Online Payment Security of E-Commerce: Case of China & Bangladesh

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**Abstract** 

This article carries out analysis of the E-Commerce online payment security of China and

Bangladesh. It provides an overview of the E-Commerce in China and Bangladesh and online

payment security, general terms, cases and principals. It also looks at online business platform,

providing specific clauses and a discussion of their effects. The article moves on to examine the

consequences of E- Commerce and online payment term and condition and what kinds of legal

protections have between two countries in modern age. How they are doing online payment

transactions? What kinds of legal support are needed? This Article contents Bangladesh case that

try to solved according to the view of bkash rule and regulation with law. It's also contents

Chinese online payment security, alipay that's rule and regulation and curriculum.

This article also provided more fig. those one show different terms like Mode of 3<sup>rd</sup> party,

mode of 4<sup>th</sup> party, Simple encrypted payment system mode, E- Cash internet payment system etc.

I collected necessary data from different website that provides more information about online

payment security of E- Commerce of China and Bangladesh.

**Keywords:** Online Payment Security, E- Commerce of China, E- Commerce of Bangladesh

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### Introduction

Electronic commerce popularly known as E- Commerce is a type of industry where buying selling, transferring, or exchanging products, services, or information via computer network, including the Internet. E-business refers to a broader definition of EC, not just the buying and selling of goods and services, but also servicing customers, collaborating with business partners, and conducting electronic transactions within an organization. If we compare of E- Commerce of China with other country in the world that one is great fact like China will become the world's E-Commerce superpower, already surpassing the US as the largest online commerce market in the world. The statistic show market size stands at \$300 billion. In 2006, less than 10% of China's urban population shopped online. By 2015, this figure is expected to have quadrupled, reaching up to 44% that total number of E-Commerce shoppers in China will grow to 329 million.<sup>2</sup>

The key payment for online purchases in china witnessed certain Changes during the past few years. Now, around 70% of all payment in China is electronic. Chinese Government has given more than 200 licenses allowing companies to set up electronic payment systems, market is dominated by 4 main payment providers like Alipay, Tenpay, 99bill & Union pay. <sup>3</sup> In Bangladesh, Thousands of development organization has gone online in the past five years, having realized the importance of the Internet for the exchange and distribution of information. Exponential growth of internet population and utilization of its potentials in various sectors

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<sup>&</sup>lt;sup>2</sup> Coo Law Bright & Young , http://www.coolaw.com.cn/info/08d667

<sup>&</sup>lt;sup>3</sup> China e-Commerce and Online Payment Trends Investigated by Maverick China Research in Its New Report Available at Market Publishers, Thursday, May 5, 2016 http://www.prweb.com/releases/2014/06/prweb11958802.htm

induce Bangladesh to be connected with information super highway, performing business and transitions over internet has become easier particularly for B2B sector.<sup>4</sup>

Easy Pay Way is an online payment gateway for Bangladesh Market that E-Commerce businesses to process debit and credit cards online quickly! In addition to that bkash, Rocket, Mkash, are also using as online payment. Now E-Commerce transaction online payments saving time and money! All debit and credit card transactions are processed in real time directly into Internet Merchant Account, but sometime it's facing legal problem that need solve to doing safely online payment.

## **Online Payment Security**

Online payment security is one of the pertinent issues that take the security of customer's data with rampant incidences of identity theft and online fraud that customers are wary giving out their personal data and credit card information online. If someone wants to start business operations online, there are a number of things you need to consider. At this time, have already identified market, researched the viability of your product and want to start selling it online.<sup>5</sup> In addiction that online Payment Security is the most important to the modern age, because most of business transactions are holding by online.

### E-commerce payment system

E-Commerce payment for online transactions known as a sample of Electronic Data interchange, this system has become interestingly popular due to widespread use internet based

<sup>&</sup>lt;sup>4</sup> E- Commerce in Bangladesh, www.business/banking/e-commerce-in-bangladesh.html

<sup>&</sup>lt;sup>5</sup> Basic Payment Security Issues for your Website / Application https://www.chargebee.com/blog/basic-paymentsecurity-issues-websiteapplicatio

banking & shopping that is the term of payment. Now day's credit cards have become one of the most common forms of payment for e-commerce transactions. About 90% online retail transactions were made with online system in America. Security measures include use of the card verification number which detects fraud by comparing the verification number printed on the signature strip on the back of the card with the information on file with the cardholder's issuing bank, online merchants have to comply with stringent rules stipulated by the credit and debit card issuers that means that merchants must have security protocol and procedures in place to ensure transactions are more secure. <sup>6</sup> Here, Security remains the main concern about online payment systems that particularly the use of credit cards for purchases made over the Internet. If concentrate on the effect of security breaches on consumers that credit card fraud affects merchants as well. For example, when hackers infiltrate a company's computers, steal thousands of customer credit card numbers, and use them to charge fraudulent purchases, the online retailer's reputation suffers severe damage.

