

*AEN Country Report*  
*- Japan -*

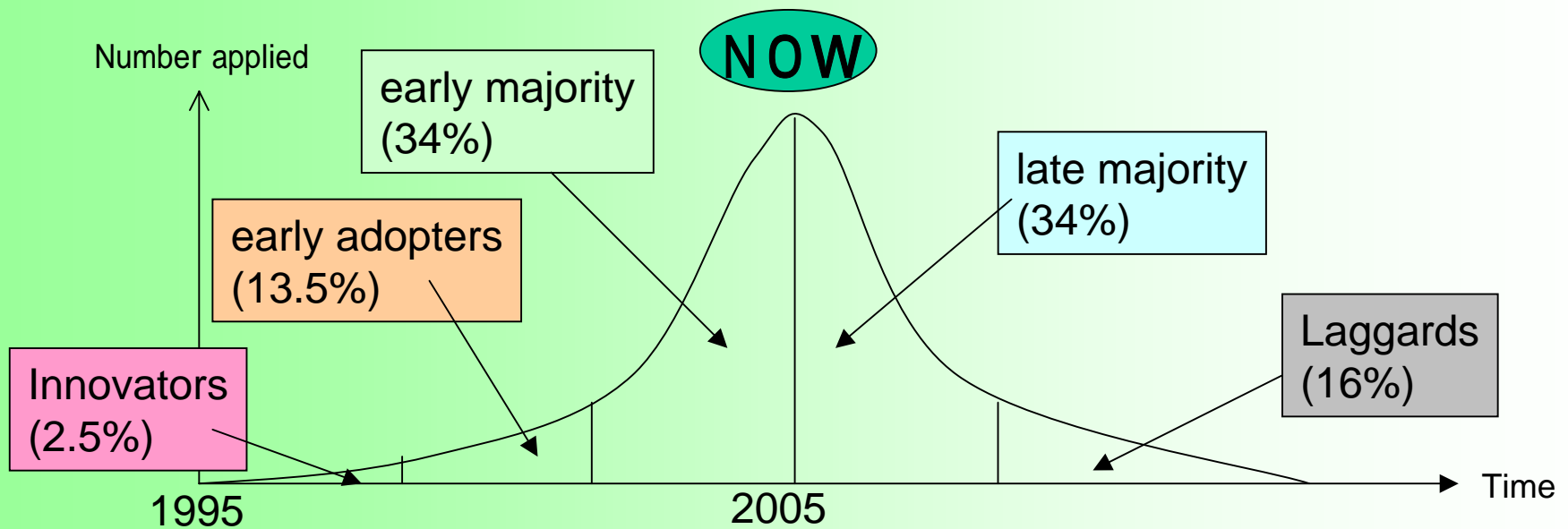
December 15, 2005

# Propagation status of e-Learning

In the case the installation status of e-Learning is evaluated from product life cycle, the installation from “innovators” (2.5%) to “early adopters” (13.5%) has been completed, and the current status is on the way from late stage of “early majority” (34%) to early stage of “late majority” (34%).

