TOWARDS COMMERCE 3.0

Roadmap for Building Sustainable Growth into Commerce

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ABOUT THE AUTHOR

Founded in 1995 in San Jose, Calif., eBay Inc. (NASDAQ:EBAY) is about connecting buyers and sellers. We do so through eBay, the world's largest online marketplace, which allows users to buy and sell on eBay platforms in nearly every country on Earth; through PayPal, which enables individuals and businesses to securely, easily and quickly send and receive online payments; and through GSI, which facilitates e-commerce, multichannel retailing and digital marketing for global enterprises. We also reach millions through specialized marketplaces such as StubHub, the world's largest ticket marketplace, and eBay classifieds sites, which together have a presence in more than 1,000 cities around the world. For more information about the company and its global portfolio of online brands, visit www.ebayinc.com

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EXECUTIVE SUMMARY

Trade policy has traditionally been viewed as only being beneficial to large firms seeking to access new markets.

This Roadmap describes a new development in the trade world presented by the combination of new technology-enabled small businesses and consumer-driven global commerce that we refer to as Commerce 3.0. Commerce 3.0 offers a new path forward for trade policy that promotes technology, entrepreneurship, and consumer welfare. This Roadmap will describe how the global potential of the Internet enables small businesses to engage in trade in a way never before imagined by advocates of trade.

Unlocking the opportunities at the intersection of technology and commerce is the goal of this Roadmap. To that end, the Roadmap looks at the technology tools that allow consumers and small businesses to engage one another in new ways, as well as at the policy implications of this new type of commerce. The aim is to offer a strategic framework for what should be a crucial policy discussion.

Policy affects the way both technology and the Internet enable merchants to enter, grow, and succeed in local and world markets. We ask policymakers to prioritize efforts that open up market access, instill trust and predictability throughout the consumer journey, and promote intermediation services and innovation.

In concrete terms, this Roadmap recommends U.S. policymakers:

1. *Design "21st century trade policy" that recognizes the benefits that consumers, small businesses, and entrepreneurial traders derive from Internet services.*
2. *Become a world leader in promoting mutual recognition of customs, duties, and security programs to facilitate trade.*
3. *Drive a paradigm shift in policymaking in relation to technology and Internet services.*

This Roadmap does not call for more or less regulation. Instead, it advocates "smart policymaking" that can emanate from, and be implemented by, the private sector, the public sector, or a combination of both.

The message that small businesses can maintain a local presence while reaching a global marketplace through Internet-enabled trade is a powerful one. This message allows policy makers to say for the first time that global trade is really open to every business, regardless of size. This is the message of Commerce 3.0.

INTRODUCTION

ROADMAP FOR BUILDING SUSTAINABLE GROWTH INTO COMMERCE

"We need to ensure that as this new American technology sector grows, it is able to compete on a level playing field abroad and to promote U.S. innovation technology and jobs."

Congressman Bob Goodlatte (R-VA) (2012)

Considering today's economic and social challenges, now is the time to fully exploit the opportunities that lie at the intersection of technology and commerce. This is a new, technology-enabled and consumer-driven commerce that occurs anywhere, anyhow, and anytime the consumer decides. We call it Commerce 3.0.

"Consumers are taking the 'E' out of e-commerce."

John Donahoe, CEO, eBay (October 2011)

Our Roadmap is the result of the fundamental change in commerce: the Internet and technology now provide consumers and merchants of all sizes with the opportunity to connect, find a trading partner, and establish trust despite geographic distance and other trade costs. Simply put, cross-border trade is no longer an activity exclusive to global corporate elites.

Our Roadmap offers a perspective on how to: 1) unlock the potential of Commerce 3.0 to empower both consumers and small merchants, thereby driving economic growth; 2) put the smallest and largest merchants on a more equal footing, thereby promoting broader, more inclusive growth; and 3) allow for smarter business opportunities and consumer choices, thereby facilitating sustainable growth.

An economic study by Sidley Austin LLP in cooperation with Professor Marcelo Olarreaga of Geneva University[1], commissioned by eBay, suggests that the potential gains of these changes are significant. For example, the study projects, assuming all international transactions had the same low trade costs as the eBay marketplace, policy changes could trigger an average increase in real GDP of 15.6%.

With this Roadmap, we want to amplify the benefits of today's technology tools and promote sound policy reforms. Policy can support and enable technology's ability to change commerce and bring down the barriers that occur when a now globally interconnected digital world meets a still divided physical world. Our goal is to make Commerce 3.0's mobility, inclusiveness, and choice integral parts of commerce and to empower consumers across America and around the world.

To this end, this Roadmap offers a strategy founded on:

1. **OPPORTUNITIES:** At the intersection of technology and commerce lie opportunities to drive entrepreneurship, economic progress, and greater opportunities for merchants of every size.

2. **TECHNOLOGY TOOLS:** Consumers and merchants are profiting from technology tools that allow them to create and engage in new trading patterns, overcome geographic distance, and mitigate other trade costs, thereby turning the opportunities into reality.

3. **POLICY ACTION:** Policy should support a technology-enabled consumer journey, promote the technology tools that bring about this new commerce, as well as encourage the innovation process that brings these tools to the market.

IDENTIFYING THE OPPORTUNITIES

"... many U.S. consumers now rely on the Internet to shop and perform many of their everyday activities. And small businesses are now recognizing the importance of being online. Small businesses will help America turn around the economy and we must provide assistance to them during this time."

Congressman John Conyers (D-MI) (October 2011)

Fully combining technology with commerce will equip the U.S. to promote the Internet as the engine for economic growth. Already today we see this playing out, with search-and-trust tools, technological convergence, and continued innovation increasingly embedding mobility, inclusiveness, and choice into the commerce environment and the consumer journey.

THE INTERNET-ENABLED GROWTH ENGINE

"Over the past five years, the Internet's contribution to GDP growth... doubled to 21 percent."

McKinsey Global Institute, Internet Matters (2011)

Empowering consumers so that they are more willing to transact with sellers will help stimulate demand. *Internet-enabled* businesses use information technology in creative and productive ways. They are well positioned to meet this challenge

since they offer consumers a compelling "360° Value Proposition," providing advantages such as:

1. **CHOICE:** Accessing boundless choice - In March 2012, there were over 644 million active websites.
2. **RELEVANCE:** Quickly comparing relevant offerings - Search engines can respond to queries with millions of results in less than a second.
3. **MOBILE:** Carrying a connection to the world in the palm of your hands - Over 50% of US mobile phone owners possess a smartphone.
4. **CONVENIENCE:** Access to information and services on demand - Funding platforms enable entrepreneurs to quickly acquire investment for businesses.
5. **CONFIDENCE:** Buyers and sellers have rights - Online payment processors protect user information.
6. **SHARE:** Socializing the shopping experience through Internet networks - Social networks give consumers the opportunity to share their likes and dislikes with friends, family, and networks.

With the advent of Augmented Reality (overlaying computer-generated images on tactical items) and Location-Based tools, consumers can also:

7. **EXPERIENCE:** A superior sensory experience - Geo-location applications can provide relevant offers and prices for nearby retail items.

And, it is increasingly easy to be:

8. **ETHICAL:** Extending our commitment to entrepreneurship by creating programs that promote market access for even the most underdeveloped and marginalized communities in the world - Microfinance websites can aggregate funds to help alleviate global poverty.
9. **INCLUSIVE:** Ensuring that disadvantaged and disabled populations around the world have equal opportunity to participate in the global economy - Accessible e-commerce websites provide the disabled community with the ability to reach the global market.

These advantages come with significant consumer welfare gains. The economic study we commissioned estimated that consumers experience an increase in online buying power by on average 42% by reason of transacting on eBay instead of via offline channels.

Internet-enabled merchants also stand to gain a great deal. The economic study reveals that 81% of the smallest commercial sellers on eBay export to at least five foreign countries,[IV] a phenomenon underpinned by the finding that a 1%-increase in geographic distance reduces offline trade by 1.4%, while it reduces eBay trade by only 0.6%.[V]

"eBay is committed to creating meaningful opportunity, through not only our core businesses but through disruptive new initiatives that extend this impact to underserved communities around the world."

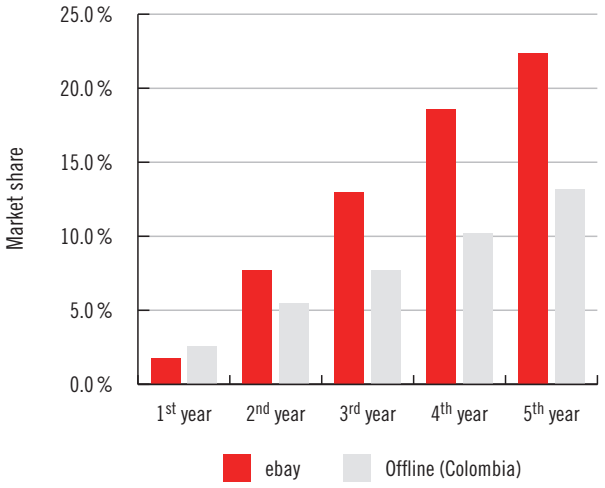
John Donahoe, President and CEO, eBay Inc.

