

International Small Business Commerce (ISBC): Potential Source of New Revenue for the United States Postal Service

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ABSTRACT

The international exchange of goods and services between small businesses and/or small businesses and an individual is growing year-over-year. This market, herein termed International Small Business Commerce (ISBC), is growing organically and concurrently, with explosive growths in global electronic commerce (e-commerce). For the purpose of this discussion, a small business is defined as a single proprietor-owned business with up to 500 employees and/or personnel.¹ There are millions of small businesses globally. In fact, in 2008 there were about 27.9 million small businesses in the United States alone, and millions of small businesses outside of the United States.² Increased connectivity is fueling growth in international small business commerce. Connectivity is continuously becoming more accessible and affordable to a growing number of small businesses and individuals, through the Internet, the World Wide Web (WWW), mobile devices and smartphones.³ The international postal system, both private and public, provides core infrastructure for the delivery and tracking of the physical goods involved in these international commerce transactions. Large e-commerce platforms such as Amazon, eBay, and others, while having made e-commerce more easily accessible to businesses in the United States, have not been focused on addressing all the gaps for ISBC enablement and execution identified in this report. The International Center for Integrative Systems (ICIS) facilitated a workshop regarding international small business commerce, where participants identified and assessed challenges and opportunities in the international small business commerce market. Outcomes from this workshop provide initial insights on how the United States Postal Service (the "Postal Service") may address some of the gaps in services necessary for enablement of the international small business commerce market. The Postal Service's provisioning of such services may potentially generate new sources of revenue, as it may be uniquely poised to offer such services by leveraging its trusted brand, rich experience and broad reach. This document explores those opportunities.

Keywords

United States Postal Service, E-commerce, Small Businesses, International, Social Commerce.

¹ SBA Office of Advocacy (September 2012) "[Frequently Asked Questions Advocacy: the voice of small business in government](http://www.sba.gov/advocacy)" www.sba.gov/advocacy Retrieved on February 15, 2013 from http://www.sba.gov/sites/default/files/FAQ_Sept_2012.pdf

² SBA Office of Advocacy (September 2012) "[Frequently Asked Questions Advocacy: the voice of small business in government](http://www.sba.gov/advocacy)" www.sba.gov/advocacy Retrieved on February 15, 2013 from http://www.sba.gov/sites/default/files/FAQ_Sept_2012.pdf

³ Indvik, L., (February 28, 2011) "[Forrester: E-Commerce To Reach Nearly \\$300 Billion in U.S. by 2015](http://mashable.com/2011/02/28/forrester-e-commerce/)". Retrieved on December 12, 2012 <http://mashable.com/2011/02/28/forrester-e-commerce/>

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INTRODUCTION

Since its inception, the Postal Service has provided a core infrastructure for enabling commerce and trade, particularly the delivery and tracking of physical goods. In September 2012, the International Center for Integrative Systems (ICIS) facilitated a workshop for the United States Postal Service – Office of the Inspector General (USPS-OIG) to explore the challenges and opportunities of the Postal Service’s participation in international small business commerce. Outcomes from this workshop included the identification of various gaps in services necessary for enablement and growth of the international small business commerce market. The workshop identified and evaluated the possibility of the Postal Service’s provisioning of such services to address some of those gaps, which could potentially generate new sources of revenue for the Postal Service. Given the Postal Service’s trusted brand, rich experience and broad reach, along with the recent and increasing market pressures placed on the Postal Service, there may be opportunities for the Postal Service to play a role in the emerging and growing international small business commerce market. This paper explores what services the Postal Service may provide in this market.

I. Overview

International small business commerce is defined in this document as the exchange of goods and services by small businesses with other small businesses and/or individuals, across international boundaries. For the purpose of this discussion, a small business is defined as a single proprietor-owned business with up to 500 employees and/or personnel.⁴ There are millions of small businesses globally. In fact, in 2008 there were about 27.9 million small businesses in the United States alone, and millions of small business outside of the United States.⁵ Growth in international small business commerce is being fueled by the increased connectivity afforded by a combination of the Internet, the World Wide Web (WWW), mobile devices and smartphones.^{6,7} These modes of communication make connectivity increasingly accessible and affordable to a growing number of small businesses and individuals.⁸

⁴ SBA Office of Advocacy (September 2012) "[Frequently Asked Questions Advocacy: the voice of small business in government](http://www.sba.gov/sites/default/files/FAQ_Sept_2012.pdf)" www.sba.gov/advocacy Retrieved on February 15, 2013 from http://www.sba.gov/sites/default/files/FAQ_Sept_2012.pdf

⁵ SBA Office of Advocacy (September 2012) "[Frequently Asked Questions Advocacy: the voice of small business in government](http://www.sba.gov/sites/default/files/FAQ_Sept_2012.pdf)" www.sba.gov/advocacy Retrieved on February 15, 2013 from http://www.sba.gov/sites/default/files/FAQ_Sept_2012.pdf

⁶ Oxford Dictionaries, (n.d.) [Definition of Smartphone](#): "A mobile phone that is able to perform many of the functions of a computer, typically having a relatively large screen and an operating system capable of running general-purpose applications. Retrieved on December 12, 2012 from <http://oxforddictionaries.com/definition/english/smartphone>

⁷ Techterms.com, (n.d.) [Smartphone](#): "A mobile phonethat that includes advanced functionality beyond making phone calls and sending text messages. Most smartphones have the capability to display photos, play videos, check and send e-mail, and surf the Web. Modern smartphones, such as the iPhone and Android based phones can run third-party applications, which provides limitless functionality" Retrieved on December 12, 2012 from <http://www.techterms.com/definition/smartphone>

⁸ Indvik, L., (February 28, 2011) "[Forrester: E-Commerce To Reach Nearly \\$300 Billion in U.S. by 2015](http://mashable.com/2011/02/28/forrester-e-commerce/)". Retrieved on December 12, 2012 from <http://mashable.com/2011/02/28/forrester-e-commerce/>

The international postal system, both private and public, provides core infrastructure for the delivery and tracking of the physical goods involved in e-commerce transactions. Large e-commerce platforms such as Amazon, eBay, and others, while having made e-commerce more easily accessible to businesses in the United States, have not been focused on addressing all the gaps for ISBC enablement and execution identified in this report. In international commerce, small businesses are at a significant disadvantage in comparison to large multi-national businesses in the areas of customer reach, logistics and shipping challenges. Developments in the field of web-based commerce have attempted to address some of these challenges, but gaps in integration with logistics, security and shipping limit the enablement and growth of international small business commerce.

Amazon is one example of an e-commerce website that has provided a platform enabling individuals, businesses (small and large) to create storefronts to conduct e-commerce, while continuing to expand its reach with additional distribution centers.⁹ However, Amazon continues to encounter problems in areas such as identity verification, which is critical for enablement of international small business commerce and trusted international e-commerce.¹⁰ Similarly, eBay has created a scalable web-based e-commerce platform enabling interaction of buyers and sellers. However, eBay is still in its relative nascence in addressing core functionality such as global shipping, which can be costly and further complicated by delivery delays and rules governing tariffs and banned goods.¹¹ In challenges that Amazon and eBay face, such as identity verification and global shipping, it is likely that the broad and deep experience of the Postal Service, may be significant in developing services to address these gaps.

Small businesses across the world have recognized the larger opportunities available to them internationally and wish to use emerging and existing e-commerce platforms to conduct global trading; however, such gaps in logistics, lack of trust-mediated commerce particularly between developed and developing nations, and other limitations arising from political/national constraints, hamper the growth of international small business commerce. While services of the Postal Service have always been available for international shipping, an assortment of other challenges that significantly affect enablement and growth of international small business commerce. Such challenges include:^{12,13}

⁹ SCDigest Editorial Staff, (August 7, 2012) "[Logistics News: Amazon to Add 18 New Distribution Centers Worldwide in 2012, as It Keeps Investing in Logistics](http://www.scdigest.com/ontarget/12-08-07-1.php?cid=6081)" Retrieved on December 12, 2012 from <http://www.scdigest.com/ontarget/12-08-07-1.php?cid=6081>

¹⁰ Pepitone, J., (August 7, 2012) "[Hack attack exposes major gap in Amazon and Apple security](http://money.cnn.com/2012/08/07/technology/mat-honan-hacked/index.htm)" Retrieved on December 12, 2012 from <http://money.cnn.com/2012/08/07/technology/mat-honan-hacked/index.htm>

¹¹ Global Data Consortium (October 2, 2012) "[EBay Aims to Ease Problems Of Shipping Abroad for Users](https://www.globaldataconsortium.com/blog/2012/10/ebay-aims-to-ease-problems-of-shipping-abroad-for-users)" Retrieved on 2, 2012 from <https://www.globaldataconsortium.com/blog/2012/10/ebay-aims-to-ease-problems-of-shipping-abroad-for-users>

¹² Kamel, M.N., (2008) "[International E-Commerce: Language, Cultural, and Infrastructure Issues, Challenges, and Solutions](#)", Electronic Commerce: Concepts, Methodologies, Tools, and Applications. Volume 3. Contemporary Research in Information Science and Technology Hershey, PA: Information Science Reference Retrieved on © 2007–2013. International Center for Integrative Systems. All rights reserved.

