

# 科技部補助專題研究計畫成果報告 期末報告

## 產品過時恐懼與高科技耐久產品採用(第2年)

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計畫主持人：陳建維  
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中華民國 104年09月23日

中文摘要：高科技耐久財的特性之一是產品過時，也就是指新款產品問世，因其式樣或品質之改進成前一代產品蒙受相對的價值損失。通常耐久財的價值下降並非緣自於產品變得無用或較不好用，而是因為有更新更好的產品推出。當消費者對下一代產品有較高的期待時，就比較不願意去購買即將被取代的前一代產品。本研究之目的在探討消費者之獨特性需求和從眾傾向如何透過產品過時恐懼影響高科技耐久財(例如智慧型手機)的購買決策。透過對臺灣地區的消費者線上問卷調查，本研究發現「資訊性影響」和「避免相似性」越高，科技性過時恐懼也越高；「規範性影響」及「反從眾」對經濟性過時恐懼有正面效果；而心理性過時恐懼則同時受到「規範性影響」、「反從眾」、「避免相似性」的正向影響。

中文關鍵詞：產品過時恐懼、消費者獨特性需求、從眾傾向

英文摘要：High-technology durable goods are characterized by product obsolescence, which denotes a relative value loss resulted from the style change or quality improvement due to the launch of subsequent product versions. In durable markets, consumers with higher expectations for the next product generation are reluctant to invest in a product that can soon be superseded. This study is to enhance our understanding of how consumers' need for uniqueness and conformity lead to different fears of obsolescence in the face of purchasing such high-technology durable products as smart phones. Analyzing consumer data collected through an online survey in Taiwan, the authors find that consumers' fear of technological obsolescence increases with their conformity through informational influence and avoidance of similarity. Conformity through normative influence and counterconformity simultaneously impose positive effects on consumers' fear of economic obsolescence. Finally, consumers' conformity through normative influence, counterconformity, and avoidance of similarity are more likely to lead to an increase in their fear of psychological obsolescence. Theoretical and managerial implications are discussed.

英文關鍵詞：fear of product obsolescence；consumers' need for

uniqueness ; consumer conformity

# 科技部補助專題研究計畫成果報告

(期中進度報告/期末報告)

## 產品過時恐懼與高科技耐久產品採用

(第二年)

計畫類別：個別型計畫 整合型計畫

計畫編號：MOST 102-2410-H-004-201-MY2

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計畫主持人：陳建維

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計畫參與人員：李曼鈺、杜家瑜、鄭綦成

本計畫除繳交成果報告外，另含下列出國報告，共 二 份：

執行國際合作與移地研究心得報告

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中 華 民 國 104 年 9 月 19 日

# 產品過時恐懼與高科技耐久產品採用

(第二年)

消費者獨特性需求、從眾傾向、與產品過時恐懼：臺灣消費者之  
智慧型手機購買決策

## 摘要

高科技耐久財的特性之一是產品過時，也就是指新款產品問世，因其式樣或品質之改進成前一代產品蒙受相對的價值損失。通常耐久財的價值下降並非緣自於產品變得無用或較不好用，而是因為有更新更好的產品推出。當消費者對下一代產品有較高的期待時，就比較不願意去購買即將被取代的前一代產品。本研究之目的在探討消費者之獨特性需求和從眾傾向如何透過產品過時恐懼影響高科技耐久財(例如智慧型手機)的購買決策。透過對臺灣地區的消費者線上問卷調查，本研究發現「資訊性影響」和「避免相似性」越高，科技性過時恐懼也越高；「規範性影響」及「反從眾」對經濟性過時恐懼有正面效果；而心理性過時恐懼則同時受到「規範性影響」、「反從眾」、「避免相似性」的正向影響。

關鍵詞：產品過時恐懼、消費者獨特性需求、從眾傾向

## Consumers' Need for Uniqueness, Conformity, and Fear of Product Obsolescence: The Purchase of Smartphone in Taiwan

### **Abstract**

High-technology durable goods are characterized by product obsolescence, which denotes a relative value loss resulted from the style change or quality improvement due to the launch of subsequent product versions. In durable markets, consumers with higher expectations for the next product generation are reluctant to invest in a product that can soon be superseded. This study is to enhance our understanding of how consumers' need for uniqueness and conformity lead to different fears of obsolescence in the face of purchasing such high-technology durable products as smart phones. Analyzing consumer data collected through an online survey in Taiwan, the authors find that consumers' fear of technological obsolescence increases with their conformity through informational influence and avoidance of similarity. Conformity through normative influence and counterconformity simultaneously impose positive effects on consumers' fear of economic obsolescence. Finally, consumers' conformity through normative influence, counterconformity, and avoidance of similarity are more likely to lead to an increase in their fear of psychological obsolescence. Theoretical and managerial implications are discussed.

