Country Report: E-learning in Malaysia

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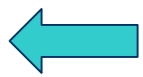
Malaysia: Country Report

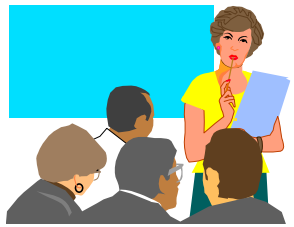
- Malaysia’s Strategy
- Current status of ICT
- E-learning readiness in Malaysia
- Development of e-learning in Malaysia
- Development of e-learning in educational institutions
- Conclusion

Malaysia's Strategy:
9th Malaysia Plan (2006-2010)
Second Phase of Vision 2020

Seven strategies for the development of Malaysia:

1. Promoting new sources of high value added growth
2. Strengthening small- and medium-sized enterprises (SMEs)
3. Developing new avenues for domestic investment
4. Dealing with the emergence of China and India
5. Completing the rehabilitation and liberalising of the financial sector
6. Building world-class human capital  E-Learning
7. Remaining cognisant of income distribution

National ICT Agenda



PEOPLE
- Work Culture
- ICT Skills
- Knowledge worker
- Learning Society
- United, moral & ethical

KNOWLEDGE-BASED ECONOMY

INFRASTRUCTURE
- Communication
- Fibre-Optic Cabling
- Gigabit ATM
- Satellite
- Transport/Logistic
- etc

APPLICATION & CONTENT
- Smart Schools
- e-govt.
- Smartcard
- Tele-medicine
- Others

Malaysia: Basic Indicators

Year	Qtr	Population (millions)	Households ('000)	GDP (RM)			Consumer Price Index (CPI)	Penetration rate		Tel (per 100 households)
				Current prices (billions)	Constant prices 1987 (billions)	Per capita current prices		Cellular phone (per 100 inhabitants)	Internet dial-up (per 100 inhabitants)	
1998		22.18	4,621	283.243	182.237	12,770	95.8	9.7	1.8	19.7
1999		22.71	4,732	300.764	193.422	13,243	98.5	12.0	2.9	19.5
2000		23.49	5,108	342.157	209.538	14,563	100.0	21.8	7.1	19.7
2001		24.01	5,220	334.309	210.640	13,922	101.4	30.8	8.8	19.6
2002		24.53	5,333	361.624	219.309	14,742	101.4	36.9	10.5	18.8
2003		25.32	5,504	394.200	231.674	15,569	104.4	43.9	11.4	18.1
2004		25.86	5,622	449.609	248.954	17,307	106.5	56.5	12.7	17.2
2005	1	25.99	5,650	115.211	62.576	...	107.6	60.9	13.2	16.8
	2	26.13	5,680	119.434	64.268	...	108.1	63.3	13.7	50.0
	3	26.26	5,709	...	....	...	108.6	66.8	13.8	49.7

Growth of Cellular Phones

Year	Qtr	Cellular phones				Short message services (SMS)	
		Total ('000)	Growth rate (%)	Penetration rate	% digital	Total (million)	Per subscriptions
1998		2,150	-12.6	9.7	74.5		
1999		2,717	26.4	12.0	83.7		
2000		5,122	88.5	21.8	91.8		
2001		7,385	44.2	30.8	95.6		
2002		9,053	22.6	36.9	97.9	3,605.9	398
2003		11,124	22.9	43.9	98.9	6,163.5	554
2004	1	11,762	5.7	46.2	99.1	1,996.7	170
	2	12,398	5.4	48.5	99.2	2,087.7	168
	3	13,072	5.4	50.8	99.3	2,500.9	191
	4	14,611	11.8	56.5	99.8	2,946.8	204
2005	1	15,831	8.3	60.9	99.9	3,406.9	215
	2	16,551	4.5	63.3	99.9	3,987.0	241
	3	17,551	6.0	66.8	99.9	*6,054.5*	*345*

xDSL Usage

Year	Qtr	Number of subscriptions				
		ADSL	SDSL	Others	Total	Penetration Rate
2002		18,511	542	249	19,302	0.08
2003		108,173	1,931	302	110,406	0.45
2004	1	139,862	2,168	302	142,332	0.56
	2	170,516	2,432	1,286	174,234	0.68
	3	213,589	2,616	1,799	218,004	0.85
	4	247,802	2,834	1,865	252,501	0.98
2005	1	288,882	2,995	5,300	297,177	1.15
	2	344,412	3,257	5,549	353,218	1.35
	3	420,611	3,651	6,299	430,561	1.64