- A lack of assurance in delivery of items,
- Customs delays,
- Inconsistencies in resolving currency exchanges,
- Potential fraud, security,
- Identification of buyers and sellers,
- Poor quality assurance and inability for handling international returns.

These challenges are consistent with those documented in earlier research work.

Electronic commerce, starting as early as the mid-1970s, and explosively growing with web-based commerce platforms starting after 1993, has made it easier for businesses to sell their products online. However, the aforementioned challenges to support enablement of international small business commerce have not been addressed universally and consistently by such “e-commerce” platforms. This paper attempts to explore the potential opportunities available to the Postal Service in facilitating and enhancing international small business commerce transactions. The paper, organized in seven sections, provides: (1) Introduction to international small business commerce (this section); (2) Background on e-commerce (past developments and future trends in e-commerce and social commerce); (3) Challenges for the growth of international small business commerce; (4) Potential opportunities available to the Postal Service, if the Postal Service elects to provide solutions to address some of those challenges; (5) Analysis of such potential opportunities; (6) Proposed research experiments to further explore the viability of a few of these potential opportunities; and, (7) Conclusions derived from this high-level exploration.

II. Levels of Connectivity

We assume that the U.S.-based individual (or small business) – the buyer – likely has multiple ways to *directly* access the Internet. We further assume that the overseas small business – the seller – has multiple *direct and indirect* ways to access the Internet to display its goods. For the purpose of this document, we categorize the small business connectivity into three types:

- (1) Web-Enabled Connection
- (2) Hybrid-Enabled Connection
- (3) Postal Service-Enabled Connection

Web-Enabled Connection

In the Web-Enabled Connection, we assume that the seller has access to a computer and Internet connection and has the ability to build its own e-commerce page where it can display its wares.

December 12, 2012 from <http://www.omnilogos.com/2012/05/23/international-e-commerce-language-cultural-and-infrastructure-issues-challenges-and-solutions/>

¹³ Badran, S. (2008) Page 5 "What Merchants Need to Know About Cross-Border eCommerce": First Data Corporation Retrieved on December 12, 2012 from http://www.firstdata.com/downloads/thought-leadership/fd_crossborderecommerce_whitepaper.pdf

As an example, we consider a small business in India selling handicrafts. It is assumed that the India-based small business has the ability to create an online presence, so the U.S.-based buyer can access the seller's website to view products and execute an e-commerce transaction. In this type of connection, both the buyer and the seller can directly communicate through the Internet and the local postal system is used for the actual delivery and tracking of the physical good from seller to buyer.

Hybrid-Enabled Connection

In the Hybrid-Enabled Connection, we recognize the growth of mobile devices such as smartphones and smartphone applications, which enable the seller in India, to engage in e-commerce transactions through the smartphone. For such sellers, they may not be as computer savvy as those with Web-Enabled Connection, but may use applications – or “apps” – resident on their smartphone to take pictures of their wares and quickly build “hybrid” mechanisms for selling their goods to the U.S. buyer. By hybrid mechanisms, we mean “apps” resident on the smartphone, which require little to minimal knowledge of the Internet and/or Web-based protocols for use. Here again, local postal systems of the respective country will be needed to intermediate the flow and tracking of the physical goods.

Postal Service-Enabled Connection

Postal Service-Enabled Connection means that the seller, such as an India-based supplier in the example above, has no direct access to the Internet either through a computer or through the use of a mobile device, such as a smartphone. In this connectivity model, the seller may rely on the local postal system e.g., India Post or the U.S. Postal Service. In this scenario, the seller, who may be working in a one-man, handicrafts operation making indigenous wood carvings, may at best have a smartphone or other mobile device, but no other access to the Internet. In this case, the seller's “connection” to the buyer in the U.S. is through the local postal system or another delivery service. The seller relies on the local postal system to deliver the materials to the U.S.-based buyer and serve as the communication membrane between the buyer and seller. There is no “close” or direct interaction between the buyer and seller except for the actual exchange of product and currency during the transaction, likely through the local postal system or other delivery service. The transaction takes place over a certain period of time due to the physical nature, mediated by the postal system, in every aspect of the transaction. In this current scenario, the Postal Service is involved in proactively engaging and supporting international small business commerce transactions. However, the extent of activities in enabling international small business commerce has not reached any significant levels.

BACKGROUND

I. Overview of E-commerce

E-commerce is a business transaction in which a good or service (a product) is sold by a seller to one or more buyers utilizing computer systems of the seller, the buyer and a network of systems that connect and aid the transaction electronically.¹⁴ Such transactions may be conducted between a business and one or more consumers or a business and one or more other businesses.¹⁵ Typical e-commerce transactions take place via a website provided by either the seller or a service provider who offers the business transaction service utilizing its infrastructure. Almost all aspects of the transaction takes place electronically in e-commerce - from marketing of the product by the seller, evaluation of product information by the buyer, negotiation of pricing and other terms, payment for the product by the buyer and provision of documentation regarding the transaction such as invoices, receipts and agreements –.

Started in the UK in 1979 as online shopping, e-commerce saw many initial developments in Europe, the United States and Canada over the next five years.¹⁶ In 1984, CompuServe provided an online shopping mall in the United States and Canada.¹⁷ In 1995, amazon.com and AuctionWeb (subsequently eBay) became available as hosted services for sellers to sell their products online. Subsequent development in Internet technologies, such as the web browser for easy access¹⁸, data encryption for secure transactions¹⁹, online banking²⁰, and payment services such as PayPal²¹, helped the growth of e-commerce.

Use of e-commerce has significantly grown since its invention in 1979. In 2010, as noted in Fig. 1, the U.S. e-commerce market was \$176.2 billion with an expected growth of 12.6% to \$278.9 billion by 2015.²²

¹⁴ SearchCIO, (n.d.) [e-commerce \(electronic commerce or EC\)](http://searchcio.techtarget.com/definition/e-commerce) Retrieved on December 12, 2012 from <http://searchcio.techtarget.com/definition/e-commerce>

¹⁵ Britannica.com, (n.d.) [e-commerce](http://www.britannica.com/EBchecked/topic/183748/e-commerce) Retrieved on December 12, 2012 from <http://www.britannica.com/EBchecked/topic/183748/e-commerce>

¹⁶ Tkacz, E., Kapczynski, A., (2009). Internet - Technical Development and Applications. Springer. p. 255. ISBN 978-3-642-05018-3. Retrieved 2011-03-28. "The first pilot system was installing in Tesco in the UK (first demonstrated in 1979 by Michael Aldrich)." Retrieved as screen shot (1) in Appendix I from Amazon.com on February 15, 2013

¹⁷ Online Today, (April 1984) "[The Electronic Mall](http://gsbrown.org/compuserve/electronic-mall-1984-04/)". CIS/CompuServe nostalgia. Retrieved on December 12, 2012 from <http://gsbrown.org/compuserve/electronic-mall-1984-04/>

¹⁸ W3.Org (n.d.) "[The WorldWideWeb browser](http://www.w3.org/People/Berners-Lee/WorldWideWeb.html)" Retrieved on December 12, 2012 from <http://www.w3.org/People/Berners-Lee/WorldWideWeb.html>

