Indicators on Community Access to ICT Bulgaria

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Structure of the presentation

1. Bulgarian e-Readiness Assessment Model

    and Methodology for Quantitative Assessment

2. Public Internet Access Points in Bulgaria

Vitosha
Research

Bulgarian e-Readiness Assessment Model and
Methodology for Quantitative Assessment

The "e-ready" society...
(Center for International Development at Harvard University)

- Has the necessary physical infrastructure

- Has integrated current ICTs throughout business

- Communities

- The e-government

The Bulgarian e-Readiness Assessment Model

Vitosha Research

- **92 variables**

- **19 indicators**

- **5 categories:**

  1. e-Access

  2. e-Learning/e-Education

  3. e-Society

  4. e-Business

  5. e-Policy/e-Government

- **Aggregate e-Readiness Index / Scoreboard**

First step

The value of each indicator is measured on a 4- or 5-point scale

Example: **Index**: E-Society   **Sub-category**: Users of computers

1.Percentage of total population (aged 18+) who has access to computers

Scale

1.   Up to 10
2.   10-20
3.   21-30
4.   31-40
5.   More 40

Second step

A rank is assigned to each indicator value using the following procedure:

With 5-point scales:

a rank of 1 is assigned to the first value
a rank of 3 – to the second value
a rank of 5 – to the third value
rank of 7 to the fourth value and
a rank of 10 to the fifth value

1. *Percentage of population (aged 18+) who has access to computers*

Rank: 3	1.	Up to 10
Data: 16 %	2.	**10-20**
Source: VR	3.	21-30
	4.	31-40
	5.	More 40

Third step

Different variables are divided in two groups depending on their importance ("medium" or "high") to Bulgaria's e-readiness assessment.

1.Percentage of population aged 18+ who has access to computers

Importance: High

Rank: 3	1.	Up to 10
Data: **16 %**	**2.**	**10-20**
Source: VR	3.	21-30
	4.	31-40
	5.	More 40

Fourth step

The respective ranks (depending on the real value of a given variable) is multiplied by the importance coefficient of the variable.

1.Percentage of population aged 18+ who has access to computers

Importance: High

Rank: 3

Data: 16 %

Source: VR

1.   Up to 10
2.   **10-20**
3.   21-30
4.   31-40
5.   More 40

Importance	Weight
High	**2**
Medium	1

Fifth step

- The values are aggregated in synthetic indicators in several categories

- The value of each index is computed as a sum of the weighted ranks of the respective variables included in a given category / sub-category

