

FROM FREE TO FEE: EXPLORING THE ANTECEDENTS OF CONSUMER INTENTION TO SWITCH TO PAID ONLINE CONTENT

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ABSTRACT

As a hybrid revenue model seems better for generating revenue for online content providers than purely either an advertising revenue model or a pay-for-content model, many online content providers are increasingly adopting the hybrid revenue model. The success of this model largely depends on consumer intention to switch from free online content (“free”) to paid online content (“fee”). However, consumers who are accustomed to free content seem unready to embrace this practice, making the hybrid revenue model undesirable. Motivated by such concerns, some studies have investigated the reasons for consumer intention to pay for online content, yet scant research has synthetically explored the antecedents of consumer intention to switch from “free” to “fee” in the context of a hybrid revenue model. Using the literature of perceived value and the status quo bias theory as theoretical lenses, we develop a model to explore consumer intention to switch from “free” to “fee” in the context of a hybrid revenue model. Empirical results reveal that loss aversion, social norms, cognitive inertia, and cognitive lock-in can indirectly or directly influence consumers’ switching intentions. Furthermore, consumer’s adaptation level to advertising is also found to moderate the relationship between perceived sacrifices and switching intention. Besides contributing to theory building on consumer switching intention, the research results also offer important suggestions to online content providers.

Keywords: Online content; Hybrid revenue model; Switching intention; Status quo bias theory

1. Introduction

Online content refers to the category of digital content shared and distributed through online channels, such as online videos, electronic journals, music downloads and so on. Two major revenue models have been identified in online content service literature: the advertising revenue model and the pay-for-content model. In the advertising revenue model, content providers attract consumer “clicks” via free content and obtain advertising revenue from these “clicks”. The advertising revenue model has the potential to attract new customers and increase market size [Papies et al. 2011]. However, since the revenues are supported by advertisers instead of consumers, content providers may only be accountable to advertisers rather than consumers. In this light, the quality of online content may deteriorate, which may result in an online market bowing only to the demands of advertisers.

To overcome the drawbacks of the advertising revenue model, the pay-for-content model has emerged as another major revenue model. In this model, content providers attract consumers by differentiated online content with a high quality of service, without advertisements, and charge consumers a subscription fee. As the revenues are supported by consumers, content producers are eager to increase product quality and diversity, e.g., offering superior or more creative content, in order to meet the heterogeneous demand of consumers. Meanwhile, content providers are motivated to improve service quality, which can reinforce their relationship with the consumers. However,

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according to a survey carried out by the Pew Internet & American Life Project in 2002, if online content providers put their content behind a pay wall having previously offered it free, only 12 percent of Internet users will pay, while 50 percent may look for a free alternative and 36 percent will terminate their relationship with the sites [Crosbie 2002]. In accordance with the survey results, many leading online content service websites, such as those of *Slate* and *The New York Times*, have struggled to charge for content [Lam & Harrison-Walker 2003; Lopes & Galletta 2006]. Such failed cases indicate that the success of a pure pay-for-content model is very hard to ensure.

From what we have discussed above, neither the advertising revenue model nor the pay-for-content model alone is enough to support the viability of many online business companies. Due to consumer heterogeneity in quality demands and price sensitivity, a hybrid revenue model offering both pricing and advertising options to consumers seems to be a better choice than either one alone [Kumar & Sethi 2009; Fan et al. 2007; Prasad et al. 2003]. Such a hybrid model can help online content providers make full use of the advantages and offset the defects of each pure revenue model.

While a hybrid revenue model is promising, its success largely depends on consumers' intention to switch from free to paid online content. In a hybrid revenue model, content providers firstly attract consumers with free content via a trial, and then attempt to attract them to pay for premium content by delivering high-quality service. By offering an incomplete version of online content (e.g. many video websites only provide a two-minute free preview of a two-hour long video), the trial can acquaint consumers with the high quality of content and service. The essential objective of the trial is to lure consumers to subscribe to paid-for content. In order to ensure the content is worth paying for, many consumers access the free content of a provider for a long time. However, previous research has indicated that long-term use of free online content will make consumers accustomed to the free model. The stronger the habit, the lower the willingness-to-pay will be [Gallaughner et al. 2001]. According to status quo bias theory, this behavior phenomenon can be explained as individuals' preference for maintaining their current course of action [Samuelson & Zeckhauser 1988]. Hence, it is necessary for online content providers to understand what factors may strengthen or weaken consumer bias towards the current status (i.e., "free") and how these antecedents affect their value perception of paid content (i.e., "fee"). Online content providers could then design a more effective marketing strategy to enhance consumer intention to switch from "free" to "fee".

Although prior literature has shed some light on the antecedents of consumer willingness to pay in a hybrid revenue model [Chu & Lu 2007; Wang et al. 2013], most have neglected the angle that the habitual use of free content may prove to be an obstacle for consumer switching intention. For example, Wang et al. [2005] and Lin et al. [2013] examined consumer willingness to pay drawing on the views of "perceived unfairness" and "*free mentality*" respectively, without paying attention to the status quo bias of online consumers. Hence, the antecedents of consumer intention to switch from "free" to "fee" in the context of hybrid revenue model have not been adequately identified. To fulfill this research gap in prior literature, this study will draw on the theory of status quo bias and investigate the factors that influence consumer willingness to switch from "free" to "fee" in a hybrid revenue model.

2. Literature Review and Theoretical Foundation

We choose switching intention as the dependent variable in this paper. In investigating the issue, the first choice of theoretical bases would be perceived value [Zeithaml 1988] which has been generally used to explain consumer willingness to pay for online products/services. Thus, relevant research on consumer willingness to pay for online content has been summarized from a perceived value perspective. Furthermore, we describe the unique characteristics of the hybrid revenue model, and introduce the status quo bias theory [Samuelson & Zeckhauser 1988] and the view of cognitive lock-in to explore the antecedents of consumers' perceived value during the switching process.

2.1. Literature review from perceived value perspective

Prior research on consumer willingness to pay for online content has highlighted the role of customers' perceived value, and regards it as the most critical factor in affecting customers' intention to pay for online services [Chen et al. 2008; Lu & Hsiao 2010]. Perceived value is defined as "the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given" [Zeithaml 1988]. It involves a trade-off of "give" (i.e., perceived sacrifices) and "get" (i.e., perceived benefits) components, being consistent with the general notion that perceived value can be regarded as a ratio between perceived benefits and perceived sacrifices [Monroe 1991].

According to Keeney's Internet commerce value proposition [Keeney 1999], perceived benefits involve not only those being generated by the online products/services, but also those associated with the processes of obtaining those products/services. Why will consumers be willing to pay for the online content when they can receive the same content for free? One important reason is that consumers perceive differences of service qualities between the "fee" and the "free". Proceeding from service quality theory, Wang et al. [2005] found that consumer willingness to

pay for online content is positively affected by their perception of convenience and added value. In general, the fee-based business process is more complex, and this would reduce consumer willingness to pay due to perceived inconvenience. Kwong and Park [2008] indicated that perceived service quality positively influences consumers' perceived convenience, thus the perceived service quality can also affect consumer willingness to pay indirectly through perceived ease of use. Because online content is an experience good, crucial aspects of its quality are impossible to verify except through its use. Hence, the main affect factors of consumer willingness to pay are "expected benefits" which are determined by the overall technical quality and the provider's reputation [Lopes & Galletta 2006]. Extending the technology acceptance model (TAM), Chu and Lu [2007] found two beneficial factors (i.e., perceived usefulness and perceived playfulness) had a positive influence on purchaser intention. However, Wang [2008] noted that many users may abandon or be reluctant to use a for-fee information service even if it is useful to them. Therefore, Wang [2008] proposed a value-based adoption model (VAM) to explain the behavioral intention to use for-fee content services. Following the VAM model presented by Wang [2008], Wang et al. [2013] divided perceived benefits into two parts: extrinsic and intrinsic factors. They suggested that perceived usefulness is an extrinsic factor while perceived enjoyment is an intrinsic factor.

