

Technology and the REALTOR[®]: Survey Analysis



Center for REALTOR[®] Technology
National Association of REALTORS[®]

February 2002

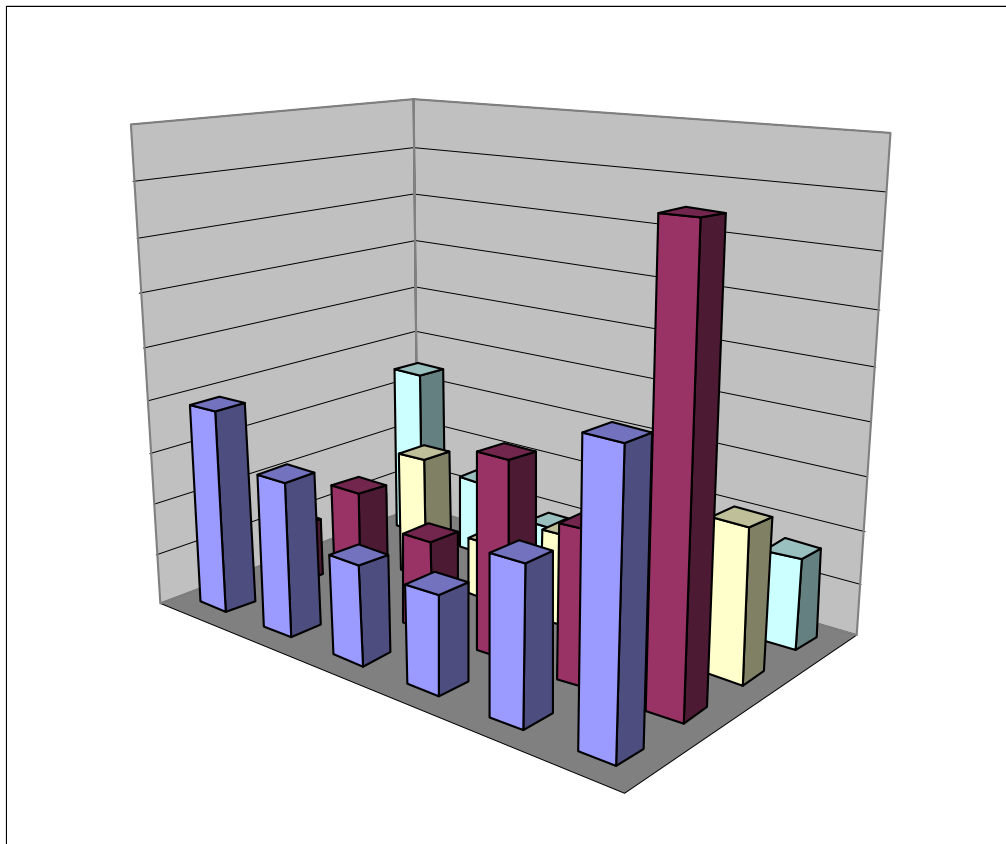


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I. Introduction: Purpose of the Study

The Center for REALTOR[®] Technology (NAR – CRT) recently introduced a demonstration-quality software package designed to address a *perceived need* for Internet web site software that enhances the agent-client relationship. The *Realtor[®]-Client Communication Gateway (RCCG)* package enables REALTORS[®] to place detailed information about specific properties on a private web page for clients to view. The software supports two-way communications (extended email) in a password-protected account fully under REALTORS[®] control. The software was first demonstrated at the 2001 National Convention and is freely available for download from the CRT website (www.crt.realtors.org).

Reactions to the RCCG software (positive and negative) prompted the CRT to explore potential enhancements as well as an effective distribution mechanism (i.e. direct distribution to agents versus hosting of the software by MLS's, brokerages or vendors). A first step in reviewing RCCG was to validate the *perceived needs* for which the package was designed, specifically that REALTORS[®] prefer direct one-on-one interaction with clients. Using a combination of REALTOR[®] focus groups and on-line surveys, the CRT evaluated the general impact of technology upon the REALTOR[®] and explored the specific value of the RCCG software.

The CRT is not a market research entity. Our studies were intended to evaluate technology's impact on REALTORS[®] with broad strokes. By identifying trends, the CRT improves its focus for delivering future products to REALTORS[®].

II. Survey Summary

This CRT survey confirms that within the subset of computer-savvy REALTORS[®], website usage and email as a marketing tool is heavily prevalent (and increasing). In addition, REALTORS[®] are using the IDX downloads from MLS's to enable their web sites to provide listings and search services. Many of the respondents to the survey believe that the Internet has transformed the way they perform their jobs.

The survey indicates that REALTORS[®] working in larger firms tend to have greater access to the tools necessary for personal web page publishing. This is logical, since larger firms are more likely to employ or have access to computer talent and maintain significant technical infrastructure. Economies of scale dictate that the cost of delivering web services is far cheaper per licensee for large firms and for MLS's.

The CRT believes that the market segment with the fewest web services options (and potentially highest expense) is REALTORS[®] in smaller firms. Unfortunately, it is this same group that is least likely to have the financial and technical resources necessary to purchase and maintain the software.

For many REALTORS[®], MLS's and larger brokerages offer the best sources for providing web services on a large scale. The CRT suggests these groups actively pursue providing inexpensive, personalized web services to REALTORS[®]. As previously stated, large brokerages and MLS's can best absorb the cost of acquiring, operating and maintaining web services software.

This survey also shows that electronic devices are in heavy use by REALTORS[®] with many carrying three or more portables at any given time. The CRT believes that new products coming to market will perform functions that previously required several devices and simplify the REALTORS[®] job.

III. On-Line Internet Marketing Survey

I. A. Survey Description

Conducted January 13-20, 2002, a CRT survey was conducted on-line to elicit responses regarding use of the Internet and web sites as REALTOR[®] marketing tools. Starting with basic information about technology devices (i.e. use of pagers, cell phones, etc.), the survey progressed to the use of IDX downloads and displays. The following pages contain the results of the study as well as comparisons to similar studies conducted by NAR.

Method of Solicitation: Email.

Demographic Selection Criteria: None. Emails culled from NRDS.

Solicitations: 10,000 + notice to several Internet Crusade mailing lists

Responses: 1348

Eliminated: 146 responses were from non-agents/brokers or unspecified
9 responses duplicate from same email address

B: Survey and Selection Bias

The results of this survey represent a sampling of REALTORS® that actively use email for personal and/or business purposes. Respondents were chosen at random from NAR National REALTORS® Database System (NRDS) and sent an email invitation to participate. Of the 10,000 solicited, some 1348 responded. By virtue of receiving invitations via email, respondents were already predisposed to be technically “savvy” and more likely to respond favorably to questions regarding the Internet and technology.

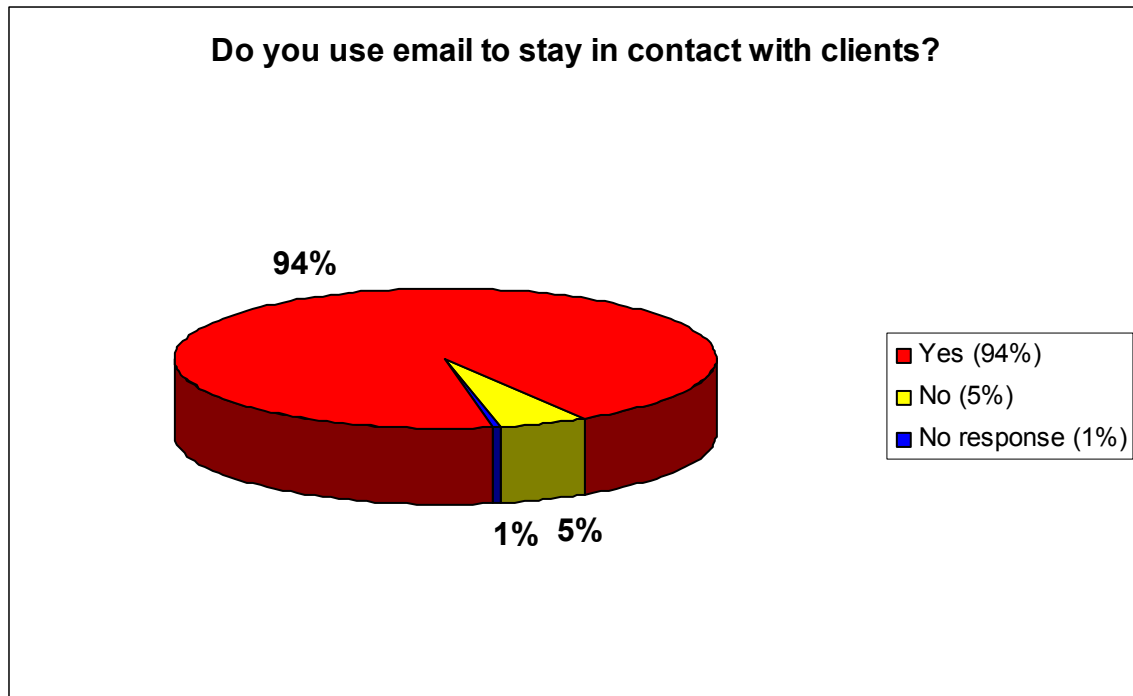
In addition, although the CRT received 1348 distinct responses, 132 invitees reviewed the survey without responding. CRT believes that the technical nature of the questions may have been a potential deterrent to some potential respondents. As a result, CRT *speculates* that email users with limited additional technology expertise chose not to respond after reading the questions. This may result in a survey bias trending towards use of Internet web sites and IDX downloads where such a trend may not exist in the NAR’s general membership.

The CRT believes that respondents may not have understood the description of IDX that preceded several questions and this may have skewed the results of related questions. In addition, one answer was accidentally omitted from the final question in the survey. Respondents with a brokerage website could choose only “Yes, my personal or brokerage website offers listings but I do not know how it is accomplished” since the response “Yes, my personal or brokerage website offers listings using IDX, a frameable solution or other” was omitted.

This survey was targeted at REALTORS® and licensees as opposed to association staff and those respondents that did not specify broker owner, associate broker or sales agent were omitted. This resulted in 1202 usable responses out of 1348 possible. Nine responses originated from the same email address and were omitted leaving 1193 total. With the exception of the question regarding occupation, the subset of brokers and agents (1193 out of 1348) was used in all cases.

At the 99% level of confidence, the statistical error is +/- 3.73% for all questions in this survey. In the recent 2001 NAR Member Profile, work conducted through the U.S. Mail, 77% of members indicated that they use email for business purposes. Extrapolating the results of this study over the entire member population should take into account the fact that the study numbers reflect only the responses from 77% of REALTORS® and not the entire population.

