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ACCEPTABILITY OF WEB-BASED ALUMNI TRACING AND JOB SEARCH SYSTEM (DWAT-JS)

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Abstract - *The purpose of the research was to determine the acceptability of Web-based Alumni Tracing and Job Search System that focuses on alumni records for easy access and job search links to seek employment. The descriptive-developmental research method was used in this study. A modified questionnaire regarding Technology Acceptance Model from Davis (1986) was used to gather information for the development of the system. This also employed analysis and gathering of data to design and develop the plan. Moreover, the study's respondents were the Eighty (80) Alumni of CTU Naga Extension Campus and Twenty (20) Faculties. Furthermore, the study revealed that the Cebu Technological University Naga Extension Campus needs an information system that focuses on the alumni tracing and job search system, specifically the Diffusion of Web-Based Alumni Tracing and Job Search System. The study recommended adopting the Diffusion of Web-Based Alumni Tracing and Job Search System (DWAT-JS).*

Keywords: *Technology Management, Diffusion, Alumni Tracing, Job Search, System, Descriptive-Developmental, Cebu, Philippines*

Introduction

In order to improve the quality of the human resources produced by the universities and to comply with the Commission on Higher Education's policy, which mandates that all universities in the nation be capable of preparing their graduates who are ready to compete in a competitive job market amid an uneven supply and demand in employment opportunities, it is necessary to gather comprehensive data about the graduates and their accomplishment, particularly during the transition. To collect such information, it is necessary to perform a study called Tracer Study. Tracer studies enable universities to collect information that might aid in course modifications and improvements, setting the framework for comprehensive program and university content evaluations (Schomburg & Teichler, 2011). (Nivera, Toledo, Sualibio, Boral, & Asuncion, 2013). Also, it is a powerful tool that can offer insightful data for assessing graduates' locations and performance in the job. 2019 (Cuadra et al.)

The aforementioned remark emphasizes that a tracer study is a technique for tracking information on a specific sample by first making an intervention that will eventually result in the intended impact. Tracer study is a way that can be done by educational institutions to obtain information about the advantages and disadvantages that may occur during the learning process at school in order to be an evaluation material for improving learning in the future (Schomburg, 2003). Tracer study also allows alumni to provide quantitative data related to activities they are currently engaged in after graduating from school (Millington, 2008). According to Lange (2001), tracer studies are intended to map the graduates' competencies and assess the value of their training. It offers cumulative data that enables universities to modify their approach to

preparing future teachers. The level of instruction teachers received and their proficiency with teaching principles and techniques determine the quality of the instruction they deliver.

Along with the development of the times, the use of technology, especially in information systems, is growing. This development also occurred in the tracer study information system. the researcher developed a Diffusion of Web-based Alumni Tracing and Job Search System that focused on alumni records for easy access and job search links to seek employment. The alumni records are also needed for the guidance and student affairs offices. The DWAT-JS System of Cebu Technological University-Naga Extension Campus will systematize Alumni records in requisition and retrieval of alumni information, storage, monitoring, evaluation, record keeping, and job link regarding employment, providing convenience and hassle-free transaction for the alumni information. The DWAT-JS System is based on the specifications and requirements of the Cebu Technological University-Naga extension campus Alumni office. It has one system wherein all alumni information is stored, and the guidance and student affairs office check and verifies it.

It is the purpose of this study to determine the acceptability of the developed Diffusion of Web-Based Alumni Tracing and Job Search System (DWAT-JS) as to its perceived usefulness, perceived ease of use; behavioral intention to use; and the actual system use.

Methods and Materials

The descriptive-developmental research method was used in this study. A modified questionnaire regarding Technology Acceptance Model from Davis (1986) was used to gather information for the development of the system. This also employed analysis and gathering of data to design and develop the plan. The system's design used the Unified Modeling Language (UML), a visual modeling tool, and notation, specifying, modeling, and documenting object-oriented and component-based system architectures.

Moreover, the study occurred at Cebu Technological University – Naga Extension Campus, where respondents will be picked randomly, and a survey questionnaire was sent to their email addresses. Cebu Technological University – Naga Extension campus located in Central Poblacion, City of Naga Cebu. Cebu Technological University – Naga Campus Extension has two (2) departments: the Department of Teacher Education and Technology. Most programs offered by the university have undergone accreditation and obtained the highest level.

In this study, two (2) groups of respondents were identified. The respondents were the people who have direct interaction with the alumni tracing and job search. The first group is the Administration, represented by the Campus Director, Head of Instruction, Guidance Counselor, Student Affairs Services, Registrar, Director for Education, Director for Technology, Chairman for Technology, Chairman for Education, and the Faculty. The second group was the Alumni represented by the Officers.

Furthermore, a modified questionnaire from Davis Technology Acceptance Model is the primary tool for data gathering. The questionnaire is divided into three portions: a) status of the Alumni Tracing and Job Search System, b) Process, Features, and Design of the developed Diffusion of Web-based Alumni Tracing and Job Search System, c) Acceptability of the developed Diffusion of Web-based Alumni Tracing and Job Search System.

