The Human Resource Issues and their Impact on Firm Growth in Small e-businesses in China

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Abstract

This paper studies the human resource issues in small e-businesses in China through questionnaire survey about online shoppers and current employees in e-commerce companies, interviews with human resource managers who are now working in successful e-commerce firms and those who have worked before in the broken e-business websites. E-businesses inevitably confront with the human resource dilemma, especially when they rely on high-quality service for differentiation. In order to deliver infinite scalability, these firms need to reduce their dependence on human resource. However insufficient human resource investment impedes the firm growth. Analyzing how these issues impede the firm growth, by developing the case study of comparing two Chinese B2C websites, Jindong, one of the leading B2C websites, and Vipshop, one of the small e-businesses struggling to “tip” in the market, recommendations are given to small e-businesses to improve their human resource and promote the firm growth.

Keywords: Firm Growth, Human Resource Dilemma, Human Resource Issues, Infinite Scalability, Small e-businesses in China

1. Introduction

1.1 Literature Review

A great amount of publications about the Internet economy and finance are accessible. A small portion of this expanding literature, however, is conducted under rigorous empirical research, and few are practically valuable to the owners and managers in small e-commerce organizations. Some researchers, for example, Jonathan D. Levin22, have been trying to adopt the economics and management theories to support their study of Internet market. They try to find explanation and guidance from economics and management theories, like the standard price theory3,6,10 to find ways for small Internet platforms to “tip” in the Internet market. In the extant literature about Internet market, some researchers work on quantitative studies concerned with specific e-businesses, for example, studying the influence of intangible capital.

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The extant researches of human resource in e-commerce companies are either the collection of managers’ experience or the observation of the problematic human resource management. Therefore, it is necessary to conduct the research of human resource issues in small e-businesses to find how these issues impact the company growth.

1.2 Introduction to Chinese e-commerce Market
The e-commerce industry in China now is in the period of fast growing and presents some major features as follow.

1.2.1 The transaction Scale of e-commerce Keeps Growing Fast
The total transaction amount of e-commerce in China has broken the record of RMB 1 billion in 2006, the total online sales amount has reached RMB 1,000 billion, and both keep a high growth rate until present. In 2012, the total e-commerce transaction amount reached RMB 81,000 billion and increased by 31.1% than last year. The average growth rate has reached 31.5% during the passed five years. China then was the second biggest e-commerce market in the world, right after America. In 2013, the total e-commerce transaction amount was over RMB 100,000 billion and increased by 26.8% than the corresponding period in 2012, while the total online sales amount was over RMB 18,500 billion and increased by 41.2% than 2012. China then became the biggest online selling market in the whole world, and the online sales presented 7.8% of the total sales amount of total social retail sales.

1.2.2 VC/PE (Venture Capital and Private Equity) are Active in Investing e-commerce
In 2012, the total amount of e-commerce finance amounted to $6.51 billion and broke the record of e-commerce finance in the history. And the venture capital for e-commerce in 2013 reached $2.63 billion, increased by 56.4% than the corresponding period in last year. There were 165 finance events, 10 merges, and 2 IPOs in the year of 2013.

1.2.3 ICT Keeps Improving
Internet users’ number and the Internet penetration rate keep increasing, as well as the Internet application business. In 2013, the number of Chinese Internet users reached to 0.618 billion and increased 5.4 million users by 9.6% than that of 2012. The rate of Internet penetration increased from 44.2% in 2012 to 45.8% in 2013. Lastly, e-commerce industry is highly innovative and numerous new forms of e-businesses have been online. E-commerce industry in the recent years has been one of the most dynamic industries in China. In the first half year of 2013, Alibaba launched Yu E bao to strike the traditional bank industry and makes Internet finance on the focus. In the next few years, as estimated by Chinese government, Chinese e-commerce’s transaction amount will keep increasing. According to the document of e-commerce development project, until 2015, the total transaction amount of Chinese e-commerce will amount to 18 thousand billion yuan and the online sales will reach RMB 3,000 billion. Then if the estimation is correct, in the next three years, Chinese e-commerce transaction scale will increase in the average growth rate of 30%.

