Market Trends: Multienterprise/B2B Infrastructure Market, Worldwide, 2009-2014

Dataquest Note G00200571, Fabrizio Biscotti, Paolo Malinverno, Benoit J. Lheureux, Thomas Skybakmoen, 14 July 2010, R3569 7142011

During the next five years, the multienterprise/business-to-business (B2B) infrastructure market will continue to grow at a steady pace. This period will offer good opportunities for existing providers and market consolidators and strong potential for new entrants — particularly if they are already players in the application integration and middleware space — although substantial investment in sales, marketing and product functionalities will be required to displace well-established incumbents and to gain market share. In addition, the B2B market is already crowded in some regions (such as the U.S. and parts of Western Europe).

Key Findings

- The fastest-growing segments are managed file transfer as a service (MFTaaS) for B2B, cloud services integration as a service and B2B integration outsourcing (BIO), which are benefiting from increasing end users' attention on cloud and managed services.
- Between 2010 and 2014, we expect Global 2000 companies to at least double their multienterprise traffic (transactions, documents and process execution events), and this will have a significant impact on the amount of spending that goes toward multienterprise/B2B infrastructure.
- One key driver for the revenue growth of multienterprise/B2B infrastructure technologies will be that midsize to large businesses will need to implement several different styles of multienterprise collaboration to meet diverse external business partner requirements. This is set to be a driver for software segments such as multienterprise/B2B gateways and for service segments such as B2B Integration outsourcing.
- E-invoicing projects will be increasingly common, due to new regulations and pressure on reducing costs, especially in some countries of Western Europe (such as Spain and Germany) and of South America (such as Mexico and Brazil).

Gartner

Recommendations

- End users should place great care in assessing vendor viability. Because the outsourcing B2B integration functionality (integration as a service, IaaS) and B2B projects (BIO) makes a vendor a partner in the B2B integration project, vendor viability must have a substantial weight in evaluations for integration service providers in terms of vendor size and support quality in your local geography

- Vendors should focus on modular offerings in which customers can start small and incrementally build with time. This is because, given the still challenging economic conditions, end users are more wary about large projects and the relative costs and prefer to start small and grow incrementally over time.

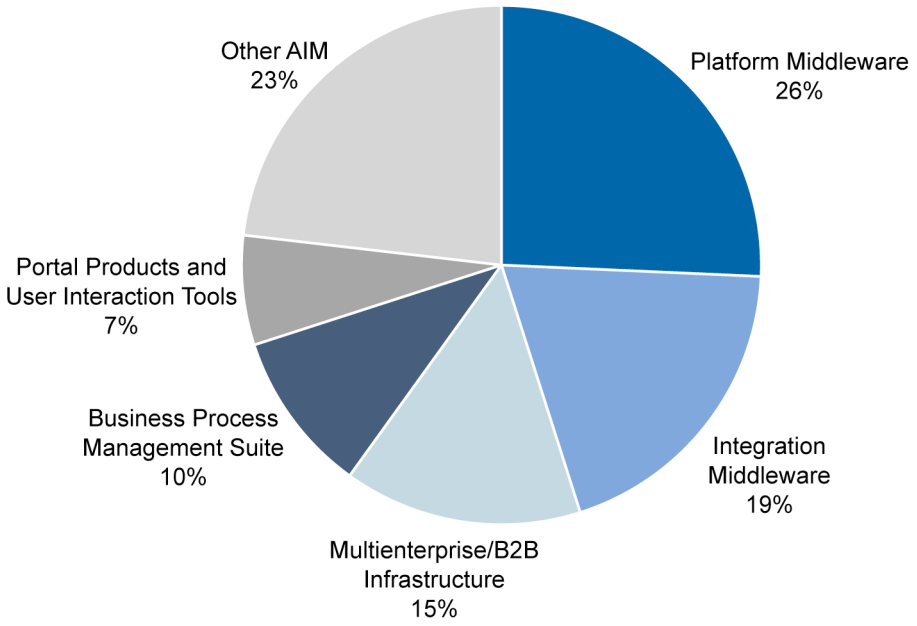
- Vendors should be prepared with customer references and a focused go-to-market strategy that will put them as a point of contact for any company looking at the rationalization of their B2B infrastructures.

WHAT YOU NEED TO KNOW

Gartner defines multienterprise infrastructure (also referred to as B2B infrastructure) as an IT project that is composed of some combination of B2B software and B2B services that companies use to perform multienterprise integration with external business partners.

Figure 1 shows the importance of the $2.7 billion multienterprise/ B2B infrastructure market within the wider family of application infrastructure and middleware (AIM) technologies.

Figure 1. AIM Software and Outsourcing Market by Macro Area



Note: the overall size included both the AIM software market revenue and the B2B IO revenue.

Source: Gartner (June 2010)

The objective of multienterprise infrastructure is to exchange business data (for example, customer or supply goods data) or to link and automate business processes (for example, order-to-cash or procure-to pay) between two or more companies in a way that is easier to manage, faster, more-affordable and more-accurate than manual approaches or custom coding. To accomplish these objectives, companies use a range of approaches, such as building or outsourcing the B2B infrastructure, or using traditional batch electronic data interchange (EDI) at one extreme, emerging cloud services at the other extreme, Web services-based SOA or a combination of any of these approaches to B2B. For this reason, there are currently several multienterprise/B2B infrastructure offerings available in the market with similarly different traction and prospects for growth.

The wave of mergers and acquisitions that is characterizing the overall AIM market and the specific B2B integration market is a major disrupter that will continue to shape the vendor landscape during the forecast period. Changes in the vendor landscape (such as, IBM acquiring Sterling Commerce might trigger or accelerate acquisitioning moves by its main competitors) will offer new opportunities, but also more reasons for caution by user organizations. Organizations having to address B2B requirements must assess carefully the balance between extra specialized pure-play B2B vendors (typically smaller and nimbler) and vendors that offer B2B in conjunction with other integration products and services. Deals will have to focus on the ability of vendors to have sufficient resources and domain expertise to meet diverse, geographic- and vertical-specific B2B project-scope requirements that are likely to expand in the future.

