

## Identification of Research Gap: T-Commerce Impulse Purchase for iTV advertising

<sup>1</sup>Azizah, Che Omar, <sup>2</sup>Norshuhada, Shiratuddin, <sup>3</sup>Siti Mahfuzah, Sarif, <sup>4</sup>Ariffin, Abdul Mutalib, <sup>5</sup>Sabrina, Mohd Rashid,

Universiti Utara Malaysia

<sup>1</sup>co.azizah@uum.edu.my; <sup>2</sup>shuhada@uum.edu; <sup>3</sup>ctmahfuzah@uum.edu.my; <sup>4</sup>amariffin@uum.edu.my; <sup>5</sup>sabrina@uum.edu.my;

*Abstract—iTV advertising provides consumers with new sales channels as well as gives higher return to the advertisers. T-commerce is a tool in iTV advertising that enables users to buy something directly through television screen which is more flexible, comfortable, and convenient. Studies show that there is a necessity to examine the factors influencing individuals to purchase products on television shopping program. However, research effort on this is minimal. Also, design models that are dedicated to increase impulse purchase on iTV advertising are scarce and do not include consumer behaviour regarding impulse purchase. In fact, research on the design of t-commerce for iTV advertising for effective marketing strategies is still lacking. Therefore, such a gap ought to be investigated which could contribute to the fields of business and interactive advertising.*

*Keywords; t-commerce, interactive TV advertising, impulse purchase*

### I. INTRODUCTION

Traditional TV advertising is less efficient and a revised interactive advertising model is required to commercialize the content on TV [15]. The traditional TV advertising uses push model, where advertisers send information to passive and non-interactive viewers [25]. On the contrary, interactive advertising in iTV is based on the original pull model, where the viewers have active access to the contents and active interaction with the services, where they are able to purchase or receive the information requested for specific goods via remote control [18].

On top of that, iTV advertising allows users to have two-way communication by sending or requesting additional information back to the advertiser or programmer [15]. It also could convert the medium of TV from a passive involvement to an active involvement in order to encourage viewers to do purchasing and having interaction with the TV screen [19]. Other than that, iTV also provides new opportunities for advertisers to increase the effectiveness of TV advertising messages for interactive advertising [24].

Additionally, iTV advertising provides audiences with new sales channels and gives higher return to the advertisers [33]. It is the most suitable method in promoting services and products since it provides a medium with ease of use, more efficient, high visibility, and could give viewers more enjoyment to watch. In conjunction, Television Advertising

Survey [33] found that more than half of revenue in US comes from TV advertising which achieved to \$41.1 billion, from the total of \$79.5 billion. The users have been discovered to purchase new products or services because they view on TV [7]. However, advertising and marketing people have to know how to attract and influence customers to purchase the products on TV.

There are different types of interactive advertising to attract viewer's attention and provide with specific information. According to NDS Business Consulting [23], interactive advertising can be categorized into response, jump, tag, incentive, targeted, viewer response, and impulse purchase. Impulse purchase can influence and allow the viewers to purchase products while watching the advertisement [16]. By understanding the consumer behavior and environmental psychology, it will easily influence users to make purchases and access the products or services.

Previously, marketing team realized the importance of impulse purchase phenomenon in traditional commerce, which allows the marketers to attract customers in many ways such as store position products, store promotion, product packaging in an enticing way to increase impulse purchase, and getting consumers to be impulsive [34]. Through the years, impulse purchase has also been made easier by innovations, such as telemarketing, debit cards, and credit cards. In the last decade, rapid developments in information technology have substantially changed the landscape of consumer behavior. The retailing availability for the Internet has brought about an increase impulse purchase [31]. Consequently, impulse purchase accounts for a large volume of product sales every year [1], contributing to t-commerce.

For t-commerce, consumers' buying opportunities will be expanded for an increased ease to make purchases and increased accessibility to products and services. Additionally, t-commerce will eliminate the constraints in terms of space and time that are always experienced by shoppers in the context of traditional commerce [29]. Goods and services are purchased easily on TV using a remote control instead of a telephone, PC, or PDA [17]. In fact, in the Europe and USA, Digisoft [8] found that the successful of t-commerce adoption was excellent. In detail, 46% of

consumers are happy and interested in services provided by t-commerce. Therefore, this study expects that the implementation of t-commerce in Malaysia could recolor the nationwide marketing and advertising landscape.

