

# Use and Effect of Internet in Saudi Arabia

A decorative graphic consisting of a black crosshair with a blue square, a red square, and a yellow square at the intersections.

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# Outline

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- Introduction
- Internet infrastructure in Saudi Arabia
- Research methodology
- Results of our study
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  - Sss
  - Sss
- Conclusion



# Introduction

- After the introduction of Internet (for public access) in Saudi Arabia (in April 1997), there was a need to conduct a study of its use & effects.
- Similar studies exist for other countries in the Arab world, but this study is first of its kind in Saudi Arabia.
- Objectives of this research is to study and monitor the use of Internet in the country.

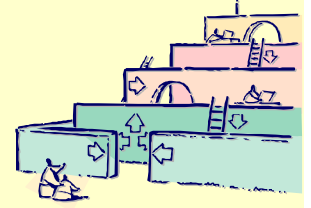


## Introduction (contd.)

- The project explores the use of Internet along three major topics:
  - Social use of Internet in society.
  - Implications of Internet technology for education.
  - Business uses of the Internet.
- Other topics also investigated through this study are:
  - Availability & growth of Arabic content on the Internet.
  - Prospects of distance learning in Saudi Arabia.

## Introduction (contd.)

- This study is conducted by obtaining responses from a carefully and scientifically designed web-based online questionnaire, and its analysis. (<http://kacst.ccse.kfupm.edu.sa> )
- This presentation includes study from data collected and analyzed for a period of one year. (Data collection is to continue for another year.)



# Internet infrastructure

- Currently, there are 30 licensed ISP (Internet Service Providers) and 18 educational/other organizations.
- All ISPs are tied to a central node at Internet Services Unit (ISU) that controls access to the Internet.
- Average bandwidth allotted per ISP is 6 Mbps and to educational institutions and others are 2 to 4 Mbps.
- The ISPs use average bandwidth of 3.4 Mbps and other institutions use 90% of their bandwidth.



## Internet Infrastructure (contd.)

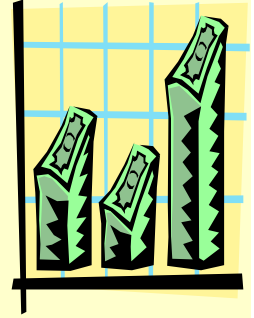
- According to a recent estimates reported by King Abdulaziz City for Science and Technology (KACST), there were 275,000 Internet subscribers in the Kingdom of Saudi Arabia as of June 10, 2001.
- According to another study, only 2.6% of population has Internet access.



# Research Methodology

- Survey process:
  - Surveys typically collect three types of information, which are not mutually exclusive: description, behavior, and preference.
- Sampling frame:
  - For our purposes the sampling frame is the population which is divided into three (although overlapping) categories: ordinary users, users directly related to education, and business users.
- Information gathering methodology:
  - Web survey methodology was used due to the nature of the study as the targeted respondents are the Internet users.





# Results of our study

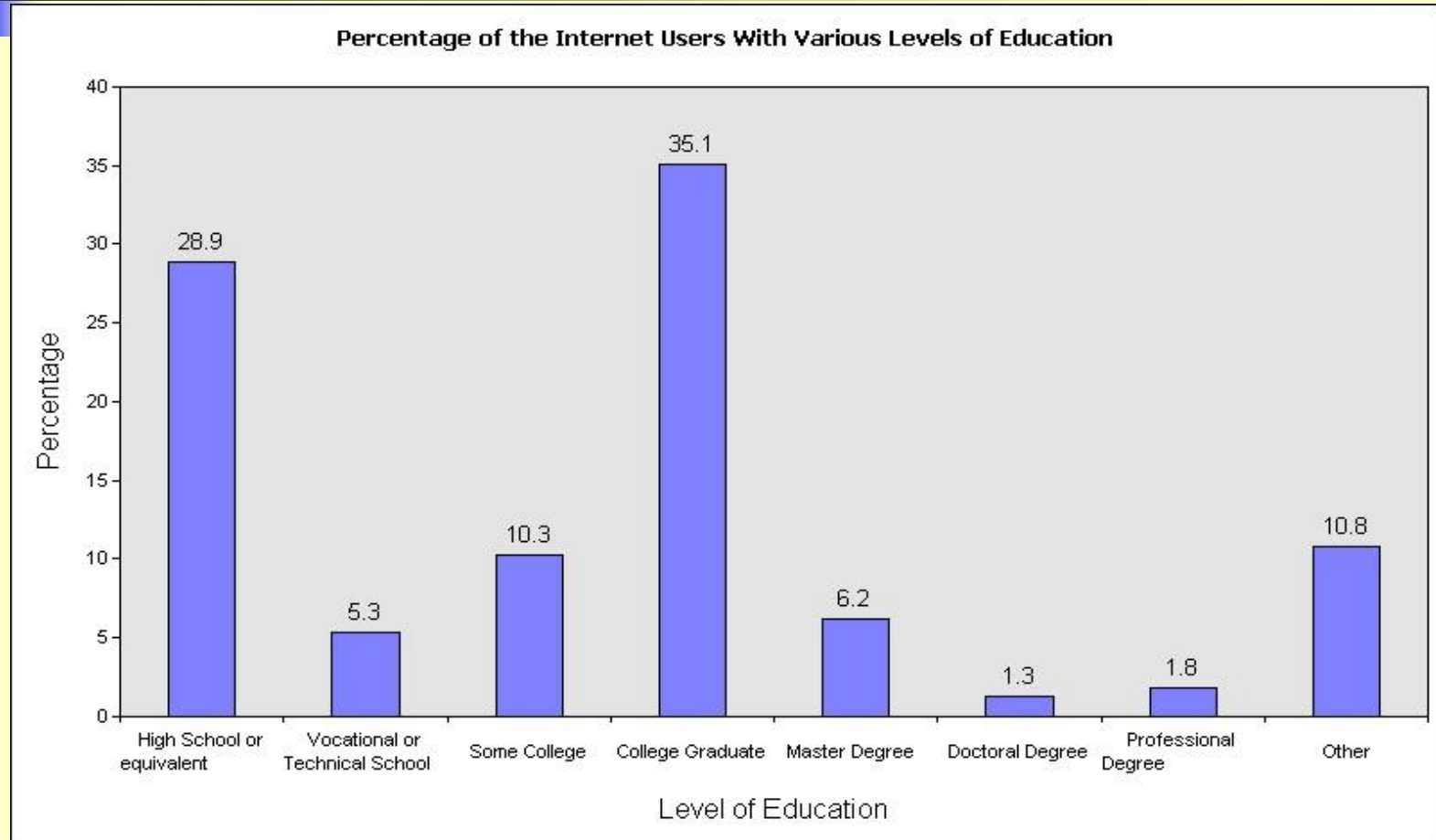
The results obtained are related to: (**ORDER**)

- Internet users in Saudi Arabia.
- Views about Internet & barriers in using it.
- Social and psychological impact of Internet on the population with privacy and security concerns.
- Views of Saudi Internet users concerning the availability of Arabic language content and search facilities.
- The use of Internet and its prospects for distance learning and business uses.

# Internet Users

- Almost 80% of the respondents were in the age group of 16 to 35 years.
- *Men are more likely to have access to Internet than the women.* Almost 80% of the respondents were men.
- Internet users in the Kingdom are concentrated in urban areas. Almost 80% of the respondents live in major cities of the country while little over 4% live in rural areas.
- Majority of the Internet users are college (35%) and high school (29%) graduates. This is due to the fact that the in general majority of the population falls within these two educational levels.

