



PRIZMA ISTRAŽIVANJA

Istraživanja tržišta, medija i ispitivanje javnog mnijenja

▶ **cati**

▶ TRŽENJSKE, MEDIJSKE,
DRUŽBENE RAZISKAVE IN
SVETOVANJE D.O.O.



Alternative Approach to Measure Web Site Audiences

Krešimir Žnidar, Jan Jilek, Zenel Batagelj

Why we have to measure web side audience ?



Internet Usage
is correlated with :

**CONNECTION
PRICE**

- ▶ Will decrease with number of users, providers and new technologies

CONTENT

- ▶ Will improve with and advertisers

PC LITERACY

- ▶ Life standard, education, ...

....

Advertisers have to do media planning e.g. Web site reach, visitors profiles, visitors, overlapping, ...

- ▶ Based on independent, reliably and easy to use data

Survey research



▶ **Telephone survey**

▶ **Web survey**

Limitations:

- ▶ **Brand recognition**
(known brands get higher scores)
- ▶ **Memory limitation**

Limitations:

- ▶ **Brand recognition**
(known brands get higher scores)
- ▶ **Memory limitation**
- ▶ **Specific sample – internet users**

Technical – server based methods



Technical

- ▶ Large log files based on activity

Limitations:

- ▶ Trust
- ▶ Cookie problems
- ▶ Proxy servers

PC meters

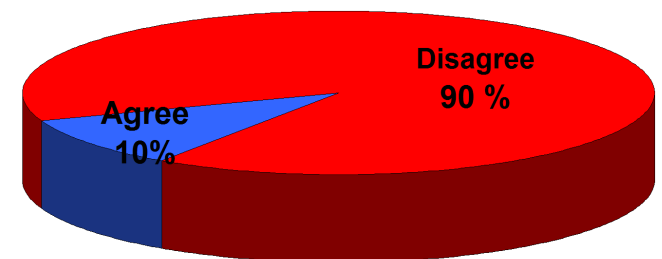


- ▶ **Method similar to TV**
- ▶ **Monitoring software application installed on computer**
- ▶ **Real time data monitoring**

Limitations:

- ▶ **Expensive initial setup costs**
- ▶ **High running costs of panel**
- ▶ **Panel recruitment problems**

