Abstract—With the proliferation of multi-channel retailing, developing a better understanding of the factors that affect customers’ purchase behaviors within a multi-channel retail context has become an important topic for practitioners and academics. While many studies have investigated the various customer behaviors associated with brick-and-mortar retailing, online retailing, and brick-and-click retailing, little research has explored how customer shopping value perceptions influence online purchase behaviors within the TV-and-online retail environment. The main purpose of this study is to investigate the influence of TV and online shopping values on online patronage intention. Data collected from 116 respondents in Taiwan are tested against the research model using the partial least squares (PLS) approach. The results indicate that utilitarian and hedonic TV shopping values have indirect, positive influences on online patronage intention through their online counterparts in the TV-and-online retail context. The findings of this study provide several important theoretical and practical implications for multi-channel retailing.

Keywords—Multi-channel retailing; utilitarian shopping value; hedonic shopping value; online purchase

I. INTRODUCTION

One of the most dramatic trends in the shopping environment over the last decade concerns the proliferation of channels that customers can use to interact with retailers [38]. In the context of multi-channel retailing, retailers provide consumers with purchase opportunities through various channels, such as traditional brick-and-mortar stores, online storefronts, and TV shopping channels. As Schröder and Zaharia [46] noted, multi-channel retailers can expand the scope of their sales market in geographical, time-related and goods-related terms. However, the key issue for multi-channel retailers concerns optimal satisfaction of customer needs by simultaneously offering customers multiple channels for alternative utilization [1, 17, 36, 46]. As such, practitioners and academics must strive to understand the factors that affect customer purchase behaviors within a multi-channel retail context.

The proliferation of broadband communication, cable TV, and interactive TV has encouraged many retailers in Taiwan and other countries to take advantage of both TV shopping channels and virtual storefronts to market their products. In recent years, the Taiwan TV shopping market has grown dramatically, and continues to expand. In 2009, Taiwan television shopping sales are expected to reach NTD 54 billion—an increase of 20 percent relative to the previous year [34]. Moreover, TV-commerce is expected to change individual purchasing styles and create new business opportunities for providers (Yu et al, 2005). Exposure to TV-commerce and online channels will affect consumer purchase behaviors in terms of shopping value perceptions. While many studies have investigated customer behaviors related to brick-and-mortar retailing [9], online retailing [8, 12, 20, 23, 31, 45, 47], and brick-and-click retailing [6, 46, 51], little research has explored how customer shopping value perceptions influence online purchase behaviors within the TV-and-online retail context. Furthermore, to date, few studies have attempted to correlate shopping value to retail variables, such as satisfaction [5, 33], customer share [2], and patronage intention [57]. As Noble et al. [39] noted, researchers have examined both utilitarian and hedonic values in single channel studies, but little multi-channel utilization behavior research on these values has been undertaken. The current study is designed to address this gap by conducting empirical research regarding how TV-and-online retailing operations contribute to consumer online purchase behaviors. Specifically, the main objective of this study is to investigate the influence of TV and online shopping values on online patronage intention in a multi-channel retail context.

The remainder of this paper is organized as follows. First, the literature on hedonic and utilitarian shopping values is reviewed, followed by elaboration on the research model and hypotheses. Finally, this study discusses the hypotheses testing results and the theoretical and practical implications of the findings for multi-channel retailing.

II. UTILITARIAN AND HEDONIC SHOPPING VALUE

Research suggests that the shopping experience provides consumers with a combination of utilitarian and hedonic shopping values [3, 4, 10, 11, 24, 28, 30]. Consumers perceive utilitarian value through acquiring the product that necessitated the shopping trip, and can simultaneously perceive hedonic value associated with enjoyment of the shopping experience itself [9, 10]. Utilitarian shopping values reflect the acquisition
of products and/or information in an efficient manner, and therefore can be viewed as a more task-oriented, cognitive, and non-emotional shopping characteristic. However, hedonic shopping values reflect the value received from the multisensory, fantasy and emotive aspects of the shopping experience [4, 26, 28]. As such, consumers may choose to shop because they feel that comparing between merchants is convenient in terms of evaluating price/quality ratios, and conserving temporal and psychological resources [21, 35]; they may also choose to shop for entertainment purposes rather than simply for task completion [4, 29, 35].