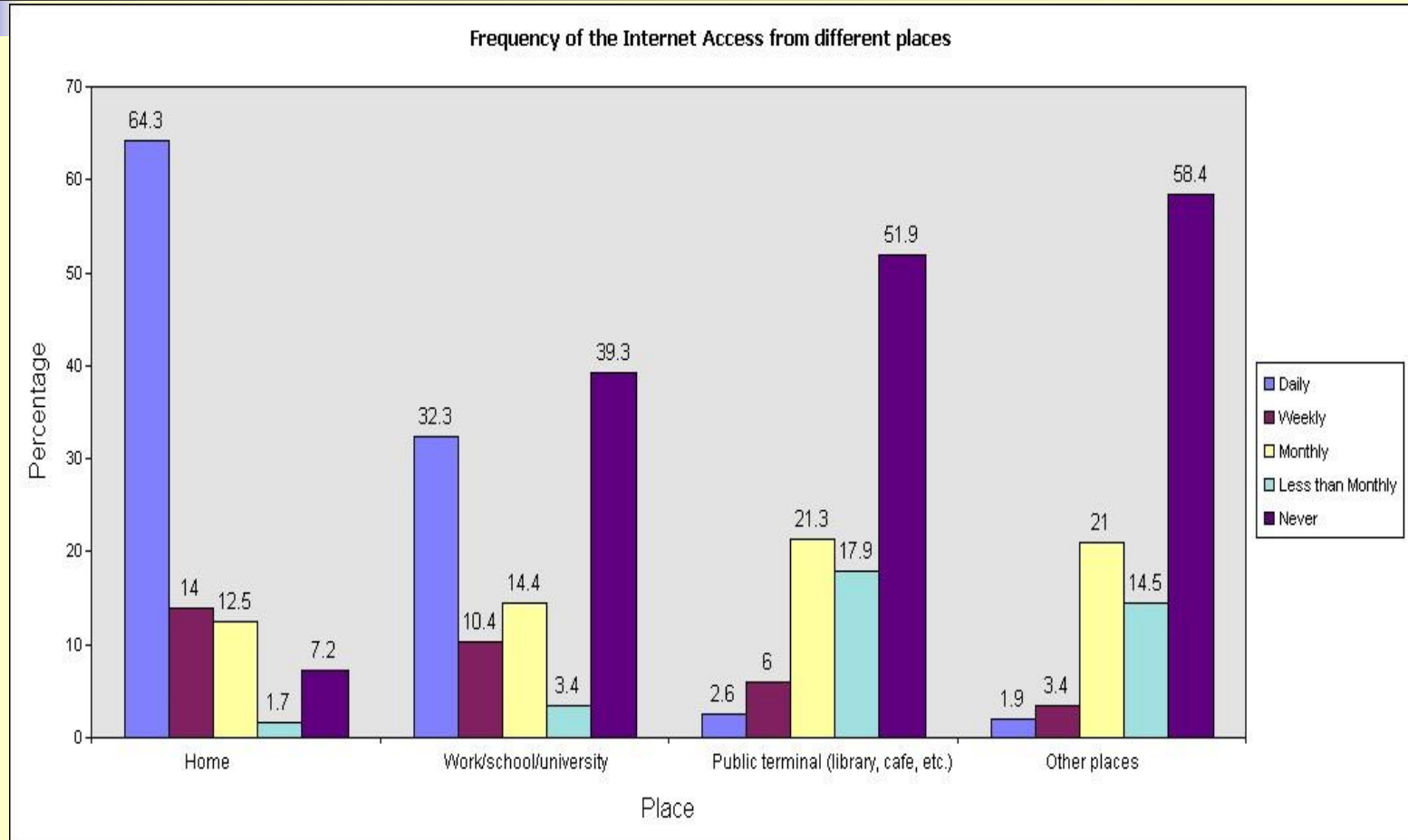
# Internet Users (contd.)



# Internet Connection/Access

- When we compare the place from where the Internet is accessed for the daily uses, 64.3% of the respondents' access it from home while 32.3% from their work or educational place.
- Very few *daily* users (2.9%) prefer public Internet facilities like libraries and cafes.
- A large number of occasional users prefer public facilities. For example 21.3% of *monthly* users access it from public places. (CHECK & MEET With Salman)

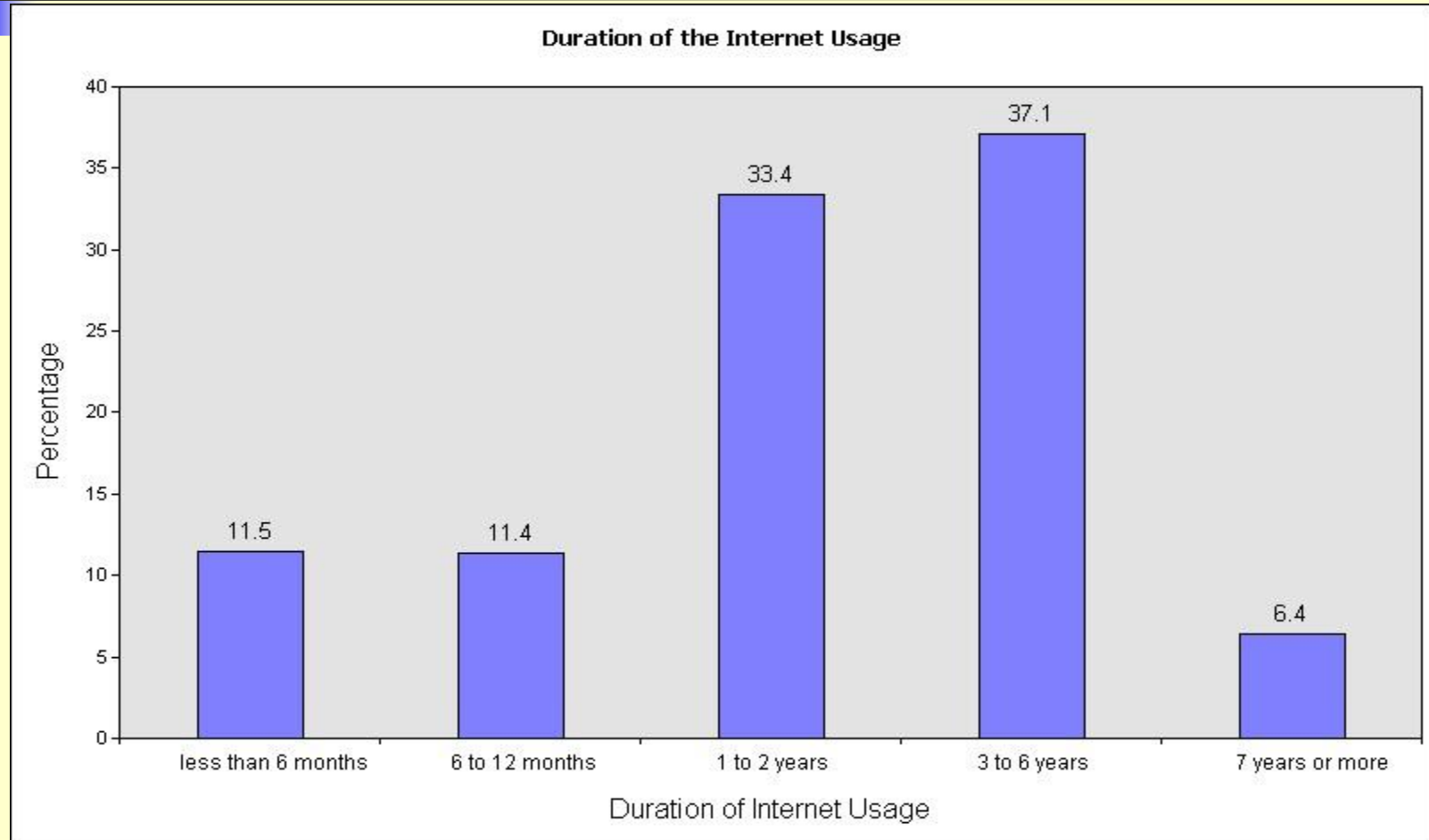
# Internet Connection (contd.)