As far as diverse ways of delivering B2B capabilities, we have identified nine segments, including purely software offerings and service offerings, composing the B2B infrastructure portfolio; each of these segments addresses different B2B project requirements and has specific pros and cons; some are legacy technology, and some are emerging offerings, but they all play a role in the current organization's quest for B2B integration portfolio consolidation. The segments composing the multienterprise/B2B Infrastructure portfolio are as follows:

- BIO
- Traditional e-commerce IaaS
- Cloud services IaaS
- Managed file transfer (MFT) for B2B
- MFTaaS for B2B
- Service-oriented architecture (SOA) governance software for B2B
- Stand-alone multienterprise/B2B gateways
- Embedded multienterprise/B2B gateways
- Electronic data interchange (EDI) translators (stand-alone)

Stand-alone EDI translator software is typically licensed from an EDI software provider or traditional value-added network (VAN) that is focused primarily on the translation of EDI data into internal data formats. There are also embedded EDI translators that are offered as functionality within multienterprise/B2B gateways. However, this embedded component is fairly commoditized, and its revenue contribution is recognized in the revenue size of multienterprise/B2B gateways.

B2B gateway software is middleware used to consolidate and centralize a company's multienterprise data, application, process integration and interoperability requirements with those of external business partners.

MFT software enables companies to automate, compress, restart, secure, log, analyze and audit the transfer of data from one endpoint to another, often (not always) including external business partners.

SOA governance software for B2B projects is driven by the emergence of SOA overall, which helps coordinate the governance of the services involved. Because SOA is making a significant inroad into the B2B space, there is a growing market opportunity for offerings addressing the specific needs of SOA governance within B2B projects.

IaaS is multienterprise integration capabilities (such as that of B2B gateway software) hosted in a multitenant environment and delivered as a service rather than as software. Traditionally known as EDI VANs, vendors offering IaaS are called "integration service providers." This segment is composed by traditional e-commerce IaaS, cloud services IaaS and MFTaaS for B2B.

B2B Integration outsourcing is a specific category of IT project outsourcing that combines outsourcing your technical B2B infrastructure (IaaS) and your B2B project (that is, the people and processes). Most of e-invoicing projects will be in this segment.

On the B2B software side, a key trend is that the market for stand-alone EDI translators, SOA governance technologies, and MFT is quickly being absorbed into B2B gateway software. So far, most SOA governance software for B2B projects are sold as a stand-alone, but over time this functionality will increasingly become available as an embedded feature of B2B gateway software and cloud service IaaS. On the service side, B2B Integration outsourcing increasingly is deployed using an IaaS offering as the technology backbone, which lowers overall project costs because it leverages shared B2B infrastructure.

KEY TRENDS

Integration is no longer a project between two applications. It is a cross-company and between-company discipline that increasingly involves all of an organization's applications, external business partners and cloud services. The "dumb" network that used to only transfer bulk files between applications and trading partners is turning into a "smart" network that incorporates diverse integration functionality, including communications, translation and workflow, increasingly implemented by application vendors and users using an SOA. The B2B discipline also now must include cloud services integration — for example, how to link services from solutions such as salesforce.com to on-premises applications. Successful organizations will combine traditional integration and emerging SOA

and Web-native approaches such as Web-oriented architecture (WOA) and cloud AP's to solve diverse application integration and interoperability requirements. The scope of these efforts will involve internal and external applications, the latter including e-commerce trading partners and external service providers (ESPs), such as service integrators and software as a service (SaaS) providers.

A typical IT infrastructure includes adapters; data transformation engines and extraction, transformation and loading (ETL) tools; integration brokers, managed file transfer and business process managers to orchestrate message flows, Web services choreography and business process execution; event management; and alerting facilities for business activity monitoring (BAM). Organizations will then need B2B infrastructure to extend their IT infrastructure to external business partners, including provisioning tools to simplify the process.

The B2B Vendor Landscape — More Consolidation Ahead

When pure-play application integration vendors came to market in the mid-1990s, products introduced had a base set of features that included data transformation, intelligent routing, message-oriented middleware, a message warehouse and administration/management. When large suite vendors (such as Oracle) entered the market (in the late 1990s), they also offered similar types of base features. However, the number of features in products from pure-play vendors has been extended to include workflow, internal integration features (such as adapters for packaged applications), process visibility and other forms of BAM. The net effect of this over time is that the distinction between pure-play B2B products and pure-play internal integration products is blurring, and increasing B2B capabilities will simply be a feature of any integration middleware. Furthermore, we believe that the pure-play B2B market will ultimately cease to exist, although stand-alone B2B products and services will continue to be available for at least the next decade.

We expect the B2B market to consolidate around fewer B2B specialists, while we also expect traditional AIM vendors (particularly suite vendors) to consider expanding into the multienterprise/B2B infrastructure space. As a consequence, the B2B suite vendors and the AIM vendors will increasingly battle head-to-head; the former will promote their ability to deliver specific expertise and excellence in the B2B space, including much-needed vertical knowledge, while the latter will capitalize on their ability to reach out to a sizable existing customer base and to those organizations looking for a "good enough" B2B solution.

The main challenge for B2B specialists will be to reach out to the same variety (in terms of vertical markets and geography) of existing customers that a typical AIM vendor might be able to reach. This will be increasingly difficult when facing a megavendor that is starting to play in B2B. Furthermore, by exploiting existing relationships and cross-selling and upselling B2B functionality to their existing customers, AIM vendors obtain the potential competitive advantage of shortening sales cycle times and being able to offer (very often, good enough) B2B functionality at a discounted rate on top of other middleware offerings. Also, for the customers, it's much easier to connect any B2B extension into something that is already plugged into and integrated with their IT systems.

Multienterprise/B2B gateway software would generally be the entry point to the B2B market for traditional AIM players that can potentially offer B2B gateway functionalities within wider integration suite offerings. This is because the multienterprise/B2B gateway market is composed of middleware technology from multiple disciplines, including integration suites, enterprise service buses, application servers and application platform suites, EDI translators, MFT and the B2B-enabled integration middleware that is increasingly available with packaged applications. In general, vendors offering any of these middleware technologies would find it easier to also try to address the B2B gateway needs of their customers.