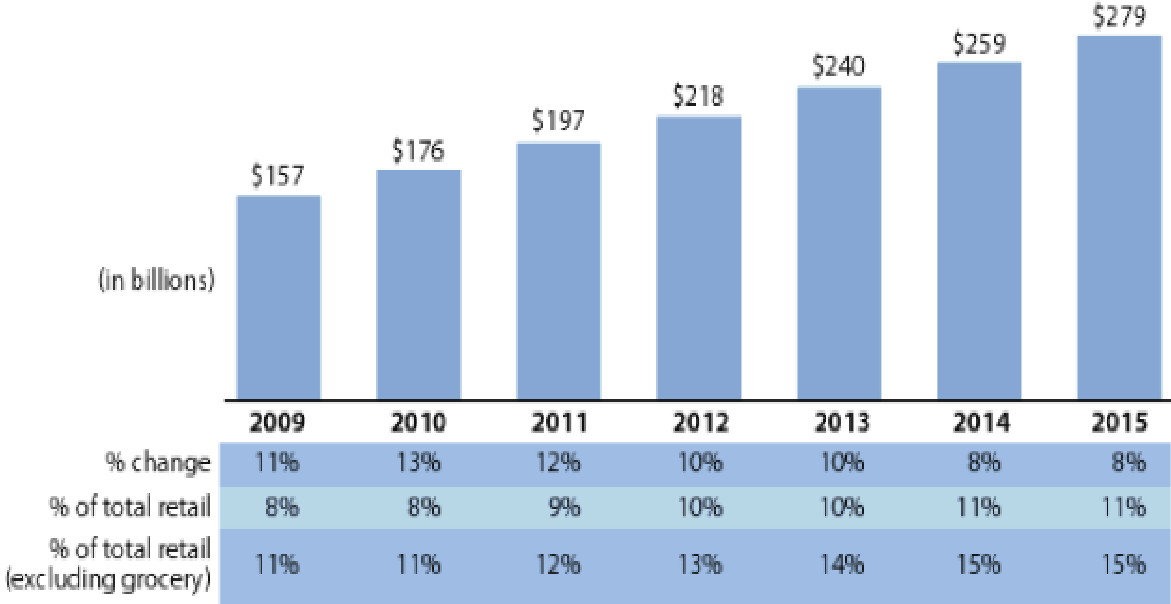
¹⁹ T. Dierks, E. Rescorla (August 2008). "[The Transport Layer Security \(TLS\) Protocol, Version 1.2](http://www.ietf.org/rfc/rfc5246.txt)". , A. Freier, P. Karlton, P. Kocher (August 2011). "[The Secure Sockets Layer \(SSL\) Protocol Version 3.0](http://tools.ietf.org/html/rfc6101)". Retrieved on December 12, 2012 from <http://www.ietf.org/rfc/rfc5246.txt> & <http://tools.ietf.org/html/rfc6101>

²⁰ Cronin, Mary J. (1997). [Banking and Finance on the Internet](http://books.google.com/books/about/Banking_and_Finance_on_the_Internet.html?id=I94FEs-IMu4C), John Wiley and Sons. ISBN 0-471-29219-2 page 41 from Banking and Finance on the Internet. Retrieved 2008-07-10. http://books.google.com/books/about/Banking_and_Finance_on_the_Internet.html?id=I94FEs-IMu4C

²¹ Lillington, K., (July 27, 1999) "[Wired Article-PayPal Puts Dough in Your Palm](http://www.wired.com/science/discoveries/news/1999/07/20958)". Retrieved on December 12, 2012 from <http://www.wired.com/science/discoveries/news/1999/07/20958>

²² Indvik, L., (February 28, 2011) "[Forrester: E-Commerce To Reach Nearly \\$300 Billion in U.S. by 2015](http://mashable.com/2011/02/28/forrester-e-commerce/)". Retrieved on December 12, 2012 <http://mashable.com/2011/02/28/forrester-e-commerce/>

Fig. 1 – E-commerce Expected to Reach Nearly \$300 Billion in U.S. by 2015.



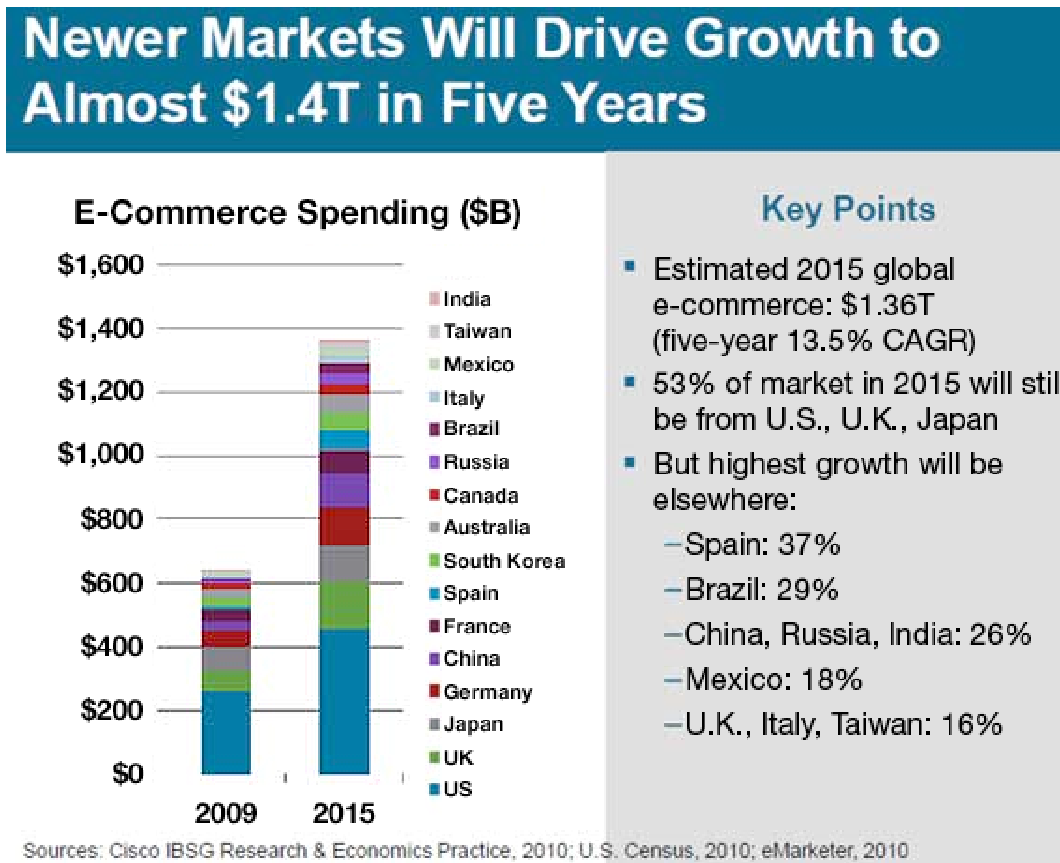
At the international level, per Fig. 2, the world e-commerce market is expected to more than double from over \$600 billion in 2009 to nearly \$1.4 trillion in 2015.²³ In 2010, the United Kingdom’s e-commerce market was nearly \$160 billion with an expected growth of 10% between 2010 to 2015.^{24,25}

²³ Singh, K., (June 4 2009 / modified May 21 2012) [Growth of Internet Marketing – Top Factors](http://www.kronikmedia.co.uk/blog/growth-of-internet-marketing-top-factors/406/)”, KronikMedia Retrieved on December 12, 2012 from <http://www.kronikmedia.co.uk/blog/growth-of-internet-marketing-top-factors/406/>

²⁴ Robinson, J., (October 28, 2010). "[news](http://www.guardian.co.uk/technology/2010/oct/28/net-worth-100bn-uk)". London: Guardian.co.uk. Retrieved on December 12, 2012 from <http://www.guardian.co.uk/technology/2010/oct/28/net-worth-100bn-uk>]

²⁵ 100 billion British Pounds in the footnote 26 equals 160 billion US dollars at the current currency conversion rate See <http://www.reuters.com/finance/currencies/quote?srcCurr=GBP&destCurr=USD> for currency conversion rates © 2007–2013. International Center for Integrative Systems. All rights reserved.

Fig. 2 – Growth of E-commerce in International Markets.



Legend:

\$B means billion dollars

\$T means trillion dollars

Acronym CAGR stands for Compound Annual Growth Rate

Among the emerging economies, China's e-commerce market was \$36.6 billion in 2009.²⁶ Moreover, per Fig. 2, e-commerce across China, Russia and India is expected to grow by 26% over this 5-year period. Fig. 1 and 2 demonstrate that e-commerce, both domestically in the U.S. and in other international economies, is growing, at a minimum of 8% to 13%, respectively. Such growth, relative to the current global recessionary environment of 2012, is significant.

II. Overview of Social Commerce

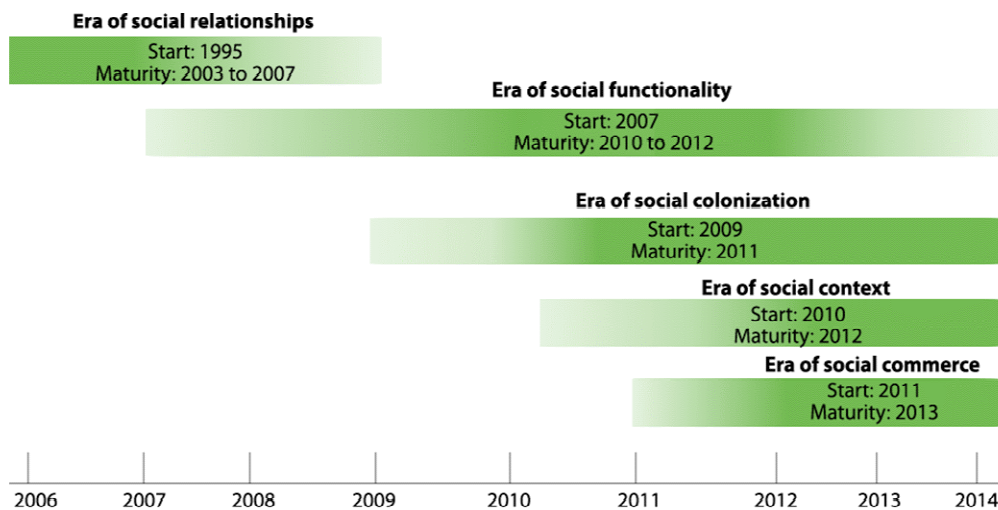
With the growth of social media such as Facebook, Twitter and other platforms, social commerce is also driving e-commerce. It is important to understand this phenomenon in the context of the current discussion. Social commerce is defined as e-commerce transactions that make use of the platform of social media and recommendations generated in social media communication to initiate and conduct the transaction. Yahoo! first introduced the term "social commerce" in 2005