Satisfaction and perceived value are conceptually distinct constructs [33, 58]. Satisfaction is best being conceptualized as an affective variable [41, 57], while perceived value should be conceptualized and measured as a cognitive construct [43]. O’Cass and Cotte [44] noted that utilitarian value incorporates more cognitive aspects of attitude, such as economic “value for the money” [59] and judgments regarding convenience and time savings [27, 49]. Furthermore, customer satisfaction differs from perceived value, as the former is universally agreed to be a postpurchase and postuse evaluation [40], while the latter can be generated without the product or service being bought or used [48].

Perceived value has been used as part of a theoretical framework [4, 9, 24, 25, 28, 39]. Previous research has also supported the relationships between shopping value and important business outcomes including satisfaction, word of mouth communication, patronage intention, and loyalty [5, 14, 28, 33, 57]. A multi-channel retailer, which takes advantage of both TV and online channels, can provide consumers with a combination of utilitarian and hedonic shopping values on each of the individual channels. As such, both TV and online shopping values are expected to influence online patronage intention. Although the influence of shopping values on patronage/repatronage intention within a single-channel retail context has been well explored [9, 28, 50, 54], the effect of TV and online shopping values on online patronage intention within a multi-channel retail environment has not been addressed. This study attempts to investigate how the synergy between TV and online shopping value generates to influence consumer online patronage intention.

### III. RESEARCH MODEL AND HYPOTHESIS

The research model used to guide this study is shown in Figure 1; it suggests that the TV and online shopping values of a multi-channel retailer affect its customer online patronage intention. Within the traditional, unidirectional TV shopping environment, many TV shoppers find it inconvenient to make purchases due to the fact that they are required to make a phone call to complete the purchase. In addition, searching for and/or buying products on the Internet often provides consumers with additional product information and even better prices. Hence, some consumers watch TV shopping programs to gather initial product information, and then move online to evaluate alternatives and make their purchase. Further, given the seamless, convenient customer purchasing services available on the Internet, very few customers gather product information online and then make their purchase through the service center of a TV shopping channel. Thus, this study focuses on the effect of TV and online shopping value perceptions on online patronage intention.

![Fig. 1 Research model](Image)

Prior research suggests a link between utilitarian and hedonic shopping values, patronage intention, and loyalty [28]. Babin et al. [4] contend that consumers who perceive utilitarian value from their shopping experience are likely to have accomplished the shopping task of product acquisition. Empirical studies also support the relationship between utilitarian shopping values and purchase intentions [5, 28, 42]. Thus, it is expected that utilitarian online shopping values will have a positive influence on online patronage intention.

Further, this study argues that in a multi-channel retail context, the utilitarian shopping value provided by a retailer’s TV shopping channel can influence customer online patronage intentions – consumers who perceive high usefulness from various aspects of a retailer’s TV shopping channel are more likely to search for, evaluate, and purchase products/services from the same retailer’s website than consumers who perceive low usefulness from those same aspects. Taking into account the fact that online shopping channels can provide sufficient product information and convenient product comparison mechanisms, some consumers may initially search for product information on TV shopping channels, and then move online to evaluate alternatives and make their purchase. Verhagen and Dolen [55] suggest that offline store images may influence online purchase intention in a multi-channel retail context. This also implies that consumers may transfer their utilitarian TV shopping experience or perception into online purchase intention. Thus, the following hypotheses are posited:

- **H1:** Utilitarian online shopping value has a positive influence on online patronage intention.
- **H2:** Utilitarian TV shopping value has a positive influence on online patronage intention.
Hedonic value is also associated with patronage intention since affective experiences within a store can be important antecedents of approach or avoidance motivations, such as patronage intentions [18]. Previous research also provided empirical support for the positive relationship between hedonic shopping value and patronage intention [42, 56]. Thus, online hedonic shopping value is expected to have a positive influence on online patronage intention.

In addition, this study contends that in the context of multi-channel retailing, the hedonic shopping value rendered by a retailer’s TV shopping channel can influence its customer online patronage intention because customers who perceive high enjoyment from a retailer’s TV shopping channels are more likely to purchase from the same retailer’s electronic storefront than are those who perceive low enjoyment from the same stimulus. Verhagen and Dolen [55] contend that offline store images may affect online purchase intention in the context of multi-channel retailing. It is expected that consumers may transfer their hedonic TV shopping experience or perception into online purchase intention. Thus, this study posits the following hypotheses:

H3: Hedonic online shopping value has a positive influence on online patronage intention.
H4: Hedonic TV shopping value has a positive influence on online patronage intention.

