Development and Evaluation of Infomercial of Cagayan State University at Aparri, North Luzon, Philippines

Julieta B. Babas

College of Information and Computing Science, Cagayan State University, Maura, Aparri, 3515 Cagayan, Northern Luzon, Philippines julsbabas@gmail.com

Abstract – This study developed and evaluated an Infomercial using Flash and further produced with video/audio editor software for widest information dissemination. Its features include the history, VMGO, organizational structure, curricular offerings, and year-round accomplishment reports of Cagayan State University. The Infomercial is a "play-as-it-goes" that once loaded it will automatically play until it will be closed. It offers portability that it can also be accessed from smartphones. The study used two-phase process method, the development of the system (first phase) and its consequent evaluation (second phase). Results showed that the developed system helped a lot in improving the existing processes of information dissemination. The usual process of conveying information through plain text or written which requires a lot of effort in collecting information. With the system deployed and had taken over of the typical process in collecting data/information. The overall functionality of the Infomercial increased the efficiency of information dissemination which was evaluated by 890 number of critiques including IT experts. In general, across all features, they equally perceived that the software performed Good. Moreover, it is also worth observing that IT experts assessed lower than all other respondents and this could be associated with experts having higher standards in evaluating software comparing to all other non-IT profile respondents.

Keywords - Aparri, Cagayan State University, Flash, functionality, Infomercial, play-as-it-goes, portability, video/audio editor software

1 INTRODUCTION

IGITAL advertisements enormously affect print ads and newspaper advertising. Newspaper Ad revenue drops about 45 percent of between 2007 and 2010 in the study of Sterling as cited by Schmitz. Through the emergence of digital data and Internet, twenty-first-century advertising like Infomercials was made possible to Internet formats and can be published through blogs, social media forums and other online spaces [1].

The development in the mobile-phone market that uses smartphone apps in advertising concurrently helps in widest utilization of publishing Infomercials.

The AIDA Model (Attention-Interest-Desire-Action) [2] is one of the classical promotional theories in the development of Infomercials. In an academe environment, Infomercials adopts the AIDA model, which makes an active, learning and inquisitive information avenue. Through this, Infomercial engages attention and increases students' retention on the information conveyed by it.

Dissemination of information is a very important thing to manage and deliver, it is a communication to raise thoughts, ideas or even knowledge. The infomercial is supposed to be an aid, it is the so-called advertisement of information and it is an art of advertising or inculcating important information about an organization. In this way, infomercials are both a

presentation of information and a campaign pitch, though the informative aspect exists to further serve its purpose.

Infomercials have a number of potential benefits for advertisers. These include the ability to present a detailed information story or an organizational history to an effective connection with the consumers, customers, visitors, insider's employee, and the administrators, These infomercials can have a number of different formats, focusing on information demonstration, a "documercial" format taking on the appearance of a documentary or newscast, a talk show format emphasizing entertainment value, or a documentation show to promote and advertise, given the general belief that the more information, the better understanding [3].

In Cagayan State University at Aparri, Philippines, an effective way of campaigning for the school is disseminating its Vision, Mission, Goals and Objectives; its curricular offerings and organizational structure; and its accomplishments.

2 OBJECTIVES

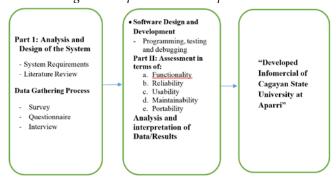
The main objective of the study aims to design or develop and assess the performance of the program for a customized Bulletin (eBulletin) or Advertisement, promoting the flagship and banner of Cagayan State University – Aparri. Specifically, the designed program sought to:

- 1. To design and develop a system integrating all the needed requirements, that could perform the following:
 - Disseminate the Vision, Mission, Goals, and Objectives of CSU Aparri;
 - Advertise curricular programs of CSU Aparri;
 - c. Present the Organizational Structure of CSU-Aparri;
 - d. Display the school year-round calendar of activities of CSU-Aparri; and
 - e. Customized avenue of information on year-round accomplishments of CSU Aparri
- 2. Determine the assessment of the respondents on the Infomercial with respect to the ISO 9126 software criteria used in the system. To assess the system in terms of the following:
 - a. Functionality
 - b. Reliability
 - c.Usability
 - d. Maintainability
 - e. Portability

2.1 Conceptual Framework

A conceptual framework is the researcher's own position on the problem and gives direction to the study. The researchers describe the Input-Process-Output (IPO) as a concept used in the development of the system as shown in Fig. 1.