Results and Discussion

This part of the study identifies the level of acceptability of the developed Diffusion of Web-based Alumni Tracing and Job Search System (DWAT-JS) using the technology acceptance model. Effectiveness, efficiency, and satisfaction must be assessed to gauge the design's usability. The present research has focused on the Technology Acceptance Model (TAM) since research seeks to understand the design's acceptability, perceived ease of use, the behavioral intention of use, and actual use of the design.

Perceived Usefulness

The first part of the respondent's acceptability of the developed Diffusion of Web-Based Alumni Tracing and Job Search System (DWAT-JS) utilizing the Technology Acceptance Model (TAM). It determines the respondent's acceptability in terms of efficiency in acquiring data, finding data in data storage, monitoring data, proficiency in developing and retrieving data, and usefulness in evaluation, as shown in Table 16.

Table 1 Acceptability of the design DWAT-JS System as to Perceived Usefulness

Perceived usefulness	SA (5)	A (4)	N (3)	D (2)	SD (1)	TWP	$\overline{X}$	VD
1. Using the DWAT-JS System would increase the efficiency in acquiring data.	82	12	6	0	0	476	4.76	SA
2. The DWAT-JS System allows me to find the data stored in the system.	85	13	2	0	0	483	4.83	SA
3. The DWAT-JS System would make it easier to keep track and monitor the data.	88	9	3	0	0	485	4.85	SA
4. The DWAT-JS System would allow me to acquire and retrieve the data needed immediately.	90	9	1	0	0	489	4.89	SA
5. The DWAT-JS System would be useful for evaluation.	89	10	1	0	0	488	4.88	SA
						Average Weighted Mean	4.85	SA

Legend: SA = *Strongly Agree 4.21-5.00;* A = *Agree 3.41-4.20;* N = *Neutral 2.61-3.40;* D = *Disagree 1.81-2.60;* SD = *Strongly Disagree 1.00-1.80* TWP =*Total Weighted Points* X = *Weighted Mean;* VD = *Verbal Description*

The respondents strongly agree on perceived usefulness with an average of 4.85, as shown in Table 1. This means that the respondents accepted the information system that allows them to interact with the system easily through predefined templates. With today's advanced

web technology facilitating website creations, educators have used the web as a new delivery channel to present educational and instructional materials (Harris and Martin, 2012; Otter et al., 2013). Online uploading at the same time retrieval of documents for the parameters proves that user interaction and convenience have a significant impact on the acceptability of automated systems. Perceived usefulness is "the degree to which a person believes that using a specific system would enhance his or her performance" (Davis, 1989).

Uploaded documents can also be generated within the computer or mobile in pdf format through its download button. Thus, acquiring and retrieving is made easy and available anywhere and anytime. According to Smith and Mosier (2015), standard formatting and templates are necessary to ease the user from remembering and specifying formats, thus achieving user-friendliness in the interaction. This implies that the acceptability of DWAT-JS in terms of perceived ease of use based on the mean score of 4.85 the respondents strongly agree.

Perceived Ease of Use

The second part of the respondent's acceptability of the developed Diffusion of Web-Based Alumni Tracing and Job Search System (DWAT-JS) utilizing the Technology Acceptance Model (TAM). It classifies the respondent's acceptability regarding the ease of use of system utilization, finding information, user interface, and system flexibility in usage, as shown in Table 2.

Table 2. Acceptability of the design DWAT-JS System as to Perceived Ease of Use

Perceived Ease of Use	SA (5)	A (4)	N (3)	D (2)	SD (1)	TWP	$\bar{X}$	VD
1. Learning to operate the DWAT-JS is easy for me.	86	12	2	0	0	484	4.84	SA
2. I could easily find the information I am looking for using the DWAT-JS	88	10	2	0	0	486	4.86	SA
3. The user interface of the DWAT-JS is clear and intuitive.	84	13	3	0	0	481	4.81	SA
4. The DWAT-JS is flexible to interact with.	89	9	2	0	0	487	4.87	SA
5. I find the DWAT-JS easy to use (user-friendly).	88	7	3	2	0	481	4.81	SA
						Average Weighted Mean	4.83	SA

Perceive ease of use refers to the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989). The respondents strongly agree with

the acceptability of the system design, with a 4.83 average mean in terms of perceived ease of use. This shows that alumni tracing is wide, and many documents are needed.

A database management system (DBMS) is an important design consideration. DBMSs are either shared file-based or client/server databases, Lovell, Magrabi, Celler, Huynh, & Garsden, (2001). Paperless and hassle-free alumni tracing would mean an electronic repository for the documents needed for alumni documents. The system intentionally designs to collect files in pdf form for it to be queried and processed fast by the server. Thus, it will be capable of processing many documents simultaneously. This indicates that the acceptability of DWAT-JS in terms of behavioral intention of use based on the mean score of 4.83 the respondents strongly agree.