In addition to the direct influence of shopping value on online patronage intention, the current study suggests that TV shopping value indirectly influences online patronage intention through the mediation of online shopping value. Since TV shopping programs in Taiwan usually introduce few products at one time, the variety of product information provided during these programs is limited. As such, TV shoppers are likely to seek out additional information online in order to further evaluate alternatives and make purchase decisions. If consumers find the product information offered by a retailer TV shopping channel to be attractive and useful, they are likely to believe that the same retailer’s online storefront will also provide similar utilitarian value. Similarly, if consumers perceive the programs rendered by a retailer’s TV shopping channel to be enjoyable and interesting, they may tend to believe that the same retailer’s website will also provide hedonic value.

In sum, within the TV-and-online retail context, consumers who perceive high (low) utilitarian and hedonic value from a retailer TV shopping channel are expected believe that the same retailer’s online storefront will also provide high (low) utilitarian and hedonic value. Verhagen and Dolen [55] found that offline store images had indirect, positive influences on online purchase intention through online store images in a brick-and-mortar retail context. Thus, based on the above, this study hypothesizes that TV shopping value dimensions have indirect, positive effects on online patronage intention through their associated online counterparts:

H5: Utilitarian TV shopping value has a positive influence on utilitarian online shopping value.
H6: Hedonic TV shopping value has a positive influence on hedonic online shopping value.

IV. METHODS

A. Measures of the Constructs

Selected measurement items must represent the concept about which generalizations are to be made to ensure the content validity of the measurement [7]. The measures of the online and TV shopping values (i.e., utilitarian online shopping value, hedonic online shopping value, utilitarian TV shopping value, and hedonic TV shopping value) were adapted from previous shopping value scales [4, 22, 28]. Further, items adapted from Venkatesh and Davis [53] were used to measure online patronage intention. Likert scales (ranging from 1 to 7), with anchors ranging from “strongly disagree” to “strongly agree” were used for all construct items. The survey items were pre-tested by a small number of shopping experts and were modified to fit the multi-channel retailing context studied. The survey items are listed in the Appendix.

B. Data Collection

The focus of this study is an investigation of shopper behaviors in TV and online channels belonging to a single retailer. Data used to test the research model was gathered from a convenience sample of 116 consumers in Taiwan. Respondents ranged from 18 to 50 years of age. Of the respondents, 45 (38.8%) were male and 71 (61.2%) were female. 57 (49.1%) had completed one college or university degree. Most of the respondents had more than five years of Internet usage experience (73.2%). Respondents were first asked whether they had ever used a specific multi-channel retailer’s TV and online shopping channels. If they replied in the affirmative, they were invited to participate in the survey. Respondents were asked to write down the name of the TV-and-online retailer they had used to search for product information and/or make a purchase. The respondents were also instructed to answer all questions by assessing the retailer they had identified. For each question, respondents were asked to circle the response that best described their degree of agreement.

V. DATA ANALYSIS AND RESULTS

The empirical data was analyzed using the partial least squares (PLS) approach, which was employed because it does not require the data to have a multivariate normal distribution and is less demanding in terms of sample size [13]. SmartPLS software was used for the data analysis of this study, which contained two steps. In the first step, all measurement models were examined for their psychometric properties, while the second step focused on testing the research model and hypotheses.
A. Measurement Model

Assessment of the measurement model involved evaluations of reliability, convergent validity, and discriminant validity of the construct measures. Composite reliability exceeded 0.9 for each of the five construct measures. Convergent validity of the construct measures was examined using average variance extracted (AVE) and factor loadings. The AVE for each construct exceeded the recommended level of 0.50, which means that more than one-half of the variances observed in the items were accounted for by their hypothesized constructs. Further, all of the item factor loadings were higher than the recommended level of 0.70, demonstrating convergent validity. To examine discriminant validity, this study compared the correlations between factors with the square root of AVE of the individual factors [19]. The square root of AVE for each construct exceeded the bivariate correlations between that construct and all other constructs, confirming discriminant validity. Thus, the measurement model demonstrates adequate reliability, convergent validity, and discriminant validity.

