

行政院國家科學委員會補助專題研究計畫成果報告

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※※ 數位產品網路行銷環境之顧客資訊滿意度衡量模式 ※※

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計畫主持人：湯宗益

共同主持人：曾國雄

本成果報告包括以下應繳交之附件：

- 赴國外出差或研習心得報告一份
- 赴大陸地區出差或研習心得報告一份
- 出席國際學術會議心得報告及發表之論文各一份
- 國際合作研究計畫國外研究報告書一份

執行單位：

中華民國 91 年 7 月 31 日

數位產品網路行銷環境之顧客資訊滿意度衡量模式

摘要：

網際網路開創了數位資訊時代的來臨，造就了數位化之產品交易與配送型態，並促成了網路行銷新典範的建立。網路行銷不只造成了行銷模式的變革，也導致了傳統「顧客滿意度」(Customer Satisfaction)衡量方式之改變。「顧客滿意度」是企業主管制定行銷及服務策略之重要資訊，其將直接對企業之顧客忠誠度、市場佔有率、獲利率與競爭態勢造成重大影響。企業若無法有效衡量顧客滿意度，將嚴重影響其行銷策略之擬定，並對企業造成重大之生存危機。由於數位產品本質上是一種資訊導向的產品，而數位產品網路行銷特性與傳統行銷或實體商品行銷特性有極大的不同，其強調整個行銷過程都可以透過網際網路或網站來進行，省卻了物品與人員的流通活動，這使得傳統「顧客滿意度」的衡量方式在概念上與操作上必須重新定義，亦即傳統「顧客滿意度」的衡量工具已無法適用於數位產品網路行銷的相關研究。考量了數位產品的「資訊與資訊處理」本質，以及網路行銷方式的「資訊系統內容及資訊介面」本質，本研究提出「顧客資訊滿意度」的構念，用來區別傳統行銷方式中「顧客滿意度」的概念。再則，由於傳統行銷中的「顧客滿意度」研究著重於顧客滿意度的心理決定過程(formation)及決定因素(determinants)，而對顧客滿意度的衡量方式大多以單一問項(single-item)測量或利用未經嚴謹信度與效度分析的測量工具來進行。針對傳統「顧客滿意度」構念在數位產品網路行銷環境中的不適用性，以及其測量工具的缺失，本研究的目的是要在概念上(conceptually)及操作上(operationally)建立一個適用於數位產品網路行銷之「顧客資訊滿意度」衡量工具。由於網路行銷中的顧客資訊滿意度構念所含蓋層面非常廣泛，因此第一步驟，本研究參酌了網路行銷、數位產品、使用者資訊滿意度、以及傳統顧客滿意度等領域的相關文獻，歸納出初步的「顧客資訊滿意度測量構面」，其中包括「數位產品/服務品質構面」、「網路銷售活動構面」、「資訊系統構面」、「顧客支援與售後服務構面」、以及「公司文化構面」等五個理論性構面。第二步驟，本研究並進一步發展一個「數位產品網路行銷之顧客資訊滿意度量表建構模式」，此模式不僅有助於數位產品業者發展本身的「顧客資訊滿意度」測量工具；然而，對於研究顧客資訊滿意度與其他消費者行為變數關係的研究人員而言，本模式正可以提供其在發展顧客資訊滿意度量表時之參考流程。第三步驟，本研究依據先前所提出的顧客資訊滿意度量表建構模式，進一步運用各種統計分析方法來檢驗量表的信度與效度，最後則是建構出一個適

用於數位產品網路行銷之「顧客資訊滿意度」測量工具。本研究所發展出的顧客資訊滿意度測量工具，不僅有助於數位產品業者有效評估其顧客滿意程度，更可以作為學術界建立網路行銷與資訊系統理論的測量工具。

關鍵字：網路行銷，數位產品，顧客滿意度，使用者資訊滿意度，顧客資訊滿意度

一、研究背景與動機

網路化與全球化市場的來臨，突破了傳統企業經營範圍之限制，對目標顧客市場之爭奪與固守已為現代企業生存發展之重要課題，而提昇顧客滿意度已是未來企業成功之關鍵要素(Muller 1991)。是故，「顧客滿意度」是企業主管制定行銷及服務策略之重要資訊，其將直接對企業之顧客忠誠度、市場佔有率、獲利率與競爭態勢造成重大影響(Cavallo and Joel 1989; Goodman 1989; Oliver 1980; Bearden and Teel 1983; Anderson and Sullivan 1993; Kolter 1991; Anderson et al. 1994)。網際網路的發達，開創了電子數位時代的來臨，由於「全球資訊網」具備跨平台、多媒體、互動式與操作簡單等特性(Molenaar 1995)，因而造成了數位產品(Digital Goods)線上交易之蓬勃發展，並促成了電子行銷新典範之建立。傳統以實體產品(Physical Goods)為標的之行銷研究，因未考量網路媒體可數位化之特性，故已未能完全適用於此數位網路時代，而傳統行銷環境中「顧客滿意度」的衡量在概念上及操作上亦必須重新檢討。

二、顧客資訊滿意度構念(construct)之提出

數位產品本質上是一種「資訊導向」的產品，例如：電子報、隨選視訊等，其可以透過網際網路來傳輸，而數位服務本質上是一種「資訊處理導向」的服務，例如：證券交易、電子銀行、基金購買、轉帳等，其亦可以完全透過網際網路或網站來進行服務的處理，因此數位產品網路行銷特性與傳統行銷或實體商品行銷特性有極大的不同，其強調整個行銷活動及價值創造的過程(如查詢、訂購、送貨、付款等)都是透過網際網路或網站來進行，省卻了商品的實體流通及人員的流通與接觸活動，因此數位產品網路行銷方式本質上是透過「資訊系統」來進行所有的行銷活動，而「資訊系統內容」與「資訊系統介面」將是決定數位產品網路行銷方式中顧客滿意度的重要測量構面，這也與傳統顧客滿意度測量構面存在極大的差異。因此，傳統「顧客滿意度」的衡量方式在概念層次上(conceptually)及操作層次上(operationally)必須重新定義，亦即傳統「顧客滿意度」的衡量工具與方法已無法

適用於數位產品網路行銷的相關研究中。是故，考量了數位產品或服務的「資訊與資訊處理」本質，以及網路行銷方式的「資訊系統內容及資訊介面」本質，本研究在概念層次上重新定義「顧客滿意度」，提出適用於數位產品網路行銷中的「顧客資訊滿意度」構念，用來區別傳統行銷方式中的「顧客滿意度」構念，並強調數位產品網路行銷中「資訊」、「資訊處理」、「資訊系統」、「資訊介面」的重要性。

三、傳統顧客滿意度在操作化及測量工具驗證上的缺失

傳統「顧客滿意度」之測量大多以單一問項(single-item)的測量方式為之，亦即利用簡單的「非常滿意—非常不滿意」的四等分到七等分的量表，再者，很多顧客滿意度的研究使用自行設計的量表，卻沒有進行測量工具的驗證工作(Westbrook 1980a, p.68)。依據測量理論的研究顯示，多問項(multi-item)的測量工具比單問項測量工具更佳，且使我們可以計算測量工具的 alpha 信度係數(Churchill 1979; Nunnally 1978)。因此，針對傳統「顧客滿意度」構念在數位產品網路行銷環境中的不適用性(inadaptability)，以及傳統「顧客滿意度」測量工具的缺失，本研究的主要目的不僅是要在概念化層次上(conceptually)區別傳統「顧客滿意度」與網路行銷中的「顧客資訊滿意度」，並且在操作化層次上(operationally)，必須避免傳統顧客滿意度測量工具的缺失，建立一個具有信度與效度且適用於數位產品網路行銷之「顧客資訊滿意度」衡量工具。