# Internet Experience

- Almost two-third respondents have been using the Internet for *less than 6 years*.
- This is approximately the time when the Internet facilities were introduced in the country.
- 43.5 (37.1+6.4) have been using for over 3 years....

# Internet Experience



# Internet Usage

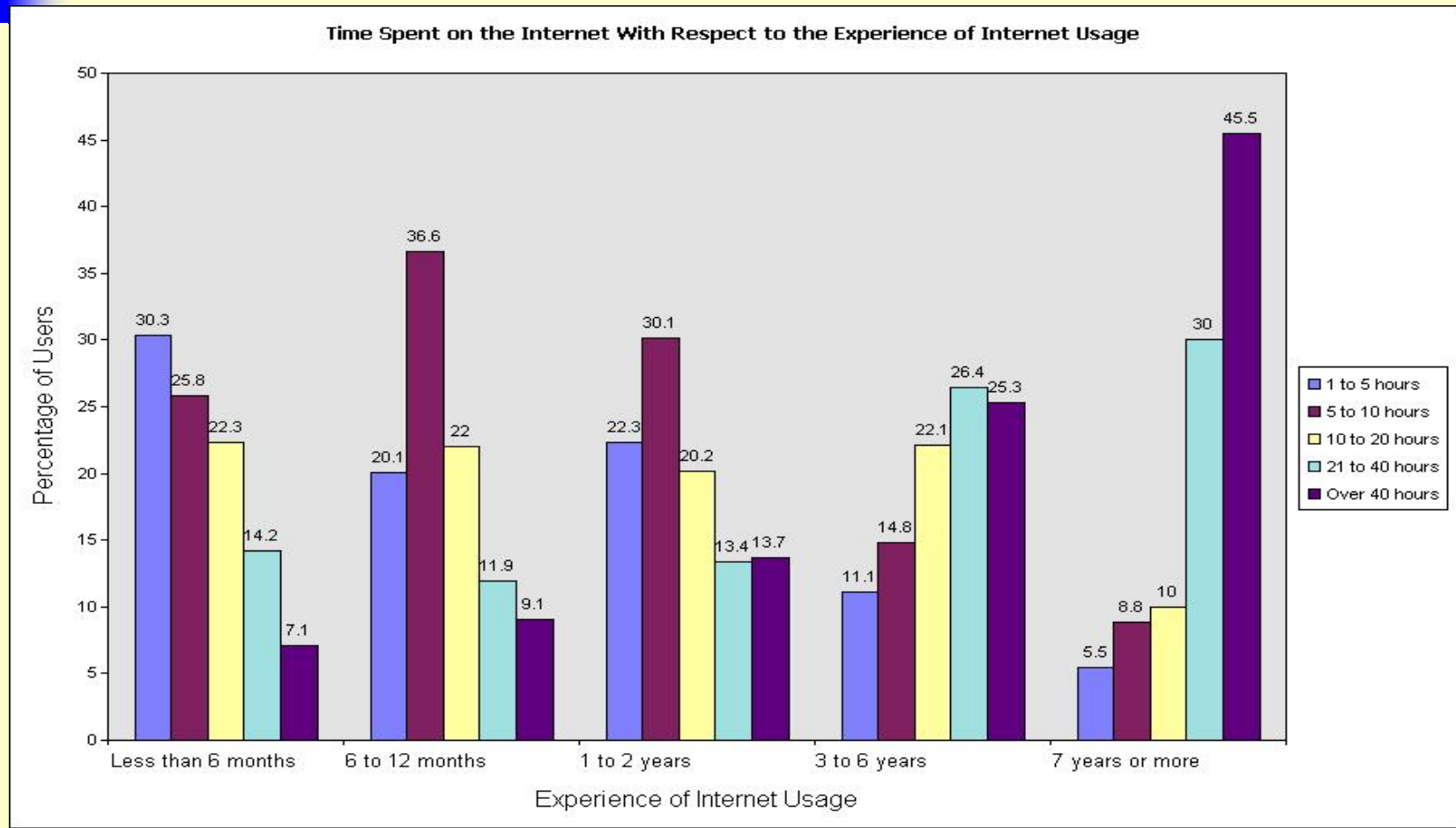
- Usage of Internet can be characterized in terms of work or for fun.
- The usage of Internet for work is evenly distributed between different time segments per week.
- However, almost 40% of users use the Internet for only 1 to 5 hours per week for fun and entertainment.



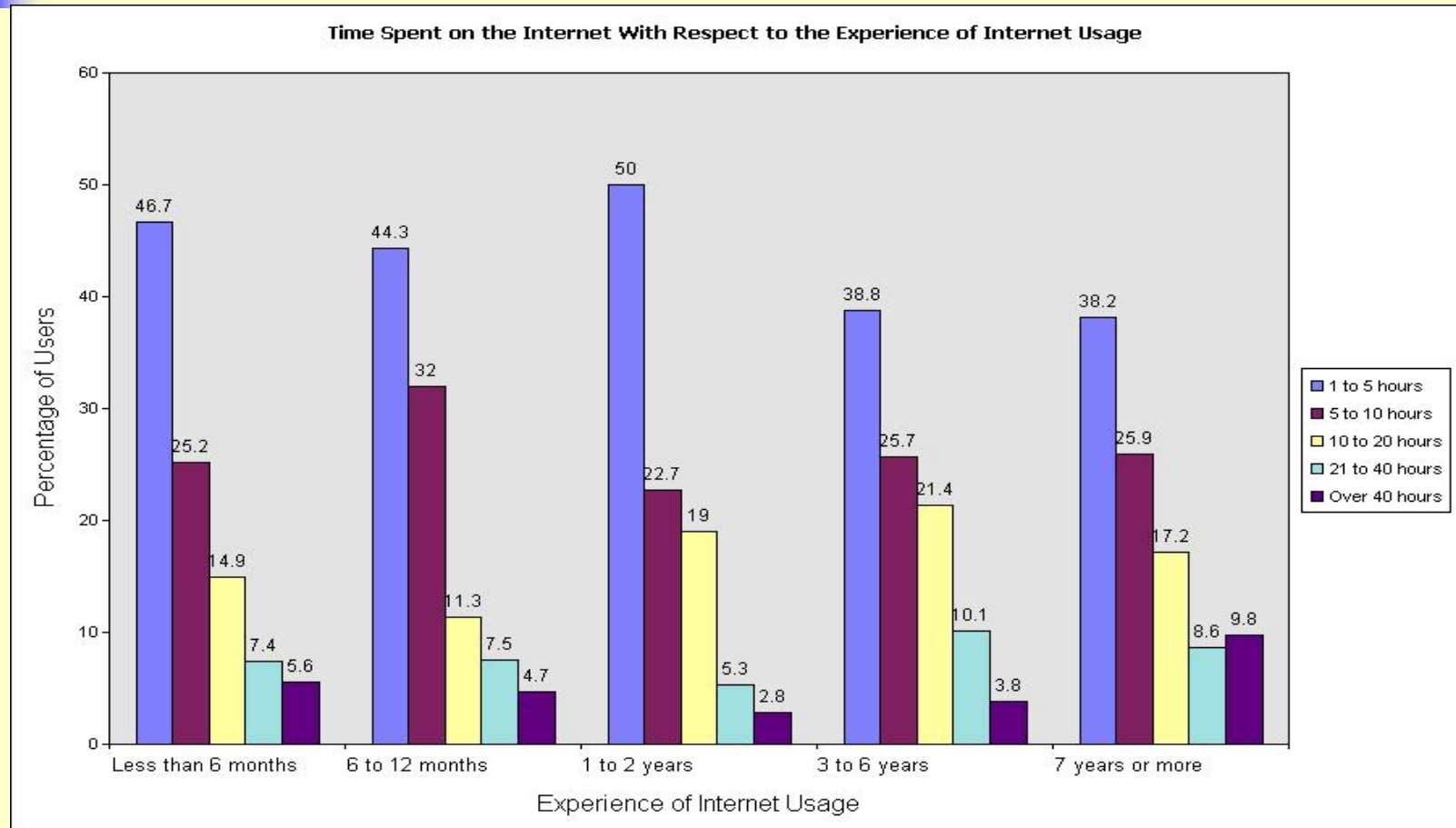
# Effect of experience on Internet Usage