Key words: fear of product obsolescence; consumers' need for uniqueness; consumer conformity

## INTRODUCTION

The world has witnessed the revolution of technology which makes it possible for firms to offer an increasingly variety of consumer durables at an ever increasing pace. In the adoption of technology-driven durable products, consumers usually learn to anticipate improvement in technology and reductions in prices for old versions (Sultan, 1999). Consumer durable goods are characterized by product obsolescence, which denotes a relative value loss resulted from the style change or quality improvement due to the launch of subsequent product versions (Cooper, 2004). Most often, the value of a durable product quickly decreases not because the product becomes useless or less productive, but simply because newer or superior products are introduced. In durable markets, consumers with higher expectations for the next product generation are reluctant to invest in a product that can soon be superseded (Levinthal and Purohit, 1989). As a result, the decision of purchasing a durable product is normally made not only based on the product's current price and level of quality but also based on the product's future value (Levinthal and Purohit, 1989). The continuous launches of ever-changing, superior versions or models, mainly in forms of technological improvements and style modifications, heighten consumers' anxiety about the right time to buy and the right price to pay for any new durable product (Lee and Lee, 1998).

Fear of product obsolescence refers to a valenced emotional state in response to potentially outdated products (LaTour and Rotfeld, 1997). It reflects apprehension about making a purchase today because the product will be outdated tomorrow (Higgins and Shanklin, 1992). Cooper (2004) distinguishes three forms of product obsolescence: psychological obsolescence, economic obsolescence, and technological obsolescence. Psychological obsolescence originates from subjective changes in product perceptions with respect to status achievement, fashion, and aesthetic quality. Economic obsolescence occurs because of financial factors that cause existing products to be considered no longer worth keeping. Technological obsolescence is caused when the functional qualities of the products are inferior to newer models. Although research has shown that purchase decision of high-tech durables are often driven by fear of product obsolescence (Grewal, Mehta, and Kardes, 2004), little empirical work examines the drivers or antecedents of consumers' fear of product obsolescence.

Consumers of high-tech durable products, e.g., smartphone, normally expect long periods of ownership due to the longevity of the products (Cripps and Meyer, 1994), and thus may stay away from the market for a while or for a long time after buying the product (Kinley, Josiam, and Lockett, 2010). Subsequently, they need to make a decision on whether to retain an incumbent model or replace it with a new one that better meets their evolving needs and tastes (Cripps and Meyer 1994;). In addition, the ownership and use of high-tech products such as smartphones can be publicly observed. Accordingly, consumers of these conspicuous

durables may make purchase decisions based not only on product attributes, but also on the purchase decisions made by other consumers in the market (Fromkin and Snyder, 1980). It would be worth empirically exploring how various aspects of susceptibility to social/interpersonal influence result in different kinds of obsolescence fears in the use of high-technology durable products.

The objective of the research is specifically to examine the relationships of consumers' conformity and need for uniqueness with their fears of product obsolescence in a smartphone consumption context. On the basis of the results of a survey released by Google Inc., Taiwan boasts 51% penetration rate of smartphones as of 2013 and Taiwanese are the most frequent users of smartphones in the Asia-Pacific region (CNA 2013). The survey found that 81 percent of Taiwan's smartphone users do not leave home without their hand-held devices. An investigation into the effect of two competing influences in social interaction, i.e., conformity and dissension (Simonson and Nowlis, 2000), on consumers' fear of product obsolescence through studying Taiwan's smartphone users may offer theoretical and practical insights. The research findings should help us gain a better understanding of consumer adoption and/or replacement of high-technology durable products.

