A Primary Study of Ubiquitous Business Interactive Learning Portfolio Assessment System Establishment _Case Study of a Life Insurance Company in Taiwan

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Abstract

In the past decade, the Internet has spawned many innovations and services that stem from its interactive character. The emergence of ubiquitous technology and wireless networks has lead to the wide deployment of mobile devices that allow us to access and to handle information almost anytime and anywhere. This purpose attempts to establish "the interactive learning portfolio" which is a fixed form, and it is provided the learners to fill in. There is the guide to stepwise finish the interactive learning portfolio. Due to the forms and the content items of everyone is the same, it is convenient to evaluate for teachers. To hope the system can be used for the staffs of the corporation, and to understand the training process of the staffs.

Keywords: u-learning, Portfolio, Interactive Learning Portfolio

1. Introduction

In recent years, along with the rapid development and popularization of Information and Communication Technology (ICT), the development of science and technology has overturned all industries and life styles of mankind. The nonstop innovation of digital technology will soon bring on the latest digital revolution to this generation.

In the times of knowledge, technology innovation, and digital economy, people have to combine their learning skills with new technology in order to absorb new information ubiquitously, and become the navigator of knowledge. The combination leads to the Ubiquitous Network Society (UNS) in the future. The installation and application of technology would be ubiquitous due to the gradually condensed sizes and increasingly powerful functions of the information tools. The feasibility of replacing "electronic" with "ubiquitous" is gradationally taken into consideration by the new information society (Chiu,C. H., Hsieh, H. Y, 2005). According to the report of Institute for Information Industry (2005), "ubiquitous" means to access the internet with computers or end equipment, and with the internet information technology, anyone could have internet interaction anytime, anywhere, for any purpose. Consequently, "ubiquitous" is constantly focused as a key factor of the development of national information technology strategy for many countries. Take the countries in the Pacific Asia for example, the Japanese government is launching so-called "U-Japan" project, and expects its country to become the "ubiquitous" Japan in 2010. Korea is also launching "IT839 Strategy", and the focal points are also emphasized on "ubiquitous" and its related technical application. The goal of "U-Korea" is expected to be accomplished in 2007 (Chiu and Hsieh, 2005). As a result, the new vision of the ubiquitous internet society which is built with the combination of fixed local and mobile network has already led a new trend in the global developed countries. Facing the ubiquitous trend, individuals, families, and business would undergo a major change and move forward to a more instant, more secure, and more efficient direction in the mode of information acquisition and usage.

The life insurance industry has been under rapid development during recent years, but in fact, the social environment is volatile, and the circumstance within the industry is fragile for both employee recruitment and the talent training. In order to cope with the ageing society and the competitive market due to inflation, the industry is stressful and disturbing; however, inside the industry, employees are often recruited and trained at a great cost, but they are immediately hunted by other competitors. The situation leads to the careless attitude of those companies toward retaining talent. The causal relation generates the instability for the insurance practitioners in both the social and the industrial

environments.

To start a revolution of U-training to expand software platform, “ubiquitous” and its related applied technologies are essential, which could make insurance personnel continuously gain their own knowledge, get ready to provide training at all time, and the training is executed by alternate systems (carriers and internet) without interruption. To jump on the trend of technology, a collection by objectives is required, including learner’s experiences, thoughts, digests, performances, works, and personal introspection as archives for the next learning step. Therefore, the object of this research is to create a ubiquitous digital portfolio for Taiwan life insurance industry and to find out what effects and functions that insurance personnel could produce in terms of the learning, knowledge-sharing, and working process, and as well as providing constructive suggestions as references to enterprises and follow-up researchers.

2. Literature Review

2.1 The Theory and Development of Ubiquitous

According to the research conducted by Advanced e-Commerce Institute of Institute for Information Industry (ACI-FIND) in 2005, “ubiquitous” in Latin signifies that the existence is everywhere, and it further refers to that something could be used by anyone, anytime, anywhere, and for any purpose. In 1991, Mark Weiser, the computer scientist of the Xerox Laboratory, first proposed the concept of ubiquitous computing. He pointed out that computers or end equipments are able to connect to the network in any location, and the concept carries out the information society with unlimited internet access. He suggests that the information and communication technology in the future would be “ubiquitous”, and three characteristics are indicated: (1) computing devices would be embedded everywhere in people’s everyday life; (2) computing devices would have more intelligent user interface, which would make it easier to use and to operate; (3) The necessary information can be accessed through the linkage to internet via various computing devices anytime anywhere.

After the increase of internet users and the competition of related technologies and services within the broadband industry in the past few years, the developed countries in IT focus on the development of wireless devices and technology, and the new slogan “ubiquitous” is come up with in the information era of the 21st century (ACI-FIND, 2005). Preece (2002) defines the ubiquitous computing as the technique applying the wireless technology so that people could enjoy the information without the limitation of time and space. (Intelligence detection systems are often installed within the technologies). Preece also considers that there are three characteristics of interaction paradigms: (1) the ubiquitous technology, which refers to the integration of technology and environment; (2) the techniques of penetration, which namely the seamless integration of technologies; (3) The portable technology. Based on the report of III (2005), “ubiquitous” means that one can access to the internet with computers or end equipments in any location, and the information technology in the future would facilitate the interaction for anyone, anytime, anywhere, and for any purpose. The ubiquitous learning environment provides a sharing, popular, and seamless bridge to link, to integrate, and to share three major learning resources: (1) Cooperative & collaborative learning (2) context aware learning, and (3) learning service. Meanwhile, the major difference between ubicomp and mobile computing lies in the feature of “context aware”, which can offer the most efficient user environment according to individuals’ locations, the environmental information, and personal conditions and missions (Gwo-Jen Hwang, 2005). Japanese government first proposed this conceptual policy in March 2004. In August the core policy of “U-Japan” was confirmed, and the purpose is to build a safe and secure “ubiquitous” society with information technology. As a leading country in the development of information and communication, South Korea also launched the “IT839” in 2004. IT 839 refers to “eight” types of services, “three” infrastructures networks, and “nine” new growth engines. Broadly speaking, the eight types of services are new business models for the government to develop concurrently with the industries of communication networks, broadband, and electronic chips. The three infrastructure networks refer to the broadband convergence Network (BcN), the Ubiquitous Sensor Network (USN), and “IPv6”, the new generation of Internet Agreement. The nine new growth engines include: next-generation mobile communications, digital television, home networks, IT System-on-Chip, next-generation PCs, embedded S/W, digital contents, automotive