TOP 20 COUNTRIES WITH HIGHEST NUMBER OF INTERNET USERS

#	Country or Region	Internet Users, Latest Data	Population (2005 Est.)	Internet Penetration	Source and Date of Latest Data	% Users of World
1	United States	202,888,307	296,208,476	68.5 %	Nielsen//NR June/05	21.6 %
2	China	103,000,000	1,282,198,289	7.9 %	CNNIC June/05	11.0 %
3	Japan	78,050,000	128,137,485	60.9 %	C+I+A Mar./05	8.3 %
4	Germany	47,127,725	82,726,188	57.0 %	Nielsen//NR June/05	5.0 %
5	India	39,200,000	1,094,870,677	3.6 %	C.I.Almanac Mar./05	4.2 %
6	United Kingdom	35,807,929	59,889,407	59.8 %	Nielsen//NR June/05	3.8 %
7	Korea (South)	31,600,000	49,929,293	63.3 %	KRNIC Dec./04	3.4 %
8	Italy	28,610,000	58,608,565	48.8 %	C.I.Almanac Dec./03	3.0 %
9	France	25,614,899	60,619,718	42.3 %	Nielsen//NR June/05	2.7 %
10	Brazil	22,320,000	181,823,645	12.3 %	C+I+A Mar./05	2.4 %
11	Russia	22,300,000	144,003,901	15.5 %	C.I.Almanac Mar./05	2.4 %
12	Canada	20,450,000	32,050,369	63.8 %	C.I.Almanac Dec./03	2.2 %
13	Spain	15,565,138	43,435,136	35.8 %	Nielsen//NR June/05	1.7 %
14	Indonesia	15,300,000	219,307,147	7.0 %	C.I.Almanac Mar./05	1.6 %
15	Mexico	14,901,687	103,872,328	14.3 %	AMICI Aug./04	1.6 %
16	Taiwan	13,800,000	22,794,795	60.5 %	C+I+A Mar./05	1.5 %
17	Australia	13,784,966	20,507,264	67.2 %	Nielsen//NR June/05	1.5 %
18	Netherlands	10,806,328	16,316,019	66.2 %	Nielsen//NR June/04	1.2 %
19	Poland	10,600,000	38,133,891	27.8 %	C-I-A Feb./05	1.1 %
20	Malaysia	9,513,100	26,500,699	37.9 %	C+I+A Mar./05	1.1 %
TOP 20 Countries		761,766,979	3,975,852,010	19.2 %	IWS - June/05	81.2 %
Rest of the World		176,943,950	2,444,250,712	7.2 %	IWS - June/05	18.8 %
Total World - Users		938,710,929	6,420,102,722	14.6 %	IWS - June/05	100.0 %

Household use of Internet Survey 2005

Distribution of household users of the Internet by age category

	Percent
Below 15	6.5
15 - 19	18.6
20 - 24	17.2
25 - 29	12.5
30 - 34	12.2
35 - 39	9.9
40 - 44	9.6
45 - 49	5.1
Above 50	8.4

Distribution of household users of the Internet by employment status

	Percent
Employer	5.0
Employed	37.7
Self Employed	8.8
Unemployed	12.0
Student	36.5

Distribution of household users of the Internet by gender

	Percent
Male	50.2
Female	49.8

Distribution of household users of the Internet by activity on the Internet*

	Percent
E-mail	73.7
Chat rooms	25.9
Finding information about goods and services	40.5
Getting information from/interacting with government	12.7
Reading/downloading online newspapers /news/ magazines	20.2
Playing/downloading games, music, software	19.9
Other entertainment/pleasure	7.0
Online banking/financial activities	12.2
Purchasing/ordering goods or services	2.4
Educations/research activities	46.8
Others	1.3

**Multiple response*

Growth of ICT in Malaysia

- Estimate for 2005: US$904.71mil
- Growth Rate from 2005 to 2009: 15.6%
  - System Integration (SI): 40%
  - Support & Training: 32.3%
  - Outsourcing: 27.7%