On the integration services side, we have seen substantial market consolidation, which will continue in the next years. Recent examples include IBM's acquisitions of Cast Iron and Sterling Commerce and the GXS merger with Inovis. Overall, the expansion of pure-play integration vendors (most of which already offer some kind of B2B functionality) will cause increased pressure on smaller B2B players, some of which will ultimately lose market share and/or become appealing acquisition targets. We believe that the recent SPS Commerce IPO — was executed at least in part because of pressure from larger providers and a need to raise capital to better compete.

Multienterprise/B2B Infrastructure Market Outlook

In sizing the multienterprise/B2B infrastructure market, we considered some components that are sold as a specific stand-alone B2B product or as a functionality part of a suite.

Multienterprise/B2B Gateway Software Forecast

Multienterprise/B2B gateway solutions are sold by B2B specialists as a stand-alone product (such as those sold by Sterling Commerce (now part of IBM), Axway, GXS, Seeburger AG, Software AG and Generix) or as a functionality within a broader integration suite (such as those sold by Tibco, Software AG, Oracle and Microsoft).

As shown in Table 1, the overall multienterprise/B2B gateway market is expected to grow at a single-digit rate through 2014, outpacing the overall Application Infrastructure and Middleware software market.

Multienterprise/B2B gateways continue to be in high demand from organizations of every size, regardless of industry expertise. Vendors have expanded the functionality of the multienterprise/B2B gateway from primarily providing a means of consolidating and centralizing a company's B2B communications (regardless of the size and type of data), to providing some internal integration (resulting in the eventual externalization of the integrated data), and providing an infrastructure including innovative community management capabilities for automating and monitoring (from both a technology and business process point of view) interactions with external business partners. This evolved functionality gives companies the flexibility necessary to support the myriad of current and emerging transport and communications protocols, as well as security standards and mechanisms.

We believe that, through 2014, most companies that buy multienterprise/B2B gateways, particularly for more-demanding B2B projects (such as those that consolidate multiple B2B projects onto one infrastructure, involve connecting to very large numbers of external business partners, require highly specialized B2B connectivity, or require the exchange of very high volumes of messages and data), will buy stand-alone solutions. This is because stand-alone products still offer a more-advanced and sophisticated set of functionalities and vertical specialization that embedded functionalities have not yet widely achieved.

MFT Software Forecast

For the purposes of this sizing exercise, we also considered MFT software revenue (see Table 2). However, MFT revenue has been allocated selectively and accounted for partially under the integration suite umbrella and partially under the B2B software umbrella. This is because about forty% of MFT software is used in the context of internal integration and sixty% for multienterprise/B2B projects.

On top of traditional MFT software licenses and maintenance fees, we also included the emerging and fast-growing trend, the adoption of MFT as a service (MFTaaS) can also be used for traditional horizontal integration and for B2B projects.

Many companies would benefit from MFT-like capabilities, but have traditionally viewed file transfer solutions as department-level point tools that are necessary to run the business, but that do not produce competitive differentiation. Thus, they have not sought to integrate these technologies into their existing infrastructure. However, this attitude is slowly changing as a result of the integration of MFT in B2B and middleware, its ability to manage service levels, customer onboarding, to provide visibility into all file transfer, and to deliver nonreputation and security. Organizations are taking advantage of these features. Existing MFT solutions are up for consolidation efforts undertaken by organizations that are moving away from departmental to enterprise deployments, which are contributing market growth.

In recent years, a few MFT suite vendors have developed application programming interfaces (APIs), interfaces or development toolkits; however, several offer services to achieve this integration, or the solution to simply monitor a specific location on a file system (server) and use that to trigger MFT processes. Some vendors have started to offer MFTaaS with APIs to deliver the same functionality traditionally seen in on premises deployments to take advantage of cloud computing. As companies struggle to deal with increasing file transfer requirements, vendors that have taken a service-oriented approach to developing solutions to expose the necessary interfaces of their core MFT services are seeing more deployments as they can increasingly integrate with existing applications.

IaaS Forecast

Companies worldwide heavily leverage IaaS for traditional e-commerce projects (such as supply chain integration in retail and manufacturing) and for various other industry-specific requirements (such as track-and-trace in logistics or claims adjudication in healthcare). Use of IaaS for clearing e-invoices internationally is also rising steadily. IaaS for such uses is quite mature (and is maturing rapidly for e-invoicing), and providers of IaaS have invested in their IT operations to enhance functionality (adding business activity

Table 1. Multienterprise/B2B Gateway Forecast, 2009-2014 (Millions of Dollars)

	2007	2008	2009	2010	2011	2012	2013	2014	CAGR (%) 2009-2014
Stand-Alone	465.2	509.1	519.1	513.9	526.7	552.0	587.9	633.8	4.1
Embedded	173.8	191.2	195.9	205.9	221.3	239.1	261.8	289.5	8.1
Total	639.0	700.3	715.0	719.8	748.1	791.1	849.7	923.3	5.2

Source: Gartner (June 2010)

Table 2. MFT Software Forecast, 2009-2014 (Millions of Dollars)

	2007	2008	2009	2010	2011	2012	2013	2014	CAGR (%) 2009-2014
MFT for Horizontal Integration	110.5	120.6	124.4	132.9	142.5	155.1	171.3	189.0	8.7
MFT for B2B	146.4	160.1	167.6	179.8	196.7	218.8	246.8	279.9	10.8
Total MFT Suites	256.9	280.8	292.0	312.7	339.3	373.9	418.1	468.8	9.9
MFTaaS for Horizontal Integration	14.5	19.1	24.5	31.2	39.7	50.2	61.8	75.6	25.3
MFTaaS for B2B	27.5	35.9	45.5	57.5	72.4	90.9	110.8	134.4	24.2
Total MFTaaS	42.0	55.0	70.0	88.8	112.1	141.1	172.6	210.1	24.6
Total	**298.9**	**335.8**	**362.0**	**401.5**	**451.4**	**515.0**	**590.7**	**678.9**	**13.4**
Note: For MFT on premises, the revenue pertains to licenses and maintenance fees. For MFTaaS it refers to annual subscription fees.									