Perceived sacrifices include monetary and non-monetary terms, such as purchase price, acquisition costs, transportation, installation, order handling, repairs and maintenance, and risk of failure or poor performance [Monroe 1991; Ravald & Grönroos 1996; Ha et al. 2007]. Price can be viewed as the most direct monetary sacrifice [Chu and Lu 2007, Wang 2008]. However, individuals do not always remember actual product prices [Monroe, 1973]. Thus Chu and Lu [2007] defines perceived price as the degree to which the consumer believes that he/she must pay in money to obtain online music. The findings indicate that perceived price is negatively related to perceived value in online music. Chu and Lu [2007] and Wang et al. [2013] think consumers have to make more effort to benefit from a "fee" model. Therefore, perceived "ease of use" (EoU) is the uppermost part of perceived sacrifice. According to the theory of perceived behavior control (PBC), Kwong and Park [2008] found that decreased perception of EoU would affect the perceived behavior control, therefore indirectly influencing consumer paying willingness. The findings of Chu and Lu [2007] and Wang et al. [2013] indicate that EoU has an insignificant impact on perceived value. As to the "fee" model, consumers are often concerned about the unreliability of online services and privacy violations. Lin et al. [2013] defined these consumer concerns as perceived risk. Given that the design of a contemporary website is easy to use, perceived risk became one of the most critical factors of non-monetary sacrifices.

Online consumers have become accustomed to the belief that most online providers are financed by advertisers and therefore should offer free access to content [Wang et al. 2005]. When consumers are asked to pay for content access, they may perceive a certain degree of unfairness. This is called Internet culture which is characterized by "*free mentality*" [Lin et al. 2013]. Based on the decomposed theory of planned behavior, Lin et al. [2013] investigated the effect of *free mentality* on the consumer's attitude toward paying. An important result of their investigation was that *free mentality* has a moderating effect on the relationship between consumers' perceived sacrifices and their willingness to pay. Their study also indicated that the subjective norm, which describes internal and external social influences, had an effect on an individual's intention to subscribe to fee-based online music services. Oestreicher-Singer and Zalmanson [2013] noticed that more and more content consumption had become a social experience. For example, many content providers built a community platform in which users could organize discussions around different topics. According to the survey data, Oestreicher-Singer and Zalmanson [2013] found that subscribers made their subscription decisions after using the community platform for 652 days on average. This suggests that a user could be familiar with the content of the website through community participation. Their research shows that willingness to pay is more strongly linked to community participation than to the volume of content consumed. Piracy is another source of "free online content". Previous research has suggested that stronger ethical concerns regarding piracy are related to less pirating behavior [Levin et al. 2004; Pan & Sparks 2012]. The survey of P2P users conducted by Chen et al. [2008] revealed that moral reasoning moderated the relationships among consumption value and behavioral intention to download music. Wang et al. [2013] described the individual's propensity for ethical usage of online content as moral judgment or "ethical self-efficacy for online piracy" (ESEOP). Their research findings indicate that ESEOP not only has a significant positive influence on purchase intention, but it also has a positive moderating effect on the relationship between perceived value and purchase intention.

Table 1: Previous Research on Willingness to Pay for Online Content

Theoretical perspectives	Antecedents of perceived benefits of “fee”	Antecedents of perceived sacrifices of “fee”	Effects of “free” on perceived value of “fee”	References
Service quality	<ul style="list-style-type: none"> ◆ Convenience ◆ Added value ◆ Overall technical quality ◆ Reputation 			Wang et al. (2005)
				Lopes & Galletta (2006)
				Kwong and Park (2008)
VAM PBC	<ul style="list-style-type: none"> ◆ Emotion/Performance / Money value ◆ Usefulness ◆ Playfulness/ Enjoyment 	<ul style="list-style-type: none"> ◆ Monetary sacrifices ◆ Non-monetary sacrifices: <ul style="list-style-type: none"> • Risk • Decrease in EoU • Technical barriers 		Chu & Lu (2007)
				Kwong & Park (2008)
				Wang et al. (2013)
Ethics and morality			<ul style="list-style-type: none"> ◆ Morality ◆ Free mentality ◆ Ethical usage 	Lin et al. (2013)
				Chen et al. (2008)
				Wang et al. (2013)
Social influence			<ul style="list-style-type: none"> ◆ Internal and external social influences ◆ Community participation 	Lin et al. (2013)
				Oestreicher-Singer & Zalmanson (2013)

The unique characteristic of the hybrid revenue model is that the free model may affect consumer perceived value towards the fee-based model. Thus, the objective of this study is to derive and empirically test a theoretically grounded model of such factors leading to user resistance to change from “free” to “fee”. Although some above studies [Chu & Lu 2007; Lin et al. 2013; Wang et al. 2013; Oestreicher-Singer & Zalmanson 2013] provided some empirical evidence for understanding the resistance, there seems something missing in the explanation of user decision making from the angle of status quo bias, that is, user resistance may be due to the bias or preference to stay with the current situation. Our model, derived by integrating status quo bias perspective with the perceived value theory, is validated through a survey in the context of a hybrid revenue model implementation by Douban FM, the most popular online music provider in China.

2.2. The Unique Characteristics of the Hybrid Revenue Model

When probing the context of the hybrid revenue model, researchers realized that this context was associated with some unique characteristics that may affect consumer perceived value and in turn their willingness to pay. The most notable one is the trial function. For example, many video websites provide a two-minute free preview of a two-hour long video, and the quality is identical to that of the paid video. As far as we know, there is not yet specific research on the trial function of paid online content. Nevertheless, this trial function is similar to the trialware in the software industry, thus some prior studies on the software trial function can contribute to an explanation of the trial function in online content. There are two types of free trials in prior literature: (1) trialware, which has the full functionality of the focal software with a time lock, and (2) freeware, which consists of limited features of focal software without a time lock [Lee & Tan 2013]. Both can minimize consumer risk perception toward the quality of software [Lee & Tan 2013; Zhu et al. 2014]. The trial function of paid online content is more like trialware than freeware, as it employs the same standard of content quality and limits the length of content using a time lock.

On the other hand, unlike software trialware usage, during the short limited trial period of online content, online content consumers are not able to assess the complete intrinsic value of the content. Moreover, as the volume of online content is large and the content is updated frequently, it takes consumers a long time to find out the overall intrinsic value of a website before they decide whether to subscribe to its paid content. During this process, consumers may be accustomed to and cognitively locked in free access, and thus become reluctant to switch away from the status quo. In this regard, status quo bias is key to consumers’ valuation of benefits and sacrifices. However, there is a dearth of research devoted to this issue. This study will draw on the status quo bias theory to predict the antecedents of perceived benefits and perceived sacrifices, which in turn affect consumers’ intention to switch from free to fee.