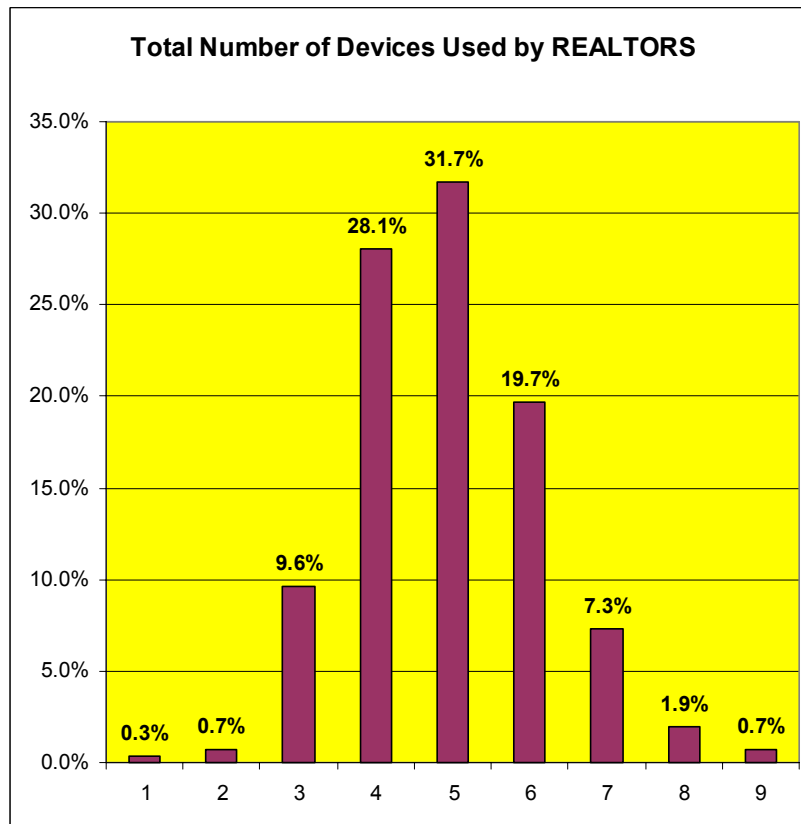
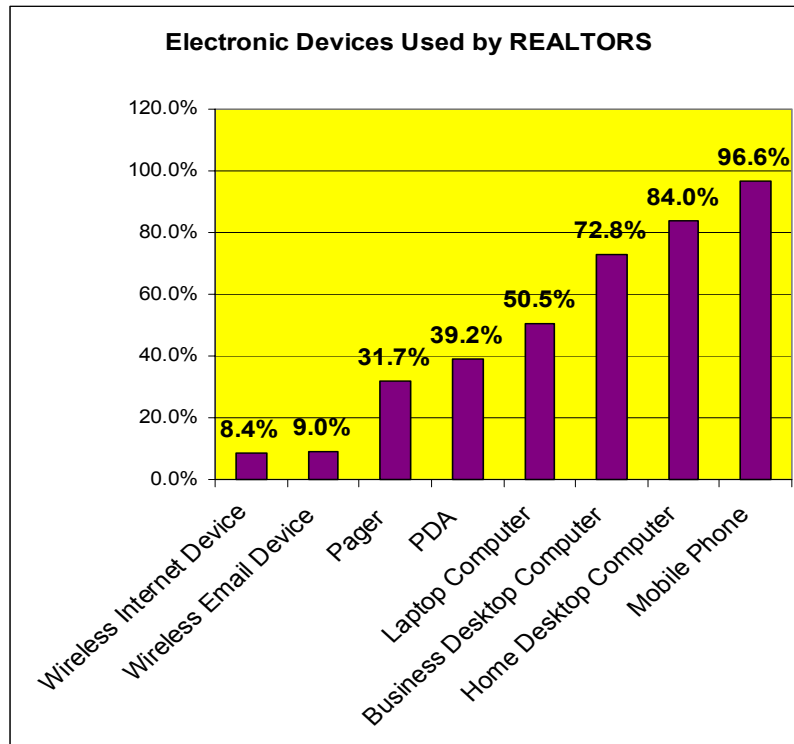
C. Survey Results: Email Usage



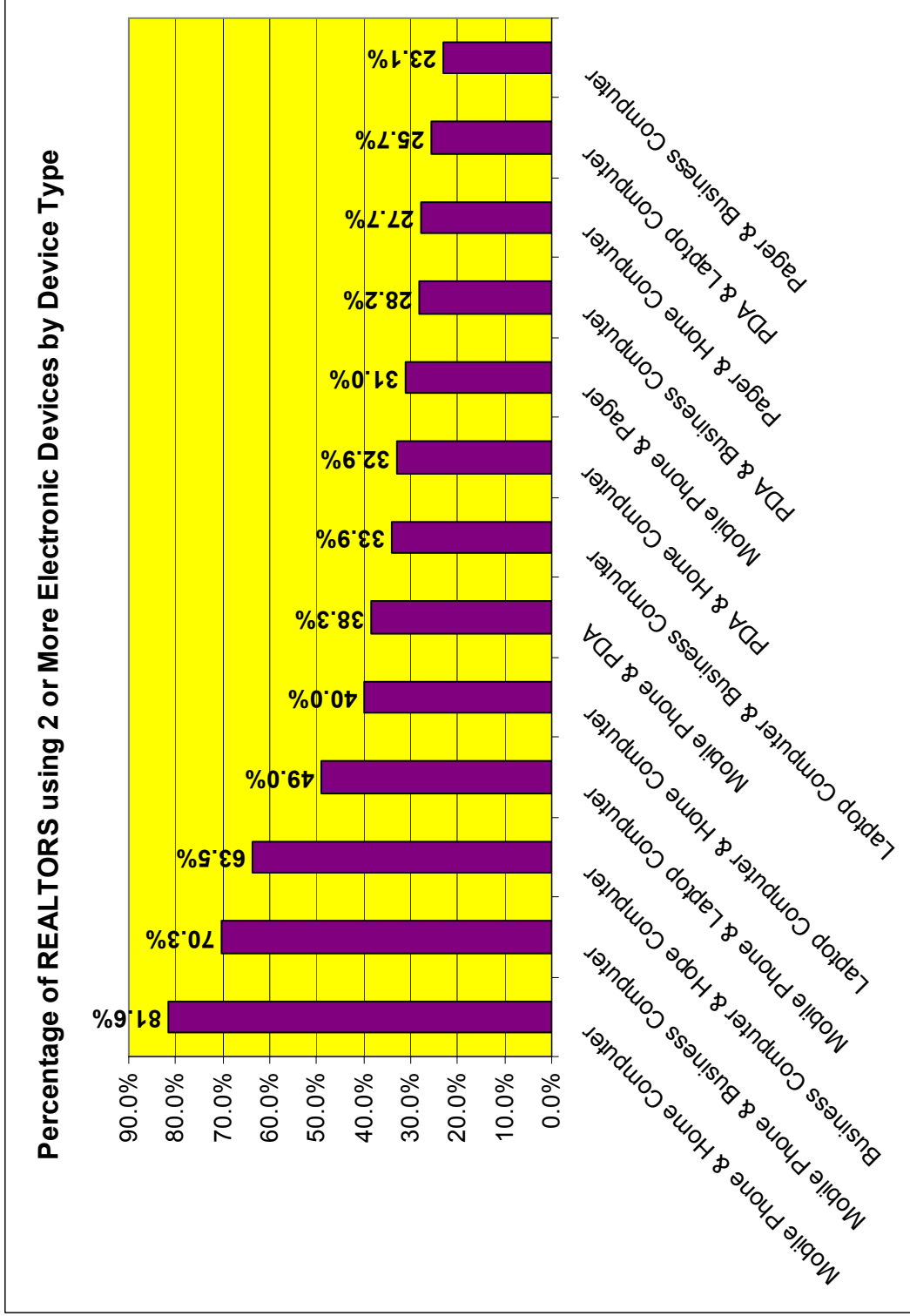
Although 94% of respondents report using email to stay in contact with clients, it is important to note that the survey was conducted via email and Internet. As a result, respondents were more likely to use email since they were already familiar with the tool. In the recent 2001 NAR Member Profile, the same question resulted in 77% using email for business purposes, however the survey used U.S. mail.

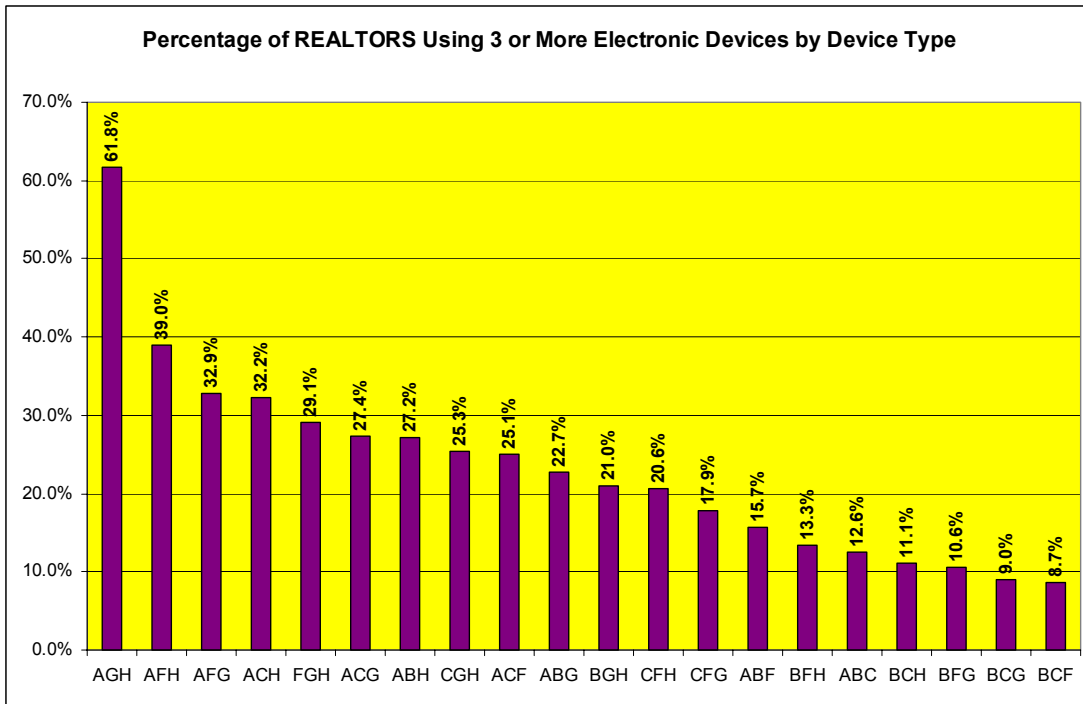
Both surveys clearly demonstrate a strong trend towards the use of email in business. The CRT survey shows that those who are already familiar with email and/or the Internet are highly likely to employ email for business use.

D. Survey Results: Electronic Device Usage



D. Survey Results: Electronic Device Usage (continued)





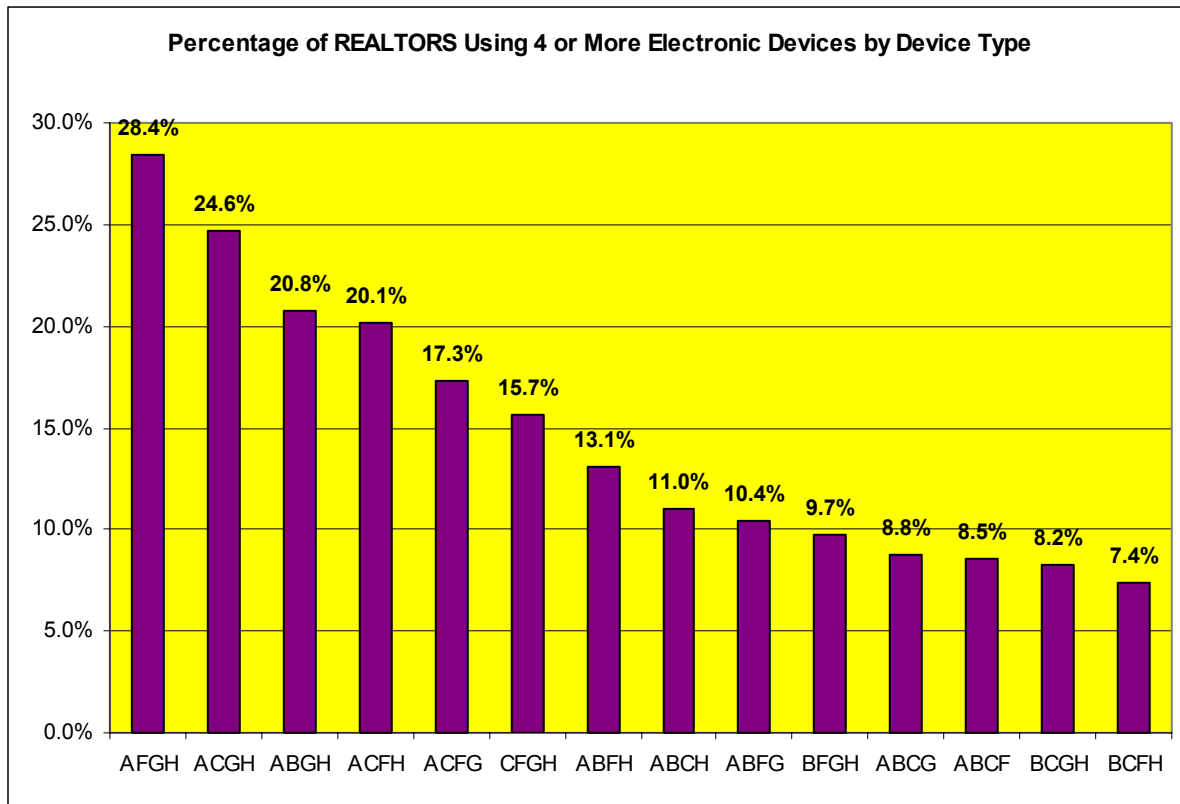
Key:

A: Mobile Phone
 B: Pager
 C: PDA (i.e. Palm, Handspring)
 D: Wireless email device
 E: Wireless Internet device
 F: Laptop Computer
 G: Business Desktop Computer
 H: Home Desktop Computer

Top 5 Combinations of 3 Electronic Devices:

1. Mobile Phone, Business Desktop Computer, Home Desktop Computer
2. Mobile Phone, Laptop Computer, Home Computer
3. Mobile Phone, Laptop Computer, Business Computer
4. Mobile Phone, PDA, Home Computer
5. Laptop Computer, Business Computer, Home Computer

D. Survey Results: Electronic Device Usage (continued)



Key:

- A: Mobile Phone
- B: Pager
- C: PDA (i.e. Palm, Handspring)
- D: Wireless email device
- E: Wireless Internet device
- F: Laptop Computer
- G: Business Desktop Computer
- H: Home Desktop Computer

Top 5 Combinations of 3 Electronic Devices:

1. Mobile Phone, Laptop Computer, Business Desktop Computer, Home Computer
2. Mobile Phone, PDA, Business Desktop Computer, Home Desktop Computer
3. Mobile Phone, Pager, Business Desktop Computer, Home Desktop Computer
4. Mobile Phone, PDA, Laptop Computer, Home Computer
5. Mobile Phone, PDA, Laptop Computer, Business Computer

E. Survey Results: Electronic Device Convergence

The data on the preceding pages makes it clear that more and more REALTORS® are using more and more electronic devices. Not surprisingly, a significant population of REALTORS® uses mobile phones and personal computers; however usage of PDAs, laptops and wireless devices is also extensive.

