Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

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Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

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Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

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# Table of Contents

1.0. Acknowledgement……………………………………………………………………….. P.4
2.0. Abstract……………………………………………………………………………………. P.5
3.0. Introduction……………………………………………………………………………… P.6
4.0. Literature Review………………………………………………………………………… P.8
   2.1. Electronic Commerce………………………………………………………………… P.8
   2.2. Electronic word of mouth communication……………………………………….. P.8
   2.3. Intrinsic and extrinsic motivations……………………………………………….. P.9
   2.4. Electronic loyalty……………………………………………………………………… P.10
3.0. Research Methodology and Hypothesis Development…………………………….. P.12
   3.1. Knowledge self-efficacy…………………………………………………………….. P.14
   3.2. Enjoyment in helping others………………………………………………………. P.14
   3.3. Enjoyment in influencing the company…………………………………………… P.15
   3.4. Extrinsic incentives…………………………………………………………………… P.15
   3.5. Reciprocal benefits………………………………………………………………….. P.16
   3.6. Reputation……………………………………………………………………………. P.17
   3.7. Identification theory………………………………………………………………….. P.17
   3.8. e-loyalty……………………………………………………………………………… P.18
4.0. Research methodology………………………………………………………………… P.18
   4.1. Data collection………………………………………………………………………… P.19
   4.2. Sample profile………………………………………………………………………… P.19
   4.3. Measures……………………………………………………………………………… P.20
5.0. Data analysis and results……………………………………………………………… P.21
   5.1. Measurement model………………………………………………………………… P.21
   5.2. Structural model…………………………………………………………………….. P.24
6.0. Discussion………………………………………………………………………………… P.25
   6.1. General discussion…………………………………………………………………… P.26
   6.2. Implication…………………………………………………………………………… P.29
   6.3. Contribution………………………………………………………………………… P.32
   6.4. Limitation…………………………………………………………………………….. P.33
   6.5. Further Study……………………………………………………………………….. P.33
   6.6. Conclusion…………………………………………………………………………… P.34
7.0. References……………………………………………………………………………… P.35
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

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In addition, we would like to express our cordial gratitude and appreciation to the 204 respondents for the invaluable time and effort they spent in taking part in our online survey. Their kind responses and feedbacks are the important source of our project that gives us a foundation to generate useful discussion and to support our proposed model.

Finally, we are grateful to our families and friends who give us endless love and overwhelming supports throughout the whole process when we are working with this research paper. For their love and support, we get the encouragement and power to overcome the stress and challenges from our honors project.
Effect of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

Abstract

This research paper aims at showing the understanding of how eWOM affects the consumers’ online shopping behaviors (C2C). Identification theory and motivation theory are adopted to understand how online shopping patterns are affected by eWOM. Many antecedent researches have investigated the positive eWOM’s effectiveness. They assessed how eWOM would affect the consumers’ buying decision. Nonetheless, we thought there was a need to examine the motivations of consumers to take part in eWOM and how eWOM is related to e-loyalty for extensive study in this research. In this research paper, we investigate both the intrinsic and extrinsic factors which encourage consumers to take part in eWOM on online review platforms.

The result findings are encouraging. Most of the hypotheses and the model we have proposed in this research paper are supported by the research findings. The findings reveal that the intrinsic motivation factors (Knowledge self-efficacy, Enjoyment in helping other and Enjoyment in influencing the company) are more important than the extrinsic motivation factors (Reputation, Extrinsic incentives and Reciprocity benefit), which matched with the antecedent researches’ result findings of eWOM participation. In this research paper, it also reveals that the personal site identification and social site identification have great impact on e-loyalty. Also, we have made a contribution of investigating on the indirect effects between the four significant motives and site identifications. The proposed model is tested with a sample of 204 users of an online review community, hk.taobao.com. The six motivation factors including both intrinsic motivations and extrinsic motivations explain 92.5% of the variance in eWOM participation in our model. For the e-loyalty, the two factors of identification including personal site identification and social site identification explain 60.7% of the variance in e-loyalty. Considerable implications for practice and research are offered by the result findings of this research paper.
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

1.0. Introduction

These years, people always search on Internet before purchasing something and WOM becomes an important source of information for purchase. Electronic word-of-mouth is common now and affects greatly especially for online purchase decision (Stauss, 1997). Electronic word of mouth (eWOM) has become a significant factor in forming consumer consumption behavior. Consumers these days are easily affected by the information offered by consumer opinion sites (Hennig-Thurau, Gwinner, Walsh & Gremler, 2004). e-WOM refers to “any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet” (Hennig-Thurau & Walsh, 2003). The considerable effect of eWOM communication is also supported by the industrial statistics.

Recently, in managerial and academic aspects, significant attention has been given to electronic word-of-mouth (eWOM) communication. The effectiveness of eWOM communication has been examined by many academic studies and it was being investigated in how it would affect consumer purchasing decisions. Nowadays, traditional WOM has been replaced by online media due to the advance in technologies (Duan, Gu & Whinston, 2008, Li & Du, 2011, Weinberg & Davis, 2005). Many online tools such as blogs, online instant messenger, services consumer review systems and social media are the foundation for electronic WOM networks. They are used by consumers to assemble and spread the information of products and services. Shaping brand images, making decision, and searching of information can be managed by these tools (Chatterjee, 2001, Helm, 2000).

The way of interaction between the customers and sellers has been changed because of the rise of these e-WOM tools. When compared with traditional word-of-mouth interactions, e-WOM is easier to reach the consumers as there are no limitations in time and relationships. Moreover, it can be interacted in everywhere since Internet network is always available nowadays as well as having a wider range of application daily. Besides, it can be spread much more quickly than traditional word-of-mouth communication (Churchill, Girgensohn, Nelson & Lee, 2004). Furthermore, they also amend the conventional way at which they affect to business activities. Positive and negative comments given by online shoppers these days are more aggressive under e-commerce (Harrison-Walker, 2001).
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

Many online business websites want their customers to offer as many positive eWOM as possible since potential customers trust those eWOM rendered by the current customers (Gauri, Bhatnagar & Rao, 2008). Therefore, e-commerce websites aim at using e-WOM as a marketing strategy to maintain customer relationships as well as to gain new customers. The importance of e-WOM in different industries is realized by researchers. E-loyalty refers to an attitude or behavior in respect to revisiting a particular website (Anderson & Srinivasan, 2003). Online business firms pay attention to customer loyalty because companies want to understand consumer’s attitudes and preferences for its products or services offered.

The reason why we are going to do this research is that e-WOM behavior highly depends on the interaction between customer and customer on the feedback platforms in the C2C online shopping mall which is hk.taobao.com. There are few existing journals primarily examine the individual rational perspective in terms of costs and benefits on e-WOM behavior. We use the previous researches to examine this new phenomenon of the social communication in different theoretical perspectives and to investigate the intrinsic and extrinsic factors of driving consumers to spread e-WOM on online review platforms and how e-WOM affects the loyalty in e-commerce since loyalty of the customers can help the business generate 80 percent of the total revenue. According to Pareto’s Principle 80/20 rule, it states “80 percent of sales volumes for a product or service is generated by 20 percent of the customers who make repeated purchase of its goods and services.” According to Cermak et al. and Wind and Rangaswamy, whether there is the increase in repurchase, customer satisfaction and loyalty or not is the result of whether customers have taken part in service specification or mass customization (Cermak, File & Prince, 1994, Wind & Rangaswamy, 2001). This study combines participation, identification and motivation theories into a research model based on the social psychology literature to understand how e-WOM affects the loyalty in e-commerce.