2.3. Status Quo Bias Theory

Status quo bias theory is appropriate for explaining consumers' preference for maintaining the incumbent course of action. Individuals who have a strong status quo bias will persuade themselves that "if it was good enough for me then, it is (must be) good enough for me now" when they under changed conditions [Samuelson & Zeckhauser 1988, page 39]. In this situation, individuals' perception and cognition will be influenced. In the context of the hybrid revenue model, most consumers have been in the "free" condition before they move to the "fee" one. They may be prone to bias the status quo (i.e., the free online content). Hence, this theory can provide a theoretical foundation for explaining consumer intention to switch to paid content in our study.

According to this theory, there are three main categories of status quo bias explanations: cognitive misperceptions, rational decision-making, and psychological commitment [Samuelson & Zeckhauser 1988]. Firstly, cognitive misperceptions of loss aversion suggest that individuals may weigh losses more heavily than gains, especially when they are facing the change. Magnified loss perception contributes to status quo bias. This was generally used in the area of monetary investment previously. Since the disadvantages and risks of alternatives will be evaluated as losses, investors tend to choose the fund that was chosen previously [Kahneman & Lovallo 1993; Kempf & Ruenzi 2006]. Secondly, rational decision-making implies that rationality requires individuals to make a choice based on an assessment of relative costs and benefits of change. Status quo bias occurs when costs exceed benefits. Assessment of switching costs contributes to cognitive inertia, which can be the result of a conscious bias toward the status quo [Polites & Karahanna 2012]. Long-lasting habit, such as long-term use of an information system and long-term relationship with an Internet vendor, will lead to status quo inertia. Thirdly, status quo bias may also be the result of psychological commitment. Individual choices are not always rational but may be affected by some psychological factors, such as sunk costs, efforts to feel in control and social norms [Samuelson & Zeckhauser 1988; Kim & Kankanhalli 2009]. Sunk costs represent incurred costs that cannot be reversed. In order to "cut their losses", individuals will continue previous behavior after making an initial investment. Status quo bias caused by sunk costs can be seen in economic, information system and Internet shopping settings. The money already paid and the time and effort already invested will make individuals exhibit bias towards the status quo [Arkes & Hutzel 2000; Polites & Karahanna 2012; Liang et al. 2014]. Efforts to feel in control can be used in the context of new information system implementation. Users do not want to lose control by switching to an unfamiliar system [Kim & Kankanhalli 2009]. Social norms mean that others' opinions have an active role in individuals' decision-making on the change, including the adoption of a new technology, buyer-seller relationship, willingness to pay and so on [Nysveen et al. 2005; Raggio et al. 2014; Oestreicher-Singer & Zalmanson 2013].

The three status quo bias explanations may affect consumers' perceived benefits and sacrifices [Kim & Kankanhalli 2009]. In addition, they may also lead to cognitive lock-in, which has been largely used to account for consumers' perception and behavior during the switching process [Shih 2012]. Cognitive lock-in is derived from "technological lock-in" proffered by Arthur [1989], which has been used to describe the phenomenon that a single technology can gain market advantage and get a long-run dominance by increasing switching costs of the subsequent competitors [Arthur 1989]. Users are likely to be locked into a particular technology or service if they have invested considerable time and effort in learning and adaptation. The more they adopt the technology or service, the harder it is to abandon the technology or service [Shih 2012]. As such, the term "lock-in" has been applied to studying consumers' switching decision.

3. Research Model and Hypotheses

Drawing on the literature on perceived value and the status quo bias theory, we propose our research model, as shown in Figure 1. This model investigates the relationships among status quo bias factors, cognitive lock-in, perceived value, and switching intention.

3.1. Perceived Sacrifices and Perceived Benefits

Value perception plays a key role in influencing consumers' switching intention [Andrews et al. 2010]. Some studies suggest that perceived benefits and perceived sacrifices are two components of perceived value, and are often viewed as a mutually dependent whole [Ravald & Grönroos 1996]. However, not all the consumers care for perceived benefits or perceived sacrifices at the same time or value those at the same level. For example, Monroe [1991] argues that customers value a reduction in sacrifices and an increase in benefits differently. Similarly, in the context of this study, consumers who do not mind the quality of an online content service may feel that sacrifices, such as the fees, are of prime importance; while those who pursue the high quality content service without advertising may easily accept the paid content rather than carefully considering the switching costs they have to suffer. Thus, in this study, we treat the two components of perceived value (i.e., perceived benefits and perceived sacrifices) separately, and examine each of their effects on consumer switching intention respectively.

Based on the literature of perceived value and the status quo bias theory, consumers tend to have a higher resistance to change if they consider that the change has a lower perceived value [Samuelson & Zeckhauser 1988]. Particularly if the perceived sacrifices of the change are higher, consumers are more reluctant to switch to paid online content. Conversely, value will enhance switching intentions due to the added benefits [Andrews et al. 2010]. According to Wang et al. [2013], to strengthen consumer willingness to pay, it is necessary for online content providers to deliver benefits. With higher perceived benefits, consumer switching intention will be stronger. Hence, this study hypothesizes:

H1 Perceived sacrifices have a negative effect on switching intention.

H2 Perceived benefits have a positive effect on switching intention.

