

A Study of Shaping Consuming Behavior in Virtual Communities

Yi LIN

Dept. of Biz Admin, Takming Univ. of Scin and Tech
No.56, Sec.1, Huanshan Road, Taipei City, 114, Taiwan

Shih-Chi LIU

Dept of Info Mgmt, Tatung Univ.
No.40, Sec. 3, Chungshan N. Rd, Taipei, 104, Taiwan

Andrew CHOU

Dept of Applied English, Kainan Univ.
No.1 Kainan Rd., Luzhu Shiang, Taoyuan 33857, Taiwan

Jang-Ruey TZENG

Dept of Info Mgmt, Tatung Univ.
No.40, Sec. 3, Chungshan N. Rd., Taipei, 104, Taiwan

Kuo-Shean LIU

Dept of Info Mgmt, Tatung Univ.
No.40, Sec. 3, Chungshan N. Rd., Taipei, 104, Taiwan

ABSTRACT

Drucker's *Post-Capitalist Society* claims that different generations represent different value systems, lifestyles and commercial modes [4]. More importantly these generations can be linked into a continual process with distinctive watersheds sitting among. The world today indeed witnesses a new watershed to emerge with the arrival of internet, delivering tremendous impacts on consumer habits. The nature of our selecting commodities is said to have been transformed from the days when we had less time to compare, less access to encounter, and less confidence to judge those commodities that are arduously promoted by the suppliers.

On the other hand, however, researches found that internet enterprises are also aware that in virtual communities consumers are in lack of commitment to specific commercial goods they promote as there is a lack of face-to-face or even voice-to-voice interaction to convey certain social meaning as that in the "real" communities. Since stimulus-response relationship cannot be taken for granted and reinforcement has to be in place to ensure engagement, the internet content producers are not hesitant to make effort to construct selection patterns of consumers in some strategic ways. *Shaping*, *delayed effectiveness* and *conditioning* are the main approaches, to name but the most important three.

Seeing that trends that virtual community is increasingly identified by internet content producers as an important benchmark to potentially influence consuming patterns, this paper is to examine the structure of consumer *shaping* and consumer *delayed effectiveness* as a premature effort to explore the current strategy used by the internet content producers that have significant stakes in shaping consumers' virtual community. Methodologically, a triangulation design is set and a benefit chain is constructed, sustained by interviews in a face-to-face and focus-group formats. Based upon the findings after the survey, the paper in the end proposes a model of consumers' *delayed effectiveness* that not only summaries the developing process

evolution of *delay effectiveness* but serves as a reference point for internet enterprises if they are to create a promotion strategy in virtual communities.

Keywords: Shaping, Delayed Effectiveness, Virtual Community

1. INTRODUCTION

According to the estimated data released by the Institute of Information Industry (III), the productivity of the online game reached 6 billions in 2003 from 4 billions in 2002 with the growth rate of 50% [9]. The master group of the consumers surfing on the hot waves is the younger generation of the internet ranging from 12 to 25 years old [1], and the generalized meaning of younger generation of internet is for such group of people who can enjoy interacting with others by surfing online without any difficulty, hereby defined by the internet enterprises "Golden Chicken" with great potential of making profits [8]. All the big internet enterprises are heading the direction of highly entertained business and pulling more effort to develop the related services for such internet communities [14]. Different from the past cliché services of BBS and message interaction, internet companies help the participants of the communities to play the virtualized role as their incarnation interacting with other fictional objectives on the online game by using "Avatar".