四、發展「顧客資訊滿意度」構念測量在理論建構上的重要性

「顧客滿意度」是目前網路行銷以及消費者行為研究中重要的構念，然而現行有關顧客滿意度方面的研究著重於二個方向，第一是從心理學的層面來探討顧客滿意度的決定過程理論(Oliver 1980; Churchill and Surprenant 1982; Bearden and Teel 1983; Oliver and DeSarbo 1988; Tse and Wilton 1988; Oliver and Swan 1989; Mano and Oliver 1993; Oliver 1993; Spreng et al. 1996)，例如：探討期望(expectation)、認知績效(perceived performance)、期望不符合(disconfirmation)等變數，如何影響「顧客滿意度」；第二就是探討「服務品質」、「顧客滿意度」、「顧客忠誠度」、「抱怨」等構念之間的因果關係，然而，在發展「顧客滿意度構念」定義與衡量工具的基礎研究卻極為缺乏，如此一來，使得不同的顧客滿意度研究文獻之間，都使用不同的顧客滿意度概念性及操作性定義(Giese and Gote 2000)，承如 Peterson and Wilson(1992)所述，「顧客滿意度研究最大的特徵就是缺乏定義與方法論上的

標準」；Bacharach(1989)綜合前人的研究(例如：Dubin 1969; Nagel 1961; Cohen 1980 等)認為，「理論是實證世界中不可觀察的構念之間及可觀察的變數之間的關係描述」，雖然理論的發展必須建立在構念之間的因果關係研究，但是在未具備有效的「顧客滿意度」測量工具之前，就貿然進行構念間因果關係的研究，將使得理論的發展產生嚴重的問題，承如 Peter(1981)所述，有效的測量是理論發展與檢驗的基礎，是故在進行因果關係研究之前，必須先進行構念測量工具之基礎研究。針對這個問題，Giese 與 Gote(2000)亦認為目前「顧客滿意度」構念尚未建立一個一般可接受的定義方式，因而使得顧客滿意測量工具的發展受到限制，進一步造成顧客滿意理論發展受到限制，而且由於不同的研究人員使用自行設計且未經驗證的滿意度測量工具，這也使得不同的研究成果之間缺乏一個共同比較的基礎。

五、顧客資訊滿意度構念之定義與測量構面(dimension)

本研究參考使用者資訊滿意度的相關文獻以及 Giese & Gote(2000)對於「顧客滿意度定義」上的研究，在概念化層次上將「顧客資訊滿意度」定義為：「顧客在消費後，對於透過網路取得資訊、數位產品、服務、進行交易、以及消費經驗等層面所感受到不同程度的彙總性情感反應」；而在操作化層次上，顧客資訊滿意度可以透過不同的測量構面(dimensions)與屬性(attributes)來衡量；本研究從「網路行銷」、「數位產品」、MIS 學域中的「使用者資訊滿意度」、以及「傳統顧客滿意度」四個層面來進行探討，而依據上述的文獻歸納整理，本研究將數位產品網路行銷的「顧客資訊滿意度」測量構面，分為「數位產品/服務品質構面」、「網路銷售活動構面」、「資訊系統構面」、「顧客支援與售後服務構面」、以及「公司文化構面」等五個理論性構面。「數位產品/服務品質構面」是指顧客對於數位產品或服務本身所感受到的品質滿意程度；「網路銷售活動構面」是指在公司在進行網路廣告、促銷、定價、報價、接訂單、送貨、及付款結清等銷售活動過程中，顧客感受到的滿意程度；「資訊系統構面」是指顧客對於網站資訊內容與使用者介面所感受到的滿意程度，這構面主要是參考使用者資訊滿意度層面的因素，包括「網站資訊內容的正確性」、「網站資訊內容的可靠性」、「網站資訊內容的及時性」、「網站符合使用者需求」、「顧客對網站系統的信心」、「網站的安全性」、「網站資訊內容輸出格式品質」、「網站使用者介面」、「網站容易操作使用程度」、「網站對顧客所提供的輔助支援」、「網站資訊內容品質」、「顧客容易在網站上找到所需資訊」等；「顧客支援與售後服務構面」是指公司在支援售後服務、退貨、回饋與賠償等活動過程中，顧客感受到的滿意程度。「公司文化構面」是指顧客對

於正式與非正式公司形象所感受到的滿意程度。本研究所歸納出的這五個理論性構面，可以作為學術界與數位產品業者發展顧客資訊滿意度量表及問項之參考依據。本研究的流程如圖 1 所示。