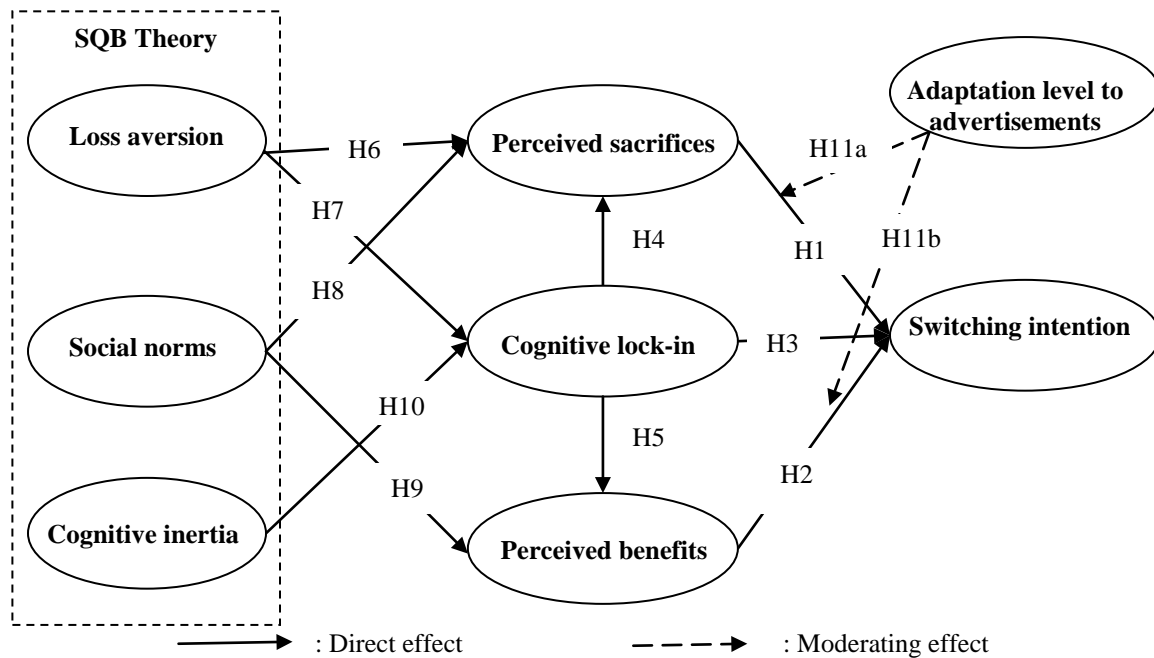


Figure 1: Research model

3.2. Cognitive Lock-in

Zauberman [2003] defines the “lock-in effect” as consumers’ decreased propensity to search and switch after an initial investment, which is determined both by immediate costs and future switching costs. Traditionally, analyses of the importance of retaining customers have focused on switching costs [Chen & Hitt 2002; Zauberman 2003], while the notion does not contain the psychological mechanism that may lead to some specific costs affecting consumer perception. Johnson et al. [2003] focused on the cognitive costs and emphasized that cognitive rather than physical switching costs are the key factor creating cognitive lock-in. More recently, Shih [2012] regarded cognitive search costs, cognitive transaction costs, and cognitive switching costs as three lock-in mechanisms, which business-to-consumer (B2C) websites can use to retain customers.

Prior literature suggests that if cognitive lock-in is greater, consumers are more reluctant to switch to new alternatives. The key point of cognitive lock-in is that consumers tend to choose initial alternatives, which reduces the probability that they will switch to other alternatives [Shih 2012]. In this study, cognitive lock-in occurs when consumers continue to acquire online content through the original channel. Switching to another choice may require cognitive efforts and inflict cognitive costs on consumers. Greater cognitive lock-in implies high cognitive costs of change, which may lead consumers to continue subscribing to free online content more often rather than try a pay-for-content model. Hence, this study hypothesizes:

H3 Cognitive lock-in has a negative effect on switching intention.

Apart from the direct effect of cognitive lock-in on switching intention, Shih [2012] found that cognitive lock-in could also affect consumer intention indirectly through perceived value. Following this logic, we expect that cognitive lock-in has an indirect effect mediated through perceived sacrifices and perceived benefits.

Particularly, according to previous research, repeated experience with an incumbent behavior can increase the value of the incumbent relative to a competing alternative and the perceived costs of switching [Murray and Häubl 2007]. This argument implies that an inert consumer who is locked into an incumbent consumption pattern tends to overestimate the potential sacrifices when considering the adoption of a new one. In the context of this study, consumers who are locked into free content may be more likely to have a subjective impression of the free content (the status before changing), and may perceive higher sacrifices of switching away for paid online content (the status after changing). Hence, cognitive lock-in can increase the perceived sacrifices of the change. Thus, this study hypothesizes:

H4 Cognitive lock-in has a positive effect on perceived sacrifices.

According to the status quo bias theory, individuals have a desire to maintain cognitive consistency. If they want to continue their current way of doing things, they must view an alternative negatively to strive to reduce cognitive dissonance [Polites & Karahanna 2012]. This argument indicates that an inert consumer who is locked in an incumbent consumption pattern may bias the value of a new one to eliminate cognitive dissonance. Additionally, Internet service mostly started as “free”, which has resulted in the “free mentality” of Internet consumers [Lin et al. 2013]. Once consumers’ consumption pattern is locked, they may perceive a certain degree of unfairness in paying for content, which could weaken the perceived value of paid content. To sum up, cognitive lock-in can decrease the perceived benefits of the change. Thus, this study hypothesizes:

H5 Cognitive lock-in has a negative effect on perceived benefits.

3.3. Status Quo Bias: Loss Aversion, Social Norms, and Cognitive Inertia

Status quo bias theory suggests that various factors can either reinforce or weaken an individual’s status quo bias. Samuelson and Zeckhauser’s [1988] empirical evidence has shown that the series of theoretical mechanisms via which status quo bias operates is context-specific and not all explanations are present in a specific context [Polites & Karahanna 2012]. For example, consumers in our paper hardly incur monetary costs when they achieve free online content and they scarcely change their relationships with content providers when moving “from free to fee”. It is nigh on impossible that they will perceive sunk costs and a feeling of losing control. Considering the unique characteristics of our context, we chose three components of status quo bias, i.e., “loss aversion”, “social norms”, and “cognitive inertia”, as the foci of this study. The primary reasons are: (1) changing from “free” to “fee” implies monetary loss, (2) social norms prevailing in the online environment are very influential, and (3) switching between different types of online content services mainly involves cognitive efforts rather than physical efforts [Oakley 1991].

3.3.1 Loss Aversion

Loss aversion is a psychological principle that has been observed in human decision-making [Kahneman & Tversky 1979]. This means that potential (even small) losses can be perceived as being larger than potential gains in making decisions. Because of the uncertainty perception of the future, individuals who have a strong preference for avoiding potential losses are biased in favor of the status quo. According to Luo et al. [2012], the major difference between search and experience goods lies in the level of uncertainty. Online content is a typical experience good, and switching the consumption pattern may inflict uncertainty costs on consumers because they have limited knowledge of the new service and may be worried about whether the changes are worth paying for. These costs can be perceived as higher due to loss aversion, which may affect consumers’ eventual switching intention. Additionally, in a hybrid revenue model, consumers may form a kind of “free expectation”. Since it is possible to gain access to free content, paying seems unfair. Hence, offering free online content may increase consumers’ perception of loss, which may lead to their refusal to eventually pay for content.

As Kim and Kankanhalli [2009] suggested, the loss aversion principle is mainly related to consumers’ negative perceptions (in this study, perceived sacrifices and lock-in). Particularly, according to loss aversion, individuals have a strong tendency to resist change because they tend to weigh potential losses as greater than potential gains of an equal amount [Yen & Chuang 2008]. In this situation, losses will be perceived as being larger than their actual value. If consumers have a high level of loss aversion, it is conceivable that they will be likely to overestimate what they have to give up in order to switch to paid online content. In other words, a higher level of loss aversion leads to higher perceived sacrifices. Thus, this study hypothesizes:

H6 Loss aversion has a positive effect on perceived sacrifices.

When customers may suffer losses caused by changing the current state, they undergo a form of lock-in [Lee et al. 2011]. Loss-averse consumers are motivated to avoid cognitive costs, such as uncertainty costs, and time and effort to adapt to new behavioral patterns; therefore they will be more likely to stick with the status quo. Higher levels of loss aversion imply higher perceptions of cognitive costs, which may lead to cognitive lock-in. Thus, this study hypothesizes:

H7 Loss aversion has a positive effect on cognitive lock-in.

3.3.2 Social Norms

Social norms also impact status quo bias and play an important role in influencing individuals' perception of value [Samuelson & Zeckhauser 1988; Kim & Kankanhalli 2009]. Consumer decision-making is heavily influenced by social norms, especially when consumers make a choice regarding the products and services that are difficult to evaluate before consumption. Social norms can also reflect the effect of significant others' opinions on a consumer's perception and behavior [Zhou 2011].

As Kim and Kankanhalli summarized, while social norms can imply either an impetus for or a barrier to an individual to change, investigating the impetus side can offer more insights on the source of change [Kim & Kankanhalli 2009]. Following their suggestions, in this study, we adopt the concept of *favorable social norms* that weaken status quo bias and favor a change. Hence, such social norms might help make a switch to the paid model appear more acceptable to the individual.