- More experienced users spend more time for on-line activity.
- This conclusion is drawn by examining the relationship of experience on the usage of Internet for work & for fun.
- This trend with somewhat a smaller scale is also visible for fun related on-line activities (**Rephrase..**)
- Majority of people use Internet for fun between 1 to 10 hours per week.

# Effect of experience on Internet Usage (for work)



# Effect of experience on Internet Usage (for fun)



# Internet Activities

- In terms of on-line search, majority of the users prefer to search for computer software and hardware information (**one**).
- On-line chat is the **third** most sought-after use of the Internet followed by making on-line telephone call and listening to radio broadcast (**second**).
- In case of multimedia on-line services, streaming audio (47%) and Internet phone (45.4%) are most popular services, **followed by Usenet, listserv and discussion forums (41%)**.

## Internet Activities (contd.)

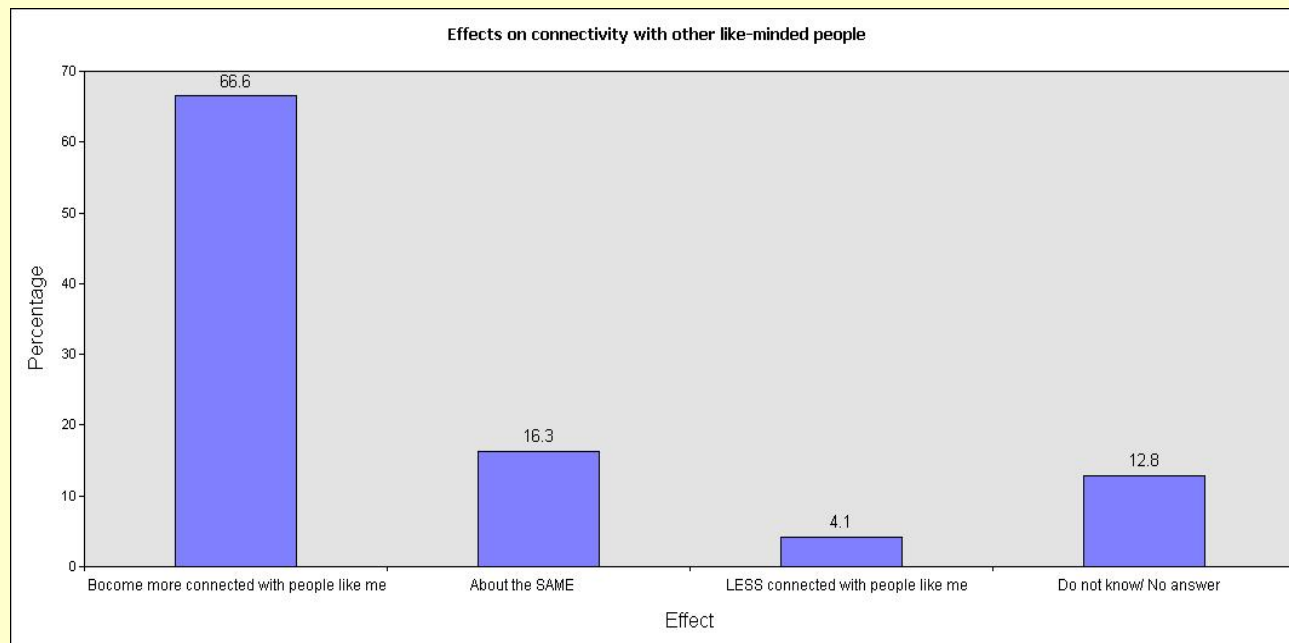
- For on-line information services, accessing news sites is the single most sought after regular activity. Almost 43% of the respondents daily read the news on the web.
- Other Internet related activities such as number of e-mail accounts, search engines used etc.
  - It was found that over three-fourths of the respondents have more than one e-mail account.
  - Web-based access is the most favorite form of e-mail access (41%).
  - Almost two third respondents prefer yahoo as a search engine (65%).

# Social & Psychological Impact

- The rapid evolution of any technology naturally raises questions about both its potential benefits and possible negative consequences. This is especially true of the Internet.
- Related issues include:
  - questions about children and access to on-line material,
  - potential on-line threats to personal privacy,
  - the “digital divide”,
  - and the effects of the Internet on family involvement and social organizations,
  - gender differences in use and access,
  - security, and the effects of on-line sales on traditional retailing. (REPHRASE)

