Communications and Information Technology Commission

Internet Usage in the Kingdom of Saudi Arabia

Education Sector

The Second year (2008) Report .

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Background

1.0 Background

Communications and Information Technology Commission (CITC) was established under the name of Saudi Communications Commission pursuant to the Council of Ministers Decision No. (74) Dated 5/3/1422H. The Commission was entrusted with new tasks related to information technology to become (Communications and Information Technology Commission) under the Council of Ministers Decision No. (123) dated 21/5/1424H and the name was changed to CITC. The Mission Statement of the Commission is to **"Ensure the provision of universally available, high quality and affordable communication and information technology services"**

Internet service was officially made available in the Kingdom of Saudi Arabia in 1997. Internet is becoming an integral part of the Saudi Society and Economy. CITC wants to understand the Internet status and potential growth within the Kingdom. To this end, a comprehensive study covering a wide range of the Internet related indicators in Saudi Arabia was needed. Nielsen was entrusted to conduct the study in 2007. For this year, 2008 – this study was been repeated to assess the changes that have occurred in the span of one year.

The study evaluates the current situation of Internet in Saudi Arabia and comparison from last year's levels. The study aims to identify the penetration levels, habits and usage patterns and the future potential of Internet in Saudi Arabia. It covers a wide range of information areas from infrastructure to satisfaction. It covers different types of users – individual users, home users, government agencies, education institutes and corporate users. The research was designed, to ensure national representation. Further, the study would be repeated annually for a minimum of three times in order to measure progress and growth.

> **Salient Features of the Research**
> ▶ **National Representation**
> ▶ **Across Customer Types : Consumers, Corporate and Government**
> ▶ **Annual Tracking to measure progress**

This document details the findings of the survey carried out in the **Education Sector** in the Kingdom of Saudi Arabia.

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Methodology / Sample Profile

2.0 Methodology

The detailed methodology report has been highlighted in the appendix of this report.

2.1 Research Design
- A quantitative research exercise was conducted.
- **A total of 709 interviews were conducted.**

2.2 Target Respondents
The interviews were conducted with the IT head/ computer teacher/ principal or equivalent position holding individual working within each institute.

2.3 Coverage and Sampling
- Interviews were conducted across all the provinces in Saudi Arabia.

- The corresponding universe size of education institutes is close to about 19,000 (source: Yellow Pages) spread across the Kingdom and across types of institutes. The same was used to arrive at the sample.
- The error levels for the sample size is 3.7%, at 95% confidence level.

2.4 Research Instrument
- Interviews were conducted using a structured questionnaire. The questionnaire was translated into Arabic. Interviews were done in Arabic / English as convenient to the respondent.
- The questionnaires were a mix of close and open-ended questions.
- The interview length was approximately 30-35 minutes long.

2.5 Quality Control
- Rigorous quality controls were followed at both the field and data processing levels. A minimum of 25% of the questionnaire were back checked by the Field Supervisors and Field Managers.
- At the data processing stage, questionnaire which were not filled in properly were rejected and only after ensuring 100% cleaned data were considered for the analysis.
- For details on the Quality Control standards please refer to the CITC Inception Report Section 6 and 7.

3.0 Sample Profile

In total, 709 organizations across different types of institutes in the education sector were contacted for the purpose of this research. The following types of organizations were covered in the sample.

Exhibit 3.1 Sample Composition

	2007	2008
Base: All	**700**	**709**
Preliminary education/ Kindergarten	36%	48%
Primary	31%	25%
Secondary	28%	23%
College/ Technical Institutes/ Universities	5%	4%

The average number of students enrolled in the schools visited, range between 551 at preliminary level to 1082 at college/technical institute level.