Figure 1. Input-Process-Output Model



The *Input frame* indicates the data gathering procedures by knowing the problems in the present system in disseminating information, interviewing the persons involved in the dissemination of information, getting data substantial needed.

The *Process frame* contains processes used in the development of the system.

After gathering the data needed to start the project, system design was formulated following the testing and debugging of programs. After several testing and debugging with the suggestions of the viewers, implementation and evaluation come next thereby obtaining the level of acceptance on every stage of the process.

The *Output frame* is the desired output, Infomercial of Cagayan State University at Aparri, which aims of enhancing the information dissemination in the campus.

3 METHODOLOGY

The study was conducted in Cagayan State University, Cagayan Valley, Northern Philippines. The study used two-phase process method, the development of the system (first phase) and its consequent evaluation (second phase).

A. The Development Phase

This study chose to employ Incremental model for combining linear and iterative system development methodologies, with the primary objective of each being to reduce inherent project risk by breaking a project into smaller segments and providing more ease-of-change during the development process.

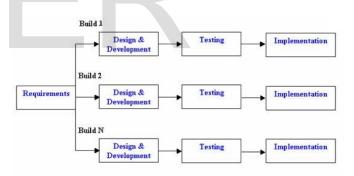


Figure 2. The Incremental Model of the Infomercial

The Incremental Model used as a pattern in the development of the Infomercial. In the design phase, which is the heart of most system where data is conceptualized, and broken down into units for its proper interaction forming the whole system. The system was implemented using Adobe Flash with ActionScript. An evaluation was done if the Infomercial fully satisfies the requirements listed and to ensure that it was bug-free. Prior to the pilot test of the study, the system was presented for test-run to the administrators, faculty, and deans.

B. The System Evaluation Phase

To evaluate the system developed, the technical evaluation using the software for system testing, [4] utilized. This evaluation focused on the functionality, reliability, usability, efficiency, maintainability, portability features of the Infomercial. This also involved humanistic evaluation focused on the acceptability of the system with a survey of the perceptions by its intended users and was statistically analyzed using the weighted mean to describe the effectiveness of the Infomercial and the t-test to compare the perception of the IT experts with the non-IT profile administrators, Deans, faculty and staff, students and walk-in visitors on the said Infomercial at 0.05 level of significance.

3.1 Respondents

The respondents with a total of 890 comprise the administrators, faculty and staff, deans, students and some of the visitors. Random sampling using the Slovin's Formula was utilized in picking the respondents on the students but total enumeration for the administrators, faculty, and staff, and deans. Convenient sampling for walk-in visitors was used.

3.2 Measures

The research employed descriptive-evaluative with correlational and survey method obtaining the perception of the respondents on the system.

The researcher used interview guides in identifying the problems and the needed information to be included. Results from the interview were used to identify the features and functionality of the Infomercial.

Direct observation was also used before the development of the system to further investigate the needs and the problems encountered for information dissemination. This instrument was also used after the system has been deployed for operation.

Likewise, the questionnaire was also used to gather the respondents' rating on the efficiency of the system. The questionnaire was adopted from the ISO/IEC 9126

3.3 Data Analysis

To provide evidence on the efficiency of the system, data collected from the 890 respondents were statistically treated.

The following adjectival and arbitrary scales were used to describe the weighted mean on the perception of the respondents.

Arbitrary Scale

Descriptive Value

4.20 - 5.00	Excellent
3.40 - 4.19	Outstanding
2.60 - 3.39	Very Good
1.80 - 2.59	Good
1.00 - 1.79	Fair

3.4 Data Gathering Procedure

Prior to the pilot test of the study, the Infomercial was presented for the test-run and demonstration to the campus where the audience composed of administrators, faculty and staff, deans, and student leaders. A separate group that composed of IT experts and the sample size population of the students were also given the chance to view the Infomercial, the second batch. This include system testing to ensure the specified requirements were met and error-free. The Infomercial was pilot tested at the College of Information and Computing Science Laboratory. The researchers floated questionnaire after the actual viewing of the Infomercial. The researchers personally collected the questionnaire to ensure a one hundred percent (100%) retrieval. The questionnaire used the 5-point Likert scale indicating: 5-Excellent; 4-Outstanding; 3-Very Good; 2-Good; 1-Fair.