Source: IDC

- IT spending for 2005: reached US$3,261 million

Source: IDC

- Malaysia is ranked top five in terms of promoting information, communication and technology (ICT) in Asia

Source: iPark Singapore

2005 Global Service Location Index (Outsourcing)

The 2005 Global Services Location Index

1. India
2. China
3. Malaysia
4. Philippines
5. Singapore
6. Thailand
7. Czech
8. Chile
9. Canada
10. Brazil
11. U.S.*
12. Egypt
13. Indonesia
14. Jordan
15. Bulgaria
16. Slovakia
17. Mexico
18. Poland
19. Hungary
20. UAE

Source: http://www.atkearney.com/

E-Learning Readiness in Malaysia 2004

- A survey conducted in 2004 with 5779 respondents showed that:

1. Malaysia is moderately ready for e-learning (mean = 5.5; on a scale of 10)
2. Environmental readiness* (mean=4.76) rated lowest
3. Technical readiness rated highest by providers (mean=6.95) and policy-makers (mean=6.14)
4. Enablers are mostly ready, culturally (mean=6.77)
5. Learners are more ready for e-Learning compared to the perception of their lecturers (mean = 6.33 vs 5.73)
6. Financial readiness is second lowest among organizations (as rated by providers and policy-makers)
7. Financial readiness is second highest among individuals (as rated by enablers and receivers)

* The readiness of the country as a whole in terms of the presence of government policy, the role of mass media, IP regulations and proficiency in the English language.

E-readiness Ranking among 65 countries

2005 e-readiness rank (of 65)	2004 rank	Country	2005 e-readiness score (of 10)*	2004 score
1	1	Denmark	8.74	8.28
2	6	US	8.73	8.04
3	3	Sweden	8.64	8.25
4	10	Switzerland	8.62	7.96
5	2	UK	8.54	8.27
6 (tie)	9	Hong Kong	8.32	7.97
6 (tie)	5	Finland	8.32	8.08
8	8	Netherlands	8.28	8.00
9	4	Norway	8.27	8.11
10	12	Australia	8.22	7.88
11	7	Singapore	8.18	8.02
12 (tie)	11	Canada	8.03	7.92
12 (tie)	13	Germany	8.03	7.83
14	12	Austria	8.01	7.68
15	16	Ireland	7.98	7.45
16	19	New Zealand	7.82	7.33
17	17	Belgium	7.71	7.41
18	14	S. Korea	7.66	7.73
19	18	France	7.61	7.34
20	22	Israel	7.45	7.06
21	25	Japan	7.42	6.86
22	20	Taiwan	7.13	7.32
23	21	Spain	7.08	7.20
24	23	Italy	6.95	7.05
25	24	Portugal	6.90	7.01
26	26	Estonia	6.32	6.54
27	31	Slovenia	6.22	6.06
28	27 (tie)	Greece	6.19	6.47
29	27 (tie)	Czech Republic	6.09	6.47
30	30	Hungary	6.07	6.22
31	29	Chile	5.97	6.35
32 (tie)	36	Poland	5.53	5.41
32 (tie)	32	South Africa	5.53	5.79
34	39 (tie)	Slovakia	5.51	5.33
35	33	Malaysia	5.43	5.61
36	39 (tie)	Mexico	5.21	5.33
37	34	Latvia	5.11	5.60
38	35	Brazil	5.07	5.56
39	37	Argentina	5.05	5.38
40	38	Lithuania	5.04	5.35
41	n/a	Jamaica**	4.82	n/a
42	42	Bulgaria	4.68	4.71
43	45	Turkey	4.58	4.51

Source:
http://globaltechforum.eiu.com

E-readiness Ranking: Asia-Pacific

Asia-Pacific

2005 rank in region	2004 rank in region	Country	Overall ranking (of 65)	e-readiness score (of 10)
1	2	Hong Kong	6	8.32
2	3	Australia	10	8.22
3	1	Singapore	11	8.18
4	5	New Zealand	16	7.82
5	4	South Korea	18	7.66
6	7	Japan	21	7.42
7	6	Taiwan	22	7.13
8	8	Malaysia	35	5.43
9	9	Thailand	44	4.56
10	10	India	49	4.17
11	11	Philippines	51	4.03
12	12	China	54	3.85
13	12	Sri Lanka	56	3.80
14	14	Indonesia	60	3.07
15	15	Vietnam	61	3.06
16	16	Pakistan	64	2.93

Source: Economist Intelligence Unit, 2005

E-Readiness – ASEAN Region: Where are we?