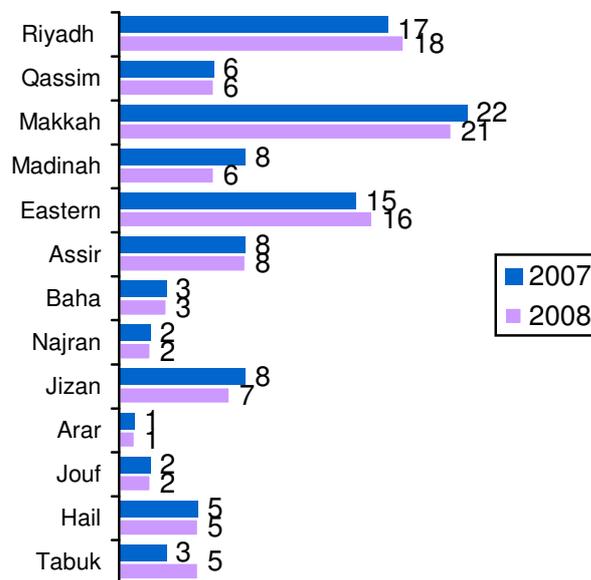Exhibit 3.2 Sample Composition by region

Exhibit 3.3 Sample Composition by gender

	2007	2008
Base: All respondents	**700**	**709**
Total Boys	52%	50%
Total Girls	48%	50%
Preliminary/ Kindergarten - Boys	20%	24%
Preliminary/ Kindergarten - Girls	18%	23%
Primary - Boys	15%	13%
Primary - Girls	15%	12%
Secondary - Boys	15%	11%
Secondary - Girls	13%	13%
College/ University - Boys	2%	1%
College/ University - Girls	2%	1%

Key decision makers on IT related issues

In more than 50% of organizations, IT head and the Principal are both involved in the decision making process.

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Detailed Findings
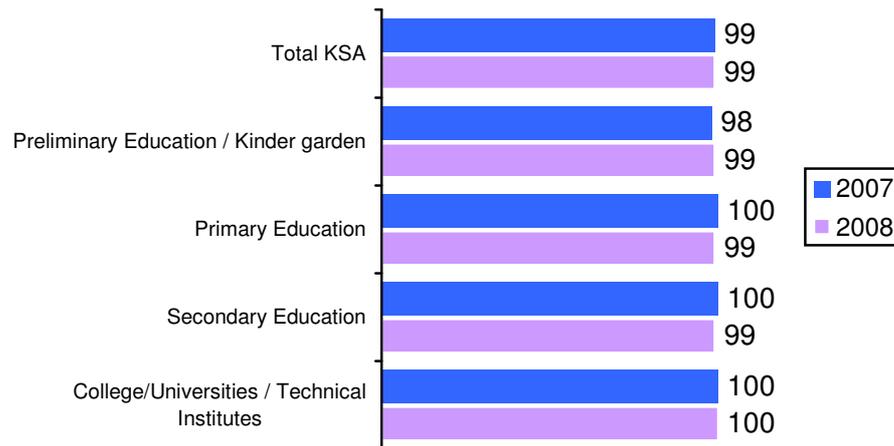
Internet Usage in Kingdom of Saudi Arabia

Detailed Findings

4.0 Infrastructure & Investments

4.1 Computer Penetration

There is almost full penetration of computer devises within all education institutes in Saudi Arabia.

Exhibit 4.1 Computer Penetration

However when we calculate the ratio of computers to students the lowest is for primary education (1 computer for 46 students) and the highest is for colleges/universities/technical institutes (1 computer for 21 students). Both have decreased their ratio since 2007 by increasing the number of computers available.
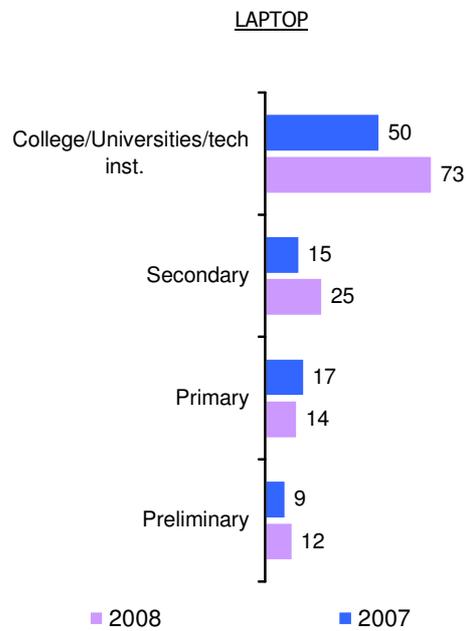
	RATIO OF COMPUTER TO STUDENTS	
	2007	2008
TOTAL	57	67
Preliminary/ Kindergarten	46	105
Primary	72	46
Secondary	59	40
College/ Universities/ Technical Institutes	38	21