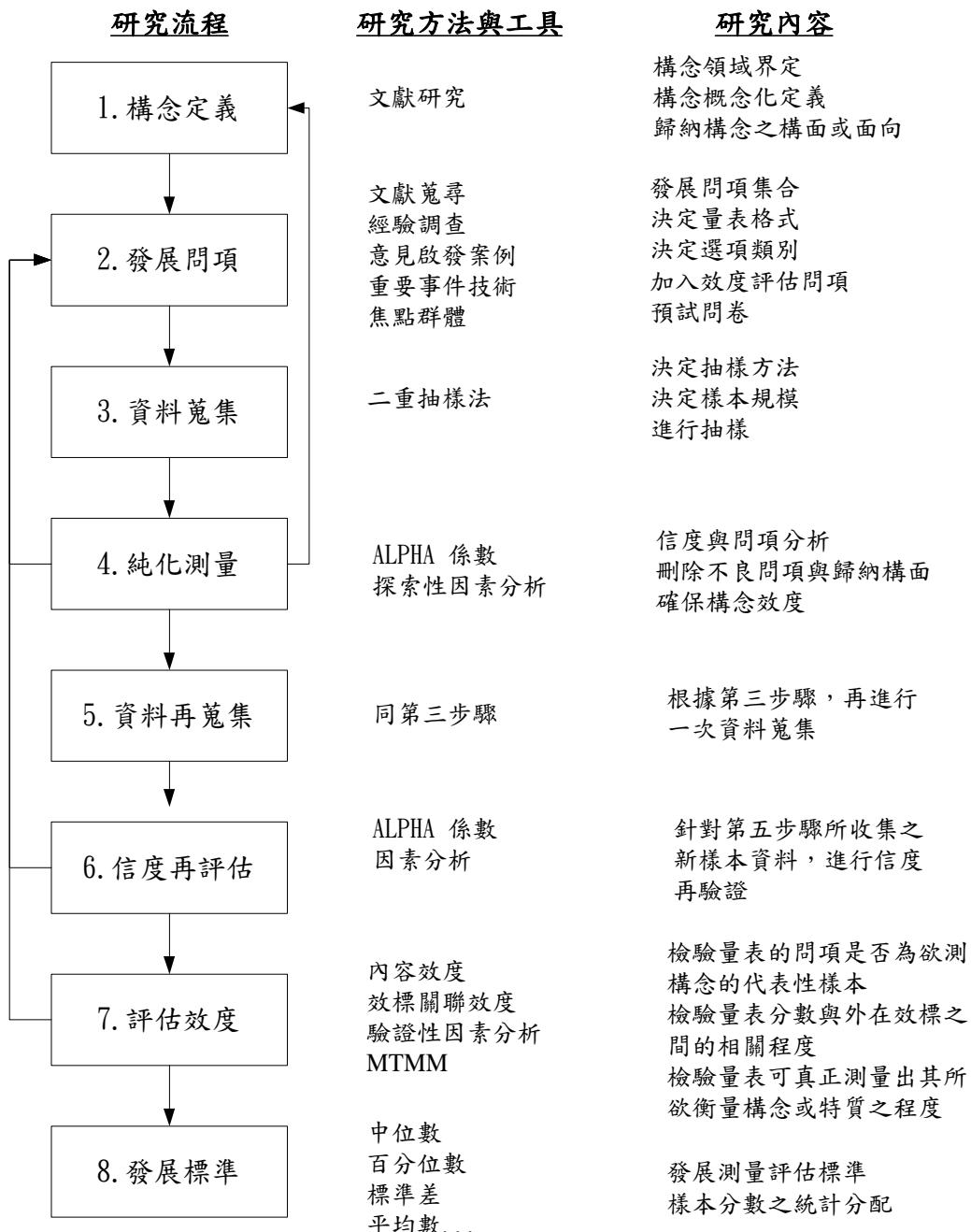


圖 1：數位產品網路行銷之顧客資訊滿意度量表建構模式

六、研究成果

本研究主要目的為：發展出有效的「數位產品網路行銷之顧客資訊滿意度量表」，以作為學術界研究數位產品消費者行為議題之測量工具，並提供數位產品業者評估其顧客滿意度之參考。因此本研究之成果共有下列三項：

1. 分析數位產品網路行銷與傳統行銷或實體商品行銷特性的不同，在概念層次上提出不同於傳統「顧客滿意度」構念的「顧客資訊滿意度」構念，並從網路行銷、數位產品、使用者資訊滿意度、以及傳統顧客滿意度等領域的相關文獻中，歸納出適用於數位產品網路行銷環境的「顧客資訊滿意度衡量構面」。
2. 根據文獻的歸納整理，提出一個「數位產品網路行銷之顧客資訊滿意度量表建構模式」，以作為實務界與學術界發展量表之準則與參考流程。
3. 依據上述的量表建構模式，發展出適用於數位產品網路行銷之「顧客資訊滿意度量表」(如表 2 所示)，表 1 為探索性因素分析後的因素負荷，圖 2 為二階驗證性因素分析的結果。此量表不僅有助於數位產品業者有效評估其顧客資訊滿意程度，更可以做為學術界在研究顧客資訊滿意度構念與其他消費者行為構念之間關係時的測量工具。

表 1：探索性因素分析結果

問項 碼	Customer Support	Security	Ease of Use	Digital Products/ Services	Transaction and Payment	Information Content	Innovation
CS1		.893					
CS2		.879					
CS3		.824					
CS4		.639					
SE1			.930				
SE2			.856				
SE3			.844				
EU1				.920			
EU2				.889			
EU3				.851			
DP1					.867		
DP2					.845		
DP3					.740		
TP1						.860	
TP2						.857	
TP3						.740	
IC1							.860
IC2							.778
IC3							.777
IV1							.901
IV2							.852

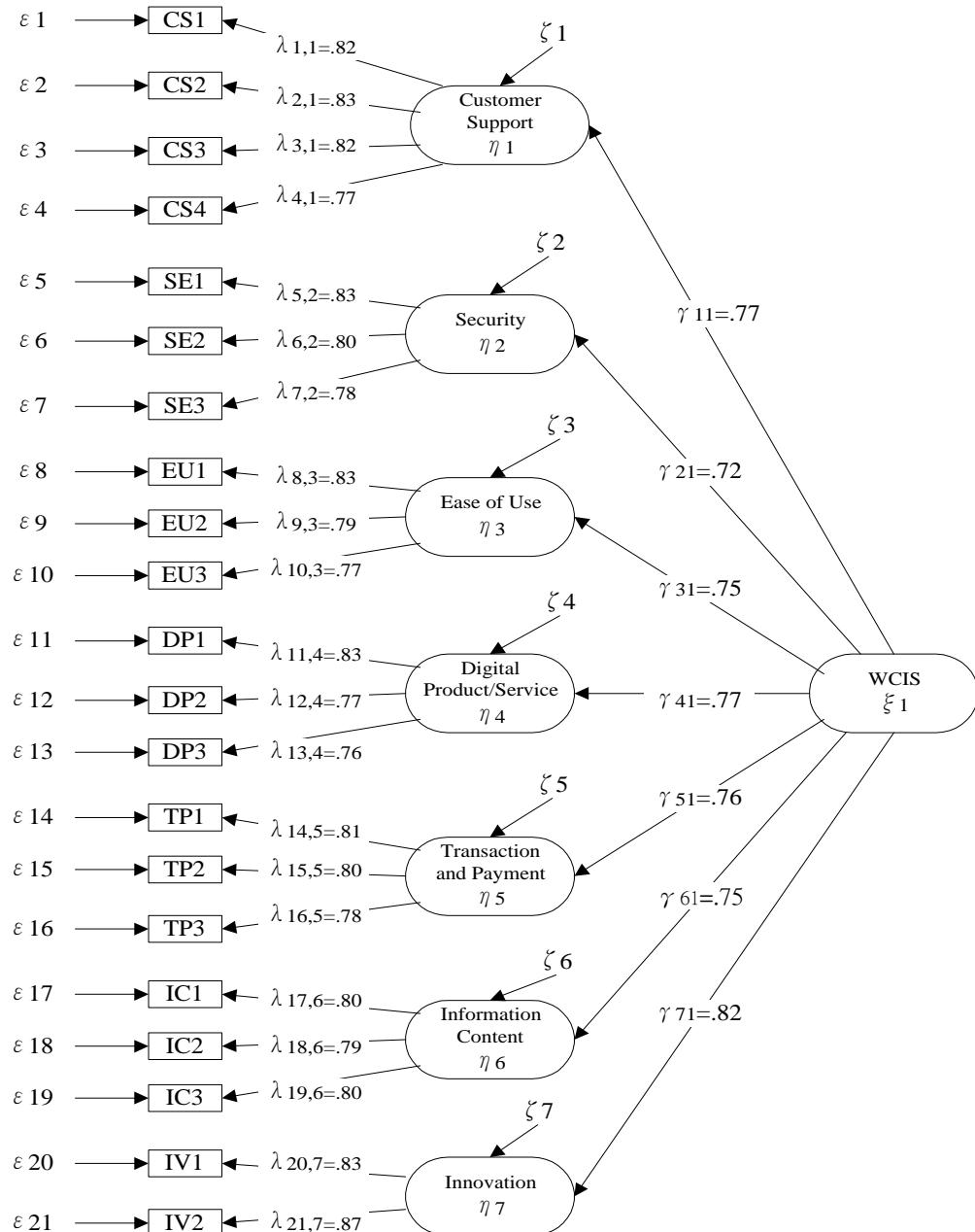


圖 2：二階驗證性因素分析結果

表 2：顧客資訊滿意度量表問項

問項碼	問項描述
CS1	該網站提供完整的顧客支援及售後服務項目
CS2	該網站提供高品質的顧客支援及售後服務
CS3	該網站能夠友善的了解您的問題及服務需求
CS4	該網站能夠快速的處理您的問題及服務需求
SE1	該網站對於顧客隱私資料提供安全的保護
SE2	該網站提供安全的線上交易環境
SE3	我覺得該網站是安全的
EU1	該網站提供友善的操作方式
EU2	該網站輸出的格式容易閱讀
EU3	該網站容易操作與使用

