Empirical Analysis of Factors Influencing Consumer Behaviors in Movie Media Selection: Shifting Demand for Online Movie Piracy to Legitimate Online Media

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Abstract

In the Korean movie industry, ancillary markets such as online VOD and DVD as opposed to the theater market have continuously decreased since 2005. A major reason for this, according to the researches on ancillary market, is the increase in online movie piracy. The focus of this research is to analyze the influences of utilitarian value and hedonic experiential value consumers feel when they select the movie media and identify its implications and contributing ideas to the effort to convert the demand for illegitimate media to legitimate media. An offline survey on 248 respondents in their 10s' to 50s' was used to analyze the movie consumer behaviors. This empirical analysis of consumer behaviors related to media selection demonstrates that hedonic experiential value from the media environment has a greater influence on consumers' media selection than the utilitarian value in the case of theaters while both the hedonic experiential value and utilitarian value have equally significant influence on consumers' media selection in the case of online media. The result suggests that, in order to effectively convert the demand for illegitimate movie media to legitimate online media, adjustments in the online media fee as well as the enhancement of consumers' experiential value of the online media environment need to be pursued.

Keywords: Movie ancillary market, Movie piracy, Hedonic experiential value, Utilitarian value

1. Introduction

Since 2005, movie ancillary market in Korea have been struggling with a decreasing market size that has made a shift in the market size ratio between the theater market and ancillary market from 20:80 to 80:20 [1]. Movie makers now rely heavily on the theater market as a main source of their profits. According to the researches on movie consumer behaviors conducted by Korean Film Council, a major reason for this is the increase in online movie piracy and the typical reasons for the movie piracy are (in order) economics, ease of use, and convenience of time [2]. The research also showed that, if consumers could not engage in movie piracy, their most preferred alternative media is theater (60% of the survey respondents) while only 10% of the survey respondents preferred legitimate online media. These findings suggest that most of the demand for online movie piracy would not be converted into the demand for legitimate online media although, economics-wise, legitimate online media is cheaper than theater.

Existing studies on the movie ancillary market and movie piracy in Korea have mostly dealt with consumers' level of consciousness in the movie ancillary market, degree of

satisfaction by media, and copyright policies to protect the movie ancillary market from movie piracy. However, not enough studies have sought to find effective ways to grow ancillary market by relating consumers' media selection behaviors to the effort to convert the demand for illegitimate media to legitimate media. The current study seeks to answer the following questions: What are the key factors influencing consumers' preference for a certain movie media and how can we relate the answers to the effort to grow the movie ancillary market, especially the online movie market, in Korea? The current research focuses on the top three media alternatives: theater, legitimate online media, and illegitimate online media.

2. Literature Review and Theoretical Considerations

2.1. Hedonic Experiential Value, Utilitarian Value, and Shopping Emotions

Consumers consider various values, such as pleasure, excitement, and cost—either consciously or subconsciously—when they select a movie media. It includes two key aspects: the price consumers paid and subjective evaluation of what consumers acquired. In other words, value is consumers' cognition of relative magnitudes of the cost and benefit that are traded off. Movie media serves as a shop for movie products and services. Babin (1994) distinguished shopping motivations by utilitarian shopping motivation and pleasurable hedonic shopping motivation [3]. He asserted that utilitarian shopping motivation is purpose-oriented and rationalized buying whereas hedonic shopping motivation pursues potential pleasures and emotional values of shopping. As consumers pursue double desires (i.e., utilitarian and pleasurable) at the same time, Sherry (1990) defined it as "homo economics" and "homo ludens" [4]. Thus, for the research on shopping values, we need to measure both the utilitarian shopping value and pleasurable shopping value in the same system.

When the perceived cost of buying a product or service is too much, it has a negative influence on the selection of the product or service under consideration [5]. As different movie media has different fees, the utilitarian value from the economics perspective can be regarded as consumers' satisfaction with a media fee.

Bitner (1992) asserted that the emotions developed by the environmental stimuli of a shop significantly influence consumers' willingness to revisit the same shop [6]. When it is an esthetic product or service such as the movie, emotions developed from pleasurable and entertaining experiences significantly influence the selection of the product or service [7]. Various researchers dealing with the influence of shopping emotions adopted Mehrabian and Russell's model [8]. The core concept of the Mehrabian–Russell model is that environmental stimuli affect emotional states such as pleasure, arousal, and dominance, which ultimately affects people's approach or avoidance responses; willingness to buy the product or service.