Calculation: No. of students / No. of computer x % of computer used by students

4.2 Devices

Desktop computers have 100% penetration across institutes. Penetration of laptops is much lower than desktops, although it is growing in most education institutes. Laptop penetration is higher in colleges/Universities/ technical institutes (73%). Further, it is seen that ownership of server is the highest among colleges/universities/technical Institutes.

Exhibit 4.2 Computer Devices

DESKTOP

	2008	2007
College/Universities/tech inst.	100	100
Secondary	99	100
Primary	100	100
Preliminary	99	100

■ 2008 ■ 2007

LAPTOP

	2008	2007
College/Universities/tech inst.	73	50
Secondary	25	15
Primary	14	17
Preliminary	12	9

■ 2008 ■ 2007
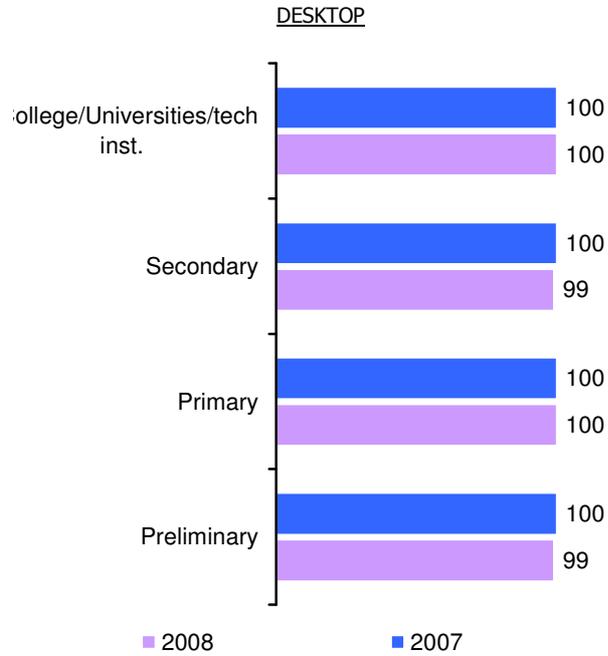
Branded computer devices are much more common than the unbranded ones.

4.3 Depth of usage

Relatively more number of computer devices is owned by Colleges/University/Technical institutes in line with the number of students enrolled with them, this has seen a marginal decline since 2007, this is also true for Primary and Preliminary Schools. On the other hand, Secondary schools have seen a growth in the number of devices from 32 to 47 year on year.

Exhibit 4.3 Average Number of Computer Devices

	AVE. # OF COMPUTERS	
	2007	2008
Preliminary/ Kindergarten	18	16
Primary	18	15
Secondary	32	47
College/ Universities/ Technical Institutes	121	120

4.4 Distribution of Computers by users

It is interesting to note that teachers emerge as the least users of computers installed across institutes, and this has seen a slight decrease year on year. Overall, around 50% of the computers are used by administrative staff for their day to day activities and maintaining records. There has been a slight growth in computer use by students from 34% using the devices in 2007 to 38% in 2008.

