Interview: United Parcel Service's Director of Electronic Commerce, Alan Amling, on the Opportunities and Challenges of Global Electronic Commerce

William P. Wan

Executive Summary

The development of global electronic commerce presents many opportunities as well as challenges for companies worldwide. Alan Amling, director of electronic commerce for United Parcel Service (UPS), discusses various aspects of electronic commerce, its global implications, and UPS's effort in enabling its global development. Mr. Amling emphasizes that the key success factor for e-commerce is building relationships with customers and suppliers. For companies engaging in global e-commerce, he suggests the importance of "Thinking Global, Acting Local." Furthermore, Mr. Amling provides critical insights as to why UPS has been able to stay at the forefront in the development of e-commerce and how UPS is positioning itself to enhance global e-commerce's growth. © 2002 Wiley Periodicals, Inc.

he growth of electronic commerce (e-commerce) has captured tremendous amounts of attention in recent years. Due to its fervent development, global e-commerce is likely to become one of the most significant business revolutions to date. In the development of global e-commerce, United Parcel Service has been a central player in providing all kinds of support services for companies internationally. With its global presence, UPS is well-positioned to further facilitate the connection between buyers and sellers worldwide.

Alan Amling, director of electronic commerce for UPS, is responsible for the marketing activities of electronic commerce solutions. Since joining UPS in 1992, Mr. Amling has held numerous positions with the company. Prior to joining the Electronic Commerce team, Mr. Amling worked with UPS's Strategic

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Planning group. He also served as the long-range planning manager for UPS Airlines.

Mr. Amling is defining UPS's electronic commerce vision, as well as delivering solutions through the formation of strategic alliances with Internet commerce leaders and the development of new technologies. More than just putting technology in place, Mr. Amling is aligning UPS's business processes and product offerings to put their customers in the driver's seat. With this foundation, UPS can act as a facilitator of commerce—a physical and virtual link in their customers' supply chains.

Mr. Amling addresses various questions in regard to e-commerce, including its global implications in light of the rapid development, as well as UPS's effort in enabling this development.

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William P. Wan: What is e-commerce as conceptualized by UPS?

Alan Amling: We define e-commerce broadly as the use of network communication technologies to conduct business. This is much more than just selling goods over the Internet. This definition includes communication over the Internet, EDI [Electronic Data Interchange], fax, phone, etc., and applies to all the business processes that make commerce happen. Further, we don't view ecommerce as a separate category. E-commerce is just the transition to twenty-first-century commerce. It is how companies will differentiate themselves and compete in the new economy.

WPW: How do you think e-commerce will revolutionize the ways business is conducted?

Alan Amling: E-commerce is about leveraging new technologies to improve communications with customers and trading partners. While commerce has been, and will always be, about the movement of information, goods, and funds, e-commerce is fundamentally changing how this movement takes place. Leveraging the new communications platform, entirely new and/or improved business models can be developed. Manufacturers can now get real-time demand information from the end consumer, lowering the inventory and obsolescence costs. Retailers can leverage an entirely new channel to market. Barriers to global commerce will begin to fall as access to goods on a global basis drives new consumer demand. Probably the most significant revolution caused by e-commerce will be the rise of the buyer. Consumers now have access to the greatest source of power since the dawn of time: information. We are already beginning to see the empowerment of the consumer. It will be the buyer, not the supplier, that will begin driving the supply chain, and their needs are much different. As a buyer, we want exactly what we want, when we want it, and at the lowest possible price. This brings us full circle. In order for businesses to meet the ever-expanding demands of a more sophisticated consumer, they will have to leverage the e-commerce technologies or perish.

WPW: What do you think is the key success factor in e-commerce?

Alan Amling: I think the key success factor in e-commerce is building great relationships with your customers and suppliers. Building a "sticky" site that attracts consumers is nice, but it's a strong relationship that will keep them coming back. The key to building strong relationships in business, as well as your personal life, is in making good promises and keeping them. Most pure dot-coms, as well as many clicks-and-mortar companies, take an initial order from a customer without knowing how much they have in inventory, how many orders they already have against that inventory, what orders they have coming in and where they are in the supply chain, or what their capability to deliver is. In other words, they don't have the information to make good promises or keep them. Consequently, we're seeing the results of this "oversight" in the current dot-com crash.