**PC meters –
Participate intention
HR Internet users
(CATI research)**

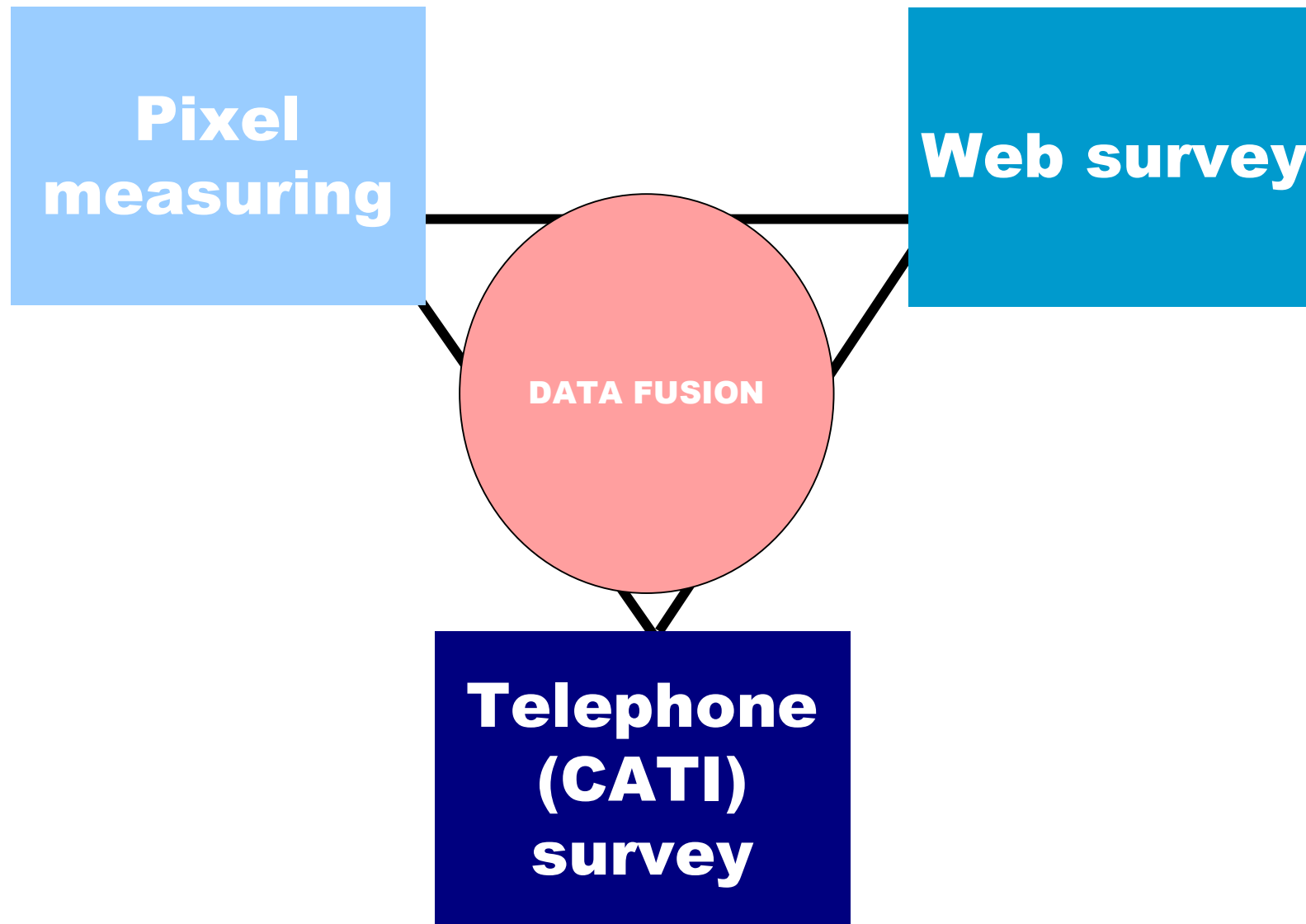




Alternative approach

**Pixel technology & web survey
research & telephone survey
combined**

Measuring model



Pixel technology

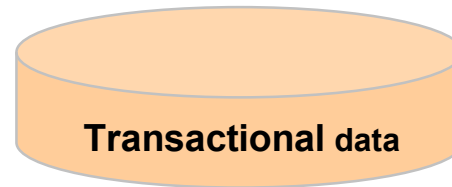


Participated Web pages

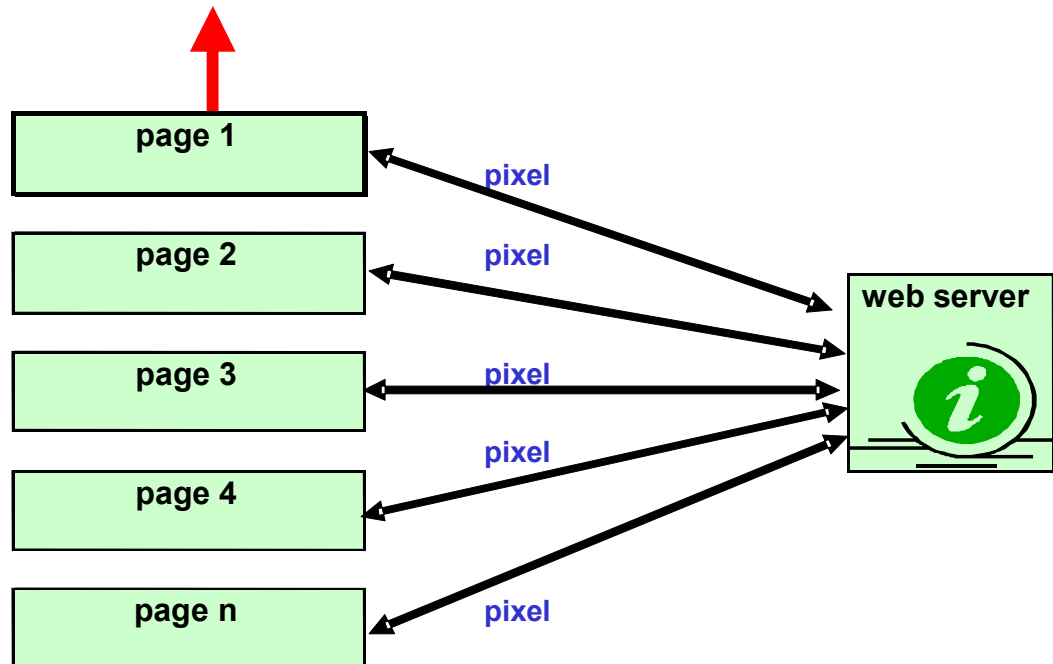
- ▶ Every measured website had a “pixel” included on all their pages

```

```



ID_cookie	time	site_code	referral	IP address



Pixel measuring

Daily results overview



http://Trackserve.doticri.net/index.php - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Choose
View statistics
Users

Site	Views yesterday	Users yesterday	Actions
www.adriatica.net	3757	524	Ignore
www.autoweb.hr	3752	835	Ignore
www.bankamagazine.hr	2190	755	Ignore
www.briefing.hr	929	230	Ignore
www.bug.hr	22102	5709	Ignore
www.burza.hr	4526	1402	Ignore
www.cati.hr	368	316	Ignore
www.corner.hr	11418	2142	Ignore
www.cro-climbing.com	421	115	Ignore
www.etours.hr	2145	351	Ignore
www.gloria.com.hr	7988	2411	Ignore
www.gradpula.com	1506	587	Ignore
www.hr	18218	5077	Ignore
www.ht.hr	14597	6095	Ignore
www.htnet.hr	524137	69286	Ignore
www.httpool.hr	0	0	Ignore
www.index.hr	98742	10171	Ignore
www.iprom.com	926856	54316	Ignore
www.iskon.hr	758689	79802	Ignore
www.mobil.hr	811	314	Ignore
www.moj-posao.net	85778	7611	Ignore
www.mojnovac.com	8966	575	Ignore
www.monitor.hr	54400	24975	Ignore
www.naidi.si	848248	88067	Ignore