DP1	該網站提供多樣的產品或服務
DP2	該網站提供的數位產品或服務符合我的需求
DP3	該網站提供高品質的數位產品或服務
TP1	該網站提供方便的付款方式
TP2	該網站提供順暢的訂購交易流程
TP3	該網站對價格及交易資訊能充分揭露
IC1	該網站提供正確的資訊
IC2	該網站提供充足的資訊
IC3	該網站提供可靠的資訊
IV1	該網站提供創新的數位產品或服務
IV2	該網站提供最新的資訊

七、本研究的貢獻

本研究對於學術界及實務界具有如下幾點貢獻：

- 1.釐清傳統行銷環境及數位產品網路行銷環境下，兩者在顧客滿意度構念及測量構面上的差異性，除了在概念層次上提出不同於傳統「顧客滿意度」構念的「顧客資訊滿意度」構念外，並從文獻中歸納出的「顧客資訊滿意度衡量構面」，這可以作為學術研究人員與實務工作者在發展顧客資訊滿意度測量工具時的參考構面。
- 2.本研究所提出的「量表建構模式」，可以作為網路行銷與資訊管理研究人員，發展有效測量工具的準則與參考流程，提升學術研究中測量工具的信度與效度，並確保研究結果的正確性。
- 3.本研究依上述的量表建構模式，發展出適用於數位產品網路行銷之「顧客資訊滿意度量表」，此量表可作為後續研究人員發展網路行銷與資訊系統理論時的測量工具，使用經驗證過的滿意度量表，除了讓不同研究成果之間具有一個可以相互比較的基礎，更可以使網路行銷與資訊系統理論發展更為穩定且健全。

八、研究範圍與限制

由於不同產業的產品特性及消費者特質存在著極大的差異，因此本研究僅針對數位產品網路行銷環境來發展「顧客資訊滿意度」測量工具，而無法發展適用於所有產品及行銷環境下的一般化顧客滿意度量表，這不僅是本研究的主要範圍與限制，也是考量理論與實證問題後的必然結果。另外，本研究所指的數位產品網路行銷，在本質上是指「付費的數位產品行銷行為」，而不包含「免費的數位產品傳播行為」，這除了考量廠商行銷行為具有付費經濟的本質之外，最主要是考量網路上「免費的數位產品傳播」與「付費的數位產品

行銷」兩者在顧客資訊滿意測量構面上具有一定程度的差異性。是故，本研究是針對具有金錢交易行為的數位產品網路行銷環境，來發展顧客資訊滿意度量表，而排除免費的數位產品傳播環境，這亦是本研究的範圍與限制之一。

九、結論

由於傳統「顧客滿意度」的衡量工具已無法適用於數位產品網路行銷環境，為了使網路行銷與資訊系統理論發展更為健全，本研究考量了數位產品的「資訊與資訊處理」本質，以及網路行銷方式的「資訊系統內容及資訊介面」本質，提出「顧客資訊滿意度」的構念，用來區別傳統行銷方式中「顧客滿意度」的概念。再則，由於傳統行銷中的「顧客滿意度」研究著重於顧客滿意度的心理決定過程(formation)及決定因素(determinants)，而對顧客滿意度的衡量方式大多以單一問項(single-item)測量或利用未經嚴謹信度與效度分析的測量工具來進行。針對傳統「顧客滿意度」構念在數位產品網路行銷環境中的不適用性，以及其測量工具的缺失，本研究的目的是要在概念上(conceptually)及操作上(operationally)建立一個適用於數位產品網路行銷之「顧客資訊滿意度」衡量工具。由於網路行銷中的顧客資訊滿意度構念所含蓋層面非常廣泛，因此第一步驟，本研究參酌了網路行銷、數位產品、使用者資訊滿意度、以及傳統顧客滿意度等領域的相關文獻，歸納出初步的「顧客資訊滿意度測量構面」，其中包括「數位產品/服務品質構面」、「網路銷售活動構面」、「資訊系統構面」、「顧客支援與售後服務構面」、以及「公司文化構面」等五個理論性構面。第二步驟，本研究並進一步發展一個「數位產品網路行銷之顧客資訊滿意度量表建構模式」，此模式不僅有助於數位產品業者發展本身的「顧客資訊滿意度」測量工具；然而，對於研究顧客資訊滿意度與其他消費者行為變數關係的研究人員而言，本模式正可以提供其在發展顧客資訊滿意度量表時之參考流程。第三步驟，本研究依據先前所提出的顧客資訊滿意度量表建構模式，進一步運用各種統計分析方法來檢驗量表的信度與效度，最後則是要建構出一個適用於數位產品網路行銷環境之「顧客資訊滿意度」測量工具。本研究所發展出的顧客資訊滿意度測量工具，不僅有助於數位產品業者有效評估其顧客滿意程度，更可以作為學術界建立網路行銷與資訊系統理論的測量工具。

參考文獻

中文資料

- 毛穎崙(1995),「Internet 在買賣零售業電子購物應用」, 網路通訊雜誌, 六月號, 頁 80-85。
- 王文泰(1995),「無限商機-網路行銷時代來臨」, 網路通訊雜誌, 三月號, 頁 77-78。
- 王育民、林心慧、王怡舜(1999),「網際網路應用對旅行業產業衝擊之研究」, 1999 中華民國科技管理研討會論文集第三集, 民國 88 年, 頁 97-104。
- 湯宗益、王怡舜(2000),「資訊服務業的電子行銷新典範」, 商業現代化學刊, 第一卷第二期, 頁 81-92。
- 王美玉(1998), 服務品質、服務價值與顧客滿意關係之研究---消費者貸款之實施, 國立中山大學企業管理研究所碩士論文。
- 吳琮璠、謝清佳(1997), 資訊管理：理論與實務, 第三版, 智勝出版社。
- 呂俊民(1995), 我國一般銀行顧客滿意來源之研究---以高雄市為例, 國立中山大學企業管理研究所碩士論文。
- 呂鴻德(1993),「服務品質與顧客滿意度關係之研究—以流通業為實證」, 1993 中日美流通業研討會, 經濟部商業司編, pp36-39。
- 呂鴻德(1999),「建構顧客滿意為核心，企業再造新思維」, http://www.fisc.com.tw/maz/vol7/maz_page5.htm。
- 呂鴻德, 許慧娟(1997),「服務品質、服務價值與顧客滿意關係之研究」, 1997 邁向管理新紀元國際學術研討會, 頁 325-345。
- 李宗儒(1998),「電子商務行銷在花東銷售之應用」, 第四屆國際資訊管理研究暨實務研討會, 頁 221-229。
- 沈瑞棋、施東河(1998),「餐廳服務品質模糊評量模式之研究」, 第十三屆全國技術及職業教育論文集。
- 汪美香(1999),「消費者特性與使用網站滿意度對網際網路購物意願之影響-以南部大專生為例」, 1999 中華民國科技管理研討會論文集第三集, 民國 88 年, 頁 1-10。
- 周泰華(1999), 服務業顧客滿意評量模式與指標之研究, 國科會研究計劃, 研究期間 87/08-88/07。
- 林志浩、祝國忠、周亞民(1997),「數位化產品在網路外生效應下的競爭策略-以電腦軟體為例」, <http://www.mba.ntu.edu.tw/~jtchiang/StrategyEC/eec/report2/menu.htm>

