

# Conceptual Design Model of Interactive Television Advertising: Experts Reviews on Impulse Purchase Tendency

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**Abstract**— Previous studies have proposed factors of impulse purchase in different advertising mediums like website, mobile, traditional retail store and traditional television. However, to the best of researchers' knowledge, none of the impulse purchase model is dedicated on impulse purchase tendency for interactive TV advertising. Therefore, a conceptual design model of interactive television advertising toward impulse purchase tendency (iTVAdIP) was developed. The focus of this study is to evaluate the conceptual design model of iTVAdIP through expert reviews. The finding showed that majority of the experts agreed that the conceptual design model is applicable to the development of iTV advertising and the model has the ability to increase impulse purchase level of iTV advertising.

**Keywords**- impulse purchase, interactive television.

## I. INTRODUCTION

Television advertising is an important medium for marketers around the world and it brings new opportunities for the advertisers to reach more consumers [1]. In addition, most of the countries show that the advertising on television is an effective way to market products and bring effective strategies for marketing. According to Forecast Advertising, [2], the advertising on television had grown by 6.0% globally in 2011 and generated \$169 billion. Over the following five years, the industry should grow at an average rate of 7.5% to the total of \$243 billion by 2011.

Previously, the marketing team realized the importance of impulse purchase phenomena. Rapid developments in information technology have substantially changed the landscape of consumer behaviour. The retailing availability for the Internet has brought about increased impulse purchase [3]. Consequently, impulse purchase accounts for a large volume of products sold every year [4] contributing to the iTV advertising.

iTV advertising has increased the ease to make purchases and accessibility to products and services. Additionally, iTV eliminates the constraints in terms of space and time that are always experienced by shoppers in the context of traditional commerce [3]. In fact, in the Europe and USA, [5] found that the success of iTV advertising adoption was excellent.

In order to take advantage of the positive aspects of iTV advertising, the advertisement must be carefully and intelligently designed. Therefore, based on the preliminary investigation and comparative analysis which was published in [6][7][8][9][10] there was a clear need for a design model of iTVAdIP.

The main objective of this study is to validate the conceptual design model of iTVAdIP through expert reviews. This paper presents the methodology, followed by the proposed model analysis and findings and ends with the conclusion.

## II. METHODOLOGY

As shown in Figure 1, this study implemented two phases. Firstly, the criteria of expert reviewer were identified. The criteria for the experts were based on their working, researching and teaching experience.

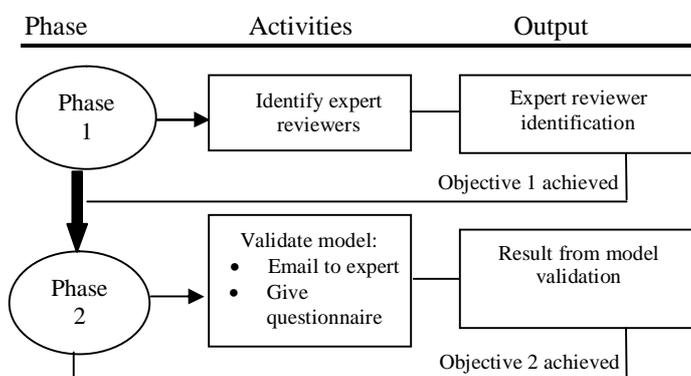


Figure 1: Phases in this study

Secondly, after the expert reviewers were identified, they were given invitation letter, consent form, evaluation form and the proposed model to validate. All of the validation processes were made through email. Lastly, the evaluation forms were analyzed in order to know the applicability of the model to be implemented by advertiser.

### III. OVERALL PROPOSED MODEL OF ITVADIP

Generally, the proposed conceptual design model for iTVAdIP refer [11] consists of three main components which are development process, layer of technology and impulse purchase components. The method used in development of iTVAdIP is content analysis and comparative analysis [11]. The details of the model can be seen in [11].

### IV. THE FINDINGS AND ANALYSES

#### A. Expert Review Identification

As mentioned earlier, this study is to validate the proposed model through expert review. The demographic profiles of the experts are as displayed in Table 1.