Pixel
measuring

Cumulative (total site + section) results



Site: www.iskon.hr
Back to site list

Date	Views	Users	Section list
21.10.2003	758689	79802	/
20.10.2003	753283	80074	/chat_i_forum
19.10.2003	468707	54195	/portal
18.10.2003	410733	48137	/w18%20email
17.10.2003	682510	73472	/web16%20mail
16.10.2003	708836	75370	/webmail
15.10.2003	712422	75538	
14.10.2003	719192	77371	
13.10.2003	741837	77880	
12.10.2003	467710	53221	
11.10.2003	394250	45933	
10.10.2003	540300	64301	
09.10.2003	741640	76798	
08.10.2003	555514	59584	
07.10.2003	742012	78477	
06.10.2003	773225	79454	
05.10.2003	515726	56698	
04.10.2003	433129	49724	
03.10.2003	414960	51480	
02.10.2003	95676	15747	
01.10.2003	737398	76914	
30.09.2003	711969	75623	
29.09.2003	344345	49232	

Section: www.iskon.hr/webmail
Back to whole site statistics

Date	Views	Users
21.10.2003	251793	23409
20.10.2003	259569	23815
19.10.2003	154410	16209
18.10.2003	133251	14242
17.10.2003	218516	21305
16.10.2003	242045	22430
15.10.2003	237792	22390
14.10.2003	243028	22822
13.10.2003	245412	22885
12.10.2003	152061	16127
11.10.2003	126206	13828
10.10.2003	175400	18633
09.10.2003	246115	23015
08.10.2003	182316	17927
07.10.2003	243956	22893
06.10.2003	250009	23558
05.10.2003	163094	16718
04.10.2003	138070	14703
03.10.2003	135724	15184
02.10.2003	31691	4151
01.10.2003	246552	23239
30.09.2003	248725	23037
29.09.2003	128185	14524

Pixel measuring

Problems with pixel technology



Problems:

- ▶ **More than one user behind one cookie**
- ▶ **Foreigners**
- ▶ **Proxies and cookie blocking**
- ▶ **Technical problems due to server traffic**

Telephone survey



- ▶ **DCO (Daily CATI Omnibus); representative sample of Croatian population** (by age, gender, education, counties, settlement size)
- ▶ **In total 7174 CATI interviews**

Purposes:

- ▶ **to estimate actual number of the “cookie” universe i.e. number of visitors of Croatian web sites**
- ▶ **demographical structure of visitors**

How many people is behind one cookie?

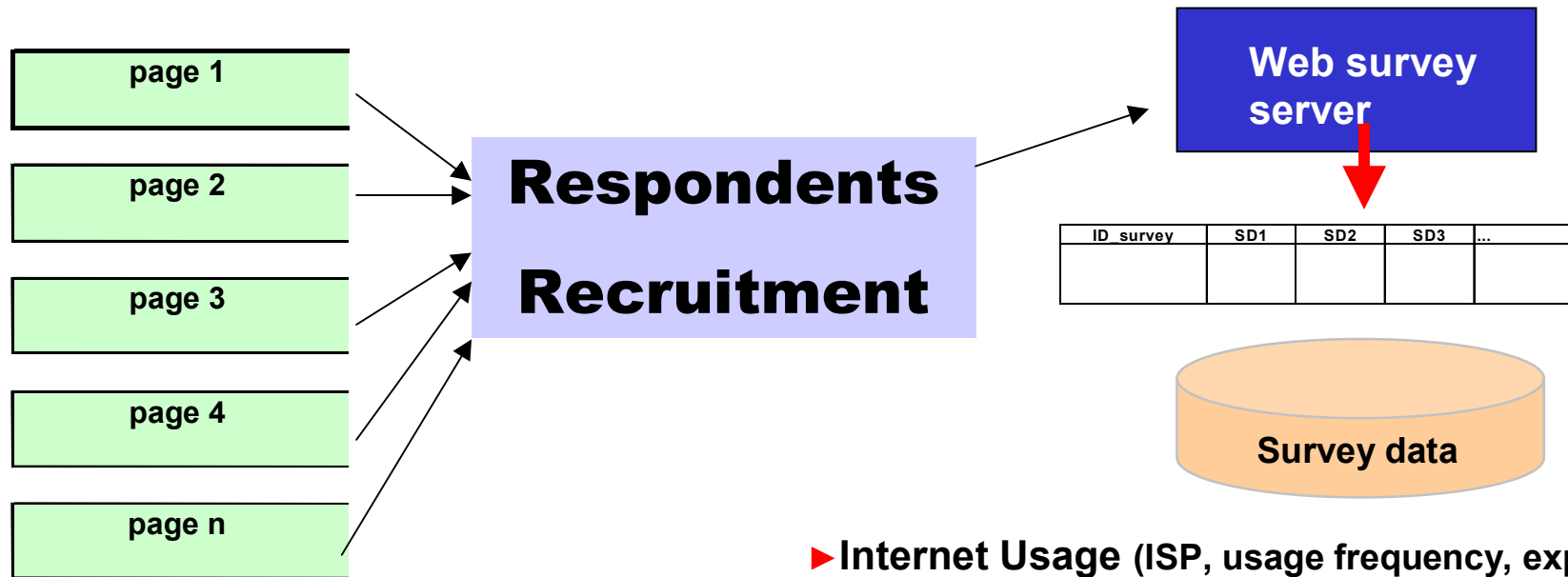


- ▶ **Cookie is unique ID of user (s) behind one computer**
- ▶ **One cookie is not necessarily one person**

