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An Investigation into Consumers' Continued Social Shopping Intentions

Completed Research Paper

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Abstract

Social shopping (s-shopping), a novel online shopping model which connects consumers and leverages collaborative efforts, has achieved initial success. However, the continued usage remains a serious issue. To explore the consumers' intentions to continually participate in s-shopping activities, we reviewed literature on sustaining IS usage and s-shopping technical designs and built a research model. To test the hypotheses, an online survey of s-shopping users was conducted in a leading Chinese social network site, Sina Weibo. The results confirmed that consumers' perceptions of the usefulness and enjoyment of using the s-shopping system are critical predictors of their persistent usage. Moreover, informational social support from the virtual group also encourages ongoing participation in the collaborative shopping activities. In addition, personalization, social interaction and social presence support of the s-shopping system are discovered as remarkable antecedents of consumers' usefulness, enjoyment and social support perceptions of the system. This paper fills in the research gap of s-shopping continuance and enriches s-shopping literature.

Key words: social shopping, social support, social presence, continuance intention

Introduction

Social media technologies have given rise to a collaborative and interactive shopping method, namely social shopping (s-shopping) (Liang & Turban 2011). S-shopping means using consumers' online social network ties and social activities to facilitate the exchange of product information and opinions, recommendation of products and social interactions and therefore to promote buying and selling of products (Shin 2013b). Social cues have become increasingly significant for e-commerce operations, indicating that s-shopping should be one of the most crucial and challenging research subjects (Liang & Turban 2011). Consumers and Internet service providers have shown enthusiasm for the s-shopping applications. For example, the e-business website owners have shown great interests to strategically combine their business with social networking applications (Wang 2016). However, despite of the fast growth of s-shopping model, its sustainable development has become a concern for academicians and practitioners (Kim 2013). The notion of shopping while socializing has been doubted (Zhu 2011). Evidences can be found that the former influential Chinese social shopping websites, Mogujie.com and Meilishuo.com, are deviating from s-shopping practices further and further (Yao 2012).

Therefore, the continuance development of s-shopping applications deserve our attention. However, studies undertaken to date have been limited and centered on the definitional and conceptual issues of s-shopping (Wang & Zhang 2012) and consumers' intention to participate in s-shopping activities (Liang et al. 2011; Zhang et al. 2014). Particularly, there is a research gap regarding consumers' continuance intention to participate in these activities after initial adoption. Therefore, we propose our research question:

- What particular factors of social shopping model can affect consumers' continued participation intention, and how?

To address this research gap, we refer to general continued information system (IS) usage literature as well as the s-shopping system design model. Consequently, we built an overarching research model that connects s-shopping technical cues, users' perceptions and continuance intentions and tested it empirically. In the remaining of this article, we further illustrate the study and findings.

This research can contribute to both research and practice. Since there are limited academic insights on s-shopping continuance, we filled in this research gap and enriched the s-shopping literature. Moreover, we shed lights on continued IS usage studies by bringing in the novel s-shopping environment, a field that is distinct from either e-commerce or SNS. Thus the peculiar elements shall deepen our understanding of the traditional IS continuance usage predictors. The s-shopping service providers shall benefit from our study to optimize the technical designs and management strategies.

Research Background

Social shopping

In the s-shopping context, consumers are not isolated any more. They could be connected and use their collaborative efforts to explore stores, exchange opinions and commercial information, and discover products of interests (Olbrich & Holsing 2011; Stephen & Toubia 2010). Through taking part in such activities, they could obtain practical shopping advice (Liang et al. 2011), discover interesting products (Phang et al. 2013), obtain bargains (Kim 2013), and therefore improve their shopping performance (Kim 2013; Liang et al. 2011; Liang & Turban 2011). In addition, the collaborative shopping tools offer consumers a more hedonic and socialized shopping experience (Zhu 2003). Furthermore, they could gain increased social presence (Zhang et al. 2014) and receive social support (Liang & Turban 2011; Shin 2013b).