TABLE 1: DEMOGRAPHIC PROFILE OF EXPERTS

No.	Gender	Age (Year)	Education	Field of Expertise	Experience (Year)
1.	Female	34	Master	Advertising	9
2.	Female	36	PhD	Advertising	14
3.	Female	40	Master	Marketing	14
4.	Male	56	PhD	Advertising	27
5.	Male	57	PhD	Advertising	32
6.	Female	53	PhD	Advertising	31

Ten invitations were sent out through email to identify experts to review proposed model. From ten invitations, only six agreed to validate the proposed model. This number is sufficient as supported by [12][13]. Experts involved were classified based on the following criteria:

- 1) have qualifications in either Persuasive, Advertising or Marketing or related areas or/and
- 2) have at least five years teaching background in Persuasive, Advertising or Marketing or related areas or/and
- 3) have been working/ studying/ researching in persuasive/ Advertising/ Marketing or related areas at least five years.

#### B. Instrument and Procedures

Main instrument used for this review is questionnaire. Throughout the review process email was used as a medium of communication. First, invitation email was sent to the identified experts. Having agreed to be appointed as an expert reviewer, a consent form and official appointment letter were sent expert reviewers. After received the signed and stamped consent form, the illustration of the proposed model together with the instrument were attached also via email. An ample time and opportunity were given to the experts to review the model and complete the questionnaire. Most of them took two to three weeks to complete all the tasks.

As mentioned, the main instrument used for this review is a questionnaire and the format of the questionnaire is adopted from Siti Mahfuzah [14]. It contains six questions asking about the: (1) terminologies used in the conceptual design model, (2) relevancy of proposed elements in each component, (3) connections and flows of the components, (4) how usable is the model to the development of an interactive television

advertising toward impulse purchase, (5) how useful is the model to the implementation of a iTVAdIP and (6) readability of the conceptual design model. Along with that, few demographic questions were also asked like name, age, gender, affiliation, working experience, and position. Experts were also encouraged to write their further comments in the provided instrument.

#### C. Analysis from Expert Review

Data gathered from the expert review are tabulated in Table 2. The data is recorded as in frequency of responses to the questions asked in the instrument.

TABLE 2: FREQUENCY OF RESPONSES FROM THE EXPERT REVIEWERS

No.	Items	Need very detail explanations	Frequency (n=6) Need some explanations	Is easy to understand
Q1.	Layer of technology			
	Physical	0	2	4
	Interaction	0	0	6
	Style of	1	2	3
Q2.	Presentation			
	Development			
	Process			
	Pre-production	0	0	6
	Production	0	2	4
	Post-production	1	2	3
Q3.	STRATEGY			
	<b>Information</b>			
	Show product characteristics	0	1	5
	Price	1	0	5
	Descriptions			
	Include product Distribution	1	0	5
	<b>Influence</b>			
	Show product	0	2	4
	Quality			
	Sales promotion	1	0	5
	Free gift and	1	0	5
	Rewards			
	<b>Emotion</b>			
	Happiness	0	0	6
Trust	0	0	6	
Self-expression	2	1	3	
GENERAL				
TACTICS				
<b>Attention</b>				
Brand identifiers	1	1	4	
Slogans &	1	0	5	
Taglines				
Credible	0	2	4	
Spokesperson				
<b>Message</b>				
Powerful text	1	1	4	
Simplicity and	1	2	3	
Clarity				
<b>Acceptance</b>				
Demonstration product problem	0	3	3	

	and solution			
	Data evidence or Testimonial	1	1	4
	Endorsement by celebrities, expert or customer	0	2	4
<b>MEDIA SPECIFIC TACTCS</b>				
<b>Still Media</b>				
	Headline	1	2	4
	Pictures	0	2	4
	Text	1	2	4
<b>Motion Media</b>				
	Scenes	1	2	3
	Voices	0	2	4
	Animation	1	2	3
	Graphic	1	2	3
	Music and sound	0	2	4
	Video	1	2	3
	Transition	0	3	3
	Effect	1	2	3
	Audio	1	2	3
<b>Interactivity</b>				
	Navigation	1	1	4
	Interaction	1	1	4
	Remote control	1	2	3
	Hand gesture	1	1	4
	Voice recognition	1	1	4
	Touch screen	0	1	5
	<b>Yes</b>	<b>Yes</b>	<b>No</b>	
Q4.	The connections and flows of all the components are logical.	5	1	
Q5.	The model is usable to the development of interactive advertising.	6	0	
Q6.	The model is useful for the implementation of iTV advertising.	6	0	
Q7.	Overall, the conceptual model is readable / feasible.	6	0	