Measured Monthly Reach	
Period: 17.11. - 12.12.2003 (4 weeks)	
unique visitors	946 863
CATI reach	813 481
HT population in age 12 +	3 844 000
correction	0,86

- ▶ **Each cookie counts for 0,86 person**
- ▶ **Example: for a web page where 10.000 different cookies were detected we estimate that there were 8.600 visitors in the evaluated one month period**

Web survey



Participated Web pages

- ▶ Internet Usage (ISP, usage frequency, experience,)
- ▶ Internet Usage Purposes
- ▶ Internet Services Usage
- ▶ Influence of Internet Usage on Other Activities
- ▶ Attitudes towards Advertising
- ▶ Attitudes towards Shopping
- ▶ Interests about Different Product and Services
- ▶ Leisure Time
- ▶ Demography

Web
survey

Web survey



- ▶ Parallel to pixel measurements
- ▶ Purpose: to collect demographical and other relevant data
- ▶ Self-interviewing method
- ▶ Poll banner invitations – teasers
- ▶ Respondents in this survey (n=4840)


Teasers:

Najbolji mobitel je...

Nokia Siemens


Sony Ericsson

Samsung Motorola Drugi




Mislite li da će nakon izbora u HR stvari krenuti nabolje?

da ne




Slažete li se sa prijedlogom o zakonskoj zabrani vanbračnih spolnih odnosa?

Da Ne




Jeste li jučer slušali radio?

da ne




Mislite li da su žene sposobnije za niz "tipičnih muških poslova" od muškaraca?

da ne



Smatrate li da bi država trebala financijski pomagati razvoj Interneta u Hrvatskoj?

Da Ne



Web
survey

Entry point



Click on poll banner (teaser):

CATI WWW.SI MONITOR 2002 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://wwwsi.cati.si/anketa.pl?bvalue=7&btype=3>

cati

Najlepša hvala za vaš odgovor!
Odgovori na vprašanje "Najboljša slovenska e-trgovina je..." so dosedaj sledeči:

big bang	0.0 %
bolha	82.4 %
emka	0.9 %
mercator	0.0 %
merkur	0.0 %
neckerman	0.0 %
rec rec	0.0 %
svet glasbe	0.0 %

Najboljša slovenska e-trgovina je... (n = 17)

Spoštovani!

Raziskovalna družba CATI (www.cati.si) izvaja raziskavo **WWW.SI MONITOR** o obiskanosti slovenskih spletnih strani. Pristopniki k raziskavi so praktično **vse najbolj obiskane slovenske spletne strani**. Od strani s tedenskim dosegom prek 10% so to na primer Matkurja, SIOL, TIS, Mobitel, Email.si in Najdi.si. Cilj raziskave je pridobiti čim bolj bogate podatke o pogostosti obiska strani in strukturi obiskovalcev strani, ki so kar se da **primerljivi z drugimi raziskavami za tiskane medije, radio in televizijo**. Vaše sodelovanje je z vidika **kvalitete podatkov zelo pomembno**. Anketni vprašalnik je resnično kratek in je sestavljen iz **dveh delov**: vprašanj o poznavanju in obiskovanju 35 slovenskih strani in vprašanj o vaših demografskih podatkih.

Za sodelovanje se najlepše zahvaljujemo!

Zoran Batagelj
odgovorni

info@wwwsi.cati.si

Naprej

Web survey

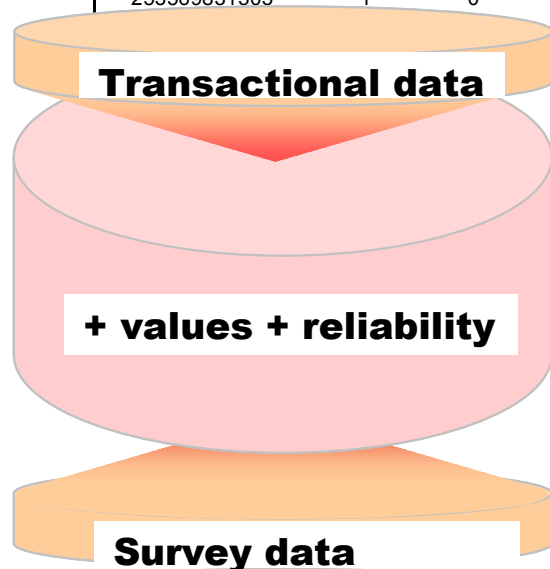
Internet

Output data tables - matching



ID_cookie	P1	P2	...
253569831289	1	0	
253569831290	0	0	
253569831291	1	0	
253569831292	0	1	
253569831293	0	0	
253569831294	1	0	
253569831295	0	1	
253569831296	1	0	
253569831297	0	0	
253569831298	1	1	
253569831299	0	0	
253569831300	0	0	
253569831301	1	1	
253569831302	0	0	
253569831303	1	0	