Exhibit 4.4 Distribution of Computers

	2007	2008
Teachers	14%	13%
Students	34%	38%
Admin Staff	50%	48%

4.5 Operating Systems

Microsoft is the most dominant operating system in the Kingdom. Windows XP (Home and Professional) is the most widely used version of Windows. Other operating systems like Macintosh and Linux have negligible usage.

Exhibit 4.5 Operating systems used
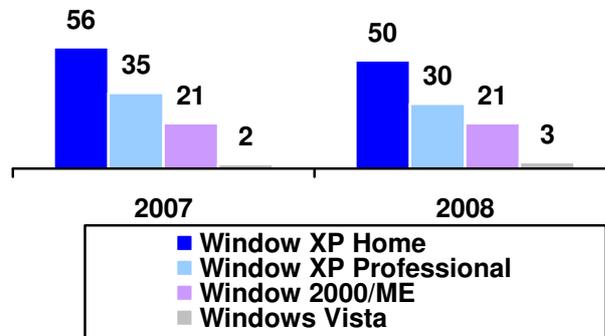
Arabic is the most prefered language for operating systems with it being prefered by three quarters of organisations. However, a quarter use both English and arabic OS.

4.6 Investments

In 2008 education institutes in Saudi Arabia are spending less on IT related training than in 2007. At aggregate level 82% of the institutes spend 1000 or less SR on IT related expenses from their annual budget. Data shows, expenses increase with an increase in the level of education, Primary, for example, spend an average of 757 SR while College / Universities / Technical Institutes spend an average of 4025 SR.

Overall 58% of the institutes did not provide any IT related training, an increase from 42% in 2007. Among those who reported to have received training, Database Management and Accounting packages were the common area of training (21% and 18% respectively). Percentage for other topics /areas of training stood was quite less (20%).

Low investments on IT are decreasing year on year

IT Training for employees is not a general practice

5.0 Opinion about Internet

Perceptions about the internet are becoming more positive over time. 90% of the respondents agree that internet gives people all the information and has been access to information much simpler, while 85% agrees that it is critical medium of today's generation and keeps people abreast with all the latest information.

Exhibit 5.1 Opinion about Internet

Internet gives people all the information they need in a convenient manner
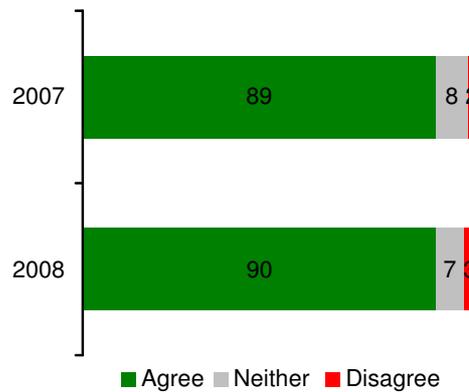
Internet is not good as it has a lot of immoral content
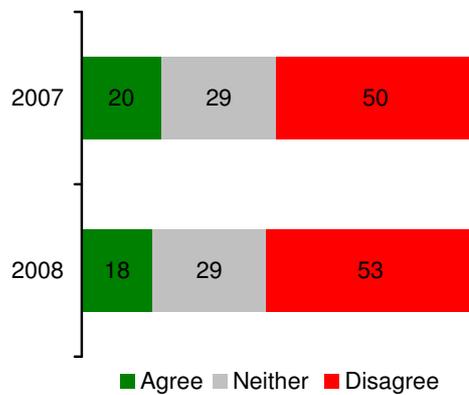
This is the medium which will keep people abreast with all the up-to-date information

	Agree	Neither	Disagree
2007	85	12	2
2008	83	15	1
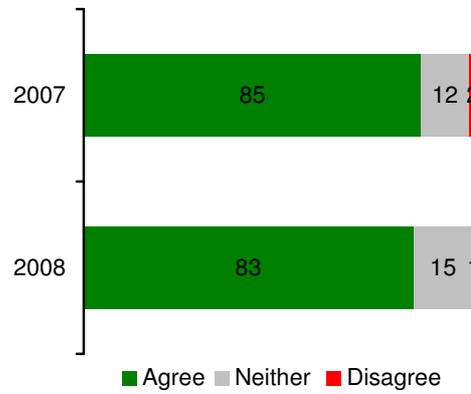
It is very critical to have access to the Internet as this is the medium of today's generation