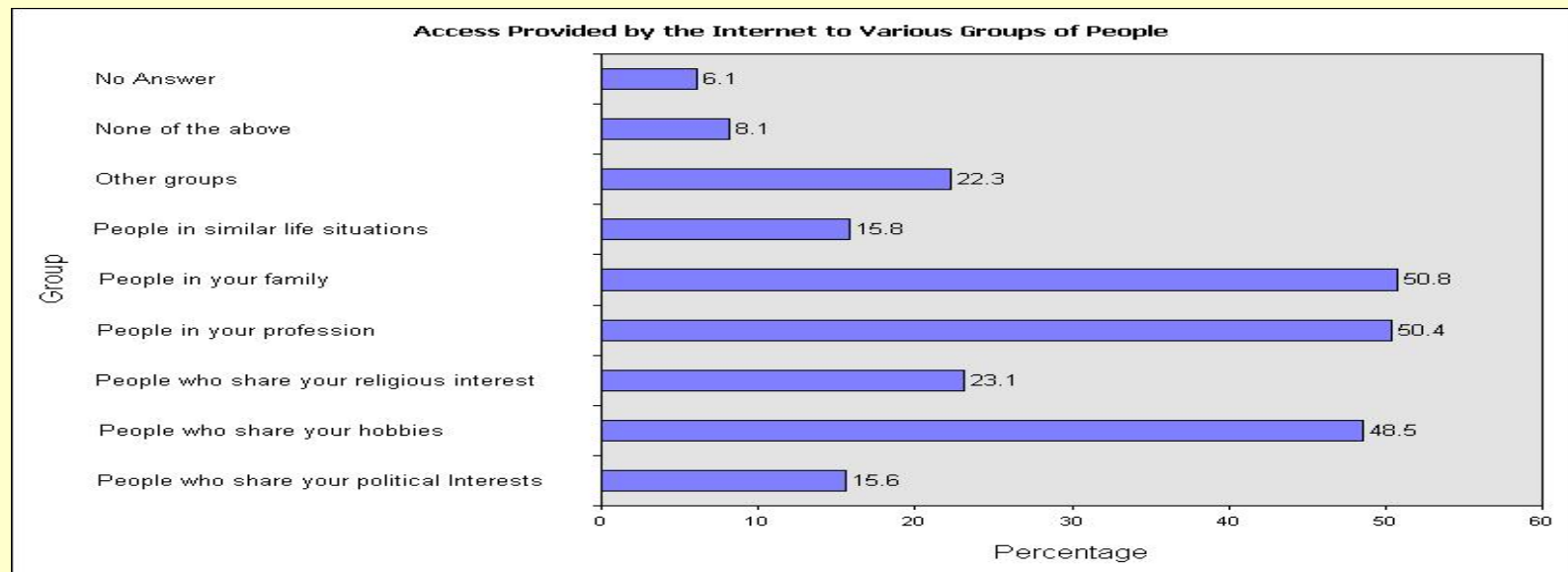
# Effect on connectivity

- It was found that generally Internet is helping people to be more connected to like-minded people. Almost 67% of the respondents agree with this argument.
- Only 4% of the respondents feel otherwise.



# Access provided to various groups

- A large number of respondents consider that Internet has helped them to be connected to
  - their (1) family members, (2) people with identical professions, and (3) hobbies.

