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International Center for Integrative Systems  
A Workshop Series for United States Postal Service –  
Office of Inspector General (USPS-OIG)

An Executive Summary Report from ICIS USPS-OIG Workshop

# **Connecting Buyers and Sellers for International Small Business Commerce**

By

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International Center for Integrative Systems (ICIS)

For

**USPS-OIG Innovations Team**

Date of Workshop

**September 26, 2012**

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## I. ABSTRACT

Definition of social connection has dramatically changed in this decade. Such changes are presenting their effects in consumer transactions. Today's consumers are transcending space, time and language to purchase what they need. Buyers and sellers across the world want to connect in a "globally local" marketplace to provide and procure materials. Platforms such as online communities and commerce portals are making it increasingly possible for people in the world to transact business. However, *international small business commerce* ("ISBC") is severely limited in spite of such platforms. There are a number of formidable challenges and limited options for such buyers and sellers to connect seamlessly, be it across different countries or even within the same country. The United States Postal Service (USPS) may be uniquely positioned to provide solutions to overcome a number of these challenges, given its wide reach, its trusted brand and its proven infrastructure. The USPS has potentially many opportunities for connecting buyers and sellers within the ISBC market. In preparation for exploring such opportunities ICIS conducted a workshop for the USPS-OIG. This workshop revealed that in order to explore the ISBC opportunity the USPS would need to: (1) Understand the target market of international buyers and sellers; (2) Identify the systems and components of the entire workflow including the communication, financial, legal, transportation and cultural aspects; (3) Identify benefits to buyers and sellers as well as the USPS itself; (4) Identify and classify the optimal revenue opportunities; and (5) Outline the potential strengths and weaknesses of these opportunities. This executive summary report documents the notes from the workshop facilitated by ICIS for the USPS-OIG on September 26, 2012. This report, by no means, is an extensive research report on the ISBC opportunity.

## II. BACKGROUND

### Purpose of this Document

On July 26, 2012, the International Center for Integrative Systems (ICIS) was awarded a contract to perform a series of workshops for the United States Postal Service – Office of Inspector General (USPS-OIG) on a range of topics based on the core research and educational efforts of ICIS. Each workshop is designed to support USPS-OIG mission and goals in research and education. The workshops involve presentations as well as discussions. This document is an Executive Summary report summarizing the workshop on the topic "Connecting Buyers and Sellers" along with relevant and supporting documentation.

### Motivation for Workshop

The purpose of the Connecting Buyers and Sellers Workshop conducted by ICIS on September 26<sup>th</sup>, 2012 was to introduce the USPSOIG Innovations team to explore how the United States Postal Service ("Postal Service") could potentially establish itself as a major contributor in the "globally local" marketplace. Reviewing the current trends in connecting buyers and sellers through web-enabled methods, also called social commerce, and exploring opportunities in connections facilitated by USPS, leading to analyzing the relevant common themes, would offer a framework for USPS to develop potential areas of further research in determining its role in this evolving opportunity.

**Workshop Agenda**

8:45 – 9:00 am	Introduction of participants	
9:00 – 10:00 am	Connecting Buyers and Sellers Overview: Trends, Opportunities and Three Scenarios	VA Shiva
10:00 – 11:30 am	Web-Enabled Connections	VA Shiva
11:30 – 11:45 am	Break	
11:45 am – 1:00 pm	Postal Service Facilitated Connections	VA Shiva
1:00 – 2:00 pm	Lunch	
2:00 – 3:00 pm	Leadership in the Social Economy	Thomas Zawacki
3:00 – 3:30 pm	Hybrid Connections	VA Shiva
3:30 – 3:45 pm	Break	
3:45 – 4:30	Analysis of Opportunities	All participants
4:30 – 5:00	Summary	

**Workshop Attendees**USPS-OIG

Mohammad Adra (USPS-OIG, RARC, Assistant Inspector General)  
 Darrell E. Benjamin (USPS-OIG, Revenue and Innovations, Deputy Assistant Inspector General)  
 Shirian Holland (USPS-OIG, Innovations Team, Audit Manager)  
 Laraine Hope (USPS-OIG, RARC, Economist - Specialist)  
 Bruce Marsh (USPS-OIG, RARC, Economist - Manager)  
 Lisa Nieman (USPS-OIG, Innovations Team, Director)  
 Janice Pegram-Lewis (USPS-OIG, Innovations Team, Audit Manager)  
 Tammy Whitcomb (USPS-OIG, Deputy Inspector General)  
 David C. Williams (USPS-OIG – Inspector General)

ICIS

Sonu Abraham (ICIS)  
 VA Shiva Ayyadurai, Ph.D. (ICIS)  
 Thomas Zawacki (ICIS)

Special Guests

Maynard H. Benjamin (President, Envelope Manufacturers Association)  
 Caitlin Brosseau (USPS-OIG Special Guest)  
 Chuck Chamberlain (USPS Advocate, Northrop Grumman IS & Frmr USPS Manager, Bus. Dev.)

### III. PROCEEDINGS OF WORKSHOP

#### A. Connecting Buyers and Sellers Overview: Trends, Opportunities and Three Scenarios

##### Presenter

VA Shiva Ayyadurai of ICIS

##### Summary of Presentation

The presentation began with a review of Internet and web-based social connections starting from the early days of online communities up to today's social media platforms. Keeping the backdrop of social media and proliferation of e-commerce today, this workshop aimed to:

- Understand the target market of small business buyers and sellers
- Identify the various components of a commerce system, including:
  - Communication channels
  - Classification of buyers and sellers
  - Payment methods
  - Legal and regulatory requirements
  - Transportation and logistics management

The world is connected today via Internet and mobile communication technology. Access to information is available practically everywhere and worldwide usage of computer-based and mobile-based Internet is increasing at a fast pace, even though rate of adoption of technologies differ by economy (developed versus developing countries), regions (Europe, Asia, USA etc.) and age group (under 25, over 25 years etc.). Consumers all over the world are progressively moving to online retail transactions. According to a study conducted by IMRG, a UK-based e-retail trade group, some of the trends are:

- Global e-commerce sales expect 30% increase from 2011 to 2013.
- Internet users are likely to increase nearly 60% from 2011 to 2013.
- E-commerce market in the United States, United Kingdom and Japan are growing at 10-15% per year.
- China's e-commerce market grew 130% in 2011 and likely become the single largest market in the world over time.
- As a region, Europe is the largest e-commerce market with 19% growth in 2011.
- France, Italy, Spain, Russia, Turkey and Poland are becoming the fastest-growing markets in Europe.
- Substantial growth is expected in Latin America with Brazil and Mexico in the lead.
- Substantial growth is also expected in the Middle East, led by Israel and UAE.

Other trends seen in Internet based commerce are:

- Indian market is projecting e-commerce to grow 47% from 2011 to 2012.
- While 80% of the e-commerce in India in 2011 was from online travel business, other segments such as electronic retail and financial services captured nearly 6.5% of the e-commerce market.

There are three scenarios that need to be considered when reviewing trends and exploring available opportunities involving small businesses. In the first scenario, today's web-enabled

connections between buyers and sellers should be understood, where the transaction is primarily occurring over the Internet. Examples of web-enabled connections are those provided by Amazon, eBay, Facebook, Twitter, PayPal, Pinterest, Flickr, LinkedIn and various other web sites.

The second scenario explores how Postal Service is currently involved in commercial transactions and what opportunities lie ahead for Postal Service to get more involved in the transactions. Current Postal Service enabled connections include aspects such as handling of packages, use of land and mobile phone, use of print and paper media where local post office is gateway for buyers and sellers, but is marked by lack of direct Internet based commerce.

The third scenario explores how Postal Service can potentially offer services in a 'hybrid' approach to enhance Internet-based commerce where Postal Service gets more extensively involved in various stages of the transaction, making the activity easier for the buyer and the seller. In this scenario, smart-phones are likely to be used extensively with web-based software applications and other downloads taking place on hand-held devices and Internet fading into the background essential as a utility service, similar to electric power.

### Summary of Discussion

Innovative approaches that take advantage of the changing trends in commerce is opening potential opportunities for USPS. USPS may be able to offer services in a number of areas identified as the components of the commerce system. Other potential components active in the global commerce system are:

- Impact of language and culture in the global market
- Ensuring security of transactions and the entities
- Verification of identity and authenticity of entities
- Micro financing & banking to help customers with the purchase
- Provision of help, support and user training to customers
- Tools to easily calculate 'net cost' including currency conversion in global transactions
- Handling of regulatory requirements such as customs clearance in global transactions
- Provision of insurance coverage for the materials in transit
- Tools to verify authenticity and completion of transactions
- Services such as Escrow to ensure proper conclusion of transactions
- Handling of materials that are returned by customers
- Tracking and tracing of packages in transit

Detailed analysis of the three scenarios and the components of the commerce system will reveal specific areas where USPS may be able to potentially offer services and generate revenue. Finding the reasons behind rapid and significant growth of Internet in developing countries is likely to help with developing solutions at the Postal Service that grows with the demand.