EMERGING
- Basic infrastructure requirements for e-readiness in place
- Political commitment for ICT revolution

Cambodia, Laos, Myanmar & Vietnam

EVOLVING
- Comprehensive infrastructure framework established
- Framework being updated for effective implementation

Thailand & Philippines

EMBEDDING
- General acceptance of ICT by citizens, business and government
- Incorporating e-business requirements into policies, legislations and regulations
- Efforts taken to enhance international standing

Malaysia

EXTENDING
- Has moved to world-class practice
- ICT used to improve productivity and standards of living

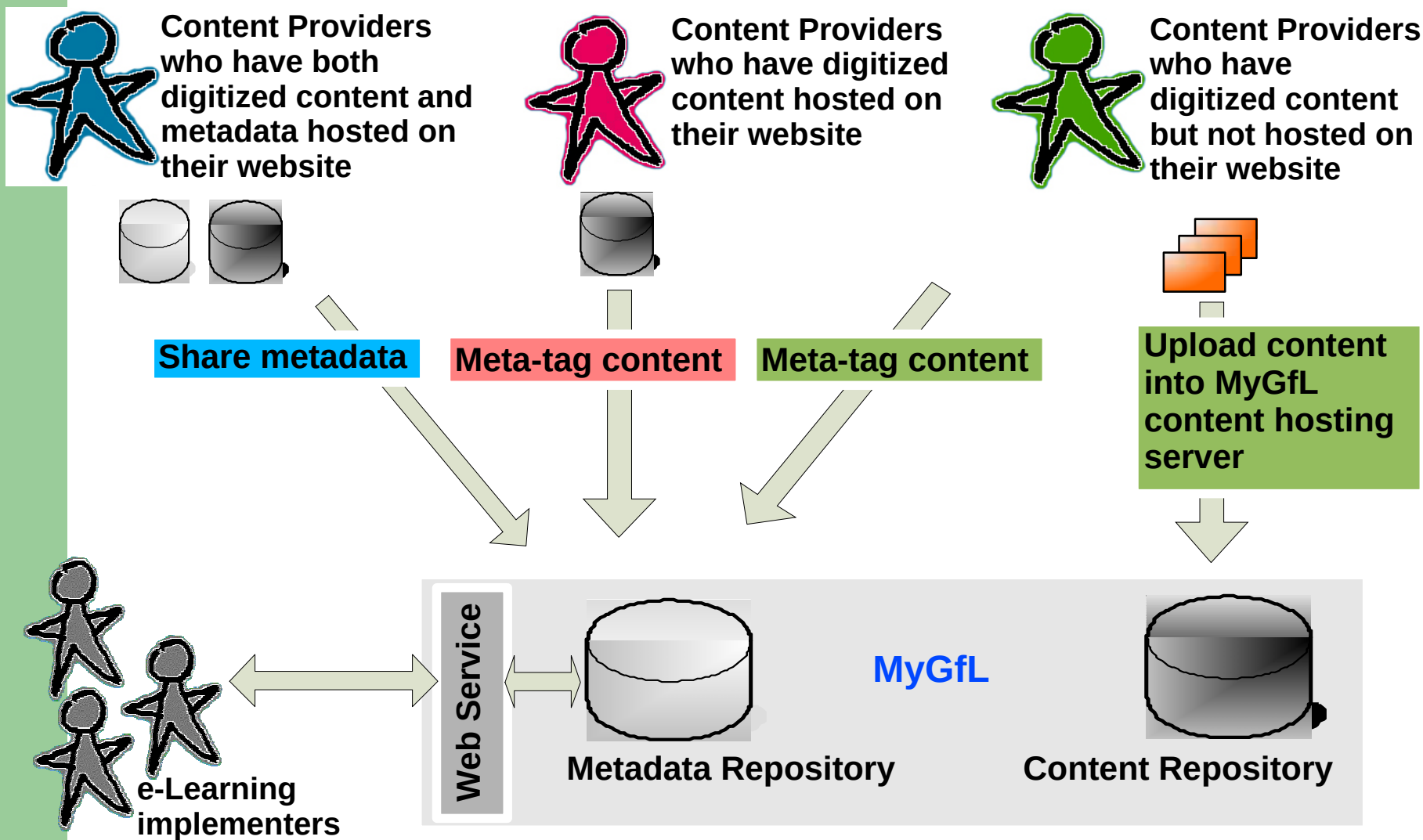
Singapore

Development of e-Learning in Malaysia

Pre e-learning	e-learning: Schools	e-learning: Universities	e-learning: National level
1972: Educational Technology Division set up by Ministry of Education: Educational radio and television broadcasts to schools	1997: MOE through ETD actively involved in Smart Schools- beginning of e-learning.	1998: University of Malaya- First LMS in the country - COL : Course On-Line 1999 : MMU, IMU and UNITAR launched LMS 2001 : OUM : Started E-Learning. Now 34,000 students	1992: National E-Learning Steering Committee 1994: National IT Council 1997: Research Education Network: TEMAN* 1999: MyGFL 2004:Metadata Centre Activities by NITC
2005: 15 State Libraries and 336 Teacher Activity Centres	2002: Smart school application software in 90 pilot schools		National e-Learning Centre (NELC):
	2004: Beginning of active “e-learning”		2005: ASEAN E-Learning Seminar