Figure 2. The Division of Chinese e-commerce investment events in 2013.

1.2.4 China’s e-commerce Transaction Amount 
In 2012, the total amount of e-commerce finance amounted to $6.51 billion and broke the record of e-commerce finance in the history. And the venture capital for e-commerce in 2013 reached $2.63 billion, increased by 56.4% than the corresponding period in last year. There were 165 finance events, 10 merges, and 2 IPOs in the year of 2013.

Figure 1. 2005-2013 Chinese e-commerce total transaction amount and online sales
In the next few years, as estimated by Chinese government, Chinese e-commerce’s transaction amount will keep increasing. According to the document of e-commerce development project, until 2015, the total transaction amount of Chinese e-commerce will amount to
| Year | Thousand billion | 2010 | 2015(estimated) | Annual growth rate |
|------|------------------|------|-----------------|-------------------|
| Total E-commerce Transaction Amount | 4.5 | 18 | | 32% |
| Transaction Amount in Businesses | 3.8 | 15 | | 31% |
| Online Sales Amount | 0.5 | 3 | | 42% |
| Total Retail Sales of Social Consumer Goods | 15.7 | 31.4 | | 15% |
| Ratio of Online Sales to Total Retail Sales of Social Consumer Goods | 3.27% | 9.5% | | 1.1% |

### 1.3 Market Analysis of Chinese e-commerce Industry

A central question to think about the structure of e-commerce market in China is whether certain e-businesses will become dominant. The second concern is that if some e-businesses become market dominator, there may be dynamic in efficiencies because on-line buyers are coordinated and locked-in to a small number of e-businesses. Then it may be difficult for start-up and small e-businesses to grow. In China, e-commerce market has becoming increasingly oligopoly: in 2010, the total revenue amount of B2B e-businesses reached over $10 billion, and Alibaba represented 58.9% of the whole market. In online purchase market, among the C2C auction networks, Taobao presented 84.6% of the whole market. For the online tourism service, Xie Cheng occupied 55.6% of the market.

### 2. Research Study

#### 2.1 Research Question - the Dilemma of Human Resources in e-businesses

Traditionally, service has been thought of as an exchange in which an employee serves a customer. During the twentieth century, that definition expanded to include self-service, in which a customer serves him or herself. The Internet enables customers to engage in a higher degree of self-service than ever before. For some Internet businesses, information itself is the end. These are “pure information” providers such as Google and Yahoo. Many of these organizations serve their customers almost purely through the Internet, delivering completely “technologically-intermediated” service. However, the e-businesses deliver more than pure information. These firms offer products and services that customers were used to enjoy in the traditional ways like shopping mall and market, through their websites, built on Internet technology. This point has important implications for e-businesses' economy because their service delivery systems are less “scalable,” or subject to economies of scale, than those firms selling a pure information “product.” Venture capitalists investing in Internet businesses often look for what they call “infinite scalability” (related concepts are discussed in). This term refers to a business's ability to serve numerous additional customers at extremely low incremental cost. Businesses with infinite scalability may be worthy of enormous investment in their early stages, despite a lack of profitability, because they will be highly profitable once they amortize their fixed costs over a large enough customer base. The need for infinite scalability to justify high valuations creates a problem for Internet firms delivering non-pure information products, especially when those firms rely on high-quality service for differentiation. In order to deliver infinite scalability, these firms need to reduce their dependence on human resource, which increase variable costs. Internet firms have attempted to do this by automating customer support and overtly or covertly discouraging customers from interacting with employees.