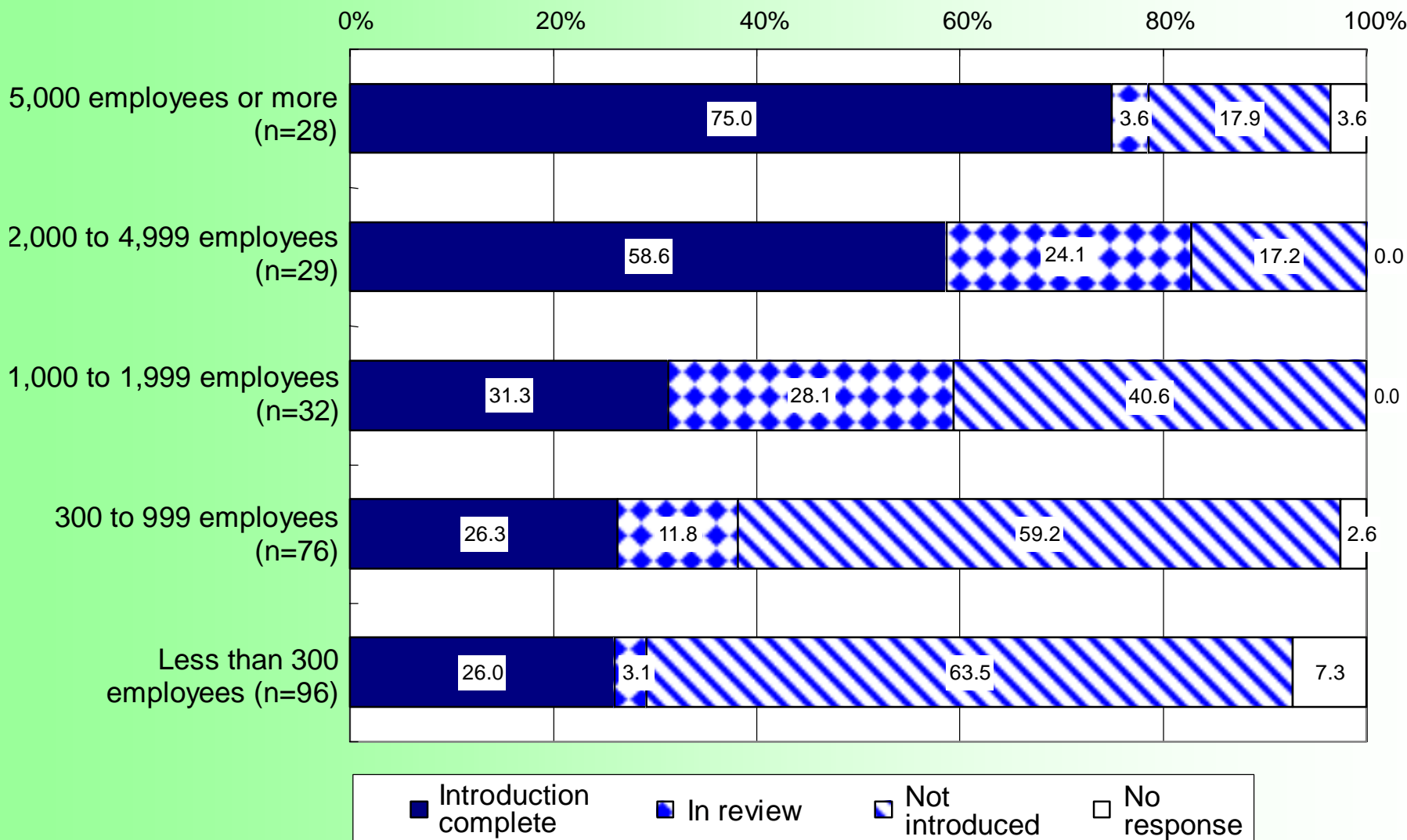
In enterprises, the installation by large enterprises have completed, and the installation by medium and small enterprises have started to install, while there are enterprises who are not interested in installation at all.

In the educational industry, the installation by higher educational institutions has well progressed, however the installation by elementary school and junior high school is partial. On the other hand, colleges have aggressively installed, however most cases are used as an supplementary tool.



# Installation Tendency of Enterprise

For the installation status of enterprises, enterprises not installed increase in employee number less than 1000.  
 (Source: e-Learning white paper)



## *Installation Status of Enterprise*

According to the questionnaire (n=267) in the end of 2004, the installation statuses of enterprises are 37% for already installed, 12.5% for under study and 50.6% for not installed respectively.

The feature of successful application cases of enterprises is becoming remarkable for applying to Large scale of employee education (themes with emphatic meaning of notices such as security education and global environment or morals problem, etc.)

Application cases in the field of works are increasing, and there are especially many cases for applying to ones being mainly used video, etc. for equipment operation and maintenance.

