



SHIPPERS' IT

On-demand IT moves into era of utilization

Societal transformation, especially that occurring at the hands of technological shifts, is often only obvious through the rearview mirror of history.

Take for example the case of the commercial aviation industry shortly after World War II. Today, airline travel by jetliner, much like e-commerce, is indispensable — but such was not always the case. And, like the shift from manual processes to e-commerce within the supply chain industry, airlines in the early 1950s did not immediately see the societal transformation offered by jet-powered aircraft.

In 1953, major U.S. airlines spent today's equivalent of \$2 billion on orders of the most advanced piston-driven aircraft available. The common wisdom in the airline industry, reinforced by the disastrous appearance, and spectacular crashes of the British jet-powered passenger de Havilland Comet in the early 1950s, was that turboprops were the way of the future for the passenger airline industry.

Only the early foresight of Juan Trippe, head of Pan American Airways, broke the piston-barrier in the mid-1950s. Pan Am's fleet of 45 Boeing 707s and Douglas DC-8s, purchased by Trippe and the first of any major airline, ground the international carrier's competition down with faster and more efficient service. Competitors, seeing a loss of market prominence, jumped on board the Jet Age bandwagon with near reckless abandon, and most of the world's major airlines switched to jetliners within three years of Pan Am's first scheduled jet service in 1958.

Just like the airlines in the early-1950s, firms in today's supply chain sector find themselves on the transitional point of an entire shift in the way their industry does business. In fact to many innovators and leaders of the supply chain IT industry, the "golden age" of major electronic and digital innovation in the supply chain industry is already in the rearview mirror. The road ahead for the industry is the "silver age" of mass utilization of on-demand e-commerce solutions.

Adopting e-commerce in the shipping industry was limited by firms' reluctance to invest in proprietary in-house services. The growth of international Internet access and the simultaneous development of simple-to-use Web-based platforms, like INTRRA, GT Nexus, Freightgate and Tradebeam, have led to a reversal of thought by many firms.

"This paper and manual-intensive industry, in which e-commerce was a curiosity and the exception, is now an everyday thing," said Ken Bloom, chief executive officer of INTRRA, the seven-year-old Parsippany, N.J.-based company.

The firm's software-as-a-service, or SaaS, e-commerce platform handles 10 percent to 15 percent of the world's shipping container moves — more than 250,000 TEUs per week — and the firm is likely the largest single provider of an e-commerce platform. INTRRA boasts more than 20 ocean carriers as members and transactions on its platform touch 12,000 firms worldwide each day.

John DeBenedette, INTRRA's commercial vice-president, believes the shipping industry has moved from the era of adopting e-commerce to learning how to pull maximum efficiency from it.

"We are starting to see a snowballing effect," said DeBenedette, referring to how more and more carriers and firms are attracted to e-commerce solutions by the testimonials and proven success of earlier adopters.

"For a variety of reasons, technology costs keep coming down and Internet bandwidth is becoming ubiquitous," he said. While he freely admits INTRRA cannot take credit for these things, he said INTRRA "can take credit for making e-commerce an 'everyday' thing in our industry and lowering the costs and barriers for information exchange for containerized supply chain users."

INTRRA's users have begun building on the efficiency they receive from integrating e-commerce throughout their firms, he said, transforming them to "being totally 'e.'"

"When shippers are completely 'e,' meaning all of their shipments are processed electronically, they are starting to get the benefits of their participation in real time," DeBenedette said. "It is no longer an after-the-fact exercise where these firms look back over what happened last quarter and look at performance — they are actually starting to get real-time benefits from that ingrained e-commerce process, giving them real-time decision support and exception management."

While he believes e-commerce within the shipping industry has turned a corner towards maximum utilization by consumers, other experts see the transition as being more specifically related to the way service can now be provided.

"The IT formula of the whole installation and the hassle of configuration with projects taking years to come online, that is really out of the equation," said Greg Johnsen, executive vice president of marketing for Oakland-based GT Nexus. "Now it is really a matter of where does the user want to focus first and where do they want to expand."

Johnsen believes the success of SaaS is easily attributable. "In the old way, where you bought software and installed it, you took on a lot of risk as a company," he said. "You have to buy it, you pay multimillion-dollar licenses, you have to buy a bunch of Dell servers, you have to buy a data center, you have to hire IT staff and maybe even consultants."

In addition, the in-house systems still require a firm to go out and build a network of partners within the industry to obtain the vast amount of data for accurate supply chain visibility — something that even the largest of firms might be unable to do.

The simplicity of the SaaS model, Johnsen said, "is that everyone is sharing a common network that's already been built and the connections have already been made."

The real shift due to the growth of SaaS has been the burden of risk, from the customer, and the potentially millions of dollars of in-house software system development, maintenance and upgrades, to the SaaS providers like INTRRA and GT Nexus.

"If I don't deliver a working, viable, performing solution that's delivering real value, then I don't have a business, because people will simply turn it off," Johnsen said.

A recent AMR Research study confirmed the adoption of service provided by SaaS firms is "steadily growing." "Large companies with extensive networks, both physical and informational, are the most likely users (of SaaS), particularly if they were predisposed towards outsourced non strategic activities in general," said John Fontanella, AMR vice president of research.

A recent Stanford University Global Supply Chain Forum study also found that about half of survey respondents either use or would use managed services, defined as any service provided through SaaS.