Because of the need for social companionship and the fear of sanction for non-compliance in online communities, users have the tendency to conform to others' favorable opinion towards switching. If others endorse or give favorable comments on paid content, a desire for conformity may prompt consumers to internalize social norms and reduce their status quo bias. In the context of our study, once consumers assume the social norms that the new paid online content can serve better quality, they may internalize the concept. In this case, perceived sacrifices and perceived benefits may be adjusted. As previously stated, consumers may feel uncertainty about the paid content; while positive social norms can represent a way of dealing with uncertainty [Arrow 1971]. For instance, the favorable opinions toward the paid content are conducive to the reduction of perceived risk, namely, perceived sacrifices. In the same vein, perceived benefits may also be increased because the paid content is highly appraised for its value among other consumers. Hence, favorable social norms relate negatively to perceived sacrifices and positively to perceived benefits. Thus, this study hypothesizes:

H8 Social norms have a negative effect on perceived sacrifices.

H9 Social norms have a positive effect on perceived benefits.

3.3.3 Cognitive Inertia

The third basis for explaining status quo bias is cognitive inertia. Cognitive inertia denotes that consumers consciously remain with the state quo due to cognitive momentum. Consumers' consumption patterns will be locked because of a long-term usage of free content. The belief that such online content is financed by advertisers and thus should be free may foster a sense of unfairness in the consumers. When consumers are to be charged subscription fees for online content, the perception of unfairness will increase the cognitive momentum and promote consumption pattern lock-in.

Consumers may favor the current situation out of cognitive inertia. In the context of our study, consumers' cognitive inertia towards free content will lead to status quo bias. Although they may realize that free content is not necessarily the best, most efficient, or most effective alternative, they are still unwilling to abandon the status quo [Rumelt 1995; Polites & Karahanna 2012]. In other words, consumers will be reluctant to change even though they know a new alternative is better. In this regard, perceived value will not be affected by cognitive inertia.

Rather, according to Narula [2002], cognitive inertia will make individuals prefer to maintain the status quo, which will further lead to cognitive lock-in. Higher cognitive inertia forces consumers to increase their momentum, which encourages them to take it for granted that online content should be free [Wang et al. 2005]. In this regard, they are more likely to be locked in to free online content. Hence, this study hypothesizes:

H10 Cognitive inertia has a positive effect on cognitive lock-in.

3.4. The Moderation by Adaptation Level to Advertisements

In a hybrid revenue model, online advertisements play an indispensable role in generating revenue for online content providers. However, the providers may also suffer resentment from online consumers who tend to see these advertisements as an intrusion. For instance, pop-ups can interrupt browsing activity and demand consumers' immediate response to close them [Chatterjee 2008]. Nonetheless, according to adaptation level theory [Helson 1947], individuals can adapt themselves to a certain stimulus through prolonged exposure to it. The theory posits that individuals' judgments of current stimuli are relative to their adaptation level, which is a reference point based on past experience with the stimuli. It is not hard to see that experience varies with each individual, resulting in the adaptation level being as individual as the person. In our study, online advertising can be viewed as a stimulus that triggers consumer antipathy, yet consumers may adapt to the advertising if they have experienced online advertisements for a long period. Since the extent of adaptability varies with different individuals, we introduce a concept named "adaptation level to advertisements" to describe the varying degree of advertisement that individuals can adapt to.

This paper argues that this adaptation to advertisements will have an effect on consumer choice. For instance, although they still have to suffer the loss of change, consumers with a low adaptation level can be more likely to

accept a pay-for-content model because they may be comfortable with the online content without ads. In a similar way, consumers who care less about online advertising (high adaptation level) may be more inclined to resist the switch even if they may perceive that the new content is superior. Namely, on one hand, the user's adaptation level to advertisements will moderate the relationship between perceived sacrifices and switching intention by making that weaker in the presence of a low adaptation level. On the other hand, the adaptation level to advertisements will also moderate the relationship between perceived benefits and switching intention by making that weaker in the presence of high-level adaptation. This study hypothesizes:

H11a: The adaptation level to advertisements will moderate the relationship between perceived sacrifices and switching intention such that the relationship is stronger in the presence of a high adaptation level to advertisements.

H11b: The adaptation level to advertisements will moderate the relationship between perceived benefits and switching intention such that the relationship is weaker in the presence of a high adaptation level to advertisements.

4. Research Methodology

4.1. Target Object and Measures

Douban FM, the most popular online music provider in China, was chosen as the target object in this study. Like a radio station, Douban FM automatically plays recommended songs, and users do not know what the next one will be. It recommends songs based on the historical records of a user and a list of songs that the user has marked as favorable. The original revenue model of Douban FM was an advertising revenue model when it was launched in November 2009. Adverts are occasionally broadcast between songs. This kind of advertising is intrusive since users have no control over it. Unlike pop-ups, Douban FM users cannot move or close the adverts but must listen to them and wait for them to end. These ads not only distract user attention, but also reduce the quality of Douban FM's online content.

Users numbers of Douban FM reached 67 million in early 2013 and the web traffic was approaching a peak [Li 2013]. Launching the pay-for-content model seemed like a feasible strategy to cover copyright costs. In order to win better profits, Douban FM launched the pay-for-content model, Douban FM Pro, in January 2013. The Pro version is advertising-free and has a more superior sound quality. Douban FM users, if subscribing to Pro, can remove the adverts if they perceive them as unwanted and irritating. Meanwhile, Douban FM has retained its original advertising revenue model. In other words, it now uses a hybrid revenue model. Douban FM users can decide whether to pay or not.

The variables of this study were measured using a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) in the survey. The items were adapted from existing studies and the wording of each item was reviewed by both online content researchers and online content customers. The final version of the items for each construct is listed in Table 2.

4.2. Data Collection

A Web-based survey was conducted to collect data. Survey requests were sent to subscribers of Douban FM official micro-blog and Douban FM Group. As this study focuses on the switching intention of free-content consumers, we limited our respondents to be those who began to use Douban FM before the launch of Douban FM Pro. Furthermore, most of users who had only used Douban FM infrequently had not encountered any advertising. We eliminated users who had never encountered Douban FM ads before. In this way, we ensured that our respondents had had a long usage experience with Douban FM so that the status quo bias towards Douban FM might appear, and the quality of data could be guaranteed.

Using the above criteria, we randomly sent out survey requests to Douban FM users and screened the user group. A total of 127 complete and valid questionnaires were returned. Of the participants, 56.69 percent were male and 43.31 percent were female. The majority of respondents were aged below 30 years (91.34%) and had been using Douban FM for one year or more (86.61%). According to China Digital Music Players' Behavior Research (2012-2013), we consider the structure of our sample acceptable. Meanwhile, it is similar to other online music studies [Chu & Lu 2007; Lin et al. 2013]. The descriptive characteristics of the sample are shown in Table 3.