²⁶ Olsen, R., (January 18, 2010). "[China's migration to eCommerce](http://www.forbes.com/2010/01/18/china-internet-commerce-markets-equities-alibaba.html)". Retrieved on December 12, 2012 from <http://www.forbes.com/2010/01/18/china-internet-commerce-markets-equities-alibaba.html>

to describe a set of online shopping tools, including shared pick lists, user ratings, user-generated product information and recommendations that Yahoo! Search provided.²⁷ The concept of social commerce was developed to denote user-generated ‘advertorial’ content (product information provided in the style of an editorial) on e-commerce sites, and to include collaborative e-commerce tools that offer recommendations and advice to friends and associates regarding product or services they should purchase.^{28,29}

As Fig. 3 and Fig. 4 below demonstrate, social commerce evolved from social relationships.³⁰

Fig. 3 – The Growth of Social E-commerce.



Relative to Fig. 3, the “Social Relationship” era started in 1995 and matured through 2007. During this era, like-minded people formed social networks with limited use of Internet for their activities.

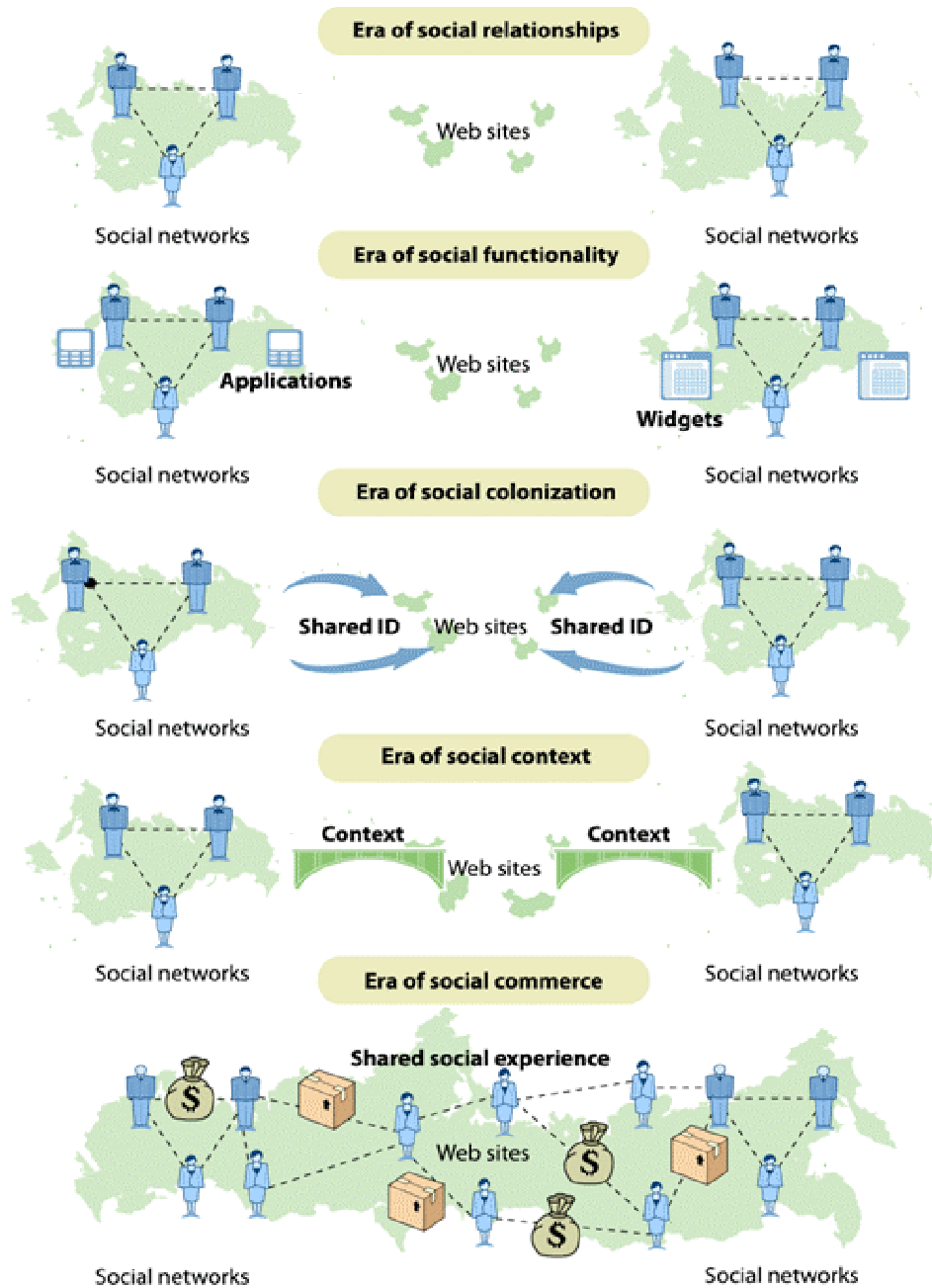
²⁷ Yahoo! Search (Posted November 14 2005). “[Social Commerce via the Shoposphere & Pick Lists](http://www.ysearchblog.com/2005/11/14/social-commerce-via-the-shoposphere-pick-lists/)”. Yahoo! Search Blog Retrieved on December 12, 2012 from <http://www.ysearchblog.com/2005/11/14/social-commerce-via-the-shoposphere-pick-lists/>

²⁸ Beisel, D., (December 6, 2005). “[The Beginnings of Social Commerce](http://genuinevc.com/archives/2005/12/06/the-beginnings-of-social-commerce.html)”. Retrieved on December 12, 2012 from <http://genuinevc.com/archives/2005/12/06/the-beginnings-of-social-commerce.html>

²⁹ Rubel, S., (December 23, 2005). “[2006 Trends to Watch Part II: Social Commerce](http://socialcommercetoday.com/steve-rubels-original-2005-social-commerce-post/)”. Retrieved on December 12, 2012 from <http://socialcommercetoday.com/steve-rubels-original-2005-social-commerce-post/>

³⁰ Owyang, J., (April 27 2009). “[The Future of the Social Web: In Five Eras](http://blogs.forrester.com/jeremiah_k_owyang/09-04-27-future_social_web_five_eras)”. Forrester Research Retrieved on December 12, 2012 from http://blogs.forrester.com/jeremiah_k_owyang/09-04-27-future_social_web_five_eras
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Fig. 4 – The Five Eras of the Social Web.

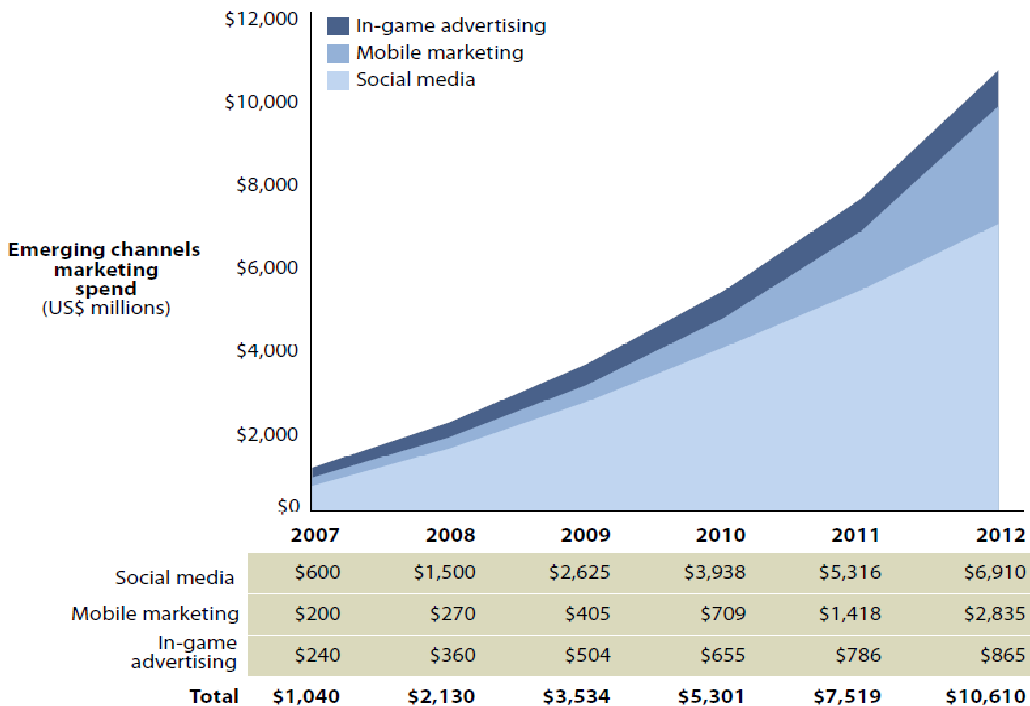


In the next era, “Social Functionality,” individuals started using computers, applications and other widgets within their social relationships. This era started in 2007 and matured through 2012. In the third era, “Social Colonization,” which started in 2009 and matured through 2011, individuals began sharing information and identities using the Internet. During this era, individuals also began collaborating across social networks. During the era of “Social Context,” which started in

2010 and matured through 2012, people began sharing information that is more contextual - such as opinions and recommendations. The fifth of the five eras, "Social Commerce," which started in 2011 and is projected to mature through 2013, is defined by taking the interaction in the social group to complete commercial transactions.