4 RESULTS AND DISCUSSION

This part presents the evaluation of the Infomercial by getting the perception of the Deans, faculty and staff, the administrators, the students, and walk-in visitors. Their perceptions were elicited from the self-perceived questionnaire using the ISO/IEC 9126 after they viewed the Infomercial.

Self-perceived assessment of the features of the Infomercial

The self-perceived features of the Infomercial with regards to functionality, reliability, usability, efficiency, maintainability, portability as perceived by the Deans, Faculty, and Staff, administrators, students, and walkin visitors were summarized below.

Table 1a. Functionality Evaluation on the Infomercial

Features	1	IT	Descriptive			
	Deans/ Administrators	Faculty and Staff	Students	Walk-in Visitors	Experts	Equivalent
Suitability	3.05	3.18	3.65	3.98	2.98	Good
Accurateness	2.98	3.85	4.00	3.50	3.20	Very Good
Interoperability	3.50	3.10	3.75	3.98	3.00	Very Good
Security	3.1	3.15	4.00	3.75	2.25	Good
Functionality						
Compliance	3.16	3.32	3.85	3.80	2.86	Good
Description	Good	Good	Very Good	Very Good	Good	Good

As shown in Table 1a, the Deans, faculty and Staff, students, walk-in visitors and IT experts assessed the functionality of the Infomercial at 4.97, 4.98, 4.97 and 4.98 respectively, which were described as "Very Good." This implies that the Infomercial was functional and running. The suitability and accurateness bear the requirements set which were met. The interoperability of the system result shows that the Infomercial easily is adaptable to any systems.

IJSER

Table 1b. Reliability Evaluation on the Infomercial

Features	N					
	Deans/ Administrators	Faculty and Staff	Students	Walk-in Visitors	IT Experts	Descriptive Equivalent
Maturity Fault	3.25	3.45	3.85	4.20	3.00	Very Good
Tolerance	3.75	3.38	4.15	4.50	3.20	Very Good
Recoverability	3.98	3.65	3.98	4.25	3.00	Very Good
Reliability Compliance	3.66	3.49	3.99	4.32	3.07	Very Good
Description	Very Good	Very Good	Very Good	Outstanding	Good	Very Good

As to the reliability feature of the Infomercial, all weighted means of all the respondents were the same at a rate of 4.98 with a descriptive value of "Very Great." This means that the Infomercial bear on its ability to maintain a specified level of performance in case of software faults or of infringement in its specific interface.

Table 1c. Usability 'Evaluation on the Infomercial

Features	N		_ IT	Descriptive		
	Deans/ Administrators	Faculty and Staff	Students	Walk-in Visitors	Experts	Equivalent
Understandability	3.50	3.75	4.10	4.10	3.27	Very Good
Learnability	3.65	3.85	4.25	3.98	3.05	Very Good
Operability	3.85	4.00	4.00	3,45	3.40	Very Good
Attractiveness	3.75	3.98	4.00	3.75	3.53	Very Good
Usability						Very
Compliance	3.69	3.89	4.09	3.82	3.31	Good
Description	Very Good	Very Good	Very Good	Very Good	Good	Very Good

The usability feature of the Infomercial was evaluated by the deans of 4.96, the faculty and staff with 4.98, the students with 4.96 and the walk-in visitors with 5.0; which all have a descriptive value of "Very Great." This implies that it bears on the user's effort for recognizing the logical concept and its applicability.