### Key Takeaways

The reach of Internet access is growing at a very fast pace, especially with the growth of 'smart' mobile devices being used as Internet access points. E-commerce and Internet retail are growing, along with the expansion of Internet access, and the growth is seen worldwide with

the United States in the lead today. Global Commerce in retail business will increase and consumers will expect easy-to-use solutions, even when transacting across countries. The Postal Service has an opportunity to be a key player in this area – by offering alternative solutions for today’s complex business processes, adding trustworthiness to commercial transactions in small business and using its household-level reach accessible to small businesses.

### Supplementary Material to Presentation

## **APPENDIX I – Powerpoint Presentation Connecting Buyers and Sellers by VA Shiva Ayyadurai**

### **B. Web-Enabled Connections**

#### Presenter

VA Shiva Ayyadurai of ICIS with contributions from Special Guests

#### Summary of Presentation

In the web-enabled connection scenario, buyers and sellers across globe transact business with each other as though both parties are local. Geographical distance is not considered as a limiting factor in this mode of connection. Activities from the seller to the buyer may involve multiple operatives such as Amazon, eBay, e-commerce sites, GoDaddy, shopping carts, web sites, Wordpress, Twitter, FaceBook, email marketing, Google AdSense and the local post office. For example, the seller may have a web site providing information about his/her business organization and may sell their products using Internet-based consumer-to-consumer shopping sites such as Amazon and eBay. Seller may use social media, Google and email for marketing the products. When a product is sold, the seller may use local post office to ship the product. Activities from the buyer’s end involve the use of web-based services for payment, which includes PayPal, Visa, Mastercard, or the electronic clearing of checks. An example of such a web-enabled connection transacting business across the globe is maker of handicrafts in a developing nation selling his/her products to a US-based small business distributor.

Consumer-to-consumer online marketplace providers such as Craigslist, Amazon and eBay are in the forefront of providing infrastructure and facilities for conducting web-enabled business transactions. Some of the problems and issues identified in the ensuing discussion are either resolved or addressed otherwise by consumer-to-consumer online marketplace providers.

#### Summary of Discussion

An example is discussed to analyze all aspects of web-enabled connection, in detail. The example also explores how Postal Service could immerse in web-enabled connection and thereby identify potential opportunities. The discussion on the example helps in learning how established consumer-to-consumer online marketplace providers handle various issues.

In the example that was discussed, a person visits Peru for vacation. He/she buys souvenirs during the visit and returns to his/her home in the United States. After returning to his/her home, the person then decides to buy other items they saw in a handicraft maker’s shop in Peru. Can the buyer easily transact business in this scenario? What are the issues the buyer

would face in this transaction? What are the issues the seller would face? What ways can the Postal Service potentially help to make the transaction easier for the buyer and seller? These questions were discussed in detail.

Issues faced by the buyer in the United States include:

- What are the various components of the cost of purchase, which includes cost of the unit, shipping costs, taxes, any duties or customs, etc.
  - What currency should the buyer pay when purchasing the products?
  - How is currency exchange rate determined?
- How convenient it is to conduct business?
  - How does the buyer find information about the seller and the products
  - How would the buyer pay for the product
  - How does the buyer know if the product is shipped
- What are the rules of transacting with the country and who governs the transaction
  - If the transaction does not take place correctly, who assumes liability
- Is there a way to verify or ascertain the authenticity of the seller's business
  - Are there any business certification provided by Peru or the US for the seller
  - Are there any intermediaries who could guarantee the successful completion of the transaction
- What measures are available to ensure security
  - Security of personal information of the buyer
  - Security of the financial information of the buyer
- How does the transaction successfully complete through the customs and other controls of both countries
- If the buyer has questions about the use of the product, how does he/she receive help and support

Issues faced by the seller include:

- How does the seller in Peru provide information about his/her business to buyers in the US
  - In what language would the seller Peru provide information to the buyer in US
- How does the seller market the products to the sellers in US - how does he/she disseminate information about product features, cost, quality etc. to buyers
- How can the buyer establish communication that is closer to the face-to-face communication he usually employs locally in Peru
- How does the seller ensure he/she receives payment on the product that is sold

The discussion revealed that consumer-to-consumer online marketplace providers ("E-Shopping Sites") have already resolved some of the listed issues, while certain other issues still remain unresolved.

- When working across countries, E-Shopping Sites have established a solution for resolve the issue of converting currencies.
- E-Shopping Sites are yet to find a solution to the issue of sellers speaking language other than English

- The issue of being able to present ‘fully landed’ cost to the buyer is resolved partially. (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 US still remains unresolved for E-Shopping Sites
- Providing an easy process to return a purchased product remains open issue for E-Shopping Sites
- E-Shopping Sites are yet to resolve the issue of providing support and help to the buyer when conducting transaction with an international seller
- E-Shopping Sites have only partially resolved the issue of liability wrongly handled transactions by implementing certain type of insurance coverage
- E-Shopping Sites are yet to resolve the issue of determining if the transaction conducted is considered legal trade by the countries involved in the transaction
- E-Shopping Sites are still exploring methods to make it more convenient for the buyer to contact the seller
- With respect to reputation of a seller, E-Shopping Sites rely on the ‘star-rating’ assigned by other buyers who have used the platform in the past to purchase from the buyer.
- E-Shopping Sites ensure security of personal information and payment information by utilizing highly secured infrastructure including secure payment gateways
- E-Shopping Sites help the Seller with product marketing by providing the ability to present all the information in their web site with easy to find search feature.

### Key Takeaways

There are a number of key players in the scenario of web-enabled connections. E-Shopping Sites are the most involved players in this scenario. The Postal Service is involved in web-enabled connections in the areas of international and national shipping, last-mile delivery, returns handling, shipment insurance etc. The Postal Service may be able to expand its services to other areas including micro warehousing, improved tracking and tracing of packages in shipment and customer service support to generate more revenue.

### Supplementary Material to Presentation

#### **APPENDIX I – Powerpoint Presentation Connecting Buyers and Sellers by VA Shiva Ayyadurai**

### **C. Postal Service-Enabled Connections**

#### Facilitator

VA Shiva Ayyadurai of ICIS

#### Summary of Presentation

In the scenario exploring Postal Service-enabled connection, buyers and sellers transact business in a manner quite different from the web-enabled connection. In this model, which has existed for many years, buyers are aware of the geographical distance from the sellers and aspects of shipping such as cost, time and packaging are considered important factors in

purchase decisions. Activities from the seller to the buyer may involve fewer operatives such as local post office and local bank. The seller may typically use paper-based informational brochures and printed catalogues sent via postal mail to provide information about their business and market their products. When a product is sold, the seller may use local post office to ship the product. Activities from the buyer's end may primarily involve making the payment via wire transfer at the local bank, mailing checks or using credit cards. The example considered for discussion of Postal Service-enabled connection is a Peru-based seller offering scarves to buyers in the United States.

### Summary of Discussion

The discussion explored some of the additional services that Postal Service could potentially provide to the seller. Some of the possible services are:

- Provide ability to track and trace package
- Manage cross-border issues relative to customs
- Fulfillment services including appropriate packaging, wrapping and shipping
- Provide 'micro' warehouses to store popular products, locally near the place of sale
- Handle return of packages returned by the buyer. This is a service that Postal Service currently provides, but can potentially be extended to more businesses.
- Payment gateway integrated with the shipping of the product
- Provide insurance for the product that is in shipment. This is a service that Postal Service currently provides.
- The Postal Service may offer to 'own the transaction' taking responsibility for all the aspects of shipping, especially when shipping internationally, from the point of accepting the product, across customs and up to the point of delivery.
- Provide customer service on behalf of the buyer to answer questions of the seller
- Provide a tool that calculates the 'fully-landed' price, which is the price that includes the cost of the product, shipping, taxes, customs fees etc.
- Provide Indemnification service that handles all legal aspects of the transaction
- As a trustworthy brand holding certain authority, the Postal Service may be able to mediate disputes between buyers and sellers
- Provide Escrow services to ensure prompt payment to the seller

### Key Takeaways

The following opportunities utilizing its existing and emerging infrastructure are available to the Postal Service to explore as potential opportunities to generate revenue.