"Most of the people in the world still don't have a personal computer, whereas in three to five years, most people in the world will have a smartphone.... If you've got a smartphone, then I can build a business in any domain or category and serve you as a customer no matter where you are in the world in just gigantic numbers--in terms of billions of people."

Marc Andreessen, Partner Venture Capital firm Andreessen Horowitz (December 2011)

FROM ECONOMIC REPORT SHOWING THE GROWTH OF MARKET SHARES OF NEW ENTRANTS ON EBAY

After 5 years, new sellers on eBay have a combined market share of 22% compared to 13% for new sellers offline, according to available data.



With lower trade costs and the ability to reach multiple foreign markets, new *Internet-enabled* businesses have greater prospects to grow and succeed as established firms. For example, the economic study demonstrates that the market share of new entrants on eBay grows faster than new offline firms: after five years, newcomers on eBay have a much higher combined market share (22%) than do new offline firms (13%), according to available data.[VI] Moreover, transaction data from PayPal shows that the revenue earned by *Internet-enabled* businesses from online transactions flows back to the more traditional economy by being spent at supermarkets, post offices, bookstores, and restaurants.

The opportunities presented by *Internet-enabled* business – for both consumers and merchants – are magnified as a result of the uptake of mobile technologies: every second of everyday a product is purchased via eBay Mobile apps, and more than 1 million new listings are added via eBay Mobile apps each week.

As mobile phones and applications move the consumer to the center of the purchasing process, the merchants follow, embracing multichannel strategies to meet the needs of an increasingly "omnipresent" consumer and to profit from alternative ways of reaching new customers.

THE 21ST CENTURY MARKET – SMALL LOCAL BUSINESSES THRIVE GLOBALLY

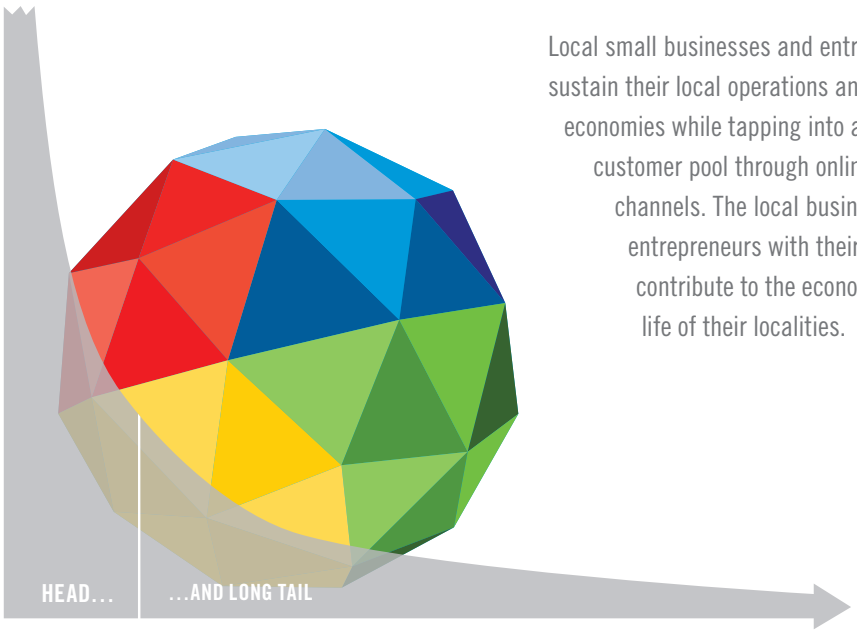
"America's 'So-Lo-Mo' (social-local-mobile) industry creates jobs… Thanks to the leveling effect of the Internet, firms in the job-growing 'So-Lo-Mo' market can create American jobs from anywhere, not just Silicon Valley."

Aneesh Chopra, Senior Advisor, Technology Strategy, The Advisory Board Company (August 2011)

The vast majority of businesses in the U.S. are small businesses. In the retail sector, not every business offers "hit" products that appeal to a broad consumer base. Rather, many Main Street businesses specialize in specific types of local goods or other specialty "niche" products. These businesses create a specialty, and then build a customer base. In recent decades, these businesses have been hit hard by the proliferation of massive retailers that have access to global supply chains. The Internet and technology tools help these local merchants grow their businesses by providing a global market for their products.

The economic study shows that online marketplaces such as eBay are enablers of the *21st Century Market*: merchants can more easily find the right buyers for their products, irrespective of their size and whether a product is a "niche" product or a "hit" product.[VII] Online channels broaden the demand curve by expanding existing markets and enabling merchants, especially very small businesses, to enter new markets with lower barriers than offline global trade.

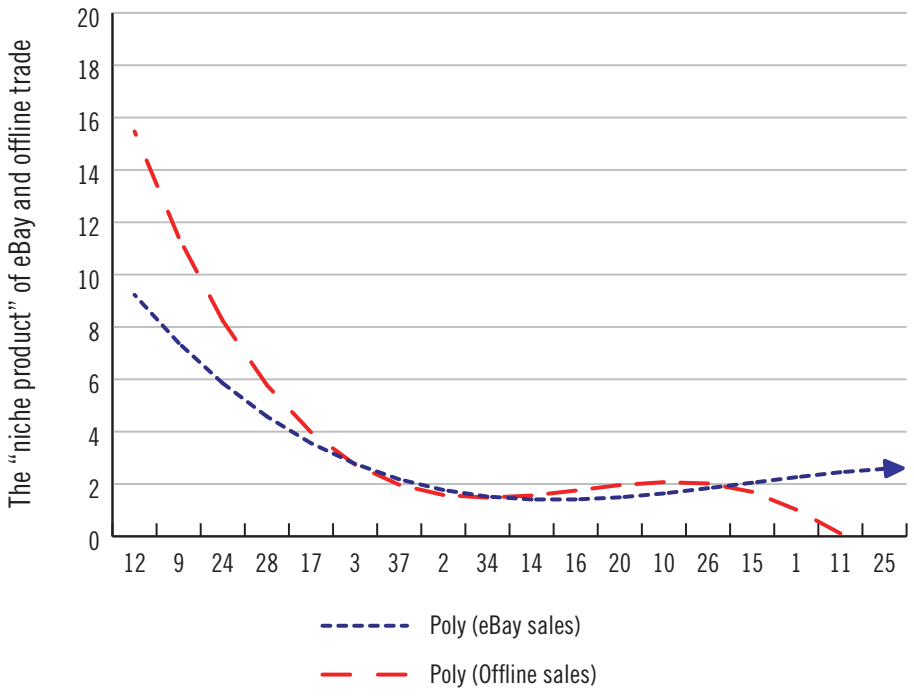
Local small businesses and entrepreneurs can sustain their local operations and promote local economies while tapping into a larger, global customer pool through online and mobile channels. The local businesses and entrepreneurs with their global reach contribute to the economy and social life of their localities.



The Internet and technology together facilitate transactions between distant sellers and buyers in a trusted environment. This economic study concludes that eBay, as an online marketplace, uses the Internet and technology to create trust in key aspects of a transaction by establishing trust in the seller's quality; by establishing (or reinforcing) trust in the quality of the product traded; and by increasing trust through institutions and rule of law.[IX]

This goes to the heart of how the *21st Century Market* is a fundamental shift in the way we think about global trade. The *21st Century Market* facilitates information exchanges and it provides transparent, interactive ways of displaying and sharing information, including user-created content. It even allows for the development of alternative mechanisms for resolving disputes. Most importantly, the *21st Century Market* provides local businesses with the ability to engage in the global market and compete with businesses of all sizes.

"BUT THE GREAT PART OF EBAY is that even small countries like Finland, Norway, and Belgium bring a good amount of business." Ambesh Kanna is one of the largest operating sellers of online diamond jewelry in India. He has three eBay stores, listing on the U.S., UK, Canadian, Singaporean, and Australian sites. The business attracts its major buyers from the U.S., Germany, and the UK.



The dotted and dashed polynomials ("poly.") are trend lines both over eBay and offline trade flows. A product's popularity in international trade is shown on the vertical axis. Along the horizontal axis from left to right, products are ranked from most hit to most niche.[VIII] Numbers 12 to 34 are hit products, numbers 16 to 25 are niche products.

THE "CIRCULAR ECONOMY"

"The cost of inaction is high, while ambitious actions to protect the environment are affordable and can go hand-in-hand with economic growth."