So, many e-commerce analysts claim that transmitting credit card numbers online does not have to be any less secure than handing a card to a salesperson at retail store. Within the United States, credit card numbers sent over the Internet can be protected by sophisticated encryption technology, which is often invisible to parties involved in the sale. In these positions, many hosts will collect customer financial data and pass it along to their clients in encrypted form; Small businesses that do not have access to a secure Web server can also go through a company like Versant, which allows companies to call their own secure order page on the Versant server to process credit card transactions.<sup>7</sup>

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<sup>&</sup>lt;sup>6</sup> https://en.wikipedia.org/wiki/E-commerce\_payment\_system

<sup>&</sup>lt;sup>7</sup> Internet Payment systems, http://www.referenceforbusiness.com/small/Inc-Mail/Internet-Payment-Systems.html

#### E-Commerce in China

At present, China has a huge market potential for e-commerce. The large absolute gross domestic product of US\$1305.9 million seems encouraging in China. Apart from that, the main indicators for ecommerce imply a rapid growth that indicators include number of internet users, personal computers as well as telephone lines, Mobile Phone and cellular subscribers. E-commerce of China is surging & opening up opportunities for companies if they pay close attention to the quickly evolving marketplace. China's e-commerce sales totaled RMB 460 billion in 2010.<sup>8</sup>

#### **Statistics and fact**

Now-a- days, peoples are doing businesses through online. Presently, number of internet users in China reached 537 million in June 2012 and has driven the explosive growth of E – Commerce market that is expected to triple and surpasses the US marketplace in 2015. Now, predicted that estimated 193 million online shoppers that one increase to more than 350 million by 2015. The business-to-consumer and consumer-to-consumer sector, the business-to-business e-commerce sector currently generates the greatest amount of revenue that is great boom in E-Commerce of China. 9

In China, Traditional and online players alike, four factors are expected to give e-commerce a further boost more secure payment methods that more reliable delivery services and government regulations that standardize e-commerce and increasing numbers of customers. who

<sup>9</sup>Statistics and Facts about e- commerce in China, http://www.statista.com/topics/1007/e-commerce-in-china

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<sup>&</sup>lt;sup>8</sup>China E- Commerce: Heading toward RMB 1.5 trillion, February 27,2012 by Serge Hoffmann, Bruno Lannes and Dai, https://smallbusiness.fedex.com/ecommerce.html

are becoming comfortable shopping online. Now, the size of China's overall e-commerce market will expand dramatically through 2013, growing at a compounded annual rate of 48%. This

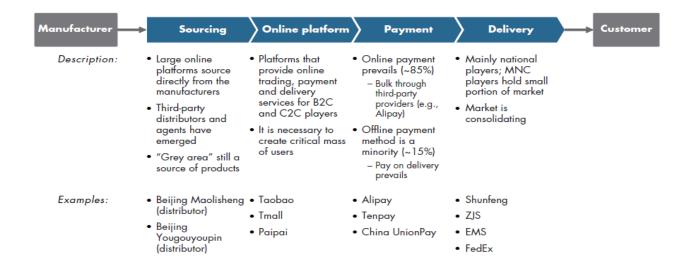


Figure: E- Commerce ecosystem in China is becoming more sophisticated with full set of enablers 10

growth will be fueled by an expected increase of more than 60% in the e-commerce customer base and a projected 40% or more surge in customer spending. The emergence of well-designed, user-friendly online trading, payment and delivery services for both B2C and C2C companies has played a vital role in building a critical mass of Chinese users.<sup>11</sup>

### Online payment security in China

Online payment aim to provide a safe payment service for all parties engaged in National and International trade that one great term on Internet platform. Now days, over 25% of the 430 million Chinese online shoppers consider online payment security as the most important fact. To ensure the payment security, China has since long addressed these concerns, in particular by

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<sup>&</sup>lt;sup>10</sup> Bain analysis, http://www.bain.com/publications/articles/china-ecommerce.aspx