## II. INTERACTIVE TELEVISION ADVERTISING

The Malaysian advertising landscape is progressively shifting its traditional media forms to the emergent new media advertising, but is still at a maturing stage [21]. With household broadband penetration at an explosive growth of 61.4% and the Internet Protocol Television (IPTV) subscription increased its size fivefold by the third quarter of 2011 [21], while there are tremendous opportunities for growth the potentials of interactive advertising in Malaysia, which is prospective to be fulfilled. According to Interactive Advertising Bureau [15], the number of TV household has shown the largest ownership. As forecasted in Bernama [3], the growth for this would be expected to come from digital advertising and the huge potential in TV and creative production. It means that TV is the largest important hardware for users in many purposes and activities. One of the purposes of TV is to provide opportunities for advertising [15].

In addition, most of the countries show that advertisement on TV has been an effective way for marketing products and bring effective strategies for marketing [15]. Television Advertising Survey [33] discovered that in 2011 almost \$169 billion was generated by advertising on TV, and it will achieve up to \$243 billion by 2016. It shows that, TV advertising is an important aspect for marketing around the world. TV advertising brings new opportunities for advertisers to reach higher consumers. However, lack of interactive advertising made advertisers to use traditional TV advertising in promoting products. Traditional TV advertising is less effective in promoting product there have no interaction between viewer and television and has fail to increase the largest market on traditional television advertising [9]. Therefore, iTV is needed to make the TV advertisement more interactive and effective.

According to Interactive Advertising Bureau [15], iTV can be defined as a television viewing experience that enables users to request and send information back to the advertiser and programmer. It provides richer entertainment, information, and is able to provide two-ways communication between the viewers and TV. iTV allows viewers to take part and actively participate in TV programming. User can use remote control to interact with TV and make TV more enjoyable and productive [10]. According to Cauberghe et al. [35] there are 56% of TV audience using TV for entertainment, 79% of TV viewers like to interact with TV programming, 73% of TV audience want to have two-way communication with TV advertising and 58% of viewers want to request for a free sample during

advertisement and TV viewers like to ask free samples through commercials. It shows that, iTV is able to take immediate actions during an advertisement including information request, request for a coupon, and asking for local retail locations. There are some genres, formats and contents for iTV such as electronic program guides, Personalized TV, personal video recorders, and video demand options [10].

## III. T-COMMERCE

According to Yu et al. [17], t-commerce is electronically-mediated commerce over digital iTV. T-Commerce may involve purchase orders via TV by clicking through with the TV remote control. Development of services on iTV enables it to become an e-commerce medium merging voice, video, and data transactional, and combines the interactivity of the Internet with high quality TV video [37]. T-commerce is expected to change the style of an individual's purchasing and to create new business opportunities for providers. There are two types of T-Commerce application [17], which is homeshopping and homebanking. Homeshopping allows viewers to purchase products directly on TV. Meanwhile, homebanking allows viewers to check their balance and account status on TV.

Development of iTV Service allows it to be a medium for e-commerce which combines video, audio, and data to make commercial transactions (t-commerce), and combine the interactivity of the Internet with high-quality TV video [37]. T-commerce is expected to change the style of an individual's purchase and to create new business opportunities for suppliers.

A conceptual Model for t-commerce has been proposed by Ghisi et al. [2]. It outlines three characteristics: Presentation, Form of payment, and Content Associatively. Firstly, t-commerce presentation content of sales channel, program related, interactive advertising, and other initiatives. The way of payment has been proposed by Ghisi et al. [2]. It consists of payment by credit card, direct debit, and other forms. In addition there are two types of services related to TV content which is contextualized and independent. However, this model does not include consumer behavior regarding impulse purchase.

