Factors Influencing the User Behaviour Intention of Online Recruitment Websites

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Abstract
The quality of real-time communication over the Internet is an reason why online recruitment websites become the main job-hunting platform for job seekers. The purpose of the study is to learn whether the web service quality of the online recruitment website perceived by the users would affect their satisfaction and perceived risk towards the website. The study also is intended to see the effect of satisfaction on the intention of continual usage, loyalty and word-of-mouth communication. This study uses online survey questionnaire to collect samples. A total of 601 valid questionnaires were collected. Structural Equation Model (SEM) is used to validate the research hypothesis. The study results: 1. Continuance intention, loyalty, word-of-mouth communication are positively affected by satisfaction. On the contrary, perceived risk is negatively affected by satisfaction; 2. Web service quality is positively influenced by satisfaction but negatively influenced by perceived risk. Continuance intention and loyalty are indirectly influenced by satisfaction and perceived risk; 3. The searching service of online recruitment websites is most frequently used by job seekers; 4. Online recruitment website operators have to emphasize more on risk management.

Key words: online recruitment websites; web service quality; satisfaction; perceived risk; continuance intention; loyalty; word-of-mouth communication

1. Introduction
Thanks to the quality of high interactivity, instant responsiveness, low-cost, low entry barrier and the absence of time and space restraints, Internet has attracted more and more users and in turn influenced our daily lives in a more substantial way. Internet users are getting used to finding information they need from the web, which naturally includes employment information. According to the statistics of 104 Job Bank
in Taiwan, the website enjoys an average of 420,000 visits per day. 19,000 corporate employers are currently recruiting new employees via the site. On an accumulative basis, a total of 134,000 employers have paid 104 Job Bank for recruitment service while the website’s human resource database has accumulated 3.44 million entries of resume. These statistics shows that online recruitment website has become a new business model of great maturity. Online recruitment websites in Taiwan (i.e. 104 Job Bank, 1111 Job Bank, 168 Job Bank and Yes123.com) mushroomed one after another in recent years, and in turn posts a lot of challenges for the operators. However the services provided by these online recruitment websites may be different from each other in terms of numbers and functionalities. This study is intended to identify whether these differences will influence job seeker’s intention to submit their resumes and use the services of the specific website, and to act as references for online recruitment website operators to improve the services and functionalities of their sites.

Most of the studies focusing on the user behavior of online recruitment websites focused on whether the functions provided by the website can improve user satisfaction. (Chen 1999; Chen 2000; Lu 2001). Few studies touched upon the impact of web service quality to the user’s intention of continual usage. This study is intended to see, from the job seekers’ perspective, whether the services provided by online recruitment website meet their needs. It is also intended to identify the factors influence the continuance intention of the users for the job site operators to develop their service strategy for the future. Therefore the main purposes of this study are: 1. Learn the job seeker’s usage of the online recruitment website services. 2. Identify job seeker’s perception on the web service quality and satisfaction level of online recruitment websites. 3. Learn whether the satisfaction for web service quality and perceived risk of the user will affect the intention of continual usage and sharing experiences with friends and relatives.

2 Literature Review

2.1 Online Recruitment Websites

Many previous studies show that “online recruiting” has the following advantages over traditional advertising: (1) cost; (2) attractiveness; (3) convenience and speed; (4) immediacy; (5) broader recruiting source, and (6) specific target audience (Drake 1996; Yuce and Highhouse 1998; Marlene 2000; Stoops 1998). The study of McGovem (1998) specified the reasons why companies prefer online recruiting. The reasons include Speed-online recruiting can reduce the time required for recruitment; Reach-more job seekers can access to the job vacancy information; Cost-reduce recruiting cost; Focus-focus on target audience, and Integration-combining modern technology and recruiting channels (McGovem 1998).

Online recruitment websites According to JIAN (2001) the definition of online recruitment website is a new type of profit organization emerged along with the development of Internet. The business model of online recruitment website is created by setting up a website for the employers to post recruitment information and the job seekers to submit their personal resume and matching the two types of information together. Such websites include Monster.com, Hotjobs.com, 104 Job Bank, 1111 Job Bank, etc. Sun (1999) on the other hand, believed that online recruitment websites offer online job recruitment and candidate information. Employers who are members of the website have the right to review the job seeker’s resume online while the job seekers can register their resume and look for employment opportunity at these websites. For the definition of this study, online recruitment websites are the websites that offer employment information or service to job seekers and matching service to business
employers via information technology over the Internet.

