INTRODUCTION OF U-LEARNING SYSTEM IN STATISTICS KOREA

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The **Statistical Training Institute (STI)** operates under the **Statistics Korea(KOSTAT)** and is the only national agency which offers statistical education. Mission of the STI is to nurture statistical experts and raise understanding of statistics.

Sometimes, **Ubiquitous learning** (u-learning) is equivalent to some form of simple mobile learning that learning environments can be accessed in various contexts and situations. But, u-learning environment may detect more context data than e-learning. U-Learning Materials is defined as learning materials that may be transferred to mobile devices via cable or wirelessly and be operated in these mobile devices.

This paper will introduce STI's u-Learning system which is actively operated. In particular streaming progress checkable technology (N-screen) do not have to download the video lectures and **regardless of the devices available** (such as smart phones, smart pads, PC) system to introduce.
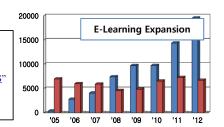
1 Goal

➢ **Provide training environment for anyone, anywhere at anytime + using any device (U-Learning)**
➢ **Offer increased training opportunities**
➢ **With the goal of being equally efficient as group training**

2 Concept

❖ E-Learning : In a broad sense, the computer and network enabled transfer of knowledge
❖ M-Learning : mobile technology based learning
❖ S-Learning : smart-device based learning
❖ U(Ubiquitous)-Learning : wherever and whenever learning possible using array of digital devices

3 Need for U-Learning

○ H/W : Server, O/S
○ Network : Internet, WiFi, LTE, 3G
○ S/W
  • Learning Management System, also known as "LMS"
  • Content Making Tool(Camera, relational S/W)
○ Contents : Developed, purchased, leased
○ Human : The most critical requirement

E-Learning Expansion

Legend: ■ E-learning ■ Classroom
X-axis: '05 '06 '07 '08 '09 '10 '11 '12
Y-axis: 0 – 20000

4 Target Training Audience

○ **KOSTAT**
  • Head Office
  • Regional Statistics Office
    ○ Civil servants in charge of surveys, non-civil servants
○ **Statistics Producing Agencies**
  • Central government employees
  • Local government employees
  • Staff of private organizations
○ **General Public**
  • College and grad students and general public

5 Considering Points before making U-Learning System

➢ Integration IT Infra : develop mobile LMS and Integrate with existing E-learning system
➢ Efficiency in Administration : Enhance management of existing IMSE + E-learning + Mobile
    ➢ Develop advanced features for analysis of integrated statistical analysis reporting, control design by module and learning promotion system
➢ Enhanced multi device and communication Develop service system, Expand training opportunities and Strengthen communication
    ✓ Enhance use of various devices (iPhone, iPad, Android, etc) by building compatibility, forward-looking platform, and expandability
    ✓ Strengthen communication over SNS to encourage learning and maintain communication with clients

6 U-Learning System Development Process

| Analysis | Task analysis | Needs analysis | Trainee analysis |
| Set up development plans to advance e-learning system |
| Design | User/administrator | Screen(storyboard) | Design database |
| Confirm system specifics and detailed development plans |
| Development | Draft Proposal | UI Coding | Develop applications |
| Develop system user/administrator parts |
| Implementation | System Set up | Pilot Run | User Test |
| Implement and test the system (user/administrator) |
| Evaluation | Testing/delivery | Training/Evaluation | Management |
| Check system specifics and review detailed advancement plans |

11 Training Contents

○ Web-based Training
  • Content making: Animation(FLASH)
  • Videos + PPT
  • Screen Capture (program description)
○ Regular Curriculum: E-Learning(33 courses), U-Learning(11 courses)
○ Open Study: 34 animation, 40 videos+ PPT
○ Supplementary Training Materials :
  • Course Materials (Text data, EXCEL, PPT)
  • e-books (including pdf)

7 Video room

8 Contents Feature

9

http://elearn.kostat.go.kr/ulearn
Or
Download App at Play Store(Android)

10 What are the first things?

• **N- Screen Technology**
    • Consider mobile situation [Home → bath → Office → Out → Business …]
    • Saving progress point of contents without download
• **One Source Multi-platform & Browser**
    • Any Browser [Explorer, Chrome, Firefox, Safari,..]
    • Any Device [PC, smartphone, pad, Notebook ,..]
• **Mobile Push : Checking Progress User**
    • SMS cost down
    • Real time message
• **Hybrid Mobile App : HTML5, CSS3 and Java scripts**
    • Low Cost maintenance
    • Rapid Rebuild Service

13 Anticipated Benefit

• Enhance statistical business skills by offering training to anyone, anytime, and anywhere + anydevice
• Maximize just-in-time learning effects by providing basis for developing training curriculum that is best for U-learning
• Increase statistical awareness by expanding training opportunities to the general public

12 U-Learning Curriculum (11 courses) 267 session

Planning Survey	Statistical Learning	Statistical Packages	Related Knowledge
- 2 courses	- 1 course	- 1 course	- 7 courses
- 61sessions	- 29 sessions	- 30 sessions	- 107 sessions
※ Introduction to survey methods	※ Introduction to statistical studies	※ Statistical analysis using SPSS	※ Psychology of persuasion

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