- Reliable tracking of international packages in shipment
- Tracing the exact location of a package, in certain emerging markets
- Product return service including disposition. Disposition may include destruction of certain merchandise (potentially less expensive) and warehousing certain merchandise for remarketing.
- Micro warehousing of products that are highly popular in certain regions
- Providing simplified fees to make cost structure easier to manage by the buyer

### Supplementary Material to Presentation

#### **APPENDIX I – Powerpoint Presentation Connecting Buyers and Sellers by VA Shiva Ayyadurai**

## **D. Leadership in the Social Economy**

### Presenter

Thomas Zawacki of ICIS

### Summary of Presentation

Thomas Zawacki founded lemonade.com as way for any person to build their own e-commerce business and use social media platforms to market their products. The presentation began with review of the trends in social commerce. The Internet began actively influencing various societal aspects in 1995. Forrester Research has identified five eras from 1995 to 2014 that influenced the society by the growth of Internet. The fifth of the eras, Social Commerce began in 2011. This is marked by major brands and retailers utilizing social media as a channel for commerce. To a certain extent, social commerce relies on the paradigm that recommendation made by a trusted friend is likely to influence a person's online purchase decision. Statistics show that purchase decisions are likely to be influenced by trusted friends nearly 90% of the time. Over the last six years, spending in social channels by Marketing has increased nearly twelve times and is expected to show the largest increase over the next three years. \$2.75 billion was invested in social commerce in the last six months of 2011. The areas in which social commerce are growing include 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 ecommerce and content (e.g. Payvment). In the United States, online retail sales are projected to grow to \$250 Billion by 2014 and social commerce is projected to be at \$14 Billion by 2015.

Lomonade.com offers the opportunity for small business owners to build social commerce by themselves. The platform provides the ability to set up web site that enhances social user-experience and carry virtual inventory. The platform also provides assistance in activating 'fans' across all the major social media applications such as Twitter and Facebook and uses Internet-based socially prominent payment gateways such as Paypal for transaction. The platform leverages mobile apps provided by Facebook and Twitter for expanding the reach. Lemonade.com provides a dashboard for the small business owner to view reports and activity logs. An example of social commerce business built based on lemonade.com is "Taylor Town", a social site that sells Taylor Swift fan merchandise.

### Summary of Discussion

Social Commerce is a relatively new area and the Postal Service need to actively evaluate if they can utilize this concept to expand business and generate revenue.

### Key Takeaways

The Postal Service can potentially involve in social commerce in a number of ways. As a commerce enabler, the Postal Service can offer Social Commerce platform to small businesses and work-at-home individuals to set up and support their business. As a data provider, the Postal Service can provide information about popular brands and products and syndicate audience data. The Postal Service can potentially offer various value added services such as discount digital mall and deal-of-the-day provider. Involving in social commerce could

potentially help the Postal Service as a global leader in e-commerce, enabling developing communities and leveraging international postal relationships.

### Supplementary Material to Presentation

#### **APPENDIX II - Powerpoint presentation Leadership in Social Economy by Thomas Zawacki**

#### **E. Hybrid-Enabled Connections**

##### Presenter

VA Shiva Ayyadurai of ICIS

##### Summary of Presentation

Hybrid-enabled connection envisions integrating today's web-enabled connection with services that Postal Service has been providing to businesses. In this scenario, modern-day tools such as downloadable apps and catalogs viewable on mobile devices could potentially be integrated with services provided by the Postal Service. The buyer could market their products through mobile compatible web sites, which the Postal Service may choose to provide as a special service. The seller could transact business using mobile and Internet technology. The Postal Service could possibly provide all the aspects of fulfillment of the transaction. The seller may continue to use Internet-based applications payment services including Paypal, credit cards and local post office and banks for other modes of payment.

##### Summary of Discussion

Many of the issues and concerns discussed under web-enabled connections are applicable to Hybrid-enabled connection also. The potential opportunities, a number of them being enhancements to services currently offered by the Postal Service, are listed below.

- Tool for calculating 'fully landed' cost, which includes cost of the material, shipping cost, taxes and regulatory fees such as customs fee.
  - The local post office could provide packaging and shipping for a fee, including any other transactional fees
  - The local post could also calculate taxes and tariffs, for international shipping. Buyers are typically hit with variable and unknown costs. There is an opportunity for Postal Service to provide complete set of costs that is assured for the buyer.
  - The Postal Service could interface with Customs department to pre-calculate the customs fee and assure the buyer of the cost
  - The Postal Service could potentially offer price assurance
- Fast international shipping is hard to afford for small businesses. Postal Service could potentially act as an 'aggregator' for a number of small businesses, to collectively process their shipping and lower their individual shipping costs.
- Provide enhanced and faster tracking of a package in shipment
- Since international shipping is subject to a number of restrictions, Postal Service could act as the official international shipping agent for accredited small businesses, i.e. "Importer of Record"

- Dun and Bradstreet is a US-based service that rate good standing of businesses in US and they assign unique identifier to each business for easy reference of the rating. In a similar manner, the Postal Service could offer a service to provide rating and unique identifiers to reputed sellers. Such a service is likely to instill confidence in US-based buyers to buy from high-rated sellers. The rating services could be based on a number of factors including:
  - Financial status of the seller
  - Number of satisfied buyers who conduct repeat business with the seller
  - Number of dissatisfied customers returning products
- Another area the Postal Service could offer service is in management of cross-border issues in an international transaction.
  - Buyers are often unaware of the customs fees and Postal Service could provide up-to-date information to the buyer.
  - Various countries have restrictions and imitations on what items can be sold within the country and across countries. Postal Service could provide information to the buyer.
  - Certain restricted items may require extensive inspection by the customs before it is allowed to leave a country or enter the United States. The Postal Service could offer services to manage the inspection and approval process for the buyer and the seller.
- The Postal Service could provide certain services identified above as Internet-based programming interfaces, which Internet-based sellers can integrate into their e-commerce web sites, making the information easily available to the buyer and the seller. Some examples of services that could be provided as Internet-based programming interfaces are:
  - An interface to calculate 'fully landed' cost instruct the Postal Service to handle shipping and handling and
  - Interface to calculate taxes
  - Interface to instruct the Postal Service to handle customs and calculate customs fees

### Key Takeaways

The potential opportunities for the Postal Service to involve in e-commerce are numerous, which could lead to generating new revenue through better utilization of the infrastructure of the Postal Service. Some opportunities are potential enhancements to existing services. While certain opportunities can be easily implemented, certain others could take significant effort due to various constraints. The Postal Service may have to set up their own offices in other countries, as Extraterritorial Offices of Exchange (ETOE), to implement some of the opportunities.

### Supplementary Material to Presentation

**APPENDIX I – Powerpoint Presentation Connecting Buyers and Sellers by VA Shiva Ayyadurai**  
**APPENDIX III – Diagram and notes explaining the activities, opportunities and challenges of the Postal Service connecting buyers and sellers**

## **Analysis of Opportunities**

### Presenter

All the attendees participated in the analysis of opportunities that was led and moderated by VA Shiva Ayyadurai.

### Summary of Discussion

Fifteen potential opportunities were identified by the attendees as potential service that the Postal Service could offer to buyers and sellers. The opportunities are:

- Offer simplified shipping options and reasonable prices to customers. For example, provide flat rate packages and volume discounts to all customers.
- Provide a tool to calculate the 'fully landed' cost of a shipment. Taking into consideration the seller's location, buyer's location, type of product being shipped and other relevant information, the calculator could provide the total cost of transaction in the local currency.
  - The calculator can be enhanced to include insurance fee as a premium service
- Provide a service to authenticate both trading partners – the buyer and the seller – to verify if 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.
- Provide the ability to track and trace shipments with greater accuracy and in real time
- Enhance the product return service to make it easier for the buyer and to integrate it with the seller's disposition requirements
- Enhance the user experience of mailing and shipping by providing 'one-click ship'. This service could store the sender's information including his/her address and maintain an address book for the sender and enable the sender to mail or ship items with ease.
- Enhance current insurance coverage to provide more options to the buyer and seller
- Utilize the Postal Service customer service team to provide customer service as an additional service 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
- The Postal Service could take advantage of its authority and provide a service that ensures compliance with proper trading practices. This service could include sending of alerts/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.
- The large team of mail carriers could be used by the Postal Service to offer promotional resources for sellers. This could include carriers selling stamps and other products, in addition to the current service of delivering print catalogues
- Another service that the Postal Service could offer is helping a seller through customs clearance process. Utilizing the stringent overseeing within the Postal Service, pre-determined sellers can be assisted to move their shipments of pre-approved products through the customs faster.
- The service of 'cash on delivery' could be enhanced to include international transactions

- The Postal Service could take advantage of large physical spaces available to them to offer 'micro warehousing' for small businesses. Such micro warehousing can make fulfillment faster.
- The Postal Service has the authority to open Extraterritorial Office for Exchanges (ETOE) in foreign countries. ETOE offices could be set up in many locations and such offices could coordinate activities to make shipments move faster through regulations.
- The Postal Service can offer a service to provide reputation score of the sellers. For example Trip Advisor

The team analyzed the opportunities for their strengths and weaknesses. Among these opportunities, the attendees identified three opportunities as potentially most feasible for implementation, based on subjective assessment along these parameters: (a) Does the opportunity work within the regulatory framework, (b) Is the opportunity legally allowed, (c) Can the opportunity easily be implemented as an enhancement of a current offering, (d) Will the opportunity service an under-served market, and (e) Does the offering utilize core competencies of the Postal Services. The three top opportunities were identified by assigning numeric values to the subjective assessments.