The e-Learning system is increasing in the case relating to the human resource upbringing system, and is also being positioning to bear a part of skill management of employee and carrier management.

There are many cases that applicable scope of e-Learning is extended to concerned personals other than employees such as clients, sales shop employees, etc.

# *Installation Issues at Enterprise*

## Issues of content production

### Production cost of content

If cost lowers, quality will decrease resulting in claim increase from lecturers

If cost is increased, number of development becomes less resulting in poor menu arrangement

### Insufficient specialist

Content that paper text was only turned to electronics is mass produced

### Content circulation

Since circulation has not been performed, insufficient manner that similar contents are produced by each enterprise has been performed

## Issues of installation cost

When installing the e-Learning, temporary expenses such as L M S purchasing cost, content production cost, etc. occur.

## Recognition issues of e-Learning effect

Due to installation of cheap and low quality content, improper recognition of the e-Learning has been performed

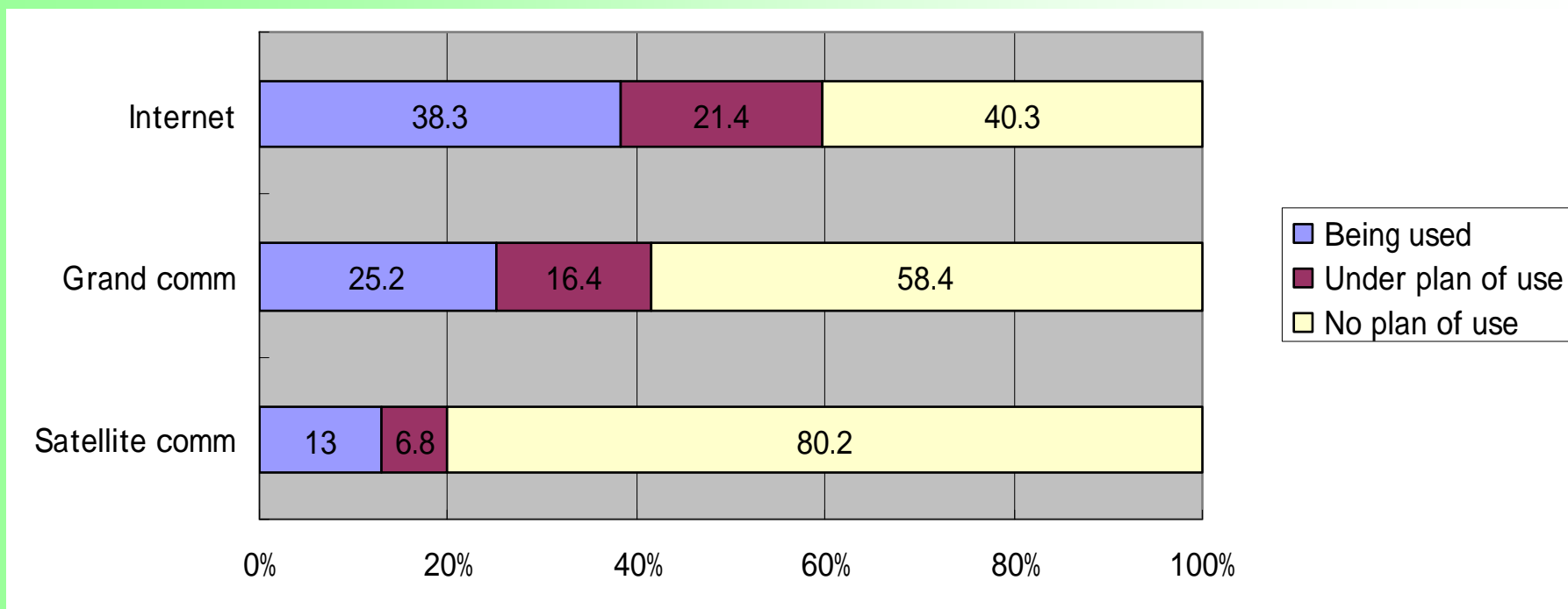
## Issues of impellent division

If the e-Learning is propelled with cooperative projects such as IT division, personnel division, educational division, etc., responsible division becomes vagueness, and many cases will not be functioned properly.