WPW: Can you share with us UPS's effort in developing e-commerce in the past few years?

Alan Amling: As a critical bridge between the virtual world and the physical world, most of our activities over the past two years can be tied to the development of e-commerce. Actually, we drop the e and call it enabling global commerce. We're doing that by adding new digital and physical capabilities every day. For example, UPS is improving access to our services to reduce e-commerce transaction friction. We're doing this on the digital front by providing access to our information systems over the Internet through UPS OnLine Tools. UPS Internet Shipping allows users to process UPS shipments from their desktops in 34 countries. UPS tracking information can be accessed in the U.S., Europe, and Asia via wireless phones or PDAs, and much more. On the physical side of access, we've opened up some UPS stores, put UPS shipping centers in Office Depot locations, purchased Mail Boxes Etc., and struck a deal with Texaco in the Benelux countries where customers buying from select online retailers can request to have their purchases delivered to their neighborhood Texaco station. The UPS-Texaco alliance has now been expanded to include the UK. The list goes on and on.

WPW: What are the major differences between B2C and B2B e-commerce? Can you tell us about UPS's participation in B2C and B2B e-commerce?

Alan Amling: Some of the key differences between B2C and B2B are:

- B2B purchase size is larger.
- B2B payment method is typically by P.O., and B2C is by credit card.

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- Negotiation is more common in B2B and the report ing needs are more advanced.
- Relationships are much more important in a B2B environment.
- Switching costs are typically higher in B2B.
- For UPS, a big difference is that the delivery destination in B2B e-commerce is typically commercial.

Alan Amling: While about 80% of UPS's delivery volume is to businesses, we remain the top carrier in B2C e-commerce. The lines between B2C and B2B blur as you look at the unique solutions we have implemented to make coverage of residential deliveries in some of our international locations more convenient for the customer by delivering consumer packages to Texaco in Benelux and the UK, as well as 7-Elevens in Asia upon request.

WPW: With e-commerce technology reducing transaction costs and companies increasingly adopting just-in-time (or even real-time) or direct factory-consumer models, what would be the business implications for UPS?

Alan Amling: The most obvious implication, and one that is very good for UPS, is that shipments are becoming smaller, more frequent, and time-definite. Another implication is that reliable information-rich transportation services are becoming more important. If businesses adopt a JIT environment to reduce their inventory holding costs, real-time information about their shipments is critical because they don't have "safety stock." If there is a hiccup in the supply chain, they need an early warning to give them time to respond. Consequently, that is providing UPS with a host of opportunities to help companies compete in this environment.

WPW: Modern economy is increasingly driven by the movement of intangible resources such as information, not just movement of tangible resources. The development of e-commerce, with its capability in generating and transmitting large amounts of information across spaces, will further contribute to the importance of the information economy. How does UPS equip itself to take advantage of such a transformation?

Alan Amling: In a word, investment. We've invested over \$1 billion per year since the mid '80s on our technology infrastructure. We're also investing in the acquisition of knowledge capital. This includes a massive training effort to educate our people on the business implications of technology as well as the activities of our Strategic Enterprise Fund (SEF). The SEF, unlike most corporate venture funds, invests in young, innovative companies not for financial gain but to understand new market spaces that will affect our business. For example, the first investment they made in 1997 was in a young company called TradeEx. TradeEx was a pioneer in e-marketplace applications and was eventually purchased by Ariba. UPS's primary e-commerce objective is to get closer to our customers by integrating our business with theirs. This is accomplished by leveraging the Internet and other network technologies to make the package information UPS collects accessible to

We've invested over \$1 billion per year since the mid '80s on our technology infrastructure. our customers from order entry to post-sales service. In doing this, UPS becomes an integral part of their total value proposition and elevates our relationship from vendor to partner. The UPS technology products that make this integration with our customers possible include UPS OnLine Tools, UPS OnLine Host Access, UPS Document Exchange, UPS Internet Shipping, and the UPS OnLine family of shipping systems, to name a few. UPS leverages multiple channels to market and deliver these technology products to our customers. Key channels include UPS.com and ec.UPS.com, the UPS sales organization, the UPS Electronic Commerce Account Managers, and alliances.