What is "Avatar"? Avatar comes from the Sanskrit of Indian, meaning "An existentialist is willing to wear the material clothes to get involved with the creativity of the world" [13]. With the continuous improvement of internet service, the concept of Avatar in Indian Legendary story has been gradually proven real and let the participants show their personal characters or to express their expected images based on their desire in the bottom of heart. The reason that raises "Avatar" with popularity in Taiwan is the completeness of infrastructure and the desire to show off. Taiwan is the place after Korea to provide such service of "Avatar", which

become the most added value service and increase the online users by 20.000 a month [15]. CEO of Gamania, Mr. Liu pointed out that “Avatar is a big impact to online games and internet industry”. The next profit generator for content provider service is definitely from such basis. Consideration of the great profit, the internet enterprises in Taiwan introduce “Avatar” into internet market without any hesitation, and formally transform the internets with the words as a tool of communication into the world of interacted image and entertainment. So far, the internet markets still enjoy the honeymoon and more efforts are devoted to the vivid and colorful customized figures to attract the customers’ attention. Looking from different angles, internet enterprises should be proud of how far they go so far, but pay more concerns of all the possible alternatives that could replace the “Avatar”, like online games. Isn’t it more exiting interactive mode than the “Avatar”? [12] Actually, they are competitive to each other on the basis of consuming time. On the other hand, there exists a great possibility of losing such curiosity or the generation of consumer delayed effectiveness, even leading to failure of the company, which is the sense of risk, can not be ignored by the internet enterprises [7] [20].

Based upon the learning process of operant conditioning by the behaviorist [17], which derived from the main idea of law of effects, the learning process of the operant conditioning includes: the acquisition of operant behavior, the termination and natural restoration of learning behavior and the generalization and discrimination of stimulus.

a. The acquisition of operant behavior: To research the process of operant conditioning, Skinner designed so-called “skinner box” equipment, including a light lamp, a response lever, a pecking board, a container for food or water, electrical floor and a record board. When a starving rat left in the box, it would be fed with the food by pressing the response lever. It is of course a self-emitted for a rat to press the response lever at the first time, but turns into a ideal operant behavior-called by the Skinner after the food comes together with the pressed response lever.

b. The termination and natural restoration of learning behavior: The operant behavior is hereby learned by reinforcement implementation, and vanishes because of the same enabler. The rat in the box is going to decrease its pressing lever behavior until totally stop due to no food coming after the pressing action. The same story happens to the human being; hard working students consolidate their study because of the continuous encouragement from parents and teachers, but gradually terminate such behavior owing to the disregard of compliment.

c. The generalization and discrimination of stimulus: Operant conditioning and classical conditioning are alike with the phenomena of stimulus generalization and discrimination. An individual reinforcing his or her behavior under stimulus

environment would show the similar response if he or she encounter the same situation. It is called “stimulus generalization”. “To apply what you learn” is a typical phenomenon for stimulus generalization. On the contrary, it is called stimulus discrimination if an individual’s response to stimulus A can be reinforced, but without any response to stimulus B.

2. METHODOLOGY

The research adopted the technique of data and theory triangulation presented by Denzin [3], together with the multi-method approach [19]. Theoretical background of the research is the same as the one in the section of research background, which constructed the thinking structure associated with consumer behavior shaping prototype, regular psychology, delayed effectiveness and the behavior conditioning theory in the social science. Among which, all the data included in the data triangulation comprised foreign database plus domestic secondary data and the primary data for in-depth interview and focus group session. Collecting and analyzing the data from the face to face interview with product manager of China Telecom for online happiness country Mr. Xu, marketing manager, Ms. X and 30 respondents in the focus group session, the study conclusively build up the structure as depicted in figure 1 to explore the potential motives by three ways of verification.

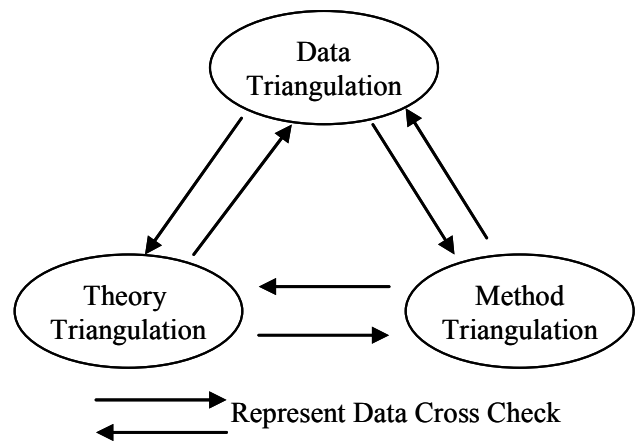


Figure 1. The Structure of Methodology

a. In-depth Interview: In-depth interview is kind of face to face interview with specific purposes. In other words, the interview with specific purpose should be acceptable to the participants who are part of the colloquy. Smith [18] took the interview of qualitative research as a journey of colloquy and there existed partner relationship between the interviewers and interviewees in the process of interview. All the participants involved in the colloquy can exchange points of view and attitude by the ways of oral or non-oral communication.

