Factors Affecting Customer Satisfaction on B2B Portals; A study on Chinese Businesses using online Portals

Kamran Khan*, Syed Karamatullah Hussainy**, Habibullah Khan***

Faculty of Management Sciences, KASBIT

Abstract- E-commerce has strongly emerged as a new pillar of International Trade in recent times, not only Business to Customer (B2C) but also Business to Business (B2B) market places have made an impact globally as new channel of revenue generation engine. Now Global trade is far more dependent on such portals which have provided easy access to buyers and suppliers to interact and trade with each other. Since the industry is new and dependent on advance technology which is changing very frequently that is not allowing businesses to maintain the required satisfaction levels. This study has made an attempt to identify the potential factors that are affecting the satisfaction of members on Business to Business (B2B) portals. The specific objective of this study is to analyze the factors affecting the Asian customers' of B2B portals and the role of Chinese market in developing B2B portals as a new industry to the world arena. Target audience was the paid members of these B2B portals which are mostly based in China and they are also the biggest source of revenue generation. Primary data was gathered through Questionnaire and 25 respondents were interrogated whose responses were further tested. Finally, this study has revealed the significant evidence with respect to the satisfaction of the members of these portals and recommendations have also made about what measures companies should take to ensure their satisfaction level.

Index Terms- Business to Business (B2B) Portals, customer satisfaction, International Trade

I. INTRODUCTION

A. Overview and Background

Business to consumer (B2C) but also the phenomena of Business to Business (B2B) portals have having a significant importance in world economy. Heavy investments on these B2B portals by the members have made this industry a new and strong sector in a situation where world economy is seriously disturbed. This study is belonging to the role of Factors Affecting the Customer Satisfaction on B2B Portal in Asian businesses as there are many root causes which influence on customer satisfaction including major to minor factors. As the industry has already gets it roots and standing on the strong pillars so there must be some critical factors which are necessary and needs to be highlight for the betterment of this sector.

Technology has revolutionized everything including, it made everything accessible, anything that is required can easily find on Internet within no time period even businesses are linked to technology. *Internet is not an Industry it's an Era*, Tradekey,

(2005). But there are some shortcomings of using internet as well especially when you are dealing in B2B ecommerce on both ends weather its a buyer or supplier. A buyer needs a serious security of money that is going to lend and as supplier there are many issues that are involved and making and maintaining satisfaction levels, some of them we will be discussing in this paper. A Supplier when joins B2B portals only think about the benefits or in business terms one can say is ROI (Return on investment), But to achieve targets there are certain services needed in order to have a smooth transaction. E-services are very complex in nature, response of inquiries, information security, search criteria, postings, service delivery issues and most importantly rapid changes in industry. Ba, and Johansson (2006). The situation becomes terrible here because it's hard to fix any standard and save financial & operational cost and more importantly this is linked to customer satisfaction. The interface of the websites are not that friendly to allow members to search with specific criteria & only few of them having advertisements that reflects users demography. Accenture (2010). Rightly so, to customize searches there should be a clear indication on websites that can allows members to search normally or advance searches. Oracle (2012); presented interesting results, personalization (custom catalogs, micro sites) persuades customers most heavily, followed closely by the online catalog and search engine optimization (SEO). More interestingly Mobile websites and applications secure 5th position in the top line up after paid advertisements. Services such as online Product Catalog & Showcase, Alerts, trust point / numbers, Optimization work (Key words Selection), ads especially Top Ranking, sub accounts, Year Count or Associated Tags, social media, Friendly Interface, Customer Services / Account Management etc are major to minor needs of the members depending upon different B2B portals. Wang, and Benaroch (2002) mentioned the complexities for the suppliers to get the orders in competitive markets, well agreed with the authors that if choices are available for the buyers they can find many suppliers at the same stage. It's easy to promote loyalty online because more information is usually available for customers (Shankar et al, 2002). Partially this author is right when everything is available it becomes easier to use but again some steps are need to be explained to customers. CoE (2007) suggested that American and EU top businesses are transforming to pay advertising online at the expenses of print advertisements. This study also mentioned the role of social media and Search engine Marketing (SEM) and companies' interests towards them.

B. An Overview of an Organization under Study

Tradekey.com has been launched in end of 2005. Soon after its launch Tradekey secured 2nd position in world's B2B portal

industry after Alibaba. It's a Saudi Based company which is running its operations from Pakistan and competing globally. China Market has the Maximum number of premium members at Tradekey.com which is actually the base of research. Tradekey and other B2B portals believes that it is difficult to make a long term strategies due to rapid changes in Internet technologies which itself is a root cause of the factors we will be discussing in this study.