2.2 Definition of Consumers' Preference System

To define consumers' preference system in media selection, the current research adopted the Theory of Consumer's Choice, with the assumption that consumers select media based on their rational judgment. Based on the movie consumer survey conducted by the Korean Film Council (2011), the completeness and transitivity of consumers' preference system for movie media are defined as follows. First, consumers' higher preference of movie media moves from illegitimate online media (34% of the survey responses) to theater (29%) to legitimate online media (12%) and to various other media.

Transitivity of consumers' media selection

For all $s, v, w \in A$, we have that $s \gtrsim v, v \gtrsim w$, then $s \gtrsim w$ where A: a group of movie consumers, s: illegitimate online media, v: theater, and w: legitimate online media

Second, consumers' reasons for accessing illegitimate online media (representing the utilitarian value) moves from economics (48% of the survey responses) to ease of use (23%) to convenience of time (16%) and to various other reasons. However, when consumers were assumed to be prohibited from illegitimate online media, they preferred theater to legitimate online media even though the cost of the legitimate online media is much less than that of theater.[2] We can infer from this that consumers consider another high value as well as the economics when they select the media. Thus, consumers seem to regard the hedonic experiential value (e.g., pleasure and arousal from the media environment) as importantly as the utilitarian value (e.g., economics; perceived media fee). This supports the principle of completeness as put forth in the Theory of Consumer's Choice.

Completeness of consumers' choice of a media

For all $x, u \in A$, we have that $x \ge u$ and $u \ge x$ Where x: utilitarian value (economics) and u: hedonic experiential value

3. Hypothesis and Research Model

3.1. Hypothesis

- **3.1.1 Environmental Stimuli: Hedonic Experiential Value:** Consumers buy movie services via various media where different media's environmental stimuli influence consumers' emotional state to different degrees, which then influences their satisfaction level and ultimately their willingness to revisit the same media in the future. In the case of theaters (mostly multiplex in these days), large screens, good sound systems, and nearby shopping malls and restaurants are typical environmental stimuli that give hedonic experiential values such as pleasure and excitement to movie consumers.[9] Hedonic experiential values in the case of online movie media are typically interactive communications, customer services, personalized information, etc.[10]
- **Hypothesis 1-1**: Theaters' hedonic experiential values positively influence consumers' satisfaction level with the theaters.
- **Hypothesis 1-2**: Online movie media's hedonic experiential values positively influence consumers' satisfaction level with the online movie media.
- **3.1.2 Utilitarian Value:** The perceived magnitude of the fee influences consumers' reactions and willingness to buy the services.[3][11] The acceptance of a service is more influenced by the consumers' sensitivity to the movie fee than the absolute fee itself.[12] As the cost of watching movies varies by media, the utilitarian value would have a significant influence on consumers' satisfaction level of a media.
- **Hypothesis 2-1**: Consumers' perception of theaters' utilitarian value positively influences their satisfaction level with the theaters.
- **Hypothesis 2-2**: Consumers' perception of online movie media's utilitarian value positively influences their satisfaction level with the online movie media.

3.1.3 Emotional State and its Influence on Media Selection: Consumer's satisfaction is a function of expectation level on the product or service and consumers' cognition of a discrepancy between the expectation and the actual result. The emotional state of satisfaction or dissatisfaction influences consumers' attitude such as re-purchase of the same service after the initial purchasing activity.[13][14] As the current study focuses on the conversion of the illegitimate media demand to the legitimate media demand, the causal relationship between consumers' satisfaction and their selection of preferred legitimate media is investigated under the assumption that movie consumers are prohibited from accessing illegitimate media.

Hypothesis 3-1: Consumers' satisfaction with theaters positively influences their selection of theater provided that illegitimate media is prohibited.

Hypothesis 3-2: Consumers' satisfaction with online media positively influences their selection of legitimate online media provided that illegitimate media is prohibited.

In addition, as the most important reason why people access illegitimate media is its cheap cost, the causal relationship between consumers' satisfaction and their selection of preferred legitimate media is investigated under the assumption that all media fees are adjusted to the level that consumers feel is adequate.

Hypothesis 4-1: Consumers' satisfaction with theaters positively influences their selection of theaters provided that all media fees are adjusted to the level that consumers feel is adequate.

Hypothesis 4-2: Consumers' satisfaction with online media positively influences their selection of legitimate online media provided that all media fees are adjusted to the level that consumers feel is adequate.