<sup>11</sup> China e – commerce: Heading toward RMB 1.5 trillion http://www.bain.com/publications/articles/china-ecommerce.aspx

requiring multiple levels of verifications before finalizing a transactions, such as personal passwords, E-Tokens and SMS to the registered phone number. Third parties platforms such as We Chat and Ali Pay, ten pay are bypassing these regulations in order to speed up the online payment procedure in China.<sup>12</sup>

In 2012, CNNIC <sup>13</sup> officially released the Report on line payment Security of China. Statistical Report on Internet Development Condition shows that online payment users have reached 187 million, penetration rate 34.8%, Only 5.3% online payment users think online payment is not safe. Online payment in China, third – Party payment and online bank payment are top two online payment tools. Presently, Ali pay has a remarkable advantage and Union pay also is seeing rapid growth. But Ali pay is 3<sup>rd</sup> party payment tool with the largest coverage that about 80% online payment users choose Ali pay. Its popular day by day that is a great advance online payment in China, about 21.1% online payment users choose Ten pay, its comes the 2<sup>nd</sup> position and about 16.9% users choose Union pay, it comes to the 3<sup>rd</sup> position in China.

## Ali pay Online Security Payment Platform

Ali pay is a third party online platform with no transaction fees. It was launched in China in 2004 by Alibaba Group which founder Jack Ma. Ali pay had biggest market share in China that control of just under half of Chinas online payment market. Ali pay is alternative to using a credit card. It can be linked to a bank account. Now Ali pay is more than just a way to shop online. It has many uses like that —

<sup>&</sup>lt;sup>12</sup> Online Payment Security Top Concern For Chinese Shoppers, http://blog.tlgcommerce.com.hk

<sup>&</sup>lt;sup>13</sup> CNNIC – China Internet Network Information Center.

- > Transfer money to other bank accounts with payment made within two hours
- > Transfer money to other Ali pay accounts
- > Pay credit card bills with no fee levied
- Pay utility bills with no extra fee levied
- Top up mobile phone with credit
- Buy bus tickets
- Check bank balance
- Use at online check-out on many websites
- ➤ Use to check-out on shopping apps Tmall.com and Taobao.com
- > Use to pay for products in-store

Those services are secure and trusted by Chinese shoppers hence the desire to use this service when they shop on foreign websites, which they are starting to do much more <sup>14</sup>. Alibaba.com Secure Payment aims to provide a safe payment service for all parties engaged in National and International trade that one an independent online payment platform. Alibaba.com provides payment security to both buyers and suppliers that one is the term of payment system. Under this it is pointed out-

- ➤ Buyer must make payment within 20 days of confirming the order with the seller; otherwise the order will be closed.
- > During the delivery period, the seller must submit the express courier or kuaidi details online as proof of dispatch.

Online payment services in China: How does Alipay differ from PayPal? http://www.nanjingmarketinggroup.com

Buyer receives order and confirms online.

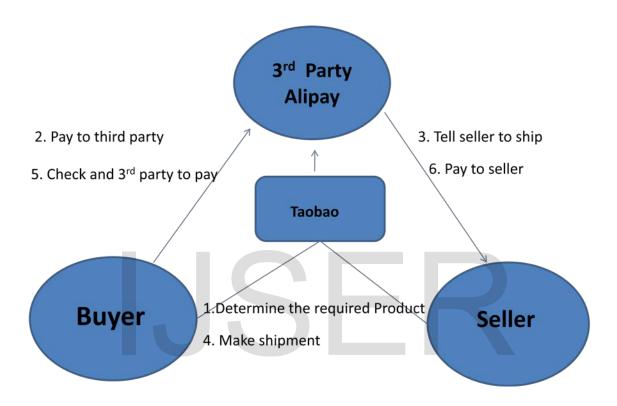


Figure: Mode of Third Party Payment

# **Payment Security and Refund Options:**

Buyer's money is not released during the trade process until you have confirmed successful delivery of the order. Once confirmed, Alipay will release payment to the supplier. All of

information will be safely encrypted.<sup>15</sup> If the supplier doesn't ship buyer's order on time, or if you don't receive it and it is determined to be the fault of the supplier, you'll get your payment returned directly. If the products buyer receives are significantly different from the product requirements agreed on within the contract, buyer may choose to receive a partial refund and keep the products.<sup>16</sup>

## **Internal Complaint Mechanism**

Online payment Aipay published the Dispute Resolution Rules in 2005. Art, (2) of Ali pay Dispute Resolution Rules authorizes Ali pay to have certain enforceability. Upon submission of a dispute to Alipay, Buyer and Supplier irrevocably agree that Alipay shall have the right to determine that all or part of the contract price of the Transaction in dispute shall be released to either or both of the parties to the Transaction according to these Rules.<sup>17</sup>

So E-Commerce of China is largest market that giving facilitate like Taobao, it's a platform for businesses and individual entrepreneurs to open online stores that mainly cater to consumers in Chinese speaking regions. Now E- Commerce of china is great online businesses platform. Online payment system are also secure that is great term in E-Commerce.