*TEMAN –Test-bed Environment for Malaysian Multimedia Applications and Networking

National Metadata Centre



E-Learning in Malaysia

- MyGfL initiative by NITC, 1999
- First National E-Learning Conference start in 2000
- Two virtual universities were established i.e. UNITAR and Open University Malaysia
- Establishment of the National E-learning Steering Committee in 2002.
- Participation in the Asian E-Learning Network (AEN)
- Smart School Project by MOE
- Programme Internet Desa

National IT Council: MyGfL Initiative

- **March 1999**
  NITC E-Learning Working Group – Malaysia Grid for Learning (MyGfL)
- **June 6, 2002**
  Conceptual framework for MyGfL
- **August 15, 2002**
  MyGfL will be used as the integrating platform for the 16 Bridging Digital Divide (BDD) pilot projects
- **September 2002**
  Soft launch of MyGfL
- **March, 2003**
  Development of technical framework
  Collaboration with National Library on content for MyGfL
- **May, 2003**
  Formulation of Content, Instructional Design, & Technical Guidelines
- **October, 2003**
  Development of Metadata Management Systems (MMS) by MIMOS
  Malaysian Metadata Centre
  Development of MyGfL technical architecture and framework by MIMOS
- **Dec 2003 - Aug 2004**
  Three Standard Expert Group meeting were held. National Consultative Committee for e-Learning (NCCEL) approves standards.
- **Sept 2004**
  Submitted the Malaysian e-Learning Standards/guidelines to SIRIM for endorsement and acceptance as Malaysian Standards
- **2005**
  Review/adopt the e-learning standard by SIRIM