## Installation Status in Higher Education Institutions

The installation due to that lectures used e-Learning for obtaining credits in commuting and communication systems have been approved since the year of 2000, is increasing.

In the [IT usage status investigation in higher education institutions] (n=1027) in 2003, the education used internet reaches about 60% in [Being used] + [Under plan of use] as follows:



## Installation Status in Higher Education Institutions

General universities are also using e-Learning for professional education for students as well as for supplementary lessons. Furthermore, the e-Learning has also been used for open lectureship, etc. for general social members with comparatively large portion.

| Education applied                                   | 2000  | 2001  | 2002  | 2003  |
|---|-------|-------|-------|-------|
| Common culture education<br>[general education]     | 40.6% | 40.1% | 44.9% | 45.7% |
| Professional education for<br>undergraduate student | 62.3% | 61.2% | 65.8% | 68.3% |
| Language education                                  | 32.6% | 34.8% | 41%   | 43.2% |
| Supplementary education                             | 23.4% | 28.8% | 36.1% | 39.8% |
| Open lecture for general<br>social member           | 29.4% | 34.8% | 37.8% | 38.7% |

From [IT usage status investigation of higher education institutions] (n=1027) in 2003



# Installation Status in Higher Education Institutions

If application cases of e-Learning in higher education institutions are classified, it will be as follows:

| type | Outline   |
|------|---|
| 1    | <p>Through only e-Learning courses, all credits necessary for graduation/completion of a degree can be earned with almost no commuting.</p> <p>*There are almost no examples where absolutely no commuting is required. For example, some departments may require attendance for certain courses, such as physical education.</p>                     |
| 2    | <p>Some credits required for graduation/completion of a degree can be earned through e-Learning without commuting.</p>  |
| 3    | <p>Some credits required for graduation/completion of a degree can be earned through e-Learning by commuting to a specified location. This is different from Type B in that the location and time for participating in the e-Learning system provided are limited. This is applicable to lecture distribution from remote campuses via satellite.</p> |
| 4    | <p>A single course is designed with both lectures using e-Learning where commuting is not required, and face-to-face lectures where commuting is required.</p>  |
| 5    | <p>There are no courses held where credits can be earned through e-Learning only. However, e-Learning is used as a supplement during normal lectures where commuting is required.</p>   |
| 6    | <p>e-Learning is used throughout or partially, such as in general public lectures.</p>  |



## *Installation Status in Higher Education Institutions*

### Issues of installation and operation budgets

Installation expenses of equipment and facility as well as their maintenance cost

Not many institutions provide professional staffs for e-Learning operation, and it might be therefore supported by volunteers of teacher and student.

Cost and man-hour of material preparation

### Problem of copyright

Solution of copyright problem when producing the content is concerned matter.

### Issue of teacher's skill

Teachers do not have adequate skill of e-Learning, and effective education can not be performed.

# Standardization Status

Entire status: Extracted from questionnaires to eLC member in this year

In the questionnaire to vendors, the compliance with standardization was approximately 50% for [Corresponded to 1.2], 20% for [Corresponded to 2004] and 20% for [Not corresponded] respectively this year.

## Transition of SCORM compliance

| Year | SCORM full correspondence | SCORM partial correspondence | Non-correspondence |
|------|---------------------------|------------------------------|--------------------|
| 2002 | 21%                       |                              | 79%                |
| 2003 | 27%                       | 40%                          | 33%                |
| 2004 | 70%                       | 0%                           | 30%                |

More than 40% of contents aimed at circulation has been produced with SCORM correspondence.

Main stream of standardization is SCORM1.2 compliance, and SCORM2004 product is in the future status. (However if very near future correspondence is included among leading vendors, it is considered that 76% will be 2004 correspondence)

66% vendors have answered the necessity of understanding for standardization in business development.