## **THEORETICAL FOUNDATIONS AND RESEARCH HYPOTHESES**

The rationale of this research mainly stems from optimal distinctiveness theory, in which the need to differentiate oneself from others and the countervailing need to assimilate oneself with others drive the quest for social identity (Brewer 1991). The literature supports that the two seemingly opposing forces, i.e., the pressure to conform and the restraining pressure to remain independent, may coexist in a person (Aaker and Lee 2001). In a consumption setting, conformity refers to "a change in consumers' product evaluations, purchase intentions, or purchase behavior as a result of exposure to the evaluations, intentions, or purchase behaviors of referent others" (Lascu and Zinkhan 1999, p. 1). Conformity is higher when consumers perform difficult, ambiguous, and/or subjective judgment tasks (Lascu and Zinkhan 1999). In contrast, consumers' need for uniqueness is aroused and competes with other motives in situations that threaten the self-perception of uniqueness according to the theory of uniqueness (Snyder and Fromkin 1977). The need for uniqueness has been proved to exert a significant effect on consumer's purchase decisions (Simonson and Nowlis 2000). Especially, the material objects that consumers choose to display may signal differentiation from others or distinctiveness among a larger group (Tian, Bearden, and Hunter 2001).

### **Conformity and Fear of Product Obsolescence**

Consumers may conform to two types of interpersonal influences: informational and

normative influences. Informational influence refers to the tendency of consumers to accept evidence about what others believe to be the true qualities of a product (Burnkrant and Cousineau 1975). Information from knowledgeable others and/or inferences based upon the observation of the behavior of others may lead individuals to the process of internalization, which increases their knowledge about the product under evaluation or consideration (Park and Lessig 1977). Consumers who are wary of technological obsolescence tend to sense the pressure to keep up with technological changes, which drives them to make decisions quickly and easily by organizing and structuring their environments, summarizing large amount of complex information about an attitude object, and providing consistency in their frames of reference (Grewal, Mehta, and Kardes 2004). It is logical that the conformity of consumers through informational influence tends to heighten the extent to which they are anxious about technological obsolescence because they have a penchant for always owning the newest and/or the best and resort to the state-of-the-art level of performance of a product as the point of reference when judging product utility (Cripps and Meyer 1994). Likewise, consumers' susceptibility to informational influence may lead consumers to great fear of psychological obsolescence. Conformity through informational influence helps consumers laden with such greater fear behave in ways appropriate to the various reference groups that comprise their social networks, and thus fit into important social situations and interact smoothly with these reference groups (Grewal, Mehta, and Kardes 2004).

H1: The more likely consumers conform to informational influence, (a) the greater their fear of technological obsolescence and (b) the greater their fear of psychological obsolescence in using high-technology durable goods.

Normative influence occurs when people conform to social norms in an attempt to receive rewards from others, such as monetary rewards, social status, and support for one's self-concept (Burnkrant and Cousineau 1975; Simonson and Nowlis 2000). There are two aspects of normative influence: utilitarian and value expressive (Park and Lessig 1977). On the one hand, utilitarian influence arises as individuals attempt to comply with the expectations of others to achieve rewards or avoid punishments (Bearden, Netemeyer, and Teel 1989). Consumers with high susceptibility to normative influence may suffer from greater fear of economic obsolescence. An old durable product becomes economically obsolete when consumers, based on the cost of new replacements or the expense of repair work, attribute little or no value to an existing version or model and conclude that it is no longer worth keeping in use (Cooper 2004). As conformity seems to be more visible in the consumption of conspicuous consumer durables, consumers are prone to worry about economic obsolescence, framed as a gain above the current level of utility or as an attempt to avert a loss in per-period utility (Cripps and Meyer 1994), especially in the eyes of others.

On the other hand, value expressive influence reflects individuals' desire to enhance self-image through the process of referent identification. It occurs when they adopts

behaviors or opinions of others because the behaviors or opinions are associated with satisfying self-defining relationships (Park and Lessig 1977). Value expressiveness may heighten fear of psychological obsolescence because consumers laden with such fear behave in ways appropriate to the various reference groups that comprise their social networks, and thus fit into important social situations and interact smoothly with these reference groups (Grewal, Mehta, and Kardes 2004).

H2: The more likely consumers conform to normative influence, (a) the greater their fear of economic obsolescence and (b) the greater their fear of psychological obsolescence in using high-technology durable goods.