#### Supplementary Material to Presentation

#### **APPENDIX IV List of opportunities, ranking by attendees and strengths and weaknesses of selected opportunities**

## **IV. FUTURE WORK**

### **Next Steps**

The workshop helped in revealing certain unique opportunities that the Postal Service could actively investigate for potential implementation. Detailed investigation is necessary to properly assess strengths, weaknesses and methods of implementation of each opportunity. While the workshop facilitated in the identification of the potential opportunities, thorough research is necessary to analyze the opportunities completely.

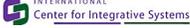
As an immediate next step, it is suggested that the exploration initiated in this workshop be taken to the next level to produce a formal research report on ISBC and how the Postal Service could facilitate ISBC with potential sources of new revenue.

## **V. APPENDIX**

### **Appendix I**

Powerpoint Presentation - Connecting Buyers and Sellers by VA Shiva Ayyadurai

Slide 1



**Connecting Buyers & Sellers**

VA Shiva Ayyadurai  
International Center for Integrative Systems Workshop Series

September 26, 2012  
United States Postal Service – Office of Inspector General  
(USPS-OIG)

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Slide 2



**Agenda**

8:45 am – 9:00 am	Introduction of Participants
9:00 am – 10:00 am	Presentation of Connecting Buyers and Sellers Overview: Trends, Opportunities and Three Scenarios – Dr. Shiva
10:00 am – 11:30 am	Facilitated Discussion of Scenario 1: Web-Enabled Connections
11:30 am – 11:45 am	Break
11:45 am - 1:00 pm	Facilitated Discussion of Scenario 2: Postal Service Facilitated Connections
1:00 pm – 2:00 pm	Lunch
2:00 pm – 3:30 pm	Facilitated Discussion of Scenario 3: Hybrid Connections
3:30 pm – 3:45 pm	Break
3:45 pm – 4:30 pm	Scenario Analysis: Common Patterns and Key Differences
4:30 pm – 5:00 pm	Summary

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Slide 3

INTERNATIONAL  
Center for Integrative Systems

## Background

- 1993-1997 - Early online communities
  - Arts-Online.com
    - Early Internet Banner Ad: Zima.Com
    - *Arts & the Internet*
  - Harvard-Square.Com
    - Enabling e-commerce and community for local businesses
    - *Internet Guide to Publicity*
  - Shibuya.Org
- 1994-2012 – EchoMail
  - AT&T      - American Express      - Hilton
  - Kmart     - Citigroup                      - QVC
  - Nike       - Allstate                          - JPeterman

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INTERNATIONAL  
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## One third of world's population online 45% of Internet users below age of 25

**2006**

Total population: 6.5 billion

**2011\***

Total population: 7 billion

Note: \* Estimate  
Source: ITU World Telecommunication/ICT Indicators database

- The world is home to 7 billion people, one third of which are using the Internet. 45% of the world's Internet users are below the age of 25.
- Over the last five years, developing countries have increased their share of the world's total number of Internet users from 44% in 2006, to 62% in 2011. Today, Internet users in China represent almost 25% of the world's total Internet users and 37% of the developing countries' Internet users.

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## Goals

- Understand target market, both buyers and sellers
- Identify the Components of the model/system
  - Communication channels and methods – hardware/software
  - Registration and establishing portfolios to categorize buyers and sellers
  - Payment channels and methods, such as escrow services
  - Legal and regulatory requirements, such as customs fees
  - Transportation/ logistics
- Itemize benefits to customer and to the Postal Service, such as transaction security
- Brainstorm on potential revenue opportunities
- Define challenges and possible resolutions

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## Growth in bandwidth

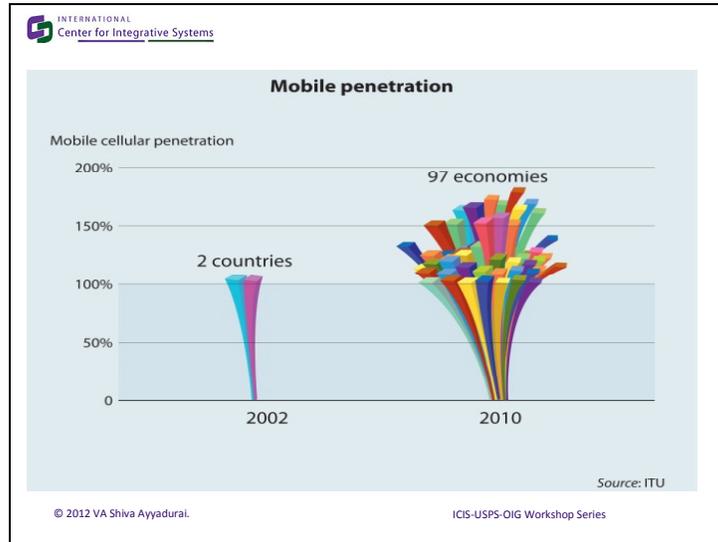
Year	World	Developed	Developing
2001	~1,000	~1,000	~1,000
2002	~2,000	~2,000	~2,000
2003	~4,000	~4,000	~4,000
2004	~8,000	~8,000	~8,000
2005	~15,000	~15,000	~15,000
2006	~30,000	~30,000	~30,000
2007	~60,000	~60,000	~60,000
2008	~120,000	~120,000	~120,000
2009	~240,000	~240,000	~240,000
2010	~480,000	~480,000	~480,000
2011*	~960,000	~600,000	~150,000

Note: \* Estimate  
Source: ITU World Telecommunication/ICT Indicators database

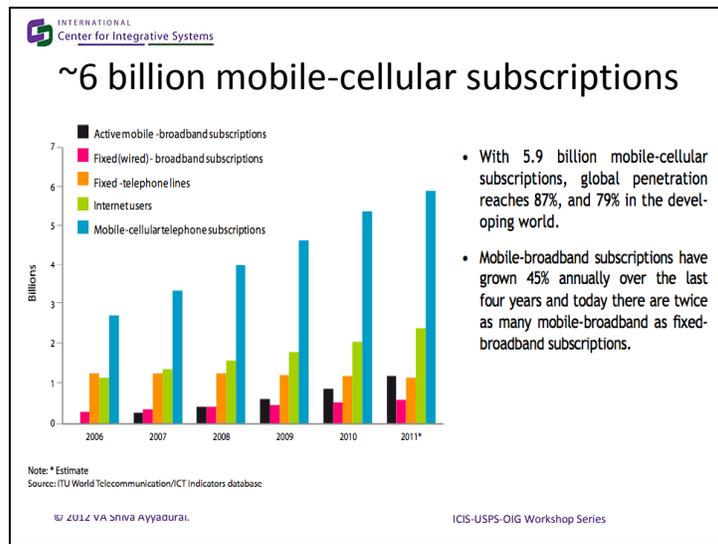
- International Internet bandwidth, a key factor for providing high-speed Internet access to a growing number of Internet users has grown exponentially over the last five years, from 11'000 Gbit/s in 2006, to close to 80'000 Gbit/s in 2011.
- Disparities between regions in terms of available Internet bandwidth per Internet user remain, with on average almost 90'000 bit/s of bandwidth per user in Europe, compared with 2'000 bit/s per user in Africa.