Source: Gartner (June 2010)

monitoring and improved community management), and to drive increasing scale and efficiencies (switching to more-modern, scalable IaaS architectures). Those IT modernizations, combined with increasing adoption and the prevailing perception that IaaS is increasingly a commodity, have been driving down IaaS prices for nearly a decade. Nevertheless, IaaS for traditional e-commerce is still a valuable IT service for companies doing B2B integration; therefore, adoption continues to increase, as indicated by the increasing numbers of companies and transactions handled by the providers of IaaS each year (generally ranging from a 10% to 100% increase in the number of companies served and transactions exchanged per year, depending on the size of the provider). This trend has been consistent worldwide year to year — even during the current worldwide recession — as more companies seek outsourcing (subscription) alternatives to the significant (capital) cost of expanding B2B infrastructure and staffing when it is necessary to scale up their B2B projects. As IaaS increases, SaaS applications using IaaS will increase steadily too. Table 3 shows the size and growth rate of the different components of the IaaS segment.

Cloud service integration is a relatively new B2B integration project scenario, yet the buyers of IaaS for cloud service integration range from line-of-business IT buyers — primarily only focused on the cloud service to on-premises integration problem — to more-traditional IT buyers — focused on cloud service integration and on traditional e-commerce integration. Providers of IaaS for cloud service integration often sell directly to IT end-users; they also sell a substantial proportion of their IaaS services (we estimate 50%) through IT channel partners.

This is because many IT services providers — particularly SaaS providers — must address cloud service integration, yet would prefer to invest their limited R&D capabilities on differentiated functionality that builds a barrier to entry in their target markets, rather than making substantial investments to solve a technically complicated integration problem. Four years ago there was basically no market for IaaS for cloud service integration. Today, we estimate that companies spend $50 million on IaaS for cloud service integration, and that this IT market segment will grow at 23.5% CAGR for the next five years.

Overall Multienterprise/B2B Infrastructure Market Forecast

The multienterprise/B2B infrastructure market is poised for good growth during the next five years. It will be driven by the increasing maturity and adoption of various related standards — such as XML, SOA, Web services, cloud computing, global data synchronization (GDS), and forecasting — combined with the increasing maturity and flexibility of the integration of SaaS.

Furthermore, there is already a good set of reference organizations successful (generally in terms of process improvements and cost savings) in multienterprise collaboration, reporting bottom-line and top-line revenue increases attributed to increased automation, lower costs and improved process execution, which improves business partner relationships and attracts new business. The prospects for growth remain positive because the need for interenterprise collaboration does not show any signs of diminishing.

To size the market, we considered total software revenue (from new licenses, maintenance and technical support) generated by sales of stand-alone and embedded multienterprise/B2B gateways, MFT for B2B, EDI translators (stand-alone), and SOA governance software for B2B products. For IaaS, we considered subscription revenue (in our definition, part of maintenance), and for B2B Integration outsourcing, we estimated revenue generated excluding professional services fees.

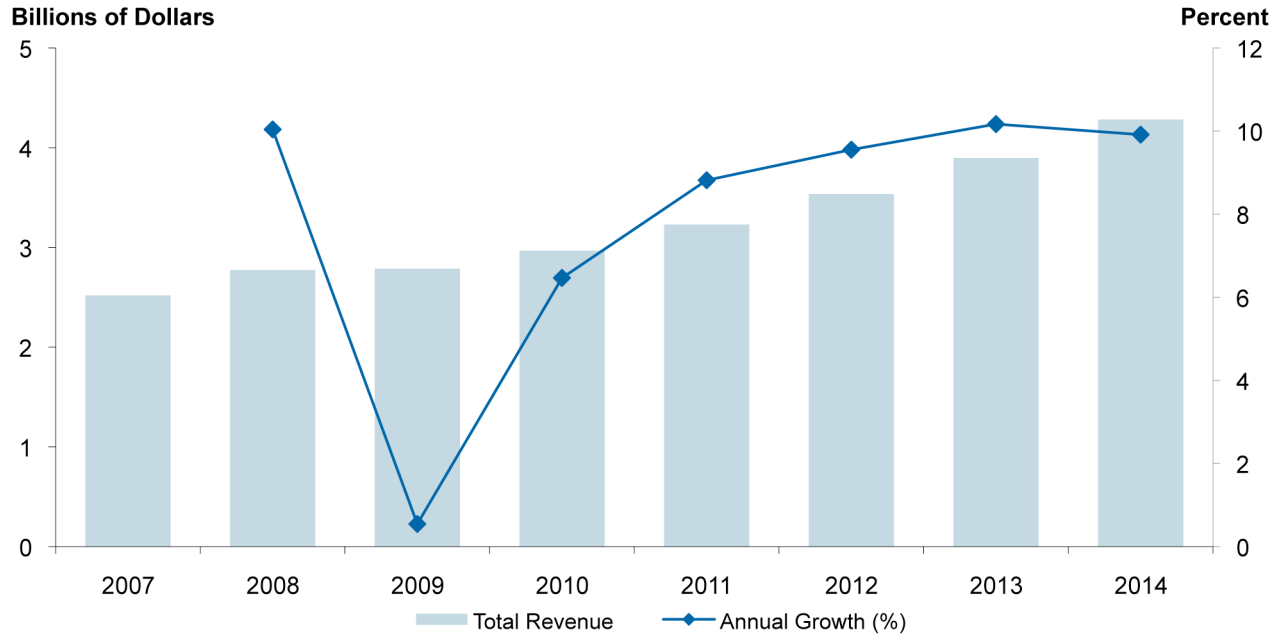
In 2009, we estimate the overall multienterprise/B2B infrastructure market generated almost $2.8 billion (see Figure 2). The market will grow at a 9.0% CAGR, which is about 2 percentage points higher than the growth we expect for the overall application infrastructure and middleware market.