b. Focus Group Interview: Group in-depth interview, also called focus group interview recognized as one of the most universal

tools. David (2000) classified the three words of such term to distinguish focus group interview from others. "Group" means that a group of people interact each others with same ideas and interests. "Depth" is the term that information being collected in the interview is far deeper than the personal relation. As for the meaning of "focus", should constrain the interview in limited numbers of issues.

The questionnaire was designed by experts and affiliated with soft laddering to explore totally 36 samples in the south, middle and north part of Taiwan, targeting at their current situation and potential motives. Through the process of verification, 30 out of 36 are effective samples, which claimed the effective rate 83.3% and the sampling of the population adopted the accidental sample, associated with internet sampling [16].

c. Benefit Chain: A linkage of products with attribute brings the consequences to the consumers after products are consumed and reinforce the value to the consumers with knowledge structure. The attribute of products can be differentiated as concrete and abstract attributes. The prior means consolidated criteria with objective measurable attribute and the latter shows the abstract idea with subjective mindset. Consequences are the results after the products are consumed, distinguished as functional, psychological and social consequences. Functional consequence is the instant physical results generated by the products. Psychological consequence is the one without direct influence but the feelings and satisfaction impressed by the products after the products being used. Social consequence is the prospective and responses from others, which means more invisible and abstract results. Value, in terms of individual subjective concept, represents the desire, preferences and demand of certain things or situations. The distinction of value can be classified as instrumental values and terminal values.

Instrumental value is a mean to achieve terminal values while terminal value is the perception and imagination to the consumers. In the interacted relations among the "attribute-consequence-value", a linkage existing among which was called benefit chain analysis [6].

3. DATA ANALYSIS

The key point of methodological triangulation is to verify the methodology for each other direction among three entities in the field of qualitative study. The research adopted face-to-face interview and focus group session to collect ideas and information from 30 effective samples, and also explore respondents' potential motives by using means ends chain. The important findings are as the followings

3.1 The first phase shaping effective data analysis (by ways of face to face interview, focus group session)

A. Answer from marketing manager: Most of our advertisements belong to newspaper ads, targeting at specific customers and then going to broader and wider ads, including broadcasting and carriage ads.

B. Answer form consumer (respondent #5): Most of the messages related to the Avatar exposed to me through the internet ads and introduction from friends.

B. Answer from consumer (respondent#3): I used to glimpse at the ads in bus and in the magazine of Garmania.

A. Answer from production manager: Currently, 100 substitute dollars are provided to new member as testing purpose online for free in Hinet. The reason to give substitute money online for free is to shape consumers' behavior and bring them all pleasure when they compare with other users in the happiness country. Under such circumstances, online users would rather to pay more real money to make up and costume their figures online when they are short of substitute money, hereby the popularity of the website can be reached.

B. Answer from consumer (respondent #9): Yes, I will try it out. Most importantly, whether I will continue to consume or not depends on the first impression upon me. I prefer the design with single color and make me feel comfortable. I will feel dizzy if the design with colorful combinations.

3.2 The second phase shaping effective data analysis:

A. Answer from product manager Most of our products with promotion are exceeding expire date, in other words, there are the products with less popularity and almost phased out by the slow response to the market. For us, all the products with promotion are the goods to explore their residual value, as part of our income by pouring wholesale.

B. Answer from consumer (respondent#17): whether I would purchase the products or not mainly depends on my personal requirement or interest, therefore no product would be acquired only with the reason of discount.