<sup>16</sup> Alibaba.com Security Payment, http://activities.alibaba.com/alibaba/secure-payment.php

<sup>17</sup>A Global Online Dispute Resolution System: Is China Ready to Join? Qisheng HE, Wuhan university Institute of International law.

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<sup>&</sup>lt;sup>15</sup> Alibaba.com Security Payment, http://activities.alibaba.com/alibaba/secure-payment.php

## **E-Commerce in Bangladesh**

E- Commerce in Bangladesh actually started in the years of 1991 by some non-resident Bangladeshis. Those people opened some Bangladeshi sites focused on providing local news and some transactional things like sending gifts items to Bangladesh. After that is are greeting popular day by day. In 2000-2008, during this period, the E-Commerce sector observed slow growth. There were few E-Commerce websites but there were no system for online transaction which was the first condition for E-Commerce. In 2009, the real change came when Bangladesh Bank allowed online payment in Country thus, officially opening up the E-Commerce sector. The year 2013 had been an important year in the history of E-Commerce in Bangladesh. First, BASIS<sup>18</sup> and Bangladesh Bank jointly observed "E- Commerce Week" for the first time in the country; Supported by ICT Business Promotion Council, In 2014 to present E- Commerce is being popular in Bangladesh that one is a great term in Modern era<sup>19</sup>.

## Types of E- Commerce & Website in Bangladesh

E-Commerce helps the businessman to get the appropriate price of their products. Because they can do the bids for their products using different companies websites around the world. Not only can that buyer also can buy any product with reasonable price after visiting many e-Commerce websites. Different types of e-Commerce that are getting popular in Bangladesh and playing vital role in Businesses sector that are B2B, B2C, B2G, C2C and MC. There are different websites in Bangladesh-

<sup>19</sup> E- Cab, E- Commerce Association of Bangladesh, Bangladesh e- Commerce sector, http://www.e-cab.net/resource-center/bangladesh-e-commerce-sector

<sup>&</sup>lt;sup>18</sup> Bangladesh Association of software and Information services (BASIS)

www.chorka.com

www.hutbazar.com

www.cellbazar.com

www.muktabazaar.com

www.bikroy.com

www.banglacommerce.com

www.premium.com

www.shoppingcard.com

www.Ecommercebank.org

www.kroybikroy.com

www.bestway.com

www.sonalibangla.com

www.e-bangla.com

www.bajna.com

www.bangladeshinfo.com

www.bdbazar.com

www.Webbangladesh.com

www.deshigift.com

www.bangla2000.com<sup>20</sup>

<sup>&</sup>lt;sup>20</sup> Assignment point, E- Commerce in Bangladesh http://www.assignmentpoint.com/business/banking/e-commerce-in-bangladesh.html

## **Operating Sector of E- Commerce in Bangladesh**

Despite being a under developed country, selected segments of the Bangladesh business community has embraced technology with reasonable success. Personal computers and the Internet are also emerging as day to day business tools. These positive indicators are favoring the prospects of e-commerce in Bangladesh<sup>21</sup>. Those sectors are - Online Banking, Online Marketing, Online cards, Hotel Booking, Airline ticket booking, Readymade garment, Online Rail ticket booking, Pay Bill, Oil and Gas Sector and Education.

## Online Payment security in Bangladesh

Easy Pay Way is an online payment gateway for Bangladesh Market in present era. E-Commerce process debit and credit cards online quickly and securely. Through e-commerce online payment save time and money, now a day's bkash are greeting popular in Bangladesh that keeps security for transaction money,. But it's playing role as a 4<sup>th</sup> party that one sometime can't make transparence between buyer and seller. In addition to that, Rocket, M-cash, U-cash also doing same transactions. So under this only I am pointing out, how bkash are doing transaction and keep payment security in Bangladesh.