林俊毅(1998),「網路行銷」, <http://www.ivy.net.tw/IntMark.htm>。

林晉寬 (1999),「行銷網際網路之理想型產品」, 中華管理評論, Vol.2 , No.2 , July , 頁 157-168 。

林震岩(1998),「產品型態與訊息呈現方式對網路購物行為影響之研究」, 第九屆資訊管理學術研討會。

唐麗英等(1999),「滿意度模式建立與滿意構面確認之研究」, 交大管理學報, 第十六卷, 第一期, 頁 55-74。

曹修源、林豪鏘(1999),「電子商務 4P 對網路購物意願的探討-交易成本理論應用之研究」, 1999 中華民國科技管理研討會論文集第三集, 頁 23-34。

許俊賢(1999),「網路行銷策略對企業市場價值之研究」, http://ecrg.ba.ntust.edu.tw/paper_8.htm。

陳光榮 (1998),「網際網路的新商機與行銷通路所產生的變革」, 經濟情勢暨評論季刊, 第四卷, 第三期, <http://production.cynex.com.tw/moea.86b/www/sae15.htm>。

陳坤豐(1998), 規模、所有權型態與管理會計資訊系統及其使用者滿足程度關係之研究：以銀行業為例, 國立中山大學企業管理研究所碩士論文。

陳鴻基(1997),「資訊管理的發展與研究方向」, 資訊管理學報, 第四卷, 第一期, 頁 80-83。

喬有慶等(1999),「銀行業顧客滿意度之再研究—Ordered Probit 分析」, 第五屆服務管理研討會論文集, 頁 106-120。

湯宗泰(1999),「網際網路服務種類之環境與組織因素」, 1999 中華民國科技管理研討會論文集第三集, 頁 35-48。

楊國樞等人(1983), 社會及行為科學研究法, 上下冊, 東華書局。

溫肇東(1999),「電子商務與行銷及廣告實務」, 電子商務總論, 智勝出版社, 頁 179-222。

廖云薇(1996), 高階主管資訊系統之發展：中美日之個案分析, 國立中山大學資訊管理學系碩士論文, 高雄。

賓至剛(1999), 網路創業 DIY-- 電子商務的規劃與實踐, 跨世紀電子商務出版社

趙國仁(1998),「電子商務與智慧型代理人」, <http://www.mba.ntu.edu.tw/~jtchiang/StrategyEC/eec/craychu/index.html>。

蔡瑞明等(1998),「在電子商務環境下進行網路購物意願之研究—以購買涉入、參考群體與消費者背景特性探討」, 1998 國際資訊管理研究暨實務研討會論文集, 頁 121-128。

羅凱揚(1998),「網路報紙使用者滿意度評估模式之探討」, http://ecrg.ba.ntust.edu.tw/paper_5.htm。

欒斌(1999)，電子商務，滄海書局。

英文資料

- Abdul-Gader, Abdulla (1996), "The Impact of User Satisfaction on Computer-Mediated Communication Acceptance: A Causal Path Model," *Information Resource Management Journal*, 9: 1, pp. 17-26.
- Aiello, A. et al (1977), "Scaling the Heights of Customer Satisfaction: An Evaluation of Alternative Measures," *Consumer Satisfaction Dissatisfaction and Complaining Behavior*, Ralph Day ed. Bloomington: Indiana University, (April), pp.43-50.
- Alavi, M. and Henderson, J. (1981), "An Evolutionary Strategy for Implementing a Decision Support System," *Management Science*, 27: 11, pp. 1309-1323.
- Alba, J. et al. (1997), "Interactive Home Shopping: Consumer, Retailers, and Manufacturing Incentives to Participate in Electronic Marketplaces," *Journal of Marketing*, (July), pp.38-53.
- Aldridge, A. et al. (1997), "Get Linked or Get Lost: Market Strategy for the Internet," *Electronic Networking Application and Policy*, pp.161-169.
- Allen, M. J. and Yen, W. M. (1979), *Introduction to Measurement Theory*, Brooks-Cole, Monterey, CA.
- American Marketing Association (1985), "AMA Board Approves New Marketing Definition," *Marketing News*, 19: 1.
- Anderson, E. E. and Sullivan, M. W. (1993), "The Antecedents and Consequences of Customer Satisfaction for Firms," *Marketing Science*, 12 (Spring), pp.25-43.
- Anderson, E. W., Fornell, C. and Lehmann, D. R. (1994), "Customer Satisfaction, Market Share, and Profitability: Findings from Sweden," *Journal of Marketing*, 58 (July), pp. 53-66.
- Anderson, J. C. (1987), "An Approach for Confirmatory Measurement and Structural Equation Modeling of Organizational Properties," *Management Science*, 33: 4, pp. 525-541.
- Augar, P., and Gallaugher, J. M. (1997), "Factors Affecting The Adoption of an Internet-Based Sales Presence for Small Business," *Information Society*, pp.55-74.
- Babbie, Earl (1998), *The Practice of Social Research*, 8th ed., Belmont, CA: Wadsworth Pub.
- Bacharach, Samuel B. (1989), "Organizational Theories: Some Criteria for Evaluation," *Academy of Management Review*, 14: 4, pp. 496-515.
- Bagozzi, R. P., and Phillips, L. W. (1982), "Representing and Testing Organizational Theories: A Holistic Construal," *Administrative Science Quarterly*, 27 (September), pp. 459-489.

- Bagozzi, R. P., Yi, Y., and Phillips, L. W. (1991), "Assessing Construct Validity in Organizational Research," *Administrative Science Quarterly*, 36 (September), pp. 421-458.
- Bailey, J. E. and Pearson, S. W. (1983), "Development of A Tool for Measuring and Analyzing Computer User Satisfaction," *Management Science*, 29, 5, pp. 530-545.
- Band, William (1988), "How to measure customer satisfaction," *Sales & Marketing Management in Canada*, (Jan), pp. 24-26.
- Barki, H. and Huff, S. (1985), "Changes, Attitude toward Change, and Decision Support System Success," *Information and Management*, 9, pp.261-268.
- Baronas, A. and Louis, M. (1988), "Restoring the Sense of Control During Implementation: How User Involvement Leads to System Acceptance," *MIS Quarterly*, 12: 1, pp.111-126.
- Baroudi, J. J. and Orlikowski, W. J. (1998), "A Short-form Measure of User Information Satisfaction," *Journal of Management Information Systems*, 4: 4 (Spring), pp. 44-59.
- Barrett, G. V. et al. (1968), "Human Factors Evaluation of a Computer-Based Information Storage and Retrieval System," *Human Factors*, Vol. 10.
- Bearden, William O. and Teel, Jess E. (1983), "Selected Determinants of Consumer Satisfaction and Complaint Reports," *Journal of Marketing Research*, 20 (February), pp. 21-28.
- Calder, Bobby J. (1977), "Focus Groups and the Nature of Qualitative Marketing Research," *Journal of Marketing Research*, 14, pp.353-364.
- Campbell, Donald R. and Fiske, Donald W. (1959), "Convergent and Discriminant Validation by Multitrait-Multimethod Matrix," *Psychological Bulletin*, 56, pp.81-105.
- Cardozo, R. N. (1965), "An Experimental Study of Consumer Effort-Expectations and Satisfaction," *Journal of Marketing Research*, 5: 2 (Aug), pp.224-249.
- Cardozo, R. N., (1964), "Customer Satisfaction: Laboratory Study and Marketing Action," *Journal of Marketing Research*, 2 (Aug), pp.244-249.
- Cavallo,G.O. and Joel, P. (1989), "Building Customer Satisfaction, Strategically," Bottomline, (Jan), pp.29-33.
- Charlesworth, W. R.(1969), "The Role of Surprise in Cognitive Development," *Studies in Cognitive Development*, ed. David Elkind and John H. F, New York: Oxford University Press.
- Chen, P. Y. (1998), "Pricing Strategies for Digital Information Goods and On-line Services on the Internet," <http://www.mba.ntu.edu.tw/~jtchiang/StrategyEC/eec/report1/report1.htm>
- Cheney, P. and Dickson, G. (1982), "Organizational Characteristics and Information Systems," *Academy of Management Journal*, 25, 1, pp. 170-184.