Continued Information System Usage

IS success depends a lot on the ongoing participation rather than initial adoption (Bhattacharjee 2001b). Motivation theory suggest that IS usage is predicted by both extrinsic and intrinsic motivations induced by one's judgement of the focal artefact (Davis et al. 1992). While intrinsic motivation refers to enjoying the experience of using the technology for its own sake, the extrinsic motivation relates to the valued outcomes of using the technology, such as improved task performance (Davis et al. 1992; Ning & Khalifa 2008). Regarding online shopping systems, consumers' usage intentions are usually driven by their perceived usefulness and perceived enjoyment of the platform (Childers et al. 2002). After initial acceptance of s-shopping system, consumers form their own evaluations of the usefulness and enjoyment of using the system. These two judgements were highlighted by existing research as direct influencers of persistent usage (Barnes 2011; Bhattacharjee 2001a). Meanwhile, via participating in the collaborative shopping process enabled by an s-shopping system, consumers could receive social support from the virtual social group (Liang et al. 2011). The social support demonstrates the mutual assistance among consumers, and it is a critical reason of taking part in collaborative shopping (Liang et al. 2011). With the development of social support, consumers would be more reliant on the s-shopping group for information and cares. Therefore, we put forward social support as a peculiar factor that determines the continued s-shopping system usage (Liang et al. 2011).

Hypothesis Development and Research Model

Perceived Usefulness

Usefulness means how using the s-shopping system improve a consumer's shopping performance (Davis 1989). It reflects a user's judgement of an s-shopping system regarding its functional and instrumental support for the person's shopping task fulfilment. An s-shopping system enables consumers to discover, share, recommend and rate products based on their online social networks (Olbrich & Holsing 2011). These mechanisms alleviate the cognitive effort of searching and help consumers find the right products faster and more easily (Phang et al. 2013). The inter-consumer information and opinion exchange allows both parties to gain better insights into making purchase decisions. Hence shoppers are willing to keep using this service to fulfil their task. Past literature has identified perceived usefulness as a key predictor of users' continuance system usage intention (Bhattacharjee 2001a; Bhattacharjee 2001b). Therefore, we propose that

H1 Consumers' perceived usefulness of using the social shopping system is significantly and positively associated with their continued social shopping intention.

Perceived Enjoyment

Perceived enjoyment indicates the degree to which the activity of using an s-shopping system is perceived to be fun and hedonic intrinsically, apart from any utility consequences (Davis et al. 1992). S-shopping is a voluntary and entertaining activity. The platform offers visually appeal and graphic product sharing methods and socializing opportunities (Olbrich & Holsing 2011), which are important indicators of shopping hedonism (Arnold & Reynolds 2003). Previous studies on s-shopping have confirmed the salience of enjoyment perception in determining customers' participation behavior (Shen 2012; Zhang et al. 2014). After initial participation, consumers are more likely to form an ongoing willingness to engage in the sharing of commercial information and interaction activities if they have experienced intrinsic enjoyment from these activities. Therefore, we suggest that

H2 Consumers' perceived enjoyment of using the social shopping system is significantly and positively associated with their continued social shopping intention.

Social Support

Social support, a key indicator of consumers' s-shopping participations, refers to "an individual's experiences of being cared for, being responded to, and being helped by people in that individual's social group" (Liang et al. 2011; Shin 2013b; Zhang et al. 2014). In the s-shopping context, one's perception of social support is concerns two dimensions: informational and emotional (Liang et al. 2011). Informational support is related to assistance in the form of knowledge, suggestions, opinions, and advice, which could turn into solutions and plans for the receiver. Emotional support is reflected as the expression of inner feelings such as understanding, solicitude, and concern. The s-shopping mechanism encourages consumers to collaborate and help each other. When a consumer's social support perception is strong, the person could expect unfailing supply of information and affection from the s-shopping group. Then the individual is more likely to seek for advice, opinions, knowledge and sentimental cares from others in the future. In this case, the person tend to engage in the s-shopping activities persistently. Therefore, we propose that

H3 Consumers' perceived informational social support is significantly and positively associated with their continuance social shopping intention.

H4 Consumers' perceived normative social support is significantly and positively associated with their continuance social shopping intention.

Technical Features of Social Shopping System

To analyses the critical factors of an s-shopping system that generate the benefits for users, we refer to extant research on the essential features of s-shopping design. It suggested that s-shopping applications should involve social media technologies, community interactions, and commercial activities (Liang & Turban 2011). Moreover, the platform contains four layers, namely, individual, conversation, community, and commerce levels (Huang & Benyoucef 2013). The individual layer highlights the functions associated with personalized offerings (Huang & Benyoucef 2013). The rest of the features demonstrate the system's support for an interactive and face-to-face shopping experience. Thus, we propose personalization, social interaction and social presence support as crucial technical features of an s-shopping system (Zhang et al. 2014).