An advantage for an Infomercial in terms of learnability and attractiveness that it engage attention. It further supported by the study of Singh investigating the relative effectiveness of ads, that Infomercials consistently have a greater impact on recall, attitudinal compared to other formats of advertisement. Operability feature also supports by his findings that Infomercials are closer to direct experiences [5]. Matveev study shows that Infomercial is instrumental in developing analytical and presentation skills, effective teamwork, reflective learning, and the application of knowledge and skills in future learning. [6]

Table 1d. Maintainability Evaluation on the Infomercial

	N					
Features	Deans/ Administrators	Faculty and Staff	Students	Walk-in Visitors	IT Experts	Descriptive Equivalent
Analyzability	3.75	3.87	3.75	4.10	3.05	Very Good
Changeability	3.50	3.93	4.10	4.20	2.98	Very God
Stability	3.95	3.80	3.95	4.40	3.25	Very good
Testability	3.85	3.98	4.50	4.25	3.35	Very Good
Maintainability Compliance	3.76	3.89	4.07	4.24	3.16	Very Good
Description	Very Good	Very Good	Very Good	Outstanding	Good	Very Good

The maintainability feature was rated by the deans with 4.96, the faculty and staff with 4.96, the students with 4.94 and walk-in visitors with 4.98, which all rated with a descriptive value of "Very Great." It implies also that it bears on the effort needed for modification, fault removal and for environmental change.

Table 1e. Portability Evaluation on the Infomercial

Features	N	_ IT	Descriptive			
	Deans/ Administrators	Faculty and Staff	Students	Walk-in Visitors	Experts	Equivalent
Adaptability	3.05	3.18	3.65	3.98	2.98	Good
Installability	2.98	3.85	4.00	3.50	3.20	Very Good
Co-existence	3.50	3.10	3.75	3.98	3.00	Very Good
Replaceability	3.10	3.15	4.00	3.75	2.25	Good
Portability Compliance	3.16	3.32	3.85	3.80	2.86	Very Good
Description	Good	Good	Very Good	Very Good	Good	Very Good

The portability feature of the Infomercial was rated by the deans with 3.16, the faculty and staff with 3.32, the students with 3.85 and walk-in visitors with 3.80, which all rated with a descriptive value of "Very Good." This manifested that the software adheres to standards or conventions relating to portability.

5 CONCLUSION

The developed system helped a lot in improving the existing processes of information dissemination that further supports by several studies that examine the effectiveness of infomercial [7]. The overall functionality of the Infomercial increased the efficiency of information dissemination and across all features, the software possesses the identity of generating information at a favorable speed with accuracy and reliability.

6 RECOMMENDATION

Full utilization of the infomercial will hence provide information essential to stakeholders of CSU. Hence, adopting various media such as mobile phones accessible to more Cagayanos and stakeholders is hereby recommended. It could be made available too to CSU website.

REFERENCES

- [1] Schmitz, A. (2012, December 28). *Creative Commons*. Retrieved from Advertising: https://2012books.lardbucket.org/books/culture-and-media/s15-01-advertising.html
- [2] Seung Hwan (Mark) Lee, K. D. (2015). Learning the ShamWow: Creating Infomercials to Teach the AIDA Model. *Marketing Education Review*, Volume 25, Issue 1: Teaching Innovation, pages 9-14.
- [3] Infomercial Media. (2012). Retrieved from Infomercial Testing and Evaluation: http://www.infomercialmedia.com/infomercialtesting-evaluating.htm
- [4] ISO/IEC 9126. (2018, September 12). Retrieved from Wikipedia: https://en.wikipedia.org/wiki/ISO/IEC_9126
- [5] Singh, M. B. (2013, May 31). A Comparative Analysis of Three Communication Formats: Advertising, Infomercial, and Direct Experience. *Journal of Advertising*, Volume 29-2000 Issue 4, pages 59-75.
- [6] Matveev, A. V. (2010). An implementation of active learning: assessing the effectiveness of the team infomercial assignment. *Innovations in Education and Teaching International*, Volume 47, 2010 Issue 2, pages 201-213.
- [7] Brett A. S. Martin, A. C. (2002). Infomercials and advertising effectiveness: an empirical study. *Journal of Consumer Marketing*, Vol. 19 Issue: 6, pp.468-480. Retrieved from https://doi.org/10.1108/07363760210444850

Author Profile



Julieta Babas received the B.S. in Computer Engineering at the University of St. Louis Tuguegarao and M.S. degree in Information Technology from Cagayan State University at Aparri in 1999 and 2013, respectively. Further Studies includes Master in Business Administration in 2004 at Lyceum of Aparri and currently taking up Dissertation Writing for the degree Doctor in Information Technology at Saint Paul University Philippines. Presently connected at Cagayan State University as Assistant Professor and designated as Knowledge and Technology Management Coordinator.