The proliferation of electronic devices virtually ensures that REALTORS® will carry two, three or more devices at any given time. The CRT believes that new devices coming to market in 2002 offer a convergence of features now found only in separate products (e.g. a mobile phone with a built in PDA).

The CRT looked at each device type, and the groupings of devices most prevalent in the REALTOR® community. The full results of this analysis can be found in Appendix C

Convergence: Features that should be combined

96.7% of respondents with a PDA also use a mobile phone.

97.2% of respondents with a laptop computer also use a mobile phone.

95.3% of respondents with wireless email also use a mobile phone.

92.0% of respondents with wireless Internet also use a mobile phone.

63.9% of respondents with a PDA also use a mobile phone and a laptop

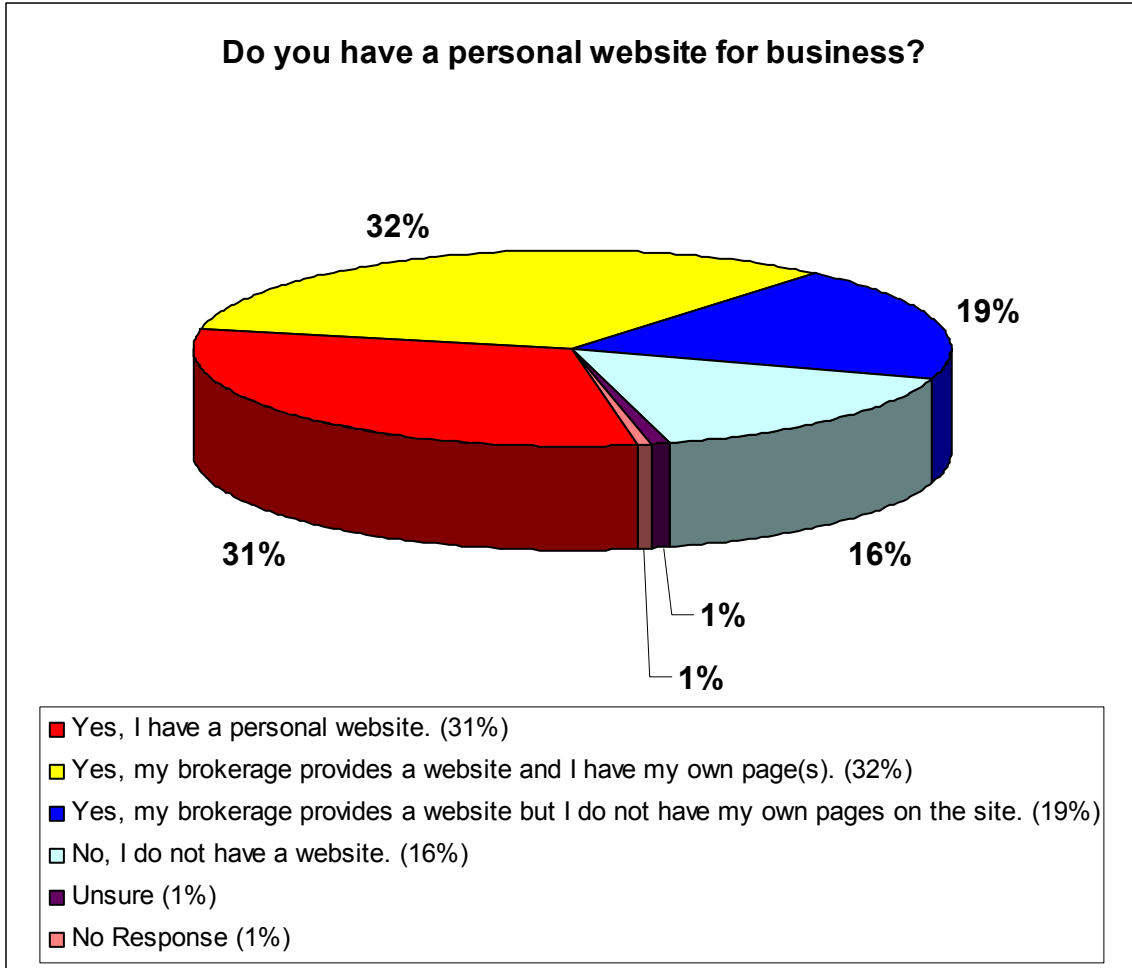
49.5% of respondents with a pager also use a mobile phone and a laptop

48.0% with wireless Internet also use a PDA and a laptop

45% of respondents with wireless Internet also use a mobile phone, PDA and a laptop.

The survey also indicates that respondents are already replacing single-function devices with multi-function devices. Although 39.2% of all respondents use a PDA, only 33.6% of respondents with two wireless devices use a PDA. The number using a PDA drops to 26.2% if the respondents also use a laptop. This small population of tech-savvy REALTORS® may derive less value from PDAs and more from wireless devices and/or laptops. The CRT believes these results would be even more compelling if the survey question asked “What electronic devices do you use on a daily basis?” Many of the respondents may own devices no longer used after being replaced by multi-function device.

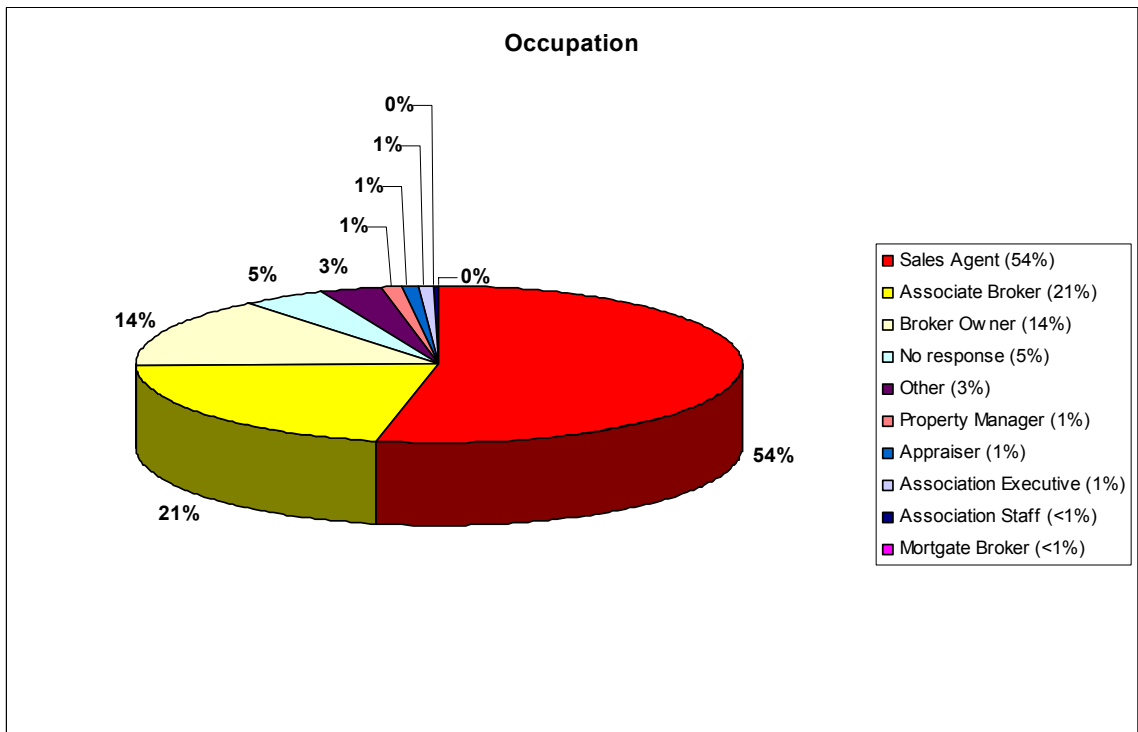
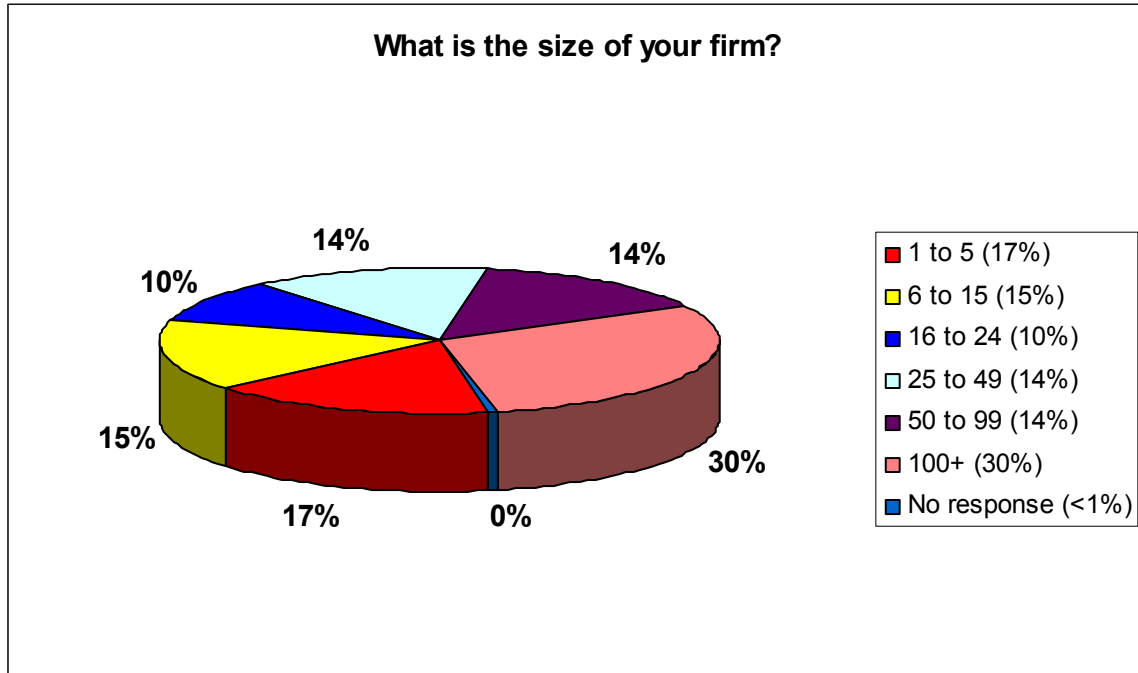
E. Survey Results: Personal Websites