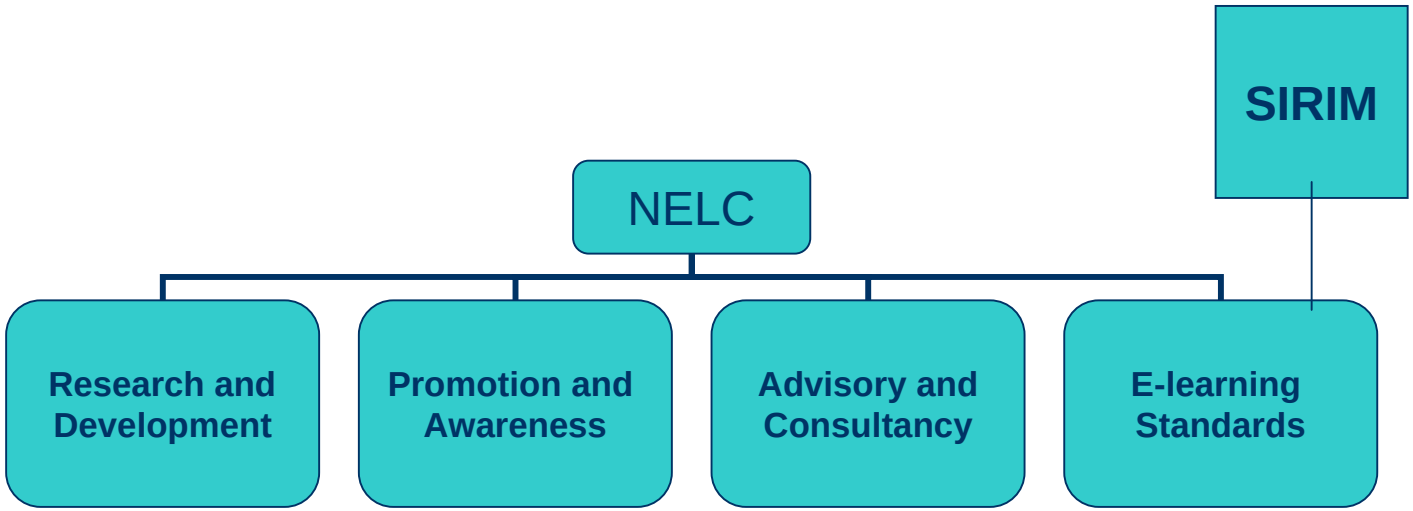
Programme Internet Desa

- Delivery of Internet and e-learning to rural community in Malaysia
- Post-Offices have been installed with computers and Internet accesss (Cybercafe concept)
- Free access to rural community
- Some courses have been designed for this purpose (short course, diploma and degree)

National E-Learning Steering Committee

- National e-Learning Steering Committee was established in 2000 by KTAK
- Proposed to form:
  - Malaysian e-Learning Centre (MeL)
- Restructuring of the government bodies
  - KTAK
  - MOSTE
- National e-readiness study

National E-learning Centre (NELC)



National E-Learning Centre

- To promote e-learning in the country
- Act as one-stop centre for e-learning
- Will be driven by public and private sector
- Certification LMS and Content
- Establish technical work groups (e.g. SCORM)
- Organize training, forums, seminars, etc
- Establishment of the centre has been delayed