- Each index summarizes the values of several variables and is presented in a statistically normalized form: from 0 to 10
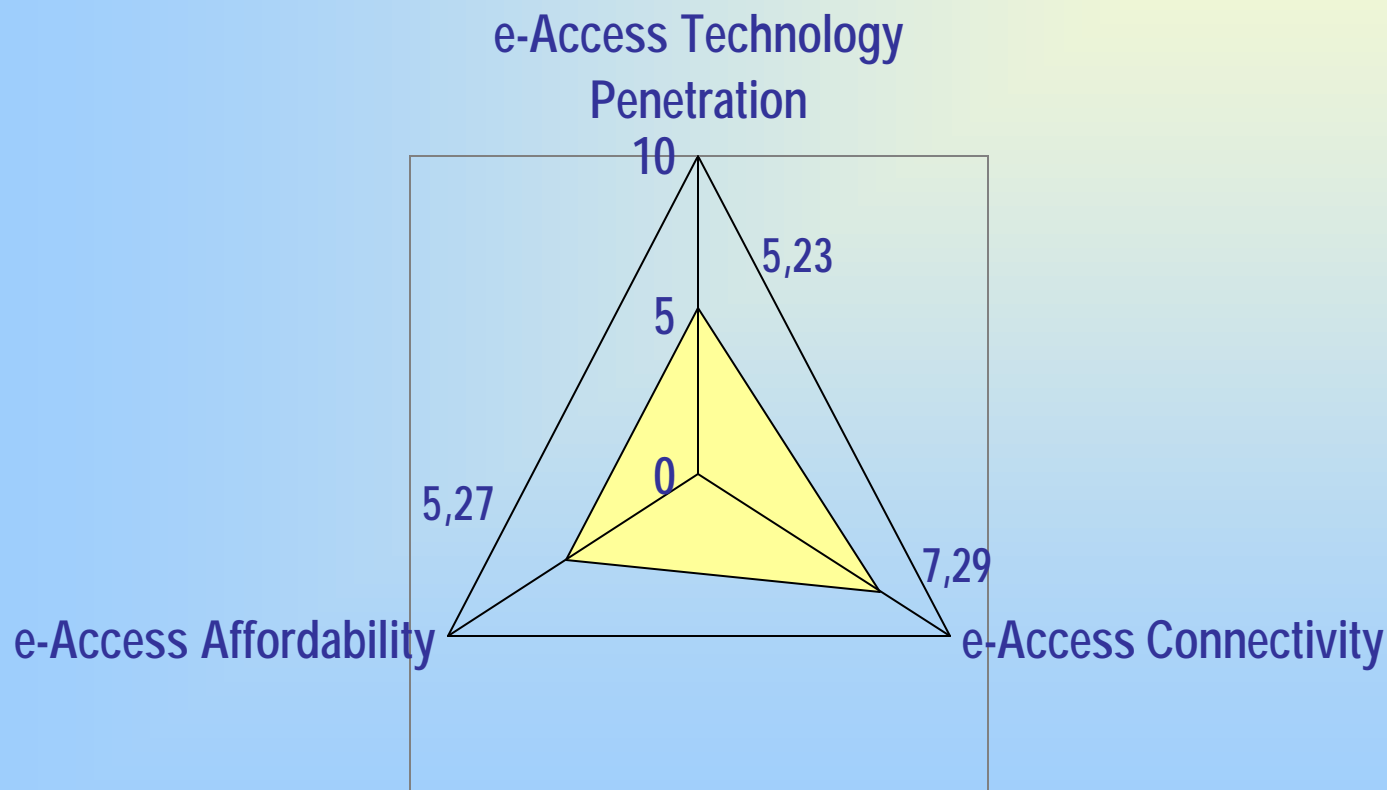
Result

Number of variable	Rank	Weight	Rank multiplied by Weight (B*C)	Result: SD/ SC
A	B	C	D	E
1	3	2	6	
2	1	2	2	
3	1	1	1	
4	1	2	2	
5	1	1	1	
		S = 8	S = 12	1.5