Personalization

Personalization refers to a person's perception that the s-shopping system can customize the content to meet his or her personal needs (Zhang et al. 2014). It reflects the process of changing web offerings to meet a user's individual preferences (Benlian 2015). The personalization mechanism is twofold. First, it allows an individual user to present "the self" and obtain identification from others, and this step is realized by allowing the user to input rich personal information to generate a profile (Huang & Benyoucef 2013; Olbrich & Holsing 2011; Shen & Eder 2009). The second is content and layout personalization aimed to deliver appropriate content to a specific user at the right time (Benlian 2015).

Content personalization is an effective and useful measure in reducing a user's effort in dealing with information load, and users usually find this measure helpful (Huang 2000). Therefore, the personalization attributes of an s-shopping system enhances a shopper's expectation of the shopping performance via using the system. These personalized content is more likely to satisfy the consumers' needs and thus increase the pleasure of using the website. In addition, this mechanism makes individual

consumers' personalities and preferences clearer to each other, so the giving and receiving of informational and emotional support becomes easy and effective. Hence consumers would be more motivated to offer mutual support to others. Thus, we suggest that

H5a The social shopping system's support for personalization is significantly and positively associated with consumers' perceived usefulness of the system.

H5b The social shopping system's support for personalization is significantly and positively associated with consumers' perceived enjoyment of the system.

H5c The social shopping system's support for personalization is significantly and positively associated with consumers' perception of informational social support.

H5d The social shopping system's support for personalization is significantly and positively associated with consumers' perception of normative social support.

Social Interaction

Social interaction refers to the extent to which an individual feels at ease and comfortable to engage in interpersonal communications through a technology-enabled space (Phang et al. 2009). The mechanism allows users to interact with one another through review and rating, instant message, comment, repost and "likes". Social interaction is found to be a key driver of virtual community participation (Phang et al. 2009; Phang et al. 2013) and s-shopping participation (Rad & Benyoucef 2010). S-shopping platform offers a variety of methods to support communications before, during, and after purchases. Thus shoppers could be informed and make better decisions. These exchanges of opinions and information and interactive actions make the shopping process interesting and enjoyable.

Moreover, since social support is a bidirectional and interactive process (Crocker & Canevello 2008), the availability of the interaction tools would facilitate informational and emotional social support exchange among participants (Zhang et al. 2014). In conclusion, the following is proposed:

H6a The social shopping system's support for social interaction is significantly and positively associated with consumers' perceived usefulness of the system.

H6b The social shopping system's support for social interaction is significantly and positively associated with consumers' perceived enjoyment of the system.

H6c The social shopping system's support for social interaction is significantly and positively associated with consumers' perception of informational social support.

H6d The social shopping system's support for social interaction is significantly and positively associated with consumers' perception of normative social support.

Social Presence

Social presence refers to the extent to which two individuals interacting through a technological medium feel as if they are together (Shin 2013a). Support for social presence shows an s-shopping system's technical support that let users be aware of presence of peer consumers and develop a sense of psychological connections with others (Zhang et al. 2014). Allowed by the colorful communication channels on an s-shopping platform, the connections between consumers can be personal, warm, intimate and sociable instead of virtual and mechanical. High social presence can facilitate social activities and maintaining consumers' ties, via which participants can obtain more fruitful outcomes (Ning & Khalifa 2008). The immersive social experience can also add hedonism to the shopping process.

For social-intensive technologies, social presence is a key determinant of users' usefulness perception (Hassanein & Head 2006; Shin 2013a) and enjoyment perception (Hassanein & Head 2006; Ning & Khalifa 2008). In conclusion, we propose that

H7a The social shopping system's support for social presence is significantly and positively associated with consumers' perceived usefulness of the system.

H7b The social shopping system's support for social presence is significantly and positively associated with consumers' perceived enjoyment of the system.

H7c The social shopping system's support for social presence is significantly and positively associated with consumers' perception of informational social support.

H7d The social shopping system's support for social presence is significantly and positively associated with consumers' perception of normative social support.