3.2. Research Model



Figure 1. Research Model

The research model was designed to be suited for consumer behaviors in the movie industry based on the Mehrabian–Russell model.[8] As the hedonic experiential value and utilitarian value are shopping motivations that can be traded off, these two values need to be measured as shopping stimuli in the same system. The emotional state is equivalent to the consumers' satisfaction with the movie media. The approach or avoidance response is equivalent to consumers' actual selection of a media. (Figure 1)

4. Empirical Analysis

4.1. Research Method and Sampling Design

An offline survey was used to gather data; of the 248 survey responses, 227 responses were used as valid samples. As the research aims to help the effort to

convert online movie piracy to the use of legitimate online media, consumers' experience in online media is an important factor for reflecting consumers' genuine behaviors. Thus, the research tried to increase the number of samples from participants in their 20s, who extensively use online media. Survey participants consist of 41(18%), 77(34%), 43(19%), 31(14%), and 35(15%) respondents in their 10s, 20s, 30s, 40s, and 50s respectively. The factor analysis, reliability analysis, and regression analysis were carried out using PASW Statistics R18.

4.2. Operational Definitions

Table 1 below describes the construct, observed variables, and references. (Table 1)

Table 1. Construct, Observed Variables, and References

Analysis on consumer's satisfaction of a media					
Degree of satisfaction (dependent variable) 1. Degree of satisfaction with theater 2. Degree of satisfaction with online media	Oliver (1997)[15]; Dawson, Bloch and Ridgway, (1990)[16]; Howard(1974)[17]				
Hedonic values of theater 1. Large screen and good sound system 2. Related facilities 3. Theater's own facilities 4. The newest movies 5. Accompanying acquaintances	You-Jae Yi(1998)[18]; Joonseok Hwang(2009)[12];				
Hedonic values of online media 1. Customer service 2. Interactive communication 3. Personalized information 4. Diversity in genre 5. Safety and ease of payment	Cheol Park(2003)[10]; Joonseok Hwang(2009)[12]; Lepkowska-White (2002)[20]				
Utilitarian value 1. Consumers' cognition of media fees	Joonseok Hwang(2009)[12]				
Analysis on consumer's selection of a media					
Selection of media (dependent variable) 1. Theater 2. Online media	Mun-Seung Lee(2006)[9]; Cheol Park(2003)[10]				
Degree of satisfaction 1. Degree of satisfaction with theater 2. Degree of satisfaction with online media	Oliver(1980)[14]; Caruana(2002)[13],				

5. Results

5.1. Reliability and Multicollinearity

All measured variables passed the factor analysis (factor loading ≥ 0.5) and reliability analysis (Chronbach's Alpha ≥ 0.8). In addition, results showed no multicollinearity problems, with VIF values between 1.0 and 2.0 for all variables.

5.2. Verification of Hypothesis

This empirical analysis of consumer behaviors demonstrated that the hedonic experiential value of theaters positively influences consumers' satisfaction while the utilitarian value did not significantly influence their satisfaction with the theater. In the case of online media, both utilitarian value and hedonic experiential value showed significant influences on consumers' satisfaction with online media. Thus, consumers prioritize the pleasure and excitement they get from the media environment rather than the cost of using the media when it is the theater. On the other hand, the media fee has

a greater influence on consumers' satisfaction and selection of media when it is online media. (Table 2)

Provided that illegitimate media is prohibited, consumers' satisfaction with the theater significantly influences their choice of theater. The same applies to the case of the legitimate online media. (Table 3)

Table 2. Analysis of Consumers' Satisfaction with Media

Hypothesis	Consumers' satisfaction with theater			Consumers' satisfaction with legitimate online media		
	Beta	t-Value	Result	Beta	t-Value	Result
1-1	0.552 ** (0.080)	6.884	Accept	0.116 (0.082)	1.418	
1-2	-0.004 (0.080)	-0.047		0.538** (0.082)	6.569	Accept
2-1	-0.095 (0.077)	1.236		-0.018 (0.078)	0.231	
2-2	0.047 (0.068)	-0.691		-0.126* (0.069)	1.833	Accept
	R Square = 0.192, F = 13.225 (P<0.001)		R Square = 0.247, F = 18.212 (P<0.001)			

^{):} Standard Error, ** P<0.05, * P<0.1

Table 3. Consumers' Selection of a Media Provided that Illegitimate Media is Prohibited