e-Access looks at …

- Network Access Technologies Penetration

- Network Connectivity

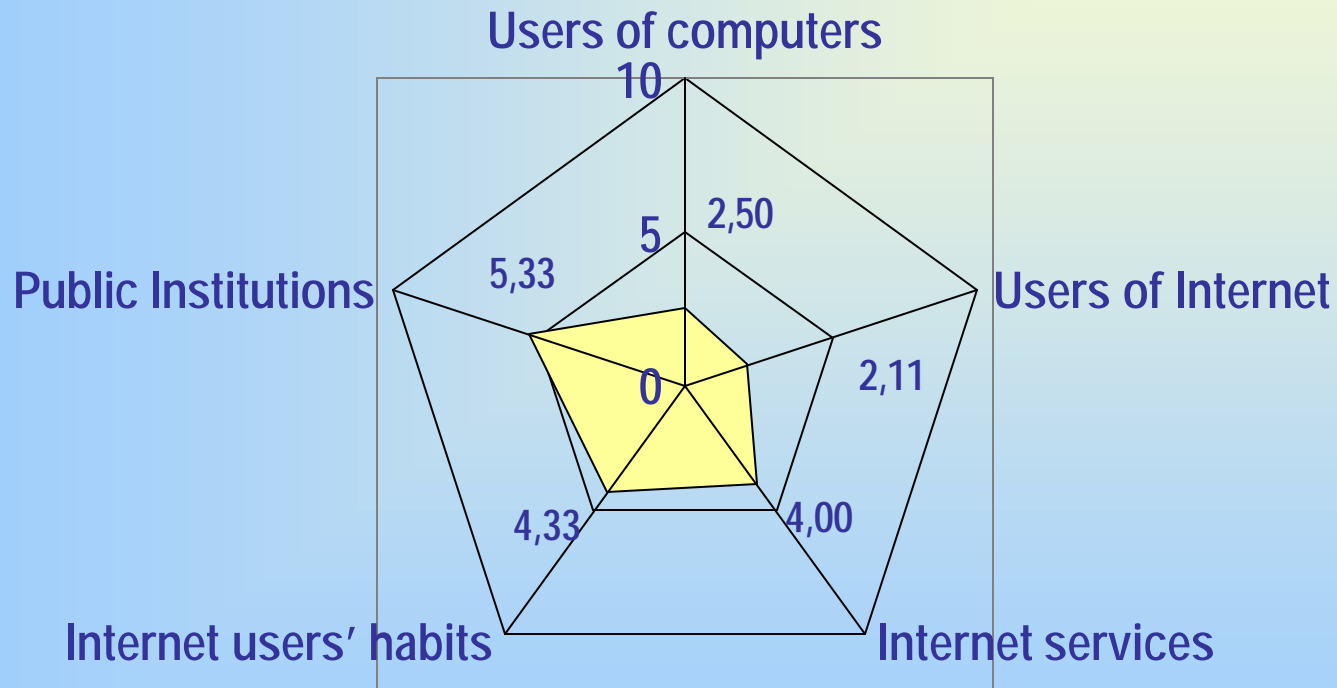- Affordability of Network Access

e-Access Index = 5.93

e-Society looks at …

- Users of Computers

- Users of Internet

- Internet Services

- Internet Users' Habits

- Public Institutions

e-Society Index = 3.66

Users of computers

10

2,50

5

5,33   Public Institutions   Users of Internet

0   2,11

4,33   4,00

Internet users' habits   Internet services

e-Education looks at …