Table 2: Measurements of Variables

Construct	Item	Wording	Reference
Switching intention	SI1	In the near future, I will consider paying for Douban FM Pro.	Kim et al. [2006]
	SI2	In the near future, the chance of my paying for Douban FM Pro is high.	
	SI3	In the near future, I am determined to pay for Douban FM Pro.	
Cognitive lock-in	CLI1	The free Douban FM provides promised benefits that I cannot easily obtain from others.	Shih [2012]
	CLI2	The free Douban FM provides useful benefits that I cannot easily obtain from others.	
	CLI3	The free Douban FM provides superior benefits that I cannot easily find from others.	
Perceived benefits	PB1	I think that Douban FM Pro can save me the time I used to spend enduring the advertising	Lee [2009]; Developed for this study
	PB2	I think that Douban FM Pro can save the inconvenience that I had to experience before.	
	PB3	I think that Douban FM Pro can offer me a wider range of content and services.	
	PB4	I think that Douban FM Pro can offer me superior content and services.	
Perceived sacrifices	PS1	The price charged for Douban FM Pro is high.	Ruiz et al. [2008]; Chapman and Wahlers [1999]
	PS2	The time period required to get Douban FM Pro is long.	
	PS3	The effort I expend to get Douban FM Pro is considerable.	
	PS4	The risk I experienced to get Douban FM Pro is high.	
Loss aversion	LA1	Compared to the utility of Douban FM Pro, I care more about the monetary cost to get Douban FM Pro.	Developed for this study
	LA2	Compared to the utility of Douban FM Pro, I care more about the time costs to get Douban FM Pro.	
	LA3	Compared to the utility of Douban FM Pro, I care more about the effort costs to get Douban FM Pro.	
	LA4	Compared to the utility of Douban FM Pro, I care more about the risk costs to get Douban FM Pro.	
Social norms	SN1	Most of my friends think I should use Douban FM Pro.	Polites and Karahanna [2012]; Kim and Kankanhalli [2009]
	SN2	Most of my colleagues/schoolmates think I should use Douban FM Pro.	
	SN3	Most of my Douban Group members/other online listeners think I should use Douban FM Pro.	
Cognitive inertia	CI1	I will continue using the free Douban FM, even though I know the music it provides is not the best.	Polites and Karahanna [2012]
	CI2	I will continue using the free Douban FM, even though I know the tone quality it provides is not optimal.	
	CI3	I will continue using the free Douban FM, even though I know the audiovisual environment is not the smoothest.	
Adaptation level to advertisements	ALA1	I think the ads in Douban FM are sustainable.	Self developed
	ALA2	I think the ads in Douban FM do not affect me much.	
	ALA3	I think the ads in Douban FM do not disturb me much.	

Table 3: Demographic Statistics of the Survey Respondents (n=127)

Demographic Variables	Count (%)
Gender	
Male	72 (56.69)
Female	55 (43.31)
Age	
Less than 22 years	39 (30.71)
23-30 years	77 (60.63)
More than 31 years	11 (8.66)
Usage experience of Douban FM	
Less than 1 year (more than half year)	17 (13.39)
1-2 years	41 (32.28)
More than 2 years	69 (54.33)
Usage Frequency	
Seldom	7 (5.51)
Sometime	32 (25.20)
Usually	88 (69.29)
Monthly income	
Below RMB ¥2000	44 (34.65)
RMB ¥2001- RMB ¥5000	47 (37.01)
RMB ¥5001- RMB ¥10000	26 (20.47)
Above RMB ¥10001	10 (7.87)

5. Results

The research model was conducted using the partial least squares (PLS) approach. PLS is relatively robust and has no restriction on multivariate normal distribution [Chin et al. 2003]. The primary reasons for using the PLS modeling technique in our study are: (1) the research model in this study was not a confirmatory one, and we intended for causal-predictive analysis; and (2) PLS provides a convenient way of testing a complex model and of analyzing the measurement model, the structural model, and moderating relationships [Chin et al. 2003; Wang et al. 2013]. Therefore, we used SmartPLS 2.0 (beta), which is an appropriate data analysis tool and followed the two-step analytical procedures [Ringle et al. 2005; Anderson & Gerbing 1988]. The measurement model was first assessed and then the structural model was tested in the second stage. Meanwhile, PLS, a regression-based strategy, requires a smaller sample size than the covariance-based strategy (such as AMOS, LISREL). It is acceptable if a sample size equals 10 times the largest number of variables that are related to any endogenous variable according to the model [Barclay et al., 1995]. Hence, the sample size is acceptable in this study.

5.1. Measurement Model

We tested the measurement model by examining its reliability as well as its validity. First, composite reliability (CR) and Cronbach's alpha coefficients were used to examine its reliability. As shown in Table 4, each item's composite reliability ranged from 0.89 to 0.98, which significantly exceeded 0.70 (the acceptable CR) [Nunnally & Bernstein 1994]. Additionally, the Cronbach's alpha coefficients for each construct were larger than 0.70 (the threshold of the construct reliability) [Nunnally 1978]. Thus, reliability was adequately supported.

Next, we assessed the validity by evaluating its convergent validity and discriminant validity. The former was examined in terms of factor loading and average variance extracted (AVE), which of more than 0.50 is deemed acceptable [Fornell & Larcker 1981]. As shown in Table 4, convergent validity was adequately confirmed. The assessment of discriminant validity is shown in Table 5. The square root of AVE for each item (diagonal elements) exceeded the correlations between that construct and all others (off-diagonal elements), indicating that discriminant validity was adequately established [Fornell & Larcker 1981].

Table 4: Results of Reliability and Convergent Validity Testing

Construct	Item	Factor Loading	t-value	Cronbach's Alpha	Composite reliability	AVE
Switching intention	SI1	0.97	134.27	0.95	0.97	0.92
	SI2	0.96	90.89			
	SI3	0.95	81.78			
Cognitive lock-in	CLI1	0.94	62.97	0.93	0.96	0.88
	CLI2	0.93	50.12			
	CLI3	0.94	57.62			
Perceived benefits	PB1	0.87	38.04	0.90	0.93	0.77
	PB2	0.89	37.49			
	PB3	0.91	46.73			
	PB4	0.84	26.26			
Perceived sacrifices	PS1	0.85	30.79	0.90	0.93	0.77
	PS2	0.90	34.15			
	PS3	0.92	61.36			
	PS4	0.84	25.70			
Loss aversion	LA1	0.77	18.31	0.83	0.89	0.66
	LA2	0.82	15.79			
	LA3	0.87	33.74			
	LA4	0.80	14.47			
Social norms	SN1	0.92	34.62	0.91	0.95	0.85
	SN2	0.92	43.72			
	SN3	0.93	63.24			
Cognitive inertia	CI1	0.87	22.49	0.88	0.93	0.81
	CI2	0.92	39.41			
	CI3	0.91	38.31			
Adaptation level to advertisements	ALA1	0.97	127.00	0.96	0.98	0.93
	ALA2	0.96	82.32			
	ALA3	0.96	105.98			

Table 5: Analysis of Discriminant Validity

Construct	SI	CLI	PB	PS	LA	SN	CI	ALA
SI	0.96							
CLI	-0.45	0.94						
PB	0.58	-0.41	0.88					
PS	-0.43	0.49	-0.36	0.88				
LA	-0.37	0.44	-0.36	0.57	0.81			
SN	0.55	-0.32	0.50	-0.22	-0.19	0.92		
CI	-0.19	0.39	-0.21	0.22	0.29	-0.19	0.90	
ALA	-0.40	0.35	-0.22	0.14	0.05	-0.23	0.29	0.96

(Note: Diagonal elements represent the square root of AVE of each construct, while the other matrix elements represent the inter-construct correlations)