Note. Q1 = Question 1

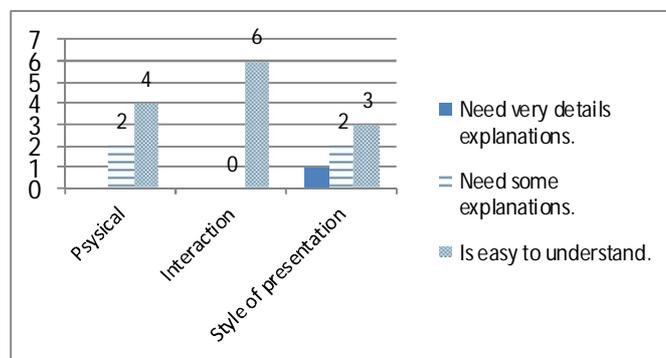


Figure 2: Clarity of terminology (layer of technology)

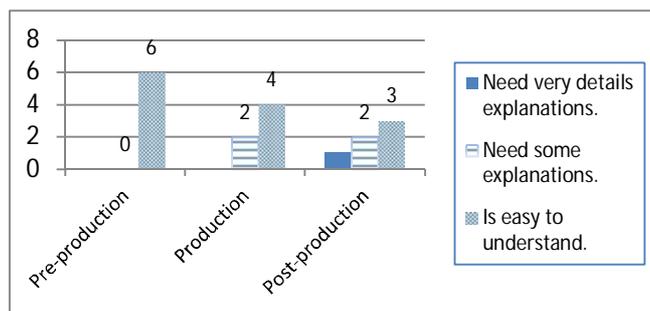


Figure 3: Clarity of terminology (development phases)

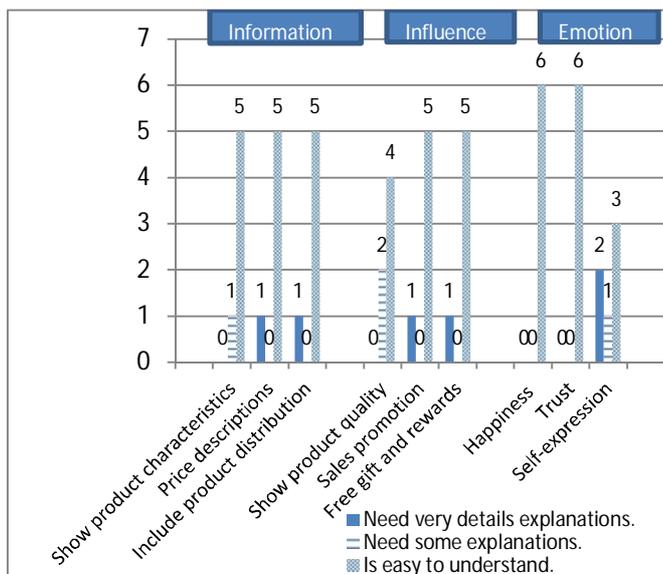


Figure 4: Relevancy of elements on impulse purchase component (Strategy)

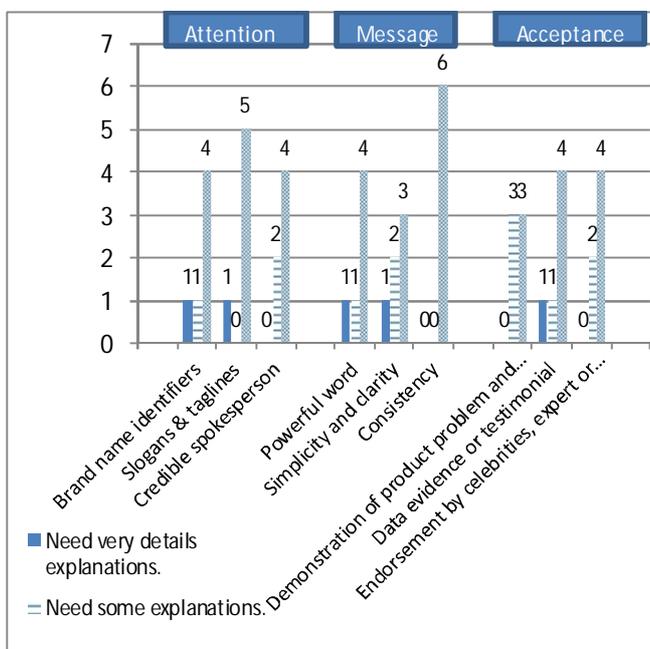


Figure 5: Relevancy of impulse purchase component (General Tactics)