#### 2.2 Research Methodology

To figure out the human resource issues in small e-businesses and how they influence the firm growth, the study is developed in three ways: questionnaire survey, face-to-face interview, and case study.
2.3 Survey Results of Online Shopping

The questionnaire investigation is conducted on both online and offline platforms. Two types of questionnaires cover two different subjects. One questionnaire survey is designed for studying the purchase preference of the customers on the e-commerce websites.

2.3.1 The Major Characteristics of Online Shoppers

The online shoppers are majorly young people who have access to Internet. The number and percentage of each age group responding this survey shows as follow.

![Number of respondents from different age groups](image)

**Figure 3.** The number and percentage of respondents from different age groups.

The majority of online customers are in the age of 20-30 and 30-40, presented 90.2% of all the respondents in the survey. According to their online shopping expenditure and purchase items, they are looking for qualified products in a reasonable price. They mainly buy daily stuff like clothing and accessories, cosmetics, books and audible, and home electronics. The main reason why they choose certain e-business other than the others is that they can get cheaper quality-guaranteed products, comparing to purchase in traditional shopping ways like shopping mall and purchase in other websites. Most of these customers indicate that they would not choose to use an e-business website if the product quality is not ensured even though they have lower price. In order to judge the product quality, customers glean information from other buyers’ recommendations and comments, official certification documents, the sales of product, online consultancy, and the feasibility of returning purchases.

2.3.2 The Major Reasons to Impede Consumers from using Specific Website

1) Unable to Test Product and Try Service

About 92% of all the respondents claim that they will not buy a car through e-business website, because they could not make a purchase decision without trying the car.

2) No Trust about the Quality of Online Product and Service

Without chance to see and try the product and service in person, customers are not confident about the quality.

2.3.3 Imperfect e-payment System

For e-business website customers in an elder age, they feel not safe to pay online. Three respondents claim that they have met with security problem like leaking their bank information online.

2.3.4 Unsatisfactory Consultancy

The purchase experience is not a simple process of buying and paying, but is involved with consultancy service from the sellers to help the buyers to make the right decision. Buying online usually has no face-to-face consultancy service available, which may prohibit customers to understand fully the product and service.

2.3.5 Problematic Delivery

Delivery is one of the most problematic online purchase procedures. According to the survey, many problems occur during delivery, such as longtime transportation, unfriendly service of delivery workers, package loss and damage, and disappointing communication with express company. These issues, however, will usually not be attributed to the express companies in charge of the out-sourced delivery businesses from e-businesses, but to the e-business firms themselves.

2.4 Survey Results of the Human Resource Issues in Small e-businesses

The other survey is involved with the employees in small e-businesses to investigate the human resource strategy and the human resource issues in these firms. Through analyzing the responded questionnaires, the investigated small e-businesses present the major human resource issues as follow.

2.4.1 Temporary Recruitment Plans
To reduce the cost of human resource, many of the small e-businesses firms often make their recruitment plan based on their temperate need of new employees during the period of start-up. Lack of recruitment strategy actually increases human resource cost, because the companies often waste money in dealing with emergent events, like hiring technicians in the shortest time as the technology department needs more people to develop and maintain the website. And human resource managers have to lower down their requirement for candidates. These temporary technicians are less loyal to the firm and less responsible to their work. Eventually, this temporary recruitment plan increases the human resource cost and difficulty.

2.4.2 Inconsistent Promotion Training Program

The temporary recruitment plan’s passive impact on firm growth extends to inconsistent promotion training program. According to the survey, 30.7% (184/600) of the respondents have not participated in introduction training when they were hired by the firm; 57.7% (346/600) of the respondents claim that they have not participated in any training in the nearest one year. When asking the respondents to grade their latest training program, we get the result as below.