C Rationale behind the Research

As mention above facts researcher came to know that these are the core issues that are directly linked with the satisfaction of member dealing in online B2B portals. Several studies mostly concerned over supply chain issues of B2B ecommerce. This paper aims to identify factors that are directly involved in satisfaction levels of the members of these b2b portals. The critical issues and detailed study will be discussed on factors associated to supplier's satisfaction; under this prospective this study highlights the problems as mentioned below.

D Research Question

What are the factors influenced on the customer satisfaction when using the B2B portals for e-commerce trade/business?

E Significance of the Study

This study identify the gapes and highlight the issues related to customer satisfaction more specifically core and IT related service such as customer and technical services, membership services including ads, emails, sign up, multiple account linkages, interface etc, Social media, Supply Chain, Communication). This study point out the relevant issues that may cause the customer satisfaction while using the B2B portals. The significance of this study is to provide the primary support to improve the communication between suppliers and customers in an effective manner. Further, this study carried out to provide extensive support for ecommerce business and their functionalities.

F Scope of the Study

The fundamental and the core cause of this particular study is to let the people know about the real picture of B2B portals that can be helpful to use them in an effective way. This study will be helpful for the new researcher to identify the core issues that Asian markets are facing on these B2B portals and helps them to understand and work more extensively. This study will also be useful for members of these B2B portals and the buyers in a way that they could able understand the limitations of each other and act in a way that could be suitable for both parties.

For Pakistani markets, the businesses out here can take the benefits of this modern system of trading online and dealing in B2B which can be a new window to decrease certain operation costs.

Last but not the least and probably the most importantly the regulations from Governments & policies & procedures of the portal's management to that ease for both buyers and supplier to deal freely and make secure transactions while using these portals.

G Objectives of the Study/Purpose of the Study

The main objective of this study is to examine the factors affecting customer satisfaction on B2B portals. There are some specific objectives which are also needs to be highlight in this comprehensive study which are mentioned below;

- To identify the Importance of B2B portals for Asian markets.
- To find out the role of B2B portals in customer satisfaction.
- To find out the role of Customer Services on B2B portals.
- To explore the kind of membership services members needs to get success and satisfaction on these portals.
- To understand the role of Social media in B2B business.
- To study supply Chain issues, including order closing, search cost, Transportation and sampling procedures.

H Hypothesis

H1 There is a significant relationship between Customer Services and Customer Satisfaction on B2B portals.

H2 There is a significant relationship between Social Media and Customer Satisfaction on B2B portals.

H3 There is a significant relationship between Membership Services and Customer Satisfaction on B2B portals.

H4 There is a significant relationship between Advertisements and Customer Satisfaction on B2B portals.

H5 There is a significant relationship between Order Processing and Customer Satisfaction on B2B portals.

H6 There is a significant relationship between Supply Chain and Customer Satisfaction on B2B portals.

H7 There is a significant relationship between Communication & feedback and Customer Satisfaction on B2B portals.

II. LITERATURE REVIEW

B2B ecommerce is primarily responsible for improving the efficiency of the companies and reduction the overall cost involve in the supply chain by automating the system on single or different platform. There were several heads of cost were involve previously that includes manual systems, labor processes transaction charges etc. What B2B did is, it automates all of manual process by approving buyer registration, developing online catalogs, and attractive contract based prices and contractual terms and conditions. Further the study explained that though there is a decline in online purchasing but the growth of B2B ecommerce is continuously growing and taking the share from the offline economy which is struggling. Oracle (2011). Ecommerce provides even faster communication than phone calls, sending faxes and invoicing system just because human linkages are faster than humans and other means. the profits coming from multiple sources and it allows companies to bypass some of the processes of value chain, the ecommerce also provides buyers an opportunity to choose the best one as per requirement, some might required higher quality and others need lower prices. Standifer, and James (2003).