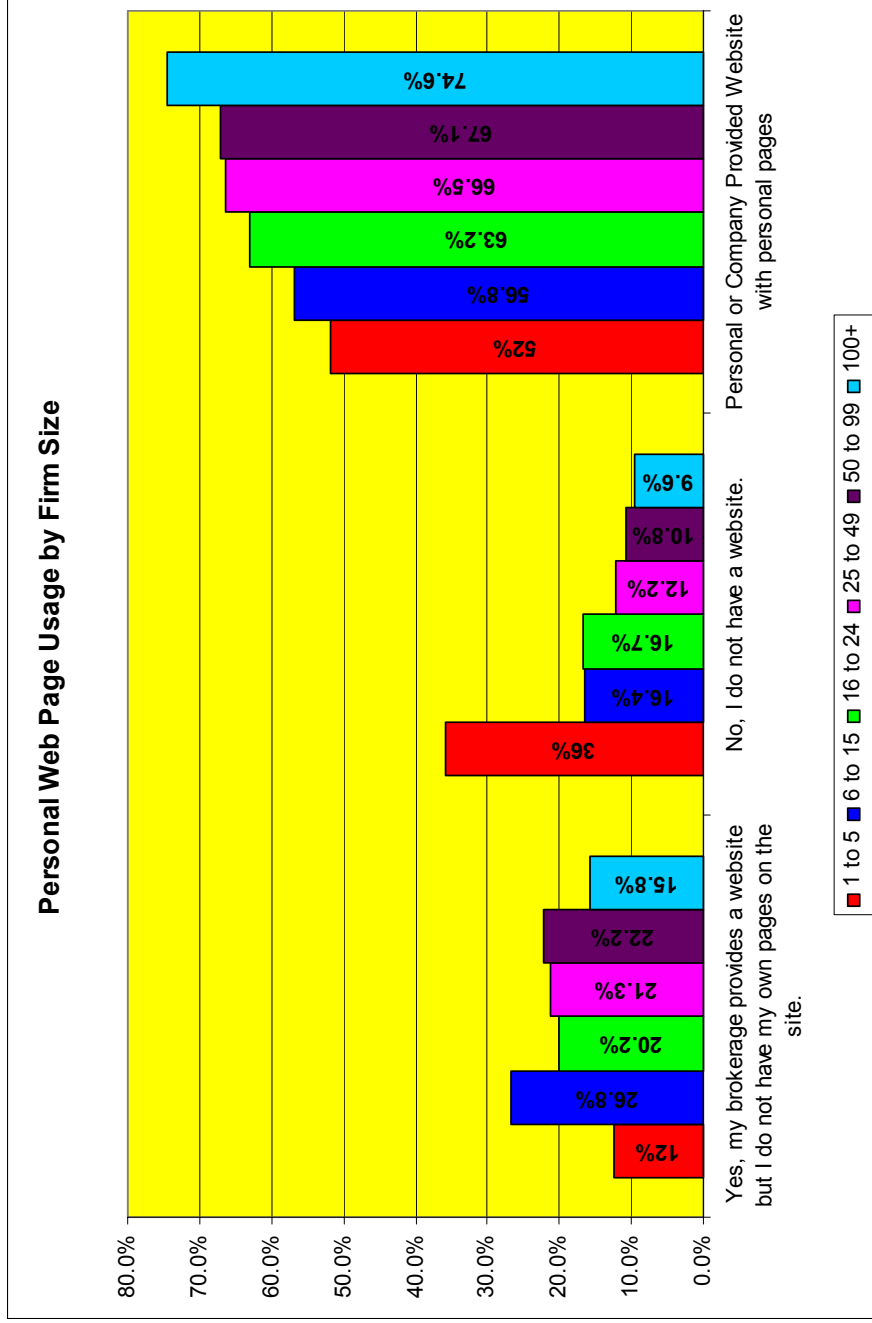
A majority of respondents (63%) indicate that they have a personal website or their company provides one for them. Including those respondents with brokerage websites, 82% of respondents report a least some form of web presence while only 16% do not use the Internet for marketing purposes.

The 2001 NAR Member Profile asked a similar question and reports that 43% of REALTORS[®] have a personal web site (or web page) while 82% of REALTORS[®] use a company sponsored web site.

F. Survey Results: Demographics

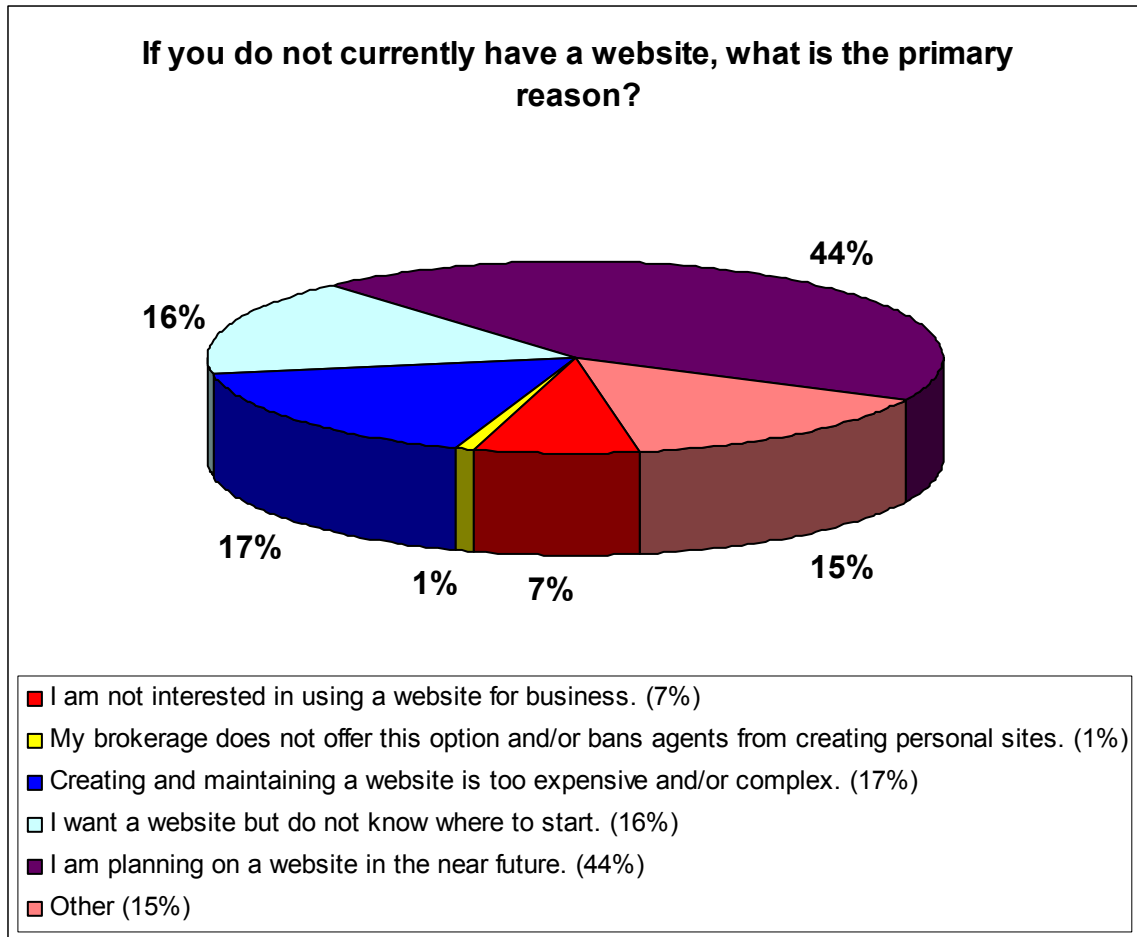


G. Survey Results: Web Site Usage and Firm Size (Demographics)



This graph demonstrates a significant correlation between firm size and web presence. Small firms are least likely to have a personal Internet presence (52%). The CRT believes that the future of web services deployment rests in the hands of those entities with the most-developed technical infrastructure (Brokerage and MLS). The MLS is especially critical to the future deployment of web services since this is the entity that will most likely service small firms.

H. Survey Results: Lack of Website Reasons

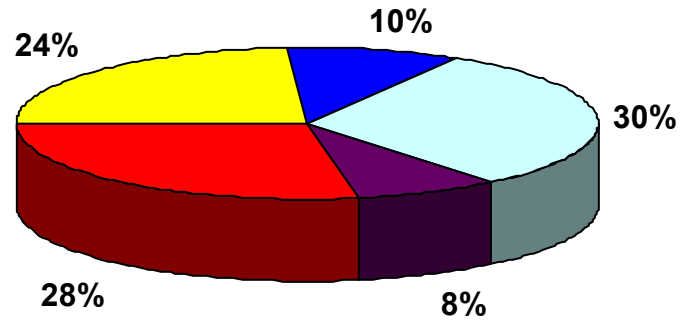


Continuing an apparent trend towards the use of the Internet for marketing purposes, 44% of those who do not use a website plan to build one in the near future. This question was directed to the 16% of respondents who reported not using a website for personal business (although others were not barred from answering). This sub-group translates to an additional 7% of the complete sample that plan to use the Internet in the future. As a comparison, the 2001 NAR Member Profile indicates that 6% of REALTORS® plan to create a web site in the future.

The 15% of respondents indicating “Other” were given the opportunity to give more detail. In many cases, “Others” reported using a website in the past and abandoning it due to cost, complexity or lack of measurable return on investment. Some indicated that the current brokerage website was adequate.

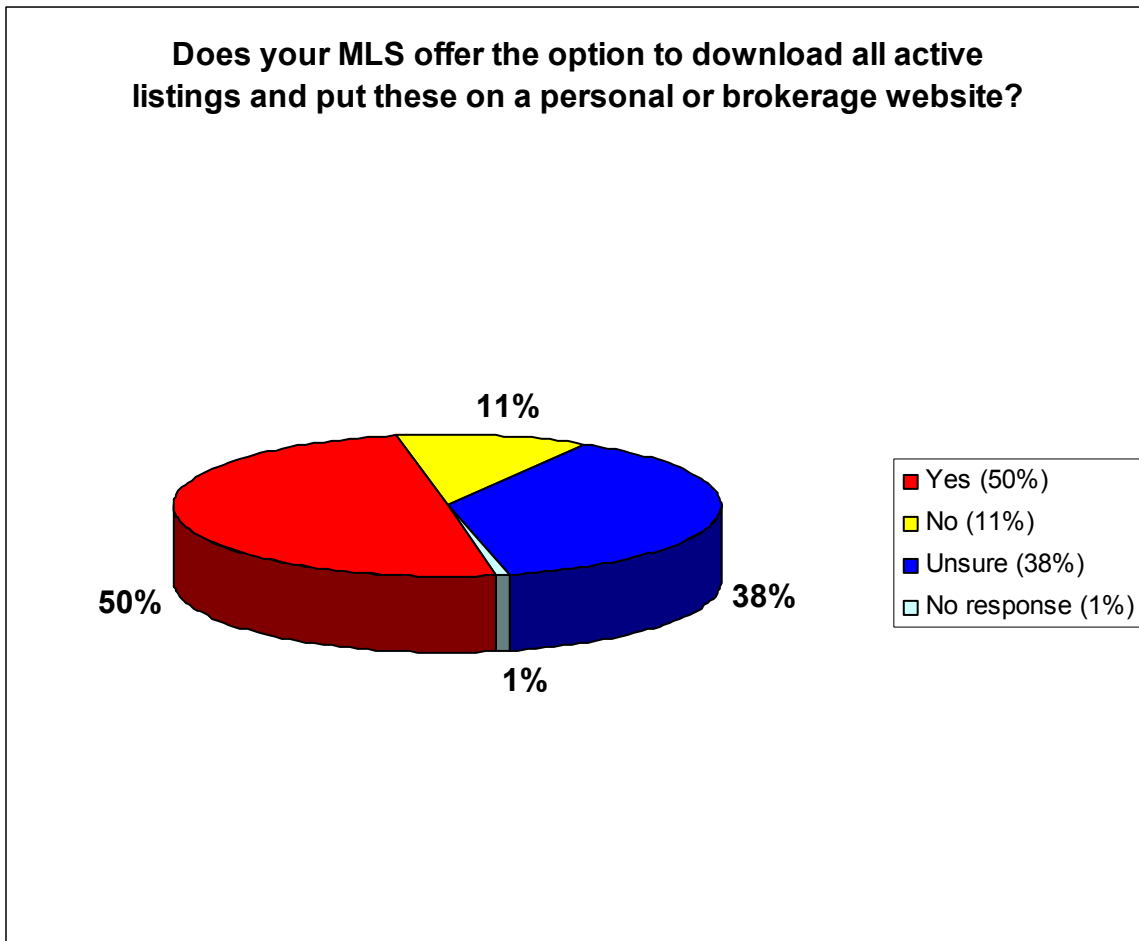
I. Survey Results: Websites and Client Interaction

If you had a website with searchable listings, would you change the way you interact with your clients?