In the following section, we firstly review the application on electronic commerce, intrinsic and extrinsic motivations for knowledge sharing or participating eWOM. In section 3, we identify the proposed research model and hypotheses. In section 4, we describe the research methodology. In section 5, the data analysis and findings will be shown. The last section is the discussion on this study.
2.0. Literature Review

This section presents literature review of major issues that are directly related to this proposed study. They are:

2.1.) Electronic Commerce
2.2.) Electronic word of mouth communication
2.3.) Intrinsic and extrinsic motivations
2.4.) Electronic loyalty

2.1. Electronic Commerce

Nowadays, people interpret the term “e-commerce” differently. There is a wide range of definitions concerning with e-commerce. Some people view e-commerce in a relation to business models or using computer to sell, purchase or exchange products and services. Some people consider e-commerce as conducting business electronically. However, some people refer it to do business electronically by non-proprietary protocols such as Internet.

In terms of academic definitions, Zwass (1996) indicated that electronic commerce (EC) was about “the sharing of business information, maintaining business relationships and conducting business transactions by means of telecommunications networks”. There are several advantages of adopting e-commerce. Through using e-commerce, transaction costs can be reduced as well as shorten the service delivery’s time, besides, the quality of products and services would be improved (Kalakota & Winston, 1996).

2.2. eWOM communication

There has been a rise in using electronic word-of-mouth communication due to the advance in technology. eWOM recently becomes a useful marketing tools in no doubt. For example, there are 116 million online consumer reviews and it keeps increasing (eMarketer, 2009). The advance in technology provides a place encouraging consumer to have eWOM communication. People use Web 2.0 tools (e.g. online discussion forums, consumer review sites, social network sites, etc.) to share information of products or services (Lee, Park & Han, 2008).
There are results showing customers in fact prefer other customers’ information to marketers or salespeople since customers are the one who have direct experience in using the products or services while Bickart and Shindler let consumers assemble information of five product categories in twelve weeks (Bickart & Schindler, 2001). On Amazon and Barnes and Noble, online book reviews were being examined by Chevalier and Mayzlin to investigate the influences on actual sales caused by e-WOM (Chevalier & Mayzlin, 2005). The results showed that online book stores gained more positive e-WOM than the offline one, in which Barnes and Noble have less positive e-WOM in quality and quantity when compared with Amazon. As a whole, it showed book sales increased due to high level of e-WOM. eWOM could assist consumers to judge the credibility of messages sent by senders such as organization by online reputation systems like online ratings.

2.3. Intrinsic and extrinsic motivations

Most of the previous literatures’ approaches explore the influences of intrinsic and extrinsic motivations towards knowledge sharing. However, there are limited researches focusing on investigating the reason why consumers would participate in eWOM at online shopping mall.

According to Lin (2007), knowledge sharing on organization is influenced by intrinsic and extrinsic motivations. Lin (2007) explored intrinsic motivations (Knowledge self-efficacy and Enjoyment in helping others) and extrinsic motivations (Expected organizational Rewards and Reciprocal benefits) of employees to share their own knowledge within a company. Hung, Durcikova & Lai (2011) also explored the extrinsic motivations (economic reward, reputation feedback and reciprocity) and intrinsic motivation (altruism) on knowledge sharing behavior. A study examined the perceived extrinsic motivations (rewards, reciprocity and subjective norm) and intrinsic motivations (self-efficacy, reputation) towards the intention of knowledge sharing (Cho, Li & Su, 2007). Researchers conducted the similar study on knowledge sharing. They used extrinsic motivations (image related to reputation, reciprocity) and intrinsic motivations (enjoyment in helping, need for affiliation) in their research (Jeon, Kim & Koh, 2011). Prior studies investigated a pool of factors on knowledge sharing (enjoyment in helping others, reciprocity, self-efficacy, trust, pro-sharing norms, self-image related to reputation and organizational reward) in their studies (Kumar & Rose, 2012).
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

A study of exploring the intention of information contribution to online feedback system which conducted by Tong, Wang & Teo (2007) investigated two main areas. One is the benefits which divided into three parts; intrinsic (enjoyment in helping other consumers and enjoyment in influencing the company); internalized extrinsic (self-enhancement); and extrinsic (economic reward). Another part is related to costs (cognitive cost and executional cost). Jeong & Moon (2009) also demonstrated three social identities for customer eWOM participation. Cognitive social identity is the perception of the community; affective social identity is the emotional attachment to the community; and evaluative social identity is the evaluation of self-worth in the community. Besides, they conducted an extrinsic incentive as a motivation of participating in online forums. According to Yoo, Sanders & Moon (2013), e-WOM participation is greatly affected by intrinsic and extrinsic motives, which have the same result with Davis et al. (Davis, Bagozzi & Warshaw, 1992) and Garrity et al. (Garrity, O'Donnell, Kim & Sanders, 2007). Their results were combined with Yoo’s results to form a motivation theory explaining e-WOM participation. Path coefficients were being compared and resulted in showing intrinsic motivation is more significant on e-WOM participation (Yoo, Sanders & Moon, 2013). Prior studies have examined four aspects which are altruism, egoism, principlism, and collectivism showing the reasons that encourage the consumers to spread eWOM online (Cheung & Lee, 2012). These literatures provide a rich foundation to investigate the intrinsic and extrinsic motivations towards eWOM participation further.

2.4. Electronic loyalty

Loyalty of customers of online markets is called e-Loyalty (Reichheld & Schefter, 2000). As online markets do not have any human features, e-Loyalty is customers’ preference and attitude for a specific online organization or product.

Moreover, e-loyalty refers to an attitude or behavior in respect to revisiting a particular website (Anderson & Srinivasan, 2003). According to the existing literature (Hogg, Cox & Keeling, 2000, Rio, Vazquez & Iglesias, 2001), e-loyalty of customers is in a high relation to brand identification, which means having a high brand identification would lead to a high customer's e-loyalty. Higher personal site identification leading to the increase in customers’ purchase (Yi & La, 2002) would bring a stronger e-loyalty.
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

Through allowing customers to use different media such as videos and images to spread eWOM can improve the interaction quality among customers resulting in building up customers’ e-loyalty of a specific website. Besides, personal and social site identifications also have a considerable effect on the e-loyalty of consumers (Yoo, Sanders & Moon, 2013). Through the literature review, we reckon there are many researches focusing on investigating the factors that move customers to spread eWOM while some researches focus on how e-WOM participation affects e-loyalty. However, there are few researches showing the factors that move customers to spread eWOM and how eWOM participation enhances e-loyalty as a single research objective. That’s the reason that encourages us to do this research.
Based on the studies above, a structural model (Fig. 1) has been developed. The model is based on Yoo’s and Lin’s model to examine the relationships between intrinsic and extrinsic motivations for customers to spread eWOM, identification and an e-commerce environment’s e-loyalty (Yoo, Sanders & Moon, 2013, Lin, 2007). Three primary steps are composed to develop this logic. Firstly, the former factors of electronic WOM participation are set by the intrinsic motives and extrinsic motives. The criteria of selecting those motives for our research paper is to see those intrinsic motives and extrinsic motives that are concerning with the eWOM or knowledge sharing from the studies published between 2007 and 2013. Also, those factors are generally adopted by different studies which can be seen in Table 2. Secondly, eWOM participation is being evaluated to see how it would influence the identifications of personal site and social site. Thirdly, the former factors of influencing e-loyalty are set by the identifications of personal site and social site.
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

