The Potential of Web Services to Transform Equipment Leasing

By Andrew Lea

As historians of technology have observed, the adoption of tools typically begins with doing old things in new ways and evolves, as new capabilities of the technology are discovered, to doing new things in new ways. The modern history of information technology begins with the use of "thinking machines" to enable a few clerks to do the work of many. From the punch-card readers that replaced rooms full of census clerks in the 1890s to the web-based lease origination tools that eliminate the keying in of faxed applications, "computerization" has often meant the "productive efficiencies" of workforce elimination or reassignment.

But in recent decades, technologies have emerged to allow customer, product, and financial data to be transmitted safely via the Internet by consumers and businesses. The result has been the growth of brand new models of commerce and business collaboration, taking advantage of new kinds of data accessibility, connectivity, and security.

What will be the analogous evolution of technology's role for equipment leasing? In this discussion, we'll look at the potential of web services to engender the shift from quantitative to qualitative change. In addition, we'll outline some of the ways that the application- and enterprise-integrating capabilities of web services might change the ways that equipment leases are initiated, approved, funded, tracked, and terminated.

To be sure, the equipment leasing industry is already exploring uses of technology that go beyond mere processing efficiencies to the generation of new sources of commerce, and to providing enhanced customer tracking and customer service. Many manufacturing captives and bank lessors, for example, have embedded lease origination tools in their parent consumer and commercial websites to support sales or offer

asset finance products over the web. Applications range from online applications to payoff quote requests to credit card acceptance for deposits, all via the Internet.

Similarly, specialized front-end vendors have gone far beyond web-based origination to include extensive data aggregation capabilities that offer an integrated view of the customer across the enterprise, comprehensive risk management and compliance tracking functions, and powerful sales force and help desk support tools. A wide range of tools has been developed to track key indexes and metrics, including aggregated customer exposure, credit line management, covenant and regulatory compliance, and portfolio and channel performance.

But none of these innovations has changed the fundamental nature of how equipment leasing business is generated. The industry remains a fundamentally one-to-one business: one deal submitted to one lessor that looks to one funding source at a time. This linear model is one reason that the industry remains a highly relationshipbased business, with a strong emphasis on a wellestablished social network of deal-makers and deal-takers. When competitive success depends on finding the right partners in the deal quickly who's looking for what kinds of credits, assets, rates, and structures—knowing whom to call is often the key to winning or losing an opportunity. What some may call the "good old boy network" economists might call inefficient.

But new technologies are making possible a new, nonlinear, many-to-many model of equipment leasing business generation. To be realized, these advances will require the participants in the equipment leasing community to take advantage of the collaboration made possible by two kinds of information sharing: first, the kind that uses the web to connect people to other people's information (via HTML-powered browsers,

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Some would argue that the World Wide Web tops the list. A new model of application integration—Web services—could change the ways that equipment leases are initiated, decisioned, funded, tracked, and terminated.

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For the uninitiated, a web service is, fundamentally, an application that delivers its functionality via an application programming interface (API). It is a resource that is designed to be consumed by software rather than directly by end users. The web-integrated application is accessed by using platform-independent and language-neutral web protocols, such as SOAP and XML. These tools promise easy integration of heterogeneous environments.

Jeff Dirks, writing in The Monitor, observes,

Web services is a combination of business and application logic that can be accessed from any web-enabled device. Using a set of standardized protocols, web services can be universally accessed and deployed—regardless of the underlying operating environment. ... The end result is that it creates efficiencies within the financial supply and value chain that equate to increased speed and efficiency of transaction processing, improved customer service, and corresponding growth in revenue.¹

Unlike electronic data interchange (EDI) or enterprise resource planning (ERP) systems that are less flexible and expensive to reconfigure, Web services technology supports loosely coupled, easily morphed connections between systems. Systems communicate by passing XML messages to each other via a web API, which adds a layer of generality and nonspecificity to the environment that makes the connections flexible and adaptable. One example is the use of a web services interface at National City Capital to allow information from its origination platform to be directly imported into its newly implemented back-office lease accounting system. To take another case, one of the larger vehicle manufacturing captives will be using web services

to share customer information between its customer self service platform and the back-office portfolio data and workflow management system.

HIGH TOUCH TRANSLATION VERSUS SEAMLESS COLLABORATION

Let's explore the potential of web services for creating value. We'll start with the transition from the one-to-one to the many-to-many model of business origination. The current industry norm is that a broker will "shop" a deal to one or more lessors by sending it to each one, one at a time. Each lessor will receive the submission either as data that already resides within its application decisioning workflow (if the broker has used the appropriate proprietary front end that "speaks" to the lessor's origination system) or, more commonly, as a fax or e-mail whose data must be keyed into the system for processing. For both broker and lessor, each new submission is a discrete process. The inefficiencies of these practices are what make the social network so vital. Knowing the right people minimizes the time wasted on these inherently inefficient, largely manual processes.