### **Consumers' Need for Uniqueness and Fear of Product Obsolescence**

People with high need for uniqueness derive intrinsic satisfaction from the perception that they are unique, special, and separable from the masses (Fromkin and Snyder 1980; Snyder 1992). Expressing uniqueness via purchasing and using certain products, consumers may obtain unique identity and social approval at the same time (Ruvio, 2008). Tian, Bearden, and Hunter (2001) contend that consumers' need for uniqueness is comprised of two dimensions: counterconformity and avoidance of similarity. *Counterconformity* refers to the motivation underlying behaviors that render people different relative to others when individuals feel a threat to their identity. Under the influence of the norm behavior of others, individuals with high counterconformity behave themselves to be in noncongruence with the norm. In a consumer context, differentness satisfying counterconformity motivations results from two behavioral manifestations: creative choice or unpopular choice (Tian, Bearden, and Hunter 2001). Creative choice counterconformity occurs when consumers purchase and display original, novel, or unique consumer goods to demonstrate personal styles, whereas unpopular choice counterconformity arises in the selection or use of products that break rules or challenge existing consumer norms. Despite the risk of social disapproval, consumers making either creative or unpopular choice can eventually establish their differentness from most others and their selections are likely to be considered good choices by these others, resulting in enhanced self-image and social image (Tian, Bearden, and Hunter 2001). Accordingly, a desire for social distinction via unusual products, embodied as goal-directed consumer counterconformity, influences affect involved in new product adoption and variety-seeking behavior. Consumers with high counterconformity are less likely to tolerate economic obsolescence in that they attribute less or no value to existing versions or models and are inclined to conclude that old products are no longer worth keeping in use (Cooper 2004). As such consumers are more attracted to the scarcity value of new products (Snyder 1992; Tian and McKenzie 2001), they tend to be much more concerned with psychological obsolescence because products are purchased to communicate superiority to relevant social groups of the

purchasers (Brucks, Zeithaml, and Naylor 2000). It is therefore hypothesized as follows:

H3: The higher consumers' counterconformity, (a) the greater their fear of economic obsolescence and (b) the greater their fear of psychological obsolescence in adopting high-technology durable goods.

Consumers with high need for uniqueness are particularly sensitive to the degree to which they are seen as similar to others and are most likely to acquire unique or scarce products that establish a sense of specialness (Snyder 1992; Snyder and Fromkin 1977). *Avoidance of similarity* refers to devaluing and avoiding the purchase of products or brands that are perceived to be commonplace. With such motivation, consumers should monitor others' ownership of goods in product categories where replacement is expected (Tian, Beraden, and Hunter 2001). The presence of avoidance of similarity deepens and reinforces consumers' fears of technological and psychological obsolescence. To a large extent, they prefer to the newest generation and/or new-styled products and discontinue the use of old-fashioned ones to avoid similarity to others because their success in creating distinctive self images and social images is often short lived (Tian, Beraden, and Hunter 2001).

H4: The higher consumers' avoidance of similarity, (a) the greater their fear of technological obsolescence and (b) the greater their fear of psychological obsolescence in adopting high-technology durable goods.

## RESEARCH METHODS

An online survey was employed to acquire the data needed for testing the hypothesized model. Respondents were solicited to complete a questionnaire consisting the measurement items of seven constructs, along with their experience in using mobile phones and the reasons to replace their current phones. This study uses smartphone as the object attached with fear of obsolescence because the phenomenon of obsolescence is salient in this product category so that, most often, smartphones are still functional when discarded (Cooper 2004). The use of online survey is justified for its low cost advantage, quick response, and reliable data quality (Deutskens, Jong, Ruyter, and Wetzels 2006; Braunsberger, Wybenga, and Gates 2007). Furthermore, the demographic and lifestyle profiles of online respondents match the characteristics of high-tech product users for their user status as lead and heavy users of smartphones. Data collection was executed through a series of online surveys, resulting in 276 usable questionnaires for the subsequent data analysis.

The questionnaire consisted of seven measures of interest. Adopted from Cooper (2004), fears of technological, economic, and psychological obsolescence were measured in terms of 6-item, 5-item, and 6-item scales respectively. The construct of informational influence was operationalized as a 8-item scale and the construct of normative influence as a 8-item scale, both adopted from Bearden, Netemeyer, and Teel (1989). Counterconformity was captured by

the 10-item scale of Knight and Kim (2006) that reflects both creative and unpopular choices. The construct of avoidance of similarity was measured using Knight and Kim's (2006) 5-item scale.