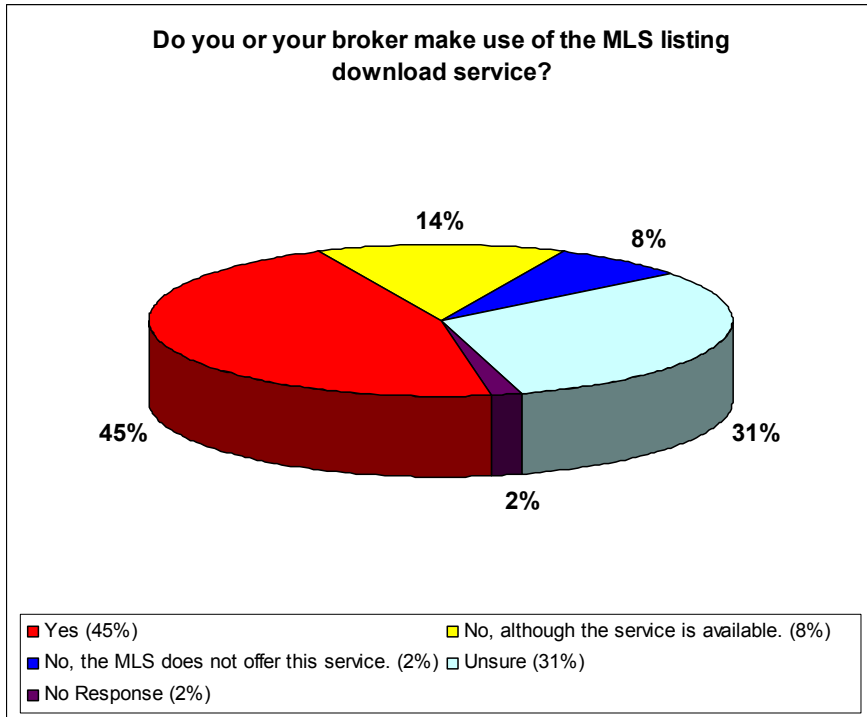
- I have a website with searchable listings and it changed the way I work with my clients. (28%)
- I have a website with searchable listings but it has not changed the way I interact with my clients. (24%)
- I do not have a website with searchable listings nor do I think it would change the way I interact with my clients. (10%)
- I do not have a website with searchable listings but I think my interactions with clients would change if I had one. (30%)
- No response (8%)

J. Survey Results: IDX Usage

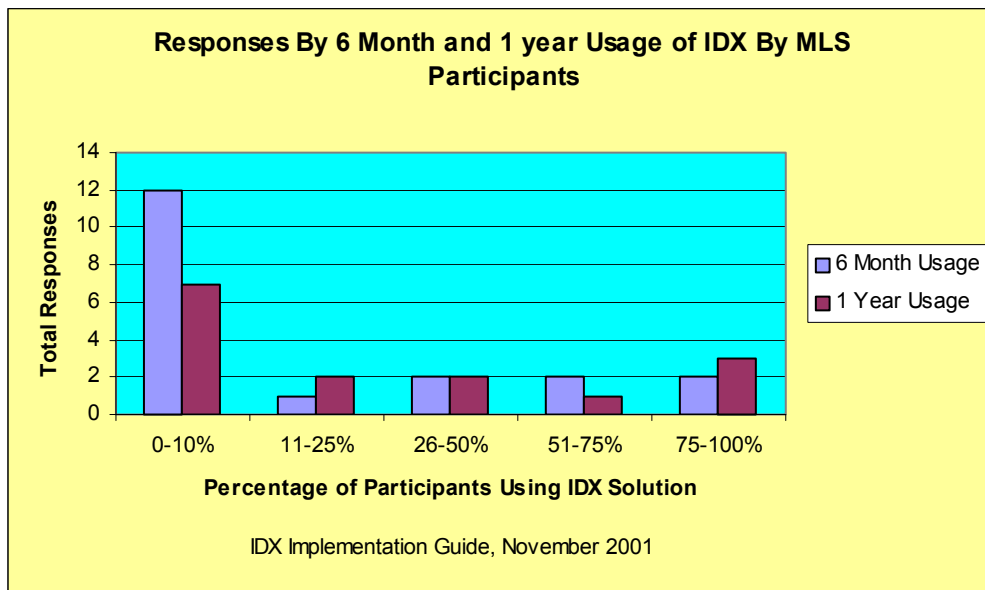


Due to the high number of "Unsure" responses (38%), the CRT believes that REALTORS[®] may not be aware of or fully understand IDX. Of special note is the 11% that answered "No" to the question. IDX was mandated for adoption by January 1, 2002 but the "No" responses may mean that a significant portion of MLS's have not met this goal.

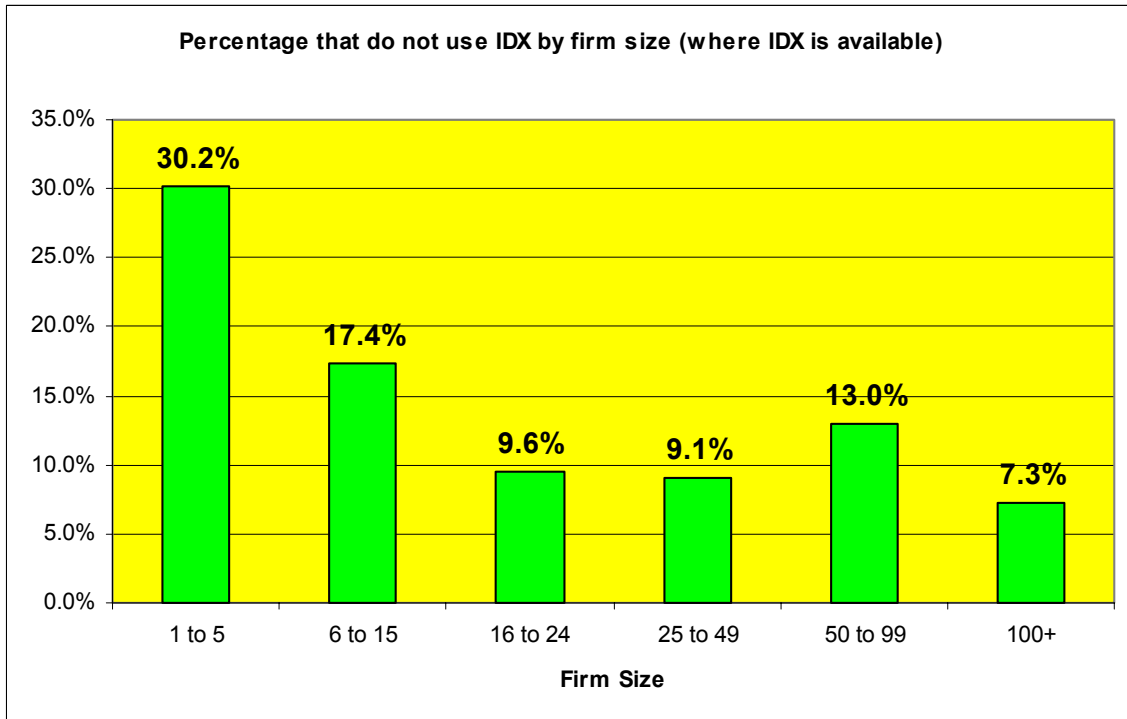
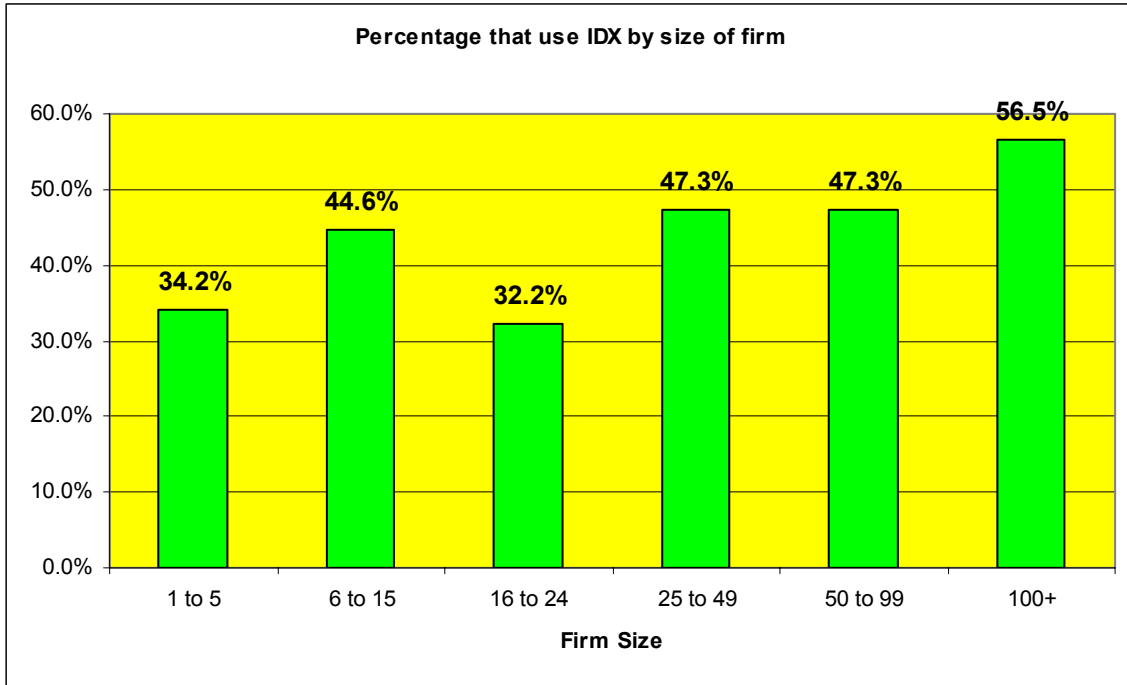
J. Survey Results: IDX Usage (continued)



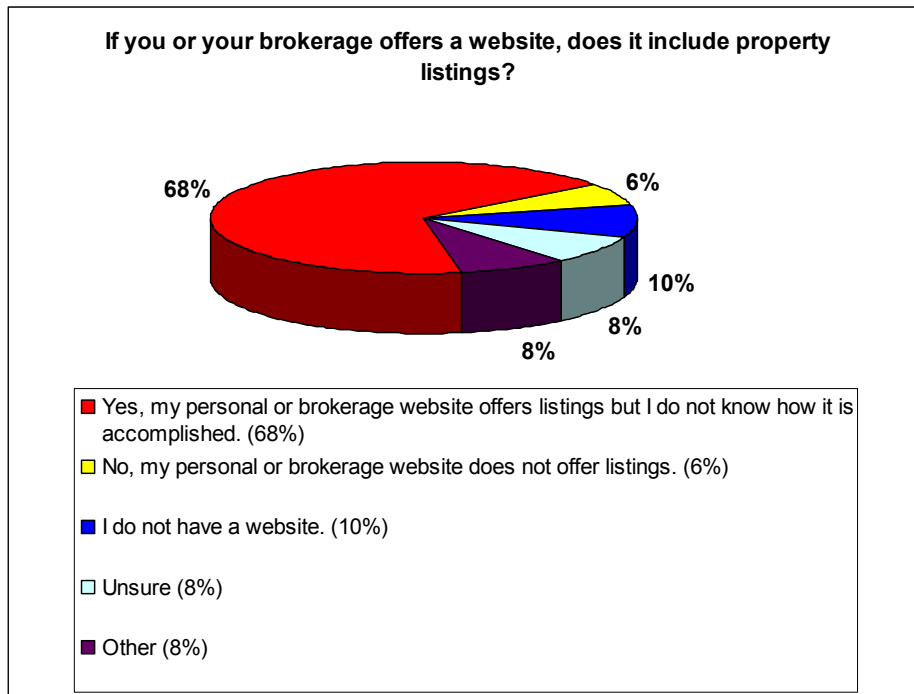
Due to the high numbers that responded “Yes” to this question, the CRT is concerned about the wording of our IDX description in the survey. In a previous survey regarding IDX (see IDX Implementation Guide, November 2001 or figure below), the CRT asked 19 MLS’s to report their IDX usage. After six months, 12 of the 19 reported that less than 10% of their membership actively used IDX. After 1 year, this number dropped to 7 of 15 (4 MLS’s did not have 1 year of data). Although the two studies focused on different samples (REALTORS[®] vs. MLS), the results are dramatically different.