- Chin, Wynne W. and Newsted, Peter R. (1995), "The Importance of Specification in Causal Modeling: The Case of End-user Computing Satisfaction," *Information Systems Research*, 6: 1 (March), pp.73-81.
- Churchill, Gilbert A. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research*, Vol. XVI (Feb), pp. 64-73.
- Churchill, Gilbert A., Jr. and Surprenant Carol (1982), "An Investigation into the Determinants of Customer Satisfaction," *Journal of Marketing Research*, 19 (November), pp.491-504.
- Cohen, B. (1980), *Developing Sociological Knowledge: Theory and Method*, Englewood Cliffs, NJ: Prentice Hall.
- Comrey, A. L. (1973), *A First Course in Factor Analysis*, NY: Academic Press.
- Comrey, A. L.(1988), "Factor Analysis Methods of Scale Development in Personality and Clinical Psychology," *Journal of Consulting and Clinical Psychology*, 54, pp.754-761.
- Conrath, D. W. and Mignen, O. P. (1990), "What is Being Done to Measure User Satisfaction with EDP/MIS," *Information and Management*, 19: 1 (Aug), pp.7-19.
- Cox(1980), "The Optimal Number of Response Alternative for a Scale: A Review," *Journal of Marketing Research*, 27 (Nov.), pp.407-422.
- Cronbach, L. J. and Meehl, P. E. (1955), "Construct Validity in Psychological Tests," *Psychological Bulletin*, 52, pp.281-302.
- Cyert, R.M. and March, J.G. (1963), *A Behavioral Theory of the Firm*, Prentice-Hall, Englewood Cliffs, N.J.
- Czepeil, John A., Rosenberg Larry J., and Akerele, Adebayo (1974), "Perspective on Consumer Satisfaction," *AMA Conference Proceedings*, 4, pp.149-154.
- Davidow, W. H. and Bro, U. (1989), *Total Customer Service: The Ultimate Weapon*, New York: Harper & Row.
- Davis, F. (1989), "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," *MIS Quarterly*, 13: 3, pp.319-342.
- Day, R. L. (1984), "Modeling Choices Among Alternative Response to Dissatisfaction," *Advances in Consumer Research*, Vol.11, Ann Arbor, MI: Association for Customer Research, p.460.
- Debons, A. et al. (1978), "Effectiveness Model of Productivity," *Research on Productivity Measurement Systems for Administrative Services: Computing and Information Service*, 2 (July).
- Doll, W. J. and Torkzadeh, Gholamreza (1988), "The Measurement of End-User Computing Satisfaction," *MIS Quarterly*, 12: 2, pp.259-274.

- Dubin, R. (1969), *Theory Building*, New York: Free Press.
- Evans, J. (1976), "Measures of Computer and Information Systems Productivity Key Information Interviews," *Tech Report APR-20546/TR-5*.
- Ferratt, T. W. and Short, L. E. (1986), "Are information systems people difference An investigation of motivational difference: An investigation of motivational differences," *MIS Quarterly*.
- Festinger, L.(1957), *A Theory of Cognitive Dissonance*, Stanford University Press, Stanford, C.A.
- Flanagan, J. (1954), "The Critical Incident Technique," *Psychological Bulletin*, 51, pp.327-358.
- Flower, F. J. (1984), "Survey Research Methods, Applied Social Research Methods Services," 1, Beverly Hills. Sage Publication.
- Fornell, Claes (1992), "A National Customer Satisfaction Barometer: The Swedish Experience," *Journal of Marketing*, (Jan), pp.6-21.
- Galletta, D. F. and Lederer, A. L. (1989), "Some Caution on the Measurement of User Information Satisfaction," *Decision Sciences*, 20: 3, pp.419-438.
- Gerbing, D. W., and Anderson, J. C. (1988), "An Updated Paradigm for Scale Development Incorporating Unidimensionality and Its Assessment," *Journal of Marketing Research*, 25 (May), pp. 186-192.
- Ghiselli, E. E. (1964), *Theory of Psychological Measurement*, NY: McGraw-Hill Book Company.
- Giese, Joan L. and Gote, Joseph A. (2000), "Defining Consumer Satisfaction," *Academy of Marketing Science Review* [Online] 00 (01) Available: <http://www.amsreview.org/amsrev/theory/giese00-01.html>.
- Gogan, J. L. (1996-1997), "The Web's Impact on Selling Techniques: Historical Perspective and Early Observation," *International of Electronic Commerce*, 1: 2, pp.89-108.
- Goodhue, D. L.(1995), "Task-Technology Fit and Individual Performance," *MIS Quarterly*, 19: 2 (June), pp. 213-236.
- Goodman, J. (1989), "The Nature of Customer Satisfaction," *Quality Progress (QPR)*, (Feb), pp.37-40.
- Helson, H. (1948), "Adaption-Level as a Basis for a Quantitative Theory of Frames of Reference," *Psychological Review*, 35 (Nov), pp.297-313.
- Hempel, C. (1973), "The Meaning of Theoretical Terms. A Critique of the Standard Empiricist Construct," *Logic, Methodology and Philosophy of Science*, Amsterdam: North Holland, pp.367-378.

- Hiltz, S. R., (1984), *Online Communities: A Case Study of the Office of the Future*, Ablex, Norwood, NJ.
- Hiltz, S. R., and J. Kenneth, (1990) “User Satisfaction with Computer-Mediated Communication Systems,” *Management Science*, 36: 6, pp.739-764.
- Hoffman, D. L. and Novak, T. P. (1997), “A New Marketing Paradigm for Electronic Commerce,” *Information Society*, 13: 1 (Jan-Mar), pp. 43-54.
- Hoffman, D. L., and Novak, T. P. (1996) “Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations,” *Journal of Marketing*, 60, 3 (July), 50-68.
- Hovland, C. I. et al. (1953), *Communication and Persuasion: Psychological Studies of Opinion Change*, Yale University Press, New Haven, CT.
- Hovland, C. I., Harvey, O. J., and Sherif, Muzafer (1957), “Assimilation and Contrast Effects in Reactions to Communication and Attitude Change,” *Journal of Abnormal and Social Psychology*, 55 (July), pp.244-252.
- Howard, J. A. and Sheth, J. N. (1969), *The Theory of Buyer Behavior*, New York: John Wiley & Sons.
- Hunt, H. K. (1997), “CS/D – Overview and Future Research Directions,” *Conceptualization and Measurement of Customer Satisfaction and Dissatisfaction*, Cambridge, MA: Marketing Science Institute, pp.459-460.
- Huppertz, J. W. (1979), “Measuring Components of Equity in the Marketplace: Perceptions of Inputs and Outcomes by Satisfied and Dissatisfied Consumer,” *New Dimensions of Consumer Satisfaction and Complaining Behavior*, Bloomington, IN: Indiana University School of Business.
- Huppertz, J. W., Arenson, Sidney J., and Evans, Richard H. (1978) “An Application of Equity Theory to Buyer-Seller Situations,” *Journal of Marketing Research*, 15 (May), pp.25-48.
- Ives, B., and Mason, R. (1990), “Can Information Technology Revitalize Your Customer Service? ,” *Academy of Management Executive*, 4, 4 (Nov)., pp. 52-69.
- Ives, B., Olson, M. H. and Baroudi, J. J. (1983), “The Measurement of User Information Satisfaction,” *Communications of the ACM*, 26: 10 (Oct), pp.785-793.
- Jamshid, E. and Farhoodmand, A. F. (1996), “A Structural Model of End User Computing Satisfaction and User Performance,” *Information & Management*, 30, pp.65-73.
- Jenkins, A. M. and Ricketts, J. A. (1985), “The Development of a MIS Satisfaction Questionnaire: An Instrument for Evaluating User Satisfaction with Turnkey Decision Support Systems,” *Discussion Paper #296*, School of Business, Indiana University.
- Jetlink(1999), “JetLink Customer Survey”, <http://www.jetlink.net/survey.html>.