A series of confirmatory factor analyses was conducted to purify the reflective multi-item scales that remained after initial item-to-total correlation analyses and exploratory factor analyses. The confirmatory approach started with a second-order confirmatory factor analysis of the fear of product obsolescence indicators. This confirmatory model was performed to test the theoretically two-level construct structure of fear of product obsolescence. Likewise, we applied a second-order confirmatory factor analysis to the verification of counterconformity, which is composed of two lower level traits, creative choice and unpopular choice counterconformity. The construct validation results in all measurement scales with Cronbach's coefficient alphas greater than .70, indicating acceptable reliability and unidimensionality.

The construct validation produces seven finalized reflective measures, which were incorporated into regression models for subsequent hypothesis testing. All the constructs are represented by their corresponding summated scores, calculated using equally weighted scales.

## RESULTS

Hypotheses were tested by regressing three types of fears of product obsolescence on information influence, normative influence, counterconformity, and avoidance of similarity, with disposable income as the control variable. Table 1 shows the results of the regression models.

### *Place Table 1 about here*

All except one hypothesis are supported. The hypothesis with respect to the effect of informational influence on fear of technological obsolescence ( $H_{1a}$ ) is confirmed and significant at the .1 level ( $\beta = .112$ , Model 1).  $H_{1b}$  predicts a positive impact of conformity through informational influence on the fear of psychological obsolescence, however, is not supported ( $\beta = .019$ , Model 3) even though the sign of the estimated coefficient is in the expected direction. The effects of normative influence hypothesized in  $H_{2a}$  and  $H_{2b}$  are significant at the .05 and .01 levels respectively ( $\beta = .174$ , Model 2;  $\beta = .263$ , Model 6). Of the two hypothesized relationships concerning counterconformity, they are confirmed in the senses that the coefficient estimates for  $H_{3a}$  and  $H_{3b}$  are significant both at the .05 levels. The  $\beta$  values are .195 (Model 2) and .149 (Model 3).  $H_{4a}$  is supported at the .05 level ( $\beta = .151$ , Model 1), and  $H_{4b}$  is confirmed with  $\beta = .213$  ( $p < .01$ ) in Model 3.

## CONCLUSION

The findings of this research confirm the proposed model stipulating that two competing mindsets driven by needs for similarity and uniqueness not only coexist but also simultaneously impose impacts on fear of product obsolescence. The research is in line with the extant studies in uniqueness theory that address people's emotional responses to information about their similarity to others (Snyder and Fromkin 1980). It is also consistent with the argument that consumer behavior cannot be fully understood unless consideration is given to the effects of interpersonal influence on development of attitudes, norms, values, aspirations, and purchase behavior (Bearden, Netemeyer, and Teel 1989). The empirical results may shed some light on why and how consumers of high-technology durables exhibit different fears of product obsolescence under others' influences.

The research findings may offer several managerial guidelines for managing and launching consumer high-technology products. Specifically, marketers may either manipulate the newness of innovations or probe consumers' need for uniqueness in order to formulate marketing strategy for product launch. With a better understanding of social/interpersonal influence, marketers must be more capable of helping consumers to manage the transitions between generations by offering a migration path or a series of upgrades. Marketing communications should be integrated to engender the actual activation of obsolescence fears, which may influence the nature of the evaluation process and then create greater persuasion impacts. Our research findings can be applied to design communication and promotional mix strategies. For instance, advertising managers may want to consider using a conformity or uniqueness theme in their advertising to provoke different aspects of obsolescence fears to facilitate and accelerate conformity-prone or uniqueness-prone consumers' replacement decision.

A research limitation concerns the design of measurement items in the survey questionnaire. Although this research adopted the measures of interest from existing studies, language translation and adaptation to the research context, especially in Taiwan, may still cause potential problems for measurement errors, which may be likely to occur due to the issues specific to the characteristics of Taiwan's consumers. Another limitation involves the focus of this research on the consumer setting of Taiwan. In an international domain, cultural environments can make a particular self-perspective chronically salient, resulting in cultural differences in individualism-collectivism (Ma, Yang, and Mourali 2014). Undoubtedly, Taiwan is a more collectivistic society (Hofstede 1993), which may magnify social and interpersonal influence on its people's cognition, affect, and conation. In this sense, we must be careful when extending the findings of the research to other countries. Certainly, future research may cross-validate the model of this research by collecting data from a variety of countries, especially from other Asian and western countries.