Table 3. IaaS Forecast, 2009-2014 (Millions of Dollars)

	2007	2008	2009	2010	2011	2012	2013	2014	CAGR (%) 2009-2014
Traditional E-Commerce IaaS	946.3	969.2	849.2	775.5	714.0	662.0	617.9	573.5	-7.5
Cloud Services IaaS	35.3	41.7	50.4	61.5	75.8	94.3	116.9	145.0	23.5
MFTaaS for B2B	27.5	35.9	45.5	57.5	72.4	90.9	110.8	134.4	24.2
Total	**1,009.0**	**1,046.7**	**945.1**	**894.5**	**862.1**	**847.2**	**845.6**	**853.0**	**-2.0**

Source: Gartner (June 2010)

Figure 2. Multienterprise/B2B Infrastructure Market Forecast, 2009-2014



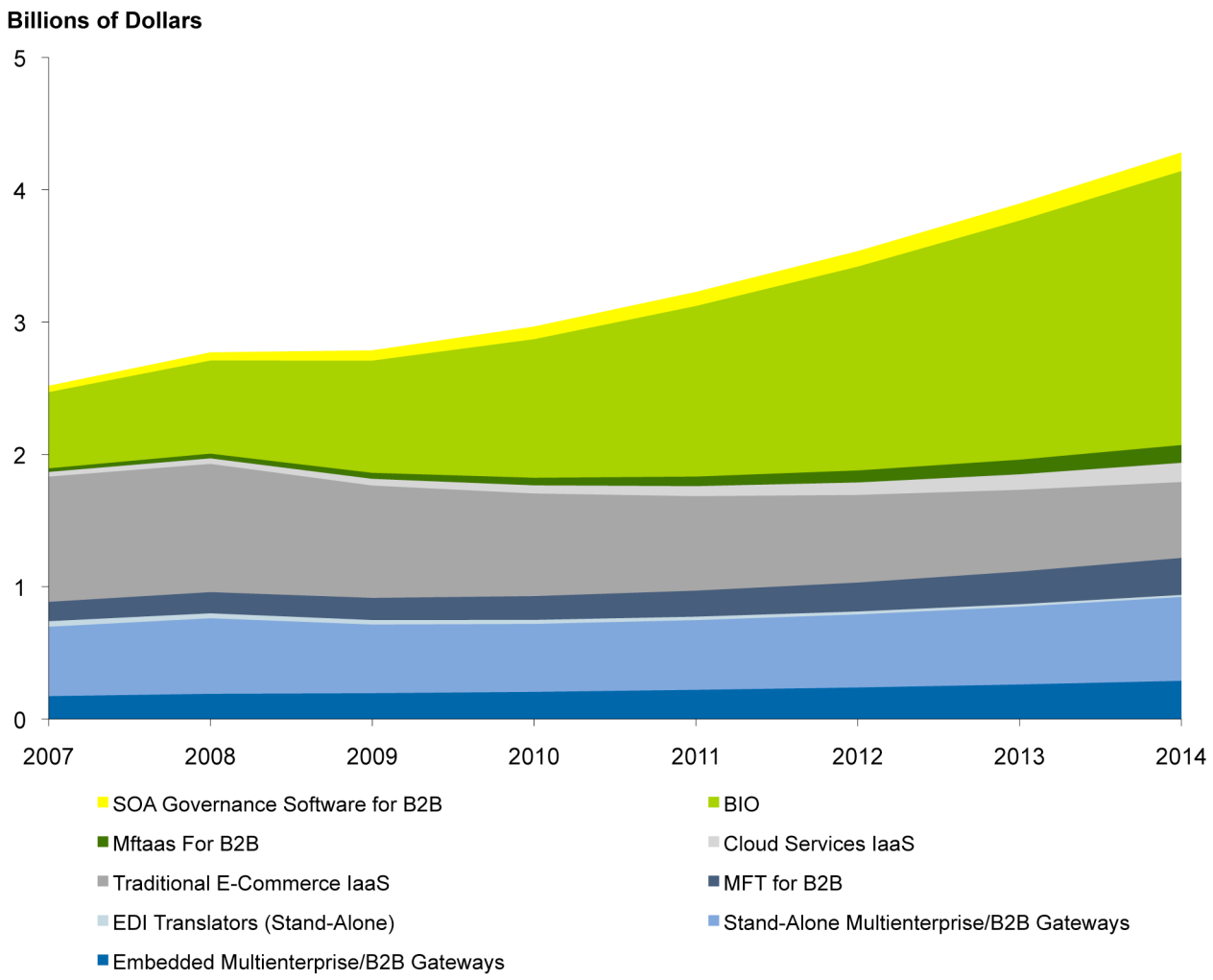
Source: Gartner (June 2010)

In terms of revenue size, traditional e-commerce IaaS is the largest segment, closely followed by B2B Integration outsourcing and then multienterprise/B2B gateways stand-alone (see Figure 3).

However, the picture is very different when looking at the growth rates of the individual segments (see Figure 4). In fact, the fastest-growing segment is expected to be MFTaaS for B2B driven by what traditionally have been a small market and few vendors, to be an alternative deployment option for MFT solutions. The increased business need for sending and receiving large files and increased focus on compliance have helped MFTaaS vendors that have been able to offer rapid deployments for organizations that need to solve their file transfer issues today rather than tomorrow. We expect this market to continue to grow and as solutions mature, to compete more with on premises MFT vendors. Cloud services IaaS is expected to be the second-fastest-growing segment