	Agree	Neither	Disagree
2007	81	15	4
2008	85	14	
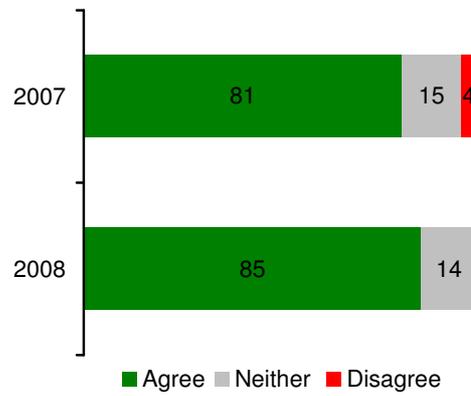
Internet addiction is very dangerous for the children

	Agree	Neither	Disagree
2007	56	24	20
2008	35	28	37
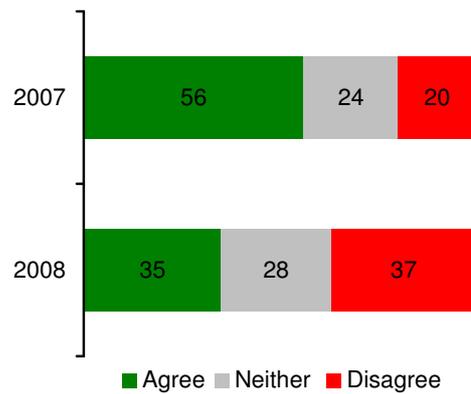
Internet makes people less sociable

Year	Agree	Neither	Disagree
2007	51	25	24
2008	34	30	36

■ Agree ■ Neither ■ Disagree
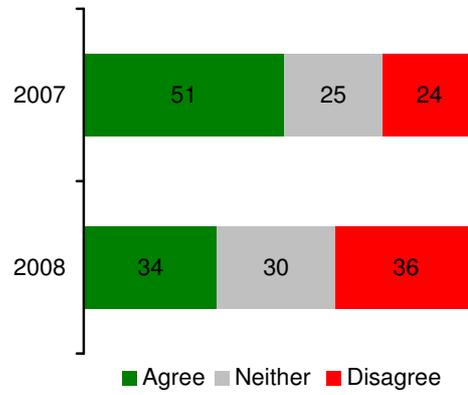
Internet is the best way for people to express themselves

Year	Agree	Neither	Disagree
2007	52	24	25
2008	63	23	14

■ Agree ■ Neither ■ Disagree
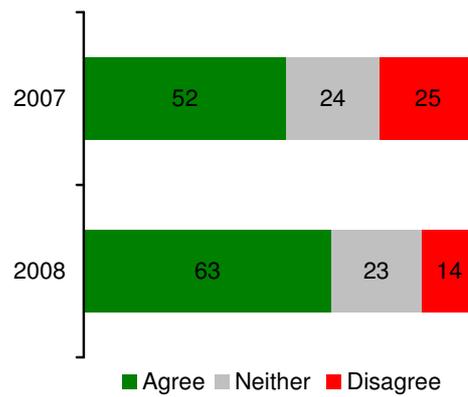
Internet embeds wrong ideas and concepts into the mind of the new generation

Year	Agree	Neither	Disagree
2007	28	27	45
2008	19	31	49

■ Agree ■ Neither ■ Disagree
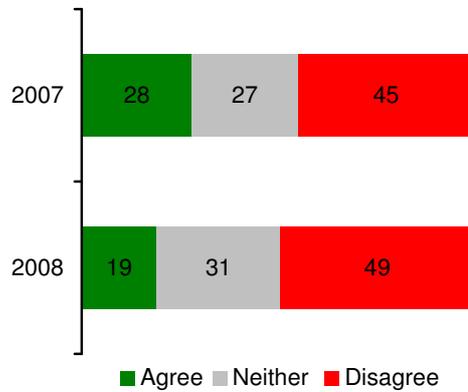
Internet has made access to information so much simpler