The same is true for the other components of the lease life cycle: each potential funding source must be qualified in a similar one-at-a-time fashion. A broker shopping a deal to bank lessor may get referred to a story-credit independent whose credit appetite is more liberal. Lacking an information management platform that cannot seamlessly share information with those of the other participants in the value chain, each incurs costly inefficiencies at nearly every step along the path to deal acceptance and completion. Each deal submission, request for funding, or search for equipment is conducted in a similarly inefficient manner. Each event leads either to a successful conclusion or to a continuation of the time- and resource-consuming pursuit of the right set of partners in the deal.

The bottom line is that each participant must be burdened by the overhead of translating each information-creating event into the format that its system can accept. Put in more technical language, the lack of system interoperability has limited the efficiency of the value chain of equipment lease deal-making.

Absent a technology that enables information to flow seamlessly and securely from each system to the others, deal completion has remained a highly inefficient, "high touch" processing chain among the key players. Although intraorganizational system infrastructures have progressed steadily toward end-to-end enterprise application integration, the barriers to intersystem connectivity have been daunting and expensive.

STANDARDIZED INFORMATION SHARING PROTOCOLS FOR INTELLIGENT FLEXIBILITY

What has changed has been the advance of web services, whose promise is to provide a simplified, standardized, efficient way to enable disparate information platforms to share data. The potential result of the web services vision is not only the achievement of true interoperability among the systems of discrete participants but also the establishment of a rational (non-personal) marketplace to manage and fuel the equipment leasing value chain. In other words, web services promises not only the empowerment of the few to do the work of the many, but a new way of conducting business as well.

Most critically, web services makes possible new kinds of collaboration and competition among the partners in the lease life cycle. When information can be instantly shared many-at-atime, business need no longer be done in a linear manner. Instead of each new deal going from broker to lessor one at a time, for example, a new deal could go from a broker to many lessors at once in a way that eliminates the manual inefficiencies of current practices. Because the connective, activating elements of web services technology ("calls") can include complex embedded business intelligence, the distributive power of the intersystem platform may be informed by the specific business requirements

of each of the participants. For example, as Carole McCluskey suggests, "Using technology combined with Internet delivery, lessors can present different rates and pricing schedules to different segments, channels, or risk profiles on a customer-by-customer basis."²

The key to making such technology attractive for equipment leasing will be to provide new efficiencies for streamlining the life cycle yet retain the advantages of the private social networks that form the human infrastructure of the industry. The great flexibility of web services can give an intra-organizational deal-flow network the power to instantly modify the openness (or privacy) of the marketplace. Stephen Campbell points out,

The aggregate demand of a public market doesn't benefit all e commerce players, especially those on the supply side, where a horde of people looking for [financing] and just a few providing them is a disagreeable scenario. Such an anonymous free-for-all is not the relationship-based, cooperative transaction their business is based on. This is where private marketplaces come in. For an increasing number of players, private marketplaces are the best of both worlds. ... It's not the wide open freefor-all of a public market. Instead, it's a private marketplace made up of a selectable group of people who want to do business with each other.

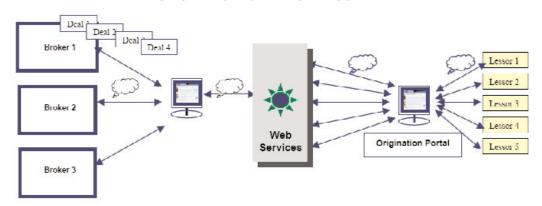
As a result, an offering may be sent to only those potential accepters whose business requirements (for example, credit appetites, deal size type, asset type, or location preferences) match the characteristics of each specific deal. Because each organization is able to share the appropriate information with the originator, each lessor has the deal information fully integrated into its own workflow and information management platform. Each lessor is thus enabled to instantly execute its credit profiling, pricing, risk management and other processing that will result in a decision with minimal manual processing and maximum turnaround speed.

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Figure 1

BROKER ORIGINATION MODEL



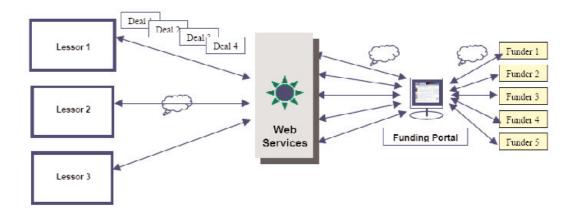
In this many-at-a-time model, rather than shopping a deal to a lessor, the originator would submit the deal to an "acceptance marketplace" via a broker portal. The business intelligence of the web services technology would then parse and distribute the information to the appropriate recipients, either all at once or on the basis of a set of business rules defining a hierarchical or time-based distribution scheme. The result would be the instantaneous creation of a discrete rational marketplace for each submission event. This would mean that the technology itself would be a key creator of deal flows, with winning based less on access to the private network and more on access to the public network. When the ability

to access the open deal marketplace is present, barriers to rational competition based on informal factors start to crumble, as a market system allows the most appropriate partners to self-select and instantaneously establish collaboration (see fig. 1).