2.2 Web Service Quality

Loiacono et al. (2002) explore the topic from the Technology Acceptance Model (TAM) perspective to develop WebQualTM, the web service quality measurement tool with twelve dimensions. Zeithaml et al. (2002) believed that the dimensions of WebQual focused too much on the design quality of website interface and therefore could not reflect the service quality perceived by the customers. Barnes and Vidgen (2002) had developed WebQual2.0 to measure web service quality. The model includes two different dimensions: the information quality provided by the website, and the interaction quality between the user and the website. Barnes and Vidgen (2002) later developed WebQual3.0 with three dimensions to measure web service quality: the information quality provided by the website, and the interaction quality between the user and the website, and the website design quality. However Parasuraman et al. (2005) believed that the scale of WebQual 3.0 cannot cover all dimensions of website service. When studying commercial websites that offer products and services, Yoo and Donthu (2001) had developed the SITEQUAL site to measure web service quality. The scale contains four dimensions and nine questions. The dimensions include ease of use, aesthetic design, processing speed and security. Just as WebQual, Parasuraman et al. (2005) noted that the scale cannot fully evaluate the web service quality for it does not cover the complete purchasing cycle. Li et al. (2002) believed that the five dimensions of ServQual is not appropriate to measure the web service quality and developed a web-based scale of six dimensions, which is based on ServQual and adjusted to meet specific industry requirements.

Wolfinbarger and Gilly (2003) adopted online and offline focus group method to collect the critical qualities of online customers and develop categories relevant with online service quality. An online customer survey was then conducted to develop eTailQ, a web service quality measurement tool that covers both reliability and validity. The tool measures web service quality from four dimensions: website design, satisfaction and reliability, security and privacy, and customer service. The study also discussed these dimensions’ relation with user satisfaction. There are two key reasons for this study to decide on using the eTailQ service quality scale developed by Wolfinbarger and Gilly (2003) to explore the web service quality of online recruitment websites in Taiwan. Firstly, this study is focusing on the study of online recruitment websites from the user’s perspective, therefore scales that are focused on system interface or purchasing process are not considered appropriate. Secondly, despite having only four dimensions, e-TailQ’s questions cover website design, privacy/confidentiality and customer service procedures, which suit the scenario of this study better.

2. User Satisfaction

Customer satisfaction is the results of comparison between pre-purchase expectation and after-purchase perception. Szymanski and Hise (2000) proposed the concept of e-satisfaction. The study concluded that convenience, product information, site design and financial security have positive effect on consumer satisfaction. Since the interaction between online shop and consumers relies on information system instead of human interaction, the factors affecting satisfaction are also different. Bhattacherjee (2001), on the other hand, defined user satisfaction as the preference level for the product or service received. Szymanski and Henard (2001) proposed two different methods to measure customer satisfaction. Firstly, customer satisfaction can be viewed as a general concept, therefore single question is used to identify customer’s subjective and general attitude towards the product or service he or she received. The other method uses questions covering multiple dimensions to evaluate customer satisfaction. These two
methods had also been used in previous studies of online customer satisfaction. Park and Kim (2003) regarded satisfaction as a general concept to explore the relationship between shopping website key success factors and website loyalty. Lin et al. (2004), as well as Anderson and Srinivasan (2003) used four questions and six questions respectively to represent general satisfaction and identity website user intention. In the studies of technology acceptance model, scholars often used positive attitude to measure user attitude. For example, Moon and Kim (2001) had used positive and pleasant concept to measure user attitude when exploring online user behavior. The research object of this study is online recruitment websites user, whose satisfaction is created from the using experience. The study, therefore defines satisfaction as the preference level for the product or service received. Since the preference level for the website is included in the four questions of Bhattacherjee (2001), this study will use them to measure user’s satisfaction for the website.

2.4 Perceived Risk

The term “perceived risk” is adopted by Bauer (1960) from the discipline of psychology. In defining perceived risk, Bauer (1960) noted that: “Actions taken by the consumers may create unexpected results, and at least some of these results could be unpleasant.” Stone and Gronhaug (1993) studied the perceived risk dimension of products. They defined perceived risk as a kind of subjectively expected loss. Sweeney et al. (1999) also used the same definition to explain product perceived risk. The definition of perceived risk proposed by Swaminathan et al. (1999) in the study of online shopping environment is: the risk perceived by consumers through the whole transaction process of online shopping. The study showed that the consumer’s purchasing intention will be higher when the perceived transaction security is higher and the perceived risk is lower. Featherman and Pavlou (2003) defined perceived risk as “the possible loss generated from pursuing a desired outcome” in a study on the influence of e-service adoption. Thompson and Yeong (2003) also see perceived risk perceived risk as expected loss and defined perceived risk as the possibility of loss. This study concluded from the above literature that defines the perceived risk of online recruitment website user as “the potential challenges and loss that the user has to face when he or she is unable to predict the outcome.”

Stone and Gronhaug (1993) explore the five risk dimensions proposed by Jacoby and Kaplan (1972) and the time dimension proposed by Roselius (1971) and found that the six risk dimensions of finance, functionality, psychology, health, society and time can explain 88.8% of total perceived risk, which is sufficient to interpret consumer’s perception towards perceived risk. The study revised the perceived risk dimensions proposed by Stone and Gronhaug (1993) and evaluated the perceived risk of online recruitment website against the four factors of social risk, time risk, functional risk and psychological risk.