telemetric and intelligent robots. (Yu, 2006).

2.2 Digital Interaction Portfolio

The word "portfolio" is composed of "portare" and "folio", and "portfolio" refers to the collection of paper-based data, which is used as a record of removal and transmission (Hewett, 2004). Paulson & Meyer (1991) defined "portfolio" is "A purposeful collection of student work that exhibits the student's efforts, progress and achievements in one or more areas. The collection must include student participation in selecting contents, the criteria for selection, the criteria for judging merit and evidence of student self-reflection."

With the open and interactive trend of new technology, the system of digital learning is able to construct the online learning environment which is different from the traditional teaching method. For example, Web 2.0, which is beyond the traditional learning methods, is affecting the world we are familiar with. Barrett (2007) has retrieved considerable relevant research of portfolio and conducted the comparison. He regards that the application of Web 2.0 structure to the digital portfolio is called the "ePortfolio 2.0" and "interactive portfolios". According to the domestic and foreign research of learning process and effects which applied Web 2.0 to digital interactive portfolios, learners will share their knowledge and opinions, and even will evaluate each other after reading. Hence in the learners' training process, the interactive portfolio is able to enhance their skills and to increase their performances.

3. Methodology

This study intends to analyze the initial research in the assessment system of the ubiquitous interactive digital system with literature analysis and systems development method, "ABCDE Learning Impact Model". The object of this study is to use the existing findings and results of related references, standard of system assessment, and the empirical study in applied research as the studying background, to realize the demand of the learners and the lecturers/teachers by literature analysis, and finally to use the result as the research basis to evaluate the feasibility in developing the assessment system of the ubiquitous digital interactive portfolio.

The purpose of this study is to construct ubiquitous interactive digital portfolio system, which meets the demand of the life insurance companies for their employee training in commercial marketing skills, and the system is applied to online learning curriculums and effectiveness. After the set-up of the system is complete, the structure would be amended according to the suggestions from the user evaluation and professional assessment, and finally making the ubiquitous system official in education training within the industry.

3.1 The Preliminary Structure of Ubiquitous Digital Interaction Portfolio—For the Staffs

The study applies the ubiquitous technology to constructing the skills and techniques of commercial marketing curriculums.

(1) Staff Area

A. Documents and working area: Includes the documents that are unprocessed, filed, unsigned by director, not approved, or with importance. The unsigned shift-changing form, the functions of looking up documents and working progress, the working schedule and calendar, etc. are also included.

B. Learning Bulletin: Includes my learning files, interactive file sharing window, my score of learning files, the assessment window, the learning ranking, etc.

C. My learning files: Includes the file pr oduction area (the study goal setting, self-reflection feedback, file-uploading), file management (upload/ delete/ remove files), information management folder(delete/ build/ rename folders), the introduction of curriculums (ten courses: my curriculum, learning records, online learning courses, online learning resources, basic information of lecturers, etc.)

D. The sharing window of interactive file: Includes work display area, file-sharing area, recommended books and websites, anecdotal news, discussion boards etc.

E. My score of learning file: Includes the scores of learners, scores from the peer and teachers, and the remark of outstanding works.

F. The window of file assessment: Includes learners' self-assessment, peer evaluation, and teacher assessment.

G. The learning ranking: Includes the ranking of popularity and score ranking.

(2) Lecturer Area

It Includes that the functions to delete/ add a curriculum, online management (learner's information, new learners list, turn-in reminder of assignment, online discussion, etc.), the learner files (including assessment, scores, online assignments, etc.)

(3) Visitors Center

It Includes that the learning portfolio of visitors.

(4) Managers Area

It Includes that the functions to delete/ add learners and to select curriculum (course description, score files, and portfolio assessment, etc.)

(5) Module-sharing functions (The sharing functions for the four areas)

It includes that: A. The system announcement; B. The discussion area (curriculums, files, and general discussion); C. Unit switching; D. The latest news; E. File browser; F. The basic information.

4. Suggestions and further directions

In summary, this study aims to set up the ubiquitous digital interactive portfolio within the life insurance industry in Taiwan in order to realize the effectiveness and functions during actual learning, knowledge sharing, and working process of insurance practitioners, and provide them constructive recommendations.

Furthermore, the digital portfolio and the "U-Training" set up for the life insurance industry could also be applied to the education sector. With the combination of the industrial demand and the orientation of practical experience, the understanding of assessment standard, the evaluation of the reliability and consistency of the research, and the exploration of the learning process and effect of students in school, the results of the study could be references and basis for educational institutions to assist students in future employment.

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