Social commerce has shown substantial growth in a number of areas such as group buying (e.g., Groupon), flash-sales clubs (e.g., Ideeli), customer review and rating (e.g., Insideview), social shopping/rewards (e.g., Aditive), social marketplace (e.g, Chirply) and e-commerce and content (e.g., Payvment). The strength of social commerce is evidence by the fact that 90% of consumers trust social recommendations³¹ and 66% of brand touch-points are now generated by customers.³²

Fig. 5 – U.S. Emerging Channel Marketing Spend 2007 to 2012.



³¹ Nielsen Global Online Consumer Study, (April 2009). "[Global Advertising: Consumers Trust Real Friends and Virtual Strangers the Most](http://blog.nielsen.com/nielsenwire/consumer/global-advertising-consumers-trust-real-friends-and-virtual-strangers-the-most/)". Retrieved on December 12, 2012 from <http://blog.nielsen.com/nielsenwire/consumer/global-advertising-consumers-trust-real-friends-and-virtual-strangers-the-most/>

³² Court, D., Elzinga, D., Mulder, S., Vetvik, O., J., (June 2009). "[The consumer decision journey](http://www.mckinseyquarterly.com/The_consumer_decision_journey_2373)" McKinsey Quarterly, Visitor Edition, Exhibit 4 under "In This Article" Retrieved on December 12, 2012 from http://www.mckinseyquarterly.com/The_consumer_decision_journey_2373
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As predicted in a 2007 Forrester Research study as shown in Fig. 5 above, social marketing has achieved the projected results.³³ Note, in Fig. 5, “In-game advertising” refers to the advertising that appears while an on-line gamer is playing an on-line game. Such on-line games may be multi-player or single-player.

One example of a platform that helps small business owners build their own social commerce business site is Lemonade.com.³⁴ Such platforms help easily create an online user experience by beginning with social inventory that is virtual in nature (actual product is carried by other stores or manufacturers). The platform provides the ability to activate ‘fans’, which may include the business owner’s friends and earlier customers, across a number of social media platforms. These platforms help generate a product value in a number of ways, such as Paypal, loyalty points, virtual currency and donations to certain causes. A dashboard provides required information that the business owner needs to keep track of the business.

Another example of a platform that promotes e-commerce using social means is Pinterest.com.³⁵ Pinterest's goal is to connect consumers through the materials they find interesting, such as a favorite book, toy, recipe etc. While fundamentally a pinboard-style photo sharing website that allows users to create and manage theme-based image collections, Pinterest is bringing a positive impact to e-commerce transactions. When consumers share products of a retailer that they found interesting or useful, others visitors to the site consider this sharing as a motivator for their purchase considerations. Thus, the social network of Pinterest users ends up promoting products and businesses. A recent survey of 7,431 online shippers, conducted by BizRate Insights, reveals Pinterest motivates more online purchases than Facebook.³⁶

III. E-commerce Trends and Peculiarities in International Small Business Commerce

The global trends in domestic e-commerce and social commerce are driving growth in international small business commerce conducted via the Internet. Such cross-border e-commerce will be responsible for nearly 20% of global e-commerce transactions by 2017.³⁷ Based on such growth estimates, international small business commerce conducted via the Internet will conservatively reach \$280 billion by 2017, given the forecasts for global e-commerce

³³ Vanboskirk, S., Li, C., Katz, J., Lee, C., (October 10 2007). “[US Interactive Marketing Forecast, 2007 to 2012](#)”: Forrester Research. Retrieved on December 12, 2012 from http://impagt.com/downloads/wp_mediamic_03-08.pdf

³⁴ <http://www.lemonade.com/>

³⁵ <http://pinterest.com>

³⁶ Pan, J., (October 20, 2012) “[Pinterest Tops Facebook in Driving Ecommerce](#)” Mashable.com. Retrieved on December 27, 2012 from <http://mashable.com/2012/10/20/pinterest-facebook-shopping/>

³⁷ Gray, M., (October 11, 2012), “[What eCommerce means for international opportunities](#),” Retrieved on December 12, 2012 from <http://www.dynamicbusiness.com.au/export/what-ecommerce-means-for-international-opportunities-12102012.html>

as indicated in Fig. 2.³⁸ This \$280 billion in international small business e-commerce is in addition to the \$279 billion of the US e-commerce revenue expected by 2015 as noted in Fig. 1.

The growth of international small business commerce via the Internet today largely depends on the location of the buyer and seller. Today, international small business commerce is limited in this aspect. For example, developed nations such as the U.S., UK and Australia find that the prospect of connecting buyers and sellers across countries varies. U.S. suppliers find that Australia and Canada tend to be good starting markets; for UK suppliers, France and Germany tend to be good markets, in addition to potential markets in Australia, U.S., Italy and Spain.³⁹ For Australian suppliers, U.S., UK, New Zealand and Canada are the best.⁴⁰ In summary, nations' ability to do business with other nations is severely limited. International small business commerce finds that doing business across nations of the world is not as free-flowing as business owners would expect it to be.

These limitations in connecting buyers and sellers currently exist primarily because of the limitations of the e-commerce web-platforms and local logistics. For example, most platforms assume that everyone speaks English. Most buyers prefer to see items in their native tongue and want to transact business under the rules of the country they live in. Moreover, selling items abroad is unlike selling items domestically. While everyone recognizes that trust is important for any commercial transaction, in international small business commerce, trust has a bigger effect on business decisions, given unknown factors such as different currencies, security concerns, various governments of other nations and their policies, international laws, regulatory bodies such as customs, etc. International small business commerce also poses far greater risks and more potential points of failure while conducting business. In addition, payment methods across countries can be limiting. For example, a seller listing in Germany without offering wire transfer puts a barrier in their own way. Amazon Italy, for example, requires you have an Italian bank account. Each country-specific eBay and Amazon site has subtle but important differences in the different geographies.

IV. Current Web Platforms for E-commerce

E-commerce vendors serve as the first and primary online interface between companies and their consumers. Each of the following 10 major e-commerce vendors set unique standards for

³⁸ Based on Fig. 2, global e-commerce is expected to reach \$1.4 Trillion by 2015. We conservatively estimate this amount to remain unchanged in 2016 and 2017, in the absence of any information indicating otherwise. Per footnote 38, twenty-percent (20%) of global e-commerce is international small business commerce. 20% of \$1.4 Trillion is \$280 billion.

³⁹ InerCultural Elements, ChannelAdvisor (2012) "[Retailer's Guide to International Expansion](#)" P 6 Channeradvisor.com Retrieved on February 15, 2013 from http://www.shop.org/c/document_library/get_file?folderId=164&name=DLFE-1013.pdf

⁴⁰ Gray, M., (October 12, 2012) "What eCommerce means for international opportunities" Section "Where is the international eCommerce opportunity?" Dynamic Business Retrieved on February 15, 2013 from <http://www.dynamicbusiness.com.au/export/what-e-commerce-means-for-international-opportunities-12102012.html>
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engaging with their consumer base, driving revenues and sales. Below are ten examples of e-commerce operations existing in mass-market volume to their consumer bases. These are Internet-based platforms that support varying levels of international electronic commerce.

Amazon.com is the world's largest online e-commerce site. In addition to operating online retail, the company also markets and sells consumer products, including the Kindle and other e-reading devices and provides cloud-computing resources. Amazon also serves as an outsourced provider for a growing number of corporate clients with a multi-channel platform, providing customers to seamlessly interact with retail sites via Amazon's multi-stream web service platform.