Government also supports procurement of the e-Learning related things as condition of [SCORM compliance].

Understanding to SCORM2004 by users is low.

The following has been qualified as the SCORM products by e L C .

L M S product: 19

Content product: 28 (by assessor qualification)

Assessor: 50 persons

# *E-Learning Related Technology Tendency*

## Movement to mobile learning

Some enterprises have been trying e-Learning testing via mobile phone. Government project to study the standardization and others of mobile learning has started.

## Employment of rapid e-Learning

There are many enterprises and higher education aiming at the rapid e-Learning with speed and development cost performance. Further the system supporting this has been maintained.

## Positioning change of e-Learning

The e-Learning was contradicted with integrated education, however recently, recognition that is one of educational methods has become high, and it has been used for interpolation with integrated education.

## Co-ownership of content at higher educational institutions

Maintenance of LOM has been performed, and partial co-ownership of content of higher educational institutions has been realized.

# *e-Learning Related Policy of Government*

Promotion of A E N (2002 - 2005)

e-Japan important scheme execution in 2004

- Promotion of content policy

- Human resource upbringing for content production

- Activation of content production (Bayh-Dole policy, etc. )

- Digital archive, etc. of content

- Promotion of remote education used IT

- Universities and others performing remote education is to be triple of 2001 in 2005.

Promotion of grass-roots e-Learning

- As a part of youth self-support and challenge plan, the following activities are performing in order to independently develop poor educated youth capability (medium and small enterprise employees, job-hopping part-time workers and youth labors).

- Supply of systematic learning information and diagnosis of self learning achievement

- Supply of various e-Learning contents for improving working capability

- Consultation, etc. of each carrier design

E-Learning taxation policy

- Tax reduction policy for installation enterprises of e-Learning (2005) (Execution of human resource investment promotion taxation)

## *E-Learning propagation activity of eLC*

eLC (e-Learning Consortium Japan) has been aggressively evolving the e-Learning propagation activity since establishment in April 2001.

The activity core is each committee and seven committees are currently activating.

- eLP (e-Learning Professional) learning committee

- Conference committee

- Application case committee

- Value committee

- Standardization committee

- Investigation committee

- Public relations committee

Authorizations of SCORM compatible product and of assessor qualification

Publishing of various e-Learning related books, etc.

# *Issue to e-Learning Propagation and Development*

Public relations of application cases

Introduction of successful and failure cases at each site and their analysis

Upbringing of e-Learning related human resource

Supply of quality content leads to high evaluation of e-Learning.

Learning maintenance for eL P (e-Learning Professional) upbringing E L C

Digitalization of site sense and manuals

Digitalization of potential knowledge by audio and video

To digitalize site manuals and texts so as to be able to retrieve.