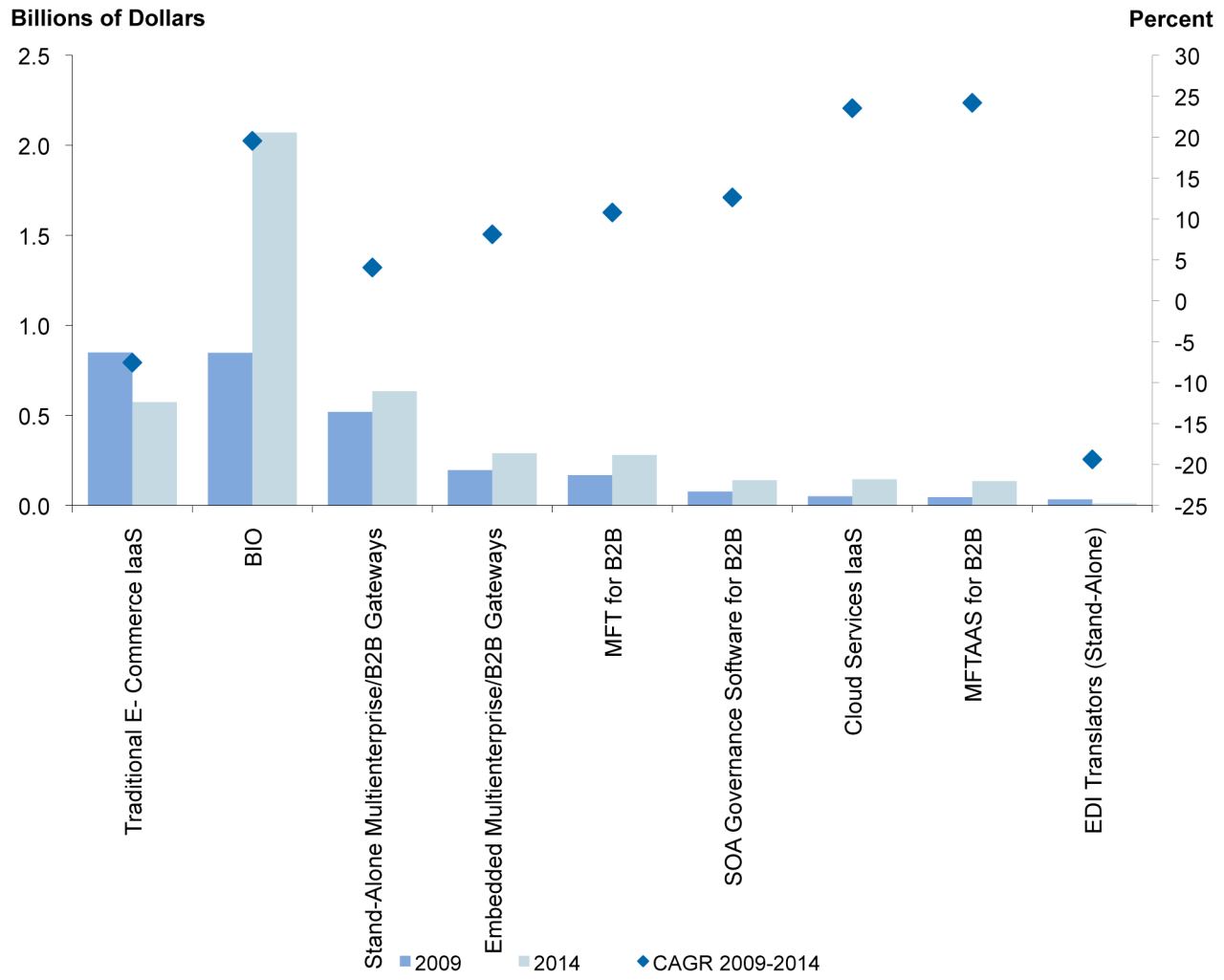
B2B Integration outsourcing is also expected to be among the fastest-growing markets with a solid double-digit CAGR on a much larger revenue base — nearly $800 million ——— that will make this segment the largest by the end of 2010, displacing market growth that would have occurred in Traditional e-commerce IaaS is driven largely by IT users that increasingly desire more functionality from their service provider than just B2B transport.

Figure 3. Multienterprise/B2B Infrastructure Market Forecast by Segment, 2007-2012



Source: Gartner (June 2010)

Figure 4. Multienterprise/B2B Infrastructure Market Revenue Growth by Segment, 2009-2014



Source: Gartner (June 2010)

SOA governance for B2B will continue to prosper, driven by the increasing adoption and deployment of SOA but also by the fact that it is growing from a relatively small installed base.

Multienterprise/B2B gateway and MFT for B2B will continue to grow at a solid pace, outpacing, by a margin, traditional e-commerce IaaS, which we expect to decline, and EDI translators, which we predict will face a dramatic fall as stand-alone products.

The multienterprise/B2B infrastructure market is set to change significantly during the forecast period in terms of segment size and potentially vendor weight. As B2B Integration outsourcing acquires size and visibility, vendors will look at this segment with more interest and move into it with acquisitions or look closely at strategic partnerships with B2B Integration outsourcing players.

The Traditional e-commerce IaaS segment has highly evolved in the last five years (for example, to incorporate in-line translation as an "on demand" capability), but the most change it will see in the next five years will come from market consolidation and improved operational efficiencies, such as e-invoicing. Traditional e-commerce IaaS will continue to be more commonly leveraged as the technology to support, and embedded within the service portfolio offering of, the fast-growing B2B Integration outsourcing market segment.

CONTRIBUTING FACTORS TO TRENDS

Multienterprise/B2B infrastructure products will continue to see traction in the market because multienterprise collaboration of all forms will continue to proliferate. There are several drivers and inhibitors of this market, both on the technology side and the business side.

Market Drivers

Technology drivers include the following:

- More companies are adopting a long-term plan to consolidate diverse multienterprise projects onto a shared infrastructure. This will likely take years, and in some cases, full consolidation is not even possible, but the general approach is consistent with our advice for consolidating internal integration projects onto a shared infrastructure, with similar benefits and challenges. Benefits include lower B2B project costs (from economies of scale), a more-consistent approach to doing integration, better provisioning tools, consistent application of security policies, and improved and more-consistent process visibility and governance.

- The market is being helped by the increasing maturity and adoption of various related standards, such as XML, SOA, Web services, portals, GDS, CPFR, Rosettanet and eXML.

- The whole market is getting an increase in spending and an injection of innovation because of the rapid proliferation of cloud services, and the need to integrate those with each other (cloud to cloud) and with on-premises applications.

- SaaS customers increasingly need to integrate their internal applications directly with the software functionality available from SaaS providers. Many companies are beginning to shop for a single-source solution of B2B infrastructure delivered as software and services.

Business drivers include the following:

- Multienterprise B2B inquiries are driven by increased compliance requirements, such as that mandated by the U.S. Sarbanes-Oxley Act, the Health Insurance Portability and Accountability Act, Basel II, e-invoicing regulations in Europe and South America, and concerns about consistent security and auditing. To protect themselves from future security violations and compliance risk, companies are increasingly considering limiting the proliferation of uncoordinated B2B projects. They now look at deploying a companywide multienterprise integration strategy, perhaps using a phased approach to control costs and minimize disruption to current projects.

- The market is being helped by more-visible business impact, with companies that are successful in multienterprise collaboration reporting bottom-line and top-line revenue increases and cost savings attributed to increased automation, lower costs and improved process execution (visibility and control). This improves business partner relationships and attracts new business, particularly when multienterprise projects include process monitoring and intelligence (such as data validation, compliance management, and supplier and vendor relationship management).