2.4.3 The Unmatched Demand of Talents in Small e-businesses

Small e-businesses need senior personnel with competitive expertise and working experience. However, they are concentrated in large e-businesses for better work package. With limited resources, small e-businesses are less attractive to talents in labor market than the big ones. According to the survey, there is only 4.3% (26/600) of the respondents changed their job in big e-businesses to work in small ones, while 27.3% (164/600) of all the respondents have changed their job from small e-businesses to big ones after accumulating several years’ working experience. The floating of talents between small and big e-businesses is asymmetrical. Comparing to the large e-businesses, the number of technicians in small e-businesses is much smaller, while the average amount of customers per technician is much higher than that in big e-businesses.

2.4.4 High Flow Rate of Employees in Small e-businesses

Among all the respondents in the survey regarding of the question whether they have changed the job recently, 47.7% (286/600) of them have changed their job in the latest three years and 8.6% (52/600) of them have changed their job in one year. The high flow rate of employees is detrimental for the continuum of technology innovation in the firm.

2.5 Research Conclusion

E-business competing in the market with low price intends to decrease human resource cost. Particularly, many start-up and small e-businesses have to reduce the investment in human resource to survive in the beginning period. Therefore, human resource is ignored or retarded intentionally in these small e-businesses, as the survey indicates. After going through the beginning period when start-ups attract customers with innovative technology or new business and when customers’ curiosity about the start-ups recedes, small e-businesses are losing their competitiveness, because of the lack of strong technician team to trace and innovate new technology, and professional service group to make customers feel valued. Working on the cases of broken e-businesses, their bankruptcy mostly happened in one or two years after start-up. The major reason for bankruptcy is short of capital, as investors lose confidence in these small e-businesses, seeing no promising return from customers. This paper tries to figure out how the human resource issues impede the customer return and the firm growth of these small e-businesses in China. For the e-businesses that take reducing human resource as method of controlling cost, they become increasingly trapped in the dilemma of human resource as the firms grow. It seems that e-businesses live by technology, and the human resource has no other big use than
adding the cost. However, all the steps of e-commerce, including developing and updating website, customer communicating, payment, delivery and after-sale service, are backed up with effective human resource. The human resource investment should begin as the e-business starts. Otherwise, it will be too late to begin investing in human resource after the firm realizes how important it is.

3. Brief Case Study of Jingdong and Vipshop

Jingdong was founded in 2004 and didn’t start to make profit until 2013. However the none profitability in the past nine years did not stop Jingdong from attracting investment. In May, 2014, Jingdong went public in NASDAQ and earned $3.2 billion investment. Vipshop is the first public Chinese B2C e-business that majors in discounted brand products selling and went to public in New York Stock Exchange (NYSE) in 2012. However, unlike Jingdong, Vipshop received no applause in American capital market. In the first day, Vipshop issued 11,000,000 shares, less than 11,200,000 shares proposed in prospectus. Vipshop financed $7.15 million, much less than $0.12 billion as estimated. Comparing the different going-public of Jingdong and Vipshop, Jingdong knows better how to balance “infinite scalability” and “human resource”, built upon a clear business model, while Vipshop fails to do the same.

3.1 Business Model

3.1.1 Clear and Profitable Business Model - Jingdong

Jingdong provides over 100,000 kinds of products and services online, including electronics, computers, office supplies, automotive and industrial products, home, garden and tools, sports and outdoors, and so on. The great diversity of products and services broadens Jingdong’s customer group and attracts large number of potential customers. Jingdong’s revenue comes from four aspects. Firstly, direct sales. Jingdong make profit from the price difference between purchases and sales, with over 30,000 kinds of products selling online. Generally, the electronics sold in Jingdong are cheaper by 10%-20% than those sold in traditional markets like Gome and Suning. Comparing with its direct competitors, like Dangdang and Amazon China, Jingdong’s products are cheaper by 10%, some of which are cheaper by 30%. Secondly, fees of renting virtual shops, logging in and transaction. Besides selling products itself, Jingdong also serves as an online platform for other sellers to open a virtual shop. The shop owners will pay Jingdong for their businesses done through its website. Thirdly, Jingdong reinvest other businesses with the capital collected during the time difference between cashing customers’ payment and paying suppliers. Lastly, Jingdong charges advertisers that publish advertisements on its website.