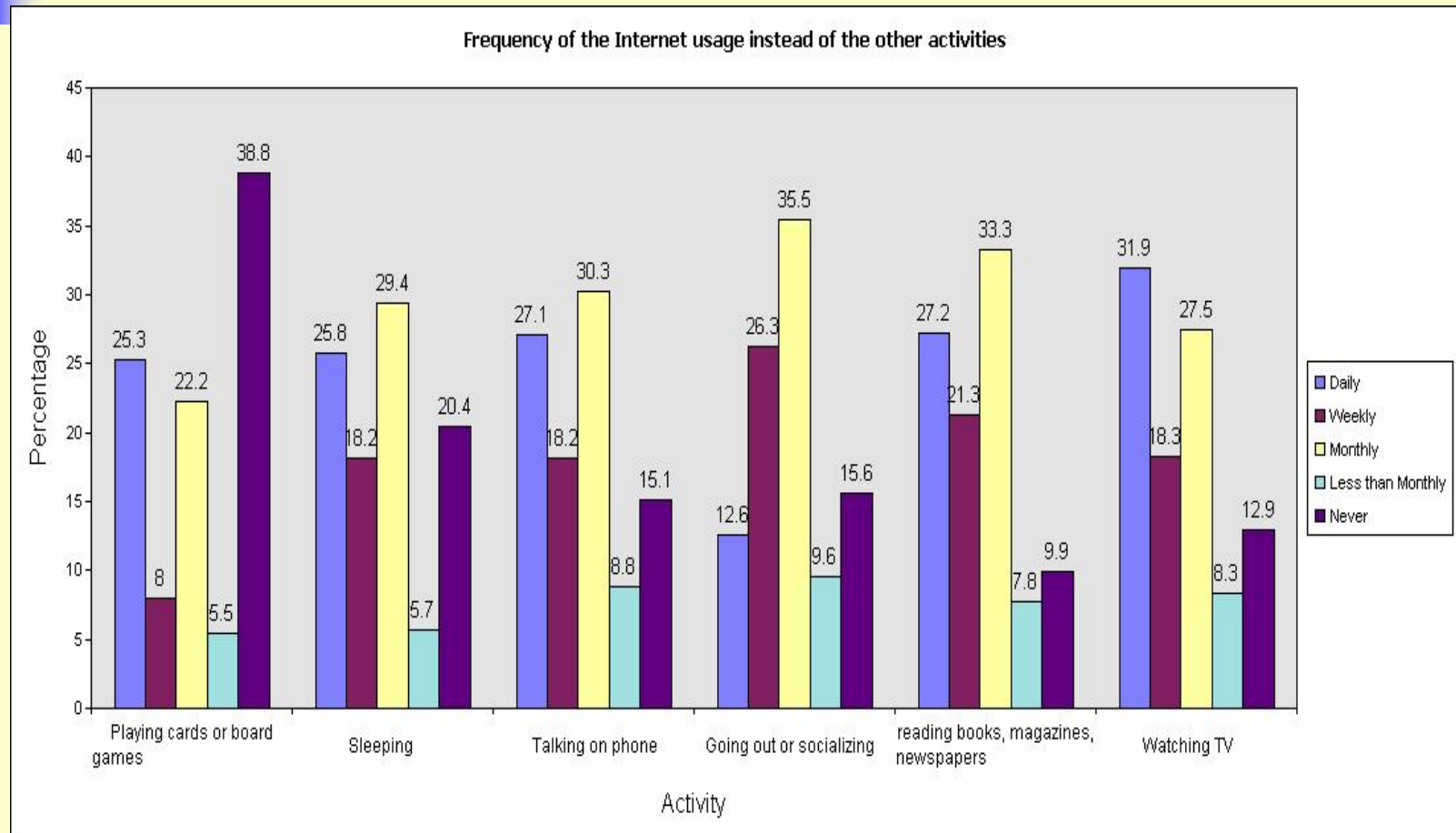




## Internet instead of other activities

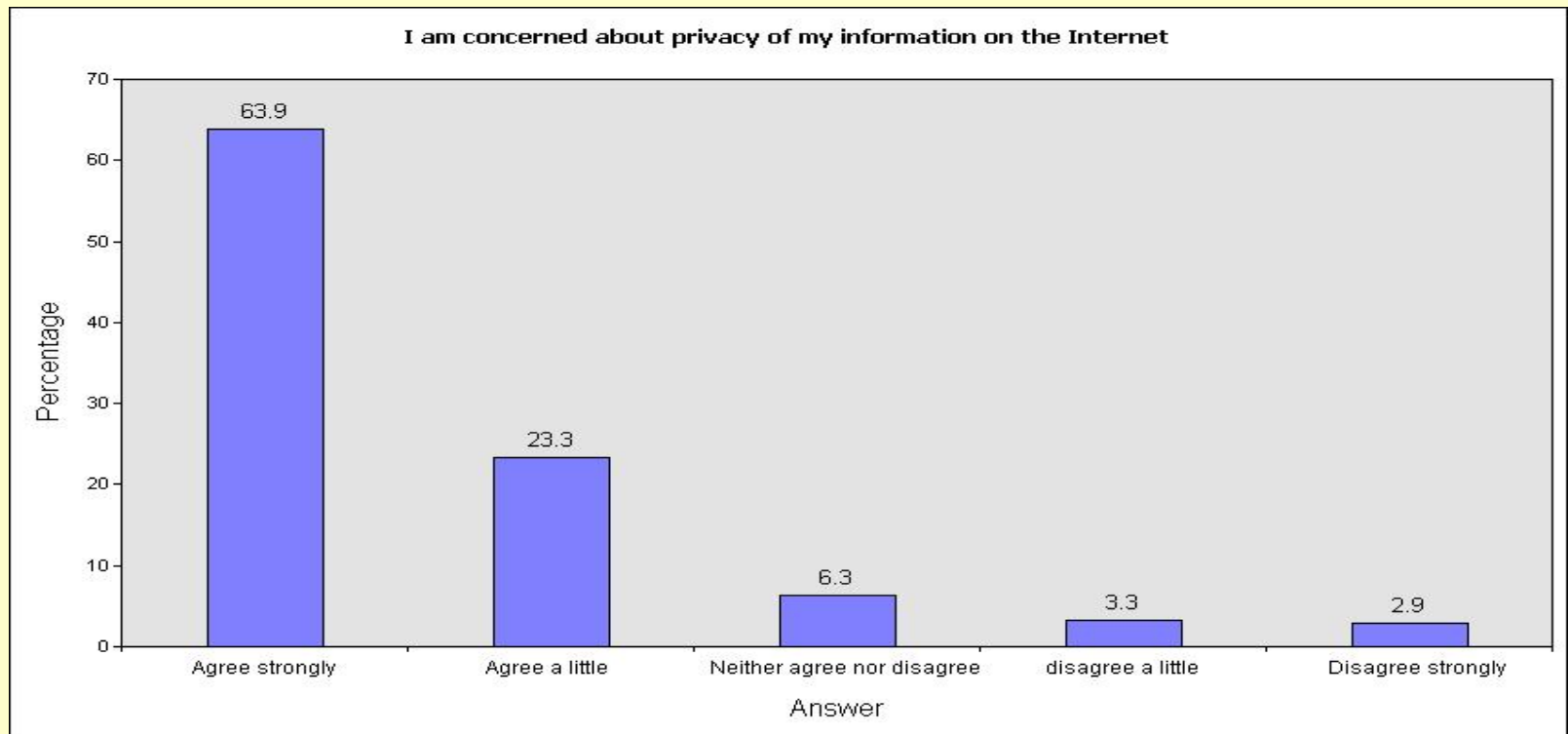
- Other social and personal patterns of behavior have been affected. Users sacrifice other activities for the sake of Internet use.
- The most adversely affected daily activities are
  - watching TV (almost 32%) feel they prefer Internet.
  - reading books
  - talking on phone
- Surprisingly a large number of respondents feel that they do not sacrifice playing cards (38.8%)!

# Internet usage instead of other activities



# Concern of privacy of information

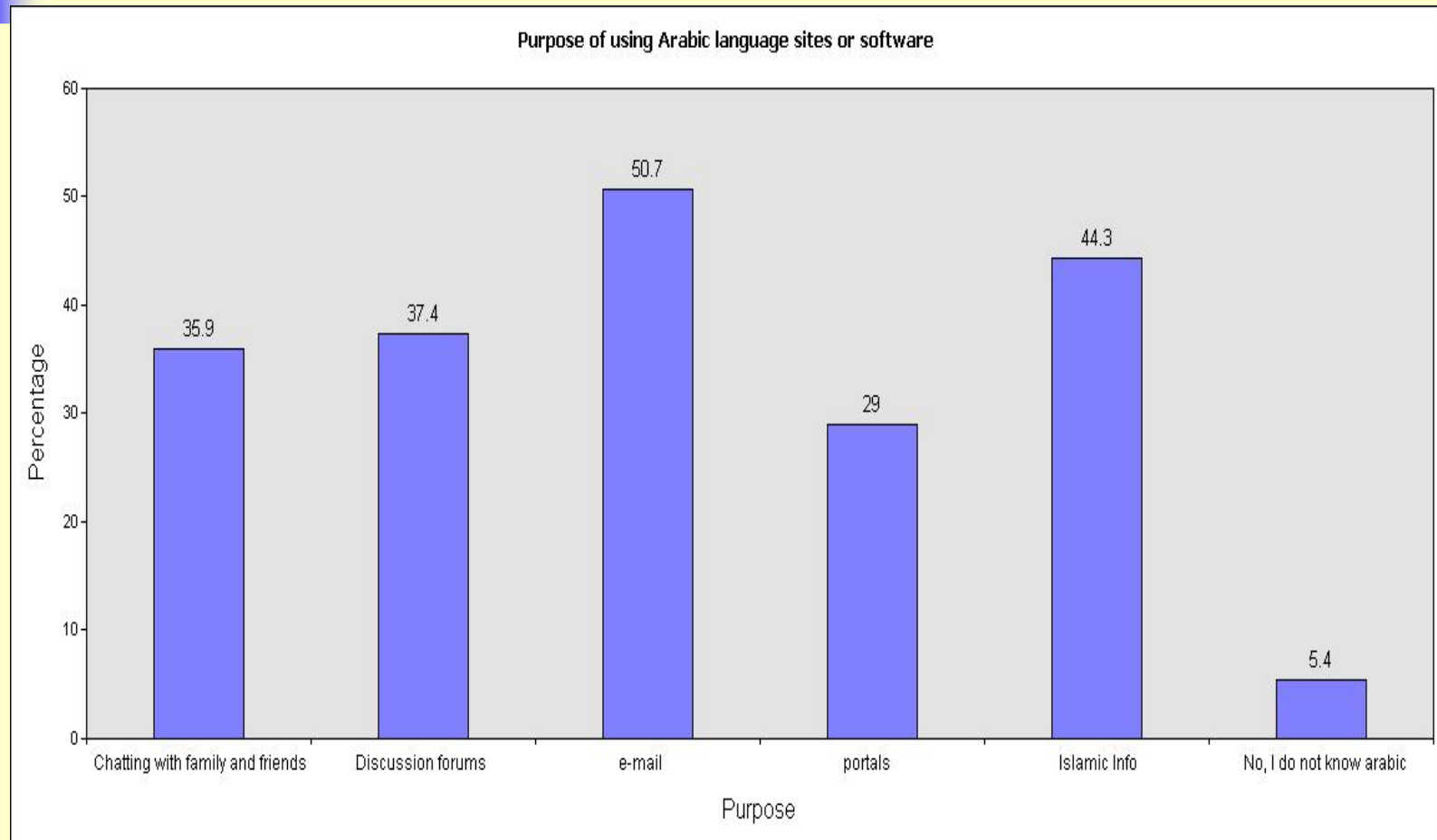
- Majority strongly agree about privacy of their information.
- 2/3 want to hide their identity while visiting web sites.



# Arabic language content/search

- Majority of the respondents (45%) prefer Arabic language for Internet and use Arabic e-mail.
- A sizeable number (40%) of native Arabic speakers prefer English because majority of them find what they seek.
- **The lack of Arabic content and few Arabic language sites are major factors for users not to use Arabic language sites.**
- On the Arabic language sites, it was found that Arabic e-mail access was the most preferred activity (51%) followed by access to the religious information (44%) and discussion forums (37%).
- A sizable number of respondents also use Arabic sites for chatting with family or friends (36%) and access to Arabic language portals (29%).