- Jöreskog, K. G. (1993), "Testing Structural Equation Models," in *Testing Structural Equation Models*, K. A. Bollen and L. S. Long (eds.), Sage Publications, Newbury Park, CA.
- Kailash Joshi(1992), "A Causal Path Model of the Overall User Attitudes Toward the MIS Function – The Case of User Information Satisfaction," *Information & Management*, 22, pp.77-88.
- Kalakota, P. and Whinston, A. B. (1996), *Frontiers of Electronic Commerce*, Addison-Wesley.
- Kaplan, Abraham (1964), *The Conduct of Inquiry*, San Francisco: Chandler.
- Katz, D. and E. Stotland (1959), "A Preliminary Statement to a Theory of Attitude Structure and Change," *Psychology: A Study of a Science*, 3, NY: McGraw-Hill.
- Kerlinger, F. N.(1978), *Foundations of Behavioral Research*, McGraw-Hill, NY.
- Kerlinger, Fred N. (1973), *Foundations of Behavior Research*, 2nd ed. New York: Holt, Rinehart, Winston, Inc.
- Klenke, K.(1992), "Construct and Critique of User Satisfaction and User Involvement Instructions," *INFOR*, 3: 4, pp.325-348.
- Kolter, P. (1991), *Marketing Management : Analysis, Planning, Implementation and Control*, 7ed., New Jersey : Prentice-Hall.
- Krishnan, Mayuram S and Ramaswamy, Venkatram (1998), "An Empirical Analysis of Customer Satisfaction for Intranet Marketing System," *Decision Support Systems*, 24 (Nov), pp. 45-54.
- Larcker, D. F., and Lessig, V. P. (1980), "Perceived Usefulness of Information: A Psychometric Examination," *Decision Science*, 11: 1, pp.121-134.
- Lele, Milind (1987), *The Customer is Key: Gaining an Unbeatable Advantage Through Customer Satisfaction*, Wiley.
- Lucas, H. C., JR, (1975), *Why Information System Fail*, Columbia University Press, New York.
- Mahmood, M. and Becker, J. (1985), "Effects of Organizational Maturity on End-Users' Satisfaction with Information Systems, *Journal of Management Information Systems*, 2: 3, pp.107-117.
- Maish, A. (1978), "A User's Behavior toward MIS," *MIS Quarterly*, 3: 1, pp. 39-52.
- Mano, Haim and Oliver, Richard L. (1993), "Assessing the Dimensionality and Structure of the Consumption Experience: Evaluation, Feeling, and Satisfaction," *Journal of Consumer Research*, 20 (December), pp. 451-466.
- Mantraco Inc. (1999), "Total Quality Management - Customer Satisfaction," <http://www.mantraco.com.tw/991203a.htm>

- Marsh, H. W., and Hocevar, D. (1985), "Application of Confirmatory Factor Analysis to the Study of Self-concept: First and Higher Order Factor Models and Their Invariance Across Groups," *Psychological Bulletin*, 97: 3, pp. 562-582.
- McCarthy, J.(1964), *Basic Marketing*, Homewood, IL: Richard D. Irwin.
- Melone, N. P.(1989), "A Theoretical Assessment of the User Satisfaction Construct in Information Systems Research," *Management Science*, 36: 1 (Jan), pp.76-91.
- Mitchell, T. R. (1985), "An Evaluation of the Validity of Correlational Research Conducted in Organizations," *Academy of Management Review*, 10: 2, pp.192-205.
- Molenaar, Cor (1995), *Interactive Marketing*, England: Hower.
- Montezami, A. (1988), "Factors Affecting Information Satisfaction in the Context of the Small Business Environment," *MIS Quarterly*, 12:2, pp.239-256.
- Muller, W.(1991),"Gaining Competitive Advantage Through Customer Satisfaction," *European Management Journal*, June, pp.201-221
- Nagel, E. (1961), *The Structure of Science: Problems in the Logic of Scientific Explanation*, New York: Harcourt, Brace and World.
- Narayanan, Sunder(1996), "Customer Satisfaction Measurement and Management," *Journal of Academy of Marketing Science*, 24 (Summer), pp.276-277.
- Nath, R., et al. (1998), "Electronic Commerce and the Internet: Issues, Problems, and Perspective," *International Journal of Information Management*, 18: 2, pp.91-101.
- Neumann, S. and Segev, E. (1980), "Evaluate Your Information System," *Journal of Systems Management*, 31 (March).
- Noland, R. and Seward, H. (1974), "Measuring User Satisfaction to Evaluate Performance Systems," *Managing the Data Function*, St. Paul, NM: West Publishing Co.
- Nunnally, J. C. (1967), *Psychometric Theory*, McGraw-Hill, N.Y.
- Nunnally, J. C. (1978), *Psychometric Theory*, McGraw-Hill, N.Y.
- O'Reilly, T. (1996), "Publishing models for Internet commerce," *Communications of the ACM*, 39: 6 (June), pp. 79-86.
- Oickson, G. et al.(1977), "Research in Management Information Systems; The Minnesota Experiments," *Management Science*, 23: 9, pp.913-923.
- Oliver, Richard L. (1980), "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions," *Journal of Markets Research*, 17 (Sep), pp.460-469.
- Oliver, Richard L. (1981), "Measurement and Evaluation of Satisfaction Processes in Retailing Setting," *Journal of Retailing*, 57, pp.25-48.
- Oliver, Richard L. (1981), "Measurement and Evaluation of Satisfaction Processes in Retailing