## IV. IMPULSE PURCHASE

Several researchers have proposed variety of definitions of impulse buying. As an example, Rook [5] defines it as an unplanned purchase, which happens when a consumer experiences positive effects when exposed to a stimulus. Later, Piron [11] integrated the definition and proposed a new comprehensive definition of impulse buying. Particularly, it contains four characteristics which are suggestion, reminder, pure, and planned impulse buying. Suggestion impulse purchase occurs when a consumer sees a product and tries to visualize the need for it [13].

Meanwhile, reminder impulse purchase occurs when a consumer is reminded to purchase the product when he or she sees it [13].

Meanwhile, pure impulse purchase occurs when a user purchases products impulsively. The consumer may remember about running out of that product or may still remember an advertisement about the interest of item, which sparks the impulse purchase. On the contrary, planned impulse buying occur when consumers do not plan to do any purchasing, but search for and take advantage of promotions in the market [13]. The common link across these different types of impulse purchase is that the purchase is a result of an exposure to the stimulus [11].

A few researchers have studied impulse purchase behavior for different requirements such as traditional retail store [30], online shopping [4], website [36] [28] and Promotional TV Program [16]. In conjunction, Dholakia [34] has proposed one of the most detailed theoretical frameworks that explains the impulse buying process. Meanwhile, Dittmar, Beattie, and Friese [12] explain why consumers purchase products impulsively and Adelaar, Chang, Lancendorfer, Lee, and Morimoto [32] studied on how media formats have an influence on impulse buying intentions. However, previous research does not include how impulse purchase occurs in t-commerce context. As a result, this study will be focusing on impulse purchase behavior on t-commerce context.

#### V. IDENTIFICATIONS OF RESEARCH GAP

T-commerce is a tool in iTV advertising that is flexible, comfortable and convenient [25]. It provides various new opportunities for advertisers to market more effectively [24]. Studies show there is a necessity to examine the factors influencing individuals to purchase product on television shopping program, however research effort on this is minimal [16].

Researchers have studied impulse purchase behavior for different domains such as traditional retail [30], online shopping [4], website [36][28], and Promotional TV Program [16]. However, particularly a design models that are dedicated to increase impulse purchase on iTV advertising are scarce and do not include consumer behaviour regarding impulse purchase.

It shows that there are interests that could be further looked into. On the other hand, a model for t-commerce has been proposed by [2]. However it does not include consumer behaviour regarding impulse purchase. Perhaps an extended study on the model is required to ensure that practitioners have a good reference for implementation.

In fact, research on the design of t-commerce for iTV advertising for effective marketing strategies is still lacking [14]. Therefore, such a gap ought to be investigated which could contribute to the fields of business and interactive advertising.

#### VI. CONCLUSION

T-commerce is a tool in iTV advertising that purposely facilitates the purchase of services and goods using a remote control through TV at home, instead of a telephone, PC, or PDA. As a result, it will make TV advertising more compelling and at the same time eliminates the constraints in terms of time and space that are always experienced by buyers in the context of traditional commerce.

This study believes that there are necessities to examine the factors influencing individuals to purchase products and services on TV shopping program. In addition, the design model of t-commerce impulse purchase (TCIP) is really needed for iTV advertising in order to bring a great deal of value drives, such as audio visual attractiveness, two-way interaction and customer-centered services to the customer and enterprises.

In addition, this design model is important in order to provide more vivid images, words, video, and audio that may make TV audience feel enjoy and believe that iTV bring more attractive than traditional TV or internet. Based on this, this study initially proposes that the model should contain dimensions as outlined in Figure 1. Currently, this very initial model has not been reviewed, hence it will be discussed in detail in future publications.

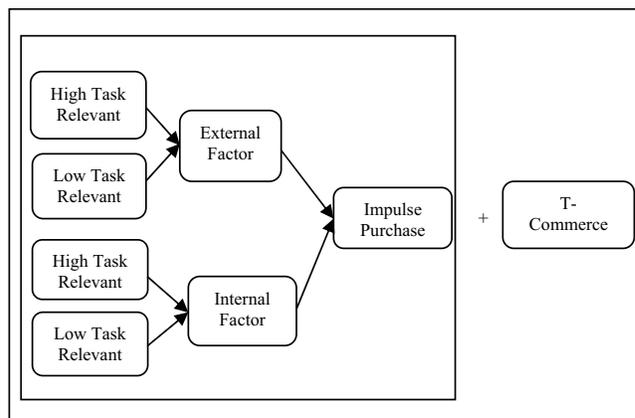


Figure 1: Proposed Conceptual Model for T-Commerce Impulse Purchase in Interactive Television Advertising