Table 2

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Codes</th>
<th>Measures</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
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</thead>
<tbody>
<tr>
<td>Knowledge self-efficacy</td>
<td>KS1</td>
<td>I am confident in my ability to provide knowledge that others in my organization consider valuable.</td>
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<td>KS2</td>
<td>I have the expertise required to provide valuable knowledge for my organization.</td>
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<td></td>
<td>KS3</td>
<td>It does not really make any difference whether I share my knowledge with colleagues.</td>
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<td>KS4</td>
<td>Most other employees can provide more valuable knowledge than I can.</td>
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<tr>
<td>Enjoyment in helping others</td>
<td>EH1</td>
<td>I enjoy sharing my knowledge with colleagues.</td>
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<td>EH2</td>
<td>I enjoy helping colleagues by sharing my knowledge.</td>
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<td></td>
<td>EH3</td>
<td>It feels good to help someone by sharing my knowledge.</td>
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<td>EH4</td>
<td>Sharing my knowledge with colleagues is pleasurable.</td>
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<tr>
<td>Enjoyment in influencing the company</td>
<td>EC0M1</td>
<td>I feel good to give the company &quot;something in return&quot; for a good consumption experience by providing my product review.</td>
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<td></td>
<td>EC0M2</td>
<td>I enjoy providing my reviews to help good companies become or remain successful.</td>
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<td></td>
<td>EC0M3</td>
<td>I feel good to affect the company by providing negative product review in Amazon feedback system.</td>
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<td>EC0M4</td>
<td>I enjoy taking vengeance upon the company by writing negative reviews in Amazon feedback system if it provides bad product to me.</td>
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<td>Extrinsic incentives</td>
<td>OR1</td>
<td>I will receive a higher salary in return for my knowledge sharing.</td>
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<td>OR2</td>
<td>I will receive a higher bonus in return for my knowledge sharing.</td>
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<td>OR3</td>
<td>I will receive increased promotion opportunities in return for my knowledge sharing.</td>
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<td>OR4</td>
<td>I will receive increased job security in return for my knowledge sharing.</td>
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<td>Reciprocal benefits</td>
<td>RB1</td>
<td>When I share my knowledge with colleagues, I strengthen ties between existing members of the organization and myself.</td>
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<td>RB2</td>
<td>When I share my knowledge with colleagues, I expand the scope of my association with other organization members.</td>
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<td></td>
<td>RB3</td>
<td>When I share my knowledge with colleagues, I expect to receive knowledge in return when necessary.</td>
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<td>RB4</td>
<td>When I share my knowledge with colleagues, I believe that my future requests for knowledge will be answered.</td>
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<td>Reputation</td>
<td>RP1</td>
<td>I feel that my participation in OpenRice.com improves my status in the profession.</td>
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<td></td>
<td>RP2</td>
<td>I participate in OpenRice.com to improve my reputation in the profession.</td>
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P1 (Lin, 2007); P2 (Tong, Wang & Teo, 2007); P3 (Jeong & Moon, 2009); P4 (Yoo, Sanders & Moon, 2013); P5 (Cheung & Lee, 2012); P6 (Hung, Suczynska & Lai, 2011); P7 (Cho, Li & Su, 2007); P8 (Jeon, Kim & Koh, 2011); P9 (Kumar & Rose, 2012)
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

3.1. Knowledge self-efficacy

Knowledge self-efficacy can encourage employees to share knowledge with other colleagues because they believed their knowledge can help the organization (Lin, 2007). A motive is considered as knowledge self-efficacy if people contribute their knowledge in online communities (Bandura, 1986). People are willing to spread eWOM at online platforms because they have a higher knowledge self-efficacy when it is related to their consumption experience (Cheung & Lee, 2012).

Table 2 showed that there are two studies which are using the motive of knowledge self-efficacy to investigate the intention of people towards knowledge sharing. Also, both studies had adopted the motive of knowledge self-efficacy as an intrinsic factor because knowledge self-efficacy is an important self motivator for knowledge contribution (Lin, 2007, Cheung & Lee, 2012). Therefore, we also consider knowledge self-efficacy as an important intrinsic factor in this research paper. We believe that people who have higher knowledge self-efficacy about consuming experiences, they will tend to participate in eWOM at online shopping mall. This leads to the following hypotheses:

Hypothesis 1: Knowledge self-efficacy is positively related to one's eWOM intention.

3.2. Enjoyment in helping others

A motive is considered as altruism if the ultimate goal is to increase the welfare of others rather than oneself (Batson, 1994). Enjoyment of helping others refers to an altruistic factor to explain an individuals’ willingness to share knowledge on online platforms or in networks (Lin, 2007, Cheung & Lee, 2012, Henning-Thurau, Gwinner, Walsh & Gremler, 2004, Kankanhalli, Tan & Wei, 2005, Tong, Wang & Teo, 2007).

Table 2 shows that almost all researchers had used the motive of enjoyment of helping others in their own study. Altruism is an intrinsic satisfaction because people want to help others’ utilities without any returns (Hung, Durcikova & Lai, 2011, Tong, Wang & Teo, 2007). Therefore, enjoyment of helping others is also an important intrinsic factor in this research paper. We believe that people who want to help others by participating eWOM in online shopping mall would in return get back the intrinsic enjoyment. This leads to the following hypothesis:
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

Hypothesis 2: Enjoyment in helping others is positively related to one's eWOM intention.

3.3. Enjoyment in influencing the company

Enjoyment in influencing the company is an intrinsic benefit which is based on altruism. Altruism refers to people who are willing to help others. The enjoyment in influencing the company can be divided into two sources. One is that people feel satisfied because the company provides a good product for consumers. Another one is that people enjoy in vengeance because the company provides a bad product for consumers, which will generate a negative consumption experiences (Tong, Wang & Teo, 2007, Sundaram, Mitra & Webster, 1998, Henning-Thurau, Gwinner, Walsh & Gremler, 2004). The reason why we selected this factor in this research paper is that in term of “others”, some researchers refer it to other customers on the online shopping mall (Sundaram, Mitra & Webster, 1998, Henning-Thurau, Gwinner, Walsh & Gremler, 2004). The others refer it to the company or seller on the online shopping mall (Tong, Wang & Teo, 2007). The nature of enjoyment in influencing the company is equal to enjoyment of helping others because if people have a good purchasing experience and feel satisfied the products provided by a particular company, people will help the company and make a positive comment for them, so other people will consider that particular company as a right chosen choice to purchase goods in the online shopping mall.

Table 2 shows that almost all researchers had used the motive of enjoyment of helping others in their own study. Nowadays, consumers always post their comments on online review platforms because they want to express their opinion on the products that they had bought. We then consider the motive of enjoyment in influencing the company is a main concern especially on hk.taobao.com. Therefore, enjoyment in influencing the company is an important intrinsic factor in this research paper. We believe that people want to help the good companies by participating in eWOM at online shopping mall. This leads to the following hypothesis:

Hypothesis 3: Enjoyment in influencing the company is positively related to one's eWOM intention.

3.4. Extrinsic incentives

Extrinsic motives are monetary incentives for influencing e-WOM participation (Bock, Zmud & Lee, 2005). Extrinsic motives refer to people who are following some actions by reason
of compensation obtained by the result of external activity (Deci, 1975). Economic factor is a desire to participate in eWOM because of potential monetary rewards. Through raising economic incentives, the interactions between customers which can help them build up a strong social identity could be improved (Yoo, Sanders & Moon, 2013). Employees want to share their knowledge in order to gain organizational rewards such as salary and bonuses because financial extrinsic incentives have an important influence on the work performance of employees (Lin, 2007, Jeong & Moon, 2009).

Table 2 shows that almost all studies are using the motive of expected rewards to investigate the motivation of participating in eWOM or knowledge sharing. Therefore, expected rewards is an important extrinsic factor in this research paper. We expect that people believe they can obtain expected rewards by participating eWOM at online shopping mall. This leads to the following hypothesis:

_Hypothesis 4: Extrinsic incentives are positively related to one’s eWOM intention._

### 3.5. Reciprocal benefits

People want to share information with others but they do not know each other. The general meaning of this exchange is called reciprocity (Ekeh, 1974). People share their knowledge in online review platform because of the value reciprocity in previous research (Wasko & Faraj, 2000). Employees are willing to share their knowledge in return for reciprocal benefits because they expect future benefits from their present behavior (Lin, 2007, Hung, Durcikova & Lai, 2011).