A study conducted on Australian agribusiness firms selected a buyer side model in b2b ecommerce which is actually a buyer centric model in nature that suggests the major buying needs from suppliers who are large or big in size. This model not only responsible in reduction of buyer's costs by viewing the list of products and services which are offered to them but also it increases customer relationships by having instant replies and strong coordination from supplier's end. Eric (2005). Though the use of social media increases the customer empowerment significantly, but it has some barriers involve. These could be time, money and most importantly the technical expertise which are required to target the audience. So one should be well supported and trained to use social media before implementing the social media strategy. Nicole (2013). The Oracle (2002) Surveyed on B2B ecommerce and presents their findings in a way that it categorize the list of factors that influence on the revenues the most, these are personalization, online catalog and making as per their requirements on micro sites, the search engine optimization, Paid Advertisements, Mobile applications, social media and other. While there is English is the common language used in business but there are huge numbers who speaks different languages like Spanish or Arabic. So ignoring this pool of potential participants ecommerce can missed the opportunity. Computers and internet systems can translate but they can't be accurate and make multi-lingual requires human efforts. Voloper (2008).

III. METHODOLOGY

Data was collected to achieve the purpose, scope and to test the hypothesis of the study, primary data has been collected to test the hypothesis. The method for conducting inquiries was questionnaire for factors affecting customer satisfaction on B2B portals. The instrument was based on liker scaling to collect primary data. Sample covering members of Tradekey.com, which is a leading B2B portal. Online methods have such as Skype, QQ and Email have been used to collect the data. One sample and Correlation has been used to test the hypothesis. The secondary data has been collected through different sources that include, research papers, white papers, conference proceedings, survey reports. The accuracy of data can be a concerning factor because of some limitations, as Tradekey.com is running its operations from Pakistan, so the data has been collected by sending Questionnaire through online means. Due to financial and time restraints it was difficult to collect data by visiting personally.

IV. DATA ANALYSIS

The independent variable customer services mean statistics and standard deviation comes out to be 4.0533 and 0.58278 The independent variable social media mean statistics and standard deviation comes out to be 3.7733 and 0.73736 respectively. The independent variable membership services mean statistics and standard deviation comes out to be 3.9800 and 0.38586 respectively. The independent variable advertisements mean statistics and standard deviation comes out to be 4.2400 and 0.53755 respectively. The independent variable order processing mean statistics and standard deviation comes out to be 3.6200 and 0.49540 respectively. The independent variable supply chain mean statistics and standard deviation comes out to be 3.2200 and 0.54639 respectively. The independent variable communication & feedback mean statistics and standard deviation comes out to be 3.7067 and 0.60146 respectively. The dependent variable customer satisfaction mean statistics, standard deviation statistics comes out to be 3.5900 and 0.49413 respectively.

The results suggest p values us .000 which can be write as p<.001. So as per results we can conclude that there are significant value found between our dependent variable and independent variables. In short the null hypotheses are rejected and all the alternate hypotheses are accepted to our study.

Pearson correlation is used to study the relation between the variables. If the value of correlation coefficient ranges from 0.10 to 0.29 then it means there is a weak relation between the variable and when the coefficient ranges from 0.30 to 0.49 then it mean there is a medium relation and when the coefficient ranges from 0.50 to 1.00 then it shows there is a strong relation between the variables. Our study shows that there is a weak relationship between the dependent variable customer satisfaction and the independent variable customer service which is 0.26, it also shows that the relationship between customer satisfaction and social media is strong which is 0.611 and the relationship between dependent variable customer satisfaction and the independent variable membership services is 0.374 which shows medium relationship between the two. The relationship between independent variable advertisement and dependent variable customer satisfaction is 0.53 which shows strong relation between them, there is a weak relationship between the dependent variable customer satisfaction and the independent variable order processing which is 0.284, there is a negative linear relationship between independent variable supply chain and dependent variable customer satisfaction because its value comes out to be -0.038 and the relationship between customer satisfaction and communication and feed back is 0.163 which is a weak relationship.

V. DISCUSSIONS & CONCLUSION

The affect of factors have been found impressive with respective to customer satisfaction on B2B portal. The statistical model has shown that there is a great significant among variables discussed above on the satisfaction of members of these B2B portals.

It's is also to note down the behavior of most of the Chinese sales personnel's because they do not have expertise to deal the buyers properly. People from different background are sometimes involved in tackling the buyers and that is deadly for the businesses. The other major issue is a language barrier, they rarely use calls to contact buyers, and the only possibility is through emails and chat mediums. Yet some confusion arises between buyers and suppliers because of grammatical mistakes and least proficient in English language.

Buyer's also need to understand the behavior of Chinese market in terms of trading and manufacturing since China is way to different manufacturing market if we compare it from Japan or Korea in Asian other region. Industries are as famous by cities and developed by provinces or cities, an example can be quoted as Guangzhou is famous for shoes and handbags, Yiwu is world biggest commodity market, Ningbo is famous for ball bearing & Tianiin is for steel.