It is anticipated, that the model in figure 1 can help practitioners in related fields to develop effective marketing strategies and help in earning substantial revenue for broadcasting companies. Besides that, having this model will help not only the advertisers and media organizations to provide further lights in interactive advertisement, but also TV audience to interact with the advertisement on TV screen that acts as a purchasing portal. It will give them higher confidence level and satisfied with the efficiency of TV advertisements. In addition, the proposed model will expand economy growth for the nation.

#### ACKNOWLEDGMENT

The authors wish to thank you to Universiti Utara Malaysia (<http://www.uum.edu.my>) and Ministry of Education Malaysia for sponsoring this study.

#### REFERENCES

- [1] A. Hausman, "A Multi-Method Investigation of Consumer Motivations in Impulse Buying Behavior". *Journal of Consumer Marketing*, 17:5, 403-419. 2000
- [2] B.C. Ghisi, G.F. Lopes, and, Siqueira. "Conceptual Model for T-Commerce in Brazil". Federal University, Santa Catarina. Brazil, 2009
- [3] Bernama.com (2008), "Malaysian Adex to Reach RM6 billion This Year with 8% Increase," 2008, <http://bernama.com/bernama/v6/index.php>
- [4] C.H.Kwek, H.P.Tan, and T.C.Lau, "Investigating the Shopping Orientations on Online Purchase Intention in the e-Commerce Environment: A Malaysian Study,". *Journal of Internet Banking and Commerce*, vol. 15, no. 2, 2010
- [5] D.W.Rook, "The Buying Impulse". *Journal of Consumer Research*, 189-199, 1987
- [6] D.W.Rook, and S.J. Hoch (1985), "Consuming Impulses", *Advances in Consumer Research*, Vol. 12, eds. Morris B. Holbrook and Elizabeth C. Hirschman, provo, UT: Association for Consumer Research, pp. 23-27.
- [7] Deloitte, "TV Shopping 2011. Perspectives on television in words and number," 2011. [http://www.deloitte.com/view/en\\_GB/uk/industries](http://www.deloitte.com/view/en_GB/uk/industries)
- [8] Digisoft. "T-Commerce". 2004 <http://www.digisoft.tv/products/tcommerce.html>
- [9] E.Erdogan, (2004). "An On-Demand Advertising Model For ITV". Master Thesis. Georgia Institute of Technology, 2004
- [10] F.Jensen, Jens. "ITV: New Genres, New Format, New Content,". *Proceedings of the Second Australasian Conference on Interactive Entertainment*, Sydney, Australia, 2005
- [11] F.Piron, "Defining Impulse Purchasing". *Advances in Consumer Research*, 18, 509-514, 1991
- [12] H.Dittmar, J.Beattie, & S.Friese. "Objects, Decision Considerations and Self-Image in Men's and Women's Impulse Purchases". 1996 *Acta Psychologica*, 187-206.
- [13] H.Stern, "The Significance of Impulse Buying Today". *Journal of Marketing*, 26:2, 59-62. 1962
- [14] L.Brown, K.D. Rijk, K.Patel, Y.Twum-Ampofo, and J.P. Belle, "T-Commerce: an Investigation of Non-Adoption in South Africa," *Proceeding of CISTM*, Chandigarh, India 2006.
- [15] IAB. Interactive Advertising Bureau. *An Interactive Advertising Overview*. <http://www.iab.net/media/file/iTVCommitteeWhitePaperV7.pdf>, 2011
- [16] J.Park, & S.J.Lennon, "Psychological and environmental antecedents of impulse buying tendency in the multichannel shopping context". *Journal of consumer Marketing*, 23 (2), 56-66, 2006
- [17] J.Yu, I.Ha, M.Choi, and and J.Rho, (2005). "Extending the TAM for a TCommerce, Information & Management", 965-976. 2005