B. Answer from consumer (respondent#15): Products with discount are not attractive to me at all. I think the most important thing is that whether the product means something to me and if it dose, I would buy it no matter what.

A. Answer from product manager: So far, in addition to the chatting room and my home, the most hot spot for the happiness country is the family. Right now there are one half of the members willing to play the roles in a family, including some new and old participants. The vital attraction for the family member is not the role they play, but the conceptual idea and their influence of power to each others.

B. Answer from consumer B (respondent#9): The part of attraction to me is that I can chit chat with my friends or joke around them.

3.3 The third phase shaping effect data analysis:

A. Answer from product manager: The critical factors that eventually keep the customers stay online are the addiction to internet and the process of interaction among players. All the functions, including my home, personal hand note, chit chat board, discussion area and family are designed to reach the purpose of improving mutually interacted space, enhancing interaction and continuously enjoying pleasure in happiness world.

B. Answer from consumer (respondent#7): The place where I play is happiness world. I really enjoy reading the messages left by others, or to write something about myself, and there is nothing really interests me other than that. As regarding to the hand note, I share my feeling and mood with the others seriously and expect to receive the same feedback from the others. The meaning of taking hand note is that I felt being confirmative with my works and finding someone with same taste.

A. Answer from marketing manager: Specific product or gifts in special festival are very potential. Taking the activity in happiness country for instance, most our customers wore the ghost decorations and costumes promote such activity in ghost month. It is necessary to promote certain products when the special festival comes.

B. Answer from consumer (respondent#27): Yes, I would go buy, either for myself or reselling it. It would possibly bring me vanity feeling if I buy the promotion product for myself, but the product with the meaning of festival has extra added value made me irresistible to the attraction.

A. Answer from market manager: It's for sure that Consumers won't purchase any products because of attending the costume party. The motive that urge the internet users show off mainly from their nature of competence. The more people challenge, the more intensive they get involved in the game.

B. Answer from consumer (respondent): I used to attend two of the costume parties. The reasons that attract me are, the bonus coming together with game and the chance to show you off, being recognized by your personal style. It would be gorgeous if you are very popular and everyone knows and wants to talk to you when you are on the street. With the comparison of other activities, the game is all free and given the chance to extinguish you.

4. The potential motives for consumers to explore the Avatar by data analysis of benefit chain:

The research discovered that the shaping behavior of consumers should be constructed through the structure graph of **figure 3** on the basis of interview data and therefore, the potential motives for consumers are explored by soft laddering as shown in **figure 2**. Data analysis is described as the followings:

- a. Concrete Attribute: interacted games, costume activities, hand note and scenario chat.
- b. Abstract Attribute: costume style and shopping environment.

- c. Functional Result: the acquisition of happiness, satisfaction with purchase, the bonus to share with friends and increase of freshness.
- d. Concrete Result: killing time, bonus, interaction of friendship and consistency with economic effectiveness.
- e. Abstract Result: challenge, increase of sentiment, quick search and locate of products and effectiveness.
- f. Tool Consequence: the results meeting false pride and the needs of society, to have sympathy, to demonstrate the friendship, to show off and release the pressure from the role they play.
- g. Ultimate Consequence: the results satisfying the image that can not be fulfilled in the reality, and also to create the uniqueness, to confirm oneself and to win with the necessary value.