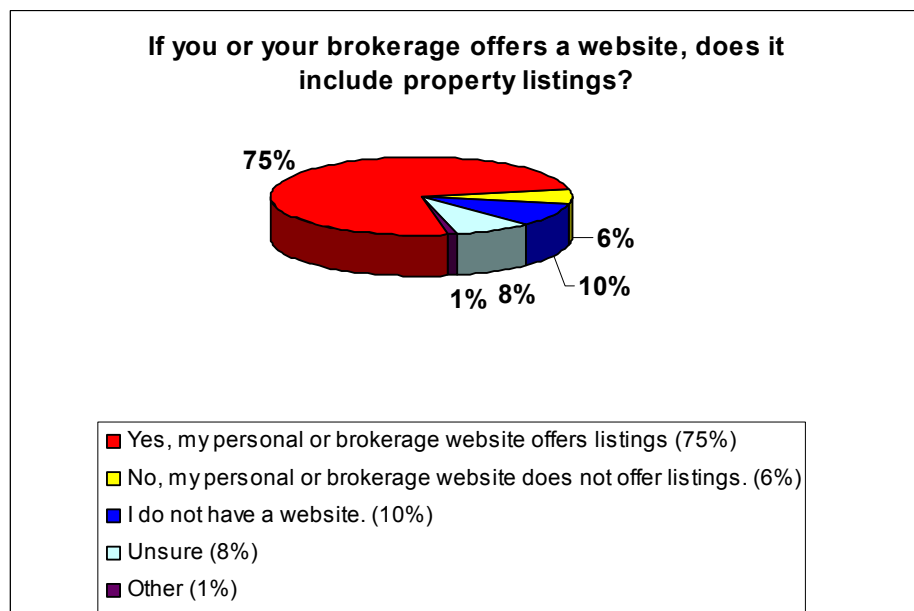
J. Survey results: IDX Usage (continued)



K. Survey Results: Websites and Property Listings



The CRT inadvertently omitted a possible response to this question, and this may affect the results of the analysis. The CRT intended to include the response “Yes, my personal or brokerage website offers listings using IDX, a frameable solution or other.” The vast majority of the “Other” respondents added commentary explaining that they include listings and fully understood the method used retrieving the data. As a result, 7% of the 8% that indicated “Other” were moved to a modified “Yes” category (see modified graph below).



IV. Conclusions

The following conclusions can be drawn from the survey: First, those REALTORS[®] who use Internet and mobile technologies invest a significant amount of money. Secondly, REALTORS[®] who invest in Internet and mobile technology tend to spread their total investment over multiple devices. Third, REALTORS[®] in larger firms are more likely to use Internet marketing techniques than those in smaller firms. Fourth, a large number of REALTORS[®] who do not use Internet marketing techniques today are planning to use them in the future. Finally, agents who work for larger firms report higher usage of IDX downloads and searchable listings than those in smaller firms.

Appendix A: Survey

<p>Do you use email to stay in contact with clients?</p>	<ul style="list-style-type: none"> • Yes • No
<p>Tell us what kinds of technologies you employ in your business?</p>	<ul style="list-style-type: none"> • Mobile Phone • Pager • PDA (i.e. Palm, Handspring) • Wireless email device • Wireless Internet device • Wireless Internet device • Business Desktop Computer • Home Desktop Computer
<p>Do you have a personal website for business?</p>	<ul style="list-style-type: none"> • Yes, I have a personal website. • Yes, my brokerage provides a website and I have my own page(s). • Yes, my brokerage provides a website but I do not have my own pages on the site. • No, I do not have a website. • Unsure.
<p>What type of company do you work for?</p>	<ul style="list-style-type: none"> • An independent, non-franchised firm. • An independent, franchised firm. • Other.
<p>If 'Other', please specify:</p>	
<p>What is the size of your firm?</p>	<ul style="list-style-type: none"> • 1-5 • 6-15 • 16-24 • 25-49 • 50-99 • 100+
<p>If you do not currently have a website, what is the primary reason?</p>	<ul style="list-style-type: none"> • I am not interested in using a website for business. • My brokerage does not offer this option and/or bans agents from creating personal sites. • Creating and maintaining a website is too expensive and/or complex. • I want a website but do not know where to start. • I am planning on a website in the near future. • Other
<p>If 'Other', please specify:</p>	

<p>If you had a website with searchable listings, would you change the way you interact with your clients?</p>	<ul style="list-style-type: none"> • I have a website with searchable listings and it changed the way I work with my clients. • I have a website with searchable listings but it has not changed the way I interact with my clients. • I do not have a website with searchable listings nor do I think it would change the way I interact with my clients. • I do not have a website with searchable listings but I think my interactions with clients would change if I had one.
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The following questions ask about Internet Data Exchange (IDX), a NAR policy that requires your MLS to provide a download of the current active listings to member brokers/agent by January 2002.

Your MLS may have a different name for this service (i.e. Broker Reciprocity).

<p>Does your MLS offer the option to download all active listings and put these on a personal or brokerage website?</p>	<ul style="list-style-type: none"> • Yes • No • Unsure
<p>Do you or your broker make use of the MLS listing download service?</p>	<ul style="list-style-type: none"> • Yes. • No, although the service is available. • No, the MLS does not offer this service. • Unsure
<p>If so, what is the source of the listings?</p>	<ul style="list-style-type: none"> • Provided using the MLS listing download service. • Uses the MLS website for searches (Site framing). • My personal or brokerage website offers only our own listings.
<p>If you or your brokerage offers a website, does it include property listings?</p>	<ul style="list-style-type: none"> • Yes, my personal or brokerage website offers listings but I do not know how it is accomplished. • No, my personal or brokerage website does not offer listings. • I do not have a website. • Unsure • Other

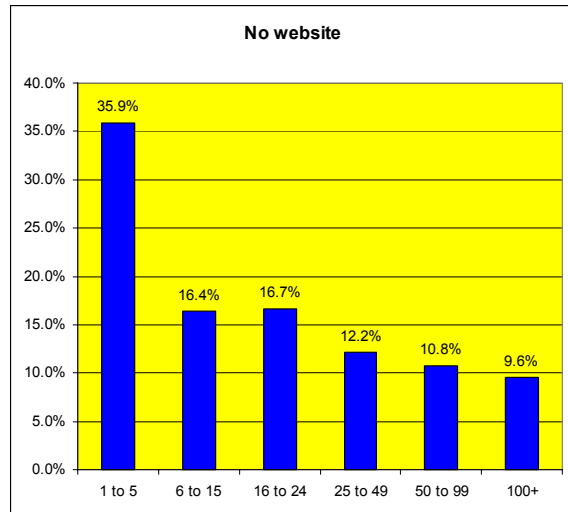
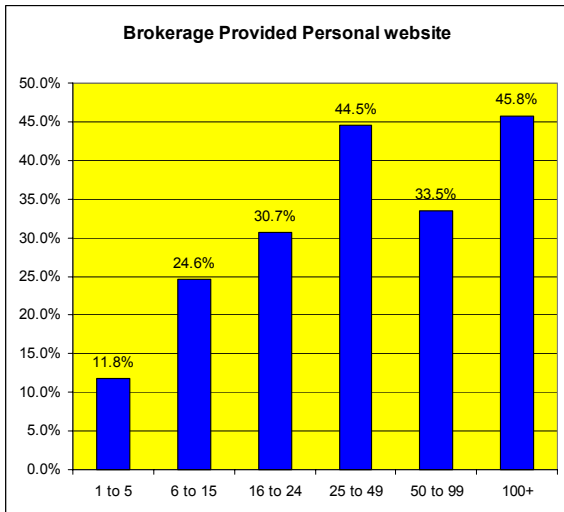
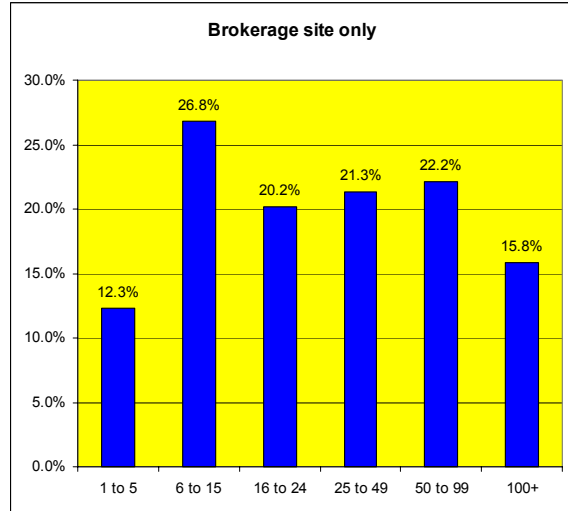
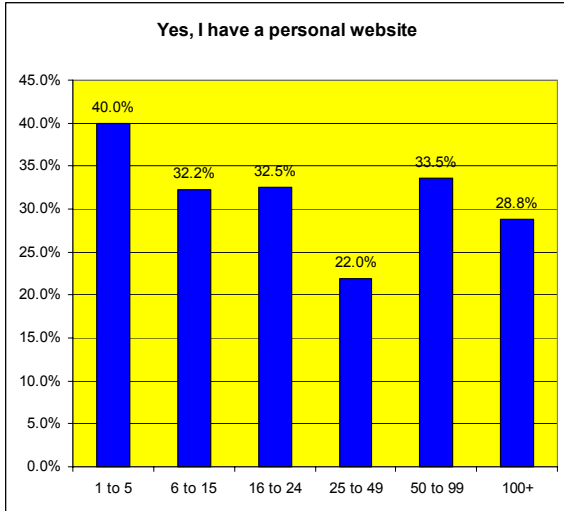
If 'Other', please specify:	

Please provide some information on yourself. The Center for Realtor® Technology is currently developing new software for REALTORS® and your participation in this and future surveys will help us to determine what tools will make your job easier.

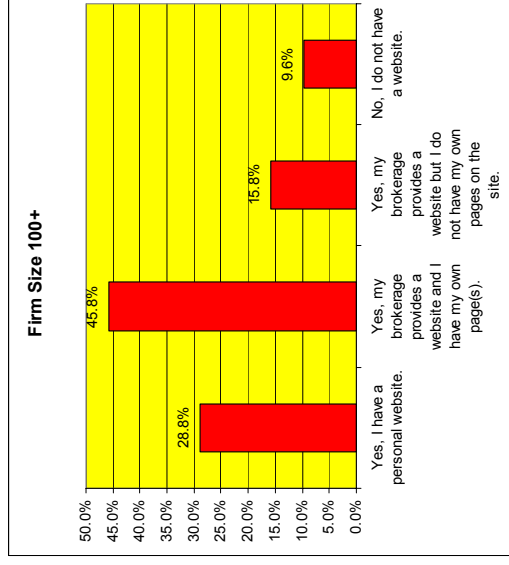
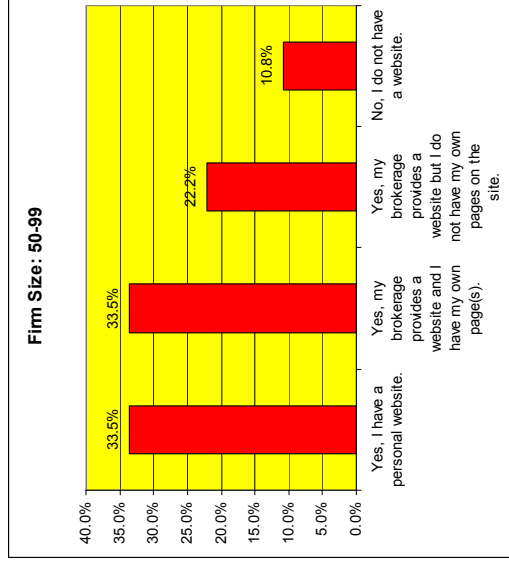
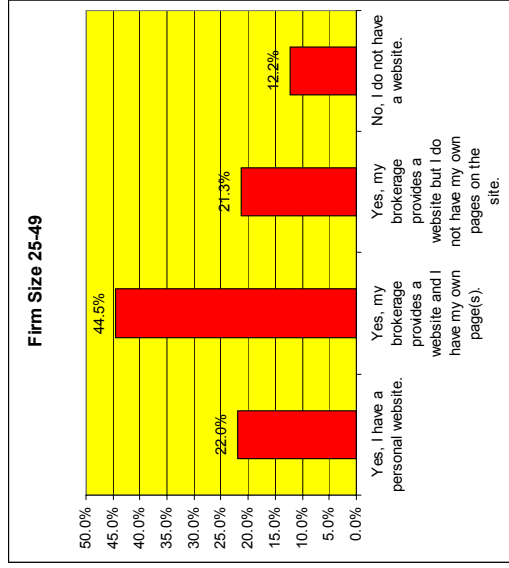
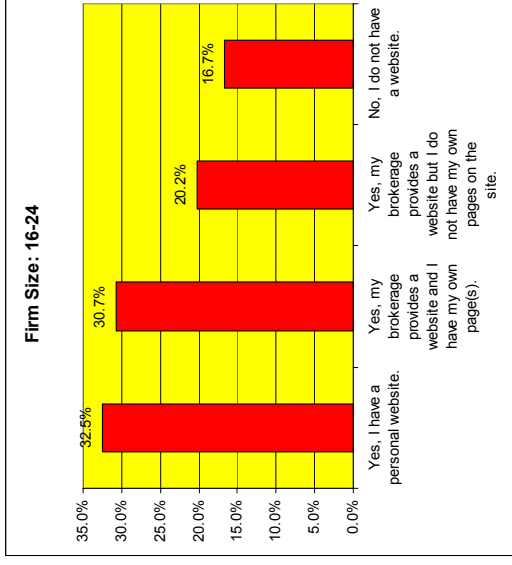
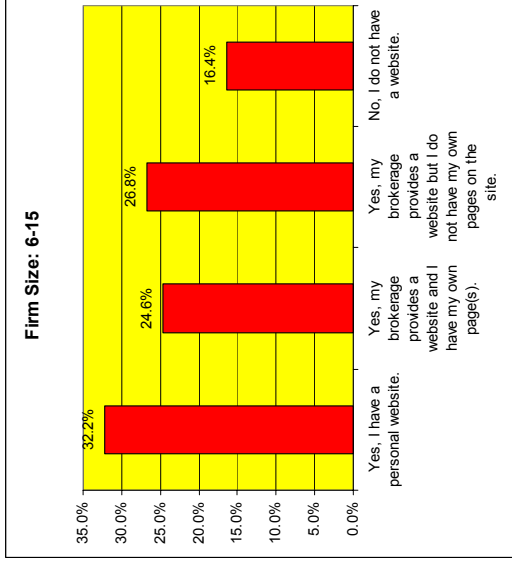
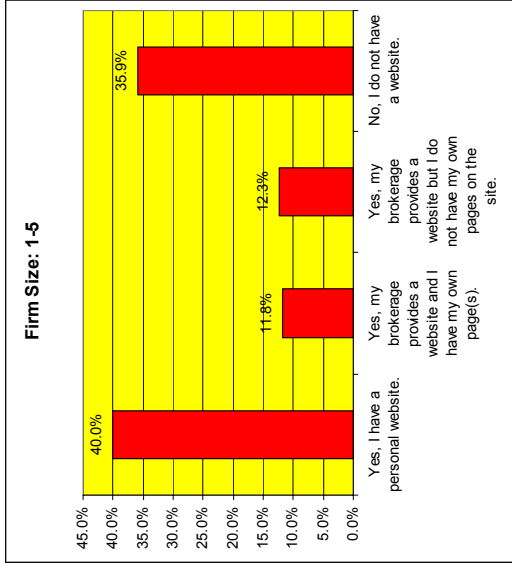
To qualify for the PDA giveaway, we need your name and email address. Your personal information will not be sold or used outside the Center for Realtor® Technology. You were randomly selected from among NAR's membership to provide feedback. We value your insight and welcome your comments. As a member of the National Association of Realtors®, you are entitled to receive the most updated information on the current and prospective programs, products and services offered by the association. In order to continue providing the most useful business tools, your input may be requested through surveys. However, if you would like to be removed from the Center for Realtor® Technology survey distribution list, please click "NO" on the last question of this survey before clicking "SUBMIT".