- [18] K.Kelly, and G.Wolf, "PUSH! Kiss your browser goodbye: the radical future of media beyond the Web. Wire," [http://www.wired.com/wired/archive/5.03/ff\\_push.html](http://www.wired.com/wired/archive/5.03/ff_push.html), 1997
- [19] Kingsford, I. "Intreactive TV Advertising: Turning Viewers Into Direct Leads Without A Set-Top Box," , [www.broadcastpapers.com](http://www.broadcastpapers.com), 2003
- [20] L.Xiang, & Q.Wang, "Influence of Interactive Television on Electronic Commerce," 2009 International Conference on Management of e-Commerce and e-Government, 513-516. doi:10.1109/ICMeCG.2009.53, 2009
- [21] MCMC, Malaysian Communications and Multimedia Commission, "Advertising Development in Malaysia – Catching Eyeballs in Changing Media,". [http://www.skmm.gov.my/what\\_we\\_do/Research/industry\\_studies.asp](http://www.skmm.gov.my/what_we_do/Research/industry_studies.asp). 2009
- [22] MCMC, Malaysian Communications and Multimedia Commission, "Communication and Multimedia – Pocket Book of Statistics". [http://www.skmm.gov.my/attachment/Pocket%20Book/Q3\\_2011\\_Eng.pdf](http://www.skmm.gov.my/attachment/Pocket%20Book/Q3_2011_Eng.pdf), 2009
- [23] NDS Business Consulting, "Interactive Advertising Broadcast," <http://www.broadcastpapers.com/data/NDSInteractiveAD01.tn>, 2000
- [24] P.Giotis, & G.Lekakos, (2009). "Effectiveness of Interactive Advertising Presentation Models". *Proceedings of EuroITV'09*, Leuven, Belgium. 2009
- [25] P.Vennou, E.Mantzari, and G.Lekakos, "Evaluating Program-embedded Advertisement Format in Interactive Digital TV". *Proceeding of EuroITV'9*, Leuven, Belgium. 2009
- [26] P.Weinberg, and W.Gottwald, "Impulsive Consumer Buying as a Result of Emotions". *Journal of Business Research*, 10:1, 43-57. 1982
- [27] R.J.Donovan, and Rossiter, "Store Atmosphere: An Environmental Psychology Approach". *Journal of Retailing*, 34-57, 1982
- [28] R.LaRose, "On the Negative Effects of E-Commerce: A Socio-Cognitive Exploration of
- [29] S.A.Eroglu, K.A. Machleit, & L.M.Davis. "Atmospheric Qualities of Online Retailing: A Conceptual Model and Implications". *Journal of Business Research*, 177-184. 2001
- [30] S.E.Beatty, & M.E.Ferrell, (1998), "Impulsive Buying: Modeling Its Precursors," 1998 *Journal of Retailing*, 169-191.
- [31] S.R.Madhavaram, and D.A. Laverie, "Exploring Impulse Purchasing on the Internet", *Advances in Consumer Research*, 31, 59-66, 2004
- [32] T.Adelaar, S.Chang, K.M.Lancendorfer, B.Lee & M.Morimoto, "Effects of Media Formats on Emotions and Impulse Buying Intent," 2003. *Journal of Information Technology*.
- [33] Television Advertising Survey, "Datacenter," 2011, <http://adage.com/datacenter/globalmarketers2011>
- [34] U.M. Dholakia, U.M. "Temptation and Resistance: An Integrated Model of Consumption Impulse Formation and Enactment". *Psychology & Marketing*, 17:11, 955-982. 2000
- [35] V.Cauberger, and P.D. Pelsmacker, (2006). "Opportunities and Thresholds for Advertising on Interactive, Digital TV: A View from Advertising Professionals," 2006.
- [36] Y.Liu, H. Li, and F. Hu, "Website attributes in urging online impulse purchase: An empirical investigation on consumer perceptions". *Decision Support Systems*, 55(3), 829-837. doi:10.1016/j.dss.2013.04.001, 2013
- [37] Y.Simon, and Y.J.Shim, "Interactive TV: VoD meets the Internet," *Computer* 35(7), 2002