2.5 Word-of-Mouth Communication

Bone (1995) defined word-of-mouth communication as “a kind of inter-personal communication and neither party of the communication is the marketing source.” Therefore word-of-mouth is a form of interpersonal sources of information. It is usually verbal and non-commercial communication or recommendation of products, services or brands (Duhan et al. 1997).

Babin et al. (2005) used three questions of a single dimension to evaluate restaurant customers’ intention of conducting positive word-of-mouth communication on the restaurant’s service. Brown et al. (2005) used two questions of a single dimension to evaluate the intention of having word-of-mouth communication of auto shoppers after they buy a car. Although Wirtz and Chew (2002) used three
dimensions, including the intention of generating word-of-mouth communication, the level of positive/negative word-of-mouth, and the possibility of purchase recommendation, to evaluate the intention of word-of-mouth communication, only one question is posted for each of these dimensions. Based on the research purpose and scenarios, this study adopted the perspective and questions of Babin et al. (2005) for measurement.

2.6 Loyalty

Newman and Werbel (1973) defined customer loyalty as the behavior that customers do not collect further information when shopping and directly purchase products of the same brand again. Telli (1988) defined customer loyalty as consumer’s repurchase volume or relative purchase volume of a specific brand. Selnes (1993) believed that customer loyalty represents customer’s behavior disposition towards products and services and is an important factor that influences actual purchasing behavior. Neal (1999) considered customer loyalty as the fact that, under the premise of high product accessibility, consumers still choose the same product or service after comparing that with the product or service of other competitors. The interpretation of Oliver (1980) on customer loyalty is that consumers purchase from the same brand repeatedly and will not switch to other brand because of different scenarios because they have a high commitment of repurchase or revisit to the product or service that they like. This study defines loyalty as “user’s inclination of repeatedly using the same online recruitment websites for job-hunting

Studies on customer loyalty of online consumer behavior in the past mostly defined and measured consumer behavior and focused on consumer’s repeated purchasing behavior for products of specific brands (Selnes 1993; Jones and Sasser 1995). However some repeated purchasing behaviors are merely triggered by scenario factors. Customer loyalty of this category is referred as spurious loyalty. Customer is really loyal to a brand if he or she will not change the repeated purchasing behavior because of outside influence. In other words, the behavior is connected to altruistic instead of egoistic motivation. (Blattberg and Neslin 1990; Shoemaker and Lewis 1999; Reinartz and Kumar 2002). Therefore this study explores online recruitment websites loyalty not from the perspective of user behavior but from the perspective of user’s self perception.

Knox and Denision (2000) believed that the purchase intention, which is traditionally used as the measurement for customer loyalty, has a low correlation with actual consumption behavior, and therefore proposed the Budget-Patronage-Switching (BPS) model. The model uses three behavioral indicators, including budget measures, patronage measures and switching ratio to measure customer loyalty. Online customer loyalty can be measured by identifying the customer’s intention of repeated purchase. Gillespie et al. (1999) used the frequency of website visit, duration of each visit and the depth of website information viewed by the user as the indicators to measure website loyalty. This paper developed three questions for measurement by referring the literatures mentioned above and revising the study by Chiou (2004) on customer loyalty for online service industry.

2.7 Continuance Intention

Expectation -Confirmation Theory (ECT) is the basic framework of consumer satisfaction research model proposed by Oliver (1980). It has been widely used by following studies on consumer satisfaction, after-purchase behavior (i.e. repurchase or complaint), and service marketing (Anderson and Sullivan 1993) and system user behavior (Bhattacherjee 2001). The predicting power of the theory has been confirmed in different areas such as product repurchase (Spreng and Mackoy 1996) and service continuance (Patterson et al. 1997). In order to predict and explain the continual usage of information system,
Bhattacherjee (2001) studied online banking system users and modified ECT model according to the system usage scenarios. The study showed that user will consider the information system useful if the system performance is higher than the user’s expectation. This paper therefore will use the expectation-confirmation theory of Bhattacherjee in the study scenario of online recruitment websites, hoping it could provide a meaningful and significant explanation for customer satisfaction, repurchase or continual usage.

3. Methodology

3.1 Research Model

The paper is intended to study the factors that influence online job seeker’s continuance intention for the usage of online recruitment websites. According to the literature review process above, the research model of this paper is constructed by reviewing the literatures regarding the definition of online recruitment websites, measurement of web service quality, the Expectation-Confirmation Theory, and online user satisfaction (Figure 1).

3.1.1 Web Service Quality and User Satisfaction

Cronin and Taylor (1992) studied the importance of service quality, customer satisfaction and purchase intention of four different service industries. The study result showed that service quality is one of the ancestors of customer satisfaction. Pittet et al. (1995) noted that the model of Delone and Mclean (1992) didn’t consider the service of IT department and believed that the dimension of service quality should be included for it may also influence usage and user satisfaction. Babin (2005) targeted at customers and showed the correlation among service quality, customer satisfaction and repurchase intention (Anderson and Sullivan 1993), therefore this paper proposed the following research hypothesis:

**H1:** The better the web service quality of the online recruitment website perceived by the job seeker, the higher the satisfaction he or she has for the website will be.