Behavioral Intention to Use

The third part of the respondent's acceptability of the developed Diffusion of Web-Based Alumni Tracing and Job Search System (DWAT-JS) utilizing the Technology Acceptance Model (TAM). It administers the respondent's acceptability of having a clear conception of the system's functionality. It also includes respondents' acceptability that DWAT-JS protects users' privacy, is reliable, is risk-free, and can be kept under control, as shown in Table 18.

Table 3. Acceptability of the design DWAT-JS as to Behavioral Intention to Use

Behavioral intention to use	SA (5)	A (4)	N (3)	D (2)	SD (1)	TWP	$\overline{X}$	VD
1. I have a clear conception of the functionality of the DWAT-JS	87	10	2	1	0	483	4.83	SA
2. The DWAT-JS protects the privacy of its users.	88	9	1	2	0	483	4.83	SA
3. I feel confident that the DWAT-JS is reliable.	85	11	4	0	0	481	4.81	SA
4. I believe it is risk-free to use the DWAT-JS.	89	6	5	0	0	484	4.84	SA
5. I feel confident that I can keep the DWAT-JS under control.	86	10	3	1	0	481	4.81	SA
						Average Weighted Mean	4.82	SA

In the behavioral intention of using, the respondents strongly agree with the average weighted mean of 4.82. As noted in the study of Bingimlas (2009), reasons for lack of confidence in the use of ICT are the limitations on ICT knowledge. In other words, users are not well-skilled in the use of ICT. According to Ashby (2011), "going to paperless requires a great deal of planning and progressive transition. Thinking that the paperless journey will be fast and easy will only lead to frustration" (Ashby 2011). This implies that the acceptability of

DWAT-JS in terms of actual system use based on the mean score of 4.82 the respondents strongly agree. Data protection is one of the concern of the data owners as it is private. A risk-free system in accordance to the data protection act guidance is the DWAT-JS designed.

Actual System Use

The fourth part of the respondent's acceptability of the developed Diffusion of Web-Based Alumni Tracing and Job Search System (DWAT-JS) utilizing the Technology Acceptance Model (TAM). It recognizes the respondent's acceptability regarding the ability to use the DWAT-JS, including the fun and advantage of knowing how to utilize the system, as shown in Table 4.

Table 4. Acceptability of the design WAT-JS as to Actual System Use

Actual System Use	SA (5)	A (4)	N (3)	D (2)	SD (1)	TWP	$\bar{X}$	VD
1. I am capable of using the WAT-JS.	88	9	2	1	0	484	4.84	SA
2. I have fun using the WAT-JS.	85	11	4	0	0	481	4.81	SA
3. Using the WAT-JS gives me an advantage over those who don't.	86	8	4	2	0	482	4.82	SA
4. I find it rewarding to use the WAT-JS.	87	7	5	1	0	480	4.80	SA
5. Using the WAT-JS is a good idea.	88	8	2	2	0	482	4.82	SA
					Average Weighted Mean		4.82	SA

Fast retrieval and viewing of data needed for alumni tracing give convenience to the users, and the respondents strongly agree with the acceptability of the actual use of WAT-JS with a 4.82 average mean. According to UX Booth (2015), three principles govern user interaction: learnability, which refers to how simple it is for a new user to use the interface. Flexibility refers to the variety of ways a user can interact with the system, and robustness refers to how well we support users when they encounter problems.

Summary of Acceptability

The summary of the respondent's acceptability of the developed Diffusion of Web-Based Alumni Tracing and Job Search System (DWAT-JS) using the Technology Acceptance Model (TAM). It contains the respondent's acceptability of the system pertaining to perceived usefulness, perceived ease of use, behavioral intention to use, and actual system use, as shown in Table 20.

Table 5. Acceptability of the design WAT-JS as to the Technology Acceptance Model

TAM Constructs	SA (5)	A (4)	N (3)	D (2)	SD (1)	TWP	$\bar{X}$	VD
1. Perceived usefulness	87	11	2	0	0	485	4.85	SA
2. Perceived Ease of Use.	87	10	2	1	0	483	4.83	SA
3. Behavioral intention to use	87	9	3	1	0	482	4.82	SA
4. Actual System Use	87	9	3	1	0	482	4.82	SA
					Average Weighted Mean		4.83	SA

Criteria for a successful system include ease of use, a robust integrated technology architecture, lifelong support, standards, and transportability (Jafari, 2002). Based on the technology acceptance model, the respondents strongly agree with the acceptability of web-based alumni tracing and job search, with an average weighted mean of 4.83. As stated by Hassan and Bhatti (2016) in their journal article, academic programs are required to monitor, evaluate and improve to acquire or maintain program accreditation from standards bodies. Data collection, management, statistical analysis, and result aggregation are important tasks to achieve this goal. This indicates that based on the mean score of 4.83 of the acceptability of DWAT-JS utilizing technology acceptance model the respondent's group strongly agree.

Conclusion

Based on the research findings, the developed Diffusion of Web-Based Alumni Tracing and Job Search Systems is acceptable. It has been utilized successfully to learn more about the activities that the university is involved in, and the tracer data may be used as evaluation material by schools to raise the caliber of their graduates so that they can compete in the labor market.

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