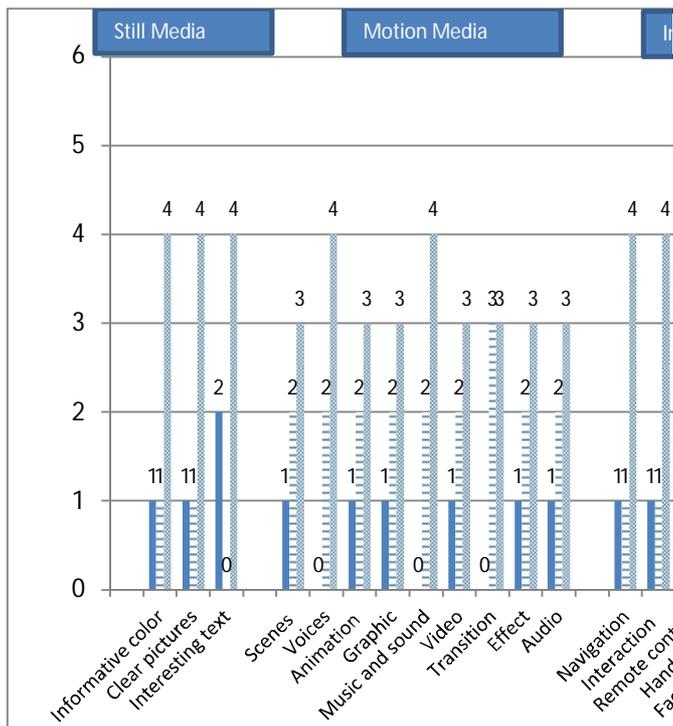


Figure 6: Proposed elements on impulse purchase (Media Specific Tactics)

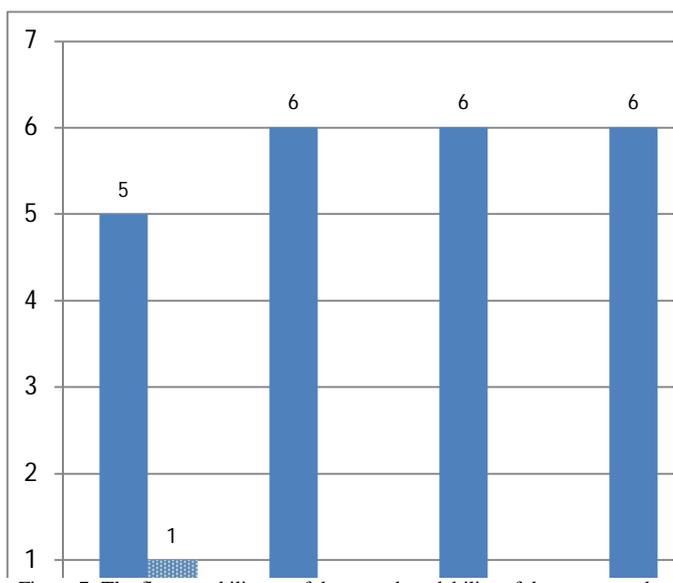


Figure 7: The flow, usability, usefulness and readability of the conceptual design model

As shown in Figure 2, Figure 3, Figure 4, Figure 5, Figure 6, and Figure 7, majority of the experts agreed that the proposed conceptual design model for iTVAdIP contains relevant elements, readable, clear logical flows, usable the development of a iTVAdIP and readable. In addition, further comments from the experts were also recorded during the reviews as recorded in Table 3.

