share of the most active users (those using the worldwide web several times a day) has been increasing steadily, though not at a high rate.

TABLE 3.1. FREQUENCY OF INTERNET USE (%)

	April 2000	September 2000	June 2001	October 2001	May 2002
Several times a day	0,4	0,9	0,9	1,4	1,3
At least once a day	1,0	1,4	2,5	1,9	1,4
At least once a week	2,2	1,6	3,2	3,8	3,8
At least once a month	0,9	0,8	1,0	1,1	0,8
Less often	1,0	2,1	0,7	2,6	1,6
Total	5,5	6,8	8,3	10,8	8,9
Base (all respondents):	1161	1158	1066	971	1170

Source: Vitosha Research Omnibus surveys (2000-2002)

The frequency of e-mail use is similar to that of Internet use (*Table 3.2*). The group of people to whom accessing the world information network (the Internet in general and e-mail in particular) becomes a daily habit is growing.

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

	April 2000	September 2000	June 2001	October 2001	May 2002
Several times a day	0,7	1,0	0,8	1,0	1,1
At least once a day	1,1	1,4	1,3	1,8	1,2
At least once a week	2,0	1,8	2,3	3,2	3,0
At least once a month	0,3	0,5	1,0	0,7	1,1
Less often	1,2	1,3	1,4	2,6	1,3
Total	5,3	6,0	6,8	9,3	7,7
Base (all respondents):	1161	1158	1066	971	1170

Source: Vitosha Research Omnibus surveys (2000-2002)

Bulgarian Internet users typically access the virtual space for three main purposes (*Table 3.3*):

- **First, as a source of information.** The leading motive of a considerable part of Internet users is the search for various types of information (inquiries, news, current events, and others).
- **Second, for entertainment purposes.** An increasing part of Internet users consider it a media of fun and entertainment (chats, discussion forums, games, and other forms of entertainment). The virtual space offers extensive possibilities for diverse activities. They are popular, user-friendly, and last but not least, relatively cheap.
- **Third, for business and education purposes.**

TABLE 3.3. STRUCTURE OF INTERNET USE (%)

	April 2000	September 2000	June 2001	October 2001	May 2002
Recreation/ Games	1,7	1,9	3,6	3,2	3,0
Research	2,7	3,3	4,0	5,5	4,0
News	1,9	3,1	3,8	4,5	3,9
Investments	0,7	0,4	0,5	1,5	0,4
Work related activities	2,9	5,1	4,1	6,8	5,6
Shopping	0,0	0,1	0,3	0,5	0,2
Chat/ Discussion groups	1,8	1,9	3,5	4,2	3,6
Information search and queries	4,5	5,1	6,6	8,2	7,5
Other	0,0	0,4	n/a	2,3	0,1
Base (all respondents):	1161	1158	1066	971	1170

Source: Vitosha Research Omnibus surveys (2000-2002)

Financial transactions operations and online shopping are still used rarely. The main reasons for this are the reliability of the connection, the low level of awareness of these technologies and the low level of trust in electronic banking (only three of the commercial banks - United Bulgarian Bank, First Investment Bank, and Union Bank – provide e-services).