Table 2 shows that half of studies are using the motive of reciprocal benefits to examine the intention of knowledge sharing. Nowadays, it is a common phenomenon that people depend on other comments to make a purchase decision. Therefore, reciprocal benefits is an important extrinsic factor in this study. We proposed that people help others by participating eWOM in online shopping mall because they expect someone will help them in the future. This leads to the following hypothesis:

_Hypothesis 5: Reciprocal benefits are positively related to one’s eWOM intention._
3.6. Reputation

An individual wants to increase own welfare as his or her ultimate goal. This action is considered as egoistic (Batson, 1994). Reputation is an essential factor of information sharing behavior (Constant, Kiesler & Sproull, 1994, Constant, Sproull & Kiester, 1996). People want to obtain an informal identification and build their image as an expert by sharing or contributing their knowledge (Wasko & Faraj, 2005). Reputation can offer benefit to people who want to enhance their status within a group or organization (Jones, 1997, MarettandJoshi, 2009). According to Tong, Wang & Teo (2007), they examined the self-enhancement as an internalized extrinsic because people want to improve their status or enhance their reputation by posting the good quality reviews in order to have a good feeling. Also, according to Hung, Durcikova & Lai (2011), they used reputation as an extrinsic factor to explore the intention of people towards knowledge sharing.

Table 2 shows that two of the studies had used the motive of reciprocal benefits to examine the intention of knowledge sharing. Therefore, reputation is an important extrinsic factor in this research paper. In view of this, we believed that people are willing to spread eWOM on an online customer opinion platform because they can improve their reputation. This leads to the following hypothesis:

*Hypothesis 6: Reputation is positively related to one’s eWOM intention.*

3.7. Identification theory

People have an opportunity to interact with an internet shopping mall by engaging in eWOM participation. People can understand the identity in the online social platform. The most effective way for promoting identification of the website is to participate eWOM (Bhattacharya, 1998). People interact with internet shopping malls, such as expressing feeling, suggesting and commenting from a seller via an eWOM system. It can increase the participant’s personal site identification. Extra role behavior has a positive impact on the formation of identity in the community (Dick, Grojean, Christ & Wieseke, 2006).

Besides, prior research indicated that extra role behavior would increase a sense of connectedness and promote social identity in the community (Feather & Rauter, 2004). People who have a higher sense of connectedness and membership than others who do not frequently
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

take part in eWOM. In fact, eWOM participation enhances a consumer’s social site identification because there is a positive relationship between the levels of customer participation and the levels of recognition. This leads to the following hypotheses:

_Hypothesis 7: The eWOM participation is positively related to personal site identification._

_Hypothesis 8: The eWOM participation is positively related to social site identification._

3.8. e-loyalty

The ultimate goal of this paper is to confirm the existence of a relationship between eWOM participation and e-loyalty. As prior researches have found that there is a strong relationship between a customer’s e-loyalty and identifications with a company (Hogg, Cox & Keeling, 2000, Rio, Vazquez & Iglesias, 2001). Customer are willing to increase the number of purchasing activity when there are high levels of brand identification (Yi & La, 2002). Previous study showed that using blog can increase social identity with the blog and can strongly influence loyalty formation towards the blog service providers (Moon, Li, Jo & Sanders, 2006). This leads to the following hypotheses:

_Hypothesis 9: The personal site identification is positively related to e-loyalty._

_Hypothesis 10: The social site identification is positively related to e-loyalty._

4.0 Research method

This research paper emphasizes the intrinsic and extrinsic motivation factors affecting the participation in eWOM and how the participation of eWOM influence the personal site and social site identifications which in turn influence the e-loyalty of the online consumer opinion platform. We base on the existing online shopping mall, hk.taobao.com, which has the online review system to test this research paper’s proposed model. Further details of the hk.taobao.com will be mentioned below. Besides, the following sections would provide the detailed information of data collection methods, measures and demographic data of this research paper.

hk.taobao.com
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

According to the study of Alexa, hk.taoba.com is a Hong Kong online shopping mall which offers an online review system to its user to express their opinion of the goods or services they bought. hk.tao.com originates from www.taobao.com which is a Chinese website being founded by Alibaba Group in 2003. It is an online marketplace which provides a platform for its users to conduct consumer-to-consumer (C2C) business on the website. Consumers using this website can leave comments anytime when they want to share their opinions about the goods and services the sellers provided. In 2013, taobao marketplace was ranked to be one of the top 10 visiting online shopping websites in the world (taobao.com Site Overview, 2013). In this research paper, as we focus on investigating the proposed model based on Hong Kong citizens, so we had tested the proposed model by hk.taobao.com instead of the Chinese taobao website in order to make the investigation more concentrate on the behaviors of Hong Kong citizens on taobao online review platform since buying goods and services on taobao is gaining popularity in Hong Kong these years.

4.1. Data collection

In this research, we would adopt an online survey so as to target Hong Kong online users on taobao. We would use hk.taobao.com as the sample frame and target at individuals who have used hk.taobao.com because it is a famous online shopping platform in Hong Kong recently. The online review system of hk.taobao.com is well used by customers. We would also adopt convenience sample by inviting volunteers to take part in the survey. Internet survey would be posted on Facebook groups in a relation to Hong Kong’s Internet buying experiences. Completing the survey according to consumers’ experience with hk.taobao.com is required.

4.2 Sample profile

Table 3 shows the demographic information of our respondents. The respondents were required to finish the survey according to the buying experiences they had with hk.taobao.com. We had collected 204 usable surveys for this research paper. In this sample size of respondents, 37% of them are male and 63% of them are female. The majority of the respondents (40%) in this research paper aged between 17 and 24. 62% of the respondents possess University education level or above. Besides, we have filtered the respondents to make the results of this research paper more accurate by asking whether they have purchased on online shopping malls in the past
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

30 days and 75% of the respondents did that in the past 30 days. The high frequency of online purchase could be seen. 73% of the respondents have left their opinions on hk.taobao.com.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
<th>Frequency</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>76</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>128</td>
<td>63</td>
</tr>
<tr>
<td>Age</td>
<td>16 years or below</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>17-24 years old</td>
<td>82</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>25-32 years old</td>
<td>40</td>
<td>20</td>
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<tr>
<td></td>
<td>33-40 years old</td>
<td>39</td>
<td>19</td>
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<tr>
<td></td>
<td>41-48 years old</td>
<td>32</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>49-56 years old</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Education level</td>
<td>High School</td>
<td>75</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>104</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Post-graduate</td>
<td>23</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>In the past 30 days, how often have you purchased on any online / shopping malls?</td>
<td>None</td>
<td>52</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>1-2 times</td>
<td>96</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>3-4 times</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>5 times or more</td>
<td>26</td>
<td>13</td>
</tr>
<tr>
<td>You always provide reviews on hk.taobao.com.</td>
<td>Strongly Disagree</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Somewhat</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Neither Agree nor Disagree</td>
<td>72</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>66</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>11</td>
<td>6</td>
</tr>
</tbody>
</table>

4.3 Measures

Multi-item perceptual scales will be used to measure all constructs on our questionnaire. Each construct are being measured by a few items for construct reliability and validity. The constructs of interest in our survey included knowledge self-efficacy (KS), enjoyment in helping others (EHO), Enjoyment in influencing the company (EIC), Extrinsic incentives (EI), Reciprocal benefits (RB), Reputation (RP), e-WOM Participation (EWOM), Personal Site Identification (PSI), Social Site Identification (SSI) and e-Loyalty (EL). All of them are carried out by seven-
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

point Likert scale, ranging from strongly disagree (1) to strongly disagree (7) and will be adopted to all constructs and clicking the submit button is required. The measures are listed in (Appendix A).