Ebay is the world's largest online auction site, where anybody, anywhere, and anytime can buy and sell practically anything. Launched in 1995, eBay connects an impassioned community of individual buyers and sellers as well as small business subscribers who partake in its online bargain search and exchange, leading to upwards of \$68 billion in sales in 2011, which equates to \$2,100 'every second'.⁴¹

ProStores is an eBay-owned e-commerce company. Acquired by eBay in 2005, ProStores involves sophisticated e-commerce functioning for both mass-market firms and individual buyers and sellers in a relatively high-tech interface for sales, trade, and exchange. ProStores also engages its merchandisers with an e-commerce portal and platform designed to better target online customers with its adjunct online search and shop functioning. Lastly ProStores provides inventory infrastructure to secure buyer and supplier communication with its online retail tracking support.

Shopster is the world's first social e-commerce network. Shopster is a user-targeted e-commerce setup that provides its users a platform to authenticate and create both an online store and website, from which products may be sourced, inventoried and then sold across multiple online channels. First, Shopster enables its users to create an online 'store' and website. From this website, sourced products are inventoried and then sold through both original and secondary merchandisers, including but not limited to Shopster's own storefront but also vies e-commerce sites including eBay and Amazon.

Vendio is a subscription-based sales-management software program that combines with e-commerce channels such as Amazon, eBay, and Facebook to sell over \$2 billion in merchandise for its more than 100,000 merchandisers.⁴² Its individual licensing and application program interface engages its merchants in combining with multiple channels for the sale of online products and services for no additional cost. Its cloud-based interface provides an entirely customizable platform with centralized inventory management, order processing and tracking, and client communication and marketing tools.

⁴¹ <http://www.ebayinc.com/who>

⁴² [Internet Retailer \(September 18, 2012\) "Vendio Releases Software for SMB E-Commerce Sellers". Vertical Web Media. Retrieved on December 28, 2012 from http://www.internetretailer.com/2012/09/18/vendio-releases-software-smb-e-commerce-sellers](http://www.internetretailer.com/2012/09/18/vendio-releases-software-smb-e-commerce-sellers)

Yahoo Stores provides online shopping services with its individual portals such as Yahoo Autos, Yahoo Jobs, Yahoo Real Estate, Yahoo Shopping, and Yahoo Travel.⁴³ Each of these online 'venues' allows for the trade and exchange of services and items for its online audience, all through a singular portal of Yahoo, Inc., independent of PayPal, i.e., there is no third-party outsourced provider.

Volusion is a comprehensive, user-friendly e-commerce software, providing over 40,000 customers with access to "free e-commerce templates, reliable hosting, effective e-commerce marketing tools" and more, such as a "full suite of customer support offerings, including free [twenty-four hours a day by seven days a week] assistance via phone, email and live chat."^{44,45}

BVCommerce is an additional e-commerce provider for small and large businesses with noted accolades from customers for its "flexibility, ease-of-use, and search engine optimization." Priding itself on "pre-integrated financials, customer self-service and strong e-commerce features," BVCommerce stands along-side competing consumer e-commerce software providers that supply "easily managed" essential nuts and bolts, in addition to more specialist-oriented features in its sales and trade solutions.⁴⁶

Shopify is among the newer contenders of e-commerce that has an impressive online display of sales content and promotions, with a leading slogan of: *make commerce better*. Rather than operating with intermediaries, Shopify claims to streamline "shopping experience" with its technologies designed explicitly to compensate for problems encountered with self-hosted e-commerce solutions such as security updates. Shopify also looks to circumvent unnecessary adjunct parties to focus explicitly on a merchandiser to sales transaction. Shopify creates the application and members focus on "what they do best, buying and selling their products." With tens of thousands of online retailers utilizing its commerce software, Shopify easily stands alongside other contending e-commerce operations with comparable scope and market share of online retailing sales.⁴⁷

Big Commerce is one of the newer e-commerce sites on the web (three years in the making).⁴⁸ Now serving 25,000 stores in 65 countries, Big Commerce aspires to create the "world's fastest growing e-commerce platform."⁴⁹ With an online sales team available to live chat with users at any given time, the layout of Big Commerce poses a formidably positive combination of features and products for online merchandising customers across the globe. Big Commerce "offers shopping cart software, SEO tools, and online payment solutions".^{50,51}

⁴³ Businessweek (2012) "[yahoo! Inc](http://www.businessweek.com)". Section "Yahoo! Inc (YHOO) Details " Bloomberg. Retrieved on December 28, 2012 from <http://investing.businessweek.com/research/stocks/snapshot/snapshot.asp?ticker=YHOO>

⁴⁴ <http://www.volusion.com/>

⁴⁵ <http://www.volusion.com/>

⁴⁶ <http://www.acumatica.com/partners/acumaticapartners/isvpartners/bvcommerceinfo>

⁴⁷ <http://www.shopify.com/about>

⁴⁸ <http://www.bigcommerce.com/about-us>

⁴⁹ <http://www.bigcommerce.com/about-us>

⁵⁰ Techterms.com (n.d.) SEO: "Stands for "Search Engine Optimization." Retrieved on December 28, 2012 from <http://www.techterms.com/definition/seo>

⁵¹ InsideView (n.d.) "BigCommerce Inc.". Insideview, Inc. Retrieved on December 28, 2012 from <http://www.insideview.com/directory/bigcommerce-inc>

V. Future of International E-commerce

The previous listing of a range of e-commerce platforms demonstrates that sellers in 2013 have multiple mechanisms to build and market their e-commerce (and social commerce) presence on the Internet. These diverse platforms are likely to improve in their ease-of-use, feature sets and accessibility to a growing number of small businesses internationally that seek to trade in a global market place. Though these platforms provide the technology infrastructure for engaging in e-commerce, they have yet to address the significant gaps in the logistics for enabling international small business commerce between the scenario of an India-based seller and U.S.-based buyer. Thus, the future of international e-commerce is limited in realizing its full potential until these issues are understood and addressed.

In summary, major businesses such as Amazon and eBay are making headway in supporting international small business commerce with developments such as eBay's recent inclusion of global shipping platform and Amazon's ongoing efforts in rendering content in multiple languages. Despite these developments, a number of other challenges including logistical challenges to enable and support international small business commerce still exist.

CHALLENGES FOR THE GROWTH OF INTERNATIONAL SMALL BUSINESS COMMERCE

I. Gaps in International Small Business Market for the Buyer and Seller

In reviewing the various potential modes in which the seller in India may connect with the buyer in the United States, we recognize that there are many issues and challenges that are consistent and invariant across the modes of connectivity. There are different types of challenges: Those faced by the buyer; those faced by the seller; those inherent to existing e-commerce platforms that were not designed with international small business commerce in mind; and challenges that are common across all three connection scenarios. Challenges workshop participants identified include:

- The total purchase cost of a of an item is unclear, including what is included in the cost (cost of the unit, shipping costs, taxes, duties or customs, etc.), what currency the buyer should pay when purchasing products internationally, and how the currency exchange rate is determined.
- It is not very convenient for the buyer to purchase a product due to difficulties in finding information about the seller and the products, being unclear about the available methods of payment and not having the confidence of knowing if the product has shipped.
- The rules and laws of entering into a transaction in the foreign country and the ownership of governing the transaction are unknown to the buyer. Lack of knowledge on who would assume liability of failures in transaction further contribute to this challenge.

- Without knowing if any certification issued by the foreign country or the United States to the seller exist, inability to ascertain the authenticity of the seller's business is a major challenge to the buyer. In the absence of such certification, seller may want to know if there are intermediaries who would guarantee the successful completion of the transaction.
- Ensuring security of personal and financial information of the buyer is major challenge.
- Customs and other controls of the foreign country and the United States have stringent regulations and successful completion of the transaction through such regulations is a challenge.
- The buyer may need customer support and help with the use of the product and being able to receive such support from an international seller remains a significant challenge.
- Sellers in the foreign country face challenges with their ability to provide information about the business. This becomes a major challenge if the seller speaks a language other than English.
- Sellers also face challenges with their ability to provide detailed product information or a catalog, including product features, cost, quality etc.
- Sellers in many developing countries may be accustomed to face-to-face communication in selling and finding a comparable mode of communication is a significant challenge to the seller.
- A major concern for the sellers would be the assurance that they will get paid for the product they sold and shipped internationally.
- With the potential lack of access to web or hybrid connectivity, sellers may not have the ability to present information about their business and products to international buyers without assistance. In the Postal Service-Enabled connection, the local postal system may have to support the seller by providing training and services in a simplified form to enable the local seller to obtain a web presence. This will be critical to success. Developing web sites or enabling a web presence for the U.S. Postal Service will seem like a deviation from its core business. Hence, it is a challenge for this mode of connection to convince management that the U.S. Postal Service "should" be in such an enablement business.
- Workshop participants concurred that a lack of standardization in the user interface across different e-commerce platforms available to Web-Enabled Connection is perhaps the biggest challenge for the buyer on the other side, confidently engaging a seller, and above all trusting

that seller. This lack of standards affects quality of presentation of the good, the currency exchange, customer service if there are any questions, language and communication issues online, calculation of costs, and security of the e-commerce transaction.