OECD Environmental Outlook to 2030 (2008)

Globalization offers consumers the promise of increased choice and lower prices. But global trade flows also raise significant environmental challenges. Commerce 3.0 encourages behavior that lowers the environmental impact of globalization and moves us closer to a *Circular Economy* by:

RETHINKING: Streamlining sales and delivery processes so that items minimize their carbon footprint.

The Internet provides merchants the means to devise business models that are less dependent on a carbon-intensive physical infrastructure. A U.S.-based study by Cooler[X] from September 2010, commissioned by eBay, found that small, online businesses with total combined revenues of $100 million generate approximately 1,400 tons fewer CO_2-equivalent emissions per year than a single big-box retail store grossing the same amount. Even when taking into account environmental impacts associated with both shipping and packaging, and data center energy use, online businesses often present an environmentally preferable alternative to brick-and-mortar shopping.

REUSING: Shifting the consumption paradigm.

The *Circular Economy* also represents a unique model for consumption that enables buyers and sellers to think differently about a product's lifecycle. In addition to the organic sales of used goods on eBay's platform, eBay has partnered with leading U.S. brands like Patagonia and the PGA to inspire and encourage the sale of used clothing and gear. In both cases, eBay has acted as a powerful catalyst and driver of consumer behavior, shifting the way that consumers think about the lifespan, and the ultimate disposal of a fleece jacket or a golf club.

Online sales can also serve to boost offline business opportunities. An empirical study,[XI] funded by the German Federal Ministry of Education and Research, published in June 2010, found through a series of interviews that offline businesses focused on reselling used goods support the assumption that eBay significantly adds volume to their turnover in merchandise.

RECYCLING: When items finally need to be disposed of, recycle them.

The online marketplace can facilitate recycling. For example, when a merchant sells an electronic device to eBay through eBay's Instant Sale program, if the product is deemed un-sellable,

the item is contractually guaranteed to be recycled in accordance with legal requirements and the rigorous e-Stewards Certification, free of charge to the consumer.

Commerce 3.0 enables consumers and merchants to act on these points at the same time as achieving increased choices and lower prices. And, as our own experience proves, greener solutions go hand-in-hand with consumer satisfaction and business opportunities.

Going forward, small ecommerce-enabled businesses can lead the way to sustainable retail. A 2010 study by Cooler, commissioned by eBay, found that peer-to-peer online sales resulted in over $31 billion in sales in 2009. These sales were driven largely by small businesses that were taking advantage of the low-cost of establishing an online storefront. The economic welfare benefits to both merchants and consumers are nearly overshadowed, though, by the environmental benefits that come from the shift to online retailing. The Cooler study cites an OECD report, which estimated that a decline of about 12.5% of building use will come about as a result of the shift to e-commerce. The Cooler study estimates that eBay contributed to 10% of this shift, finding that the energy savings from eBay-enabled retail vs. traditional retail is roughly four million tons CO_2/year.

"At Patagonia we pride ourselves on product durability – we know that our items are built to last well beyond the first consumer purchase. When we launched our Common Threads Initiative, we knew eBay would be the ideal partner. Their well-known and trusted platform helps us connect with Patagonia customers around the world that are reselling their old gear and extending its useful life. While some brands try to curb the second-hand market for their goods, we've found that it has only served to bolster our brand and deepen our connection with customers."

Rick Ridgeway, Vice President of Environmental Programs and Communications, Patagonia

WHEN TECHNOLOGY MEETS COMMERCE

"This new experience or revolution of shopping for anything, anytime, and anywhere in the digital age is driven by mobility and mobile devices, software and integrated shopping capabilities."

John Donahoe, CEO, eBay (January 2012)

The previous section identified some of the opportunities to be found in the Internet-enabled growth engine, the *21st Century Market* dynamic and the greener *Circular Economy*.

In order to seize on these and other opportunities to unlock the transformative power of Commerce 3.0, there must be a partnership that intelligently marries technology tools with policy action.

There are four key technology tools that are fundamentally changing the dynamics of commerce by embedding mobility, inclusiveness, and choice into the process. These are search, trust, technological convergence, and innovation platforms.

SEARCH tools allow consumers to find, compare and make sense of offerings – *"From the myriad of items available can I find those relevant to my needs and make sense of what is being offered?"*

TRUST tools allow consumers to make the leap and transact – *"Once I have found the item I want, can I proceed with confidence to purchase it, and will my expectations be fulfilled?"*

Search-and-trust tools not only benefit consumers. They also allow merchants of all sizes to: 1) bring their services and products to the market more efficiently; 2) be found; and, 3) build trust with a much larger pool of potential customers, be it locally or globally.

The power these tools confer on both consumers and merchants is magnified through **TECHNOLOGICAL CONVERGENCE** and continuous **INNOVATION** using online platforms.

Mobile technologies and applications put search-and-trust tools in the pockets of consumers, place merchants' offline inventory online, and give global visibility to local merchants regardless of size.

Before we explore these technology tools, and before we identify where and how policy action fits with them, it is important to understand the environment in which technology companies, such as eBay, operate, as well as the mechanics of Commerce 3.0.

DEMYSTIFYING COMPLEXITY

"The trick, with all the behavioral possibilities of complex systems, is... where possible, to arrange the structure and conditions to reduce the probability of destructive behaviors and encourage the possibility of beneficial ones."

Donella Meadows, leading systems analyst, Professor at Dartmouth College[XII]

Technology companies operate in a complex environment where systems and behaviors cannot be perfectly controlled or predicted. That is why these companies employ agile programming techniques, experiment iteratively, and accept that success can be preceded by failures.

Let's take eBay as an example.

EBAY MANAGES:

- Over 100 million active users worldwide
- More than 100 million app downloads globally
- Over 330 million items for sale at any given time
- Almost 150 billion unique visitors per month

... IN A DYNAMIC ENVIRONMENT:

- Several new features introduced each week
- Roughly 4-5% of items are listed or ended every day

... WORLDWIDE:

- In 43 countries
- 24 hours a day / 365 days a year

eBay's example illustrates the level of complexity navigated by modern technology companies. To make such a complex environment manageable, one must adopt a flexible approach, which involves constantly innovating and evaluating the success of those innovations. For want of a better phrase, this is a process of "trial-and-error."

To adapt successfully one must recognise the strengths and limitations of the different means of solving problems[XIII]:

- **"WISDOM OF CROWDS"** – Turning to the "wisdom of crowds" (such as a group of consumers) is sensible when we want to figure out the value of something or choose the right answer from among a small number of possible alternatives. So, the "wisdom of crowds" is well suited for evaluating merchant behavior based on specific questions, such as whether communication occurred promptly or shipping time was reasonable.
- **EXPERTS** – If there is an identifiable expert in a group, it may be that the expert will do better than the group average. Experts come into their own when a combination of knowledge and initiative is required. That is why experts are relied on in software development, in product and brand development, in law enforcement.
- **COMPUTERS** – In many areas computers are replacing experts when it comes to making rule-based decisions. However, computers lack common sense or sensitivity to context. There are other limits to computing power, such as software, data, and cost limitations.

TODAY'S TECHNOLOGY TOOLS

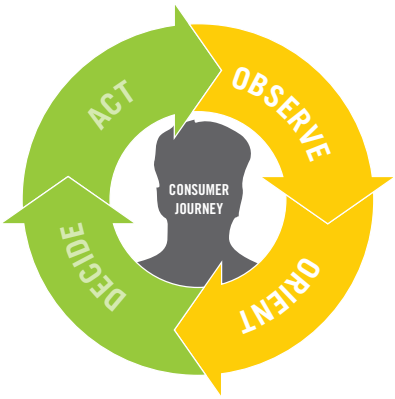
The challenges that technology companies inevitably encounter when they design and constantly redesign technology tools for consumers and merchants are illustrated by the scope and complexity of those very tools.

SEARCH TOOLS

"We're solving probably the biggest problem that exists for [small retailers], which is giving them exposure on the web and doing it in a way that doesn't require a lot of technical investment on their part."

Jack Abraham, founder of Milo (June 2011)

THE CONSUMER JOURNEY
- OBSERVE ORIENT DECIDE ACT



SEARCH CHALLENGE
"From the myriad of items available can I find those relevant to my needs and make sense of what is on offer?"

Search tools assist consumers to "Observe" and "Orient" during their consumer journey from initial interest to final purchase. They enable the consumer to answer the following question: *"Can I find the items that are relevant to my needs within the myriad of items available?"*

Search tools perform three basic functions:

1. **ACQUIRE:** Seek out data which will be valuable to consumers
2. **ANALYZE:** Rank these data to make them "relevant" to consumer needs
3. **EMPOWER:** Turn these data into information that consumers can easily query and act upon

Search results draw on vast datasets, employ feedback from machine-learning techniques, i.e. computers and artificial intelligence, and use "wisdom of crowds" feedback.