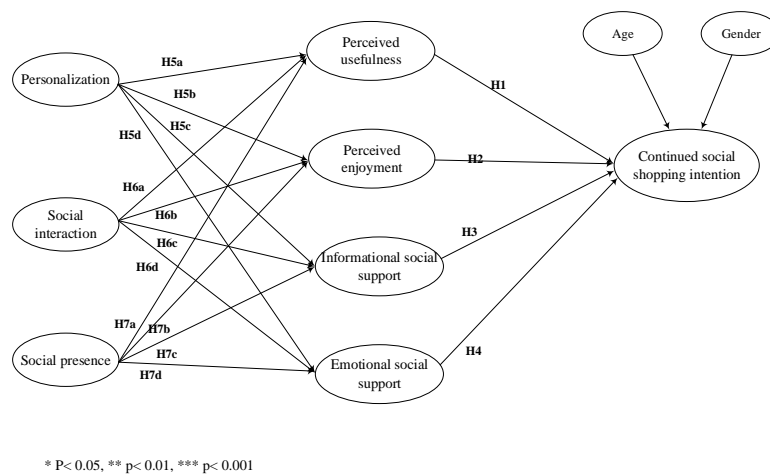


Figure 1. Research Model

Methodology

Measurement Development

A questionnaire-based empirical study is used to test the research model. The measurement items are adopted from previously validated scales and tailored to fit the research context. Two rounds of card sorting process were conducted to further modify the items. As a result, a collection of indicators is obtained, as presented in the appendix. The study measures agreement or disagreement with statements about the latent variables on a seven-point Likert scale ranging from “strongly disagree” (1) to “strongly agree” (7).

Online Survey

An online survey was used to collect data from s-shopping users. Sina Weibo, one of the most popular and influential SNS in China, was selected as research context (Zhao & Lu 2012). Weibo was established in August 2009. By 2015, it has 222 million active users per month and 100 million active users per day (Fan 2015). Collaborative shopping can be realized on Weibo. First, consumers can write product reviews or share shopping experiences, and others can comment on them. Thus, conversations and interactions revolving around shopping interests can be realized. Second, consumers can gather a group of customers to become a virtual community. Besides, Weibo supports friend matching and recommendation. Then consumers are likely to gain access to others with shared taste. Thus the

likelihood that users find potentially interesting products increases, enhancing the collaborative shopping performance of Weibo. For instance, through recommendations from like-minded consumers, users can easily find niche products (Phang et al. 2013). Evidence shows that a growing number of Weibo users participate in commercial activities, and e-commerce business owners are also increasingly using the Weibo platform to promote their businesses (Bai 2014).

To reach active social shoppers, we placed the invitation to the survey and the link to the online questionnaire at some high-traffic spots of Weibo. In motivating responses, monetary rewards were offered to each participant. The online survey was open for two weeks. As a result, a total of 298 responses were collected. Table 1 summarizes the demographic information of the sample.

Gender	Percentage (%)	Monthly Income (CNY)	Percentage (%)
Female 2	59.4	Less than 1000	4.6
Male 1	40.6	1000-2999	9.6
		3000-5999	33.7
History of using Weibo	Percentage (%)	6000-7999	31.4
Less than 1 month	0.7	More than 8000	20.8
1-6 months	5.6	Age	Percentage (%)
6-12 months	7.9	18 and younger	1
1-3 years	38.3	19-25	21.1
More than 3 years	47.5	26-30	37.9
		31-40	32.6
		41 and older	7.4

Table 1. Demographic Information

Data Analysis

Common Method Bias Test

Harman's one-factor test was conducted to check for common method variance (Podsakoff et al. 2003). It was performed by including all items in a principal components factor analysis. When one factor accounts for most of the covariance, the evidence for common method bias exists. We extracted six factors with eigenvalues greater than 1, and the first factor accounted for 12.44% of the total variance. Because more than one factor emerged from the factor analysis and no single factor accounted for most of the covariance in the variables, the data did not exhibit common method bias. In addition, the correlation matrix (Table 3) does not indicate any highly correlated factors, whereas evidence of common method bias should have resulted in extremely high correlations ($r > 0.90$).