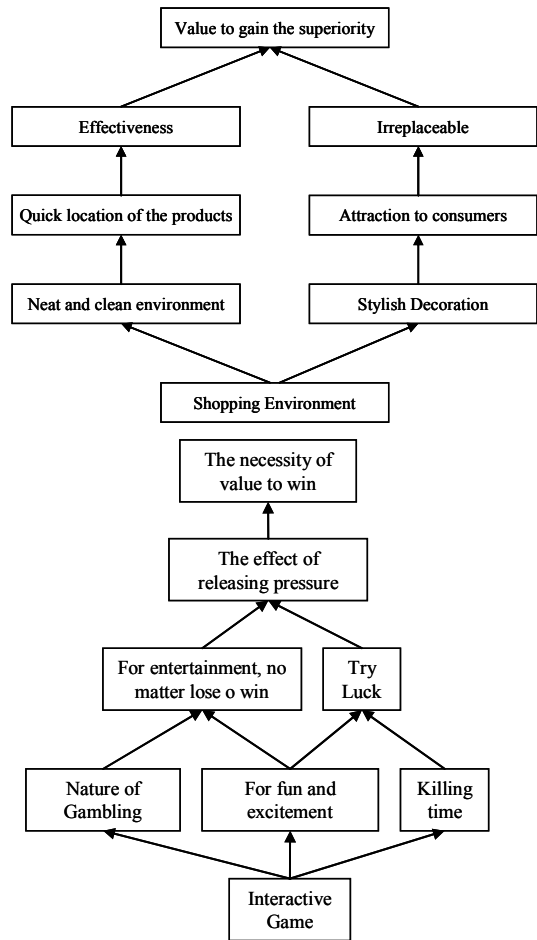


Figure 2. Chain of interest linkage--AVATAR

4. CONCLUSIONS

Through the process of focus group session and in-depth interview with experts, the study found out that consumer behavior would first show up their stimulus and then formulate the first phase of delayed effectiveness if consumption didn't proceed in the middle

of shaping phase. After the formulation of the delayed effectiveness phase, the primary reinforce should be included then transform into the second phase of delayed effectiveness if consumers didn't proceed with consumption. During the process

of second phase for the delayed effectiveness, the secondary reinforce should be appropriately increased to evolve to the behavior shaping and proceed with consumption as shown in **Figure 3**.

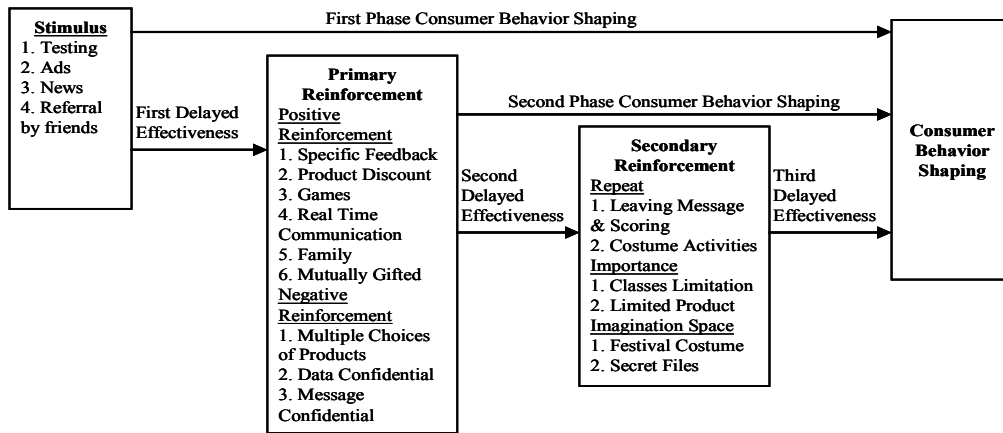


Figure 3. The Structure of Consumer Shaping and Delay Effectiveness

Stimulus: The dealers expose their products through all kinds of channel to motivate consumers' purchase desire. The study hereby concluded the stimulus as the followings: 1. Testing, 2. Advertisement, 3. News, 4. Referral by friends, 5. Magazines, 6. Carriage Advertisement.

Primary reinforcement: The object itself has the effects of reinforcement with learning process, called primary reinforces. The study concluded the result as the followings through the data analysis:

1. **Positive Reinforcement:** The results that are desirable or pleasurable can be summarized as 1. Specific Feedback, 2. Product Discount, 3. Games, 4. Real Time Communication, 5. Family, 6. Mutually Gifted.
2. **Negative Reinforcement:** The results that should be terminated or avoided can be concluded in the study as: 1. Multiple Choices of Products, 2. Data Confidential, 3. Message Confidential.