First Name:	
Last Name:	
Email Address:	
Occupation?	<ul style="list-style-type: none"> • Property Manager • Appraiser • Broker Owner • Associate Broker • Sales Agent • Mortgage Broker • Association Staff • Association Executive • Other
If 'Other', please specify:	

Appendix B: Raw data for correlation of Web Site Usage to Firm Size



For the following diagrams, the X-axis represents the size of firm (total number of REALTORS®) while the Y-axis represents the percentage of REALTORS® in a particular size firm agreed with the statement (title).



These graphs indicate web site usage as it relates to Firm Size. The x-axis lists the four possible web site usage options and the y-axis shows the percentage of REALTORS® responding favorably by firm size (title).

Appendix C: Electronic Device Convergence Raw Data

The following pages contain the results of correlating two, three and four electronic devices together. The results demonstrate that individuals that use one particular device have tendencies to use others. The conclusion of this study is presented in the Results section of this document (page 12).

Reading the Diagrams and Charts:

This examination looked at combinations of 2, 3 and 4 devices. An alpha-based key represents each combination:

<u>Key:</u>
A: Mobile Phone
B: Pager
C: PDA (i.e. Palm, Handspring)
D: Wireless email device
E: Wireless Internet device
F: Laptop Computer
G: Business Desktop Computer
H: Home Desktop Computer

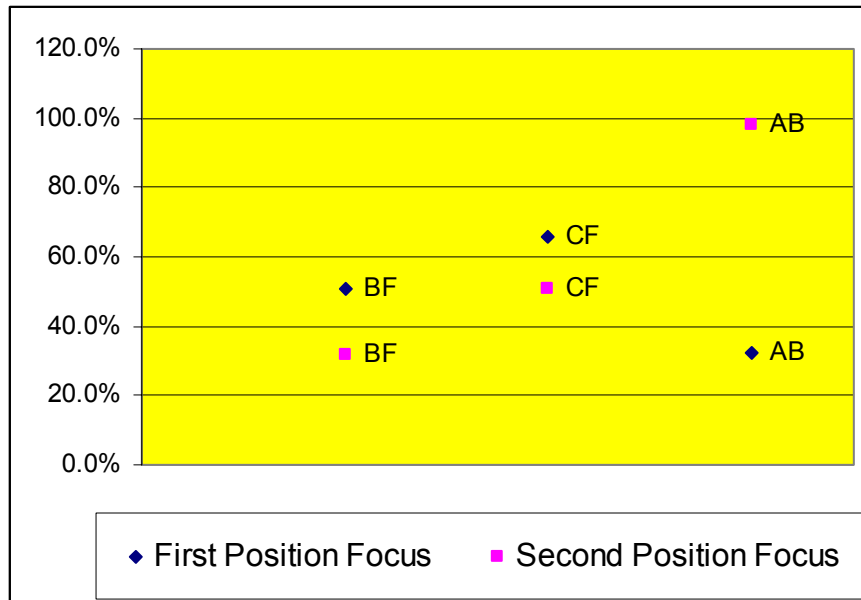
If a diagram or chart displays “BF”, then this is the combination of a Pager (B) and a Laptop Computer (F). This study not only examined each combination of devices, but the relevancy of owning each item within the combination.

For example, please refer to the portion of the 2-device combination chart.

Combination of Devices	Total Occurrences	Percent of Sample	Total Using First Device	Total Using Second Device	Focus 1 Percent	Focus 2 Percent
AB	370	31.0%	1152	378	32.1%	97.9%

In this case, it can be seen that 31.0% of all respondents use both a mobile phone (A) and a pager (B). However, of the subset of respondents that own a mobile phone, 32.1% also use a pager. And of the subset of respondents that use a pager, 97.9% also use a mobile phone. While of no great significance and for example only, it can be said that mobile phone users are not highly likely to own a pager, but pager owners are highly likely to own a mobile phone.

On a diagram, the combination “AB” will appear twice since the mobile phone and the pager can both be the device in “focus”. Each chart has 2,3 or 4 different symbols that indicate which device in the combination is in focus.



As an example, “AB” appears on this diagram twice (with a pink square and a blue diamond). The blue diamond indicates First Position Focus. The first position is the “A” of “AB” and this corresponds to a mobile phone. The second letter corresponds to a pager. The following statement can be inferred from this data point: 32.1% of mobile phone users also use a pager. The AB with the pink square indicates the use of Second Position Focus (the “B” of “AB”). The following statement can be inferred from this data point: 97.9% of pager users also use a mobile phone.

For three and four device correlations, the same process is used.

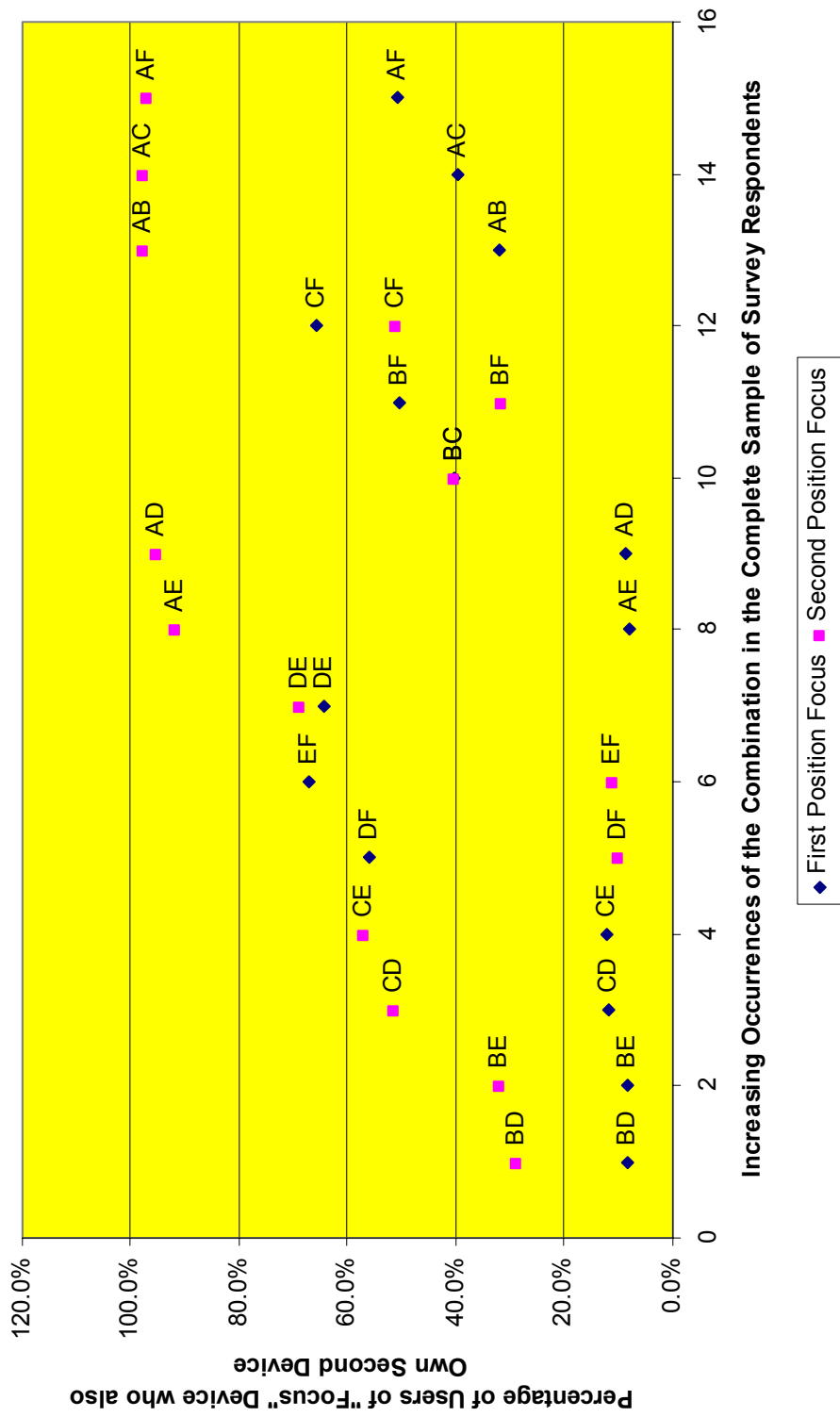
A note on the X-axis: In all diagrams, the results were ordered in increasing likelihood to occur in the full sample. This corresponds to ordering the tables by the Total Occurrences column.