3.1.2 Web Service Quality and User Perceived Risk

Sweeney et al. (1999) studied the consumer behavior of two cities in Australia and found that better functional and technical service quality of the sales counter will reduce the performance risk and financial risk perceived by the customers. Garretson and Clow (1999) found in the study that service quality perceived by consumers has a negative correlation with perceived risk in the shopping process. Perceived risk, on the other hand, has a negative effect on purchase intention. Zhang and Prybutok (2005) found that web service quality has a negative correlation with perceived risk. Chang et al. (2005) conducted a study of customer value on Taiwan banking industry and concluded that the higher the service quality is, the lower consumer’s perceived risk will be. In considering the literatures above and the purpose of this study, the following hypothesis is proposed:

**H2:** The better the web service quality of online recruitment websites perceived by the job seeker, the lower his or her perceived risk for the website will be.

3.1.3 User Perceived Risk and User Satisfaction

Anna and Mattila (2001) explored the correlation between business traveler’s post-purchase perceived risk and behavioral intention. It is discovered that perceived risk has a significant negative correlation with customer satisfaction, repurchase intention and word-of-mouth communication. Murray and Schlater (1990) also mentioned that customer will seek different means to reduce risk when making a
decision, therefore when the perceived risk is reduced, customer will increase his or her satisfaction towards the product or service. Johnson et al. (2005) proposed that there is a negative correlation between consumer satisfaction and perceived risk. In considering the literatures above and the purpose of this study, the following hypothesis is proposed:

H3: The higher the job seeker’s perceived risk for the online recruitment websites is, the lower the satisfaction for the site will be.

3.1.4 User Satisfaction and Continuance Intention

Satisfaction is an very important indicator for the continual usage of information system or the repurchase behavior of customers. The continuance intention of online customer is determined by the satisfaction level of website utilization. It is known from the Expectation -Confirmation Theory (ECT) and research literatures (Cardozo 1965; Davis et al. 1989; Anderson and Sullivan 1993; Bhattacherjee 2001; Lin et al. 2004; Ha 2006) that satisfaction is an important factor that contributes to repeated patronage. ECT-related studies all show that a significant correlation exists between satisfaction and continuance intention. According to the scenario of this paper, job seeker’s satisfaction towards the online recruitment websites will have a significant positive effect on the continuance intention; therefore the following hypothesis is established:

H4: The higher the job seeker’s satisfaction towards the online recruitment website is, the higher the continuance intention for the website will be.

3.1.5 User Satisfaction and Loyalty

Satisfaction is regarded as one of the ancestors for customer loyalty (Oliver 1980). Many marketing studies have found that satisfied consumers are usually loyal consumers (Anderson and Sullivan 1993; Fornell 1992; Rust and Zahornik 1993; Taylor and Bake 1994). Ever since the prevalence of the Internet, many scholars started to study the correlation between satisfaction and loyalty. Most studies concluded that the improvement of customer satisfaction will have a positive effect on customer loyalty (Fornell 1992; Anderson and Sullivan 1993; Heskett et al. 1994; Rust and Zahorik 1993). Ribbink et al. (2004) focused on online consumer behavior and explored the correlation between loyalty and attributes including service quality, trust, and satisfaction. It is verified in the study that e-satisfaction is positively correlated with website loyalty. Chiou (2004) also verified that general satisfaction has a positive effect on loyalty. This paper therefore proposed the following hypothesis:

H5: The higher the job seeker’s satisfaction towards online recruitment is, the higher his or her loyalty towards the website will be.

3.1.6 User Satisfaction and Intention of Word-of-Mouth Communication

Wirtz and Chew (2002) pointed out in the study on satisfaction and the intention of word-of-mouth communication that customer satisfaction is usually the key antecedent for the intention of word-of-mouth communication. Many studies on post-purchase consumer behavior also concluded that the higher the customer satisfaction is, the higher the intention of word-of-mouth communication will be (Swan and Oliver 1989; Henning-Thurau et al. 2002; Babin 2005; Collier and Bienstock 2006), therefore this paper proposed the following hypothesis:

H6: The higher the job seeker’s satisfaction towards online recruitment website is, the higher the intention of word-of-mouth communication for the website will be.
3.1.7 User Perceived Risk and the Intention of Continual Usage, Loyalty and Word-of-Mouth Communication

Consumers will perceive risk before and after the purchase, and the perceived risk will have an negative effect on purchasing behavior and intention (Hoover et al. 1978), therefore they will look for different ways to reduce the risk. When the perceived risk increases, consumer’s purchase intention for the product or service will decrease (Murray and Schlacter 1990). Garretson and Clow (1999) also noted that consumer will perceive different risk before and after the purchase. When the perceived risk is too high, the purchasing intention for the product or service will be reduced. Anna and Mattila (2001) explored the correlation between perceived risk and behavioral intention before and after the purchase, and concluded that perceived risk has a significant negative correlation with customer satisfaction, repurchase intention and the intention of word-of-mouth communication. The Prospect Theory proposed by Kahneman and Tversky (1979) proposes that people will choose to avoid risk when facing profits but will tend to take risk when facing loss. In other words, when the perceived risk is low, consumers will tend to repurchase from the same website. It will also reflect on the consumer’s behavior and attitude. On the other hand, when the perceived risk is high, consumers will tend to purchase from other alternative sources, and in turn reduce the loyalty to the original company or website. In considering the literatures above and the purpose of this study, the following hypotheses are proposed:

**H7:** The higher the job seeker’s perceived risk for online recruitment website is, the lower the continuance intention for the website will be.