5.2. Structural Model

After establishing the measurement model, the predictive power of the structural models should also be evaluated. We computed the R-squares for perceived sacrifices, perceived benefits, cognitive lock-in and switching intention. The independent constructs were imported in the first step and the interaction terms were added in the second step. Interpreted as multiple regression results, this model explained the amount of variance for perceived sacrifices ($R^2=0.397$), perceived benefits ($R^2=0.318$), cognitive lock-in ($R^2=0.266$), and switching intention ($R^2=0.502$) by the exogenous variables. The change in R^2 value of switching intention between the two steps of regression was 0.083. The effect size ($f^2=0.093$) is within the suggested range of 0.02 to 0.15 [Cohen 1998], confirming the moderating effects of adaptation level to advertisements. According to Geisser (1974) and Stone

(1974), the predictive validity of the parameter estimates was assessed via the Stone-Geisser criterion Q^2 . With blindfold technique, all Q^2 values of our research model exceed 0, which indicates that the empirical data reconstruct the proposed research model in a substantive way. The change in Q^2 value of switching intention was 0.077, leading a medium effect ($q^2 = 0.142$) on predictive relevance [Chin 1998]. Next, a bootstrapping resampling technique was used to test the path significances with the number of cases equaling 127. As recommended by Cheung and Lau [2008], 500 resamples were used to determine the significance of the paths within the structural model. We calculated the statistical results of path coefficients by using t-tests. Table 6 showed the results of the structural model.

Table 6: Results of Hypothesis Testing

Hypothesis	Path	Path coefficient	t-Value	Results
H1	PS → SI	-0.184	2.564*	Accept
H2	PB → SI	0.396	4.566**	Accept
H3	CLI → SI	-0.074	1.043	Reject
H4	CLI → PS	0.280	2.837**	Accept
H5	CLI → PB	-0.274	3.489**	Accept
H6	LA → PS	0.437	5.121**	Accept
H7	LA → CLI	0.354	4.791**	Accept
H8	SN → PS	-0.053	0.683	Reject
H9	SN → PB	0.413	5.854**	Accept
H10	CI → CLI	0.287	3.782**	Accept
H11a	PS*ALA → SI	-0.164	2.115*	Accept
H11b	PB*ALA → SI	0.014	0.149	Reject

* $p < 0.05$, ** $p < 0.01$

As expected, the hypotheses were generally supported. Perceived sacrifices (H1) and perceived benefits (H2) had significant effects on switching intention. However, cognitive lock-in was unexpectedly found to have no direct impact on switching intention (H3), only having indirect effects through both perceived sacrifices (H4) and perceived benefits (H5), which led the total effect for this relationship to be -0.234. Meanwhile, loss aversion was found to have a positive influence on perceived sacrifices and cognitive lock-in, supporting H6 and H7. Also, H10 showed that cognitive inertia had a positive influence on cognitive lock-in. H9 showed that social norms had a significantly positive effect on perceived benefits ($\beta = 0.413$, $t\text{-value} = 5.854$, $p < 0.01$). However, H8 showed that the effect of social norms on perceived sacrifices was unexpectedly found to be insignificant ($\beta = -0.053$, $t\text{-value} = 0.683$, n.s.). The total effects of the status quo bias dimensions were also compared. The results of cumulative effects show that social norms have the strongest total effect on switching intention (0.173), cognitive inertia has the lowest (-0.067), and loss aversion lies in between (-0.164).

As to the moderating effect, the adaptation level to advertisements was found to moderate only the relationship between perceived sacrifices and switching intention. As the adaptation level to advertisements becomes higher, the effect of perceived sacrifices on switching intention is stronger. Fig. 2 shows how the adaptation level to advertisements moderates the relationship between perceived sacrifices and switching intention. Hence, H11a was supported.

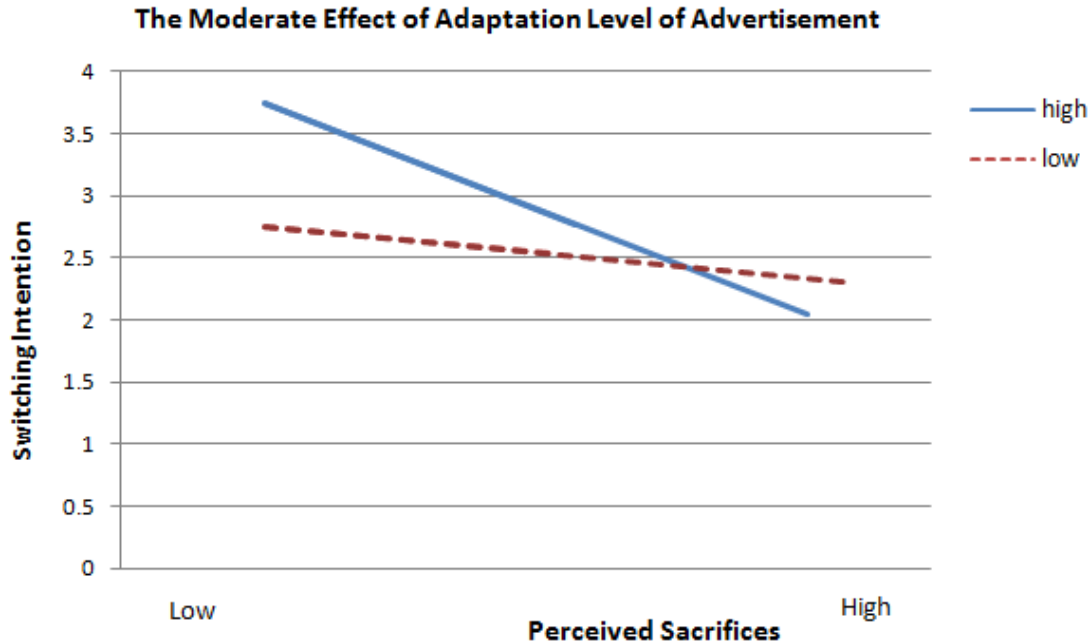


Figure 2: The moderating effect of the adaptation level to advertisements on the relationship between perceived sacrifices and switching intention

6. Discussion and Implications

6.1. Findings

This study aimed to investigate the factors that affect online consumer intention to switch to the paid content in the context of hybrid revenue model. Our findings are summarized as follows: First, the empirical result of this study extends previous findings that perceived value may enhance switching intention due to the reduced sacrifices and added benefits. We also found that perceived benefits exerted a more significant effect than perceived sacrifices on switching intention.

Second, cognitive lock-in decreases switching intention indirectly through its effect on perceived sacrifices and perceived benefits. The results agree with previous research that cognitive lock-in has an influence on consumer perceptions [Shih 2012].

Third, the findings indicate that loss aversion could increase perceived sacrifices, consistent with the results of prior research that loss aversion may contribute to the perceptions of sacrifices [Ahluwalia et al. 2010]. The results also suggest that social norms mainly increase perceived benefits. We find that the favorable opinions from outside could just enhance the perceived benefits of Douban FM Pro, a part of perceived value, rather than the whole.

Additionally, Shih [2012] suggests that cognitive costs had a critical effect on cognitive lock-in. We paid attention to two constructs -- loss aversion and cognitive inertia, which are both associated with cognitive costs. The empirical result supports the assertion that cognitive lock-in can be enhanced by loss aversion and cognitive inertia.