- Multienterprise/B2B infrastructure deployments have extensively proved to increase top-line revenue via new services and customers, and increased competitive differentiation. There is already a sizable number of reference accounts of multienterprise successes across regions and vertical markets that help decision makers lean toward multienterprise/B2B infrastructure adoption.

- The ever-increasing internationalization of economies and increased interdependence of organizations operating across regions also helps this market.

- The rapid adoption of e-invoicing (especially in areas where regulations mandate it) and logistics visibility is expanding existing B2B projects and creating new ones.

- Outsourcing of noncore competencies will increasingly sustain IaaS use and grow B2B integration outsourcing. SMBs can benefit from B2B outsourcing because B2B projects are generally a resource-intensive, complex IT task that can be cost-effectively outsourced to ESPs. Large companies can also benefit from B2B outsourcing, particularly when there is a desire to apply limited internal IT resources to higher-priority internal IT projects, such as ERP upgrades or CRM projects, or when consolidating existing (frequently nationally based) B2B infrastructures.

Market Inhibitors

Despite recent gains, there are still inhibitors to adopting various forms of enterprise collaboration, which pressure the market not to grow at the double-digit rates seen in the past.

Technology inhibitors include the following:

- Security interoperability (for example, there are no ubiquitous forms of authentication) and difficulties in integration (most internal applications are still not “multienterprise ready”) remain issues. Furthermore, in the rush to market, many companies looking to integrate various infrastructure and applications also overlook the security vulnerabilities caused by bolting together internal and external systems.

- Technical compatibility is still an unresolved issue because most applications are not inherently designed for collaboration.

- B2B standards are too numerous and still incomplete, and customization is still needed (Web services and SOA are not widely used in B2B projects).

- Master data management is poorly understood in highly distributed systems.

- There are fears related to legal issues and intellectual property (IP) protection inherent in any form of collaboration. One aspect of this is the exposure of sensitive or proprietary business process logic or data to external business partners. Another aspect of this is establishing clear IP ownership for IP implemented between companies (such as within an IaaS or B2B Integration outsourcing solution).

Business inhibitors include the following:

- The economy in 2008 and 2009 hit the manufacturing sector particularly hard; this sector is a strong consumer of B2B technologies. Although 2010 is set to be the year of recovery, it is anticipated to be a fairly slow year for most economically mature regions in the world in which the bulk of multienterprise/B2B infrastructure spending is concentrated. At this stage, the impact of spending from emerging regions in this market is minimal and not set to overcome any continued sluggish performance of Europe or the U.S. The economy remains a crucial factor in the fortunes of this market over the forecast period.

- Resistance to change has hurt the market, as has the aversion toward the cultural adaptation needed when implementing a multienterprise strategic deployment. Departmental staff generally resists change, and in some cases, key decision-making individuals might have a hidden agenda that would be undermined by any form of openness and collaboration. For example, the fear of workforce reduction or loss of control when outsourcing a B2B project could make internal IT managers reluctant to outsource B2B projects (versus implementing them in-house).

- Most companies are still at the early stages of implementing multienterprise/B2B infrastructure, developing best practices for trust and IP and establishing mutually beneficial incentives, investments, risks and rewards. This partner uneasiness shows itself also in the unwillingness to invest time and resources in collaboration.

- Compared with their understanding of the business value of internal IT projects, IT staff members on B2B projects have less experience of measuring and making the business value of multienterprise/B2B infrastructure understood at the management level. Real measurements of value are of paramount importance.

- Different national regulations will still make the deployment of international e-invoicing projects challenging: the solution of those challenges, especially from a BIO perspective, will still remain one of their major selling points in the short term (two to three years), while the difference will smooth up in international market.

ANALYSIS

The multienterprise/B2B gateway software market is poised to grow at a steady pace during the next five years. This market offers the opportunity for vendors to "get their foot in the door" of a segment of the AIM market that is among the fastest-growing and that has some of the most potential.

In fact, all the major integration and platform vendors have an articulated consistent and focused strategy of exploiting multienterprise/B2B gateways, used for the management of exchanged data and processes, to create recurring sales opportunities for vendors. The presence of their multienterprise/B2B gateways in a company's infrastructure could presumably create vendor presence and vendor opportunity to sell larger, more-expensive technologies, especially now that the megavendors have started to play in B2B. This is why we believe that the embedded B2B gateway functionalities within suites will continue to thrive.

On the other hand, stand-alone solutions will continue to offer good (and in many cases better) vertical functionality and expertise. Unlike several middleware technologies that are horizontal in nature (such as application servers), integration platforms are expected to come with some vertical "flavor" from a product perspective and from a go-to-market approach. Here, vertical markets can significantly influence the development of the product, and some industries will demand that specific protocols (such as RosettaNet for high-tech manufacturing, Odette for the automotive industry, the Chemical Industry Data Exchange, the Petroleum Industry Data Exchange, the Society for Worldwide Interbank Financial Telecommunication, ACORD for insurance and Health Level 7 for healthcare) be incorporated in multienterprise/B2B transactions.

Multienterprise/B2B infrastructure tools continue to be in high demand from organizations of every size, but particularly from midsize and large companies, regardless of industry sector, as companies continue to look for the flexibility necessary to support the myriad of current and emerging transport and communications protocols, security standards, auditing and process tracking, and external business partner provisioning mechanisms.

Vendor Recommendations

- By 2014, we expect at least one-third of organizations with uncoordinated B2B infrastructures to re-implement them as centralized B2B gateways (and two thirds as BIO). Rationalization of technology and products will be a driving force across IT departments looking at B2B projects. Be prepared with customer references and a clear go-to-market strategy that puts you as a point of contact for any company looking at the rationalization of their B2B infrastructures.

- Focus your value proposition on the business issues you solve, such as improving business process discovery, design, integration and management, or improving operating costs (such as for supply chain integration projects) or solving mandatory compliance to specific regulations rather than on the mere feature and functionalities of your product.

- New customers are still hard to come by, even in this growing market, so give your current customer base more attention for both retention and upselling opportunities. In some regions, notably Europe, but also South America, this means not only providing better localized software but also specialized solutions for the regional market, in terms of supporting geospecific packages, protocols, standards, regulations and business practices.

- Traditionally, multienterprise/B2B gateway deals have been reasonably low-priced, and the average deal size is increasing, although moderately. Focus on modular offerings in which customers can start small and incrementally build with time.