**H8:** The higher the job seeker’s perceived risk for online recruitment website is, the lower the loyalty for the website will be.

**H9:** The higher the job seeker’s perceived risk for online recruitment website is, the lower the word-of-mouth communication for the website will be.

### 3.2 Questionnaire Design and Data Collection

A pretest was conducted after the questionnaire design process was completed. During the pretest, the questionnaire was reviewed by experts and scholars on the semantic context and completeness of the questions to see whether the questions are clear, complete, appropriate and representative. Then a pilot test was conducted to check whether the questionnaire’s reliability achieve at least 0.7 for Cronbach’s α Value proposed by Nunnally (1978) and DeVellis (1991). The pilot test was conducted among a group of graduate students of information management and health management graduate schools of a national university. A total of 50 effective responses were collected. The results of reliability analysis is showed that the Cronbach’s α value of each research dimension has been above 0.7, which shows good reliability. The tests show that the questionnaire in this study has a certain degree of reliability and validity. A seven point Likert scale is adopted for measurement, which ranges from strongly disagree (very dissatisfied or very unpleasant) to strongly agree (very satisfied or very pleasant).

The format of online survey was used to collect responses. My3Q.com, a professional only survey service provider, is used to produce questionnaire. A total of 633 responses were collected by the deadline. Those who filled out the questionnaire should be users of online recruitment websites instead of merely Internet users. A total of 601 effective responses were collected after excluding 32 responses with duplicated e-mail address, missing value and obvious untruthful answers.
4. Discussion

This study used SPSS15 for descriptive statistics analysis and multicollinearity verification. Multicollinearity was verified by Pearson coefficient before SmartPLS 2.0 was used to verify the research model.

4.1 Sample Data Analysis

A total of 601 questionnaire responses were collected from the online survey. Preliminary descriptive statistics analysis showed that more than half of the respondents are female (55.6%). The largest age group of respondents is 20-29 (47.1%), followed by 30-39 (35.8%). Around 90% of the respondents fall into the age group of 20-39. In terms of educational background, most respondents have college diploma (68.7%), which shows that the younger generation who have college degree and entered the labor market within the last decade tend to look for jobs via the Internet due to their familiarity with the medium. Most of the respondents are already in the labor market (61.7%), and more than 60% of the respondents have more than 7 years of Internet usage experience. Nearly 30% of responded users stay online for more than five hours a day while another 40% of them use the Internet at least 2-3 hours a day, which shows that online recruitment website users will at least spend 2-3 hours on the Internet everyday.

In addition to the personal data of samples, this study also investigated the user behavior of online recruitment websites. The survey shows that 83.4% of online recruitment website user had found jobs via these websites. 104 Job Bank (61.4) is the most widely used online recruitment websites in Taiwan, followed by 1111 Job Bank (27.1%) and Yes123.com (6.8%). All other online recruitment websites occupied only 10% of usage in total. 104 Job Bank has been used by 60% of users, which shows its popularity among job seekers. The most frequently used function of online recruitment websites is job search (29.5), followed by employment news, resume registration, free occupational skill test, online survey, company background, training & certification, experience sharing, road show, campus recruiting campaign, job interview VCR, franchise opportunity and others. Over 90% of respondents believed that the functions of online recruitment websites have already met their needs. Only 10% of respondents thought that the functions/services of online recruitment websites could be further improved by adding services such as occupational training, job description, part-time/tutoring opportunity, job changing consultation and entrepreneur experience sharing. In terms of the using history of online recruitment websites, close to half (45.7%) of the respondents have more than 4-7 years of experience using the online recruitment websites, which shows that most of the survey respondents are very experienced in using online recruitment websites.

4.2 Reliability and Validity Testing

This study adopted Cronbach’s α value to verify the reliability of the questionnaire. Result of the reliability analysis is showed in (Table 1), where all variables were above 0.7 suggested by Nunally (1978), which means the samples collected have pretty good reliability to all dimensions of this study. (Table 1)

According to the analysis procedure of structural equation model, model fit has to be confirmed before implementing the measurement model. The model fit analysis of the structural model is shown in Table 2. Indicators including RMSEA, GFI, NNFI, IFI, CFI, and χ2/df are all above the acceptable level, which means that this research model has a certain level of model fit. (Table 2)

After evaluating the model fit, (Table 3) had included all indicators for measurement model analysis. The
results show that all indicators had met the requirement of: (1) Individual item reliability is over 0.5; (2) the composite reliability of lurking variable is over 0.7; (3) (variance extracted of lurking variables is over 0.5; (4) All parameters had reached the significance level. (Table 3)