![Measurement Model Diagram]

**P<0.01

B. Structural Model

This study proceeded to test the path significances using a bootstrapping re-sampling technique with 300 sub-samples. Properties of the causal paths, including path coefficients and p-values, are shown in Figure 2. Both utilitarian online shopping value and hedonic online shopping value had a significant positive influence on online patronage intention (0.42, p<0.01 and 0.53, p<0.01, respectively). Thus, H1 and H3 were supported. Utilitarian TV shopping value had a significant positive effect on utilitarian online shopping value (0.68, p<0.01), providing support for H5. Also, hedonic TV shopping value was found to have a significant positive effect on hedonic online shopping value (0.81, p<0.01), supporting H6. Unexpectedly, both utilitarian TV shopping value and hedonic TV shopping value had an insignificant influence on online patronage intention (0.30 and 0.08, respectively). Thus, H2 and H4 were not supported. Altogether, 69.4 percent of the variance in online patronage intention was accounted for by the research model. In addition, 46.6 percent of the variance in utilitarian online shopping value was explained by utilitarian TV shopping value, while 65.1 percent of the variance in hedonic online shopping value was explained by hedonic TV shopping value.

VI. DISCUSSION

This study presents and validates a model that explains how TV and online shopping value affect online patronage intention in the context of multi-channel retailing in Taiwan. Both utilitarian TV shopping value and hedonic TV shopping value are found to have no direct influence on online patronage intention, but do have an indirect influence on patronage intention through the respective mediation of utilitarian online shopping value and hedonic online shopping value. In turn, these findings provide several important implications for multi-channel retailing research and practice.

This study contributes to the relatively unexplored field of the effect of TV-and-online operations on online purchasing intentions. As expected, utilitarian TV shopping value has a significant positive influence on utilitarian online shopping value, which, in turn, saliently affects online patronage intention. In order to increase customer online utilitarian shopping value perceptions and online purchase intentions, TV-and-online retailers should provide additional practical information about the products and their functions on their TV shopping channels, and focus on more popular product categories, more complete introductions of product functions, and a more convenient ordering process.

On the other hand, the findings also indicate that hedonic TV shopping value has a positive influence on hedonic online shopping value, which in turn significantly influences online patronage intention. Therefore, the TV shopping programs of a TV-and-online retailer should not only provide customers with utilitarian shopping value, but should also focus on offering enjoyment and entertainment to customers. Management should select interesting TV program hosts and enhance the playful elements of the TV shopping programs. Once customers perceive high hedonic shopping value from a TV-and-online retailer, they will tend to believe that the same retailer’s online storefront also provides high hedonic shopping value, and thus increase their intention to purchase from that retailer’s online storefront.

Both utilitarian online shopping value and hedonic online shopping value are found to be antecedents of online patronage intentions. Altogether, the two online shopping values account for 69.4 percent of the variance in online patronage intention. Thus, in addition to enhancing TV shopping value, TV-and-online retailers should also increase the utilitarian and hedonic shopping value of their online storefronts by improving the information quality (e.g., usefulness, timeliness, relevance, and accuracy), system quality (e.g., availability, ease of use, user-friendliness, and response time), service quality (e.g., tangibility, reliability, responsiveness, assurance, and...
empathy), and playfulness (e.g., enjoyment, curiosity, and concentration) of their websites [15, 16, 37, 57]. These strategies can directly stimulate online customer purchase intentions as well as enhance the indirect effect of TV shopping value on online purchase intentions.

While both utilitarian TV shopping value and hedonic TV shopping value are found to be insignificant in influencing online patronage intention, each of the two TV shopping values has an indirect positive effect on online patronage intention. This result implies that customers consider TV-and-online retailers as integrated systems, and that synergy exists between TV and online shopping channels. Previous researchers have suggested that a multi-channel retailing strategy enables firms to provide customer services across channels, build strong relationships with customers, retain a larger proportion of existing customers, and attract new customers [32, 44]. Thus, TV-and-online retailers should use TV shopping channels as a marketing opportunity to increase the shopping value and brand awareness associated with their online storefronts, as well as to enhance their online sales. Given that the TV channel and online storefront appear as part of the same multi-channel retailing experience, TV-and-online retailers can introduce the most popular products with special discounts on their TV shopping channels to attract new customers. Once customers become accustomed to purchasing from the TV shopping channel of a multi-channel retailer, they may be inclined to seek out additional product information and make purchase orders through the same retailer’s online storefront due to the establishment of utilitarian and hedonic shopping value.