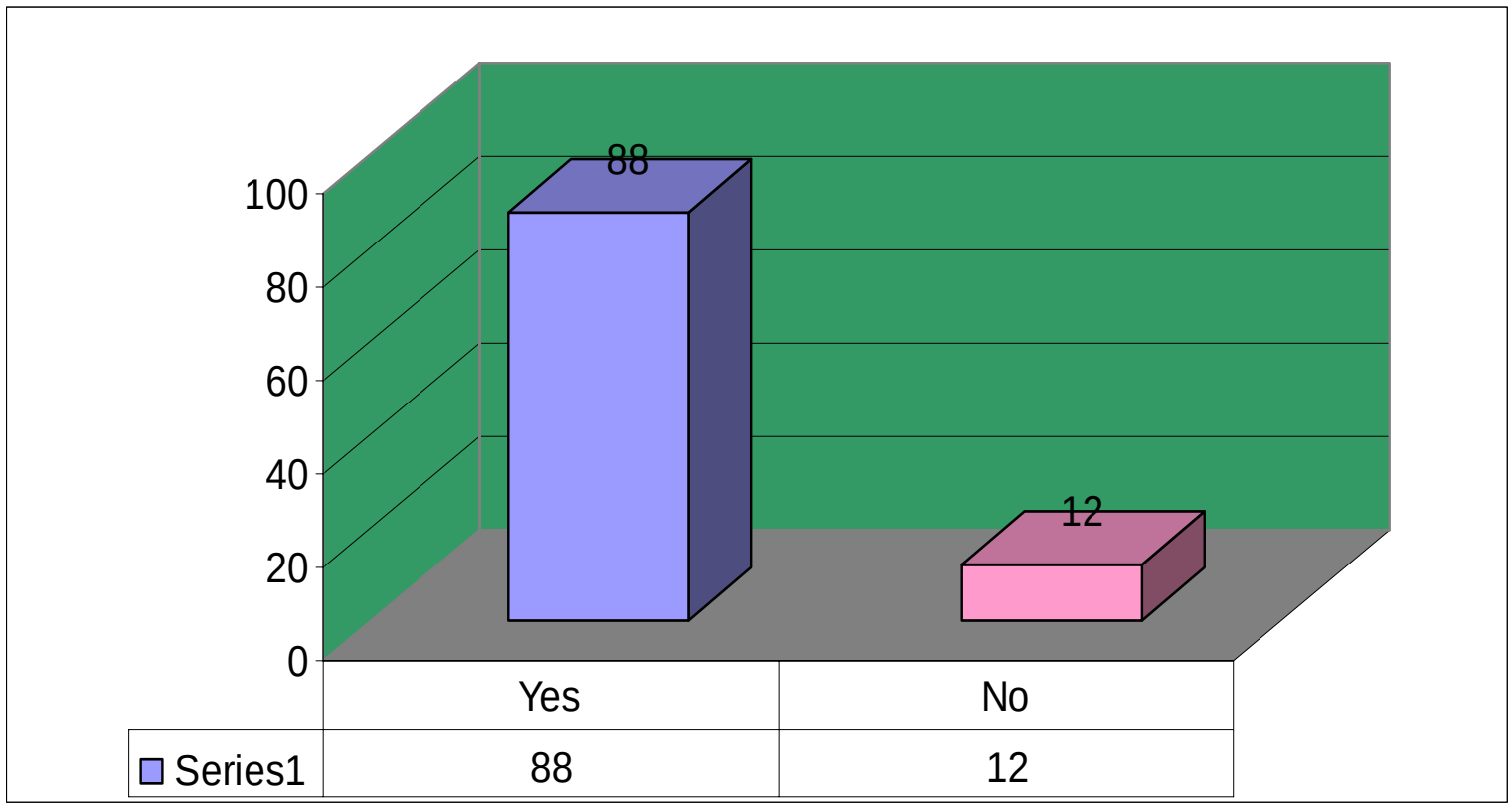
E-learning Initiative for the Government sector

- E-learning initiatives for the government sector to be spearheaded by INTAN
- Establishment of the National Steering Committee for e-learning in public sector
- Implementation has been delayed: Revised date: early 2006
- Platform and Content to conform to SCORM
- Many government-based tender and specification support SCROM
  - E.g. MHE, INTAN, MOE, etc