4.3 Model Verification

Structural equation model (SEM) is used in this study to identify the causal relationship between lurking variables and verify the hypotheses. The statistical software used is Lisrel version 8.51. This study intended to learn whether online recruitment web service quality, user satisfaction and perceived risk would affect user behavior, and therefore conducted path analysis on each of the factors mentioned above. (Figure 2) is the path analysis result of this research model, showing the standardized path coefficient between the structural model and the factors. (Fig 2)

Research results showed that the standardized path coefficient between the job seeker’s perception of online recruitment web service quality and satisfaction level is 0.57. The t-value is 17.26, which has reached the statistical significance level (p<0.05). This result shows that the higher the web service quality of the online recruitment website perceived by the job seekers is, the higher their satisfaction towards the website will be. The standardized path coefficient between the job seeker’s perception of online recruitment web service quality and perceived risk is -0.86. The t-value is -21.37, which has reached the statistical significance level (p<0.05). This result shows that the two factors are negatively correlated and the higher the web service quality of the online recruitment website perceived by the job seekers is, the lower their perceived risk towards the website will be. The standardized path coefficient between the job seeker’s perceived risk and satisfaction towards the website is -0.28. The t-value is -6.04, which has reached the statistical significance level (p<0.05). This result shows that the lower the job seeker’s perceived risk towards a specific online recruitment website is, the higher their satisfaction towards the website will be. The standardized path coefficient between the job seeker’s satisfaction level and continuance intention is 0.43. The t-value is 8.60, which has reached the statistical significance level (p<0.05). This result shows that the higher the satisfaction towards a specific online recruitment website perceived by the job seekers is, the higher their continuance intention will be. The standardized path coefficient between the job seeker’s satisfaction level and loyalty towards the website is 0.37. The t-value is 7.77, which has reached the statistical significance level (p<0.05). This result shows that the higher the satisfaction towards a specific online recruitment website perceived by the job seekers is, the higher their loyalty for the website will be. The standardized path coefficient between the job seeker’s perceived risk for the online recruitment website and the intention of word-of-mouth communication for the website is 0.22. The t-value is 4.78, which has reached the statistical significance level (p<0.05). This result shows that the higher the satisfaction towards a specific online recruitment website perceived by the job seekers is, the higher their intention of word-of-mouth communication for the website will be. The standardized path coefficient between the job seeker’s perceived risk for the online recruitment website and the continuance intention is -0.57. The t-value is -13.44, which has reached the statistical significance level (p<0.05). This result shows that the two factors are negatively correlated, which means that the higher the perceived risk for the online recruitment website is, the lower their continuance intention will be. The standardized path coefficient between the job seeker’s perceived risk of online recruitment website and loyalty is -0.54. The t-value is -13.57, which has reached the statistical significance level (p<0.05). This result shows that the two factors are negatively correlated and the higher the perceived risk for the online recruitment website perceived by the job seekers is, the lower their loyalty towards the website will be. The standardized path coefficient between the job seeker’s perceived risk of online recruitment website and the intention of word-of-mouth communication for the website is 0.22. The t-value is 4.78, which has reached the statistical significance level (p<0.05). This result shows that the higher the satisfaction towards a specific online recruitment website perceived by the job seekers is, the higher their intention of word-of-mouth communication for the website will be. The standardized path coefficient between the job seeker’s perceived risk for the online recruitment website and the continuance intention is -0.57. The t-value is -13.44, which has reached the statistical significance level (p<0.05). This result shows that the two factors are negatively correlated, which means that the higher the perceived risk for the online recruitment website is, the lower their continuance intention will be. The standardized path coefficient between the job seeker’s perceived risk of online recruitment website and loyalty is -0.54. The t-value is -13.57, which has reached the statistical significance level (p<0.05). This result shows that the two factors are negatively correlated and the higher the perceived risk for the online recruitment website perceived by the job seekers is, the lower their loyalty towards the website will be.
word-of-mouth communication is -0.54. The t-value is -15.16, which has reached the statistical significance level (p<0.05). This result shows that the higher the perceived risk for the online recruitment website perceived by the job seekers is, the lower their intention of word-of-mouth communication for the website will be. Therefore the verification results show that all the nine hypotheses of this study are sustained.