Year	Agree	Neither	Disagree
2007	91	8	1
2008	89	8	3

■ Agree ■ Neither ■ Disagree
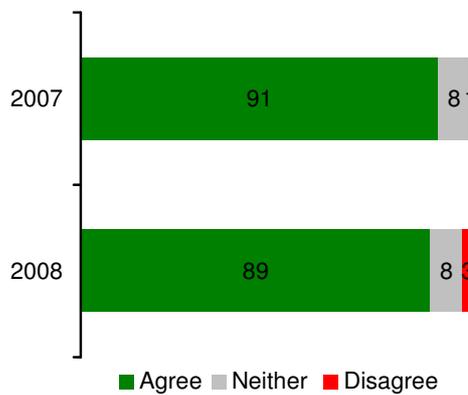
Interestingly, there has been a rise in those who believe the internet is the best way to express oneself from 52% in 2007 to 63% in 2008.

There is however, concern with regards to the internet, this is declining though. Those who believe the internet is addictive have decreased from 56-36% and those who believe the internet has a lot of immoral content has decreased from 20-18%.

Internet is regarded as useful and informative medium in the contemporary world.

6.0 Internet Usage

6.1 Internet Penetration

Internet penetration is relatively high among education institutes in Saudi Arabia, at 75%. However only 25% of the computers in education institues have access to the internet and only 11% of the students have access to the internet. The number of students accessing the internet increase along with the level of education from preliminary to college/university/technical/institutes.

	ALL		PRELIMINARY		PRIMARY		SECONDARY		COLLEGE	
	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008
Ave. # of students	658	621	568	519	532	603	800	639	1708	1148
Ave. # of computers	28	34	18	16	18	15	32	47	121	120
% of computers with Internet access	20%	25%	19%	17%	22%	24%	18%	27%	45%	47%
% of students accessing Internet	9%	11%	6%	6%	8%	6%	12%	17%	25%	39%

6.2 Barriers to using Internet

Overall, 25% of the education institutes which own a computer do not have internet connection.

The main reasons given for not having access to the internet are 'it is not available,' 'it is not necessary for school' and 'we don't know how to use the internet'

6.3 Type of connection

The majority of education institutes except colleges/universities/technical institution are connected to the internet via a dial up connection, only 13% of colleges/universities/technical institution use dial up. 40% of the colleges/universities/ technical institutes use DSL/Broadband – 2MB connection.

Exhibit 6.3 Type of Internet Connections

	DIAL-UP		BROADBAND	
	2007	2008	2007	2008
Total	78%	67%	22%	29%
Preliminary	77%	72%	23%	22%
Primary	78%	75%	22%	22%
Secondary	83%	61%	17%	36%
College	28%	13%	74%	87%
Boys school/ college	80%	71%	20%	25%
Girls school/ college	75%	63%	25%	31%

6.4 Online Activities

In 2008, dealing with government organizations is the most activity on the net, which has seen an increase since 2007. Sending and receiving emails was the most common activity in 2007, however this has seen a slight decline year on year.

Exhibit 6.4 Online Activities

	2007	2008
Dealing with government organizations	58%	62%
Receiving and sending e-mails	64%	60%
Getting information from government bodies	52%	52%
Education or learning activities	38%	30%
Browsing	25%	-
Getting information about services	14%	15%
Reading newspaper	14%	13%
Reading electronic books	9%	13%
Downloading electronic books	9%	12%

Teachers use of the internet is around a third across all education institutes, while students use is more prominent in secondary school and university.