This paper tried to explore the market which is still to be discovered with respect to investment, trading and the behavior involve in buying and selling in B2B terms internationally via online medium. This paper can provide the opportunity to those researchers who want to check the potential of B2B portal industry and the buying & selling patterns that prevails. The most interesting factor could be the behavior of Asian business professional's especially Chinese suppliers. The Chinese products are now almost in every part of the world and they are so eager to expand more, but many of their approaches are yet to

be discovered, the way they behave, the regions they like to deal in, their preferences towards any country or any particular buyer, the ways that they feel comfortable and so on. The future researcher's could have their researches in these fields to explore more from this market & especially to tackle the challenge of their sales personnel's in online business dealings.

Appendix

Table 01
One-Sample Statistics

| | N | Mean | Std. Deviation | Std. Error Mean | |
|--------------------------|----|--------|----------------|--------------------|--|
| Customer Services | 25 | 4.0533 | 0.58278 | 0.11656 | |
| Social Media | 25 | 3.7733 | 0.73736 | 0.14747 | |
| Membership Services | 25 | 3.98 | 0.38586 | 0.07717 | |
| Advertisements | 25 | 4.24 | 0.53755 | 0.10751 | |
| Order Processing | 25 | 3.62 | 0.4954 | 0.09908 | |
| Supply Chain | 25 | 3.22 | 0.54639 | 0.10928 | |
| Communication & Feedback | 25 | 3.7067 | 0.60146 | 0.12029 | |
| Customer Satisfaction | 25 | 3.59 | 0.49413 | 0.09883 | |

Table 02

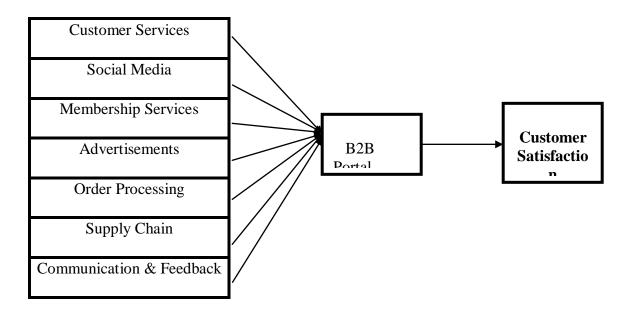
| | Test Value = 0 | | | | | | | |
|--------------------------|----------------|----|----------|------------|--------------------------|---------------------------|--|--|
| | Т | df | Sig. (2- | Mean | 95% Conf of the Diffe | idence Interval erence | | |
| | | | tailed) | Difference | Lower | Upper | | |
| Customer Services | 34.776 | 24 | 0 | 4.05333 | 3.8128 | 4.2939 | | |
| Social Media | 25.587 | 24 | 0 | 3.77333 | 3.469 | 4.0777 | | |
| Membership Services | 51.573 | 24 | 0 | 3.98 | 3.8207 | 4.1393 | | |
| Advertisements | 39.438 | 24 | 0 | 4.24 | 4.0181 | 4.4619 | | |
| Order Processing | 36.536 | 24 | 0 | 3.62 | 3.4155 | 3.8245 | | |
| Supply Chain | 29.466 | 24 | 0 | 3.22 | 2.9945 | 3.4455 | | |
| Communication & Feedback | 30.814 | 24 | 0 | 3.70667 | 3.4584 | 3.9549 | | |
| Customer Satisfaction | 36.326 | 24 | 0 | 3.59 | 3.386 | 3.794 | | |