As the use of the Internet has exploded, so has the significance of Search. Search has become the most important way to find information on the Internet. Most often it marks the beginning of the consumer's journey and thereby puts the merchant on the map.

"Horizontal" search engines search the breadth of the Internet, often from toolbars integrated into web browsers of computers or mobile phones, and as such, they play a critical role in the complex Internet ecosystem. "Vertical" search services frequently facilitate commercial transactions by offering focused information in specific areas, such as travel, videos, news, or various sorts of shopping.

Search tools are drivers and central components of the opportunities for *Internet-enabled* businesses, as they allow consumers to find products, and merchants to be found. Search tools also have the power to release behaviors that promote positive social and environmental impacts through technology-driven social innovations.

For Example:

EBAY GIVING WORKS, which connects customers in the U.S. and UK through search tools with the causes they care about by offering convenient and trusted ways to give to their favorite non-profits.

These types of tools can make a significant difference. In 2011 alone, eBay's charitable giving programs in the US, UK, and Canada raised more than $63 million for nonprofit organizations around the world, which translates to more than $120 a minute.

"I started international selling through the international site visibility feature … products started showing on overseas sites and sales increased. There was clearly an international opportunity for my products and I wanted to exploit it."

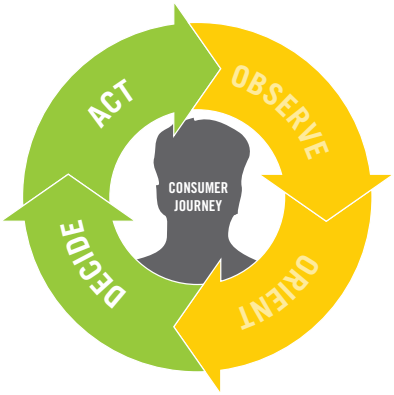
John Pemberton, 'Designer Clothes 2U' - a shop on the eBay Marketplace

TRUST TOOLS

"Shopping has evolved in ways that weren't even possible years ago. Technology is at the middle of this."

Naveed Anwar, Head of Community for X.commerce (October 2011)

THE CONSUMER JOURNEY
- OBSERVE ORIENT **DECIDE ACT**



TRUST CHALLENGE
Once I have found the item I want can I proceed with confidence to purchase it - will my expectations be fulfilled?

Trust tools, like search tools, carry out 3 basic functions:

1. **ACQUIRE:** Obtain valuable feedback about products and seller behavior.

2. **ANALYZE:** Rank this data based on the "fulfillment" of specific consumer expectations.

3. **EMPOWER:** Transform this data into feedback profiles and tools to increase pre-purchase information for consumers

Sophisticated trust tools rely on a mix of elements and actors working together for the benefit of the consumer. For example, eBay draws on the strengths of a variety of stakeholders, including:

- Rights owners' expertise through its Verified Rights Owners (VeRO) Program, which provides a Notice-and-Take-Down system for illegal items;
- Law enforcement expertise;
- Community referrals, such as via a "Report this Item" button, which allows a member of the eBay community to point out potentially illegal listings;
- eBay's Trust and Safety Department, which educates consumers and sellers, through eBay's Safety Center, Help Pages, Listing Guidelines and Tutorials;
- PayPal's Safer Payments system, which allows consumers to shop without exposing their sensitive financial information.

Social influence is increasingly driving consumer preference. Consumers can build up the requisite confidence by directly connecting with family, friends, "influencers," and fellow consumers – e.g. via social networks – when deciding and eventually acting on a purchase.

Social influence is, we have observed, also interacting with search tools to drive consumer awareness and product selection at levels approaching or exceeding traditional advertising through, for example, promotion from social networks.

Trust tools also help to fulfill the need of merchants to build trust in a cost-effective manner with consumers. For example, the economic study finds that eBay's trust mechanisms instill confidence in sellers: the higher ranked a seller's status is, the less buyers care about geographic distance and whether the seller is known or not.

In short, trust tools enable a far broader array of merchants and products to successfully come to market.

"Social design takes word of mouth and puts a bullhorn to it."

Katie Mitic, Former Director of Platform and Mobile Marketing, Facebook (October 2011))

TECHNOLOGICAL CONVERGENCE

"It's no coincidence that the countries that leverage the fruits of science and technology for greater social and economic good lead the world in well-paying jobs and in standards of living."

Rebecca Blank, Acting Secretary of Commerce (January 2012)

Technological convergence accelerates the fusion of:

- **BROADBAND:** Faster Internet speed- Fiber Optic service being launched in cities across the country.
- **RICH INTERNET APPLICATIONS:** Transition to cross platform Rich Internet Applications that have all the features of offline applications - Microsoft Office 365 provides the services of Microsoft Office in an online environment.
- **THE CLOUD:** Roll out of Internet storage and virtualization - SalesForce provides business solutions through the cloud.
- **MOBILE:** Momentum towards mobile technologies and applications - More mobile devices than personal computers by 2015.
- **SOCIAL:** Ever more wide-reaching social networks - Facebook 1 billion users, Google+ 250 million.
- **LOCAL:** Rising importance of geo-location data - PayPal Wallet can provide consumers with offers based upon location.
- **SCREENS:** Innovations in screen and 3D technology - Corning Inc. designs large form specialty glass that can be used to display computer images.
- **INTERFACES:** Novel interface technologies (haptic, gesture, etc.) - Oblong industries uses spatial interfaces to control applications and data across display devices.
- **PATTERN RECOGNITION:** Advancing pattern recognition and early stage Augmented Reality - Wikitude is an augmented reality app that overlays information about a location as a user holds up a Smartphone camera in the location.
- **3D PRINTING:** Beginnings of fast, affordable and easy-to-use additive manufacturing technologies - FormLabs has created the Form 1, which is a desktop-sized machine that can create professional grade, light cured 3-D prints.

Technological convergence enables search-and-trust tools to become ever more integral to the consumer experience, and ever more global in their reach by increasingly merging mobile, local, social, novel interfaces, augmented reality, and much more.

Christopher Payne, Head of eBay North America, explains:

"Commerce 3.0 is the intersection of technology and shopping. It's promotions and coupons for local offers. It's the idea of the digital wallet, where you can make online payments in physical stores. It's clear that there is huge opportunity in this convergence."

Technological convergence places power in the palm of the consumer's hand: making more and more information accessible through the mobile device the consumer is carrying at all times.

The RedLaser app, for example, gives the consumer information about a product, photos, reviews, and price comparisons across merchants of all sizes, as well as information on which local stores carry it, maps to the stores, phone numbers, and the ability to buy the product from within the app.

The "self-sufficient consumer" is emerging, using his or her mobile phone both inside and outside of the store to research products, as well as to receive advertising and promotion messages. This consumer also carries shopping lists, coupons, and loyalty rewards on his or her mobile phone to secure the best and right deals at all times.

Technological innovation is also extending the consumer journey, allowing the consumer to retain control even after completing the transaction. For example, PayPal allows both merchants and consumers to stay in control of their finances, with the consumer deciding how to pay for a purchase – PayPal balance, bank account, or credit card.

Moreover, convergence means that social networks become influential throughout the "consumer lifecycle," at the stages of search, purchase (trust), own, and repurpose. This helps consumers maximize personal, social, and economic value from the items they buy, own, and resell, e.g., by sharing interests and passions around products.

INNOVATION PLATFORMS

"Retailers and developers need a technology-driven global commerce partner to help them engage and connect with consumers anytime, anywhere."

Matthew Mengerink, Vice President and General Manager of X.commerce (October 2011)

Today's consumer-driven retail environment no longer revolves around the retail store; it is focused on where the consumer is. The retail store remains a part of the modern merchant's toolbox, but success in this environment requires a set of new instruments and expertise, some of them

Innovation platforms pool and catalyze the power of third party developers and specialists to rapidly create ever more innovative solutions.

quite different from traditional retail capabilities. Many merchants do not have the time or resources to make their own significant investment in developing those solutions and tools.

Merchants, therefore, opt to engage with specialist partners to allow them to take advantage of new technologies, channels and solutions, while they continue to pursue their own skills of sourcing and servicing customers. For example, eBay-owned GSI Commerce enables brands and retailers to operate multichannel businesses by offering them solutions via a technology portfolio and an operations platform.

Innovation platforms and the services they offer to developers, partners, and merchants are crucial "commerce enablers" in this fast-moving and complex retail environment. eBay's open commerce ecosystem – X.commerce – drives innovation by pooling resources from eBay, our partners, and third-party developers. Equally important, it allows merchants of all sizes to benefit from the latest innovations.

"At eBay Inc., we want to make sure merchants get what they need."