ID_survey	SD1	SD2	SD3	...
253569831290	5	3	3	
253569831293	3	2	2	
253569831298	5	4	3	
253569831301	3	4	5	
253569831303	4	4	1	



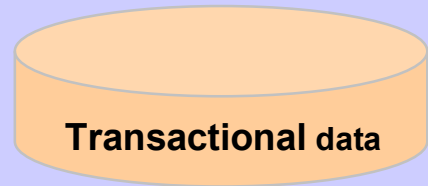
SD1	SD2	SD3	...
3	2	2	
4	4	1	
5	4	3	
5	3	3	

Web survey representativeness



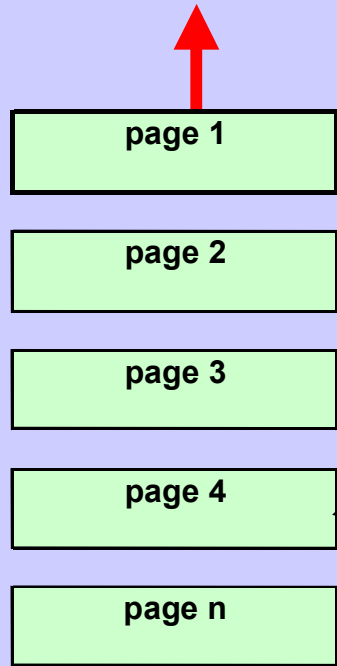
- ▶ **Web survey data should reflect the population structure**
 - Demographical characteristics gained in telephone survey
 - Web sites visits “scores” from pixel measurement

- ▶ **Solution:**
 - Weighting according to all these variables
 - Raking (rim weighting) used (gender, age, education, county, Internet usage frequency)



Pixel measuring

ID_cookie	time	site_code	referial	IP address



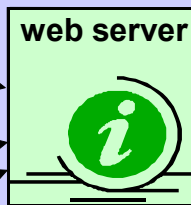
pixel

pixel

pixel

pixel

pixel



ID_cookie	ID_survey

fusion

fusion

Participated Web pages

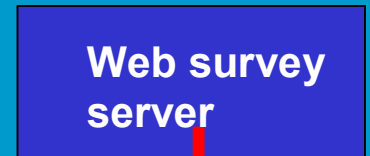
CATI survey / DCO interviewing

Estimate exact number of persons out of total cookie number
e.g. exact number of Croatian sites visitors

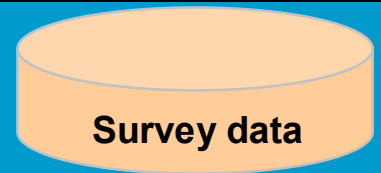
Demographical structure
Other respondents characteristics

Weighting frame

Web survey



ID_survey	SD1	SD2	SD3	...



Demographical structure
Other respondents characteristics

Results - Reach (17.11.-14.12.2003)*



stranica	doseg 28 dana (u tis)	stranica	doseg 28 dana (u tis)
iskon.hr	513	corner.hr	20
htnet.hr*	415	vidiauto.com	15
vip.hr	168	knjiga.hr	10
vecernji-list.hr	157	magic.hr	10
monitor.hr	136	adriatica.net	10
iskrica.com	128	autoweb.hr	9
slobodnadalmacija.hr	101	vidilab.com	9
index.hr	92	nogometni-magazin.com	8
posao.hr	77	mobil.hr	7
moj-posao.net	76	glazba.monitor.hr	7
hr	74	realestatecroatia.com	7
vjesnik.hr	67	etours.hr	6
ht.hr	59	motori.hr	6
croatiabiz.com	56	pcchip.hr	5
bug.hr	50	bankamagazine.hr	5
croghsm.com	49	mi3dot.org	4
forum.hr	49	gradpula.com	4
nacional.hr	36	mojnovac.com	4
plivazdravlje.hr	33	biznis.infoforum.hr	3
gloria.com.hr	31	plivamed.net	3
izbori.net	29	briefing.hr**	2
sportnet.hr	27	cro-climbing.com	1
burza.hr	23	zv.hr	0
medicina.hr	23		