5. Data analysis and results

In this research paper, we would use the Partial Least Squares (PLS) to perform the statistical analysis. PLS is suggested to explain complex relationships (Fornell & Larcker, 1981) as IS researchers adopt it (Chin, 1998). There are two stages in a PLS analysis: (1) the structural model’s assessment, and (2) the measurement model’s assessment, including the measures’ reliability and discriminant validity. In the following, the measurement scales’ psychometric assessment of our research paper is examined. Then, by following the 2 analytical procedures steps, the structural model is evaluated (Hair, Anderson, Tatham & Black, 1998).

5.1. Measurement model

Convergent validity: In this study, we examined the convergent validity and discriminant validity. There are three criteria of all constructs in testing the convergent validity: (1) the average variance extracted (AVE) should be at least 0.50 (Fornell & Larcker, 1981), (2) the composite reliability (CR) should be at least 0.70, and (3) all item loadings should be greater than 0.707 (Chin, 1998). Reliability test is to test the level of reliability of the proposed measurement tool. The reliability of the data sample in this research paper is tested by Cronbach Alpha (µ) test. According to Nunally (1978), reliability is adequate with Cronbach Alpha larger than 0.7. Table X shows the analysis’ results. The composite reliability (CR) and the average variance extracted (AVE) are adopted to assess the CR. The data sample (Table 4.) in this research paper satisfies with the three convergent validity conditions, having the AVEs range between 0.775 and 0.938 and the CRs range between 0.932 and 0.978. All Cronbach Alphas are larger than 0.7. Besides, all the item loadings are larger than the benchmark which is 0.707.
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

<table>
<thead>
<tr>
<th>Table 4. Psychometric properties of measures.</th>
</tr>
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<tbody>
<tr>
<td>Construct</td>
</tr>
<tr>
<td>Knowledge self-efficacy</td>
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<td></td>
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<td></td>
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<td></td>
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<tr>
<td>Enjoyment in helping others</td>
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<td></td>
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<tr>
<td>Enjoyment in influencing the company</td>
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<tr>
<td></td>
</tr>
<tr>
<td>Extrinsic incentives</td>
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<tr>
<td></td>
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<tr>
<td>Reciprocal benefits</td>
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<tr>
<td></td>
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<tr>
<td>Reputation</td>
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<td></td>
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<tr>
<td>e-WOM Participation</td>
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<tr>
<td></td>
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<tr>
<td>Personal Site Identification</td>
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<td></td>
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<tr>
<td>Social Site Identification</td>
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<td></td>
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<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td>e-Loyalty</td>
</tr>
<tr>
<td></td>
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<td></td>
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</tbody>
</table>

Notes: CR-Composite Reliability, AVE-Average Variance Extracted, α=Cronbachs Alpha
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

Discriminant validity: The convergent validity refers to the extent of how the measures of constructs are related to each others in theory which has to be related to reality. According to Fornell & Larcker (1981), discriminant validity is indicated by low correlation between the measure of interest and other constructs. Having each construct’s average variance extracted (AVE)’s square root larger than the correlation between it and other constructs, discriminant validity can be examined. The AVE’s square root of each construct is in capital letter which is shown in Table 5. The results in this research paper show that all measurements’ discriminant validity is adequate. As each of them is larger than the correlations between it and all other constructs, the degree of discriminant validity is fair. The results of the analysis show that the measure has adequate discriminant validity as the variance extracted by the indicators measuring that construct showing in Table 5 is larger than the square correlation for each construct. Basing on the hypothesized effects’ test in this research model, we examine the structural model. The paths of research model’s associated t-value, the overall explanatory power and estimated path coefficients with all significant paths indicated by asterisks are shown in Figure 6.

Table 5. Correlation matrix and psychometric properties of key constructs

<table>
<thead>
<tr>
<th></th>
<th>EHO</th>
<th>EIC</th>
<th>EI</th>
<th>KS</th>
<th>PSI</th>
<th>RB</th>
<th>RP</th>
<th>SSI</th>
<th>EL</th>
<th>EWOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyment in helping others</td>
<td>0.928044</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoyment in influencing the company</td>
<td>0.853649</td>
<td>0.99355</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extrinsic incentives (EI)</td>
<td>0.752460</td>
<td>0.802548</td>
<td>0.93345</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge self-efficacy (KS)</td>
<td>0.843857</td>
<td>0.814552</td>
<td>0.768710</td>
<td>0.88748</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Site Identification (PSI)</td>
<td>0.789610</td>
<td>0.792537</td>
<td>0.758048</td>
<td>0.769837</td>
<td>0.909611</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reciprocal benefits (RB)</td>
<td>0.778280</td>
<td>0.821756</td>
<td>0.756568</td>
<td>0.735043</td>
<td>0.797895</td>
<td>0.887312</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reputation (RP)</td>
<td>0.852710</td>
<td>0.824659</td>
<td>0.742302</td>
<td>0.858885</td>
<td>0.773175</td>
<td>0.758951</td>
<td>0.963716</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Site Identification (SSI)</td>
<td>0.813101</td>
<td>0.798748</td>
<td>0.759711</td>
<td>0.779787</td>
<td>0.881079</td>
<td>0.824187</td>
<td>0.771020</td>
<td>0.880589</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e-Loyalty (EL)</td>
<td>0.728795</td>
<td>0.686088</td>
<td>0.703268</td>
<td>0.671365</td>
<td>0.754313</td>
<td>0.770900</td>
<td>0.689995</td>
<td>0.756962</td>
<td>0.968540</td>
<td></td>
</tr>
<tr>
<td>e-WOM Participation (EWOM)</td>
<td>0.914600</td>
<td>0.885269</td>
<td>0.766406</td>
<td>0.881536</td>
<td>0.785360</td>
<td>0.774753</td>
<td>0.927669</td>
<td>0.797180</td>
<td>0.70027</td>
<td>0.926309</td>
</tr>
</tbody>
</table>

Notes: Italicised diagonal elements are the square root of AVE for each construct. Off-diagonal elements are the correlations between constructs.
5.2 Structural model

We are using the bootstrap re-sampling procedure, tests of significance for all paths which are shown in Figure 6. The findings show that the three intrinsic motivations - knowledge self-efficacy (path coefficient=0.135, \(t = 2.716\)), enjoyment in helping others (path coefficient=0.341, \(t = 6.911\)) and enjoyment in influencing the company (path coefficient=0.12, \(t = 2.283\)) have positively affected e-WOM participation, providing support for H1, H2, and H3. However, as for the three extrinsic motivations, there is insufficient evidence to support H4 and H5, as extrinsic incentives (path coefficient=0.004, \(t = 0.116\)) and reciprocal benefits (path coefficient=-0.023, \(t = 0.589\)) are not significantly related to e-WOM participation. Nevertheless, reputation (path coefficient=0.437, \(t = 7.985\)) positively affects the e-WOM participation, providing support for H6. Furthermore, the results support H7, H8, in which e-WOM participation is significantly related to personal site identification (path coefficient=0.785, \(t =23.773\)) and social site identification (path coefficient=0.797, \(t =26.318\)). Finally, there is sufficient evidence to support H9 and H10, as personal site identification (path coefficient=0.391, \(t =3.888\)) and social site identification (path coefficient=0.413, \(t =4.28\)) have a positive influence on e-Loyalty.