Standardization propagation of content

Fractionation and LOM of content

Realization of personalize of learning by free combination of LO

Proper understanding of SCORM by users

Study of copyright protection system of content

Clarification of copyright-free content

Copyright holder protection

# *Proposal to AEN Each Country*

## *Cooperative Activity*

### Joint ownership of content

- Study of joint ownership method and mounting

- Supply of industrial knowledge and laws in each country required for business

- Supply of industrial basic knowledge

- Opening of lessons at university

### Cooperation of each country standardization promotion body

- Information exchange of standardization

- Participation in SCORM Stewardship Meeting



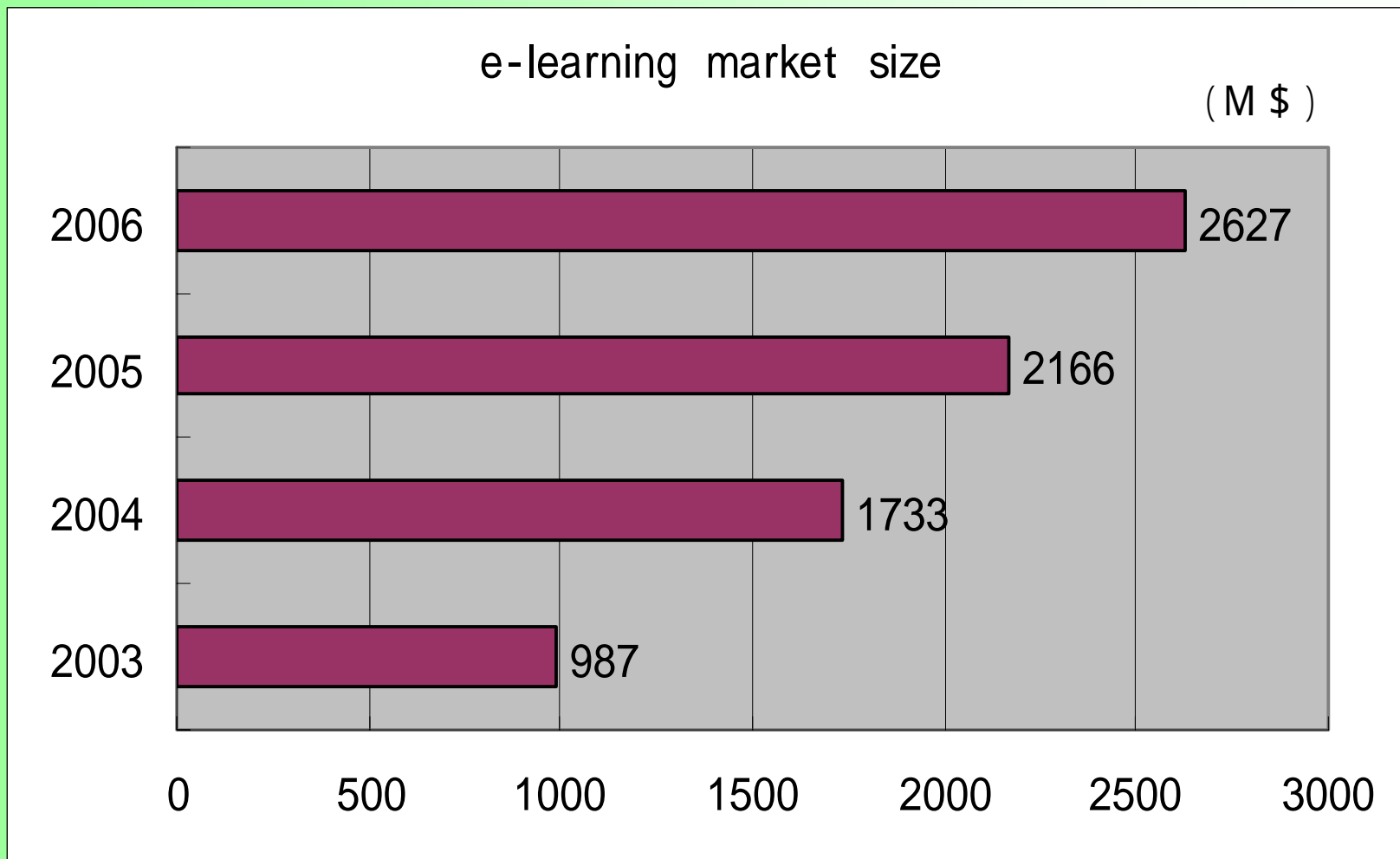
## *Appendix: Numbers of LMS and of Content*

The number of LMS are 35 types and are registered in the eLC site. If the numbers not circulated in the markets (LMS, etc. being used for local and ASP service) are included, it will be assumed to be about 100 types?

The numbers of content only registered in the eLC site is 1617 types, and there is non-registered members, and if other vendors are included, it will be assumed to be about 5000 types?

The numbers of content authorized by SCORM are 28 (less 2%), however the SCORM compatible contents are 30% to 40% of the content circulated.

# Appendix: Market Size



Extracted from e-Learning white paper in last year