Secondary Reinforcement: The object itself doesn't possess any effects of reinforcement, but the reinforcement increases by the conditioning. Secondary reinforcement can be categorized as:

1. **Repeat:** The numbers of repeat help improve the learning speed and strength. The more we expose ourselves to certain messages or the more we repeat certain behaviors, the more we can learn such information or behaviors. Based on the result of the study, there are: 1. Leaving Message, 2. Costume Activities.
2. **Importance:** The comments that given by the consumers for what they care and want to learn. The more important the learning behaviors or information are, the more effective and efficiency the learning will be. According to the result of the study, there are: 1. Classes Limitation, 2. Limited Products.

3. **Imagination Space:** Characters can create certain imagination space and bear effectiveness no matter there are brand names or company slogans. Such kind of imagination is helpful for learning. The characters with large imagination space are easier to learn than the ones with narrow imagination space. The study concluded the results in this part as: 1. Festival Costume, 2. Secret Files.

5. REFERENCES

- [1] Chien-zhi O, Perfect Identity with Various Costume, AVATAR Virtual Replacement with the Access to Internet, Da-Chen Newspaper, 2003/05/07
- [2] David W. Stewart & Prem N. Shandasani, FocusGroup: Theory and Practice, Taipei, Hon-Yi Culture Company, 2000/02, pp.15-20
- [3] Denzin, N.K. The research act: a theoretical introduction to sociological methods. Englewood Cliffs, NJ: Prentice Hall, 1999
- [4] Drucker, P.F Post-Capitalist Society. Harper Collins Publishers, Inc. New York, 1993.
- [5] Fon-jien Lee, The Study of Senior High School Students' Behavior on the Internet, Master Thesis, Chen-Kong University, 2001.
- [6] Ing-yu Huang, The Study of Objective Chain Model- The Customer Value to the Objective Chain Model by the Case Study of Consumer Experience of the Purchase for Children Clothes, Master Thesis, Graduate Study of Sun-Yat sen University, pp.25-P34
- [7] Ji-jian Huan, 'HiNet The New Release of the Paradise Country AVATAR Community Service, Kimo, Industry News 2003/05/27

- [8] Kan-jen Liu, The Internet users online breakthrough the number of 8 million. · Electronic Commercial Times, 2001/8/10
- [9] Li-Shin Ko, (2003)“Internet has Substitute ; Playing Games and Making Friends-Drinking Coffee and Shooting Breeze in Virtual World and Colorful Career”, Electronic Free Time News.
- [10] Mei-lin Chuo, The Satisfaction and Learning for the Primary and Junior School, Proceedings of the Internet and Society in Chiao-Tung University, 2001.
- [11] Pei-lin Han, The Addictive Phenomenon affected by the behavior, characters and Psychological Traits for the Junior High School, Master Thesis, Depart of Education Psychology and Consultation, Normal University, 2000.
- [12] Ron-en Shih, (2003) · Multi-Status Online and the Face Off , United News Network,2003/07/15
- [13] Shau-Li Chen, (2003) , Yahoo! Kimo Online Release that 30% of the internet users are willing to pay by themselves, iT home Electronic News, 2003/05/06
- [14] Shau-Li Chen, (2003),”Yahoo Costume Fairy online”, iThome, Electronic newspaper.
- [15] Shi-jie Lu, (2003) , Yahoo ! Let the young generation addict to the costume and create personal customized identity, Da-chen Newspaper, 2003/07/04.
- [16] Shu-man Pa, Qualitative Research: Theory and Application, Psychology Publisher, 2003/02, P135-138.
- [17] Skinner, B.F., About Behaviorism, New York, 1974.
- [18] Smith, H.W. Strategies of social research: The methodological imagination. Englewood Cliffs, NJ: Prentice-Hall, 1975.
- [19] Stiles, P. (2001) The Impact of the Board on Strategy: An Empirical Examination. Journal of Management Studies, 38, 5, July, pp.627-650
- [20] Tse-lin Chon, The Momentum to drive the Community Group for the paid service, News Column, 2003/06/05.