By examining the coefficient of determination (\(R^2\) value), a considerable amount of variance in the outcome variable can be explained by the model. The proposed structural model of this research paper is being assessed, which is shown in Figure 6. The structural model is being examined to test the hypotheses in this research paper based on adequate measurement model. The antecedent constructs can explain the variance proportion in the endogenous constructs which can be assessed by \(R^2\) value. For the eWOM participation, the six motivation factors including both intrinsic motivations and extrinsic motivations explain 92.5% of the variance in eWOM participation; and for the personal site identification and social site identification, eWOM participation explains 61.7% of the variance in personal site identification while eWOM participation explains 63.5% of the variance in social site identification. For the e-loyalty, the two factors of identification including personal site identification and social site identification explain 60.7% of the variance in e-loyalty. Meaningful path coefficient’s interpretation can be seen.

The intrinsic motivation factors affecting eWOM participation are more influential than extrinsic motivation factors is confirmed in this research paper’s findings, which is shown in Figure 6. All
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

of the intrinsic motivation factors affect eWOM participation significantly. Nevertheless, only reputation which is one of the extrinsic motivation factors affects the eWOM participation significantly. On the other hand, eWOM participation put more effect on social site identification (path coefficient=0.797, \( t = 26.318 \)) rather than that on personal site identification. However, when turning to see the relationship between site identifications and e-loyalty, social site identification (path coefficient=0.413, \( t = 4.28 \)) has a larger effect on e-loyalty than personal site identification under the e-commerce environment. The standard regression coefficient is represented by the coefficient in the model and Figure 6 shows the PLS analysis’ path coefficients.

![Figure 6. Result of the research model](image_url)

**Figure 6. Result of the research model**

*Note:
\( t = 1.96, p < 0.05^* \)
\( t = 2.57, p < 0.01^{**} \)
\( t = 3.29, p < 0.001^{***} \)
6. Discussion

This research paper aims at investigating the extent of how the intrinsic motivation factors and extrinsic motivation factors would affect the eWOM participation and the impact of eWOM participation on e-loyalty from the viewpoint of the respondents of our survey. eWOM participation was explained by motivation theory while the psychological aspect of eWOM participants was analyzed by identification theory. A survey is set and a model with 10 hypotheses is proposed to achieve the aim of this research paper. In the followings, the results’ implications will be discussed.

In general, we found that all intrinsic motives in our study have a significant impact on e-WOM participation. Our result is consistent with (Lin, 2007) and (Tong, Wang & Teo, 2007) in terms of intrinsic motives. Our model combined with their research suggests that motivation theory can explain e-WOM participation. To compare with extrinsic motives, we found that the path coefficients of intrinsic motives have a stronger influence on e-WOM participation than extrinsic motives. This result indicated that consumers are more motivated by considering e-WOM participation as a ‘good’ behavior to themselves and to other consumers in online review platforms.

6.1. General discussion

1. Knowledge self-efficacy: The intrinsic motive of knowledge self-efficacy is a significant factor in this research paper. The result is consistent with the antecedent researches’ results (Lin, 2007). According to Lin (2007), as employees believed their information or knowledge can help the company, they were encouraged by knowledge self-efficacy to share the information or knowledge with other colleagues within the company. This shows that employees trust they are capable of sharing useful information or knowledge with their colleagues and tend to be more motivated to share their information or knowledge. This brings out an implication that when employees take part in information or knowledge sharing may have a sense of confidence and competence. For this research paper, based on the findings we got, consumers are willing to take part in eWOM as they have higher knowledge self-efficacy on leaving comments in hk.taobao.com when their consumption experience is related.
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

2. Enjoyment in helping other: The findings of the intrinsic motive of enjoyment in helping other consumers in this research paper are consistent with the antecedent researches’ results (Lin, 2007), (Tong, Wang & Teo, 2007) and (Cheung & Lee, 2012). All of their research findings showed that this intrinsic motive, enjoyment in helping others, is a significant factor to affect the intention of eWOM participation. It is because the construct of enjoyment in helping others is the strongest factor that affects the intention of eWOM participation. Thus, although recipients receive less value, consumers may be still willing to leave their opinions.

3. Enjoyment in influencing the company: The findings of the intrinsic motive of enjoyment in influencing the company in this research paper are consistent with the antecedent researches’ results (Tong, Wang & Teo, 2007). According to Tong, Wang & Teo (2007), the relationship between eWOM participation and enjoyment in influencing the company is significant which has the same result in this research paper. Consumers enjoy giving out their comments to influence the company. As psychologically, it seems they have got the power over the company through providing either positive comments or negative comments for other users on online review platform. The result of this research confirms the previous findings of this intrinsic motive.

However, extrinsic motives---reciprocal benefits and extrinsic incentives do not have significant impact on e-WOM participation.

4. Extrinsic incentives: The relationship between extrinsic incentives and e-WOM participation is not significant. The result is consistent with the previous research [(Lin, 2007), (Tong, Wang & Teo, 2007)]. The respondents in this research paper may not consider rewards offered which are higher credibility and higher bonus such as coupon and discount. Besides, Kelman (1958) claimed that extrinsic rewards are successfully used only to secure temporary compliance, which may not suitable for attracting people to take part in eWOM. Antecedent researches also stated that even having a limited number of current reviews, economic rewards would not have a considerable relationship with the information or knowledge sharing intention in the online review system. This is because most subjects might not have similar experience in the online review system before. They might think that it needs to continuously take part in it so as to get the economic rewards, which reduce their intention to do so. Economic rewards offered by the online review system are relative small can be another reasonable explanation. As a result, users on online shopping mall may not consider economic rewards as an important motive to give their
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

opinion online (Tong, Wang & Teo, 2007). Therefore, this research paper suggests that economic incentive may not be an essential motive to take part in eWOM in online review system.

5. Reciprocity benefit: The findings of extrinsic motives of reciprocity in this research paper are not consistent with the antecedent research (Lin, 2007). According to Lin (2007) and Scott (2000), they argued that without reciprocity, information and knowledge sharing would not take place since collaboration ability relies heavily on trust. Nevertheless, their arguments focused on talking the reciprocal benefits within a company, which does not offer a significant explanation to the online shopping mall review system. This is because the users on hk.taobao.com do not need to concern about the long-term cooperation or relationship with other users when compared with the employees within a company which is mentioned by Scott (2000).

On the other hand, although the comments that consumers provided in hk.taobao.com assist other users in hk.taobao.com to determine whether the sellers at hk.taobao.com are worth doing transaction, the comments they share may not result in the required knowledge being met in the future. The result of this research finding matches with some of the antecedent researches which also showed reciprocal benefits do not contribute to the intention of knowledge sharing mechanism.

6. Reputation
The findings of the extrinsic motive of reputation in this research paper are consistent with the antecedent researches’ results (Cheung & Lee, 2012) and (Hung, Durcikova & Lai, 2011). Both of the researches stated that reputation is a significant factor influencing consumers’ intention of eWOM participation. The findings in this research paper also proved that. A desire to change the reputation of a particular consumer is related to affecting the consumers to take part in spreading eWOM. The online review platform has large potential for reach. Some consumers want to be perceived as an expert by others, so they were spending their own time giving comments on the online review platform. This is consistent with the reputation mechanism of Hung’s research (Hung, Durcikova & Lai, 2011). According to Hung, Durcikova & Lai (2011), the quantity and quality of contributions are greatly affected by reputation feedbacks but perceived meeting satisfaction is not significantly affected by reputation. In addition, according to Marett and Joshi (2009), status-building within a particular community and reputation improvement are the
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

motives for sharing rumors. Moreover, according to O’Dell and Grayson (1998), knowledge sharing is encouraged by offering recognition and assisting individual to build expertise.

7. e-WOM towards site identification
Our findings of the e-WOM participation towards site identification in this study are consistent with the antecedent researches’ results (Yoo, Sanders & Moon, 2013). The result is significantly affected the personal site identification and social site identification. According to Yoo, Sanders & Moon (2013), social identity is enhanced by the action of taking part in e-WOM among consumers, which matches with this research paper’s findings. Their findings showed that social identity play a role in spreading eWOM on online review system. Maintaining the online review system well can help consumers create strong social identity of a website via interacting with other consumers.