Assessment of Measurement Model

We followed the two-step approach recommended by Anderson & Gerbing (1988) to first examine the measurement model and then assess the structural model. A structural equation modeling technique, smart PLS 2.0, was used to test the research model. The CFA results are presented in Table 2. As reported, the Cronbach's alphas for each construct exceed the threshold value of 0.7 (Churchill 1979; Fornell & Larcker 1981). Convergent validity is assessed by testing composite reliability and the average variance extracted (AVE) (Hair et al. 1998). The minimum passing value for AVE and composite reliability is 0.5 and 0.7 respectively (Fornell & Larcker 1981). These values are satisfactory. The discriminant validity is supported when the square root of the AVE for each construct is greater than the correlations between that construct and other constructs (Fornell & Larcker 1981). As shown in Table 3, the model achieves sufficient discriminant validity.

	Items	AVE	Composite Reliability	Cronbachs Alpha
Continued social shopping intention	5	0.55	0.86	0.79
Emotional social support	3	0.66	0.85	0.74
Informational social support	3	0.65	0.85	0.73
Perceived enjoyment	4	0.55	0.83	0.73
Personalization	4	0.64	0.88	0.81
Perceived usefulness	4	0.61	0.86	0.78
Social interaction	4	0.60	0.85	0.77
Social presence	4	0.55	0.83	0.73

Table 2. Results of Confirmatory Factor Analysis

	1	2	3	4	5	6	7	8
1. Continued social shopping intention	0.74							
2. Emotional social support	0.42	0.81						
3. Informational social support	0.56	0.56	0.81					
4. Perceived enjoyment	0.47	0.49	0.45	0.74				
5. Personalization	0.42	0.41	0.43	0.53	0.80			
6. Perceived usefulness	0.58	0.44	0.39	0.56	0.50	0.78		
7. Social interaction	0.55	0.43	0.59	0.38	0.35	0.32	0.77	
8. Social presence	0.47	0.58	0.49	0.59	0.52	0.52	0.38	0.74

Notes: The bold numbers are the square roots of the regarded average variance extracted.

Table 3. Correlations

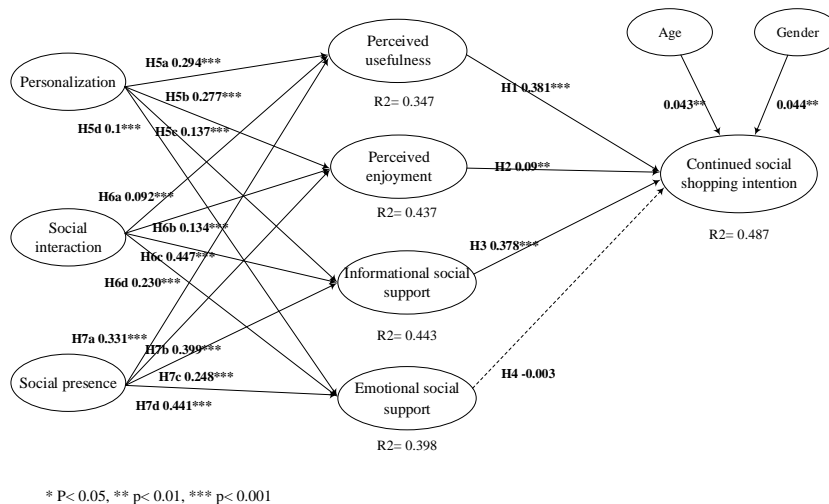


Figure 2. Results of Structural Model

Assessment of Structural Model

After examining the measurement model, we tested the structural model. The results are presented in Figure 2. We followed Mason & Perreault (1991) to judge multicollinearity via variance inflation factor (VIF) values and the tolerance value. Our test shows that the highest VIF value is 2.07, which is lower than the benchmark of 10, and the lowest tolerance value is 0.48, which is higher than the benchmark value of 0.1. These results indicate that our dataset does not have a serious issue of multicollinearity.