3.1.2 Unclear business Model Lack of Profitability - Vipshop

“Vipshop started the business model ‘discounted brand products & timing shopping’ in Chinese e-commerce market. This business model enables Vipshop to develop fast in a short time.” According to Vipshop’s prospectus, the sales revenue of the firm increased to $0.227 billion in 2011 from $0.10 thousand in 2008. Comparing with other e-businesses specialized in selling discounted brand products, such as the broken ones: Ihush, Meili Hui, and Yi Shangpin, Vipshop survives and develops in the highly competitive e-commerce market. Vipshop’s main business is selling discounted brand clothing online, and most of its products are the out-of-season clothing. Additionally, the business of timing purchase targets majorly at the price-sensitive customers. The continued launch of timing purchased items helps to cultivate customers’ consuming habit. However, the profitability of Vipshop is not optimistic in the eyes of venture capitalists. Only the gross profit margin reaches as much as 25%, can Vipshop make profit. To increase the gross profit margin, Vipshop is trying to increase its pricing ability, by controlling the suppliers stronger. But Vipshop’s business of selling the discounted products for famous brands constraints its control to suppliers. Therefore, there is no big room for Vipshop to increase the gross profit margin.

3.2 Consultancy

3.2.1 Comprehensive and Friendly Consultancy – Jingdong

Jingdong provides many other new consultancy methods besides the usual online consultancy, like website and telephone consultor. On one hand, it develops innovative methods to improve the service while selling products, for example, the “price protection” and “warranty service”. On the other hand, Jingdong provides customer comment service. Customers who have bought the products or service
Customers who have bought the products or service can make their comments online, which could be regarded as important reference by the potential customers.

3.2.2 High Degree of Self-service - Vipshop
Vipshop provides simply e-consultancy, a FAQs section on the website, with the answers to general questions that customers may propose. It is helpful for customers to search basic information like the procedures of returning purchase and the process of paying online, however it doesn't help customers to know better about the products. Additionally, Vipshop provides a service of leaving message to Vipshop employees, but the message is replied usually three days later and many of the messages are never replied. The simple consultancy system helps Vipshop to reduce the cost of human resource by decreasing the expenditure of recruiting and training the consultants, while, decreases customers' satisfaction.

3.3 Delivery System
3.3.1 Independent Logistics System - Jingdong
Jingdong has built four logistics centers in North China, East China, South China and Southwest China to cover almost every big city all over the country. In March, 2009, Jingdong started its own express company, operating the delivery service for all the businesses dealt through Jingdong website, which improves the quality of delivery and after-sale service. In Beijing, the largest city in China, most of Jingdong's products can be delivered to customers in the other day after ordering. From 2009, Jingdong has built delivery centers in big cities and trained professional delivery employees who wear the uniform and drive the same vehicle with the logo of Jingdong to provide services such as delivery in time, cash on delivery, payment on mobile POS machine, and delivery from door to door. Investing RMB 3600 million to the logistics building and delivery employees training in 2014, Jingdong's express company is credited as one of the leading logistics service providers in China. Building its own delivery system helps to improve Jingdong's after-sale service and customers' satisfactory.

3.3.2 Out-sourced Delivery Service - Vipshop
Vipshop has out-sourced its delivery business to many different express companies including Xunda, Universal Express, Yunda, and the others. Vipshop coordinates with different express companies for the lowest delivery cost in each region. This makes it difficult for Vipshop to control service in the delivery process, for the final contactors with Vipshop customers are the employees of different express companies and many of these servers have no awareness of improving their service except delivering goods. The bold investment in logistics and human resource of delivery part of Jingdong accounts for its attraction to investors and for its attraction to customers. Although some analysts think that such a huge investment would threaten Jingdong for future development because of the high cost to recruit and train its own delivery employees and maintain its own logistics system, Jingdong now is taking advantage of this strength to perfect its delivery and after-sale service to customers, which helps to enhance the customer satisfaction.