- Technical Facilities / ICT Infrastructure in Schools and Universities

- Teachers and ICT technologies

- Internet Sites of Schools and Universities

- ICT Training Policy

- ICT Education

e-Education Index = 5.06

Technical facilities /IT infrastructure in schools and universities

10

5,40

5

Teachers and ICT technologies

ICT education

4,38

0   1,00

7,00   7,50

ICT training policy

Internet sites of schools and universities
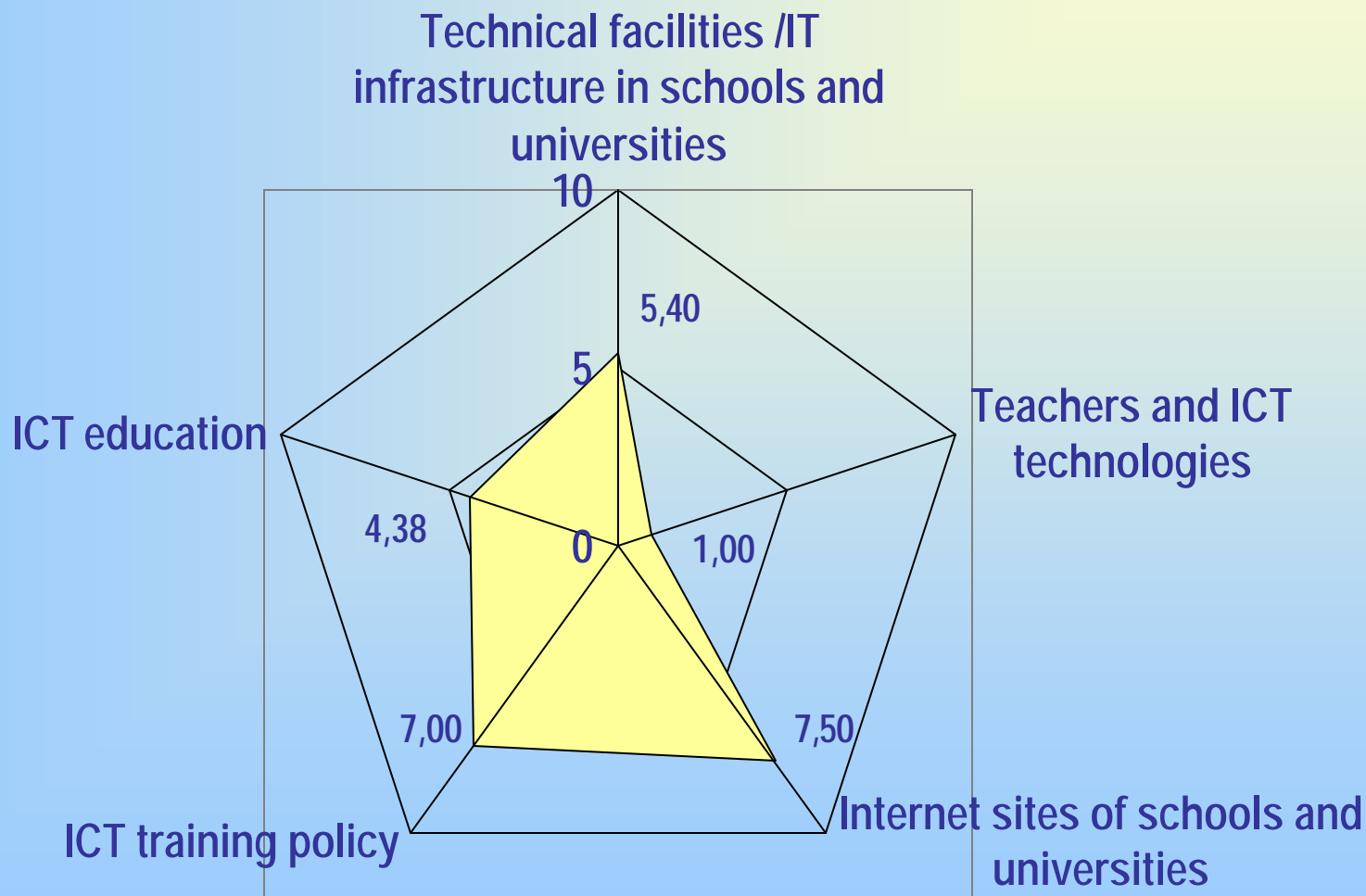
e-Business looks at …