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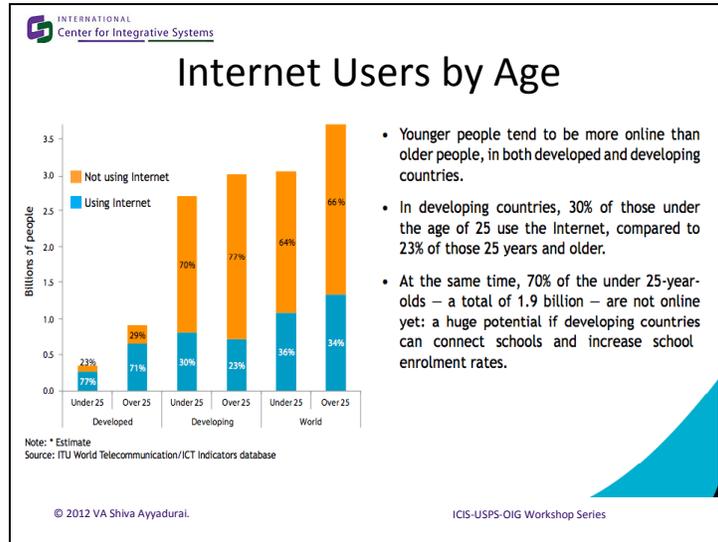
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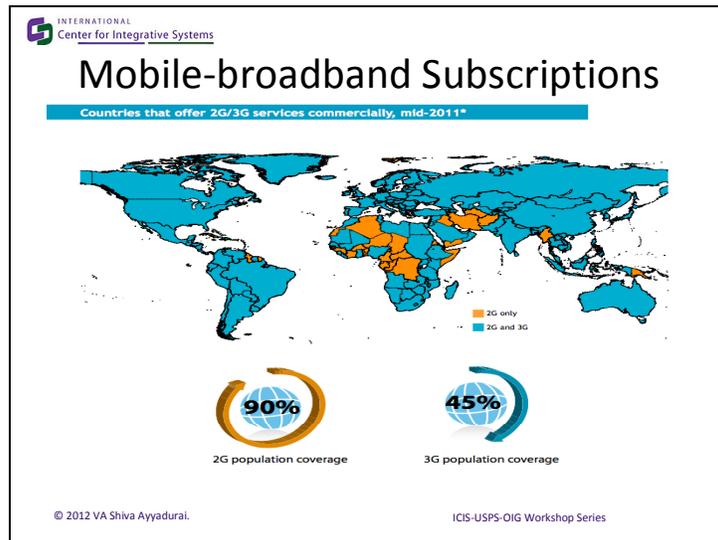
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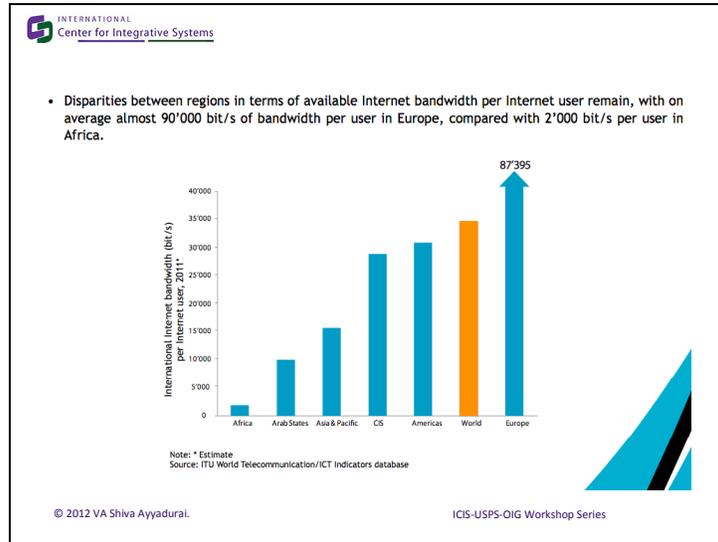
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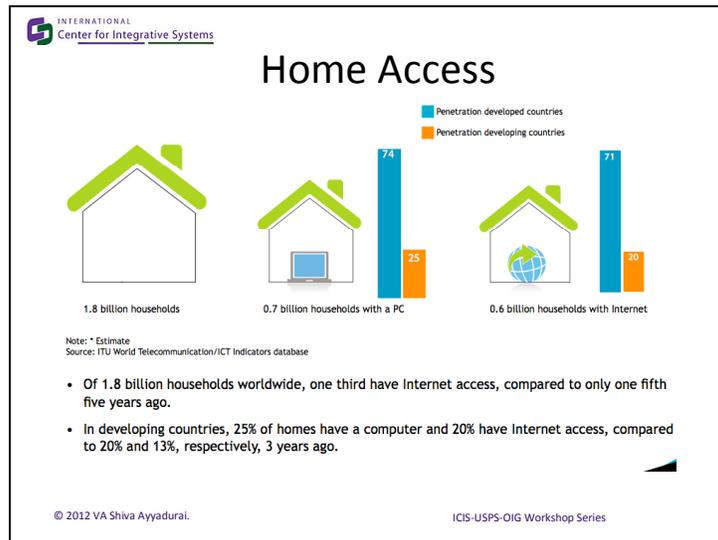
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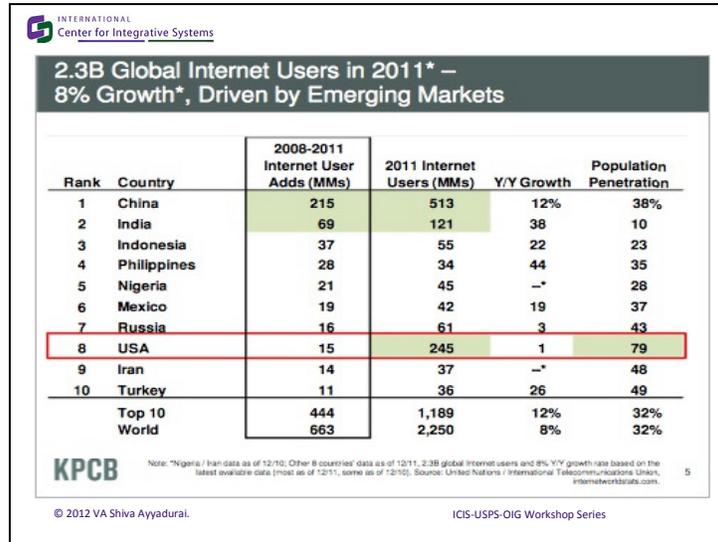
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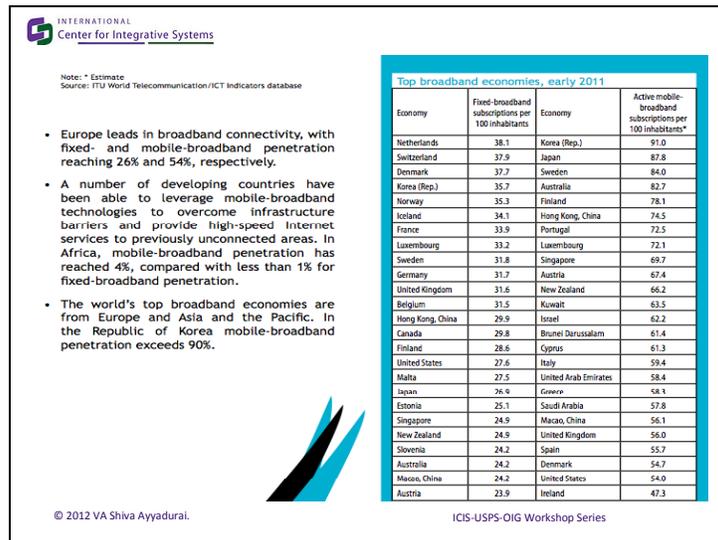
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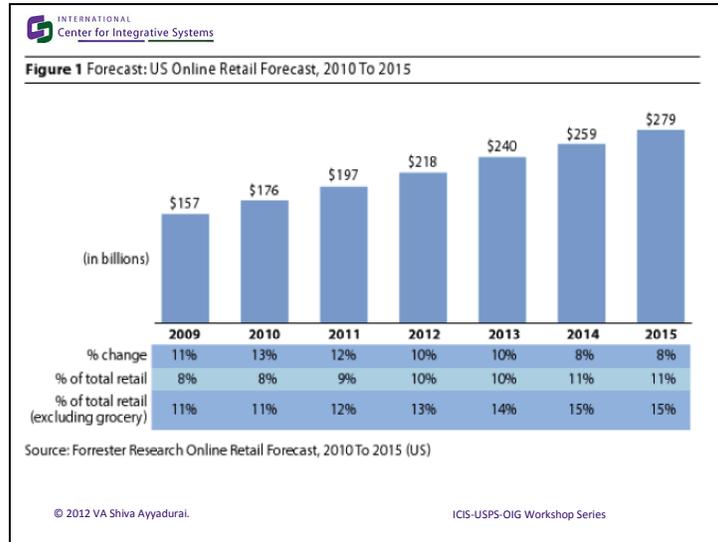
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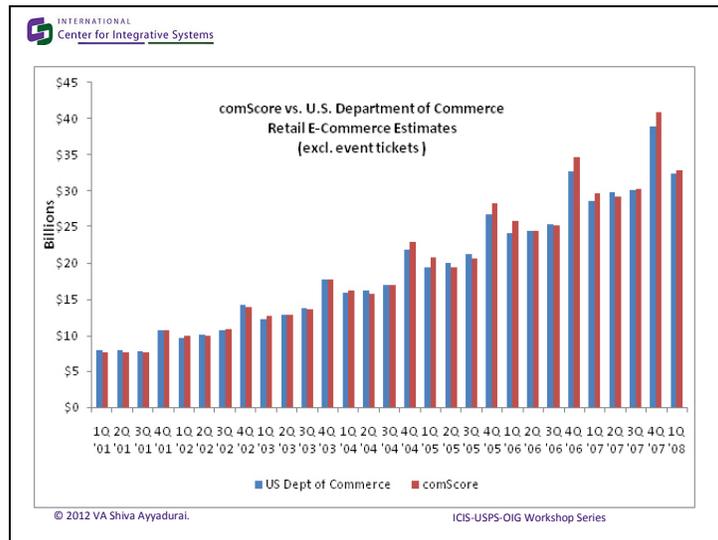
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Slide 15