3.4 E-payment
3.4.1 Flexible Payment Methods - Jingdong
Jingdong supports "easy payment" by bank card, third-part payment platform, cash on delivery, and pay on mobile POS machine. The "easy payment" supports almost every deposit and credit card launched by every Chinese bank under Union pay (Chinese bank card union). The online payment platform consists of almost every third-part payment platform available in China such as Kuaiqian, Online Payment, Mobile phone payment and Kalaka. Most importantly, Jingdong is the first e-business that supports cash or card payment on delivery in China. This is beneficial for both customers and Jingdong itself. For customers, they do not have to worry about the leaking of their bank information through paying online and they can refuse to accept the delivery without worrying that Jingdong will not give back their payment. For Jingdong, cash on delivery increases its cash flow to invest other businesses. Additionally, for Jingdong's VIP members, they enjoy many convenient items of paying. For example, they have the priority to pay later after they have experienced or purchased the product or service in Jingdong, for they have better credit record. And they can enjoy the service of installment plan. The flexible payment policy benefits Jingdong's financial improvement and makes customers convenient.

3.4.2 Normal Payment Methods - Vipshop
Vipshop supports all the online payment methods as Jingdong does and support Zhifu Bao online payment platform, which is not provided by Jingdong because of its business conflicts with Alibaba. However Vipshop has no support for payment on delivery and any retarded payment service.

To build the self-owned payment platform, Jingdong invests in hiring and training special employees to be in charge of negotiating and coordinating with a wide variety commercial banks in China. This amount of human resource investment might be considered as a waste of money in the eyes of many other e-businesses because they can use the third-party platform. However, Jingdong's move in building its own payment platform and maintaining its own employees responsible for this payment method proves to be efficient for collecting the website's cash flow.

3.5 Returning Back the Purchase

3.5.1 Easy and Convenient Purchase Return - Jingdong

As Jingdong has built delivery centers scattering in big communities in almost every big cities, customers who demand to return purchase can contact directly with the delivery centers near his or her community to order service of picking up package in door. For customers living in the community without Jingdong delivery centers, they can contact with Jingdong express and the delivery employees will come to clients’ and pick up the purchase.

3.5.2 Normal Purchase Return - Vipshop

Customers have to log in Vipshop website to claim that they want to return back the purchase. Then the express company cooperating with Vipshop will contact customers and get the purchase returned to Vipshop. Noticeably, the purchase has to be returned in 7 days after receiving the delivery. This returning purchase system is adopted by most B2C e-businesses. However customers complain about this system, according to the online shopping questionnaire survey. Because the delivery process is not controlled completely by e-businesses, it takes time for customers to contact with express company and they some times have issues to communicate with express company’s employees. Customers tend to attribute the delivery issues to the products and service providers, the e-businesses, instead of the express companies.

3.6 Three Human Resource Strategies Back up Jingdong's Expansion

“The number of staff dimission seems to be large in Jingdong, however, the rate of staff dimission in Jingdong is the lowest among all the e-businesses in China,” said Long Yu, the CHO in Jingdong. The rate of staff dimission in Jingdong is less than 10%. To reduce the flow rate of staff, the Human Resource Department in Jingdong has built a fast talent channel, to make plans of training and promotion for Jingdong employees, as well as plans of improving employees' well-being.

3.6.1 Performance Evaluation System - Jingdong Sudoku

To select the most suitable and qualified successor of management level, Long Yu has led the HR department to make a “Sudoku” performance evaluation system suitable to Jingdong’s specific situation. Sudoku has been used by GE as the employee performance evaluation system. Nine squares are consisted with two dimensions including expectation and performance. Each square reflects that the employee stays in certain position corresponding to his/her performance and value. By requiring the supervisors to give scores to their subordinates and the peers to give scores to their colleagues according to Sudoku, Jingdong HR department selects managers with comprehensive management skills among over 30,000 employees and build a manager storage system in the shape of pyramid. The talents selected by this system are given the chances to join the job rotation plan and to attend the training programs provided by Jingdong University.