Combinations of All Electronic Devices

Combination of Devices	Total Occurrences	Percent of Sample	Total Using First Device	Total Using Second Device	Focus 1 Percent	Focus 2 Percent
AH	974	81.6%	1152	1002	84.5%	97.2%
AG	839	70.3%	1152	868	72.8%	96.7%
GH	758	63.5%	868	1002	87.3%	75.6%
AF	585	49.0%	1152	602	50.8%	97.2%
FH	477	40.0%	602	1002	79.2%	47.6%
AC	457	38.3%	1152	468	39.7%	97.6%
FG	404	33.9%	602	868	67.1%	46.5%
CH	393	32.9%	468	1002	84.0%	39.2%
AB	370	31.0%	1152	378	32.1%	97.9%
CG	337	28.2%	468	868	72.0%	38.8%
BH	330	27.7%	378	1002	87.3%	32.9%
CF	307	25.7%	468	602	65.6%	51.0%
BG	276	23.1%	378	868	73.0%	31.8%
BF	191	16.0%	378	602	50.5%	31.7%
BC	152	12.7%	378	378	40.2%	40.2%
AD	102	8.5%	1152	107	8.9%	95.3%
AE	92	7.7%	1152	100	8.0%	92.0%
DH	92	7.7%	107	1002	86.0%	9.2%
DG	84	7.0%	107	868	78.5%	9.7%
EH	82	6.9%	100	1002	82.0%	8.2%
EG	77	6.5%	100	868	77.0%	8.9%
DE	69	5.8%	107	100	64.5%	69.0%
EF	67	5.6%	100	602	67.0%	11.1%
DF	60	5.0%	107	602	56.1%	10.0%
CE	57	4.8%	468	100	12.2%	57.0%
CD	55	4.6%	468	107	11.8%	51.4%
BE	32	2.7%	378	100	8.5%	32.0%
BD	31	2.6%	378	107	8.2%	29.0%

<p>Key:</p> <p>A: Mobile Phone B: Pager C: PDA (i.e. Palm, Handspring) D: Wireless email device E: Wireless Internet device F: Laptop Computer G: Business Desktop Computer H: Home Desktop Computer</p>
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Combinations of Portable Electronic Devices



Combinations of Portable Electronic Devices

Combination of Devices	Total Occurrences	Percent of Sample	Total Using First Device	Total Using Second Device	Focus 1 Percent	Focus 2 Percent
AF	585	49.0%	1152	602	50.8%	97.2%
AC	457	38.3%	1152	468	39.7%	97.6%
AB	370	31.0%	1152	378	32.1%	97.9%
CF	307	25.7%	468	602	65.6%	51.0%
BF	191	16.0%	378	602	50.5%	31.7%
BC	152	12.7%	378	378	40.2%	40.2%
AD	102	8.5%	1152	107	8.9%	95.3%
AE	92	7.7%	1152	100	8.0%	92.0%
DE	69	5.8%	107	100	64.5%	69.0%
EF	67	5.6%	100	602	67.0%	11.1%
DF	60	5.0%	107	602	56.1%	10.0%
CE	57	4.8%	468	100	12.2%	57.0%
CD	55	4.6%	468	107	11.8%	51.4%
BE	32	2.7%	378	100	8.5%	32.0%
BD	31	2.6%	378	107	8.2%	29.0%

Key:

A: Mobile Phone
 B: Pager
 C: PDA (i.e. Palm, Handspring)
 D: Wireless email device
 E: Wireless Internet device
 F: Laptop Computer
 G: Business Desktop Computer
 H: Home Desktop Computer

Combinations of Three Total Electronic Devices

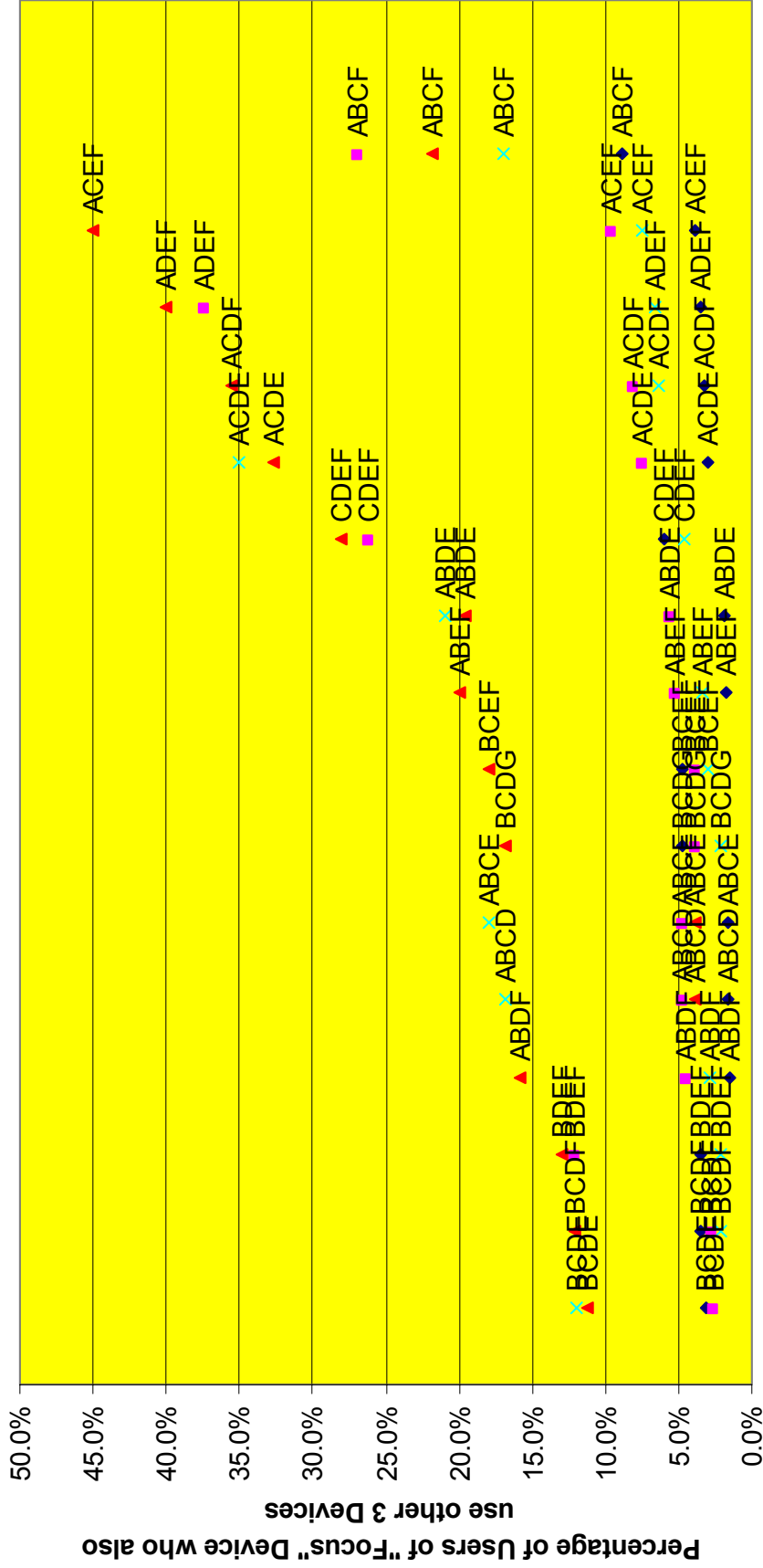
Combination of Devices	Total Occurrences	Percent of Sample	Total Using First Device	Total Using Second Device	Total Using Third Device	Focus 1 Percent	Focus 2 Percent	Focus 3 Percent
BDF	17	1.4%	378	107	602	4.5%	15.9%	2.8%
BCD	18	1.5%	378	468	107	4.8%	3.8%	16.8%
BCE	20	1.7%	378	468	100	5.3%	4.3%	20.0%
BDE	22	1.8%	378	107	100	5.8%	20.6%	22.0%
BEF	22	1.8%	378	100	602	5.8%	22.0%	3.7%
ABE	29	2.4%	1152	378	100	2.5%	7.7%	29.0%
ABD	30	2.5%	1152	378	107	2.6%	7.9%	28.0%
CDE	36	3.0%	468	107	100	7.7%	33.6%	36.0%
CDF	39	3.3%	468	107	602	8.3%	36.4%	6.5%
DEF	42	3.5%	107	100	602	39.3%	42.0%	7.0%
CEF	48	4.0%	468	100	602	10.3%	48.0%	8.0%
ACD	53	4.4%	1152	468	107	4.6%	11.3%	49.5%
ACE	54	4.5%	1152	468	100	4.7%	11.5%	54.0%
ADF	58	4.9%	1152	107	602	5.0%	54.2%	9.6%
AEF	62	5.2%	1152	100	602	5.4%	62.0%	10.3%
ADE	65	5.4%	1152	107	100	5.6%	60.7%	65.0%
BCF	104	8.7%	378	468	602	27.5%	22.2%	17.3%
ABC	150	12.6%	1152	378	468	13.0%	39.7%	32.1%
ABF	187	15.7%	1152	378	602	16.2%	49.5%	31.1%
ACF	299	25.1%	1152	468	602	26.0%	63.9%	49.7%

Key:
A: Mobile Phone
B: Pager
C: PDA (i.e. Palm, Handspring)
D: Wireless email device
E: Wireless Internet device
F: Laptop Computer
G: Business Desktop Computer
H: Home Desktop Computer

Example of use: Line 1 (BDF)

- *Total Occurrences and Percent of Sample:* 17 out of 1193 (1.4%) use a Pager (B), a Wireless email device (D) and a Laptop Computer (F).
- *Total Using First, Second and Third Device:* 378 out of 1193 use a Pager (B), 107 out of 1193 use a Wireless email device and 602 out of 1193 use a Laptop Computer.
- *Focus 1 Percent:* 4.5% of those with a Pager (B) use both a Wireless email device and a Laptop computer.
- *Focus 2 Percent:* 15.9% of those with a Wireless email device use both a Pager and a Laptop Computer.
- *Focus 3 Percent:* 2.8% of those that use a Laptop Computer use a Pager and a Wireless email device.

Combinations of 4 Total Electronic Devices



Increasing Occurrences of the Combination in the Complete Sample of Survey Respondents

◆ First Position Focus ■ Second Position Focus ▲ Third Position Focus × Fourth Position Focus

Combinations of Four Total Electronic Devices

Combination of Devices	Total Occurrences	Percent of Sample	Total Using First Device	Total Using Second Device	Total Using Third Device	Total Using Fourth Device	Focus 1 Percent	Focus 2 Percent	Focus 3 Percent	Focus 4 Percent
ABCF	102	8.5%	1152	378	468	602	8.9%	27.0%	21.8%	16.9%
ACEF	45	3.8%	1152	468	100	602	3.9%	9.6%	45.0%	7.5%
ADEF	40	3.4%	1152	107	100	602	3.5%	37.4%	40.0%	6.6%
ACDF	38	3.2%	1152	468	107	602	3.3%	8.1%	35.5%	6.3%
ACDE	35	2.9%	1152	468	107	100	3.0%	7.5%	32.7%	35.0%
CDEF	28	2.3%	468	107	100	602	6.0%	26.2%	28.0%	4.7%
ABDE	21	1.8%	1152	378	107	100	1.8%	5.6%	19.6%	21.0%
ABEF	20	1.7%	1152	378	100	602	1.7%	5.3%	20.0%	3.3%
ABCD	18	1.5%	1152	378	468	107	1.6%	4.8%	3.8%	16.8%
ABCE	18	1.5%	1152	378	468	100	1.6%	4.8%	3.8%	18.0%
BCDG	18	1.5%	378	468	107	868	4.8%	3.8%	16.8%	2.1%
BCEF	18	1.5%	378	468	100	602	4.8%	3.8%	18.0%	3.0%
ABDF	17	1.4%	1152	378	107	602	1.5%	4.5%	15.9%	2.8%
BCDF	13	1.1%	378	468	107	602	3.4%	2.8%	12.1%	2.2%
BDEF	13	1.1%	378	107	100	602	3.4%	12.1%	13.0%	2.2%
BCDE	12	1.0%	378	468	107	100	3.2%	2.6%	11.2%	12.0%

Key:
A: Mobile Phone
B: Pager
C: PDA (i.e. Palm, Handspring)
D: Wireless email device
E: Wireless Internet device
F: Laptop Computer
G: Business Desktop Computer
H: Home Desktop Computer

Example of use: Line 1 (ABCF)

- *Total Occurrences and Percent of Sample:* 102 out of 1193 (8.5%) use a Mobile Phone (A), pager (B), PDA (C) and Laptop Computer (D).
- *Total Using First, Second, Third and Fourth Device:* 1152 out of 1193 use a Mobile Phone, 378 out of 1193 use a Pager (B), 468 out of 1193 use a PDA and 602 out of 1193 use a Laptop Computer.
- *Focus 1 Percent:* 8.9% of those that use a Mobile Phone also use a pager, PDA and Laptop.
- *Focus 2 Percent:* 27% of those that use a Pager also use a Mobile Phone, PDA and Laptop.
- *Focus 3 Percent:* 21.8% that use a PDA also use a Mobile Phone, Pager and Laptop.
- *Focus 4 Percent:* 16.9% that use a Laptop also use a Mobile Phone, PDA and Pager.