According to our findings, TV-and-online retailers should realize the relationships between TV and online shopping values and online purchasing, such that they benefit from a seamless integration of their operations. Also, to link TV and online shopping values, retail managers can integrate TV and online customer databases. For example, they can remind online customers of their previous TV channel purchase records and recommend interesting or similar online offers through data mining approach.

VII. CONCLUSIONS AND FUTURE RESEARCH

This study presents and validates a model to investigate the influence of TV and online shopping values on online patronage intention in the context of multi-channel retailing. The contributions of this study to multi-channel retailing research are threefold. First, this study has successfully developed a model to explain the synergy between TV and online shopping channels, which has rarely been addressed in previous multi-channel retailing research. Second, hedonic TV shopping value and utilitarian TV shopping value were found to have an indirect influence on online patronage intention through the respective mediation of hedonic online shopping value and utilitarian online shopping value. Finally, hedonic and utilitarian TV shopping values were found to have no direct effect on online patronage intention within the TV-and-online retail environment. The empirically validated model provides a useful framework for TV-and-online retail managers to enact their marketing strategies and take advantage of the synergy between TV and online shopping channels. As such, the findings of this study provide several important theoretical and practical implications for multi-channel retailing management.

Although this study has been conducted with methodological rigor, there are still some limitations that could be addressed in future studies. First, the findings and their implications refer to only one single study in Taiwan. Caution must be exercised when attempting to generalize our findings and discussion to other geographical areas. As such, cross-cultural validation is needed to compare the findings of this study to other cultural groups. Second, this study did not explore the influence of online shopping value on TV channel sales. Thus, future research can investigate how the synergy between TV and online shopping channels influences TV channel patronage intentions. Finally, the proposed model is cross-sectional; that is, it measures perceptions and intentions at a single time point. However, perceptions change over time as individuals gain experience [52, 54], which has implications for multi-channel retailing researchers and practitioners. Additional research efforts are needed to validate the proposed model within a dynamic environment so as to enhance our understanding of the causality and the interrelationships between variables that are important to online patronage intention within the multi-channel retailing context.

APPENDIX

Measuring items used in this study

**Hedonic TV shopping value**
1. This TV shopping trip was truly a joy.
2. I continued to shop on TV not because I had to, but because I wanted to.
3. Compared to other things I could have done, the time spent on this TV shopping was truly enjoyable.
4. I enjoyed this TV shopping trip for its own sake, not just for the items I may have purchased.
5. While shopping on TV, I felt a sense of adventure.
6. While shopping on TV, I felt a sense of adventure.
7. While shopping on TV, I felt a sense of adventure.

(Reversed)

**Utilitarian TV shopping value**
1. I accomplished just what I wanted to on this TV shopping trip.
2. I could not buy what I really needed on this TV shopping trip. (Reversed)
3. While shopping on TV, I found just the item(s) I was looking for.
4. While shopping on TV, I found just the item(s) I was looking for.
5. While shopping on TV, I found just the item(s) I was looking for.

(Reversed)

**Hedonic online shopping value**
1. This online shopping trip was truly a joy.
2. I continued to shop online not because I had to, but because I wanted to.
3. Compared to other things I could have done, the time spent on this online shopping was truly enjoyable.
4. I enjoyed this online shopping trip for its own sake, not just for the items I may have purchased.
5. During the online shopping trip, I felt the excitement of the hunt.
6. While shopping online, I felt a sense of adventure.
7. This online shopping trip was not a very nice time out.

(Reversed)

Utilitarian online shopping value
1. I accomplished just what I wanted to on this online shopping trip. (Reversed)
2. I could not buy what I really needed on this online shopping trip.
3. While shopping online, I found just the item(s) I was looking for.
4. I was disappointed with this online shopping trip because I had to go to another store(s) to complete my shopping. (Reversed)

Online Patronage Intention
1. I intend to purchase on this online storefront in the near future.
2. I predict that I would purchase on this online storefront in the near future.

REFERENCES