WPW: What are UPS's core strengths, and in what ways do they contribute to the development of UPS's e-commerce business?

Alan Amling: The core strengths of UPS are its people and its culture. Our core service is package delivery. Because of this core service, we have been able to truly enable our customers to compete in the global e-commerce marketplace. Let me explain. UPS delivers 13.6 million packages per day around the world through a single integrated network. At the same time, we're collecting information on each package from origin to destination and all the points in between. Consequently, we can not only get your package from point A to point B worldwide, but we can supply you real-time information about that package to streamline your supply chain and improve customer service. In addition, since UPS lives at the nodes of a worldwide network, we can provide global trade finance solutions to you. While you might not know that potential Internet buyer in Singapore, chances are we do.

WPW: How does UPS integrate e-commerce into its existing operations to increase its competitive advantage in the transportation industry? Any particular experience you can share with us?

Alan Amling: Technology impacts virtually every aspect of our business. Scanning, sorting, picking up, delivering, and even returning packages are all activities that incorporate various technologies. In fact, UPS built the first coast-to-coast wireless network in the U.S. to transmit real-time package information from our package cars to our database. We also leverage the Internet for e-procurement and even purchase jet fuel via an electronic marketplace. Technology impacts the way we develop products and services, market those products, and service our customers. Of the 13.6 million packages UPS ships every day, more than 12 million come from customers who are electronically connected to us.

Let me give you an example that touches on both service and operational efficiency. Each day we receive 6.6 million tracking requests via the Internet. These are requests that would have previously been processed over the phone, at a cost to UPS of about \$2 per phone call. With automated, online tracking, we can satisfy each tracking request for less than a dime. We can also handle millions of requests a day. It would have been very challenging to do that effectively and efficiently with customer service phone

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centers alone. Perhaps more importantly, our technology has helped our customers run their businesses better-full visibility of their products, better customer service, faster flow of funds, reduced costs.

WPW: Can you describe UPS's unique resources and capabilities in e-commerce that can improve your customers' value chain? How would UPS achieve integration into customers' value chain to add value to customers' businesses?

Alan Amling: Once again, people and culture set UPS apart. While this might sound old-fashioned in today's fast-paced world, don't underestimate its importance. It's difficult to achieve sustainable competitive advantage in the open and ever-changing technology environment. Most of our value-added technology offerings can be duplicated by competitors. The only real sustainable competitive advantage is in a highly skilled, highly motivated workforce that raises the bar on a continual basis. On the physical side, UPS is the only carrier that provides transportation services the world over through a single integrated network. From a cost-to-serve standpoint, as well as a quality standpoint, it's an advantage that we don't have separate networks for ground, air, and international deliveries. When you open the back door of any UPS package car, you'll see all three services represented in the packages. This also allows UPS to leverage our presence at the nodes of this worldwide network, as well as the information we're collecting on every package, to fuel our e-commerce solutions across the three flows of commerce (information, goods, and funds). Finally, we're continuing to expand our global network through acquisitions. Our recent purchase of Fritz added 400 customs clearance and warehouse facilities to the UPS network in 120 countries.

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> A good example of these global capabilities is represented in a recent deal announced with Samsung Electro-Mechanics Co., Ltd. (SEMCO), a division of Samsung, to reengineer and manage its global supply chain. The three-phase project will redesign SEMCO's logistics, transportation, customs brokerage, and inventory management for both raw materials and finished goods, covering North America, Asia, Europe, and Latin America. At least four different UPS units will be tapped for the project, including UPS's small-package express operation, UPS Air Group, the recently acquired Fritz Companies, and UPS Logistics Group. The planned first phase of the project is to design and implement a global information technology infrastructure that will add supply chain visibility to the flow of SEMCO's raw materials, subcomponents, and finished goods as they move from suppliers through manufacturing and on to customers. The phase also will include the reengineering and management of SEMCO's North American distribution network that connects manufacturing centers in Asia and Latin America with customers in North America. Phases II and III will add Europe, Asia, and Latin America over the next four years. Targets for improvement include faster cycle times for finished goods, better customs clearance practices for both raw materials and finished goods, improved inventory and order accuracy, lower returns, and lowered inventory carrying costs.