6.5 Browser

'Internet explorer' from Microsoft Windows is by far the most used web browser in Kingdom with current usage at 90%. Netscape and Firefox are also used but by 5% only.

> **Students internet use is the highest in secondary schools and in universities**

7.0 Internet Satisfaction and Concerns

7.1 Satisfaction

Satisfaction levels are dropping with regards to the internet service provided, with almost a third citing extreme dissatisfaction. Universities, however, are more likely to be satisfied with a half stating they are extremely satisfied, this is most certainly linked to the internet connection type used.

The connection being 'slow' is the main reason for dissatisfaction and second to this is the constant 'interruptions.' However, this is likely due to the majority of institutes are connected to the internet via a dial-up connection.

Exhibit 7.1 Satisfaction

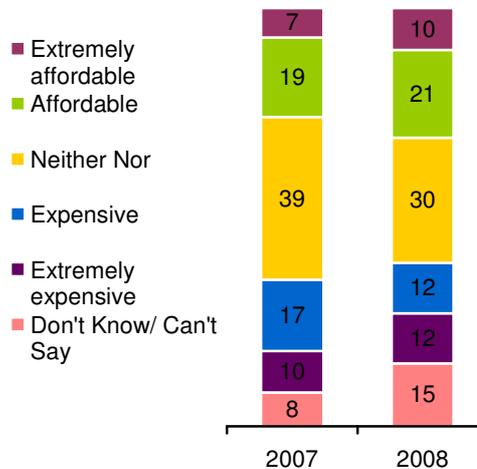|	2007	2008
Extremely Satisfied	15	13
Satisfied	30	21
Neither Nor	25	23
Not Satisfied	30	42
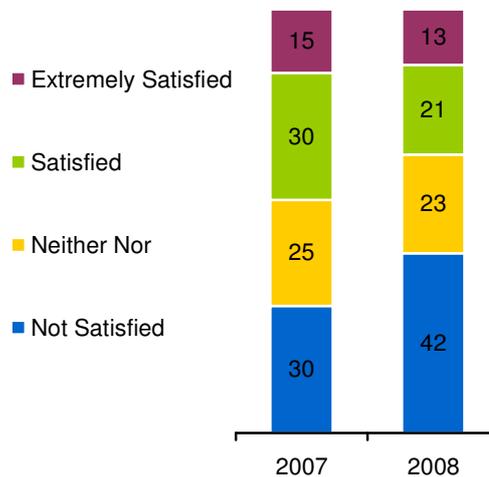
The norm for top 2 box score (extremely satisfied + somewhat satisfied) in Saudi Arabia is 70% as the acquiescence bias in the kingdom is high due to gratitude factor (cultural reasons). Source: Nielsen Studies conducted in KSA.

**Slow speed and
inconsistent connectivity
are commonly faced issues
as most education
institutes have dial up
internet connection**

7.2 Cost Perceptions

The cost of the internet services is seen to be more affordable in 2008 compared to 2007, with colleges finding it cheapest of all as 0% found it to be extremely expensive.

Exhibit 7.2 Cost Perceptions

Legend:
- ■ Extremely affordable
- ■ Affordable
- ■ Neither Nor
- ■ Expensive
- ■ Extremely expensive
- ■ Don't Know/ Can't Say

	2007	2008
Extremely affordable	7	10
Affordable	19	21
Neither Nor	39	30
Expensive	17	12
Extremely expensive	10	12
Don't Know/ Can't Say	8	15

On average education institutes spend 284 SR per month with colleges/universities/Technical Institutes spending considerably more, on averge 520 SR.

7.3 Intention to use in future

An analysis of the data suggests that at the aggregate level 53% of the current non users of internet show interest in subscribing the facility in the next 12 months. The main reason for getting a connection is 'because it is the mean of the coming generation' and 'to service students and education purposes.'

8.0 Websites and E-Learning

8.1 Websites

Almost half of education institutes host a website, and increase from 38% in 2007. Over 60% of the preliminary, primary and secondary schools do not have a web site, while colleges and universities/technical institutes are more likely to have a website, (80%).