- Setting," *Journal of Retailing*, 57, pp.25-48.
- Oliver, Richard L. (1993), "Cognitive, Affective, and Attitude Bases of the Satisfaction Response," *Journal of Consumer Research*, 20 (December), pp.418-430.
- Oliver, Richard L. and DeSarbo, Wayne. S. (1988), "Response Determinants in Satisfaction Judgements," *Journal of Consumer Research*, 14 (March), pp.495-507.
- Oliver, Richard L. and Swan, John E. (1989), "Consumer Perceptions of Interpersonal Equity and Satisfaction in Transactions: A Field Survey Approach," *Journal of Marketing*, 53 (April), pp.21-35.
- Osgood, C. E. and Tannenbaum, P. H. (1955), "The Principle of Congruence in the Prediction of Attitude Change," *Psychology Bulletin*, 62, pp.42-55.
- Palvia, Prashant C. (1996), "A Model and Instrument for Measuring Small Business User Satisfaction with Information Technology," *Information & Management*, 31, pp. 151-163.
- Parasuraman, A., Zeithaml, V. A., Berry, L. L. (1988), "SERVQUAL: A Multiple-Item Scale for Marketing Consumer Perceptions of Service Quality," *Journal of Retailing*, 64: 1 (Spring), pp.12-40.
- Parasuraman, A., Zeithaml, V. A., Berry, L. L. (1985), "A Conceptual Model of Service Quality and Its Implication for Future Research," *Journal of Marketing*, 49 (Fall), pp.41-50.
- Peter, J. P. and Olson, J. C. (1990), *Consumer Behavior and Marketing Strategy*, Irwin, IL: Homewood Company.
- Peter, J. Paul (1981), "Construct Validity: A Review of Basic Issues and Marketing Practices," *Journal of Marketing Research*, 18 (May), pp.133-145.
- Peterson, Robert A. and Wilson, William R. (1992), "Measuring Customer Satisfaction: Fact and Artifact," *Journal of the Academy of Marketing Science*, 20 (Winter), pp.61-71.
- Picot, Arnold; Bortenländer, Christine; and Röhrl Heiner (1997), "Organization of Electronic Markets: Contributions From the New Institutional Economics," *Information Society*, 13: 1 (Jan-Mar), pp. 107-123.
- Prashant, P. C. (1996), "A Model and Instrument for Measuring Small Business User Satisfaction with Information Technology," *Information & Management*, 31, pp.151-163.
- Price, J. L., and Mueller, C. W. (1986), *Handbook of Organizational Measurement*, Pitman Publishing Inc., Marchfield, MA.,
- Quelch, J. A. and Klein, L. R. (1996), "The Internet and International Marketing," *Sloan Management Review*, 37: 3 (Spring), pp.60-75
- Raymond, L. (1985), "Organizational Characteristics and MIS Success in the Context of a Small Business," *MIS Quarterly*, 9: 1, pp.37-52.

- Raymond, L. (1987), "Validating and Applying User Satisfaction as a Measure of Management Information System Success in Small Organizations," *Information and Management*, 12, pp.173-179.
- Richins, Marcia L. (1963), "Negative Word-of-Mouth by Dissatisfied Consumers," *Journal of Marketing*, 47 (Winter), pp.68-78.
- Rushinek, A. and Rushinek, S. F. (1986), "What Makes Business Users Happy?" *Communications of the ACM*, 29: 7, (July), pp.594-598.
- Shaw, M. J. et al. (1997a), "Research Opportunities in Electronic Commerce," *Decision Support Systems*, 21, pp.149-156.
- Shaw, M. J. et al. (1997b), "Characteristics of Electronic Markets," *Decision Support Systems*, 21, pp.185-198.
- Shneiderman, B. (1997), *Designing the User Interface Strategies for Effective Human-Computer Interaction*, Addison Wesley.
- Soumitra, D. et al. (1998), "Business Transformation in Electronic Commerce: A Study of Sectoral and Regional Trends," *Europ Management Journal*, 16: 5 (Oct).
- Spiller, Peter, and Gerald L. Lohse (1997), "A Classification of Internet Retail Stores," *International Journal of Electronic Commerce*, 2:2, Winter, p.29.
- Spreng, Richard. A., MacKenzie, Scott B., and Olshavsky, Richard W. (1996), "A Reexamination of the Determinants of Customer Satisfaction," *Journal of Marketing*, 60 (July), pp.15-32.
- Stevens, S. S. (1951), *Mathematics, Measurement, and Psychophysics, Handbook of Experimental Psychology*. New York: Wiley.
- Stouffer, S. A. and Guttman, L. et al. (1950), *Measurement and Prediction*, Princeton: Princeton University Press.
- Straub, D. W. (1989), "Validating Instruments in MIS Research," *MIS Quarterly*, pp.147-169.
- Swanson, B. (1974), "Management Information Systems: Appreciation and Involvement," *Management Science*, 21, pp.178-188.
- Tait, P. and Vessey, I. (1988), "The Effect of User Involvement on System Success," *MIS Quarterly*, 12: 1, pp.91-108.
- Tan, B. and Lo, T. (1990), "Validation of a User Satisfaction Instrument for Office Automation Success," *Information Management*, 18, pp.203-208.
- Teas, R. J. and Kay, M. P. (1997), "The Realms of Scientific Meaning Framework for Custructing Theoretically Meaningful Nominal Definitions of Marketing Concepts," *Journal of Marketing*, 61 (Apr), pp.52-67.

- Thurstone, L. L. (1927), "Psychophysical Analysis," *American Journal of Psychology*, 38, pp.368-389.
- Tinsley, H. E. A. and Tinsley, D. J. (1987), "User of Factor Analysis in Counseling Psychology Research," *Journal of Counseling Psychology*, 28, pp.191-193.
- Torgerson, W. S. (1967), *Theory and Methods of Scaling*, New York: Wiley.
- Tsao, Hsiu-Yuan and Koong H.C., Lin (1999), "The Influence of Electronic Product Classification on Internet Shopping Willingness," *the Proceedings of 17th Annual Conference of the AoM/IAoM*, San Diego.
- Tse, D. K. and Wilton, P. C. (1988), "Models of Consumer Satisfaction Formation: An Extension," *Journal of Marketing Research*, 25 (May), pp.204-212.
- Vallee, J. et al. (1978), "Group Communication through Computers," *Social Managerial and Economics Issues*, Vol. 4.
- Venkatraman, N. (1989), "Strategic Orientation of Business Enterprises: The Construct, Dimensionality, and Measurement," *Management Science*, 35: 8, pp. 942-962.
- Wanous, J. P. and Lawler, E. E. (1972), "Measurement and Meaning of Job Satisfaction," *Journal Application Psyc.*, 56: 2 (Apr), pp.95-105.
- Weiner, B. et al. (1978), "Affective Consequences of Causal Ascriptions," *New Directions in Attribution Research*, 2, NJ: Lawrence Erlbaum, pp.59-90.
- Westbrook, Robert A. (1980a), "A Rating Scale for Measuring Product/Service Satisfaction," *Journal of Marketing*, 44 (Fall), pp.68-72.
- Westbrook, Robert A. (1980b), "Intrapersonal Affective Influences on Consumer Satisfaction with Products," *Journal of Consumer Research*, 7 (June), pp.49-54.
- Westbrook, Robert A. (1987), "Product/Consumption-Based Affective Responses and Postpurchase Processes," *Journal of Marketing Research*, 24 (August), pp.258-270.
- Westbrook, Robert A. and Oliver, Richard P. (1991), "The Dimensionality of Consumption Emotion Patterns and Consumer Satisfaction," *Journal of Consumer Research*, 18 (June): pp.84-91.
- Whinston, Andrew B., Stahl, D. O., and Choi, S. Y. (1997), *The Economic of Electronic Commerce*, Macmillan Technical Publishing.
- Woodruff, Robert. B., Cadotte, Ernest R., and Jenkins, Roger L. (1983), "Modeling Customer Satisfaction Processes Using Experience-Based Norms," *Journal of Marketing Research*, 20 (August), pp.296-304.
- Woodside, A. et al. (1989), "Linking Service Quality, Customer Satisfaction and Behavioral Intention," *Journal of Health Care Marketing*, 9, pp.5-17.

Wynne, C. W. and Peter R. N. (1995), "The Importance of Specification in Causal Modeling: The Case of End-user Computing Satisfaction," *Information Systems Research*, 6: 1 (March), pp.73-81.

Zeithaml, V. A. and Bitner, M. J. (1996), *Service Marketing*, McGraw-Hill.

Zwass(1996), "Elctronic Commerce: Structures and Issues," International Journal of Electronic Commerce, 1: 1 (Fall), pp.3-23.