*Htnet period 1.- 30. Nov 2003

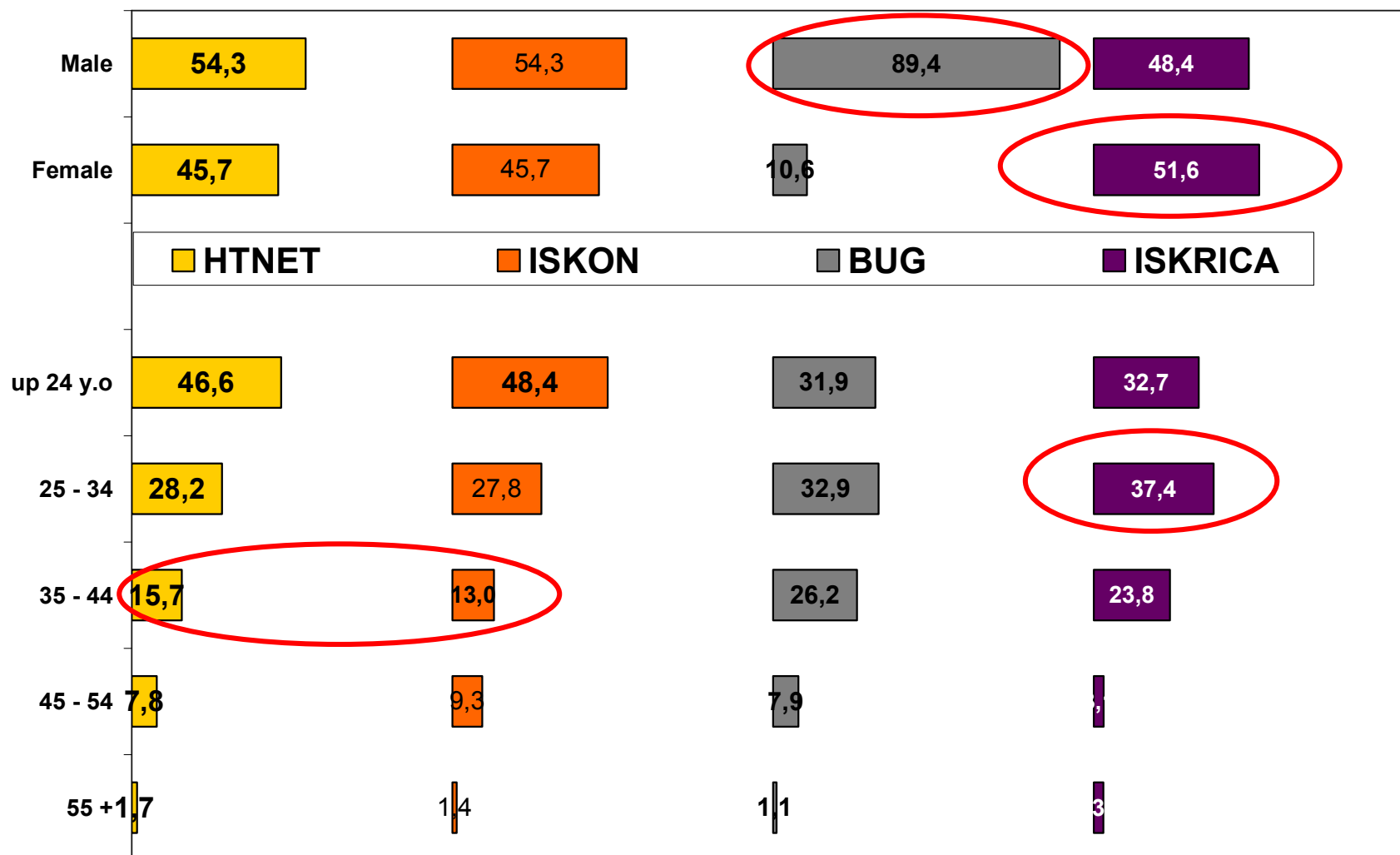
**www.briefing.hr – excluded newsletter users

Results – analysis possibility



Monthly Reach	Overlapping (col %)											
	biznis.infofor m.hr	glazba.monit r.hr	adriatica.net	autoweb.hr	bankamagazi r.hr	briefing.hr	bug.hr	burza.hr	cati.hr	corner.hr	cro- climbing.com	croatiabiz.co
www.croatiabiz.com	20,3	10,3	11,1	14,3	20,8	26	10,6	15,1	15,3	12,3	10,4	100
www.crogsm.com	8,2	8,2	8,7	11,9	8,2	11,1	9,8	10,5	11,6	10,3	8,2	51,6
www.htnet.hr	53,1	53,8	53,8	55,2	54,4	61,3	48,3	63,3	62,7	60,2	47,4	49,1
www.iskon.hr	58,4	66,6	59,4	61,5	62,5	60	56,7	63,9	61,8	68,7	66,8	60,6
www.iskrica.com	21,8	17	16,2	20,1	21,6	26,6	16,7	20,5	21,5	18,5	18,6	82,4
www.moj-posao.net	24,2	16,5	17,5	16,6	24,5	43,8	17,1	23,4	22,7	17,5	18,8	22,9
www.monitor.hr	31,5	82,1	17	28,2	28,8	25,3	31	19,9	34,4	27,1	19,9	20,8
www.posao.hr	18,8	11,4	14,5	15,7	18,2	27,8	12,6	20	17,6	15,2	13,5	67,3
www.vecernji-list.hr	38,9	32,3	20,9	28	39,5	32	22,6	25,1	60,2	30,4	17,3	18,7
www.vip.hr	27,6	37,1	25,7	34,4	27,5	30	31	30	38	35,6	23,5	29