TABLE 3: FURTHER COMMENTS FROM THE EXPERTS

Expert	Comments
Expert 1	<ol style="list-style-type: none"> <li>1) Some of the sequence in the development process could be improved.</li> <li>2) The tactics are well stated but the motive why consumers impulse purchase needs to further understood.</li> <li>3) Please also refer to S-O-R framework and look back on theories.</li> <li>4) She gives suggestion to add some elements in the model; scripts; visual copy; visual appeal; and instant gratification .</li> </ol>
Expert 2	<ol style="list-style-type: none"> <li>1) All the materials are in the chart. The flow might need some readjustment.</li> <li>2) The development process is clear and useful as a guide.</li> <li>3) The model is comprehensive.</li> <li>4) The details provided are useful to increase impulse purchase.</li> <li>5) The use of word for self-expression might be change to self-belonging or self-identity.</li> </ol>
Expert 3	<ol style="list-style-type: none"> <li>1) The basic ideas of this model are clear to show the advertiser/the advertising agency to create or to develop a creative or persuasive message (advertising message to influence customer/consumer).</li> <li>2) Need to add rational or logical appeal instead of emotional appeal.</li> <li>3) The voice element could be narrator.</li> </ol>
Expert 4	<ol style="list-style-type: none"> <li>1) The model is good and consists of general knowledge of iTV advertisement.</li> <li>2) Need to narrow down some more deep study especially the strategy part.</li> <li>3) This is the advertisement in this social media era, I think with careful planning and research you are moving into the right direction.</li> <li>4) Personally I think the emotional part is lacking, you must create a strategy of 'want' and 'must buy' from the audience.</li> <li>5) He give suggestion to focus on the basic one; use the right headline; the honest message; know the target audience and their purchasing; pattern, study how your competitors are doing and their strategy; then finally using the right media.</li> </ol>
Expert 5	<ol style="list-style-type: none"> <li>1) Need to look on the several factors to be considered such as psychological factors, technical factor, and external factor.</li> <li>2) Measuring the impulse purchase effect on a single medium/channel (IPTV) might need detail explanation.</li> <li>3) Your model is interesting and gives benefit for advertiser and advertising agencies to evaluate the creativity of advertisement before it goes on air.</li> <li>4) He gives clear definition on impulse purchase that suitable for this study.</li> <li>5) Maybe your project could lead to a successful cross-culture or international academic cooperation.</li> </ol>
Expert 6	<ol style="list-style-type: none"> <li>1) Need to give explanation on pre airing.</li> <li>2) The model is readable and feasible.</li> <li>3) Need to include the explanation on for each item to be more comprehensive.</li> <li>4) The explanation can be expresses in a matrix for readability.</li> <li>5) The model should not target the specific motive for the study.</li> <li>6) The model should explain the phenomena of impulse purchase.</li> </ol>

From the comments as depicted in Table 3, it can be concluded that the majority of the experts agreed that the model is comprehensive and useful to guide advertiser and advertising agencies to create creative advertisement that can attract consumers to buy the product impulsively. However, half of the experts inquired for clearer explanations on the meaning of impulse purchase and need elaboration for each impulse purchase element in the conceptual design model. Also, three of them gave advice and suggestion to add some words for the existing impulse purchase elements. They also suggested ways to improve the components in conceptual design model of iTVAdIP.

#### *D. Reviewed Conceptual Design Model of iTVAdIP*

Regarding comments on the **development process**, majority of the experts agreed that the development process is clear and useful as a guide for advertiser to develop a creative iTV advertising that can attract consumers. However, there are some comments and suggestions from Expert 1 and Expert 2 to improve the sequence in the development process. They gave suggestion to add elements under pre-production phase which are "Analysis on how competitors are doing and what are their strategies" and "choose the right media". Those elements were added under the preproduction phase for the development process. In addition, Expert 6 gave suggestion to elaborate the element of pre airing under post-production phase, however the detail explanations on pre airing are already described clearly in Azizah et al. [11].

This study also focuses on **layer of technology** explains how iTV advertising works. Majority of the experts could understand the meaning for physical and interaction elements very well. However, some experts need clearer explanations on the style of presentation element. Detailed explanations on styles of presentation element described clearly in Azizah et al. [11].

The model also includes of the most important element which is **impulse purchase element**. This element will guide advertisers and advertising agencies to create creative advertisement before it goes on air. Regarding comments on the impulse purchase elements, some experts gave suggestions on "need to better understand the motive why consumer's impulse purchase" (Expert 1), "should give clearer explanation on impulse purchase definition" (Expert 5) and "should explain in details the phenomena of impulse purchase" and must include explanation for each elements of impulse purchase which can be expressed in a matrix for readability and comprehensive (Expert 6). However, all of the comments regarding clear explanation on impulse purchase and the elaboration for each impulse purchase elemental ready described in detail in Azizah et al. [10][11].

Interestingly, Expert 2 also pointed out her concern about the elements under motion media. She gave suggestion to group the elements under motion media into four categories which are video (scene); audio (voice, music, sound); animation (effect, transition), and graphic to make it clearer and easy to understand. This study agrees with the suggestion.

Furthermore, two experts gave suggestion to add existing impulse purchase elements term such as voice for narrator, scene or storyline, interactive visual under motion media; honest message under message; used the right headline under still media; and interactive interaction under interactivity. So to be comprehensive, this study agrees to all the suggestions from the experts. In addition, this study also counters the comment about the use of "self-reflection" word to change to "self-identity" to be more understandable. Interestingly, one of the experts also pointed out her concerns about adding rational or logical instead of emotion. However, information element under strategy consider as rational or logical.