5. Conclusion

5.1 Research Results

With the support of information technology, Internet enterprise can offer a comprehensive portfolio of functions and services to bring more values for customers, maintain a long-term relationship between companies and their clients, and foster customer loyalty. This study shows that user satisfaction and perceived risk are two important factors that contribute to sustainable operation, customer loyalty and customer/business expansion. The empirical research of this study’s theoretical model supported all research hypotheses, therefore the following research results and recommendations have been concluded:

Web service quality, user satisfaction and perceived risk are identified to be the factors that influence user’s perception on the online recruitment website. The research result shows that web service quality has a significant effect on job seeker’s satisfaction and perceived risk for the website, which is consistent with the results of previous studies. (Cronin and Taylor 1992; Pittet al 1995; Babin 2005; Sweeney 1999; Garretson and Clow 1999; Zhang and Prybutok 2005; Chen 1999; Chang et al. 2005). Job seekers’ satisfaction and perceived risk will affect thier continuance intention, loyalty and the intention of word-of-mouth communication for the website, which is also consistent with the conclusions of previous studies (Cardozo 1965; Davis et al. 1989; Fornell 1992; Anderson and Sullivan 1993; Bhattacherjee 2001; Lin et al. 2004; Ha 2006; Rust and Zahornik 1993; Taylor and Bake 1994; Heskett et al. 1994; Ribbink et al. 2004; Wirtz and Chew 2002; Swan and Oliver 1989; Hennig-Thurau et al. 2002; Collier and Bienstock 2006). In addition, the research results also show that the increase of satisfaction level or the decrease of perceived risk of the job seeker will indirectly increase the loyalty, continuance intention, and the intention of word-of-mouth communication for a specific online employment website, which demonstrates that satisfaction and perceived risk affect the behavioral intention of job seekers to a certain degree.

Web service quality is an important factor that affects satisfaction and perceived risk. The research results show that the web service quality and user satisfaction of online recruitment websites are positively correlated, which means that the higher the service quality of a online recruitment website perceived by the user is, the higher the satisfaction will be. In addition, statistics show that job seekers are quite satisfied with the services currently provided by the online recruitment websites (including website design, performance guarantee and reliability, security and privacy, and customer service, etc.) The research results also show that perceived risk has a significant negative correlation with web service quality and satisfaction. Namely the higher the service quality of the website perceived by the user is, the lower the perceived risk for the website will be. Likewise, the higher the perceived risk is, the lower the user’s satisfaction level will be.

The impact of perceived risk is higher than that of user satisfaction of online recruitment websites. The research results also show that user satisfaction and perceived risk both have a significant effect on continuance intention, loyalty and word-of-mouth communication. Standardized path coefficient shows...
that satisfaction and perceived risk affect continuance intention the most, followed by loyalty and word-of-mouth communication. It can be concluded that if online recruitment website user is satisfied with the online recruitment website and perceives lower risk, the probability of reusing the website is higher, which makes customer loyalty and word-of-mouth communication possible.

The statistics also show that the negative effect of web service quality to perceived risk is bigger than that to satisfaction. Meanwhile, the effect of perceived risk on continuance intention, loyalty and word-of-mouth communication is higher than that of satisfaction. It can be concluded that users of online recruitment websites focus more on the risk’s effect on individuals. The biggest difference between online recruitment websites and general business website is the detailed description of member profile. General business websites allow members not to offer certain personal information they don’t want to release. However users of online recruitment website usually believe that the more detailed information they provided in the resume, the better the recruiter will understand their capabilities and experiences, and the more interview opportunities they will have. However personal information online could be sold or stolen and affect one’s privacy, therefore users of online recruitment websites are especially sensitive to risk.

5.2 Research Recommendations and Strategic Implications

Internet population has been constantly growing thanks to the development of information and communication technology. The competition among business websites has also become more intense, and online recruitment websites are no exception. The following recommendations for designing online recruitment website strategy are proposed:

When online recruitment website operators want to improve user’s continuance intention, loyalty and word-of-mouth communication, they may do so by improving web service quality and user satisfaction, while lowering perceived risk. According to the research results of this study, online recruitment website has to provide attractive functional design, improve on the reliability and performance guarantee, and emphasize on user security/privacy and customer service. More importantly, measures that can enhance user satisfaction and web service quality should be taken to reduce perceived risk, and in turn increase user’s intention of usage in the future.

The most frequently used services at online recruitment websites are job search, employment news and resume registration. Survey of the study shows that job search is the most frequently used service at online employment websites (29.5%), followed by employment news, resume registration, free occupational skill test, online survey, company background, training & certification, experience sharing, road show, campus recruiting campaign, job interview VCR, franchise opportunity and others. Research showed that most respondents believed that the functions of online recruitment websites have already met their needs. Only 10% of respondents thought that the functions/services of online recruitment websites could be further improved by adding services such as occupational training, job description, part-time/tutoring opportunity, job changing consultation and entrepreneur experience sharing. In summary, online recruitment website needs to attract more job seeker to register on the website by offering a more diversified service portfolio to maximize its matching capability.

Offer a variety of services for the younger generation. The job seeker population is evenly distributed between male and female, but concentrates mostly in the younger age group under 39 years old. Most of the respondents have college degree or above. Internet users under 39 years old have a longer history of learning and using the Internet; therefore have a higher acceptance of online services and new information.
technology. Therefore online recruitment website operators should support mobile devices such as tablet computer, personal digital assistant (PDA) and Smartphone by introducing mobile applications and services to cater to the needs of the key target audience of online recruitment websites.