3.6.2 Base of Employee Promotion and Training - Jingdong University

Jingdong University has developed from the training department in Jingdong. In February, 2014, Jingdong has gained the land in Tianjin City to build university, which takes the responsibility of not only affording the employee training of Jingdong, but also the talent promotion programs of suppliers and other competitors. Jingdong University will operate as professional e-business management school in the near future and will launch degree programs of e-business management.

3.6.3 Management Trainee Program
The management trainee program has been launched since the early days of Jingdong. After the first financing in 2007, Liu Qiangdong, CEO of Jingdong, has been focusing on two events, building logistics system and recruiting management trainees. Since 2010, the HR department in Jingdong has enhanced the management trainee system and launched the “Eagle Plan” - the whole training program lasts as long as 3 years, during which the trainees will settle in basic level management positions after training, job rotation, and position setting. Until now this program has recruited over 330 from Chinese universities graduates. The rate of staff dimission is less than 10% and most of the employees selected from this program have been promoted to be managers. In general, Jingdong has the largest investment of human resource among all the B2C e-businesses in China. It is the first B2C e-business in China that builds its own logistics centers and operates its own delivery business. It is the innovator in consultancy and payment. The investment in human resource reduces the problems intriguing customers to turn to other e-businesses and attracts potential customers by offering differentiated products and services. In the contrast, Vipshop, a standing-out e-business among the small e-businesses, reduces its cost in human resource and shares many human resource issues that impede firm growth with the other small e-businesses in China, as the survey results of human resource issues in small e-businesses in China suggest. This research could be improved by broadening the scope of surveys for both online shopping and e-business employees. The larger amount of respondents can facilitate the research results and the recommendations to be of practical meanings for small e-businesses in China to solve their human resource issues and enhance the human resource management from the beginning period of the firms. Additionally, more interviews with a wider variety of human resource managers in e-businesses could be conducted in the future to improve the study. In general, given the questionnaire survey responses, face-to-face interviews, and case study provided in this article, the conclusion and recommendation can help owners and human resource managers in start-up and small e-businesses to ameliorate their job and promote the firms’ growth.

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Endnotes

i. This part of questionnaire is consisted of 600 pieces and was conducted on the online platform. 532 pieces of them were responded anonymously by online shopping users.

ii. This part of survey is consisted of three forms. Firstly, 600 questionnaires are responded by employees working currently in the departments of technology development and customer service in small e-businesses, including Vipshop, Okbuy (shoes website), Mbaobao (bag website), Moonbasa (female clothing website), and Jinjie (jewelry website). Secondly, 100 questionnaires have been responded by employees once worked in broken e-businesses, including Houmart (founded in 2010 and bankrupted in 2012, specialized in selling daily products), Pinju (founded in October, 2011 and bankrupted in 2012, specialized in luxury goods selling), Rakuten (founded in October, 2010 and bankrupted in 2012, specialized in selling shoes), VCOTTON (founded in 2011 and bankrupted in 2012, specialized in underwear selling), and Gaopeng (founded in 2011 and bankrupted in 2012, specialized in group purchase). Thirdly, five interviews have been conducted with human resource managers from e-commerce companies, including two leading e-businesses, JingDong and Alibaba.

iii. Two largest chain malls of home electronics in China.

iv. Customers are required to make the purchase within certain time, generally two to three days.

v. The price may decrease after purchase, if so, once customer applies price protection, the price difference between the current price and that paid by the customer will be returned back to his or her payment account.

vi. The products especially the electronics bought in Jingdong have a prolonged quality warranty upon the quality warranty provided by producers. Additionally, Jingdong’s warranty service includes many items beyond that of the producers.