To answer the comments and suggestions regarding flows and connection from Expert 2 "all the important materials and elements are in the chart. However, the flow and connection might need some readjustments", which means that, the main component (development process, layer of technology and impulse purchase) need to be rearranged to make it clearer and easy to understand. So, this study agrees with the suggestion to provide logical flows by putting arrows to avoid confusion.

This study also counters the comments by Expert 3 and Expert 1 about advertising theories "refer to S-O-R framework" and this study agrees with the suggestion. So, the S-O-R framework theory was added to the proposed model

Based on the explanations above, the conceptual design model for interactive television advertising toward influencing impulse purchase tendency is revised and redesigned to give better impression and enhance readability of the model. The revised model is presented in Appendix 1.

#### V. CONCLUSION

Overall, findings from the expert reviews have shown that majority of the experts agreed that the conceptual design model of iTVAdIP is a useful guide for advertiser and advertising agencies to develop a creative iTV advertisement that can influence consumer to buy the product impulsively. In addition, most of the experts agreed that the connections and flows of all the components in conceptual design model are logic and readable and all the components and elements in the model are clear and stated well. By developing this conceptual design model for iTVAdIP will also contributed to the factors of business success.

#### REFERENCES

- [1] Interactive Advertising Bureau, IAB. An Interactive Advertising Overview. Retrieved from <http://www.iab.net/media/file/iTVCommitteeWhitePaper7.pdf>.2013
- [2] Forecast Advertising.. Advertising Forecast Magnaglobal, 2011
- [3] Hausman, A. A Multi-Method Investigation of Consumer Motivations in Impulse Buying Behavior. *Journal of Consumer Marketing*, 17:5, 403-419, 2000
- [4] Eroglu, S. A., Machleit K. A., & Davis L. M. Atmospheric Qualities of Online Retailing: A Conceptual Model and Implications. *Journal of Business Research*, 177-184, 2001.
- [5] Yu, J., Ha, I., Choi, M., & Rho, J., Extending the TAM for a TCommerce, *Information & Management*, 965-976, 2005.

- [6] Azizah, C.O.,Norshuhada, S., Siti Mahfuzah, S., Ariffin, A.M., Sabrina, M.R. .Identification of Research Gap: T-Commerce Impulse Purchase for iTV advertising. International Conference on Informatics and Creative Multimedia 2013 (ICICM'13). September 3-6, 2013.Kuala Lumpur, Malaysia, 2013.
- [7] Siti Mahfuzah, S., Sabrina, M.R., Ariffin, A.M., Azizah, C.O., .Diffusion of iTV advertising in Malaysia: the industry players' perspectives. International Conference on Informatics and Creative Multimedia 2013 (ICICM'13). September 3-6, 2013.Kuala Lumpur, Malaysia, 2013.
- [8] Azizah, C.O., Norshuhada, S., & Siti Mahfuzah, S. Impulse Purchase in iTV Advertising: a Conceptual Model of Gap Analysis. International Journal of Computer Application. 91(11), 2013.
- [9] Azizah, C.O., Norshuhada, S., & Siti Mahfuzah, S.Document Analysis Framework for Modelling iTV Advertising Towards Impulse Purchase. Brisjast Journal Science & Technology, 2(5),184-198, 2014.
- [10] Azizah, C.O., Norshuhada, S., & Siti Mahfuzah, S. An Impulse Purchase Conformity Tool for Interactive Television Advertising. Knowledge Management International Conference (KMICE). Langkawi, Malaysia, 2014.
- [11] Azizah, C.O., Norshuhada, S., & Siti Mahfuzah, S. Conceptual Design Model of Interactive Television Advertising Towards Impulse Purchase. ARPN Journal of Engineering and Applied Sciences, 2014.
- [12] Kitzinger, J. Qualitative research: Introducing focus groups. British Medical Journal, 311(7000), 299-302, 1995.
- [13] Morgan, D. L. Focus Groups. Annual Review of Sociology, 22, 129-152, 1996.
- [14] Siti Mahfuzah, S., Conceptual design model of computerized personal-decision aid (ComPDA), PhD Dissertation, 2011.

APPENDIX 1. THE REVIEW OF CONCEPTUAL DESIGN MODEL OF INTERACTIVE TELEVISION ADVERTISING TOWARD INFLUENCING IMPULSE PURCHASE TENDENCY (ITVADIP)