8. Site identification towards e-loyalty
Based on what we have discussed earlier, motivation factors such as reputation, knowledge self-efficacy, enjoyment in helping others and enjoyment in influencing the company encourage consumers to participate in eWOM, which result in improving the communication between customers on the online review system and help them create strong social identity. Having strong site identification will help customers build up e-loyalty of a particular site which is hk.taobao.com in this research paper. Last but not least, personal site identification and social site identification are both significantly affecting e-loyalty of consumers. Nonetheless, when compared with social site identification, personal site identification has higher mean value and larger path coefficient. The fitness degree between the provided services, product image and customers’ image is used to measure personal site identification. The e-loyalty will emerge when consumers identify themselves through taking part in eWOM continuously. In addition, this research paper adopted the identification theory for the online shopping mall which is hk.taobao.com in our case. The previous researches’ findings which match with this research paper’s findings suggested the interaction with a site and the customaries online services are very important.
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

6.2. Implication

- Knowledge self-efficacy: The intrinsic motivations were stated as more important factors than the extrinsic motivation factors in learning and education in the previous researches (Deci & Ryan, 1985). Through that research finding, stimulating consumers’ intrinsic motives can encourage them to take part in eWOM on online review system. For instance, advertising eWOM as a kind of ‘benevolent’ action can be adopted.

- Enjoyment in helping others: A mechanism which allows the identification of the members who have offered meaningful recommendations to other members should be added in the online review platforms. Connecting readers and contributors through person to person chatting function allows readers showing the appreciation towards the received opinions. Setting up a mail box system allows consumers to communicate with each others. Besides, a Question and Answer platforms can be created to allow consumers asking their questions and let others reply them.

- Enjoyment in influencing company: To enhance the influencing power of purchasers, online shopping malls should launch a reward and punishment system to monitor the companies who are selling their products on hk.taobao.com. Consumers can give their comments freely in the review system, no matter it is negative or positive about the products or services. Other consumers can see the creditability of the companies in order to make their purchasing decision.

- Reputation:
  1. Applying reputation tracking mechanism on the online review platforms of the online shopping malls can encourage more consumers to give their comments. Despite of the contribution’s number, publicly visible cues like status of membership and the membership length need to be added in the design of the online review system. In addition, consumers can show off their reputation by having their personal status on the online review platforms when a hierarchy system is created.

  2. The second suggestion is that different benefits such as providing some ways to assist potential contributors improve the reputation of themselves can be added at hk.taobao.com. This is important especially for goods and services having few existing reviews. The recommended top
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

reviewers and their opinions would be highlighted from time to time according to the most useful written comments in another column.

▪ Personal site identification towards e-loyalty:

1. Customers’ e-loyalty can be enhanced through increasing personal site identification. For instance, enhancing the interaction within hk.taobao.com and customaries the online services are some of the strategies. Besides, social site identification can be promoted by the interaction among consumers. e-loyal consumers trust themselves that they are important to other consumers on the online review system. Therefore, making the consumers easier to communicate with other consumers is one of the main factors of the loyalty program under the e-business environment, especially for the online shopping mall. Moreover, having a communication channel that connects the online shopping mall and consumers together is very important. Making good use of that can encourage consumers to take part in eWOM.

2. To promote personal site identification, customized content service and proper feedback replies from shopping sites are required. Customized content service and high interactivity of site enhance customers’ satisfaction and give them opportunities to understand the shopping site. In order to corroborate these aspects, machine learning technology that customizes sites and extends communication channels can be employed.

▪ Social site identification towards e-loyalty:

Also, installation of an e-WOM system through richer media which allow customers engage in e-WOM, such as images and videos, is also helpful in enhancing the quality of the interaction between customers.

▪ e-loyalty: The first suggestion is that system designer of hk.taobao.com could create some new features on the online review system so as to raise the feeling and perception of it since the above findings showed that the two important factors affecting eWOM participation are enjoyment of helping others and influencing the company. For instance, a subsystem could be built to show the review demand for each goods or service. Consumers might be allowed to ask for the reviews of the goods or services they want and indicate the desirable level. The goods or services having the most famous reviews demand would be put in the homepage. Besides, salient images could be used to tell the online users that the company's success leans on their contribution.
6.3. Contribution

Apart from the above mentioned, this research paper also investigates the indirect effect of the intrinsic motivation factors and extrinsic motivation factors towards personal site identification and social site identification, which is not mentioned in antecedent researches (Table 7.). This research paper confirmed the key mediating roles of knowledge self-efficacy, enjoyment in helping others, enjoyment in influencing the company and reputation between motivation factors and site identifications. The findings indicated all four motivation factors including knowledge self-efficacy, enjoyment in helping others, enjoyment in influencing the company and reputation have indirect effects on both personal site identification and social site identification, which are all partial mediation. This shows that knowledge self-efficacy, enjoyment in helping others, enjoyment in influencing the company and reputation are the key mechanism through which the above four motivation factors could enhance personal site identification and social site identification effectively. However, eWOM participation is still important to facilitate personal site identification and social site identification because it will increase the total effects on site identifications.

<table>
<thead>
<tr>
<th>Table 7. Results of mediation analysis</th>
<th>Independent variable</th>
<th>Mediator</th>
<th>Dependent variable</th>
<th>Sobel-z (p value)</th>
<th>IV -&gt;DV in control of mediator (beta value)</th>
<th>Mediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>KS</td>
<td>EWOM</td>
<td>PSI</td>
<td></td>
<td>5.1981 (p&lt;0.001)</td>
<td>0.3436 ***</td>
<td>Partial</td>
</tr>
<tr>
<td>KS</td>
<td>EWOM</td>
<td>SSI</td>
<td></td>
<td>5.5819 (p&lt;0.001)</td>
<td>0.3361 ***</td>
<td>Partial</td>
</tr>
<tr>
<td>EHO</td>
<td>EWOM</td>
<td>PSI</td>
<td></td>
<td>3.6991 (p&lt;0.001)</td>
<td>0.4174 ***</td>
<td>Partial</td>
</tr>
<tr>
<td>EHO</td>
<td>EWOM</td>
<td>SSI</td>
<td></td>
<td>3.3872 (p&lt;0.001)</td>
<td>0.4828 ***</td>
<td>Partial</td>
</tr>
<tr>
<td>EIC</td>
<td>EWOM</td>
<td>PSI</td>
<td></td>
<td>4.9245 (p&lt;0.001)</td>
<td>0.3862 ***</td>
<td>Partial</td>
</tr>
<tr>
<td>EIC</td>
<td>EWOM</td>
<td>SSI</td>
<td></td>
<td>5.3123 (p&lt;0.001)</td>
<td>0.3806 ***</td>
<td>Partial</td>
</tr>
<tr>
<td>RP</td>
<td>EWOM</td>
<td>PSI</td>
<td></td>
<td>4.2369 (p&lt;0.001)</td>
<td>0.3443 **</td>
<td>Partial</td>
</tr>
<tr>
<td>RP</td>
<td>EWOM</td>
<td>SSI</td>
<td></td>
<td>5.1315 (p&lt;0.001)</td>
<td>0.2538 *</td>
<td>Partial</td>
</tr>
</tbody>
</table>

$t=1.96, p<0.05^*$
$t=2.57, p<0.01^{**}$
$t=3.29, p<0.001^{***}$
6.4. Limitation

Our research does have some limitations. When the results of this research paper are being interpreted, several numbers of limitations should be considered. According to antecedent researches, people are more likely to spread out positive eWOM than negative eWOM. In this research paper, we emphasize the motivation factors for consumers to spread eWOM, no matter it is positive or negative. Further studies may explore or focus on investigating the motivation factors that encourage consumers to spread negative eWOM because in this research paper, we do not emphasize it. Convenience sampling is adopted as the data collection method for this research paper. The data we collected for this research paper may not be scientifically generalizable enough about the total population of the users of hk.taobao.com from this convenience sample, as it may not be as representative as the one who do probability sampling. Therefore, sample of respondents should be in more diversity. Having a bigger sample size can be more powerful in analyzing the statistics data. Another limitation is that since we only proposed a single survey to measure all constructs in this research paper, the measurement may have some prevalent method bias. This limitation can be solved if further studies test our research model through using various research methods.