WPW: Can you tell us more about UPS's inbound and outbound logistics services for online companies? How do such services fit into the overall picture of UPS's e-commerce strategy?

Alan Amling: UPS came out with a new corporate charter in 2000. The central purpose of UPS as outlined in the charter is to become a leading enabler of global commerce. To that end, UPS has established key subsidiaries, adjacent to our core package delivery business, to position UPS in the three flows of commerce: goods, information, and funds. As these three flows merge into one, UPS will be positioned to provide solutions. At Nike.com, for example, when you order your new running shoes, that order actually goes to a warehouse operated by UPS Logistics. All inbound transportation as well as delivery to your door is managed by UPS. In fact, if you called in your order or called the customer service department with a question, it would actually be someone from UPS Business Communications services fielding the inquiry on behalf of Nike.

Say you're a mid-sized online retailer as opposed to a multinational company like Nike. Previously, outsourced logistics services were out of reach. That's why UPS launched e-Logistics last year. It's geared toward the online company with great ideas and products but [that is] lacking experience in back-end fulfillment. In addition, UPS Capital will help young businesses make the most of their working capital through asset-based lending programs and will help them actually complete that sale they got from India by offering global payment solutions.

WPW: It seems that UPS does not view its role in e-commerce as simply delivering customers online orders. Rather, it seeks to be a solutions provider. Can you describe how an alliance strategy would help UPS in this area?

Alan Amling: UPS does not provide an e-commerce platform like IBM, Oracle, SAP, Open Market and other e-commerce application providers. Since our customers demand complete solutions, our choice was to build an e-commerce platform around our transportation technology or integrate our technology into existing platforms. We chose the latter. The basic philosophy was, "You do what you do best, we'll do what we do best, and together we'll provide the customer the best solution." So today, when you buy or upgrade to Oracle 11i, the UPS Online Tools are already integrated into the platform. That's exactly what we're after, one process. We have also formed alliances to help us bring solutions to market more quickly. Our alliance with Air2Web in the wireless space is a great example.

WPW: UPS acts as an incubator by providing funding to some technology start-ups. Can you give us an overview of these efforts and how such a strategy contributes to UPS's e-commerce strengths?

Alan Amling: How do you make an elephant dance? Or rather, how does a 94-year-old company keep their finger on the pulse of the new economy? One of the ways we do that is by investing in

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young, innovative companies that are operating in spaces that affect our business. We invest in them for knowledge, not financial, capital. By understanding how these companies are creating new capabilities, UPS can position itself early to provide customers the solutions they need when they need it . . . not after.

UPS has invested in a number of new ventures through the UPS Strategic Enterprise Fund. Some of these investments include: HighPoint Systems, which addresses an unmet need in business-toconsumer electronic commerce by offering traditional and Webbased retailers a complete e-commerce technology solution; Savi Technology, a supply chain application service provider building a global wireless network to provide real-time data on the identity, location, and status of goods and assets throughout the supply chain; NetDelivery, which developed and patented a system that enables the consolidation and delivery of personalized electronic information via the Internet; and Video Networks, a provider of comprehensive, integrated media management solutions.

WPW: When companies expand internationally, especially in the emerging economies, they have to deal with a myriad of country differences (e.g., culture, language, as well as physical and institutional infrastructures). How would country differences pose additional challenges to companies who engage in global e-commerce?

Alan Amling: It gets to the point of "Thinking Global, Acting Local." Your product and how it is positioned in a market may need to be different, based on the country differences mentioned. E-commerce companies have to think ahead of how they manage these different customers' needs and how they easily target the "local" customer with a "local" message. For example, an online store with only one entry point and one catalogue has no chance to position the products in a local view. At the same time, a separate catalogue for every potential local language or country may be too costly to maintain. The smart global e-commerce companies will find ways to uniquely identify a visitor, the visitor's needs, and dynamically position the right products that address their local needs.

WPW: Comparing between the technology and business sides of global e-commerce, which do you think poses more challenges to managers who want to develop global e-commerce for their companies? Why?