Slide 16



## Slide 17



## Global Trends

- Global e-commerce sales will top \$1.25 trillion by 2013 from \$961 billion in 2011
- Internet users increase to ~3.5 billion by 2013 from 2.2 billion at the end of 2011
- United world's single biggest e-commerce market, followed by United Kingdom and Japan, with growth 10-15% a year.
- China's e-commerce market is growing 130% a year
- China will become single largest market in the world.
- Europe, as a region, is the largest e-commerce

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## Slide 18



## Global Trends

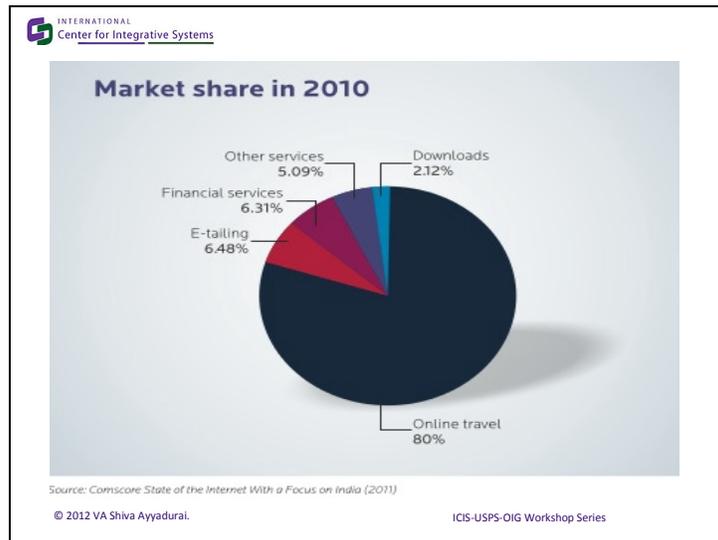
- Europe posted 19% growth in 2011 to reach an estimated \$307 billion, surpassing North America at \$297 billion.
- France, Italy, Spain, Russia, Turkey and Poland will be the fastest-growing markets in Europe
- Substantial growth in Latin America
  - Led by Brazil and Mexico,
- And the Middle East
  - led by Israel and the UAE.

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Slide 20



## Slide 21



## Three Scenarios/Connections/Systems

- Web-Enabled
  - Web sites, Amazon, eBay, Facebook, Twitter, PayPal, PintRest, Flickr, LinkedIn,
- Postal Service Enabled
  - No Internet Access, Packages, Mobile Phone, Print and Paper, Local Post Office is their Gateway
- Hybrid Enabled
  - Smartphones, Applications, Downloads
  - Internet has faded into the background

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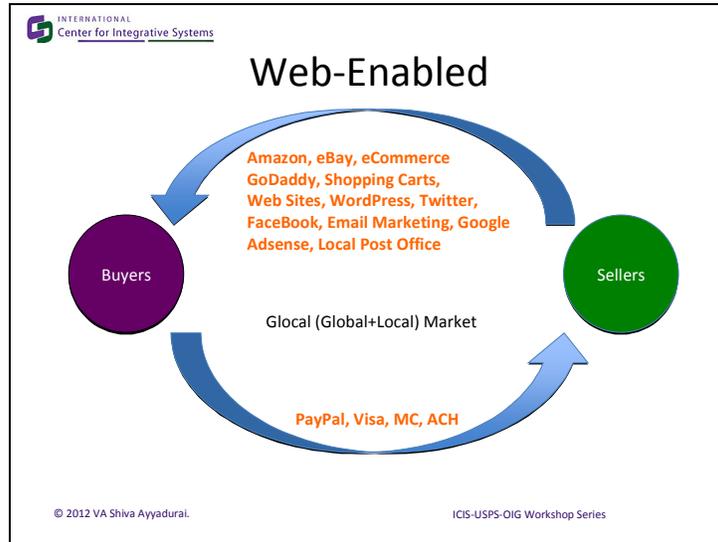


## Our Workshop Goals

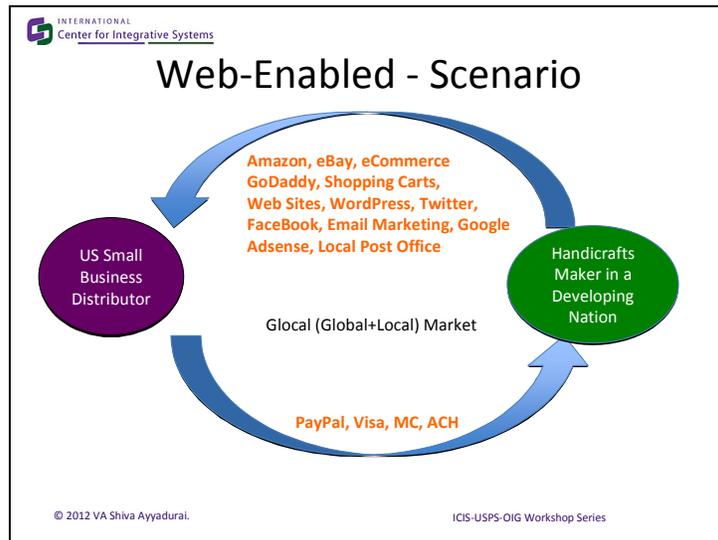
- Identify the Components of each System
  - Communication channels and methods – hardware/software
  - Registration and establishing portfolios to categorize buyers and sellers
  - Payment channels and methods, such as escrow services
  - Legal and regulatory requirements, such as customs fees
  - Transportation/ logistics
- Itemize benefits to customer and to the Postal Service, such as transaction security
- Brainstorm on potential revenue opportunities

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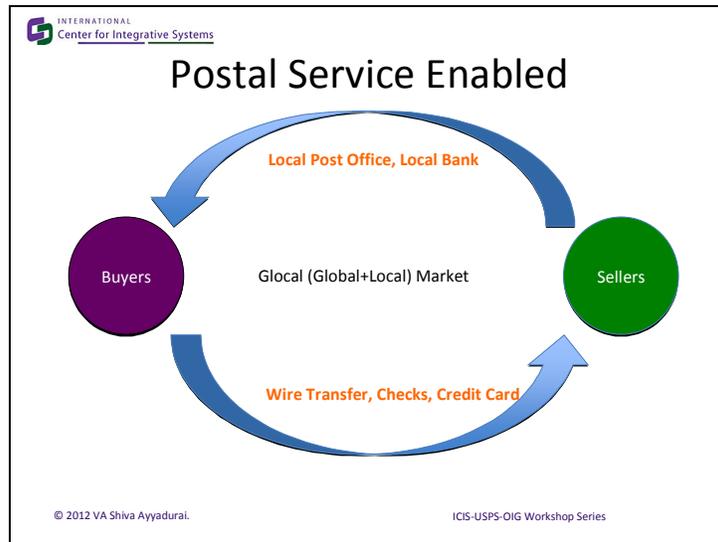
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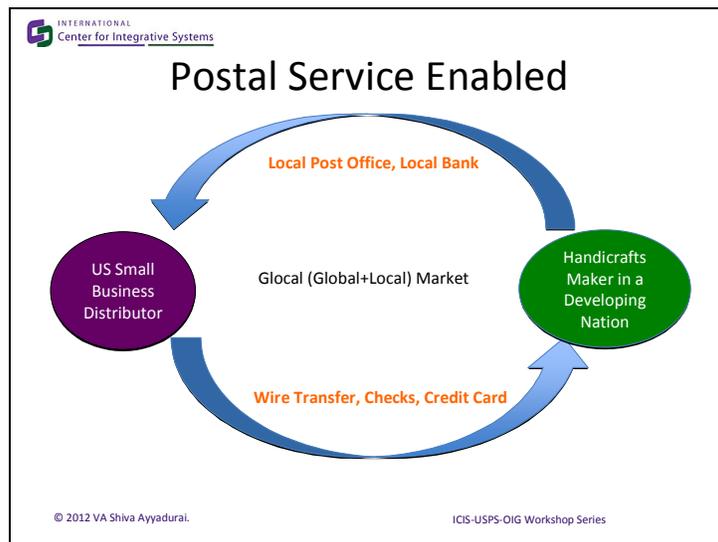
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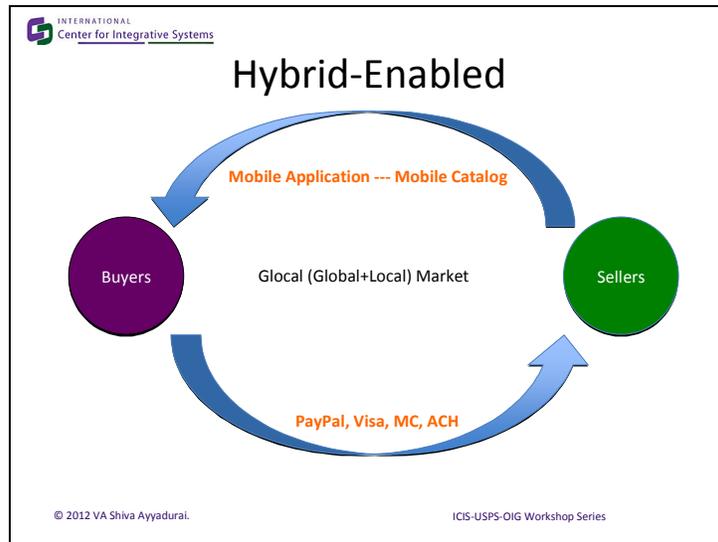
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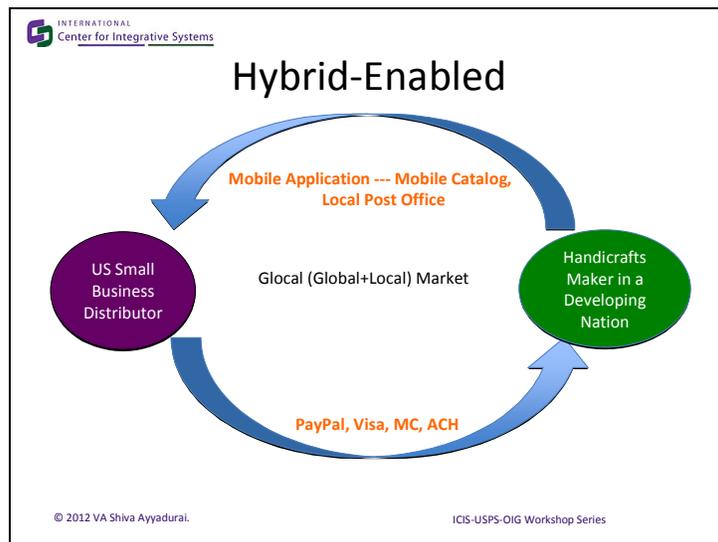
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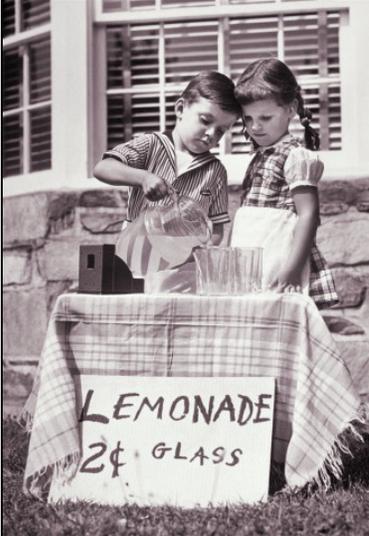
Slide 28