Matthew Mengerink, Vice President and General Manager of X.commerce (January 2012)

"Shop ePal" sells electronic products online. It started literally as a mom-and-pop store in 1999, and now averages $250,000 in sales a month. Right from the start, PayPal has been a key to the company's success. Fifty to sixty percent of its customers live in Canada, Australia, and Europe. And nearly 90% of them are using PayPal. "We keep track of fluctuations in currency exchange rates, so we can anticipate how rates will affect our overseas sales," says co-founder Klaus Koch. PayPal and ChannelAdvisor, the integrated PayPal partner that provides Shop ePal's payflow, provide the company with accurate and reliable business data. "With the sales and activity reports we extract from PayPal and ChannelAdvisor, we can track sales by all kinds of dimensions," Koch says. "They really support the business analysis that keeps us on track."

POLICY FOR THE "NEW" COMMERCE

"In order to win in today's retail, it's not about who can invest the most amount of money and who can have the best location. It's about keeping up with the pace of innovation...."

Naveed Anwar, Head of Community for X.commerce (October 2011)

This Roadmap has described how search-and-trust tools, technological convergence, and continuous innovation – together combining online and offline advantages, and serving them up with mobile capabilities – drive the emergence of an increasingly "borderless" reality for consumers and merchants. Distance matters less and less today, making it possible even for small merchants to enter, grow, and succeed in the global market; this is a historic change in trade that has been driven by the Internet and technology. Therein lies the opportunity this Roadmap identifies. As policymakers in the U.S. and across the globe consider this unique opportunity, they must identify the barriers that the small Internet-enabled businesses are facing when they engage in global commerce.

Merchants and consumers are taking advantage of modern technology and the Internet. Our economic study finds that 97% of U.S. "commercial sellers"[XIV] on eBay export. Moreover, the top 10% of U.S. "regular exporters"[XV] on eBay reach 18 out of the 20 largest markets and the smallest 10% reach 13. eBay buyers, when asked why they appreciate the ability to choose from a global inventory, mention that it provides access to unique products, products hard to come by where they live, better prices, and more choice in general.

The creation of new trade patterns, the facilitation of existing trade, and broad cost reduction are all happening fast. The economic study reveals that on the eBay marketplace, the trade-reducing effect of transaction costs has fallen by 41% between 2005 and 2009. This decrease is three times faster than for traditional trade, where the drop has been only 14% over that period.

These changes are the result of iterative efforts, from putting in place the right enabling conditions, such as platforms, thereby allowing merchants to grow their business irrespective their size or location, to providing a global payment system and developing trust mechanisms that facilitate communication, dispute resolution, and clarity on rights and obligations.

Importantly, this process of change is dynamic, a virtuous circle of continuous innovation and heightened consumer expectations.

Against this backdrop, policy plays an important role in supporting the way technology reinvents commerce and brings down the barriers that occur where a global digital world meets a (still) fragmented physical world.

The right mix and the right level of policy action are necessary in order to:

- Promote uptake of Commerce 3.0 on a global scale
- Secure a climate of innovation for the private sector when navigating complexity

TOMORROW'S POLICY ACTION

"Internet policymaking principles need to take into account the unique social, technical, and economic aspects of the Internet environment"

OECD, Principles for Internet Policy Making (June 2011)

Based upon information from the economic study and analysis, there are four key areas where policymakers should act to support the way technology-enabled commerce is reducing distance between consumers and merchants. These are areas where policy action would promote the process of building sustainable growth into global commerce.

PROMOTE SMALL BUSINESS INTERNET-ENABLED TRADE

"One of the most important tools the Internet offers to businesses is the ability to access the global electronic marketplace… Increased access will allow more small businesses to compete and enter the global market."

Sam Graves, Chairman of House Small Business Committee (R-MO) (July 2012)

Policy that opens up market access to small and large merchants alike

The economic study demonstrates how lower trade barriers, coupled with an ability to reach multiple foreign markets, translate into newcomers' having greater opportunities to grow faster. Smaller merchants, in particular, need access to a sufficiently large pool of potential consumers to make their operations thrive. Small businesses no longer merely serve local consumers, and now look beyond their immediate locality, their country, and even their continent.

Policy has a key role to play in encouraging small businesses to take advantage of online channels. Policies such as the National Export Initiative have been helpful in shedding the light on small business exporting. Yet, these initiatives can be expanded to highlight the export-advantages that come with selling goods through online channels. Moreover, trade policy should focus on market access issues that benefit micro small businesses, such as those that will be discussed in the final section of this paper.

ENSURE PREDICTABILITY

Policy that ensures there is transparency and predictability in delivery times, costs, administration, and related legal obligations costs

The economic study found that the trade-reducing effect of shipping costs is four times larger for *Internet-enabled* cross-border transactions than for offline trade. Put differently, if average shipping costs between countries decreased by 10%, then online trade would increase by about 5%.

Shipping "costs" must be understood in the broadest sense to encompass the cost of, and user confidence in, cross-border package services. Shipping costs also include delays that result from the level and administration of customs duties. The consumer and the merchant must be able to (as far as possible) view and take into account such "costs" in the transaction processes.

Policy should promote transparency, predictability, and simplicity in all these aspects for the merchant to offer products cross-border and for the consumer to make a cross-border purchase.

STRENGTHEN TRUST

"Preserving trust in the Internet economy protects and enhances substantial economic activity."

President Barack Obama (February 2012)

Policy that strengthens trust between consumers and merchants

Trust between consumers and merchants is a key condition for efficient commerce. A consumer will not conclude a transaction where he or she perceives the risk that something will go wrong and predicts little ability to redress the situation once it has gone wrong.

This report has described how Internet services employ technology tools to continuously build trust among users. The Internet allows small retailers to operate successfully alongside larger merchants, and niche or specialized products to thrive alongside more well-known branded products. Policy in the U.S. has often focused on ferreting out dubious markets, but could balance those efforts by promoting trustworthy marketplaces.

Another important element of trust is the availability of efficient and secure payment solutions. Promoting an open marketplace for payments services will allow for consumers to "vote with their feet" and choose the most trustworthy, reliable, and simple payment services.

Policy has an important role to play in ensuring a general consumer trust level in commerce and merchants collectively – and globally.

FOSTER INNOVATION

"Internet intermediaries provide increasing social and economic benefits"

OECD, The Economic and Social Role of Internet Intermediaries (April 2010)

Policy that guarantees legal and operational certainty for service providers that enable commerce while recognizing the complexity of the modern commerce environment

Service providers that enable commerce, such as online platforms and other Internet intermediaries, are at the core of Commerce 3.0 because they:

- Stimulate employment and entrepreneurship by lowering the barriers to launching and operating businesses and by creating opportunities for niche product transactions to occur;
- Provide access to information and choice, which empower users and improve purchasing power;
- Establish trust and enable collaboration to flourish among individuals and enterprises.

These are the conclusions of the OECD 2010 Report on the economic and societal role of Internet intermediaries.

Providers of services that enable commerce cannot, however, control or force specific user behaviors on their platforms. They can only seek to put in place structures and conditions that encourage virtuous behaviors. Policy must guarantee legal and operational certainty for intermediaries to innovate and experiment by tailoring any obligations or responsibilities to such a complex reality.

THE ROAD TOWARDS COMMERCE 3.0

"I don't believe it accidental that most of the innovation in the digital economy comes from the United States. We made important policy choices as the Internet began to take off."

Ron Wyden, Senator (D-OR) (November 2010)

SMART POLICYMAKING – NOT REGULATION

Policymakers should prioritize four key areas (openness, predictability, trust, and innovation) in order to realize the global opportunities of technology-enabled commerce. Policy plays an important role in supporting technology's ability to build sustainable growth into the commerce environment and its ability to allow consumers and merchants to overcome distance.

"Smart policymaking" means:

1. **USING A MIX OF "PROBLEM SOLVERS,"** such as public and private sectors, computer software, wisdom of crowds, and experts, recognizing that each has its strengths and limitations.

2. **EMBRACING COMPLEXITY** by being flexible and evaluating progress over time, accepting uncertainty, and proceeding on a trial-and-error basis.

3. **PROVIDING TOOLS** that improve consumer and merchant behaviors, yield sustainable growth, and evolve a solution – not determine it.

It is important to emphasize that this Roadmap does not make the case for more regulation. On the contrary, this Roadmap argues for "smart policymaking." The term "policymaking" has been used deliberately because it is broader in scope than the term "regulation." It may encompass initiatives emanating from and implemented by the private sector, the public sector, or a combination of both.

The choice is not one of more or less regulation, but a question of taking a more holistic approach: "smart policymaking."

Smart policymaking is particularly important when being applied to the Internet market, which is characterized by rapid innovation.

RECOMMENDATIONS FOR POLICY ACTION

Informed by the economic study and guided by the mechanics of Commerce 3.0, this report has described four priority areas where policymakers can make a difference and has set out three guiding principles for policymaking in technology markets.

Translating this into action, this report will identify six specific areas where policy action is appropriate to ensure that consumers and merchants can make their products available, find the consumer, and transact through any channel and across borders.