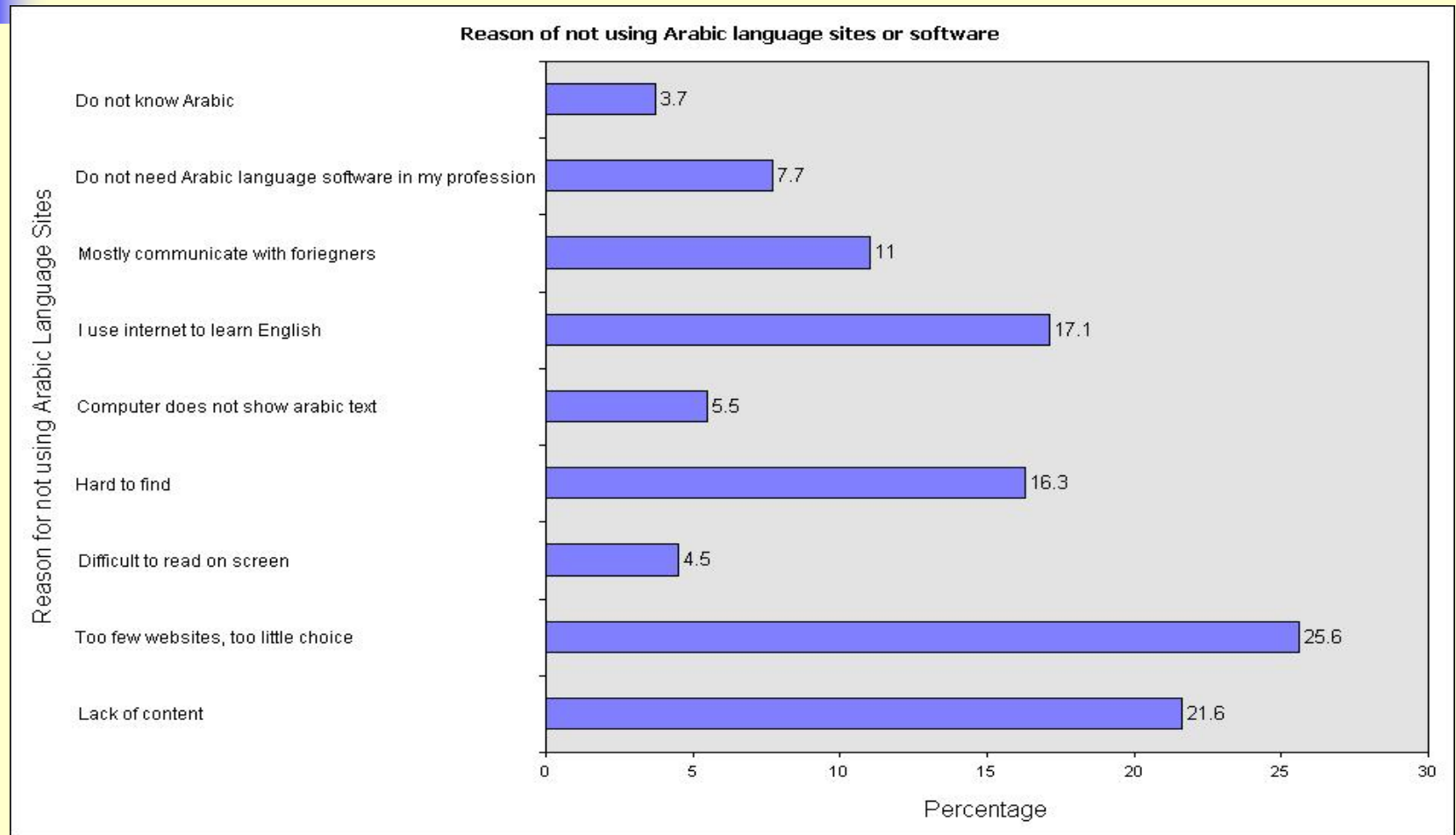
# Arabic language sites used for...



## Reasons for not using Arabic sites

- The scarcity of Arabic websites (26%) and lack of content (21%) are the 2 major factors for not using Arabic sites.
- Another factor is the difficulty to find Arabic sites.
- A large number of users are using Internet to improve their English therefore they prefer English sites in place of Arabic (17%).
- To a lesser extent, hardware/software limitations to display Arabic (6%) and in human readable form (5%) are also factors.

# Reasons for not using Arabic sites

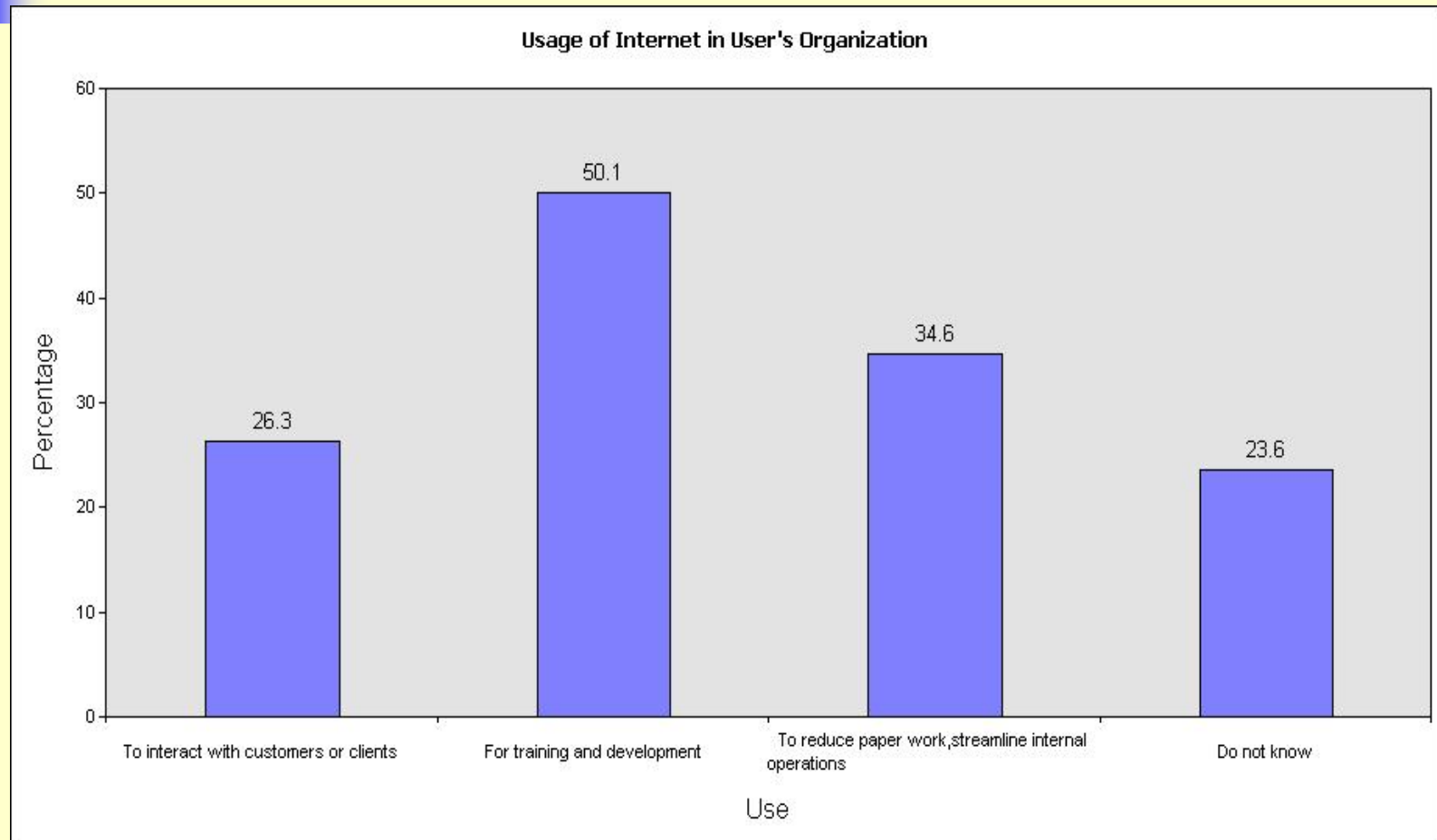


# Usage of Internet in Organizations

- Almost half of the respondents say that their organization is using Internet for training & development.
- A sizeable portion (37%) claim that it is being used to for automation in the organization, reduces paper work and helps in streamlining operations.
- A quarter of the respondents say that Internet is used for communicating with the clients.
- These results indicate a promising future for use of Internet technologies in local businesses.