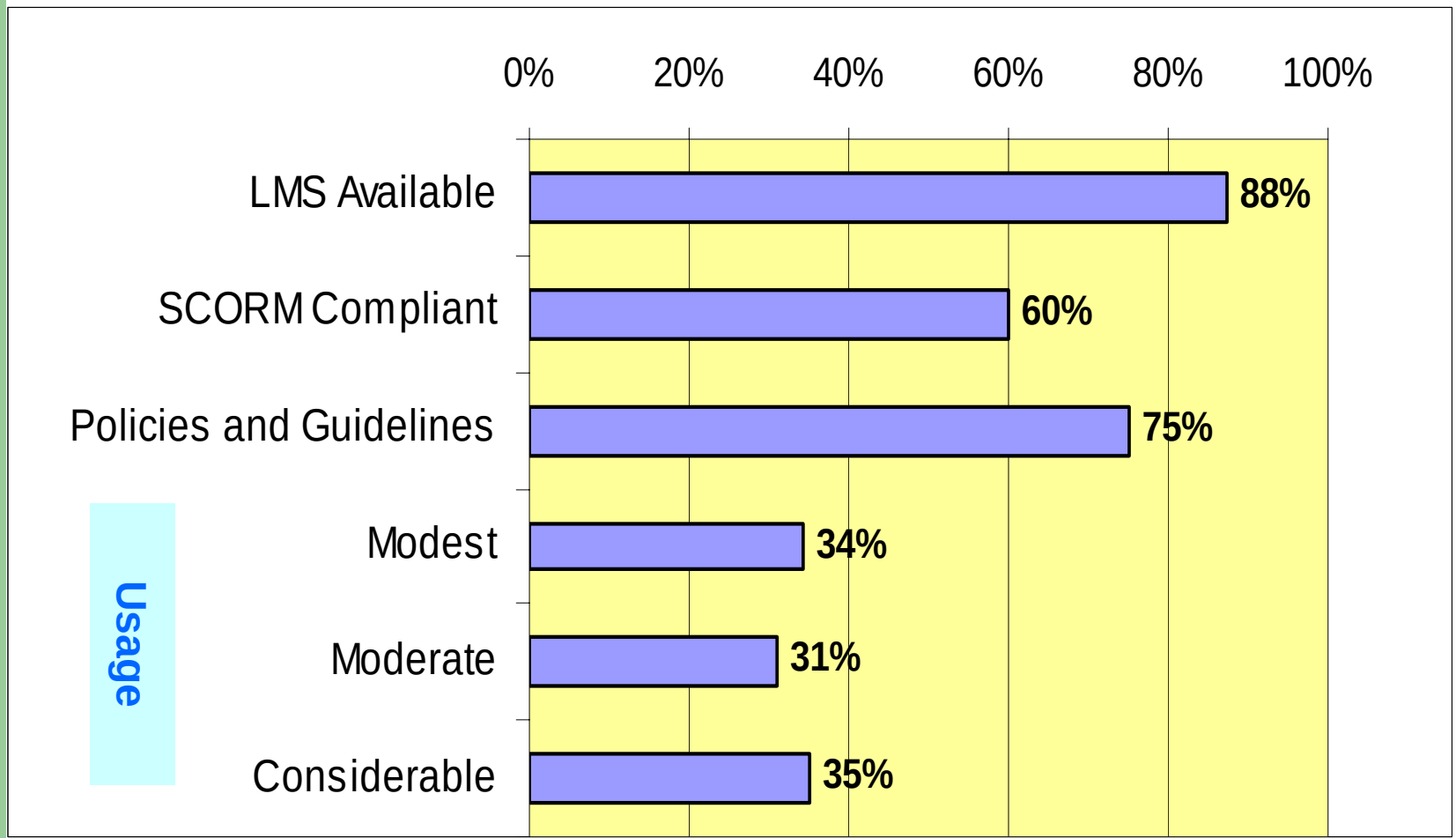
E-Learning in Higher Educational Institutions

- Individual initiative
- Report to the University ICT Council
- Many seminars, conferences and workshops have been organised.
- A lot of research on e-learning
- Malaysian E-University Project initiative
  - Establishment of e-learning centre at each universities
  - Sharing of resources
  - Adopt common standards (e.g. SCORM) among universities

Implementation of e-Learning System at Institute of Higher Learning (late 2004)



e-Learning Availability in Institute of Higher Learning (late 2004)



Summary: Status of e-learning in Malaysia

- Many e-learning seminars, workshops and conferences have been conducted
- A lot of interest in e-learning as shown by papers in conferences by public and private higher educational institutions
- Many have adopted SCORM
- More companies are involved in providing e-learning solutions: LMS and Content
- There are more than 128 companies that are registered with PIKOM who provide e-learning or related solutions.
- Almost all the companies provide solutions that are SCORM compliance.
- Many universities have established their own e-learning centre
- Almost all universities have adopted SCORM
- E-learning is used in schools (smart schools), colleges, Library, etc.
- Public Sector has started e-learning programme (prototype) for govt. employees
- Corporate companies are beginning to promote e-learning to their employees (e.g. Maybank, BNM)
- Establishment of National E-learning Centre (in progress)
- Establishment of National E-learning Standards (in progress)
- ASEAN e-learning Conference

Conclusion

- Internet penetration is considered to be good (>30%)
- Good ICT infrastructure is available
- The Malaysian government has invested a lot on ICT and e-learning
- E-learning is widely used in educational institutions but implementation has been slow in private sector.
- All schools will be connect by end of 2005. Smart school (e-learning) will be extended to ALL schools. Govt. continue to invest in content development.
- Usage of e-learning in schools/colleges has be gradual. Cultural change is needed.
- Interest in e-learning is high (many seminars/conference with a high turnout)
- A lot of research done in e-learning by universities.
- Local content/LMS market for 2005 is lower compare to 2004/3.
- Malaysian companies develop content/LMS for overseas market (outsourcing).
- Most LMS/Content conform to SCORM