**Appendix II**

Powerpoint presentation - Leadership in Social Economy by Thomas Zawacki

Slide 1



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**USPS Discussion**

**Leadership in the Social Economy**

September 2012

"Named #1 Website of 2007 by TIME Magazine and CNN"



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Slide 2



Slide 3



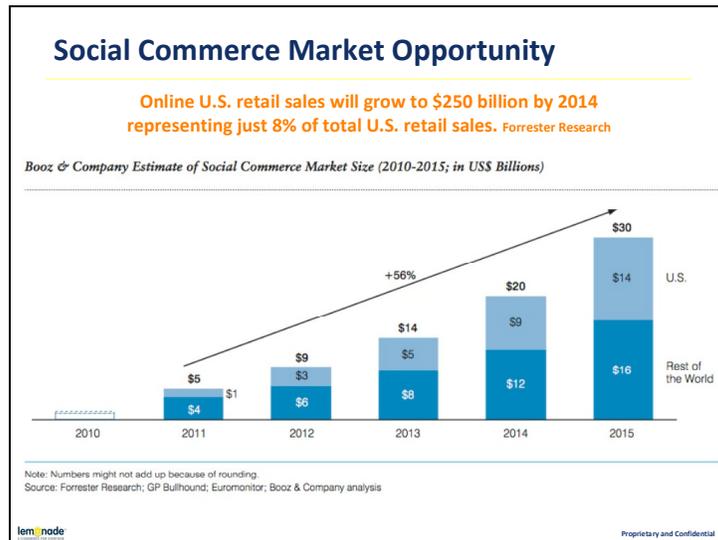
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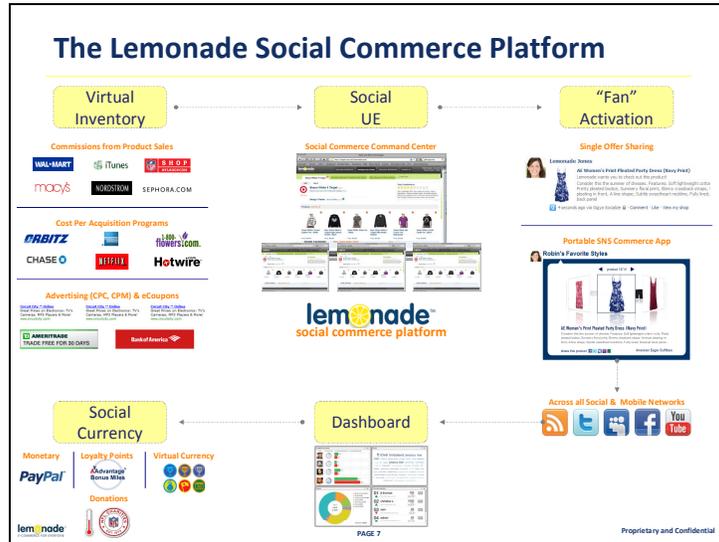
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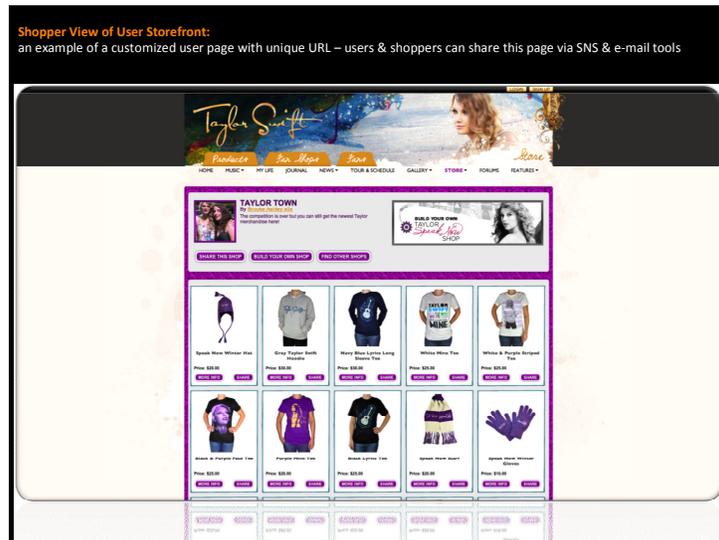
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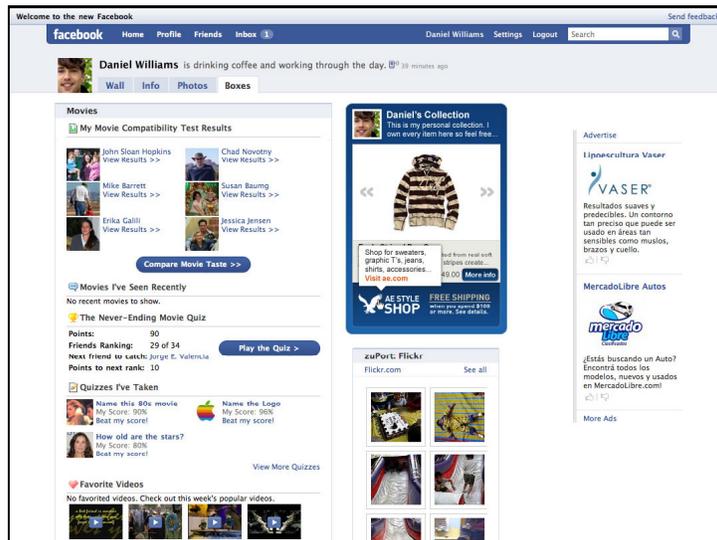
Slide 8



Slide 9



Slide 10



Slide 11

**USPS Applications**

---

- Commerce enabler
  - Small business
  - Work-at-home individual
  - Every day "Joe"
- Data provider
  - Publish reports about popular brands/products
  - Syndicate audience data
- Consumer value-added service
  - Discount digital "mall"
  - Deal of the Day provider
- Global commerce leader
  - Enable developing communities
  - Leverage international "Postal" relationships (e.g., China Post)