### Bkash online payment platform

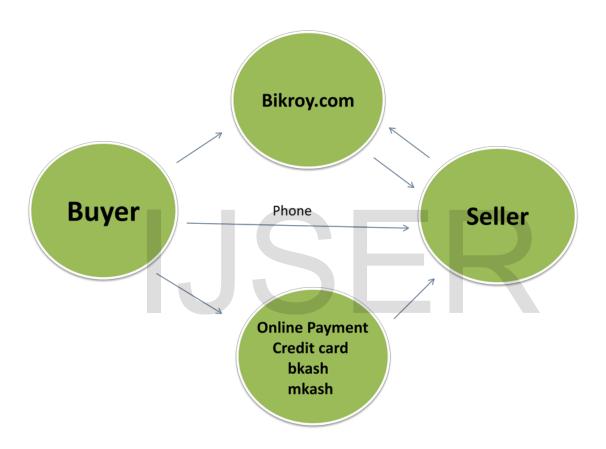
Bkash, a subsidiary of BRAC Bank, provides safe, convenient and easy ways to make payments and money transfer services via mobile phones to both the unbanked and the banked people of Bangladesh. Through partnerships with all major mobile operators of Bangladesh,

<sup>21</sup> Assignment on E-Commerce in Bangladesh, Status, Constraints & Potentials, by Md. Abdur Rakib, University of Dhaka, Bangladesh

http://www.slideshare.net/rakibrashed2011/e-commerce-in-bangladesh-status-constraints-potentials-md-abdurrakib

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Bkash's technology allows 98% of the country's mobile users to access its service via very basic handsets. Bangladesh, home to 165 million people, represents a unique opportunity for a mobile money platform: universal wireless network coverage, widespread personal ownership of mobile phones, a cash economy, poor physical infrastructure, and a favorable regulatory environment for a bank-led initiative<sup>22</sup>.



Mode of 4<sup>th</sup> Party Payment

## Payment System of bkash

Buyer/Customer can make payments from bKash Account to any "Merchant" who accepts "bKash Payment". For example, if you want to pay after shopping:

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<sup>&</sup>lt;sup>22</sup> The story of bkash, 12:00 AM, April 23, 2014 / LAST MODIFIED: 01:53 AM, March 08, 2015, The Daily Star News paper Bangladesh

- 1. Go to your bKash Mobile Menu by dialing \*247#
- 2. Choose "Payment"
- 3. Enter the Merchant bKash Account Number you want to pay to
- 4. Enter the amount you want to pay
- 5. Enter a reference\* against your payment (you can mention the purpose of the transaction in one word. e.g. Bill)
- 6. Enter the Counter Number\* (the salesperson at the counter will tell you the number)
- 7. Now enter your bKash Mobile Menu PIN to confirm, If it's Done then You will receive a confirmation message from bKash<sup>23</sup>.

### **Security of online Payment**

Money in of customer Wallet won't be lost even if he/she lost mobile phone. Every transaction is protected by own PIN and What's more, State-of-the art technology provided by VISA ensures that money is always safe and secure. PIN that customer create when register for bkash. Each transaction make needs to be authorized by entering PIN.To ensure 100% safety of owan wallet; do not share your PIN with anyone. Bkash place a high priority on protecting information to assure that transactions and data are secure with bkash. Our security and compliance practices are regularly audited to ensure that they meet the highest standards.<sup>24</sup> If have any problem call to the bkash helpline 16247 without delay.

## Comparative discuss of Online payment between China & Bangladesh

If we compare online payment security between China & Bangladesh that China has more advantage payment security than Bangladesh. If we see Alipay online platform of China that it

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<sup>&</sup>lt;sup>23</sup> Bkash Payment, http://www.bkash.com/products-services/payment

<sup>&</sup>lt;sup>24</sup> Secure, bkash BRACK Bank Company, http://www.bkash.com/about/benefits/secure

has completely ensure payment security that Buyer's money is not released during the trade process until you have confirmed successful delivery of the order. Once confirmed, Alipay will release payment to the supplier. All of information will be safely encrypted. If the supplier doesn't ship buyer's order on time, or if you don't receive it and it is determined to be the fault of the supplier, you'll get your payment returned directly. If the products buyer receives are significantly different from the product requirements agreed on within the contract, buyer may choose to receive a partial refund and keep the products<sup>25</sup>. If we see that Bkash which is more popular payment media in Bangladesh now, but it has payment security that is not secure as like Chinese Alipay payment and others, like Alipay have refund options, when buyer will pay that alipay will keep until delivery product. But Bangladeshi other payment platform is not contains like this process.