Table 03

| Correlation | ıs | | | | | | | | |
|----------------------------|---------------------------------|----------------------------------|--------------------------|-------------------------|----------------------------|-----------------|-------------------------|-------------------------|---------------------------------|
| | | Custome r Satisfacti on | Custom er Services | Soci al Med ia | Members hip Services | Advertisem ents | Order Processin g | Supp ly Chai n | Communic ation & Feedback |
| Pearson Correlatio n | Customer Satisfactio n | 1 | 0.26 | 0.61 1 | 0.374 | 0.553 | 0.284 | 0.03 8 | 0.163 |
| | Customer Services | 0.26 | 1 | 0.06 2 | 0.18 | 0.678 | 0.434 | - 0.04 9 | 0.397 |
| | Social Media | 0.611 | 0.062 | 1 | 0.244 | 0.274 | -0.084 | - 0.09 5 | -0.193 |
| | Membersh ip Services | 0.374 | 0.18 | 0.24 4 | 1 | 0.15 | 0.113 | - 0.01 9 | -0.021 |
| | Advertise ments | 0.553 | 0.678 | 0.27 4 | 0.15 | 1 | 0.425 | - 0.05 4 | 0.404 |
| | Order Processin g | 0.284 | 0.434 | - 0.08 4 | 0.113 | 0.425 | 1 | - 0.01 5 | 0.543 |
| | Supply Chain | -0.038 | -0.049 | - 0.09 5 | -0.019 | -0.054 | -0.015 | 1 | 0.036 |
| | Communi cation & Feedback | 0.163 | 0.397 | - 0.19 3 | -0.021 | 0.404 | 0.543 | 0.03 6 | 1 |
| | Customer Satisfactio n | • | 0.105 | 0.00 1 | 0.033 | 0.002 | 0.085 | 0.42 9 | 0.219 |
| | Customer Services | 0.105 | | 0.38 5 | 0.195 | 0 | 0.015 | 0.40 8 | 0.025 |
| Sig. (1-tailed) | Social Media | 0.001 | 0.385 | | 0.12 | 0.092 | 0.345 | 0.32 5 | 0.178 |
| | Membersh ip Services | 0.033 | 0.195 | 0.12 | | 0.238 | 0.295 | 0.46 | 0.46 |
| | Advertise ments | 0.002 | 0 | 0.09 | 0.238 | | 0.017 | 0.39 8 | 0.023 |
| | Order Processin g | 0.085 | 0.015 | 0.34 5 | 0.295 | 0.017 | | 0.47 | 0.003 |
| | Supply Chain | 0.429 | 0.408 | 0.32 5 | 0.463 | 0.398 | 0.472 | | 0.433 |
| | Communi cation & Feedback | 0.219 | 0.025 | 0.17 8 | 0.46 | 0.023 | 0.003 | 0.43 | |
| N | Customer Satisfactio n | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| | Customer Services | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| | Social Media | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |

| Membersh ip Services | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
|----------------------------|----|----|----|----|----|----|----|----|
| Advertise ments | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Order Processin g | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Supply Chain | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Communi cation & Feedback | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |

Figure 1 summarizes the research model.



REFERENCES

- [1] Accenture (2011) Business-to-Business (B2B) Portals: Trends, Differentiators and Opportunities for Communications and High Tech Companies, USA: Accenture.
- [2] Ba, S. and Johansson, W.C. (2009) 'An Exploratory Study of the Impact of e-Service Process on Online Customer Satisfaction', Production and Operations Management, 17(1), pp. 107-119.
- [3] NG, Eric (2005) Types of B2B e-business model commonly used: an empirical study on Australian agribusiness firms', Australasian Agribusiness Review, 13(1442-6951), pp. 1-13.
- [4] Oracle (2012) 2012 B2B E-Commerce Survey: Results and Trends, USA: Oracle.
- [5] Oracle (2011) Reinventing the Web Channel to Maximize B2B Sales and Customer Satisfaction, USA: Oracle.
- [6] PricewaterhouseCoopers (2010) Outlook for B2B publishing in the digital age, USA: PricewaterhouseCoopers.
- [7] Rhetta L. Standifer, James A. Wall, Jr., "Managing conflict in B2B e-commerce", MU Distinguished Professor of Management, University, March-April 2003.

- [8] Shankar, V., Smith, A.K. and Rangaswamy, A. (2002) Customer Satisfaction and Loyalty in Online and Offline Environments, USA: eBusiness Research Center.
- [9] Voloper Creations Inc. (2008) 10 barriers to eCommerce and Their Solutions, Canada: Voloper Creations Inc.
- [10] Wang, C.X. and Benaroch, M. (2003) 'Supply chain coordination in buyer centric B2B electronic markets', International Journal of Production Economics, 92(2), pp. 113-124.
- [11] Zix Corporation (2010) Internet Policy Task Force, USA: Zix Corporation.

AUTHORS

First Author – Kamran Khan, PhD (In Progress), M.Phil, MBA, BBA, Khadim Ali Shah Bukhari Institute of Technology, kamranabbaskhan@gmail.com

Second Author – Syed Karamatullah Hussainy, PhD (In Progress), MS, M.Com, B.Com, Khadim Ali Shah Bukhari Institute of Technology, s.karamatullah@gmail.com **Third Author** – Habibullah Khan, MBA, BBA, Khadim Ali Shah Bukhari Institute of Technology, hu.khan4@gmail.com