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Slide 12

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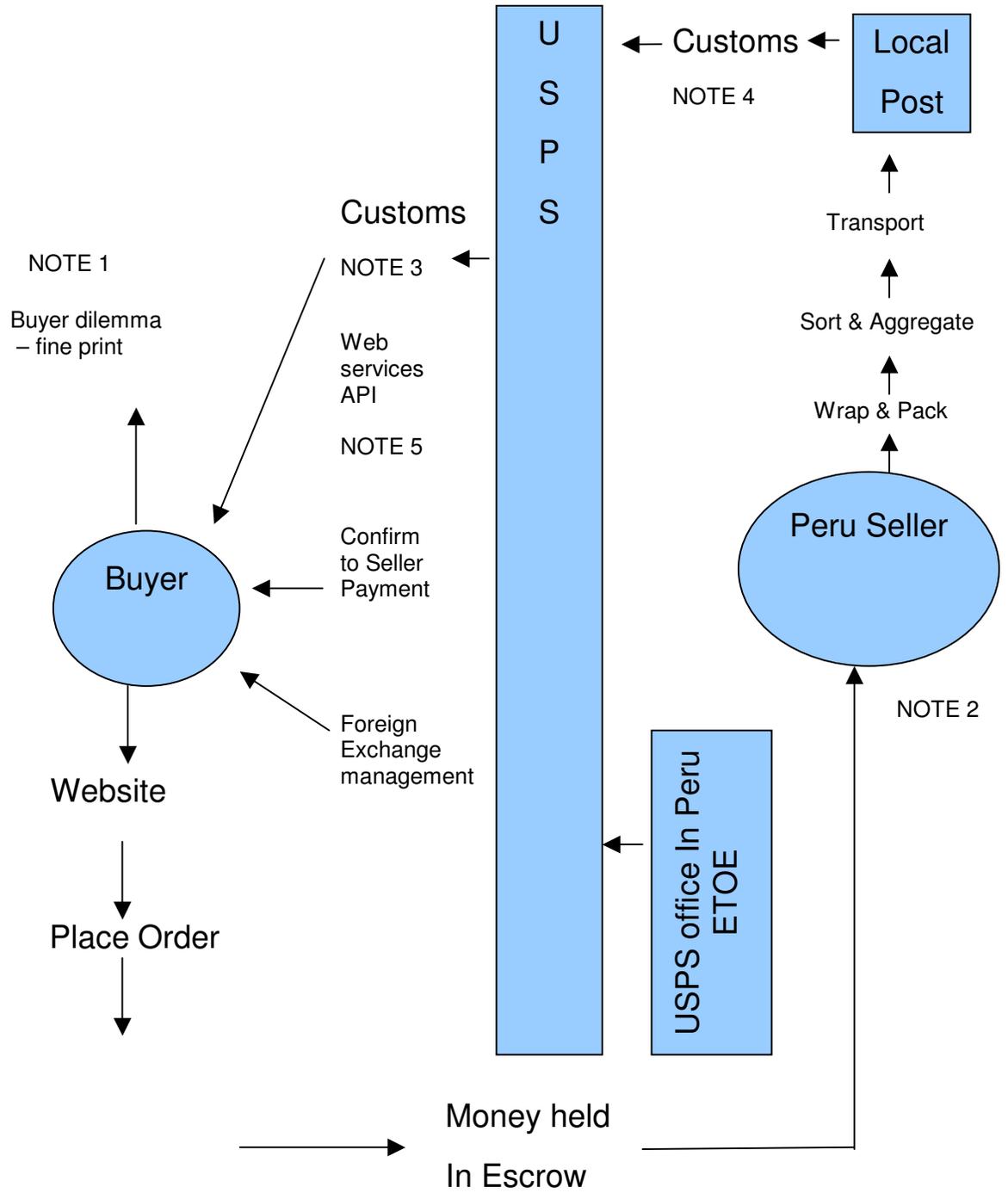
**Thank you!**

Any questions or comments  
please contact Tom Zawacki  
[tzawacki@lemonade.com](mailto:tzawacki@lemonade.com)  
(203) 644-0069

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**Appendix III**

Diagram and Notes Explaining Potential Activities, Opportunities and Challenges the Postal Service Would likely Face with ISBC



NOTE 1

ORDER	COSTS
Item – Scarf	- 10.00
= Price	- 30.00
– Shipping	- 10.00
– Tax	- 20.00
– Customs fees	TOTAL 90.00
	Fine print disclaimer – on price, on delivery time

NOTE 2

- Scarf Price
- Work with local post to calculate postage including packaging and any transaction fees [price assurance]
- Tax & Tariff calculation for international shipping that is definitive
- Customs calculation

NOTE 3

- Collective processing of a number of small sellers through customs
- Fast tracking
- “Importer of Record”
- Tax ID or DUNS type business identifier
- Financing and factoring
- Rating based on number of transactions, number of returns, customer sat etc.

NOTE 4

- Buyer's country customs fees
- Buyer's country customs allowed and restricted items, processing time etc.

NOTE 5

- Web services API
- For shipping and handling
- For tax
- For customs tariffs

## **APPENDIX IV**

### List of Opportunities, Ranking and Strengths and Weaknesses of Selected Opportunities

### List of Opportunities and Ranking

NOTE: As a method to identify the feasibility of each opportunity, a numeric value was assigned based on subjective opinion of the attendee. **The reader should recognize these numbers are qualitative values gathered from participants “intuitive” response to the feasibility of the opportunity. By no means should the reader construe the values to indicate the actual feasibility of the opportunity. Far more extensive research would need to be done to ascertain a true feasibility metric.** Feasibility considerations were based on (a) Regulatory framework, (b) What is allowable (c) What is USPS doing today that is easy to fulfill, and (d) Under-served market (e) Core competency. Numeric value 1 indicates High Feasibility, 2 indicates Moderate Feasibility and 3 indicates Low Feasibility.

Opportunity	Feasibility	p1	p2	p3	p4	p5	p6	p7	p8	p9	p10
Reputation platform e.g. trip advisor	2.5	2	3	3	3	3	2	3	2	2	2
USPS setting up ETOE Extra Territorial Office for Strategy (?) office in local places	2.4	3	3	3	1	3	3	2	2	3	1
Micro warehousing at location of buyers e.g. forward fulfillment	2.1	2	1	2	2	2	2	2	2	3	3
Promotional vehicle for sellers – e.g.; carrier sells stamps or products, or just marketing info disseminator	2	1	3	2	1	3	1	3	1	3	2
Application for determining 'fast tracking" a seller through customs and executing it	2	1	2	2	2	2	2	2	2	3	2
COD glocally	2	2	2	2	3	2	1	2	3	1	2
Govt. compliance application – seller ↔ buyer, gives red flags, assurance, verification of contents, condition & customs/tariffs	1.9	2	1	2	3	1	2	1	3	2	2
Customer service plugin application e.g. FAQ to Email Service to Chat support to live person (language specific)	1.8	1	2	1	1		3	1	2	3	2
Providing insurance to seller	1.5	3	2	1	1	1	1	1	2	1	2
One-click ship – universal shipping (not to have to re-enter address and information repeatedly)	1.4	1	2	1	1	2	1	1	2	1	2
Authenticating trading partners (buyer AND seller) – creation of a database (name & address as input – Yes/No as output)	1.3	2	1	1	1	1	2	1	1	1	2
Track trace packages (e-packets)	1.3	1	1	1	1	2	1	1	1	3	1
Seamless return	1.3	1	1	1	2	1	1	3	1	1	1
Fully loaded cost calculator (seller location, buyer location, item type as input – cost in local currency as output & insurance fee as premium service)	1.2	1	1	1	1	1	2	2	1	1	1
Simplified shipping & reasonable prices e.g. flat rate per package, volume discounts etc.	1	1	1	1	1	1	1	1	1	1	1

### Strengths & Weaknesses of Selected Opportunities

Opportunity	Strength	Weakness
Simplified shipping & reasonable prices e.g. flat rate per package, volume discounts etc.	Existing successful business model Customer likes it USPS has the knowledge base – Opportunity for USPS to standardize Specially good for micro biz Pre-pay the box	Will the market accept Complicated pricing – competitors have standardized model Currency exchange changes / fluctuations People run away with the boxes
Fully loaded cost calculator (seller location, buyer location, item type as input – cost in local currency as output & insurance fee as premium service)	Convenience Transparency Must be positioned as a shipping tool Leverage existing IP	PRC puts regulatory restrictions
Authenticating trading partners (buyer AND seller) – creation of a database (name & address as input – Yes/No as output)	USPS already in address verification biz Avoids fraud Part of a growing movement This should be permission based	Authority question\ that need to be addressed here Foreign countries may not have contiguous addresses. Will have to trust the foreign Post service Potential fraud
Track trace packages (e-packets)	We are doing it currently, improve on it	International address is not universal system Dependent on standards outside of USPS authority FedEx has better methodology now Need technology development Has to be a premium service (high cost)
Seamless return	Unmet market need Value for buyer and seller Can be argued it is an ancillary product Enables faster replacement	A little outside the USPS product line
One-click ship – universal shipping (not to have to re-enter address and information repeatedly)	Ease of use Has experience – currently “click and ship” There is a lot of business opportunities Linked with 4 & 2, this would be a great app	Privacy Already done by competitors Revenue assurance
Providing insurance to seller	Currently USPS is offering this Highly profitable Builds trust, customer has peace of mind	Fraud in claims Customer service on claim side Lengthy difficult process for claims