Consumers and merchants need help to overcome:

- Delivery concerns
- Administrative burdens
- Diverging legal rights and obligations

Merchants need innovation and intermediation to grow their operations in a constantly changing retail environment.

Our recommendations all seek to match policy action with a consumer journey that is increasingly global, digital, and mobile.

POLICY RECOMMENDATION #1 – – IMPROVE DELIVERY SERVICES

"…when you add the opportunities for the big, explosive growth in ecommerce with the package business, we think that we still will play an extraordinary, important role in that going forward."

Patrick Donahoe, Postmaster General (June 2012)

Promote fast, affordable, reliable, accessible and transparent end-to-end, cross-border delivery services

Pricing, selection, and delivery are three key "drivers" of online and mobile consumer demand. More goods crossing borders increases selection and, in turn, creates a more competitive market that improves consumer pricing.

Even though the economic study found that the vast majority of sellers on eBay export, the volumes are far below their potential. This is in part due to costs, administration, and uncertainty when shipping across borders.

Policy related to delivery services plays a crucial role in the retail chain. A consumer who receives the purchased product promptly without hassle is a happy consumer, more likely to continue exploring the opportunities of shopping online both within and outside the locality. On the other hand, products that take longer than expected to arrive, or worse are lost, undermine the value and convenience of online and mobile commerce, creating a bad buyer experience.

Moreover, prices for cross-border delivery, when compared to domestic deliveries, represent a serious concern for consumers and retailers.

The importance of cross-border package services in fostering a healthy and efficient commerce landscape cannot be underestimated. It should be a top policy priority for U.S. trade policy.

At a high level, Commece 3.0 would be best served through actions that promote the following five areas:

1. **Fast** – 3-7 days anywhere to anywhere
2. **Affordable** – High international shipping costs represent a serious barrier[XVI]
3. **Reliable** – Delivery within 1 day of promise
4. **Accessible** – Drop-off, pick-up, labels, information
5. **Transparent** – End-to-end shipment tracking, standardised returns

At a granular level, we think there are three specific areas in which delivery services could be greatly improved through policy changes:

USE OF TECHNOLOGY TOOLS TO AMPLIFY EFFICIENCIES

To put small businesses on a level playing field with large businesses, governments should support the type of delivery services small businesses and their customers demand

(e.g. end-to-end tracking; standardized return solutions; affordable, sufficiently fast and reliable services). To this end, governments should partner with and promote technology services that leverage efficiencies in scale and aggregation to achieve volume discounts for small retailers. For example, in Europe, Asia, and the U.S., eBay is partnering with commercial courier companies and postal operators to negotiate and develop delivery solutions that meet the needs of consumers and sellers.

Governments should also support the use of the Internet and technology to make shipping simpler. Government can play a role in strengthening links between the services of commercial courier companies and postal operators. Governments can also utilize technology tools and the Internet to improve customer knowledge about the nature of foreign postal services. This is important because unlike their larger counterparts, small merchants are often unaware of what options are available; the quality of foreign services; and how to facilitate (in terms of documentation, labeling, and address format) to send a package overseas.

HARMONIZATION

Cross-border delivery experiences are highly inconsistent for small merchants, depending on the country and the delivery partner infrastructure. Improving quality, access, and pricing of cross-border services will most certainly increase the volume of transactions. That means: i) more growth opportunities for merchants, courier companies, and postal operators; and ii) empowered consumers as selection increases and prices become more competitive.

Creating harmonized rules for postal operators to deal with damaged packages, tracking requirements, and data requirements would make it simpler for small businesses to manage the intricacies of cross border trade.

INTEROPERABILITY

Currently, if a merchant sends a package through the U.S. Postal Service to a foreign country the merchant will sometimes lose the ability to track the package once the package leaves the U.S. borders. Other times the merchant will have to utilize a different tracking service and system to be able to track the package. Creating interoperable tracking systems would enable merchants and consumers to track their packages throughout the shipping process, improving trust and reliability.

Shipping solutions such as these are often overlooked in trade negotiations, but are integral to improving the efficiency of Internet-enabled small merchants.

POLICY RECOMMENDATION #2 – REDUCE CUSTOMS COMPLEXITY

De Minimis Threshold

Small businesses face challenges navigating modern customs procedures. Take for example, the issue of a cross border retail return: returns are essential in the retail business, but the burden of obtaining a customs duty drawback for a returned item is high. It is harder for small businesses to absorb the costs that come with customs paperwork and the fees are proportionally harder for small businesses to mitigate. Customs complexity not only makes exporting prohibitive for potential new merchants, but can frustrate existing merchants and drive them to abandon global trade.

Increasing the de minimis threshold is a policy change that could greatly ease the burden on small exporters attempting to offer returns. When a good is imported into the U.S., it is subject to customs duties and additional paperwork, generally documenting country of origin, type of item, etc. The exception to this rule is if the good is worth less than $200; this is known as the de minimis threshold. There is an effort within the U.S. to raise the de minimis level (H.R. 1653, S. 3597 in the 112th Congress). Raising the threshold would make it easier for small business exporters to offer returns, by increasing the pool of goods that would be free of customs paperwork and duty payments.

The U.S. should also consider the de minimis issue in an international context. In late 2011, ten economies in the Asia-Pacific Economic Cooperation (APEC) signed on to a pathfinder initiative stating that they are in support of adopting a baseline de minimis value across the APEC economies. Thus, no APEC economy would be able to have a de minimis value below a certain threshold, but countries could raise their de minimis beyond the baseline level. De minimis values can be greatly divergent across different economies with some countries as low as $0.15 USD (the Philippines) or $21 USD (Canada). The U.S. should make de minimis a priority in any trade negotiation, as small U.S. merchants exporting low-value shipments that are below the de minimis benefit tremendously when they are able to access foreign markets without any customs paperwork and duties.

Raising de minimis levels domestically and internationally helps to level the global trade playing field and provides small businesses and entrepreneurs the opportunity to fully take part in the global economy.

Returns Chapter

For those items over the de minimis threshold, small businesses face challenges when attempting to comply with the requirements of the Harmonized Tariff Schedule of the United States. Specifically, small *Internet-enabled* businesses are often unable to provide original importation documentation to prove that an item was exported to the international buyer within three years of its original importation into the United States. This requirement jeopardizes the ability of small businesses to accept returns over the de minimis threshold duty free.

The Harmonized Tariff Schedule of the United States and other customs facilitation tools should be updated to ensure the seamless ability of small Internet-enabled businesses to accept returns from foreign buyers, like their larger counterparts.

POLICY RECOMMENDATION #3 – HARMONIZE AND EXPAND TRUSTED TRADER PROGRAMS

Facilitate trade through "mutual recognition" of other countries' customs programs and improve our trusted trader programs

The Customs-Trade Partnership against Terrorism (CTPAT) & the Simplified Entry Initiative are examples of U.S. trusted trader programs designed to reduce logistical burdens and increase the efficiency of U.S. businesses. These programs allow importers to register with Customs and Border Protection in order to receive preferential treatment for goods coming into the United States. The U.S. and European Union signed a Mutual Recognition Agreement in early 2012 that officially recognizes the compatibility of the U.S. Customs-Trade Partnership Against Terrorism (C-TPAT) and the EU's Authorized Economic Operator (AEO) program. The U.S. also has signed Mutual Recognition Agreements with Jordan, New Zealand, Canada, Japan, and Korea. Thus, registering with one entity will automatically apprise traders of the benefits of the other entity.

While these programs are important to improving efficiency, they should be expanded to ensure the ability of small business retailers, possibly in association with intermediaries, to benefit. Of note, intermediaries – including trusted service providers – can be effective in creating an economy of scale, which is important to the success of these mutual recognition programs. Government officials should seek to modify border regulations to reflect the role of trusted intermediaries and ensure small businesses can also benefit from streamlined trade and security policies.

Beyond harmonization, the U.S. trusted trader program should also be expanded to facilitate exports. The U.S. C-TPAT program and the Simplified Entry Initiative apply only to imports, while the EU's AEO program applies to both imports and exports.

We call on the U.S. to become a leader in creating innovative trusted trader programs by:

1. Promoting the involvement of small businesses in trusted trader programs, possibly through trusted intermediaries
2. Signing additional mutual recognition agreements and expanding the programs to cover both exports and imports

POLICY RECOMMENDATION #4 – PROMOTE OPEN DEVELOPMENT OF REMOTE MOBILE PAYMENTS

Smart policymaking is needed in the high-growth area of mobile payments. According to Juniper Research, global mobile payments will represent a $680 billion market by 2015.[XVII] There are a number of players, both big and small, that are diving into the mobile payments sphere.