Results sites visitors profiles



Results - Software application: OmniView



Omni View
Program Podatki Pomoć

PODATKOVNO DREVO

- mesečni doseg strani
- Utjecaj Interneta na:
- Učestalost uporabe Internet?
- Davatelja usluga (ISP) koji se najčešće koristi
- Korisnik Interneta od
- ISP s kojim su počeli koristiti Internet?
- Od kuda se pristup Internetu (osim kuće)
- Najčešći način spajanja
- Koristi li sada računalo s kojeg najčešće pristupate Internetu?
- Učestalost korištenja Interneta za:
- Korištenje nekih pretplatničkih uslugama na Internetu
- Stavovi prema pojedinim marketinškim aktivnostima
- Stavovi prema pojedinim marketinškim aktivnostima
- Interes za pojedina područja
- Slobodno vrijeme. Koliko često...
- Glavni ponuđač mobilne telefonije?
- Sudjelovanje u političkoj CATI anketi
- Godina rođenja:
- Zanimanje
- Završen stupanj obrazovanja
- Županija
- Županija
- Osobni netto mjesečni prihod
- Veličina naselja
- Dob
- Dob
- Spol
 - muški
 - ženski
- Spremnost na sudjelovanje u e-mail anketi

MOJE CILJNE SKUPINE

- TOTAL

PREKRIVANJA

vsi anketirani

- Spol
- Y
- mesečni doseg strani
- STATISTIKE**
 - Numerus
 - Stolpec
 - Vrstica
 - Doseg / GRP (vrstica)
 - Populacija (vrstica)
 - % (vrstica)
 - Indeks (vrstica)
 - Delež (vrstica)
 - Indeks deleža (vrstica)

Naredi poizvedbo

		Spol ⁹¹	Spol
		muški	ženski
		Populacija [...]	Populacija [vrs...]
mesečni doseg strani	www.iskon.hr	274,7	231,3
mesečni doseg strani	www.htnet.hr	224,8	189,4
mesečni doseg strani	www.vecernji-list.hr	93,2	63,4
mesečni doseg strani	www.vip.hr	89,8	73,1
mesečni doseg strani	www.monitor.hr	88,6	47,0
mesečni doseg strani	www.slobodnadalmacija.hr	65,1	35,4
mesečni doseg strani	www.index.hr	63,6	27,9
mesečni doseg strani	www.iskrica.com	60,8	64,9
mesečni doseg strani	www.vjesnik.hr	46,7	19,8
mesečni doseg strani	www.bug.hr	44,2	5,2
mesečni doseg strani	www.hr	43,6	29,2
mesečni doseg strani	www.posao.hr	34,5	42,5
mesečni doseg strani	www.ht.hr	33,8	16,7
mesečni doseg strani	www.moj-posao.net	32,4	40,0
mesečni doseg strani	www.forum.hr	32,2	16,2
mesečni doseg strani	www.croatiabiz.com	31,1	24,8

e-nough?!

Thank you!

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ESOMARmembers



PRIZMA ISTRAŽIVANJA

Istraživanja tržišta, medija i ispitivanje javnog mnijenja



▶ TRŽENJSKE, MEDIJSKE,
DRUŽBENE RAZISKAVE IN
SVETOVANJE D.O.O. ▶



Profili korisnika .hr web stranica (DCO anketa)



View: row %

	Korištenje Interneta - 2003 - Posjete bilo kojoj HR web stranici u posljednjih 30 dana				
	n=	s %	Ne	Da	sig.hk
Županija	7171	100	78.8	21.1	,00
Zagrebačka	498	6.9	81.7	18.2	
Krapinsko-zagorska	231	3.2	87	12.9	
Sisačko-moslavačka	302	4.2	88	11.9	
Karlovačka	236	3.2	86.4	13.5	
Varaždinska	300	4.1	83.6	16.3	
Koprivničko-križevačka	202	2.8	87.1	12.8	
Bjelovarsko-bilogorska	215	2.9	86.5	13.4	
Primorsko-goranska	509	7	71.9	28	
Ličko-senjska	88	1.2	89.7	10.2	
Virovitičko-podravska	149	2	81.8	18.1	
Požeško-slavonska	137	1.9	81.7	18.2	
Brodsko-posavska	279	3.8	91.7	8.2	
Zadarska	258	3.5	81.7	18.2	
Osječko-baranjska	533	7.4	80.1	19.8	
Šibensko-kninska	181	2.5	81.7	18.2	
Vukovarsko-srijemska	324	4.5	89.1	10.8	
Splitsko-dalmatinska	736	10.2	77.9	22	
Istarska	337	4.6	74.7	25.2	
Dubrovačko-neretvanska	196	2.7	78.5	21.4	
Međimurska	186	2.5	77.4	22.5	
Zagreb	1274	17.7	65.1	34.8	
Veličina naselja	7173	100	78.8	21.1	,00
<999	2102	29.3	88.8	11.1	
1,000-4,999	1412	19.6	84.1	15.8	
5,000-24,999	984	13.7	78.9	21	
25,000-99,999	836	11.6	75.1	24.8	
100,000-1.000,000	1839	25.6	64.9	35	
Regija	7175	100	78.8	21.1	,00
Slavonija	1422	19.8	84.8	15.1	
Središnja Hrvatska	753	10.4	87.1	12.8	
Sjeverna Hrvatska	919	12.8	84	15.9	
Zagreb	1773	24.7	69.7	30.2	
Istra, Primorje sa zaleđem	936	13	74.5	25.4	
Dalmacija	1372	19.1	79.2	20.7	