Finally, the empirical results identified the adaptation level to advertisements as a factor that directly influences switching intention and moderates the relationship between perceived sacrifices and switching intention, which was seldom addressed in previous studies.

However, some of our hypotheses (H3, H8, and H11b) were not supported. First, cognitive lock-in had no direct impact on switching intention. Rather, the effect of cognitive lock-in for switching intention was mediated through perceived sacrifices and perceived benefits. It could be because some consumers who are locked in the free Douban FM may also exhibit brand loyalty to Douban FM, which may lead to a willingness to pay.

Second, social norms have no impact on perceived sacrifices. This result indicates that other people's opinions can not diminish the perception of costs. It could be because not all the components of perceived sacrifices can be reduced by the supportive opinions. For example, even though many people are favorable towards the new paid online content and the perceived risk can be mitigated, the consumer still has to undergo other real costs (e.g., price, effort and so on). Third, adaptation level to advertisements has no moderation effect on the relationship between perceived benefits and switching intention. It may be due to the fact that perceived benefits (ad-free) contain the benefits of removing advertisements.

6.2. Theoretical Contributions

This research makes several contributions and has several implications for academics. Firstly, while prior studies have established the importance of perceived value in determining consumer willingness to pay for online content, most of them have neglected that consumers have to overcome their status quo bias towards free online content and take a leap to appreciate paid online content. In other words, status quo bias affects how much value consumers can perceive in the changing or switching. However, few studies have paid attention to this process. Our study goes beyond prior research by combining the status quo bias (SQB) theory and the literature on perceived value to explore the process of consumer intention to switch to paid online content based on a hybrid revenue model. SQB theory is among the first theories that showed decision-makers often stick with the status quo [Samuelson & Zeckhauser 1988]. This theory was generally used to explore human decision-making and rational choice [Inder & O'Brien 2003; Masatlioglu & Ok 2005]. In recent years, it has been applied to explain resistance to information system switching and the change of transaction relationship [Kim & Kankanhalli 2009; Kim & Gupta 2012]. As an extension of prior studies, we make use of this theory, propose a research model from a process perspective in the context of hybrid revenue model, and reveal the antecedents of online content consumers' willingness to pay.

Secondly, this study examined the two components of perceived value separately in order to provide a deeper understanding. In general, perceived value has always been considered a dominating factor that related to a consumer's willingness to pay, purchase intention or switching behavior [Bhattacharjee et al. 2003; Chen & Dubinsky 2003; Lam et al. 2010]. This paper goes beyond the prior literature by showing that perceived value can be divided into perceived sacrifices and perceived benefits [Zeithaml 1988], which have different antecedents and effects.

Thirdly, this study contributes to the SQB theory by highlighting the role of cognitive lock-in as an outcome of status quo bias. This variable has been used to explain user stickiness on particular products, Web sites, vendors and so on [Murray & Häubl 2007; Lin et al. 2010; Shih 2012]. However, few studies have examined its negative effect, that is, it may impede consumers from switching from "free" to "fee" by increasing their perceived sacrifices or attenuating their perceived benefits of change.

Lastly, this study develops the adaptation level to advertisements as a moderator of the relationship between perceived sacrifices/benefits and switching intention. Some may consider online adverts an unwelcome distraction or interference, while our results show that others may treat them as an effective source of useful information. Even though we find that only the effect of perceived sacrifices on switching intention may vary according to a consumer's attitude towards online advertisement, the adaptation level to advertisements still plays a crucial role in our model.

6.3. Implication for Practice

The findings of this research also offer implications for practitioners in online settings. First, the results show that online content providers should be aware of the role of cognitive lock-in in influencing consumer switching intention. To enhance the probability of switching, cognitive lock-in can be reduced by attempting to reduce loss aversion and cognitive inertia. For example, consumers generally will treat the payment discreetly, and consumers will differ in cognitive efforts for different means of payment. If online content providers can achieve diversification of online payment modes, different cognitive costs of different consumers will be reduced, which may weaken the negative effects of cognitive lock-in.

Apart from lowering cognitive lock-in, perceived value takes on critical importance. Content providers could also promote consumer switching through changing their perceived sacrifices and perceived benefits. Since online contents like music are experience goods, it is relatively difficult and costly to obtain product quality information of experience goods prior to interacting with them [Mudambi & Schuff 2010]. Consumers do not know what is worth buying until they experience the contents. Providers could offer a free trial of the online content in a bid to deliver perceived benefits through value experience and decrease perceived sacrifices through reducing perceived risk. Social norms, or the influence of significant others, are important to help users to further enlarge their perceived benefits. Marketing communication may also enhance the channels of interpersonal communication. For example, creating a community environment users can participate in can help enhance willingness to pay for premium services.

Third, to encourage consumer switching behavior, online content providers could offer content at multiple levels-of-service (LoS). There exists great heterogeneity in the resources of consumers in terms of the diverse adaptation levels to advertisements. To accommodate such heterogeneity, content providers may serve content at different quality levels [Jagannathan & Almeroth 2004]. For instance, for consumers who have a high adaptation level to advertisements, or consider ads interesting and useful, providers can charge a lower price and supply

superior quality content with ads. In this way, content providers can obtain both subscription fees and advertising revenue. A higher price may even be even acceptable to people with a low adaptation level. Offering online content at multiple levels-of-service can give greater flexibility to consumers and reduce the number of consumers rejecting a service, and, consequently, it will offer multiple revenue streams to content providers [Jagannathan & Almeroth 2004].

6.4. Limitations and Future Research

Despite the contributions, the present research has certain limitations to be considered in the future. First, the influence of consumer brand loyalty to Douban FM was not considered in this paper. Since attitudinal loyalty may have a positive effect on consumer willingness to pay [Jaiswal & Niraj 2011], the effect of consumer brand loyalty may play a significant role in this model. Once the loyalty of the customers toward Douban FM has been established, they may be willing to pay for Douban FM Pro even if the free version has fulfilled their needs. Future research could examine this effect.

Second, this study is limited in that the data was collected only from Douban FM users. Future work could replicate this study in other online content contexts so as to get more data and establish the robustness of the results.

Finally, while adaptation level to advertisements has been proposed for this study, future studies may apply it in different online settings using different research questions. Meanwhile, additional study efforts may be needed to evaluate the direct and mediating effect of the adaptation level to advertisements.

7. Conclusion

Our study attempted to examine the antecedents of online content consumers' intention to switch from "free" to "fee" under a hybrid revenue model. Going beyond previous studies, we developed a theoretical model to explore this issue from a switching process viewpoint. We drew on status quo bias theory, considering cognitive lock-in and perceived value, examined what factors may encourage consumers to bias free content (current status) and how these factors affect consumer value perception of paid content. We also added adaptation level to advertisements as a moderator. The results of this study indicated that cognitive lock-in, perceived sacrifices and perceived benefits together influence consumer switching intention. Furthermore, adaptation level to advertisements was found to moderate the effects of perceived sacrifices and switching intention. This study also showed that three components of status quo bias theory, namely, loss aversion, social norms, and cognitive inertia, had an indirect effect on switching intention. Our study helps advance the explanations of switching intention from "free" to "fee" in a hybrid revenue model, and enriches the research field of status quo bias theory. Meanwhile, the findings can also make contributions to revenue management by offering sensible suggestions to enhance consumer intention to pay for online content.

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