There are currently a variety of methods for payments service providers to utilize in order to facilitate cross-border ecommerce. Policy can be used to ensure that these are secure and efficient payment methods. It is also crucial that trade policy makers promote the principle of technology neutrality when considering remote mobile payments.

Mobile payments is a fast-moving area, and legislators must be vigilant not to hinder innovation by dictating the conditions of, or the direction for, technical development. The development of efficient, modern, and safe payment methods relies on companies using unique models, software rules and human review to develop over time and through constant iteration, solutions and systems that provide the right customer experience.

POLICY RECOMMENDATION #5 – PROTECT INTERMEDIARIES' ABILITY TO INNOVATE

Policy can help to secure a climate favorable for private sector innovation. Merchants increasingly rely on technology partners/intermediary services for the "back-end" support that powers the "front-end," consumer facing, services including search, transaction, payment, and others. These services must be able to evolve, iterate, and experiment.

Just as in the offline world, intermediary services can be misused for illegal purposes. They can be abused by users that commit fraudulent activity. In the context of fighting illegal activities on online platforms, there are three basic concepts that should be understood:

1. **A MIX OF ELEMENTS IS NECESSARY FOR PROBLEM-SOLVING ON INNOVATION PLATFORMS** – Intermediaries need to rely on experts (e.g. Rights Owners to report suspected counterfeits or developers to design and redesign tools and services), the "wisdom of crowds" (e.g. users telling them and each other what is a good or a bad service and tool), and computers (e.g. software to filter out blatant breaches of the law).

2. **THERE ARE STRENGTHS AND LIMITATIONS TO EACH PROBLEM-SOLVING ELEMENT** – For example, computers lack sensitivity to context, and so a software filter can only flag listings containing certain words; it cannot make its own determination as to the illegality of the listing; humans make errors and are limited in capacity and expertise.

3. **COMPLEXITY CANNOT BE "PREDICTED-AND-CONTROLLED"** – Due to complexities (e.g. the overwhelming number of users, listings, transactions, and URL requests they must host), intermediaries such as eBay cannot predict and control certain types of user activity with complete accuracy; they can only arrange conditions to reduce the probability of harmful behaviors and to encourage beneficial behaviors.

With these factors in mind, policymakers should be wary of placing burdens on intermediaries that facilitate small business cross border trade. Policymakers should first look to voluntary solutions as the primary solution in this difficult area. A policy promoting voluntary cooperation between intermediaries and experts has proven to be effective in the U.S. in combatting illegal pharmaceuticals and websites dedicated to content infringement. Promoting voluntary cooperation should be the central role for policy to play.

The need for a mix of solutions and the consequences of complexity should guide the application and interpretation of liability mandates. Moreover, the idea that intermediaries and experts can cooperate successfully and voluntarily will be central to successful policy-making in this space.

POLICY RECOMMENDATION #6 – RECOGNIZE INTERNET-ENABLED MERCHANTS AND THE 21ST CENTURY MARKET IN TRADE POLICY

Our economic study shows that trade agreements have less of an impact for *Internet-enabled* cross-border trade than they have in offline international trade. Trade agreements are found to increase offline trade between countries by 38%. In contrast, cross-border trade on eBay is largely unaffected.

Our conclusion is that the potential of trade agreements to facilitate cross-border online trade for small *Internet-enabled* merchants has not been fully exploited. With the Internet, the nature of international trade is fundamentally changing. It is no longer an activity exclusive to only the largest firms and countries; merchants of all sizes are now able to transact over geographic distance, and despite other trade costs.

Take for example the new trade issues of cross border data flows and the bar on server requirements. Incorporating the idea that small businesses utilizing Internet platforms are the true beneficiaries of cross border data flows, and the ability to access customers without establishing a physical presence, can bring a powerful message to an important issue.

The story of the small *Internet-enabled* merchant engaging in global trade is new and exciting. Advocates of trade have traditionally been seen as the mouthpieces of large multi-national corporations and the enemy of local small businesses. But this idea of the *21st Century Market* should become the new centerpiece of trade advocacy. The idea of local *Internet-enabled* merchants engaging in global trade brings a unique perspective to the traditional trade debate. Moreover, the idea that small local merchants are benefiting from trade provides a powerful argument against opponents of trade.

The story of the *Internet-enabled* merchant and the idea *21st Century market* should become a centerpiece of trade policy and trade advocacy going forward.

CONCLUSION

This Roadmap puts the spotlight on the sustainable growth opportunities that the "new" commerce – Commerce 3.0 – creates.

We see immense opportunities in how Commerce 3.0 equips consumers and merchants through digital technology enabled by the Internet. Mobile technologies and applications put search-and-trust tools in the pockets of consumers, put offline inventory online, and give visibility to local and global offerings. This allows consumers to find, compare, and make sense of product offerings. Moreover, consumers can easily make the leap and transact with confidence, whether on the run, at their laptop, or in-store. And, Commerce 3.0 allows merchants of all sizes to bring products and services to world markets more efficiently.

Importantly, the economic study commissioned by eBay points to the essential driver behind these opportunities: the Internet and technology "shrinking" the world for consumers and merchants by lowering trade costs. This enables international trade that would otherwise not occur and makes existing cross-border trade more efficient. World trade is no longer the exclusive domain of the largest firms or countries; rather the Internet is a fundamental game-changer for the global economic framework allowing consumers and merchants of all sizes to connect on the global stage and establish trust despite geographical distance, institutional differences, and other trade costs. This enables smaller merchants to reach multiple markets and newcomers to gain a foothold, then grow and succeed.

Policymakers should support this new form of globalization, which truly serves all sizes of enterprises, including local small businesses.

This Roadmap is designed to help shape the policy environment to ensure that all the opportunities, which arise where technology meets commerce, are harnessed for the benefit of consumers and merchants.

This Roadmap draws from eBay's experience, and demonstrates a vision of the future of commerce, if the right conditions are in place. These conditions include: efficient shipping and border mechanisms; global payment systems; and technological platforms that enable merchants to compete irrespective of size and provenance.

For policymakers, this means they should prioritize efforts that open up market access, instill trust and predictability throughout the consumer journey, and promote intermediation services and innovation.

TRANSLATING THIS INTO IMMEDIATE ACTION, WE RECOMMEND THAT THE U.S.:

Improve delivery services through promotion of Fast, Affordable, Reliable, Accessible, and Transparent end-to-end, cross-border package services that:

1. Use technology tools to amplify efficiencies.
2. Harmonize shipping platforms between countries.
3. Create interoperable systems that both the public and private sectors can utilize.

Reduce customs complexity by creating rules that simplify customs procedures for small Internet-enabled merchants by:

1. Increasing the de minimis threshold in the U.S.
2. Encouraging foreign nations to raise their de minimis thresholds through trade negotiations.
3. Enabling ecommerce businesses to accept duty-free returns from their international buyers.

Create innovative trusted trader programs that:

1. Encourage the participation of small merchants, possibly through trusted intermediaries.
2. Harmonize with foreign trusted trader programs through the singing of mutual recognition agreements.
3. Cover both exports and imports in foreign trusted trader programs.

Promote open development of mobile payments by:

1. Fostering competition between mobile payments services.
2. Promoting and ensure technology neutrality.
3. Avoiding the establishment of onerous standards.

Protect the innovation that intermediaries bring to bear, through policies that:

1. Recognize that there is significant complexity to the way in which the actors involved in Internet-enabled commerce interact.
2. Encourage voluntary cooperation between the actors in the Internet-enabled commerce ecosystem.
3. Provide certainty to intermediaries that they will not be held liable for the actions of their users.

Recognize Internet-enabled merchants and the 21st century market in trade policy-making by:

1. Amplifying the message that local merchants are engaging in, and benefiting from, global trade as a result of the Internet and technology.
2. Creating trade policy that benefits the *Internet-enabled* merchants that engage in the *21st century market*.

REFERENCES

I
We commissioned Sidley Austin LLP and Professor Marcelo Olarreaga of Université de Genève to study international trade flows and exporting behavior, comparing the eBay marketplace with traditional offline channels. The findings of this research can be found in the report by eBay "Enabling traders to enter and grow on the global stage – story of an online marketplace: opportunities also for small traders and developing countries" (2012) and in the academic article, *"There Goes Gravity: How eBay Reduces Trade Costs"*, by Andreas Lendle, Marcelo Olarreaga, Simon Schropp, Pierre-Louis Vezina, (December 2011), available under: http://www2.unine.ch/files/content/sites/irene/files/shared/documents/s%C3%A9minaires/Olarreaga.pdf

II
Julie Bort, How Many Web Sites Are There?, Business Insider (March 8, 2012) avaialable at: http://articles.businessinsider.com/2012-03-08/tech/31135231_1_websites-domain-internet#ixzz27hntUzA2

III
Aaron Smith, Nearly half of American adults are smartphone owners, Pew Research Center (Mar 1, 2012)

IV
This is based on 2010 data for US sellers on the eBay marketplace with annual sales of more than USD 10,000.