- Computer Usage in Business

- Internet Usage in Business

- Web space Usage by Business

- Availability of e-payment Instruments

- ICT Employment Opportunities
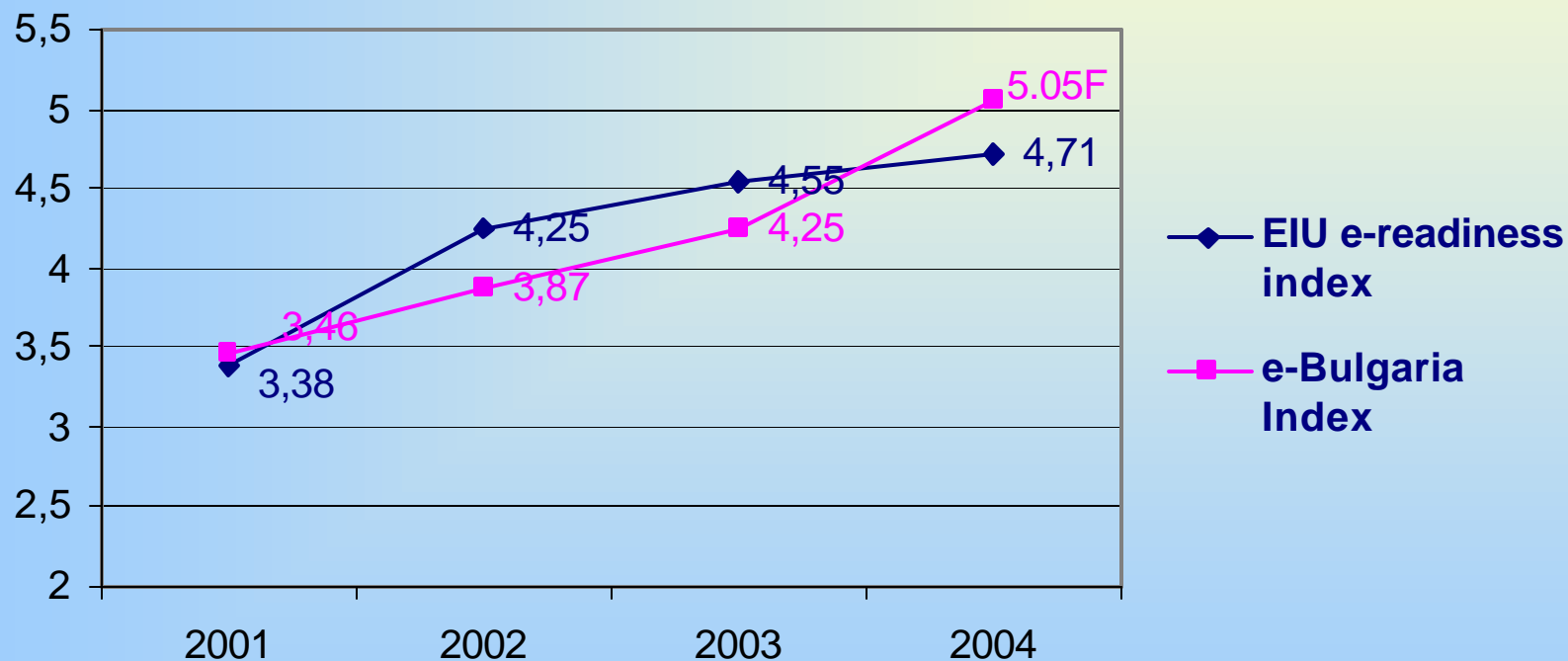
e-Business Index = 5.17
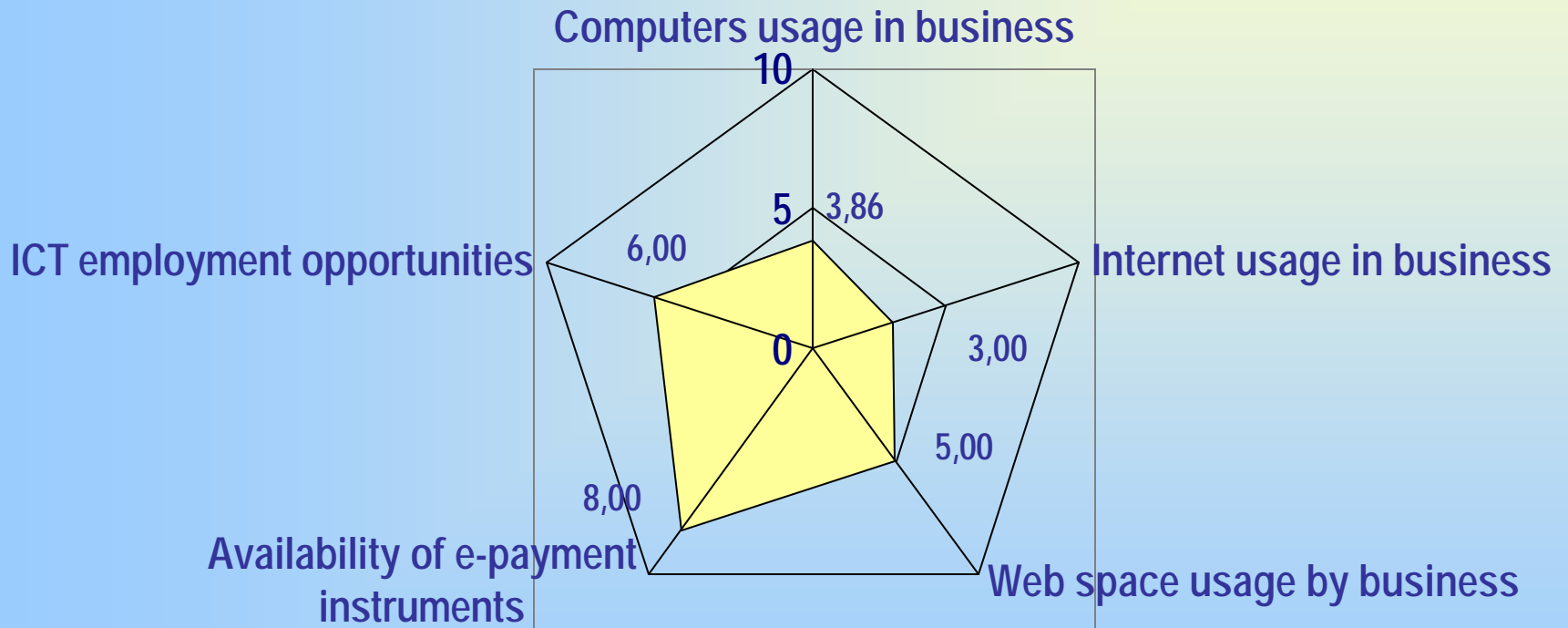
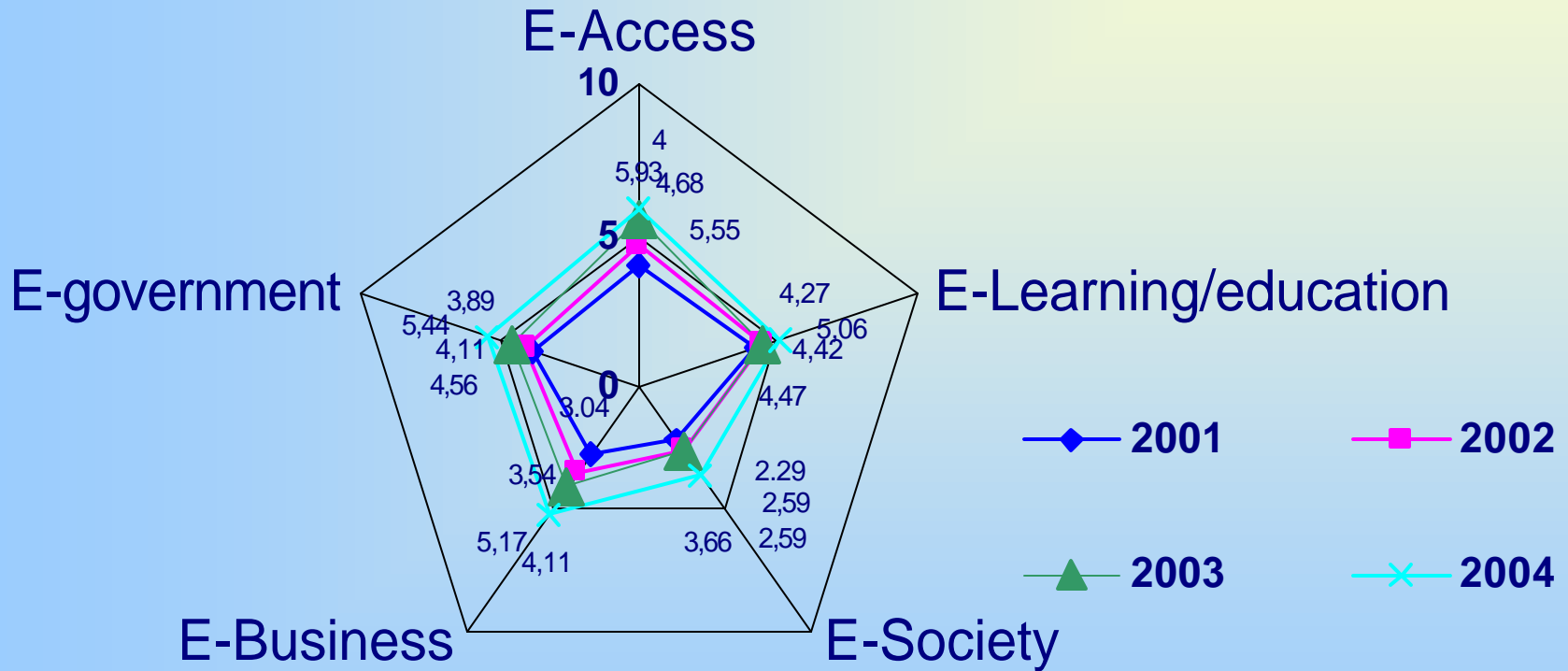# **e-Government** looks at …