Discussions

As the results suggest, perceived usefulness and enjoyment and the experience of informational social support significantly influence consumers' continued s-shopping intention, referring to H1, H2 and H3 respectively. It indicates that after initial acceptance of s-shopping, a consumer's ongoing participation is stimulated by the expectation that using the system could bring improved shopping performance and entertainment. Moreover, their reliance on the peer consumers for informational needs also drives them to keep using the s-shopping system. However, the emotional social support is not significantly associated with continued s-shopping intention, revealing that after joining the virtual s-shopping group, consumers' primary concerns are their informational demands instead of affective needs. The reason might be related to the fact that the interpersonal ties in the s-shopping group are usually newly formed and not strong. Further, given the property of s-shopping group, the initial intention of creating these collaborative connections is oriented toward commercial information exchange. Therefore, consumers attach more importance to obtaining information from the group instead of getting sentimental cares.

Additionally, three technical design cues of the s-shopping system (personalization, social interaction and social presence) were confirmed as significant influencers of the users' usefulness, enjoyment and social support perceptions, supporting H5(a-d), H6 (a-d) and H7(a-d). First, personalized services on an s-shopping system are useful for consumers to achieve better shopping efficiency and outcomes. Also, these services could offer a more hedonism experience. With the personalization cues being strong, consumers are easier to identify themselves and others, so the mutual social support could be facilitated. Second, the social interaction tools allow for more efficient and frequent communications and therefore enhance consumers' performance and mutual social support.

These interactive experience makes the shopping process inherently fun. Third, s-shopping technic reduces the distance between consumers and allow them to be psychologically close. When users feel that they are communicating in person, the collaborative shopping could be more efficient, effective and enjoyable. Besides, the intimacy and warmth allows for higher social support.

Research Contributions and Conclusions

In this paper, a research model is built to empirically test the relationships between s-shopping systematic cues, users' perceptions and their continuance intention of usage in China. This study can contribute to both research and practice. Firstly, although research has been undertaken to analyse initial acceptance of s-shopping, the sustaining usage remains unclear. Still, there is limited academic insights on Chinese s-shopping technology usage. Therefore, we resolve this important issue and can add to the understanding of s-shopping continuance in developing regions. Moreover, we contextualize the antecedents of continuance IS usage in the s-shopping setting and identify the peculiar social elements that are salient. Given the bright future of social media in China, these cues can be applied in many future research that involves the usage of social media-based technologies. Additionally, informed by our study, s-shopping service providers can encourage ongoing usage by improving the personalization, social interaction and social presence designs.

Appendix

Measurements: *Scale strongly disagree (1) – strongly agree (7)*

Personalization (Zhang et al. 2014)

1. This website understands my specific needs.
2. This website knows what I want.

3. This website stores all my preferences and offers me extra services based on my preferences.

4. This website does a pretty good job guessing what kinds of things I might want.

Social Interactions (Chen & Huang 2007; Phang et al. 2009)

1. It's conducive to interact with others through the system.

2. It's easy to interact with other users via this website.

3. The tools provided by this website allow me to communicate and discuss with other users frequently.

4. This website allows/ permits/ enables/ facilitates my interaction with other users.

Social Presence (Zhang et al. 2014)

When surfing the website, the interaction with the other users is: 1. personal; 2. Close; 3. humanizing; 4. Emotional.

Perceived Usefulness (Davis 1989; Parboteeah et al. 2009)

Using this website can: 1. improve my shopping performance; 2. increase my shopping productivity; 3. enhance my shopping effectiveness; 4. improve my shopping outcome.

Perceived Enjoyment (Davis et al. 1992; Parboteeah et al. 2009)

Using this website is: 1. Enjoyable; 2. Exciting; 3. Pleasant; 4. Fun.

Informational Social Support (Liang et al. 2011)

On the website: 1. some people would offer suggestions when I need help; 2. when I encounter a problem, some people would give me information to help me; 3. when faced with difficulties, some people would help me discover the cause and provide me with suggestions.

Emotional Social Support (Liang et al. 2011)

When faced with difficulties: 1. some people on the this website comforted and encouraged me; 2. Some people on the this website listened to me talk about my private feelings; 3. some people on the this website expressed interest and concern in my well-being.

Continuance Social Commerce Intention (Liang et al. 2011)

1. In the future, I am willing to provide my experiences and suggestions when my friends on this website want my advice on buying something.

2. I am willing to continue sharing my own shopping experience with my friends on this website.

3. In the future, I am willing to recommend products that are worth buying to my friends on this website.

4. I will consider the shopping experiences of my friends on this website when I want to shop.

5. I am willing to continue buying the products recommended by my friends on this website.

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