#### **Conclusion**

In this article, the concept of E- Commerce of China and Bangladesh are pointing out and how those countries are doing online payment transaction that are mentions with the light of different payment platform between two countries. So, if we see online payment security of both countries that are different. The analysis of the environmental forces reveals that the prevailing situation is encouraging for the implementation of e-commerce in Bangladesh. E-Commerce of China also playing vital role in the world. However, In this discussion that two countries e-commerce are very popular in present era and online payment security are more effective, although their online payment security different, but in future Bangladesh Online payment platform and other payment can necessary step for more secure payment method like developed world.

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<sup>&</sup>lt;sup>25</sup> ibid

#### References

- Coo Law Bright & Young http://www.coolaw.com.cn/info/08d667
- 2.China e-Commerce and Online Payment Trends Investigated by Maverick China Research in Its New Report Available at Market Publishers , Thursday, May 5, 2016 http://www.prweb.com/releases/2014/06/prweb11958802.htm
- 3. E-Commerce in Bangladesh, www.business/banking/e-commerce-in-bangladesh.html
- 4. Investor Words, http://www.investorwords.com/1637/e\_commerce.html
- 5. Quora, https://www.quora.com/What-are-the-needs-and-objectives-of-E-Commerce
- 6. Ecommerce Goals, https://community.optimizely.com/t5/Strategy-Culture/Ecommerce-Goals/td-p/10467
- 7. Fundamentals of E-Commerce, https://webservices.ignou.ac.in/virtualcampus/adit/course/cst304/ecom1.htm
- 8. Fundamentals of E-Commerce, https://webservices.ignou.ac.in/virtualcampus/adit/course/cst304/ecom1.htm
- 9. E-commerce: benefits in trade & commerce see page 573.
- 10. Basic Payment Security Issues for your Website / Application https://www.chargebee.com/blog/basic-payment-security-issues-websiteapplicatio
- 11. Internet Payment systems, http://www.referenceforbusiness.com/small/Inc-Mail/Internet-Payment-Systems.
- 12. China E- Commerce: Heading toward RMB 1.5 trillion, February 27, 2012 by Serge Hoffmann, Bruno Lannes and Dai, https://smallbusiness.fedex.com/ecommerce.html
- 13. Statistics and Facts about e- commerce in China, http://www.statista.com/topics/1007/e-commerce-in-china
- 14. Bain analysis, http://www.bain.com/publications/articles/china-ecommerce.aspx

- 15. China e commerce: Heading toward RMB 1.5 trillion http://www.bain.com/publications/articles/china-ecommerce.aspx
- 16. Online Payment Security Top Concern for Chinese Shoppers, http://blog.tlgcommerce.com.hk
- 17. Online Payment and Security of E-commerce Yang Jing School of KeXin, Hebei University of Engineering, Handan, China.

http://www.academypublisher.com/proc/wisa09/papers/wisa09p46.pdf

- 18. Online payment services in China: How does Alipay differ from PayPal? http://www.nanjingmarketinggroup.com
- 19. Alibaba.com Security Payment,

http://activities.alibaba.com/alibaba/secure-payment.php

- 20. A Global Online Dispute Resolution System: Is China Ready to Join? Qisheng HE, Wuhan university Institute of International law.
- 21. E- Cab, E- Commerce Association of Bangladesh, Bangladesh e- Commerce sector, http://www.e-cab.net/resource-center/bangladesh-e-commerce-sector
- 22. Assignment point, E- Commerce in Bangladesh http://www.assignmentpoint.com/business/banking/e-commerce-in-bangladesh.html
- 23. Assignment on E-Commerce in Bangladesh, Status, Constraints & Potentials, by Md. Abdur Rakib, University of Dhaka, Bangladesh http://www.slideshare.net/rakibrashed2011/e-commerce-in-bangladesh-status-constraints-potentials-md-abdur-rakib
- 24. Bikroy.com- the largest marketplace in Bangladesh,

http://bikroy.com/en/terms

25. The story of bkash, 12:00 AM, April 23, 2014 / LAST MODIFIED: 01:53 AM, March 08, 2015, The Daily Star News paper Bangladesh

http://www.thedailystar.net/the-story-of-bkash-21235

- 26. Bkash Payment, http://www.bkash.com/products-services/payment Secure, bkash BRACK Bank Company, http://www.bkash.com/about/benefits/secure
- 27. Collect from cases of Bangladesh, bkash payment
- 28. https://en.wikipedia.org/wiki/E-commerce\_payment\_system