- Though it is reported that 59% of Indian individuals on the Internet will be accessing the Internet not via a computer but via a smartphone, such mobile devices are limited in their applications and security on these devices in the Hybrid-Enabled Connection.⁵²
- When working across countries, e-commerce platforms have yet to establish a robust solution for resolve the issue of converting currencies.
- E-commerce platforms have yet to find a solution to the issue of buyers and sellers speaking language other than English.
- The issue of being able to present the 'fully landed' cost to the buyer is only partially resolved with the use of Flat Rate boxes, which helps to have a pre-determined fixed cost for shipping. (Fully landed cost is the total cost payable by the buyer which includes cost of the product, taxes, shipping, packaging, handling, customs and any other regulatory fees etc.)
- Uncertainty of shipping and delivery times of products sold from countries outside the U.S. still remains unresolved for e-commerce platforms.
- Providing an easy process to return a purchased product remains open issue for e-commerce platform.
- E-commerce platforms have yet to resolve the issue of providing support and help to the buyer when conducting a transaction with an international seller.
- E-commerce platforms have only partially resolved the issue of liability arising from wrongly handled transactions by implementing certain types of insurance coverage.
- E-commerce platforms have yet to resolve the issue of determining if the transaction conducted is considered legal trade by the countries involved in the transaction.

⁵² Nottebohm, O., Manyika, J., Bughin, J., Chui, M., Syed, A-R., (January 2012) "[Online and upcoming: The Internet's impact on aspiring countries](http://www.mckinsey.com/~/media/McKinsey/Client%20Service/High%20Tech/Flat%20thinking%20-%20media%20FFEC3D6DFEAE4AE0887F2CC987E7F2F0.ashx&ei=oyPeULioCNCt0AHH3oDwAw&usg=AFQjCNESTlev_g8W3-pPtHEwkyfAX1fm-Q&bvm=bv.135534169.d.dmQ)". McKinsey & Company. Page 5. Retrieved on December 2012 from http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CDEQFjAA&url=http%3A%2F%2Fwww.mckinsey.com%2Fclient%2Fservice%2Fhigh%2Ftech%2Flatest%2Fthinking%2F-%2Fmedia%2FFEC3D6DFEAE4AE0887F2CC987E7F2F0.ashx&ei=oyPeULioCNCt0AHH3oDwAw&usg=AFQjCNESTlev_g8W3-pPtHEwkyfAX1fm-Q&bvm=bv.135534169.d.dmQ

- E-commerce platforms are still exploring methods to make it more convenient for the buyer to contact the seller.
- With respect to the reputation of a seller, e-commerce platforms rely on the 'star-rating' assigned by other buyers who have used the platform in the past to purchase from the buyer; there is no independent method of verifying the reliability of the seller.
- E-commerce platforms ensure security of personal information and payment information by utilizing highly secured infrastructure including secure payment gateways.
- E-commerce platforms help the seller with product marketing by providing the ability to present all the information in their web site with an easy-to-find search feature.

POTENTIAL OPPORTUNITIES FOR THE U.S. POSTAL SERVICE

I. List of Potential Opportunities

During the workshop discussions, USPS-OIG personnel and postal experts identified fifteen (15) unique potential opportunities for the Postal Service in the international small business commerce arena. These opportunities include:

1. Seller Reputation Score Management - Offering a service to provide reputation score of the sellers. For example, websites such as Trip Advisor provide ranking of hotels based on surveys conducted by Trip Advisor among the hotel guests, which in turn computes a customer satisfaction index to decide the ranks assigned to each hotel.
2. International Package Movement Coordination Service - The Postal Service could set up an international consolidation facility to establish a presence in foreign countries. Through such a consolidation facility, the Postal Service could assist sellers in other countries in completing an e-commerce transaction, including coordinating activities to make shipments move faster through regulations.
3. Micro Warehousing Service - Using the Postal Service's available large physical spaces to offer 'micro warehousing' for small businesses. Such micro warehousing can make fulfillment faster. In this context, micro warehousing is defined as the ability to store relatively smaller quantities of goods, in secured space that is shared by multiple businesses.
4. Promotional and Shipping Material Distribution Service - The Postal Service could domestically distribute promotional and shipping material about international e-commerce websites and the products available on those sites.
5. Customs Clearance Service - Assisting sellers in completing the customs clearance process. Utilizing the stringent oversight within the U.S. Postal Service, pre-determined sellers could be assisted in moving their shipments of pre-approved products through customs faster.

6. International COD Service – Expanding its ‘cash on delivery’ service to include international transactions. The Postal Service currently provides such a service in domestic market where the buyer pays for the goods only when it is delivered. If the buyer does not make payment at the time of delivery, the good is returned to the seller.
7. Regulatory Compliance Management Service - Leveraging its existing authority to provide a service that ensures compliance with proper trading practices. The Postal Service could offer this service consistent with its current legal oversight authority, such as regulating mails and enforcing laws that prevent abuses of the postal system. This service could include sending alerts or notifications to buyers and sellers, assistance to meet government guidelines and regulations, verification of the product as legal trade and assurance of good condition of the product being shipped.
8. Customer Service Call Center Service - Expanding the Postal Service’s customer service to provide additional services to small businesses. The service could include simple offering such as (a) building frequently asked questions and answers, (b) email-based customer service, (c) chat-based customer support, and (d) live phone support. This service can be made more attractive by providing language-specific support to specific communities.
9. Enhanced Insurance Coverage Service - Enhancing current insurance coverage to provide more options to the buyer and seller.
10. Single Click Shipping Service - Enhancing the user experience of mailing and shipping by providing ‘one-click ship’. This service could store the sender’s information including his/her address, maintain an address book for the sender, and enable the sender to mail or ship items with ease.
11. Trading Partner Authentication Database - Providing a service to authenticate both trading partners – the buyer and the seller – to verify whether the trading partner is trustworthy and credible. This may be achieved with the creation of a database, which takes the name, and address of an entity to provide the authenticity of the entity.
12. Shipment Track & Trace System - Providing the ability to track and trace shipments with greater accuracy and in real time.
13. Enhanced Product Return Service - Enhancing the product return service to make it easier for the buyer, and integrating the seller’s disposition requirements.
14. Software Calculator for Fully Landed Cost – Developing a tool, using much of its existing intellectual property, to help buyers and sellers calculate the ‘fully landed’ cost of a shipment. This tool would, taking into consideration the seller’s location, buyer’s location, type of product being shipped and other relevant information, provide the total cost of transaction in the local currency. The calculator could be enhanced to include insurance fee as a premium service.
15. Simplified Shipping Options at Reasonable Prices – Offering simplified shipping options at reasonable prices to customers. The Postal Service has a rich history of creating such shipping options. For example, the Postal Service could provide flat rate packages and volume

discounts to the seller in India, so that the seller could assure pricing and package size to the buyer.

ANALYSIS OF POTENTIAL OPPORTUNITIES

The industry experts, USPS-OIG personnel, and USPS consultants participating in the workshop evaluated the feasibility of the fifteen (15) opportunities identified in the previous section, relative to the Postal Service's strengths and weaknesses. Workshop participants based their assessment of the feasibility of these opportunities on whether:

- (a) The opportunity is within the current regulatory framework under which the Postal Service is functioning;
- (b) The activities are allowable under the current domestic and international laws;
- (c) Services the Postal Service currently provides would easily fulfill some of the identified opportunities;
- (d) The opportunities exist in markets that are currently under-served; and
- (e) The opportunity is within the core competency of the Postal Service.

I. Categorization of Selected Opportunities by Strength and Weakness

Workshop participants ranked potential opportunities based on feasibility and identified likely strengths and weaknesses associated with the seven opportunities identified as the most feasible.

Opportunity: Simplified Shipping Options at Reasonable Prices

Strengths:

- The Postal Service has an existing successful business model and product line in this area.
- The Postal Service has developed a knowledge base in the implementation of this product line and customers seem to have accepted it enthusiastically.
- There is significant scope for the Postal Service to standardize and further grow this area.
- Products have been found to be particularly applicable to micro businesses.
- The product line offers convenience to customers and efficiency to the Postal Service since the shipping boxes in this product line are pre-paid.

Weaknesses:

- The current business model involves complicated pricing structure based on various dimensions and this hinders easy use by the customers.
- Competitors provide simpler and standardized options.
- When shipping internationally using pre-paid shipping boxes, fluctuations in currency rate can potentially cause significant losses to the Postal Service.
- There is likelihood for consumers to carry away pre-paid standard rate boxes without paying for it.