- Multienterprise/B2B infrastructure technology is now being adopted by mainstream organizations, which are not as interested in technology for the technology's sake but wish to find solutions to business problems instead. Vendors must have a solution-oriented/vertically focused value proposition: This is most likely to include some form of IaaS and BIO.

- Pick a viable and committed integrator for each location and size of company that you target. North American companies prefer to use packaged business applications, which they do not customize. European companies prefer to use legacy applications. When European companies buy packaged applications, they tend to customize them more. As a result, the influence of service providers, especially system integrators, is much stronger in Europe than in the U.S. Regional specific and country-specific system integrators are key channels to market for B2B software, especially when it comes to tackling the midmarket.

- The combination of proliferating multienterprise projects, different implementation approaches to multienterprise interoperability and sourcing options is creating a growing market segment of users who want to procure multienterprise/B2B infrastructure, including B2B software and B2B services, from one provider. Despite this trend, most companies today continue to separately procure B2B software and B2B services for their multienterprise projects (in different geographies). Thus, vendors continue to compete aggressively in the separate B2B software and service markets. In response, savvy B2B vendors should increasingly offer a hybrid B2B infrastructure portfolio, including software and services, or partner with vendors offering a complementary software and service solution that they are missing in their own portfolio.

- Vendors should understand the key trends that are driving end-user preferences for their multienterprise/B2B infrastructure and balance their product portfolio, marketing message and strategic alliances accordingly. Some key issues in the minds of end users include:

    - The need to synchronize their B2B strategy with their internal integration strategy, business process management strategy and application sourcing strategy.

    - The challenge of implementing a "portfolio approach" to B2B projects by leveraging mature and innovative approaches, such as EDI and SOA.

    - The decision to make or buy B2B infrastructure solutions.

    - The need to consolidate their B2B projects onto one shared B2B infrastructure — Consolidate buy-side and sell-side projects onto the same infrastructure and consolidate multiple VAN contracts to one vendor (and lower their rates). This driver, in particular, is making more IT users seek a B2B solution that can support all forms of B2B interaction, including EDI and XML, batch and discrete transactions, and so forth.

    - The need to leverage process visibility and BAM in their B2B projects.

User Recommendations

- The expected moderate economic growth through 2014 will put pressure on IT budgets. Buyers need to master their ability to use their more-contained IT budgets, which invariably will leave little room to maneuver for experimentation and for enterprisewide deployments, as well as for more-targeted and often departmental purchases.

- Vendors are under pressure from increased competition in the multienterprise/B2B gateway software space coming from megavendors, suite providers and business application vendors expanding their functionalities into this field and from IT services companies offering alternative ways of delivering B2B integration (such as IaaS). Vendors will be eager to conclude a sale at a time in which deals are becoming fiercely competitive; therefore, the possibilities for asking for discounts and favorable contract terms have increased.

- Recognizing the inevitable business pressure posed by cross-company and between-company collaboration and matching it to one set of technologies, instead of a series of projects, is the first step for organizations toward an effective and functional B2B project. Organizations should establish well-set expectations for "just good enough" IT and shared incentives and risk with their external business partners within their collaboration network.

- Be aware that multienterprise/B2B infrastructure projects will increasingly involve a variety of technologies as the "dumb" network evolves to become a "smart" network that incorporates diverse integration and collaboration functionality, including communications, translation, BPM and collaborative tools, increasingly implemented using an SOA. Successful companies will leverage traditional and process integration, as well as SOA, to solve diverse application integration and interoperability requirements. Internal IT infrastructure will include adapters; data transformation engines and ETL tools; integration brokers and business process managers to orchestrate message flow, Web services choreography and business process execution; and event management and alerting facilities for BAM.

- Recognize that the first step in developing a viable multienterprise strategy is acknowledging that multiple, autonomous multienterprise/B2B infrastructure projects and a "one size fits all" approach to multienterprise collaboration are long-term inhibitors to developing a holistic, flexible approach to diverse business requirements. A big challenge for companies is preventing preconceived assumptions — such as "EDI is dead," "Web services are cool," or "we can use one standard for all multienterprise/B2B collaboration" — from unintentionally hindering the implementation of a flexible and balanced approach to a multienterprise collaboration strategy.

- Organizations planning to embark into a multienterprise/B2B infrastructure project should emphasize the skills and business abilities necessary to handle successfully a variety of technologies.

- Beware that a big challenge will be organizational and cultural change — slowly elevating separate multienterprise/B2B infrastructure projects from being "wholly owned" by discrete IT groups to being part of a holistic, companywide, multienterprise strategy, and ideally, a shared multienterprise IT infrastructure, which comes with a fresh set of governance issues. Solutions — in the form of modern multienterprise/B2B gateway software or as IaaS from modern integration service providers — can help companies consolidate their B2B IT infrastructures and better meet the requirements established in a multienterprise strategy. Business-level metrics and their credible measurements will help business executives establish a link between the quality of execution of their multienterprise/B2B infrastructure projects and company profitability.

- Companies with international multienterprise integration requirements should use technology and service vendors with sufficient functionality, resources and domain expertise to meet diverse, country-specific multienterprise/B2B infrastructure project-scope requirements. This is particularly true for e-invoicing. Users of smaller multienterprise/B2B infrastructure technology providers should anticipate the impact of mergers and further consolidation. Multienterprise software and service providers should continue to invest in expanding cross-country multienterprise/B2B infrastructure project opportunities.

- No matter what vertical or financial shape your company is in, look for e-invoicing project savings opportunities. Don't wait for regulations and interoperability to get better; you can reap good benefits from e-invoicing today.

Acronym Key and Glossary Terms

AIM	application infrastructure and middleware
APS	application platform suite
B2B	business-to-business
BAM	business activity monitoring
BIO	B2B integration outsourcing
BPM	business process management
CPFR	collaborative planning, forecasting and replenishment
EDI	electronic data interchange
ESP	external service provider
ETL	extraction, transformation and loading
GDS	global data synchronization
IaaS	integration as a service
IP	intellectual property
MFT	managed file transfer
MFTaaS	file transfer as a service
SaaS	software as a service
SOA	service-oriented architecture
VAN	value-added network