# Usage of Internet in Organizations



# Reasons for not shopping on-line

- Most of respondents agree that eCommerce will make life easier.
- If purchase is done via the Internet, determining factor for that would be lowest price ([check the graph and resolve the contradiction with next slide](#)).
- A large segment of the respondents are not doing Internet shopping (40%). This is due to the lack of eCommerce infrastructure in the country. (**eReadiness**)
- Only 30% of the respondents **feel** that security of their sensitive information is most important while shopping on the net. *This may be attributed to the lack of knowledge among the Internet users of possible potential threats that may originate due to compromise of sensitive information (Rephrase).*

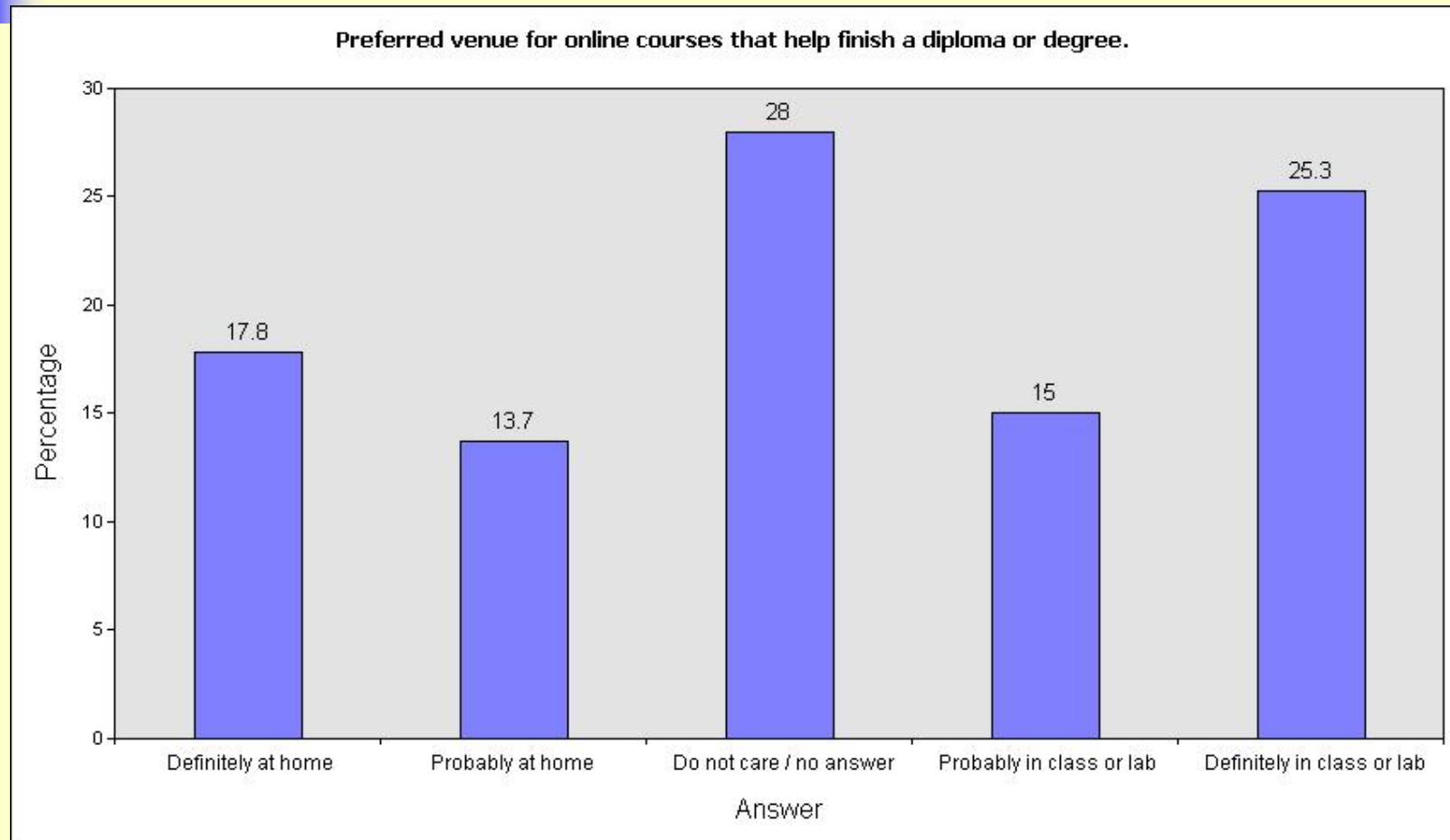
# Internet shopping features

- For net shoppers in Saudi Arabia, many features are important while doing shopping. These features are (in order of importance):
  - lowest price
  - easy order placement and payment procedures
  - security of information
  - variety of choice
  - quality of information
  - customer service and after-sale support etc
- Surprisingly Internet vendor reliability is not considered as a very important aspect (17%).

# Internet & Education

- Majority of the respondents prefer not to take courses on the Internet (%age).
- The major reason being that on-line courses are not considered equivalent to regular courses in the country.
- The other reason is the non-interaction with other students and faculty.
- As for the venue: almost 40% of the respondents either definitely or probably prefer taking the course in a class.
- Around 32% of the respondents prefer otherwise i.e., definitely or probably the venue to be home.

# Preferred venue of attending a class



# Reasons to take online courses

- Of those who prefer on-line education, the most compelling reason was that the users like computers. Almost 41% of the respondents have this opinion.
- The other reasons (in order of importance) are:
  - learning from own home/own place
  - fun or experience
  - promotion
  - non-availability of course in school
  - and to get higher degree

# Interests of users

- Of those who would like on-line education, users are interested to:
  - upgrade their skills (40%),
  - special training courses for jobs (31%) and
  - to obtain a University degree (23%).
- On the other hand they are not at all interested for high school (43%), home schooling whether schools are available (35%) or not (33%).

# Conclusion

- In this talk, we presented some initial findings of a study on the ‘Use and Effect of Internet in Saudi Arabia’. This study covers **three** major areas where Internet is **influencing** the Saudi society. These areas are
  - social,
  - education and
  - business.
- Other areas included Arabic content & prospects of distance learning.





# Acknowledgements

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- We thank King Abdulaziz city of Science and Technology (KACST) for funding this study through project AR-19-16.
- We also thank King Fahd University of Petroleum & Minerals (KFUPM) for providing facilities for this study.