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**Table 1**  
**Results of Regression Analyses**

	<b>Model 1: Fear of Technological Obsolescence</b>	<b>Model 2: Fear of Economic Obsolescence</b>	<b>Model3: Fear of Psychological Obsolescence</b>
<b>Control Variable</b>			
Disposable Income	.075	.104*	.030
<b>Predictor Variable</b>			
Informational Influence	.112*	.090	.019
Normative Influence	.084	.174**	.263***
Counterconformity	.080	.195**	.149**
Avoidance of Similarity	.151**	-.068	.213***
<i>R</i> <sup>2</sup>	.090	.109	.243
<i>F</i> -value	5.373***	6.608***	17.316***

\*Significant at  $p < .10$ .

\*\*Significant at  $p < .05$ .

\*\*\*Significant at  $p < .01$ .

# 國科會補助專題研究計畫出席國際學術會議心得報告

日期：103年8月11日

計畫編號	102-2410-H-004 -201 -MY2		
計畫名稱	產品過時恐懼與高科技耐久產品採用		
出國人員姓名	陳建維	服務機構及職稱	國立政治大學國際經營與貿易學系副教授
會議時間	2014年8月1日至 2014年8月3日	會議地點	美國舊金山市
會議名稱	(英文)AMA 2014 Summer Marketing Educators' Conference		
發表題目	(英文) Technological Opportunism and Responsive and Proactive Market Orientation: Synergistic or Antagonistic Effects?		

## 一、參加會議經過

American Marketing Association (AMA) 的年度研討會(Summer Marketing Educators' Conference)是全球行銷學界一年一度之盛事，因為AMA係行銷領域最大的學會，2014年更有超過四十五個國家的學者出席此年度聚會。本人於2013年年底便積極撰寫論文準備投稿，有鑑於本次大會主題定調為：“Leveraging New Technologies to Create Value for Customers & Firms”，本人遂決定投稿的論文題目是：“Technological Opportunism and Responsive and Proactive Market Orientation: Synergistic or Antagonistic Effects”，希冀此研究能切合會議主軸，對本次研討會知識交流有所貢獻。文章於2014年一月截止日前寄出，四月初時，共同作者台大工管系練乃華教授便接獲電子郵件通知，確定我們通過審查，可以出席本屆AMA年度研討會；本人隨即規劃出國開會相關事宜，並因開會需要，註冊成為AMA會員。

本次AMA年會時間定於8月1日至8月3日，在美國舊金山(San Francisco)的Marriott Marquis Hotel舉行。Marriott Marquis為該城市最大的飯店，尤其適合舉辦國際會議；AMA年會場地位於該飯店地下二樓，場地寬敞氣派。本人自七月初便積極準備投影片檔案與口頭報告，為避免時差干擾，力求口頭報告有較佳表現，我們決定提前於7/30便飛往舊金山，以即早適應當地時間。出席會議期間並巧遇台大國企系黃恆獎教授與政大企管系張愛華教授，可謂他鄉遇故知。

本論文的報告被安排在8月3日上午10:30到12:00，場地是Salon 6；該場次主題為“Customer and Market Orientation”，總共有四篇論文發表，我們被安排在第二位報告，其他三篇論文皆有關Customer Orientation，僅我們的文章是關於Market Orientation；本場次的主持人是美國Ball State University韓國籍的Sangwon Lee教授，同場報告的學者兩位來自德國，另一位來自澳洲，加上我們來自台灣，足可充份體會多元國際文化交流，他山之石可以攻錯之效。

## 二、與會心得

能夠參與AMA的年度研討會，是件令人振奮的事，因為可以與全世界活躍於行銷領域的學者專家齊聚

一堂，相互切磋琢磨，更可以藉此瞭解最新的研究趨勢與方向，而舊金山Marriott Marquis Hotel的會議場地相當專業，大小適中，設備新穎，非常適合學術發表活動的進行。稍嫌美中不足之處是，AMA大會並未在各場地準備電腦，而是要求報告者自行攜帶，是以本場次的主持人Professor Lee於報告前十分鐘才意識到此狀況，緊急徵調本人的筆記型電腦應急，因為其他三組報告團隊皆未隨身攜帶自己的電腦。一個如此大的國際學術會議要求與會者自行攜帶筆電誠屬不合情理，不但換場容易佔用時間，更可能會有報告人之筆電與單槍投影機不相容之狀況，所幸本人的筆電順利完成任務，四組報告皆順利成功達成。由於主持人為掌控效率，請求報告者統一演講完後，再由與會聽眾發問，所以僅最後一組的內容有人提出意見，本組的報告並未收到任何回饋。儘管有以上瑕疵，但整體而言，AMA的年會提供世界各地的行銷學者交換研究創見、獲取新知的機會，所發表的論文素質亦屬至高水準。能夠參與其中，令人深感不虛此行。