Alan Amling: There are some technical challenges associated with double-byte characters for Asian languages and the right to left reading of Hebrew not usually supported by traditional U.S. systems. However, for the most part, the biggest challenges (or opportunities) are on the business side. Beyond the differences in cultures and business practices, and the difficulty of positioning and supporting products in the global market, there are a host of unfamiliar import and regulatory policies that must be considered. Further, the quality of the physical and communications infrastructures vary widely by global region. Additional variations are found in e-commerce penetration rates. If your potential customer isn't connected, forget about selling to them over the Internet. Finally, difficulties in global trade finance (i.e., How do I get paid?)

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and international trade logistics (i.e., Can I ship this commodity to that country? How much will this cost to ship, including duties and taxes?) challenge global e-commerce managers.

WPW: For a seller located in the U.S. operating an online business selling goods to foreign buyers, can you describe how e-commerce can help improve its international business model and what roles UPS could play in the model?

Alan Amling: The Internet truly opens up every businessperson to the most robust source of information. If you need information on shipping an international package, it's on the Web. If you need help understanding the local customs, it's on the Web. If you need contacts in other countries to help sell your products, it's on the Web. UPS continues to introduce capabilities and services (Online Tools, Global Trade Finance, etc.) that help bring the vast amount of information and services needed by a global company into a central place. For example, our recent acquisition of Fritz, a leading freight forwarder, allows UPS to reduce the complexities of international trade even further. Fritz can move freight by any mode of transport anywhere in the world. In addition, they have hands-on industry expertise, forwarding specialists, licensed customs experts, and financial analysts that can manage import and export processing, compliance assessment programs, and financial risks. UPS is really becoming a one-stop shop for global trade.

WPW: Is cooperation with local partners in a host country important to develop UPS's global e-commerce business? If so, can you tell us why?

Alan Amling: The UPS-Texaco relationship is a good example of partnering to quickly build the infrastructure needed for Web delivery while adding extra value and service to our customers. The agreement with Texaco allows customers who buy online from certain e-commerce Web sites to have their purchases delivered to their nearest Texaco station. Customers are notified by e-mail when their packages are waiting. And those online shoppers can pick up their purchases at their own convenience.

Not only does this Texaco arrangement help consolidate shipping and thus cut shipping costs for both shippers and consumers, it makes things more convenient for consumers, who aren't always home to receive express deliveries. And it drives business to Texaco stations, where consumers are likely to make impulse purchases and fill up their tanks.

WPW: So far, what are some of the biggest challenges UPS has encountered in the development of global e-commerce? How did you solve them?

Alan Amling: UPS faces many of the same challenges faced by our customers. Consequently, that is why we are investing heavily on our physical and communications infrastructure on a global basis. We continue to roll out additional local language sites and

The agreement with Texaco allows customers who buy online from certain e-commerce Web sites to have their purchases delivered to their nearest Texaco station. have seen an increase in usage. In the latest Asian sites, we have seen preliminary numbers indicating an increase of 22–143%. Visitors chose the local language version 84–96% of the time.

UPS also faces challenges unique to the transportation industry. Policy issues such as Open Skies (the ability to fly your airplanes to a certain country), Fifth Freedom rights (the ability to continue a flight to a third country), and trade facilitation procedures (customs) continue to inhibit UPS in the global arena. UPS is actively educating policy makers around the world on the global and regional economic benefits of an open global marketplace and a streamlined transportation infrastructure.

WPW: How do you see global e-commerce evolving in the coming decade? What would be the major opportunities and challenges ahead? How will UPS position itself to help shape the future development of global e-commerce?

Alan Amling: The movement of information, goods, and funds will continue to speed up, effectively diminishing the geographic space between trading partners. The e will eventually seem passé as the "shrinking globe" enables commerce between countries to become a primary profit driver for most large companies. While many of the challenges outlined earlier will take years to overcome, UPS sees great promise in fulfilling the purpose laid out in our corporate charter last year "to enable global commerce." To that end, UPS will focus not only on the \$80 billion small-package delivery market but also on the larger \$3 trillion global logistics market. As technology allows the three flows of commerce-information, goods, and funds-to converge in the global supply chain, UPS will be positioned to offer the consolidated services required for twenty-first-century commerce.