- Penetration of ICT in Public Administration

- Sophistication of Web-Sites

- Usage by Citizens

- Usage by Business

Aggregate e-Readiness Scorecard

Aggregate e-Readiness Scorecard

e-Bulgaria Index: 5.05

Public Internet Access Points

in

BULGARIA

Public Internet Access Points

According to the eEurope+ 2003 Data collection, monitoring and benchmarking:

"**PIAPs (Public Internet Access Points)** *are publicly provided centres providing access to the Internet* **regardless of their public and/or private provider** *and whether* **access is free or not** *though* **excluding fully private Internet cafes** *PIAP does not have to provide hardware (i.e. computers) needed to connect to the Internet and include WLAN access points.*"

The first telecenter in Bulgaria
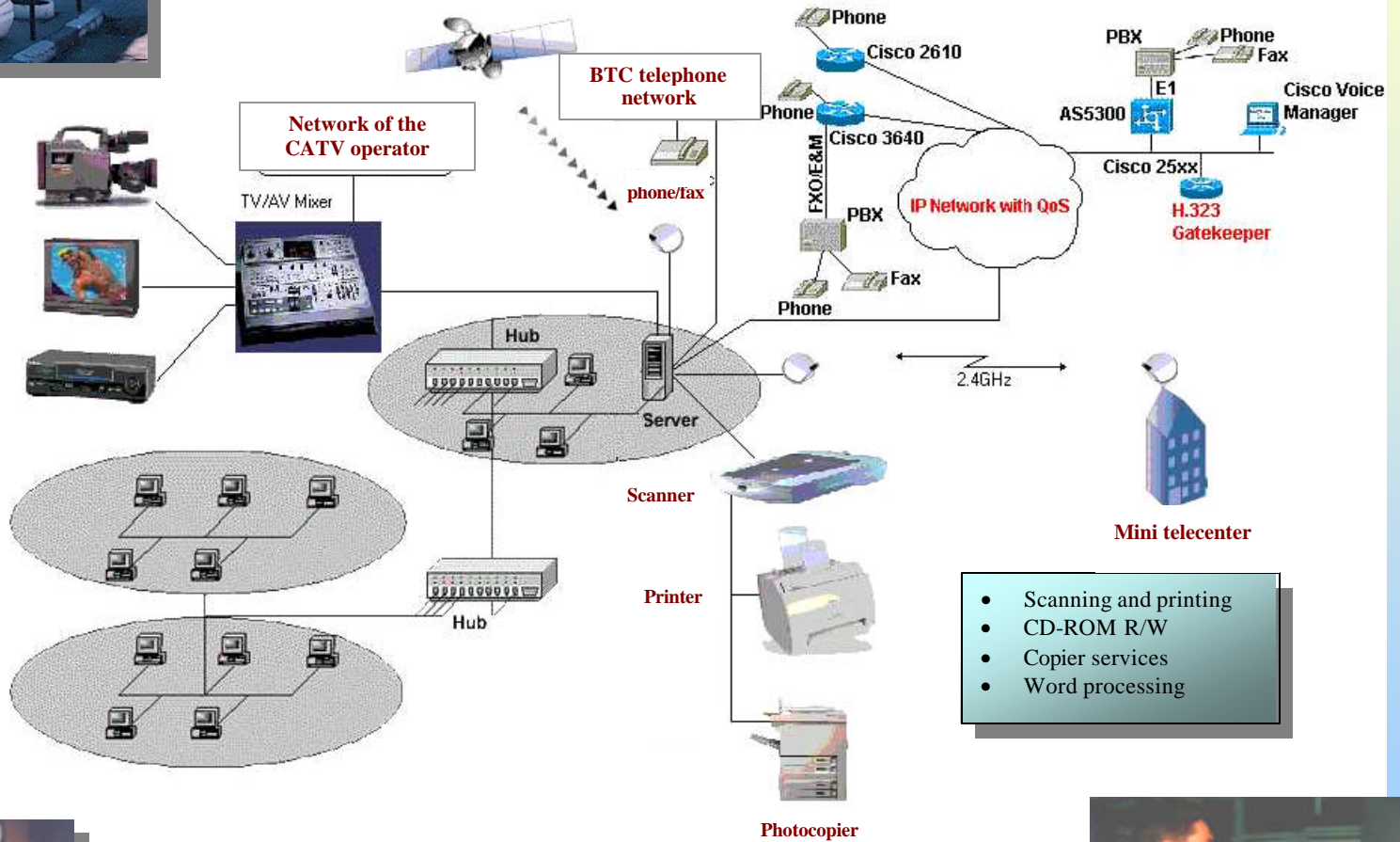## 12 November 1999