Korištenje Interneta - 2003

METODA: CATI - Omnibus

Comments: differences are marked with colours: positive with blue, negative with red, more intensive colours are used for higher differences

Profil korisnika

View: row %

	Korištenje Interneta - 2003 - Posjete bilo kojoj HR web stranici u posljednjih 30 dana				
	n=	s %	Ne	Da	sig.hk
Spol	7174	100	78.8	21.1	,00
Muški	3414	47.5	75.1	24.8	
Ženski	3760	52.4	82.1	17.8	
Dob	7175	100	78.8	21.1	,00
12 - 24	1422	19.8	57.6	42.3	
25 - 34	1141	15.9	62.7	37.2	
35 - 44	1120	15.6	75.3	24.6	
45 - 54	1168	16.2	86	13.9	
55 - 64	977	13.6	96	3.9	
65+	1327	18.4	99.2	.7	
DK/NA	20	.2	85	15	
Završeno obrazovanje	7176	100	78.8	21.1	,00
Nezavršena OŠ	1484	20.6	92.5	7.4	
Završena OŠ	1552	21.6	84.7	15.2	
Srednja škola	3289	45.8	76.9	23	
Viša škola	289	4	64	35.9	
Fakultet	546	7.6	44.1	55.8	
DK/NA	16	.2	75	25	
Zanimanje	7176	100	78.8	21.1	,00
Samostalno zaposlen	245	3.4	61.6	38.3	
Stalno zaposlen	2065	28.7	69	30.9	
Honorarno zaposlen	187	2.6	74.8	25.1	
Nezaposlen	789	10.9	86.4	13.5	
Kućanica	624	8.6	98.7	1.2	
Učenik / student	1125	15.6	49.1	50.8	
Umirovljenik	1939	27	98.4	1.5	
Poljoprivrednik / ribar	114	1.5	98.2	1.7	
Ne zna / ne želi reći	18	.2	77.7	22.2	
Nešto drugo	70	.9	75.7	24.2	
Osobni mjesečni prihod	7173	100	78.8	21.1	,00
Nema prihoda	1588	22.1	75	25	
Do 1000 HRK	913	12.7	81.5	18.4	
1001 do 2000 HRK	1653	23	93.8	6.1	
2001 do 3500 HRK	1505	20.9	84.3	15.6	
3501 do 6000 HRK	1049	14.6	62.1	37.8	
Više od 6000 HRK	276	3.8	39.4	60.5	
DK/NA	189	2.6	72.4	27.5	
Osoba koja najviše doprinosi kućnom budžetu	7174	100	78.8	21.1	,00
Da	3049	42.5	83.5	16.4	
Ne	1966	27.4	73.6	26.3	
DK/NA	1617	22.5	75.5	24.4	
Više osoba dopridonose zajedno	542	7.5	80.8	19.1	



Profil korisnika



View: row %

	Korištenje Interneta - 2003 - Posjete bilo kojoj HR web stranici u posljednjih 30 dana				
	n=	s %	Ne	Da	sig.hk
Broj članova u kućanstvu	7173	100	78.8	21.1	,00
1,00	1032	14.3	88.7	11.2	
2,00	1607	22.4	86.4	13.5	
3,00	1384	19.2	75.1	24.8	
4,00	1706	23.7	67.9	32	
5 +	1444	20.1	79.7	20.2	
Djeca do 18 god	7173	100	78.8	21.1	,00
Niti jedno	4243	59.1	82.8	17.1	
Jedno	1323	18.4	71.6	28.3	
Dva	1155	16.1	71.3	28.6	
Tri i više	452	6.3	80.9	19	
Mjesečni prihod kućanstva	7174	100	78.8	21.1	,00
Bez prihoda	133	1.8	83.4	16.5	
Do 2000 HRK	1437	20	95.8	4.1	
2001 do 4000 HRK	2038	28.4	88.5	11.4	
4001 do 6000 HRK	1337	18.6	76.6	23.3	
6001 do 8000 HRK	791	11	65.4	34.5	
više od 8000 HRK	949	13.2	46.4	53.5	
DK/NA	489	6.8	77	22.9	
Prihod kucanstva po članu	7173	100	78.8	21.1	,00
Do 499	675	9.4	92.1	7.8	
500 do 999	1326	18.4	88.8	11.1	
1000 do 1999	2629	36.6	83.6	16.3	
2000 do 2999	1172	16.3	69.4	30.5	
3000 i više	882	12.2	52.7	47.2	
DK/NA	489	6.8	77	22.9	

Korištenje Interneta - 2003

METODA: CATI - Omnibus

Comments: differences are marked with colours: positive with blue, negative with red, more intensive colours are used for higher differences