Further, it was observed that the majority of sites are in Arabic; however, a third of universities websites are hosted in both English and Arabic.

Website is predominantly used to provide information about the education institute and to provide applications for work.

Exhibit 8.1 Services offered on the website

	2007	2008
Information about the school/ institute	69%	64%
Forums	58%	-
Web mail	49%	17%
Registration	44%	38%
Extra-curricular activities	40%	-
Schedules	34%	39%
Calendar	27%	-
Contact information	18%	12%
Follow-up on kids' results	16%	17%
Events	14%	21%
Exam records	-	49%
Application for work	-	45%
Real estate	-	38%

62% of education institutes prefer to host the website internally.

8.2 e-Learning

The number of education institutes offering e-learning has decreased since 2007, from 24% to 15% in 2008. However, the majority (84%) have purchased/acquired the e-learning system/platform. For those who offer the e-learning, the main service offered is video, lectures and course guides, second to this is registrations – these being most popular in universities.

The main reason for not offering e-learning's are 'the director of education did not introduce it' and 'there is no curriculum for it.'

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Conclusions & Recommendations

9.0 Conclusions

Almost all the education institutes contacted were computerized. With 75% of these education institues being connected to the internet.

However of these 75%, only 11% of students had access to the internet. A third of teachers use the internet, suggesting the majority of use is conducted by administrative staff.

Desktops are most widely used; contemporary computer devices like laptops, servers and PDA have very minimal presence in the education sector. With a slight increase year on year for laptop penetration.

Windows is the most used operating system. Arabic is the most preferred language for the operating system, closely followed by English and Arabic. English only is rarely used.

IT Training for employees is not conducted by most education organizations. Investments on IT were also very low.

The majority of those connected to the internet are so by a dial up connection – which is causing dissatisfaction due to the slow speed and constant interruptions.

Perceoptions of the internet are becoming more positive year on year. The most common used browser is Microsoft.

Internet is used mainly for basic activities – Communication and Sourcing Information.

Websites are relatively less popular as less than 40% of education institutes have a website of their own. The hosting of the website is mainly limited to Colleges and Universities. Most of the lower grade education institutes do not host a website. Website is used mainly for providing information about the institution.

E-Learning is also not very popular amongst the education institutes in Saudi Arabia.

10.0 Summary (Key Figures)

Related to Computers

		2007	2008
Institutes with computers		99%	99%
Type of PC *(based on institutes with PCs)*	Desktop	100%	100%
	Laptop	15%	18%
	Servers	10%	9%
Average number of computers per institute *(based on institutes with PCs)*	Preliminary	18	16
	Primary	18	15
	Secondary	32	47
	College/University/Technical Institute	121	120
Operating system usage *(based on institutes with PCs)*	Windows XP Home	56%	50%
	Windows XP Professional	35%	30%
	Windows 2000	20%	21%
	Windows Vista	1%	3%
	Others	3%	1%
IT Training provided		58%	42%

Related to Internet

		2007	2008
Proportion of institutes that use the internet		74%	75%
Type of internet connection *(among institutes with internet connection)*	Broadband	22%	29%
	Dial-up	78%	67%
Key online activities *(among institutes with internet connection)*	Receiving and sending e-mails	64%	60%
	Dealing with government organizations	58%	62%
	Getting information from govt. bodies	52%	52%
	Browsing	25%	-
Web browser usage *(among institutes with internet connection)*	Internet Explorer	91%	90%
	Netscape	5%	5%
	Opera	1%	-
	Mozilla Firefox	-	5%
Satisfaction with Internet Services *(among institutes with internet connection)*	Satisfied	45%	34%
	Dissatisfied	30%	42%
Perception on Internet cost	Expensive	27%	24%
	Affordable	26%	31%
Institutes with web sites		38%	46%
Institutes offering e-learning		24%	15%