Consider offering services for niche market. Online recruitment website operators can adopt different market strategies for differentiation and offer services for niche market to expand business scope. For example, online recruitment websites can provide occupational training for middle-aged job seekers who have been laid-off, offer exclusive matching service for government agencies, support middle-aged women to reenter the job market, or help new immigrants to find jobs and settle down quickly. Operators may try to create unique competitive edge by focusing on niche market or providing differential services.

Online recruitment website operator should pay attention to managing all kinds of possible risks. When online users are used to the service of a specific website, such as social network website or blog maintenance, it is usually difficult for them to switch to other similar websites, and that’s the same case for the usage of online recruitment websites. Users are reluctant to fill out the personal information all over again to switch to other online recruitment websites. If they want to find a new job in the future, they tend to go back to the online recruitment websites that have already hosted their personal information; therefore risk management, instead of loyalty, is the most important factor for the success of online recruitment websites. That’s why these websites have to highlight the emphasis on risk management in strategy and advertising campaigns.

5.3 Research Contribution

In addition to the number of registered users, continuance intention, loyalty and word-of-mouth communication are the key factors to attract enterprise recruiters to the online recruitment websites and generate steady revenue. Therefore the study explored the effect of factors such as web service quality, user satisfaction and perceived risk to the behavioral intention of users. The research model showed that all factors above have significant effect, which helps to predict user’s behavioral intention for the online recruitment websites and user loyalty. For the business community, the research results should serve as the reference for online recruitment website operators in planning their services and marketing strategies.

In terms of the contribution to the academia, this study analyzed the effect of satisfaction and perceived risk on the continuance intention, user loyalty and the intention of word-of-mouth communication to construct the model of online recruitment website user behavior. Such study has not been conducted in the context of online recruitment website. The study had introduced these concepts and validated that these factors have significant influence on the usage intention and user loyalty of online recruitment websites. The study provides research results and recommendations to serve as the theoretical reference for future studies on online recruitment websites or other types of websites.

5.4 Research Limitations and Future Research Direction

5.4.1 Research Limitations

The study focused on the behavioral intention of online recruitment websites user. Following research limitations may apply: (1) Limitation of websites. This study did not focus on other types of websites, therefore the research results may not be applied to other types of e-commerce websites. (2) Limitation of samples. Due to the time and labor restraints, it is difficult to ask all the online recruitment websites in Taiwan to conduct online survey for the study. It was only possible to invite users of several major BBS sites to visit our survey website to fill out the online questionnaire. Secondly, there are many
international online recruitment websites in the market. However since the online survey of the study was conducted in Mandarin, the sample may be limited to the online recruitment website users in Taiwan. (3) Change of time. The study focused on the user experience of the respondent’s most frequently used online recruitment websites within a specific time frame, therefore it can’t be seen from the study whether the website has any significant changes that affect the continuance intention of the users after the research period. (4) Change on website. The webpage and services of online recruitment websites are constantly changing or updating. The study can only discussed the service items of the website during the research period. However the afore-mentioned limitations may not affect the direction of the conclusion, therefore the research results should still hold their values and contributions.

5. 4. 2 Future Study Recommendations

In view of the research results and limitations, future research recommendations proposed by the study are as follows:

- Increase factors to expand the research model. There are not many studies discussing the variables affecting the behavior of online recruitment website users. This study defined the relevant variables according to theories. It will take more follow-up studies to see whether there are any other factors affecting the user behavior of online recruitment websites.

- The behavior intentions discussed in this study include continuance intention, loyalty and word-of-mouth communication. Whether there are causal relationships among these intentions, or whether there are any additional behavioral intentions involved, are also issues worth discussing.

- Analyze different e-commerce business models. The research model of this study is developed for the scenario of online recruitment websites. However there are many other types of business models exist in the online business environment. Future studies may focus on different types of websites to see whether the research results would be different.

- Develop a scale suitable for measuring the web service quality of online recruitment websites. Future studies may conduct survey on all online recruitment websites to develop a proper scale to measure the service quality of online recruitment websites.

- This study focused only on the users of online recruitment websites in Taiwan. While the theoretical model is supported by the empirical research of the study, the research result is limited to Taiwan where all the samples were originated. It is necessary for future studies to expand their research scope to other countries to improve on the study’s generalization and external validity to make the causal relationships among the variables more convincing.

References


Jacoby, J. and Kaplan, L. (1972), ‘The components of perceived risk’, In M. Venkatesan(Ed), Proceedings, 3rd Annual Conference, Association for Consumer research, Chicago, , pp.382-393


Figure 1. Research Model

Figure 2 Path Analysis of the General Research Structure

Table 1 Cronbach’s α Value of Reliability Analysis

<table>
<thead>
<tr>
<th>Research Dimension</th>
<th>Cronbach’s α Value</th>
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Table 2 Results of Structural Model Fit Analysis

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Table 3 General Measurement Model Analysis Results

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<th>Observed Variable</th>
<th>Standardized Loading</th>
<th>Error</th>
<th>Individual Item Reliability</th>
<th>t-value</th>
<th>Composite Reliability</th>
<th>Variance Extracted</th>
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