Cisco Internet Business Solutions Group, Global Transportation Practice

Transportation Community

Transportation is a fundamental enabler of economic activity, and is deeply embedded and interconnected with key processes in the global value chain.

Despite periods of cyclical economic slowdown, globalization is occurring at an unprecedented pace—much of it enabled by a robust transportation system that underpins supply chain networks across the globe. Transportation is an enormous contributor to national GDP and typically ranks third or fourth in developed nations. Compared with more efficient industries, transportation is labor-, asset-, and capital-intensive, and ranks very low in productivity.

Transportation can be a fiercely competitive business and, at its basic level, is often commoditized and prone to narrow margins. Bottom-line pressures, therefore, are significant, especially during economic downturns, as evidenced by the most recent recession. Currently, transportation business leaders face a fundamental challenge to maintain and grow profit levels, while anticipating further pressures to decrease costs and increase efficiencies.

Businesses can apply a number of key levers to increase productivity and align their operations with market realities. Among these are:

- Boost labor efficiency
- Increase asset use
- Optimize labor deployment
- Decrease inventory-holding expenses
- Rationalize business holdings and service portfolios

More traditional practices of applying these levers include resource reallocation and downsizing, travel expense reduction, non-core-asset disposition, and capital project deferment. There is, however, a viable but often overlooked alternative. Maturing and emerging technological capabilities, when applied creatively, can help organizations transform their operations and business processes, and serve as a powerful tool in enhancing productivity in the transportation sector.

Cisco Internet Business Solutions Group (IBSG)

Transforming Operations and Business Models

The Cisco® Internet Business Solutions Group (IBSG) Global Transportation Practice works with shipping and logistics, aviation, rail, and maritime companies around the world to help senior executives and their teams develop and apply transformational business strategies based on innovative use of advanced technologies, processes, and tools. Our Practice focuses on five key business priorities that can be effectively addressed through the application of technology:

1. Reducing operational latency
2. Increasing asset visibility
3. Enhancing services at the point of delivery
4. Improving collaboration
5. Driving innovation for competitive differentiation

Three key areas of technology have significant potential for fueling substantial process improvements in the transportation industry:

1. **Pervasive connectivity:** Ubiquitous wired and wireless communications and standardized use of IP now enable sharing of business-critical information on any device—anywhere, anytime. This capability empowers both employees at the point of service delivery and decision makers on the go, permitting more effective deployment and management of key assets. Shipping companies are deploying Wi-Fi, Bluetooth, and a new breed of scanning devices and wireless terminals to sorting centers and delivery-vehicle drivers on a massive scale. For the first time, this capability enables delivery of real-time information about the status of assets, such as the location of cargo and customer packages. New solutions can be offered to customers, increasing their satisfaction while significantly reducing operating expenses and improving productivity. In another example, Internet technologies are being embedded in large transportation vehicles—such as railcars and locomotives—to enable onboard services and connections to the global network. This capability dramatically improves asset utilization, passenger convenience, staff communications, and service.

2. **Collaboration platforms:** Convergence of data, voice, and video communications, coupled with a new generation of web technologies and capabilities such as social networking, have taken the Internet to new heights as a platform for collaboration and productivity enhancement. The benefits from such capabilities are significant. Our Practice works with large global transportation logistics companies to help provide richer interactions among employees and to increase productivity within the value chain. A cohesive strategy of using high-definition collaboration solutions such as telepresence, unified communications, and Web 2.0 can help transportation companies generate substantial productivity gains. For example, in just three years, Cisco has saved more than US$600 million in travel costs and nearly $225 million in productivity gains since adopting its Cisco TelePresence™ technology.[1] TelePresence improves decision making, interaction quality, and teamwork efficiency across the globe. Similar benefits are also possible within the global transportation

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[1] Cisco on Cisco TelePresence Metrics, 2010.

value chain. These companies can play a pivotal role in driving value chain efficiencies while enhancing their own performance. Digital media and business video are the next frontier in business collaboration for transportation companies.

3. **Intelligent devices:** The price of sensing technologies such as RFID (both active and passive) has now reached the point where it is more feasible to deploy solutions on a larger scale for greater ROI. The "Internet of Things"—the networked interconnection of everyday objects—is increasingly becoming a reality. Two of our customers— McCarran International Airport in Las Vegas and Chek Lap Kok Airport in Hong Kong—are examples of successful RFID bag-tag deployments. Passive RFID tags affixed to passengers' bags deliver accurate luggage status information remotely, thereby reducing handling requirements and speeding processes for handling massive numbers of bags. Benefits from sensors and intelligent devices vary broadly, from increased passenger throughput, improved aircraft turnaround times, and customer interaction, to increased asset and labor use. When it comes to the shipping/logistics industry, global couriers employ active sensor technologies for remote tracking of packages and the status of their condition. These capabilities vastly improve service levels, particularly in situations where shipments are critical, such as in the life sciences sector.

Innovative Application of Technology

Operational latency and inefficiencies are rampant in the transportation industry, where labor-, asset-, and capital-intensive infrastructures are a necessary and integral part of the business. The Cisco IBSG Global Transportation Practice helps transportation companies develop strategies to reduce latency, eliminate inefficiencies, and provide improved customer services by implementing maturing and emerging technological capabilities in innovative ways. By working closely with our clients, often co-creating business solutions that deliver high impact and quantifiable improvements, we help organizations transform operational and business processes in order to enhance productivity, improve customer service, and create new revenue streams.

For more information about the capabilities of the Cisco IBSG Global Transportation Practice, please visit our website at www.cisco.com/go/ibsg/transportation, or contact:

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More Information

Cisco Internet Business Solutions Group (IBSG), the company's global consultancy, helps CXOs from the world's largest public and private organizations solve critical business challenges. By connecting strategy, process, and technology, Cisco IBSG industry experts enable customers to turn visionary ideas into value.

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