Hypothesis	esis consumers' selection of theater		consumers' se onlir	lection of le ne media	gitimate	
	Beta	t-Value	Result	Beta	t-Value	Result
3-1	0.341 ** (0.069)	4.956	Accept	-0.068 (0.084)	813	
3-2	-0.053 (0.065)	815		0.325** (0.080)	4.079	Accept
	R Square = 0.099, F = 12.292 (P<0.001)		R Square = 0.069, F = 8.355 (P<0.001)			

However, if all media fees were assumed to be adjusted to the level that consumers feel is adequate, consumers' satisfaction with the theater did not result in a significant increase in their selection of theaters whereas consumer's satisfaction of the legitimate online media significantly leads to an increase in their selection of the legitimate online media. (Table 4)

Table 4. Consumers' Selection of Media Provided that all Media Fees were Adjusted to the Level that Consumers Feel is Adequate

4-1 4-2	0.023 (0.064)	.363 -2.434		-0.066 (0.092) 0.218** (0.087)	722 2.508	Accept
4-1	Beta 0.023 (0.064)	t-Value	Result	Beta -0.066 (0.092)	t-Value	Result
Hypothesis			_	e media		

Thus, when prohibiting illegitimate media and, at the same time, adjusting all media fees to the level that consumers feel is adequate, we can expect that the shift in the demand for illegitimate media to legitimate media would be more spread across theater and other legitimate online media in the movie ancillary market instead of resulting in a major shift to theaters. This empirical analysis indicates that consumers' current preference of theaters to legitimate online media stems from their belief that the online media fee is more expensive than necessary. Such a belief makes a negative impact on the growth of the movie ancillary market in Korea. This implication from the analysis

is in line with the results from the movie consumer survey report by Korean Film Council (2011), which indicated that consumers prioritize economics when selecting online movie media.[2]

6. Conclusion

The results of this empirical analysis are in line with the Theory of Consumer's Choice as they demonstrated that a) consumers consider both utilitarian value and hedonic experiential value comprehensively when they select movie media. (Completeness); and b) as consumers perceive legitimate online media fees are too expensive compared to the values from it, they maintain a preference for theaters to legitimate online media under the current media fee structure. (Transitivity) The fact that theaters provide the newest movies with larger screens and good sound systems and that many of them are located in complex entertainment facilities, where consumers can enjoy various pleasurable experiences from nearby shopping malls, electronic game facilities, dining and drinking places enhances consumers' satisfaction with the theaters and ultimately their willingness to pay. Thus, theaters are in the position of being the most preferred movie media for consumers in the Korean movie market whereas legitimate online media is less preferred due to the consumer's perception that the current online media fee is more expensive than necessary.

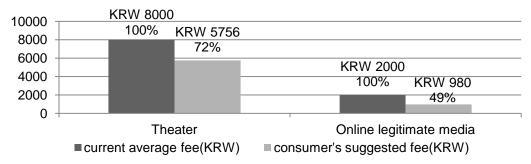


Figure 2. Current Media Fee vs. Movie Consumers' Suggested Fee

According to the survey conducted by the Korean Film Council (2011), although movie consumers suggested that KRW 5,756 was an adequate theater fee, which is 28% below the current average fee of KRW 8,000, they suggested that KRW 980 was an adequate online movie fee, which is 51% below the current average fee of KRW 2,000.(Figure 2) Such a response strongly supports the current empirical analysis results that consumers are very sensitive about the online movie fees and they are not satisfied with the current legitimate online movie fee.

In order to effectively convert the demand for illegitimate online movie media to legitimate online media, this research suggests the following. First, the online media fee needs to be adjusted down to the level that consumers feel is adequate. This makes sense because Korea has a very well-established network infrastructure so that online movie distribution has minimal cost compared to the distribution cost of offline media. Second, online movie sites need to make continuous efforts to enhance consumers' pleasurable experiences by introducing factors such as, but not limited to, creative promotion programs (e.g., mileage), personalized search functions, tailored movie information, and interactive communication and community functions.

The analysis results have high applicability as this study analyzed the top three media: theaters, legitimate online media, and illegitimate online media. However, as the movie market and its media are becoming diverse, consumers are more frequently being exposed to other media, such as IPTV, satellite TV, and mobile TV. Inclusion of these media for further analysis would enhance the completeness and applicability of the analysis results in the next stage of the research.

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