6.5. Further Study

From this research paper, several opportunities are found for research in the future. To begin with, as the questionnaire in this research paper focuses on investigating the consumers’ behaviors of a particular online shopping mall which is hk.taobao.com in our case, data should be collected from a wide range of shopping malls apart from hk.taobao.com to further make our result findings more general or representative. We have proposed a theoretical model to explain the intention of consumers’ eWOM participation to understand this phenomenon. Our study included only 3 intrinsic and extrinsic motives respectively. Although the explanatory power of each construct is high, there is a need for us to do further researches which include some other related motives to account for the uncertain variance in eWOM participation.

In the future research, we can focus on customers who had bad feelings about their purchasing experiences on online shopping malls. When consumers dislike the online buying experience, they will have bad feeling towards the online shop owners and may probably write some negative
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

eWOM opinions. Their action is different from those people who have good online buying experience.

Last but not least, the site identification of consumers may not be the same due to different product types such as clothing, books, accessories, and the like. Since when they buy personal products such as clothing, they will feel more uncertainty than homogeneous products such as books. Buying things on internet does not look like buying things in physical store as people cannot see the physical products before buying. If consumers have to make purchase online, especially for heterogeneous products, they will have larger tendency to rely on eWOM. eWOM plays a critical role for personal products than others do. So, it is worthy to investigate the online shopping site’s interactivity’s effect. The results would have considerable implications for the management of the online shopping mall.

6.6. Conclusion

The results of this research paper reveal that knowledge self-efficacy, enjoyment in helping others, enjoyment in influencing the company and reputation are the most critical motivation factors to motivate consumers to take part in eWOM on online review system. We believe online shopping experience is important for eWOM. It is important to understand the phenomena for behaviors of users and e-commerce. This research paper reveals an important insight of the relationship between consumers’ purchases and consumers’ eWOM participation. Besides, the results of this research also show that consumers’ eWOM participation plays a significant role on site identifications which help to build e-loyalty. All these could not be ignored by the online retailers. This research results not only help understand how motivation can encourage consumers to take part in eWOM, it also helps further research on identification and user participation.
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

7. References

<table>
<thead>
<tr>
<th>Appendix A.</th>
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</thead>
<tbody>
<tr>
<td>Knowledge self-efficacy (Lin, 2007)</td>
<td></td>
</tr>
<tr>
<td><strong>KS1</strong></td>
<td>I am confident in my ability to provide knowledge / information that others in hkt.taobao.com.</td>
</tr>
<tr>
<td><strong>KS2</strong></td>
<td>I have the expertise required to provide valuable knowledge / information in hkt.taobao.com.</td>
</tr>
<tr>
<td><strong>KS3</strong></td>
<td>It really makes differences when I share my knowledge / information with other consumers in hkt.taobao.com.</td>
</tr>
<tr>
<td><strong>KS4</strong></td>
<td>I can provide more valuable knowledge / information than most of other consumers in hkt.taobao.com.</td>
</tr>
<tr>
<td>Enjoyment in helping others (Lin, 2007)</td>
<td></td>
</tr>
<tr>
<td><strong>EHO1</strong></td>
<td>I enjoy sharing my knowledge / information with other consumers in hkt.taobao.com.</td>
</tr>
<tr>
<td><strong>EHO2</strong></td>
<td>I enjoy helping consumers by sharing my knowledge / information in hkt.taobao.com.</td>
</tr>
<tr>
<td><strong>EHO3</strong></td>
<td>It feels good to help someone by sharing my knowledge / information in hkt.taobao.com.</td>
</tr>
<tr>
<td><strong>EHO4</strong></td>
<td>Sharing my knowledge / information with consumers in hkt.taobao.com is pleasurable.</td>
</tr>
<tr>
<td>Enjoyment in influencing the company (Tong, Wang &amp; Teo, 2007)</td>
<td></td>
</tr>
<tr>
<td><strong>EIC1</strong></td>
<td>I feel good to give the company “something in return” for a good consumption experience by providing my product review in hkt.taobao.com.</td>
</tr>
<tr>
<td><strong>EIC2</strong></td>
<td>I enjoy providing my reviews in hkt.taobao.com to help good companies become or remain successful.</td>
</tr>
<tr>
<td><strong>EIC3</strong></td>
<td>If the company harmed me, I feel good to affect the company by providing negative product review in hkt.taobao.com.</td>
</tr>
<tr>
<td><strong>EIC4</strong></td>
<td>I enjoy taking vengeance upon the company by writing negative reviews in hkt.taobao.com if it provides bad product to me.</td>
</tr>
<tr>
<td>Extrinsic incentives (Lin, 2007)</td>
<td></td>
</tr>
<tr>
<td><strong>EI1</strong></td>
<td>I will receive a higher level of credibility in return for my knowledge / information sharing in hkt.taobao.com.</td>
</tr>
<tr>
<td><strong>EI2</strong></td>
<td>I will receive a higher bonus (such as coupon and discount) in return for my knowledge / information sharing in hkt.taobao.com.</td>
</tr>
</tbody>
</table>
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce

| Reciprocal benefits (Lin, 2007) | When I share my knowledge / information with consumers in hk.taobao.com  
| RB1 | I strengthen ties between existing members of hk.taobao.com and myself.  
| RB2 | I expand the scope of my association with other consumers of hk.taobao.com.  
| RB3 | I expect to receive knowledge / information in hk.taobao.com in return when necessary.  
| RB4 | I believe that my future requests for knowledge / information in hk.taobao.com will be answered.  

| Reputaion (Cheung & Lee, 2012) | I feel that my participation in knowledge / information in hk.taobao.com improve my status in the profession.  
| RP2 | I participate in knowledge / information in hk.taobao.com to improve my reputation in the profession.  

| e-WOM Participation (Yoo, Sanders & Moon, 2013) | I frequently write a consumer review in hk.taobao.com.  
| EWOM1 | When I leaving a consumer review in hk.taobao.com, I elaborately write it.  
| EWOM2 | I spend much effort in posting review in hk.taobao.com.  

| Personal Site Identification (Yoo, Sanders & Moon, 2013) | This hk.taobao.com is associated with my life style well.  
| PSI1 | I have positive feeling about hk.taobao.com.  
| PSI2 | This hk.taobao.com suits my self-image.  
| PSI3 |  

| Social Site Identification (Yoo, Sanders & Moon, 2013) | I interact with other consumers through review system in hk.taobao.com.  
| SSI1 | I have positive feeling with other consumers in hk.taobao.com.  
| SSI2 | I become important person to other consumers through review system in hk.taobao.com.  
| SSI3 | Because of product review I wrote in hk.taobao.com, other consumers respect me.  
| SSI4 |  

| e-Loyalty (Yoo, Sanders & Moon, 2013) | I seldom consider switching another to Internet shopping mall.  
| EL1 | I believe that hk.taobao.com is my favorite Internet shopping mall.  
| EL2 | When I need to purchase, hk.taobao.com is my best choice.  
| EL3 |
Effects of extrinsic and intrinsic motivations of knowledge sharing on electronic word of mouth participation in e-commerce


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