Similar logic would apply to the ways that lessors could work with funding sources (or syndication partners). Instead of a deal being shopped by a lessor to each potential funder, for example, the deal could go out to multiple funders, based on the business requirements, credit appetites, and deal size and type preference of each funding source (as well as the constraints of the lessor). Again, instead of submitting the

Figure 2

FUNDING PORTAL



deal to a potential funder, the originator would submit the deal to a "funding marketplace" via a funding portal such as the one shown in figure 2.

Vendors (manufacturers or third-party suppliers) as well could benefit from their participation in an integrated market and value chain. Equippers holding a sales opportunity could efficiently find the partners they need to structure and fund a lease, using a vendor origination portal that seamlessly allows their sales force, customer relationship management, and inventory management platform to communicate with the integrated vendors' lease marketplace, via the vendor origination portal. Once again, the integrating power of web services would allow for the instantaneous creation of a discrete rational marketplace for each equipment placement opportunity, enabling the most appropriate partners to self-select and establish collaboration to support the sale (fig. 3).

Of course, few companies are ready to participate in such a vision, but the increasing adoption and deployment of web services technology will hasten the day when the possibility becomes—out of competitive necessity—a reality. For example, Michael Cumby reports from the field,

Both [Key Equipment Finance] and Pitney Bowes are currently doing business in over 20 countries worldwide. Each of these countries has its own systems for origination, accounting, general ledger, etc. A great many of them are proprietary and where they are integrated, the process involves complicated and unreliable middle ware products using expensive, low bandwidth direct connections. The .Net architecture, using XML, SOAP and web services, provides a platform ... to provide a single origination channel for all of these countries, separate business processes into web services that can easily communicate with each other over the much less costly Internet and much more easily integrate into current surround and legacy systems.4

OPPORTUNISTIC COLLABORATION BY SELF-SELECTED PARTNERS

When the various participants in the lease life cycle enable their data management and workflow platforms to opportunistically interoperate in such ways, the capacity to generate new business opportunities becomes a key benefit of their enabling technologies. Operating in a high-touch environment where the sharing of information between organizations is an impediment to efficient operations becomes optional. The adoption of web services standards and tools creates the possibility of a web-based, loosely

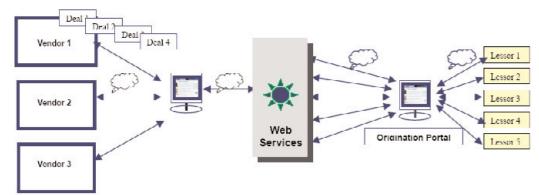
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Figure 3

VENDOR ORIGINATION PORTAL



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coupled business model in which revenueproducing events may be initiated from any part of the lease life cycle value chain. Instead of assuming that the initiating event is the deal origination, a revenue-generating event could also start with a funder, a vendor, or the asset remarketing crew at the lessor (and so on), each alternative activating a variably open marketplace that is orchestrated through the appropriate portal.

The formula is a promising one, based on the leveraging of existing infrastructure and carefully controlled degrees of "openness" among potential partners. As Charles Lyles remarks, "Web services can be building blocks for creating open distributed systems without significant alteration to business-critical and proven back-end applications." ⁵ Lyles also notes, "[Lessors'] data warehouses need to be opened up to dealers, vendors, business services partners, and customer systems."

As with every potential step forward, there will be a learning curve before the full potential of web services can be realized. There remain unresolved disputes on standards, security, and intellectual property, as well as the usual effort of the technology giants to squelch a low cost, open-source solution. But, given the right choices and the right level of infrastructure investment, the technology could usher in a new era for the equipment leasing industry. As one observer notes, "Corporate survival in the 21st century will largely depend on how well companies take advantage of technological breakthroughs to integrate."

In the end, the losers may be the players whose domination of the present-day market depends solely on access to closely held informal networks. The winners will be the customers. Open markets and free collaboration will have the same effect on the equipment leasing corner of the financial services universe as it has had everywhere else: enhanced service, lowered costs, and enhanced revenues for those who know how the new game is played.

Endnotes

¹Jeff Dirks, "Web Services: The Sky's the Limit." *The Monitor*, July/August 2002.

²Carole McCluskey, "Minimize Origination Risk with Technology." *Equipment Leasing Today*, Nov./Dec. 2001.

³Stephen A. Campbell, "Automating Business Finance Online: The State of the Art." *The Monitor*, February 2001.

⁴Michael Cumby, "The '.Net' Revolution Will Not Be Televised." *The Monitor*, July/Aug. 2002.

⁵Charles Lyles, "Future of IT: Common Language for All Applications." *The Monitor*, July/Aug. 2002.

⁶Charles Lyles, "Web Services and the Value of the Internet." *Equipment Leasing Today*, Nov./Dec. 2002.

⁷Cumby, "The '.Net' Revolution."



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