# 科技部補助計畫衍生研發成果推廣資料表

日期:2015/09/22

科技部補助計畫	計畫名稱: 產品過時恐懼與高科技耐久產品採用
	計畫主持人: 陳建維
	計畫編號: 102-2410-H-004-201-MY2      學門領域: 行銷
無研發成果推廣資料	

102 年度專題研究計畫研究成果彙整表

計畫主持人：陳建維		計畫編號：102-2410-H-004-201-MY2				計畫名稱：產品過時恐懼與高科技耐久產品採用	
成果項目		量化			單位	備註（質化說明：如數個計畫共同成果、成果列為該期刊之封面故事...等）	
		實際已達成數（被接受或已發表）	預期總達成數（含實際已達成數）	本計畫實際貢獻百分比			
國內	論文著作	期刊論文	0	0	100%	篇	
		研究報告/技術報告	1	1	100%		
		研討會論文	0	0	100%		
		專書	0	0	100%		
	專利	申請中件數	0	0	100%	件	
		已獲得件數	0	0	100%		
	技術移轉	件數	0	0	100%	件	
		權利金	0	0	100%	千元	
	參與計畫人力（本國籍）	碩士生	3	3	100%	人次	
		博士生	0	0	100%		
博士後研究員		0	0	100%			
專任助理		0	0	100%			
國外	論文著作	期刊論文	0	0	100%	篇	
		研究報告/技術報告	0	0	100%		
		研討會論文	0	0	100%		
		專書	0	0	100%		章/本
	專利	申請中件數	0	0	100%	件	
		已獲得件數	0	0	100%		
	技術移轉	件數	0	0	100%	件	
		權利金	0	0	100%	千元	
	參與計畫人力（外國籍）	碩士生	0	0	100%	人次	
		博士生	0	0	100%		
博士後研究員		0	0	100%			
專任助理		0	0	100%			

<p>其他成果 (無法以量化表達之成果如辦理學術活動、獲得獎項、重要國際合作、研究成果國際影響力及其他協助產業技術發展之具體效益事項等，請以文字敘述填列。)</p>	<p>無</p>
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	成果項目	量化	名稱或內容性質簡述
科 教 處 計 畫 加 填 項 目	測驗工具(含質性與量性)	0	
	課程/模組	0	
	電腦及網路系統或工具	0	
	教材	0	
	舉辦之活動/競賽	0	
	研討會/工作坊	0	
	電子報、網站	0	
	計畫成果推廣之參與(閱聽)人數	0	

# 科技部補助專題研究計畫成果報告自評表

請就研究內容與原計畫相符程度、達成預期目標情況、研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）、是否適合在學術期刊發表或申請專利、主要發現或其他有關價值等，作一綜合評估。

1. 請就研究內容與原計畫相符程度、達成預期目標情況作一綜合評估

達成目標

未達成目標（請說明，以 100 字為限）

實驗失敗

因故實驗中斷

其他原因

說明：

2. 研究成果在學術期刊發表或申請專利等情形：

論文： 已發表  未發表之文稿  撰寫中  無

專利： 已獲得  申請中  無

技轉： 已技轉  洽談中  無

其他：（以 100 字為限）

3. 請依學術成就、技術創新、社會影響等方面，評估研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）（以 500 字為限）

研究結果顯示獨特性與相似性這兩股相反的力量會同時影響消費者的產品過時恐懼，在購買高科技耐久財這類功能導向的產品時，消費者的決策往往被其情感反應與人際影響力所左右。本研究之結論不僅幫助吾人了解產品過時恐懼在消費者購買決策過程所扮演之角色，也對不同類型的產品過時恐懼之驅動因子有深入探討。基於研究結論，本研究對於高科技耐久品廠商有以下建議：行銷人員在規劃新產品上市策略時，可透過操作新一代產品的創新程度，例如：透過升級或系列產品的設計幫助消費者克服產品過時恐懼；在規劃新產品的行銷溝通策略時，則應視目標市場的獨特性需求及從眾傾向高低來決定廣告訴求之取向，以激發消費者之產品過時恐懼、加速產品的汰換決策。