Telecenters in Bulgaria
1999 -2004

Services offered by Telecenters in Bulgaria

- Public telephone and fax
- Public e-mail
- Internet access
- Training - computer skills: Word, Excel, Internet and etc.
- Web design

- Video telecommunication services
- Advertisement (local and regional)

Network of the CATV operator

TV/AV Mixer

BTC telephone network

phone/fax

Phone

Cisco 2610

Phone

Cisco 3640

FXO/E&M

PBX

Phone

Fax

IP Network with QoS

PBX

Phone

Fax

AS5300

E1

Cisco 25xx

Cisco Voice Manager

H.323 Gatekeeper

Hub

Server

Scanner

2.4GHz

Mini telecenter

Hub

Printer

- Scanning and printing
- CD-ROM R/W
- Copier services
- Word processing

Photocopier

- Games
- Translation services
- Phonocards sells
- Account services

Public Computer Communications Center **PC3** Project
autumn of 2001

Community Development and Participation through the Chitalishte Network
June2001 – June 2004

It is time to act today …
…to choose the future

- **MTC approach is** based on two groups of actions, interacting with each other:
  - Stimulation of **services, applications and conten**t, covering both online public services and e-business
  - Development of the underlying **broadband infrastructure and security matters**
- **Each social partner has his own role:**
  - **Citizens:** to be integrated, trained and motivated
  - **Businesses:** driving force and an example for the development of the **Information Society**
  - **Public Authorities:** facilitates and promotes change, acting as both reference and guarantor for the necessary balance

Primary objective of i@БЪЛГАРИЯ

- By the end of 2006 Bulgaria has to achieve the average levels for the IS development indicators of the EU member states

relies on young people:

i@БЪЛГАРИЯ

- who keep their identity and at the same are open to the world

- who make knowledge the driving force for development

- who are both tolerant, capable and talented

@IЦЕНТЪР

Access to computer and Internet for all

The project establishes a wide network of public telecenters in cooperation with the Bulgarian Posts. The goals of the project are:

- To provide access to the Internet and e-government services for the majority of the Bulgarian citizens (especially those in less developed areas)

- To raise the qualifications and education through various forms of distant learning and online courses

- To create new job and business possibilities

- 60 telecenters will be established before the end of the year, and another 100 during next year

Thank you for your attention!

For your additional information:

http://www.mtc.government.bg

e-Bulgaria Report 2004 is available at:

http://www.arcfund.net

Contact: *e-mail: nstoyanova@mtc.government.bg*