Opportunity: Software Calculator for Fully Landed Cost

Strengths:

- Postal Service customers are highly likely to appreciate the convenience in a software calculator that calculates fully landed cost of a shipment, possibly available in the Postal Service website or terminal at the post office.
- The customer is likely to appreciate the transparency in calculation of shipping costs, available through this opportunity.
- The calculated would be viewed and convenient shipping tool by small businesses.
- The Postal Service will be able to significantly leverage existing intellectual property to implement this opportunity.

Weaknesses:

- Calculations could prove to be restrictive, when information from disparate sources, a variety of departments from different countries, arrive in different formats, or even may be missing in certain cases.

Opportunity: Trading Partner Authentication Database

Strengths:

- The Postal Service currently provides a service for address verification and this service can be leveraged to develop this opportunity.
- This opportunity could become part of a growing movement to prevent fraudulent transactions and hence would be widely accepted by the customers.
- This opportunity will have to be implemented as a service that requires permission of the party to be included in the database and willingness of a business to join the database would be a significant marketing opportunity for the business.

Weaknesses:

- This opportunity may possibly be scrutinized to determine if the Postal Service holds relevant authority to collect information and use it to authenticate a business, as it affects the reputation of the business. Thus, this opportunity requires legal or regulatory approval prior to considering for implementation.
- When dealing with international businesses, non-availability and non-standard implementation of physical address could contribute a significant challenge.
- The local postal system of foreign countries will have to be trusted to provide certain information and the possibility of fraudulent and corrupted information can further contribute to the challenge.

Opportunity: Shipment Track & Trace System

Strengths:

- Shipment tracking is a service currently provided by the Postal Service and thus has infrastructure and processes in place. However, this service can be enhanced significantly, as competitors and local postal systems of some foreign countries provide more advanced features under this service.

Weaknesses:

- Implementing this service will require exchange of information across multiple systems around the world.
- Standardization of protocols across this massive number of systems subjects this opportunity to formidable challenge, especially since the Postal Service has limited control over it.
- Physical address of an entity is not a universal system and significantly varies from one system to another and one country to another.
- It was noted that one of the competitors (Federal Express), utilizes a much advanced technology and its worldwide infrastructure to offer improved tracking capability, and implementing such technology within the Postal Service arise as a considerable challenge.
- It is possible to offer this service as a premium service for customers who are willing to spend higher fees for it.

Opportunity: Enhanced Product Return Service

Strengths:

- One of the unique strengths of this opportunity is that this is an unmet need in the market that is equally valuable for buyers and sellers.
- While this service may not appear to be directly connected to the business of the Postal Service, it is an ancillary service that the Postal Service has been providing in a limited manner.
- Enhancing the current service to include wider customer base with additional flexibility could make this service a significant opportunity for the Postal Service.
- The ability to make faster replacements is one of the primary advantages this service would offer to buyers and sellers.

Weaknesses:

- This service is not a direct product of the Postal Service.
- The Postal Service may have to overcome regulatory hurdles to offer enhanced product return service.

Opportunity: Single Click Shipping Service

Strengths:

- This is a service that is likely to be accepted by the sellers widely for its ease of use.
- The Postal Service is currently providing "click and ship" service and experience learned from current service could make implementation of this service easier.

- This service has potential to be a significant business generator for the Postal Service.

Weaknesses:

- The 'Single Click Shipping' option envisioned herein may require access to the sender's address book, payment and other personal information which the Postal Service does not currently access.
- Access to such information will require policy and legal changes to implement privacy protection and security guidelines. Similar services are already provided by competitors, and implementation may require working with other partners to offer flexibility to the customer including standardized rates.
- Since this service may consider pre-payment of shipping costs, currency rate fluctuations could make this opportunity less attractive as a revenue generator.

Opportunity: Enhanced Insurance Coverage Service

Strengths:

- The Postal Service currently offers insurance in a limited manner and enhancing the current service to include additional options and flexibility could be relatively easier to implement.
- This is a service that has already been proven to be highly profitable.
- The service builds trust, as the customer experience peace of mind with their shipping needs, and hence a strong opportunity that is worth exploring.

Weaknesses:

- Fraudulent claims are a significant weakness of this service.
- This service may require elaborate customer service management to handle claims.
- Assessing and approving claims is considered a significantly difficult process.

METHODS TO EXPLORE POTENTIAL OPPORTUNITIES

In the previous section, we identified a set of potential opportunities the Postal Service may want to explore. To support further exploration of these potential opportunities, we propose that for three (3) of these potential opportunities the Postal Service consider three (3) associated and tangible research experiments that may help it assess their viability. Each research experiment has a hypothesis and a method for research. From a purely qualitative assessment, these three (3) opportunities are proposed for further exploration.

I. Research Experiment 1 – Simplified Shipping at Reasonable Prices

The Hypothesis

The Postal Service could enable accelerated, more trusted international small business commerce by providing simplified shipping at reasonable prices, e.g. flat rate per package and volume discounts.

The Method

Step 1: Select a small business seller in a developing nation in a village, such as India.

Step 2: Based on its experience, the Postal Service designs a finite number of simplified shipping package-sizes at reasonable prices.

Step 3: The Postal Service manufactures these shipping packages in a limited quantity for use by sellers in India.

Step 4: The Postal Service provides guidelines on pricing for shipping such package, which the seller uses to pre-determine prices that are published on the seller's e-commerce web presence.

II. Research Experiment 2 – Fully Loaded Cost Calculator Shipping and Reasonable Prices

The Hypothesis

The Postal Service can leverage its existing intellectual property to create a technology for simplifying the transaction variables, input and output, to accelerate the deployment of international small business commerce by creating a simple cost calculator for fully landed cost.

Method

Step 1: The Postal Service identifies all of the inputs and outputs to the calculator.

Step 2: The Postal Service writes a software requirement specification based on inputs and outputs to the calculator.

Step 3: The Postal Service utilizes its internal resources or contracts with a software development vendor to create calculation software as a standalone tool as well as an open architecture API (application programming interface)^{53,54} to be made available for other applications to interact and use.

Step 4: The Postal Service deploys the calculator on existing e-commerce sites and evaluates feedback.

III. Research Experiment 3 – Authentication of Trading Partners

The Hypothesis

The Postal Service can authenticate trading partners, buyers and sellers, to avoid fraud to support the growth of international small business commerce.

Method

Step 1: The Postal Service reviews its current method for authenticating business entities.

Step 2: The Postal Service documents its existing methodology ("the Authentication Methodology").

⁵³ [Oxford Dictionaries](#) (n.d.) "a set of functions and procedures that allow the creation of applications which access the features or data of an operating system, application, or other service" Retrieved on December 27, 2012 from <http://oxforddictionaries.com/definition/english/API>

⁵⁴ [Your Dictionary](#) (n.d.) "A set of routines by which an application program allows another application program to work directly with it. See also [application](#), [program](#), and [routine](#)" Retrieved on December 27, 2012 from <http://computer.yourdictionary.com/api>

Step 3: The Postal Service itemizes the gaps (“the Gaps”), if any, within its existing methodology for authenticating small businesses engaged in international e-commerce.

Step 4: The Postal Service identifies what needs to be implemented to improve on the Authentication Methodology to bridge the Gaps.

Step 5: The Postal Service creates a specification document, (“The International Small Business Commerce Authentication Methodology”) from the results of Step 4.

Step 6: The Postal Service implements the approach of The International Small Business Commerce Authentication Methodology within a prototype e-commerce test scenario specifically designed for international small business commerce e.g. U.S. buyer wishing to buy from an India-based seller (“the Test Environment”).

Step 7: The Postal Service sets metrics for success in the Test Environment.

Step 8: The Postal Service tests The International Small Business Commerce Authentication Methodology, and evaluates the success metrics.

CONCLUSIONS

I. Recommendations

In this sub-section, we provide recommendations on how the Postal Service could further explore international small business commerce. The report has thus far provided a definition of international small business commerce, the varying levels of connectivity, along with the context within e-commerce and social commerce where international small business commerce fits. Clearly, there are some unique peculiarities and challenges in enabling international small business commerce, in spite of the existing web-based e-commerce platforms. These challenges inform us of “gaps” in services which the U.S. Postal Service could potentially fulfill and serve, that could likely generate newer sources of revenue.

Based on this initial analysis, we recommend that the Postal Service further explore the following seven (7) areas to provide services:

- Simplified Shipping Options at Reasonable Prices
- Software Calculator for Fully Landed Cost
- Trading Partner Authentication Database
- Shipment Track & Trace System
- Enhanced Product Return Service
- Single Click Shipping Service
- Enhanced Insurance Coverage Service

These services may yield the best match for the Postal Service to fit its unique capabilities to gaps in international small business commerce services.

II. Next Steps

The next steps for the Postal Service may be to explore a few of the above service opportunities by deploying some concrete research programs aimed at creating “prototypes” as summarized in Research Experiments 1, 2 and 3, above. Such an exercise would provide the Postal Service tangible results in evaluating the viability of such opportunities.