V
The robustness of this finding has been checked to ensure it is not driven by any outlier variable or composition effect that occurred during the aggregation of the results. The basic gravity regression was therefore repeated for online and offline trade for each of the 29 product categories, by year, by eBay site, for Business-to-Consumer and Consumer-to-Consumer commerce separately, and including domestic trade. The result was that the finding is robust and not driven by composition effects.

VI
The offline data comes from research by Eaton, Jonathan, Marcela Eslava, Maurice Kugler & James Tybout (2007). *Export dynamics in Colombia: Firm-level evidence*. NBER Working Paper No. 13531. The authors secured access to very unique data on Colombian exporters that allowed them to track these firms over a period of ten years. Their research concluded that on average 25% of all offline firms in a given year are new entrants..

VII
There are various ways of dividing goods into "hit" and "niche" products. One way is to identify the extent of brand intensity across goods categories. Products with many registered, and thus recognizable, trademarks could be seen as "hit" categories, while those with few registered brands are seen as "niche" categories. The intuition is that protected and recognizable trademarks are the "currency" of branded goods, and product segments that register many trademarks apparently care about the "brand-image" of their products. We note that this view is taken by Anderson (Long Tail 2006).

VIII
This is a list of, in descending order, the top nine categories which we determined to be "hit" and "niche" categories by counting the number of registered trademarks listed in the Madrid System for International Registration of Trademarks, available on the World Intellectual Property Organization (WIPO) website: **"niche" products**: Home & Garden (16); Networking & IT (20); Coins (10); Stamps (26); Hobbies & Crafts (15); Antiques (1); Collectables (11); Sports Memorabilia (25) - **"hit" products**: Computing (12); Clothes, Shoes & Accessories (9); Sporting Goods (24); Toys & Games (28); Jewelry & Watches (17); Books, Comics & Magazines (3); Health & Beauty (37); Baby (2); Consumer Electronics, Video (34)

IX
For example, the Sidley-Olarreaga team analyzed the impact of different corruption levels (using the World Bank corruption index) between seller and buyer countries on the importance of distance to cross-border flows. In cases where the buyer's country of origin has a particularly bad corruption score compared to the seller's home country, distance matters roughly equally for online and offline trade. Clearly, buyers are eager to do business with reliable sellers, regardless of the trade costs involved. Sellers, eager to sell their goods, agree to the deal. In cases where the seller and buyer come from similarly-ranked countries, distance matters less for online than for offline trade. With growing levels of corruption in the seller's country, offline trade occurs less and less frequently – whereas online trade is not similarly affected because alternative mechanisms, such as buyer protection programs run by online marketplaces, replace buyers' mistrust in bad institutions in the seller country. In addition, the Sidley-Olarreaga team analyzed the effect of "seller reputation systems", such as eBay's rating estimation system and found that the higher a seller's reputation, the less buyers care about distance. Finally, comparing the effect of distance on "hit" and "niche" products, the Sidley-Olarreaga team found that the negative effect of distance is lower for "niche" products on eBay than offline. "Niche" products being a product category prone to asymmetric information problems, they concluded that the way information exchanges and communication between buyers and sellers are facilitated online helps to establish trust in the product quality.

X
"Green and Growing: The Small Online Business Link to Economic and Environmental Revival" (13 September 2010), conducted by environmental research and carbon-footprint consulting firm Cooler, Inc.

XI
"Contribution of Online Trading of Used Goods to Resource Efficiency: An Empirical Study of eBay Users"; Jens Clausen, Birgit Blättel-Mink, Lorenz Erdmann and Christine Henseling; published 23 June 2010; Open Access Sustainability ISSN 2071-1050, *www.mdpi.com/journal/sustainability.* (The project was funded by the German Federal Ministry of Education and Research within the research program of Social-ecological Research. The full report on the project to be available on www.izt.de.)

XII
See "Thinking in Systems" by Donella Meadows, edited by Diana Wright (2009). Dr. Donella H. Meadows (Ph.D. in biophysics, Harvard University) was the founder of the Sustainability Institute professor at Dartmouth College and member of Club of Rome...

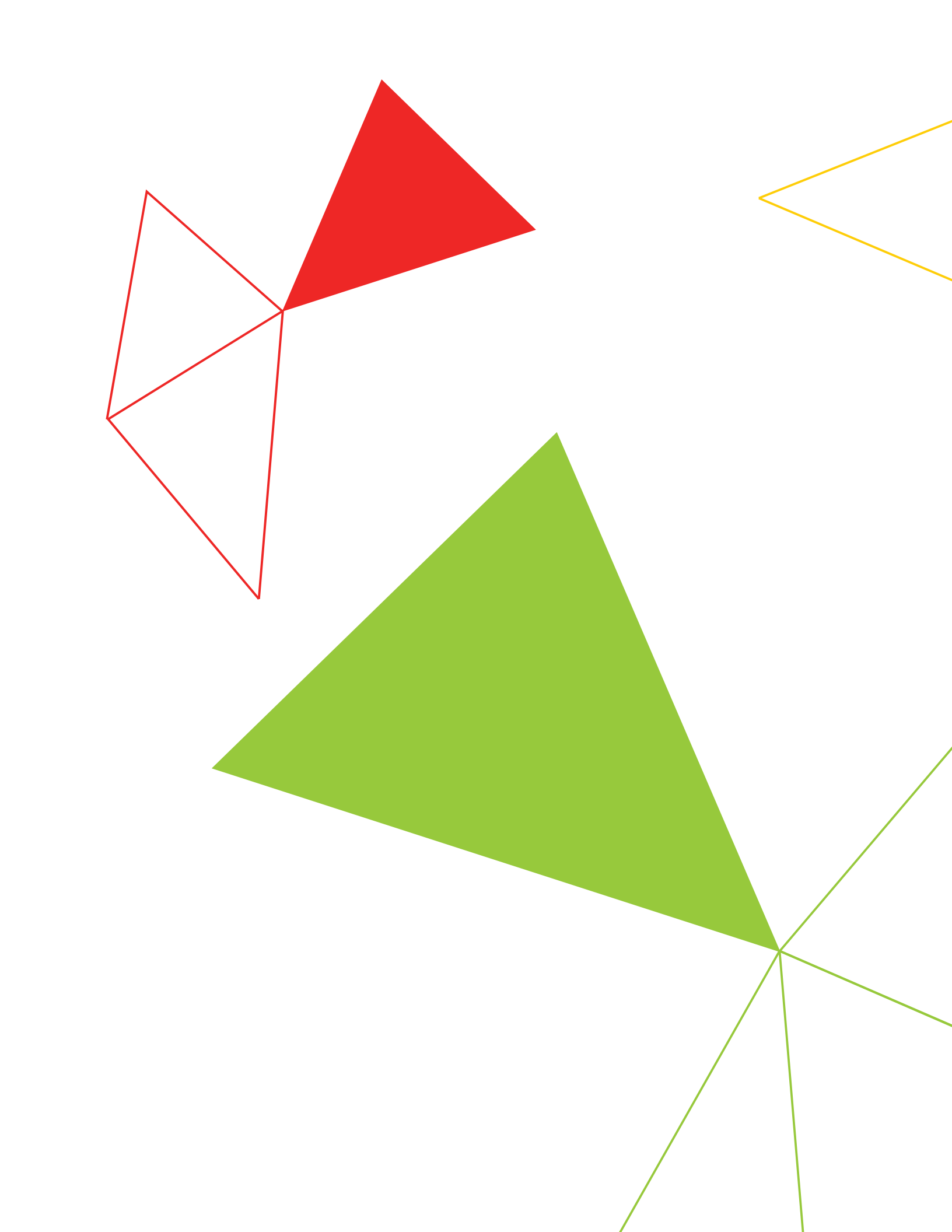
XIII
See, e.g., explanations provided by Len Fisher, a physicist at the University of Bristol, in his book "The Perfect Swarm – the science of complexity in everyday life"; Melanie Mitchell, professor of computer science at Portland State University, "Complexity"; Jaron Lanier, "You are not a gadget"; Duncan Watts, principal research scientist at Yahoo, "Everything is obvious, once you know the answer".

XIV
"Commercial sellers" are for the purposes of the economic study defined as US sellers on eBay with annual *sales* above USD 10,000.

XV
"Regular exporters" are for the purposes of the economic study defined as US sellers on eBay with annual *exports* of above USD 10,000.

XVI
R Chakrabarti, B Scholnick, Frictions in International E-commerce, 43 MIR: Management International Review 31, 36 (2003)

XVII
Ryan Kim, Mobile Payments Worth $670 Billion by 2015, Giga Om (July 5, 2011) available at: http://gigaom.com/2011/07/05/mobile-payments-worth-670-billion-by-2015/



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