

WHITE PAPER

Quantifying the Business Benefits of Host Access Solutions

Sponsored by: Attachmate Corporation

Lucinda Borovick Sandra Rogers
Randy Perry
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EXECUTIVE SUMMARY

Host access and optimization are critical for most large enterprises as they seek to leverage and extend their existing legacy systems. Demand is driven by a confluence of many variables, and it is expected to persist with the continued use of mainframes.

In this study, IDC analyzes the impact of the implementation of Attachmate's *myEXTRA!* product line, including its *Smart Connectors* technology for legacy application integration especially geared for the mainframe and *Presentation Builder* for remodeling host application interfaces, along with centralized Web management, single vendor/multihost capabilities, XP certification, and advanced productivity features in the emulation product line.

The results show that by deploying Attachmate solutions, companies were able to reduce their IT staffing costs by an average of \$233,838 annually; eliminate close to \$914,814 annually in outsourcing, mainframe, hardware, and training costs; save an average of close to \$1.9 million in higher user productivity; and increase new revenue by an average of close to \$2.3 million annually, including the capture of previously lost revenue (see Table 1).

TABLE 1

Results of ROI Study for Attachmate myEXTRA! Products

	Average Annual Savings (\$)
Increased revenue	2,268,458
Increased user productivity	1,896,278
Increased IT productivity	539,829
Increased IT efficiency	233,838
Other cost savings*	914,804
Total	5,853,208

* Savings include those from elimination of outsourcing and reduction in hardware, mainframe, and training costs.

Source: IDC, 2004

When normalized for company size, the average cost savings and revenue enhancements from deploying the Attachmate products amounted to \$120,754 per 100 users (see Table 2). Over a three-year period, the average investment was \$68,898 per 100 users, including all hardware and software purchases and the costs for installation (including outsourced installation services), training, direct support, and maintenance. Over the same three-year period, the net present value (NPV) of the savings and added revenue, based on a 12% discount rate, amounted to \$216,420 per 100 users, resulting in an average return on investment of 314% and an average payback period of 8.8 months.

TABLE 2

Results of ROI Study for Attachmate myEXTRA! Products, Normalized for Company Size

	Average per 100 Users
Annual benefit	\$120,754
Investment*	\$68,898
Net present value	\$216,420
ROI	314%
Payback period	8.8 months

* Investment includes hardware and software purchases and installation, training, direct support, and maintenance costs.

Source: IDC, 2004

IMPORTANCE OF HOST SYSTEM ACCESS TO THE ENTERPRISE

IBM mainframe and similar class host systems have been the foundation of business IT investments for the past 30 years. The mainframe remains one of the most vital IT assets within an organization. Over the past three decades, the mainframe operating system has developed to the point where it now provides the single most important platform for certain types of workloads, including extremely large single system image databases and high levels of online transaction processing. As a result, despite the growing importance of volume servers within the datacenter, customers continue to rely upon IBM mainframes.

In fact, there remain considerable ongoing investments, with \$12.8 billion spent in 2002 on high-end systems. The magnitude of these investments is staggering, yet the ability for the entire business to benefit from the IT investments depends on making the information stored on the systems available to all relevant user populations.

Expanding access to host systems provides a number of business benefits, including:

- ☒ **Increased efficiencies.** By having access to the latest account information, a customer care representative can quickly and effectively answer a client's questions.
- ☒ **Speedier response to changing business requirements.** With access to the host, a clothes buyer at a major department store can order additional items that are selling quickly and cancel orders for nonpopular items.
- ☒ **Reduced costs.** A student with host access can register for classes without having to fill out a paper form and then having someone else type this information into the host system.

Unfortunately, the limitations of the host systems themselves can create a barrier to increasing user access. The host applications can require a significant amount of training to understand the appropriate commands and information presented. As a result, companies are reluctant to expand training beyond a core group of employees. Also, distributing the appropriate software to each individual user can be cost prohibitive, which limits deployments. Additionally, security concerns prevent companies from readily allowing access to critical mainframe applications.

To overcome these limitations, customers invest in host access products that address the limitations and expand the use of the mainframe to existing and new user populations. Despite the current economic conditions and the recent, steep declines in spending in other technology markets, the host access market remains strong, with customers investing over \$1 billion a year on these types of products.

TRENDS IN THE IT ENVIRONMENT

Enterprise IT environments are, and need to be, dynamic. They are pressed to incorporate and adapt to new technology while staying focused on bringing true business benefits to the organization.

Heterogeneous Environments

In the past, a company's entire IT investment typically centered on a single type of host system. Any investment in storage, networking, software, or desktop devices was entirely dependant upon the type of host system installed. For the world's largest organizations, this typically meant an investment in IBM large-scale systems, with the latest generation taking the form of the zSeries. For smaller companies and departmental needs, minicomputers such as the IBM AS/400 and the DEC VAX became the focal point for technology investments. Though smaller, these environments were similar to large-scale hosts because they represented a similar type of IT environment that dictated the use of specialized software, communications, and client terminals.

The introduction of the PC and Intel architecture represented the most radical change to both corporate IT departments and large-scale system vendors. The benefits of

distributing computing power throughout an organization, coupled with the cost savings available by offloading certain types of workloads to a centralized computer, thrust IT into a heterogeneous computing environment. This change provided unprecedented opportunities for choosing the system, storage, software, and networking products that best met business and operational requirements.

Today's datacenters have accumulated a mix of systems and operating systems, with higher volume servers primarily responsible for handling IT and Web infrastructure requirements. Typically, Unix systems meet multiple requirements but primarily specific business processing needs, while large-scale host systems support business performance demands. Organizations tend to rely upon IBM host systems to support mission-critical, business-processing workloads, with online transaction processing (OLTP), enterprise applications, back-office applications, and batch processing forming the core of customers' continued investments in this environment. Not only are such workloads suited to the IBM mainframe, but migrating the workloads and redesigning systems for other platforms could be cost prohibitive.

In addition to matching workloads with the most appropriate server, multihost environments evolve with changing business needs. Mergers and acquisitions typically bring diverse IT systems under one organizational umbrella. It is quite common to find Unisys, Tandem, VT, and HP systems colocated within one datacenter. With host access products, customers can bring the benefits of universal Web-based architectures into their environment while maintaining and benefiting from existing investments in host systems. The host access products themselves provide the glue that enables users to access multiple systems from one desktop or application.

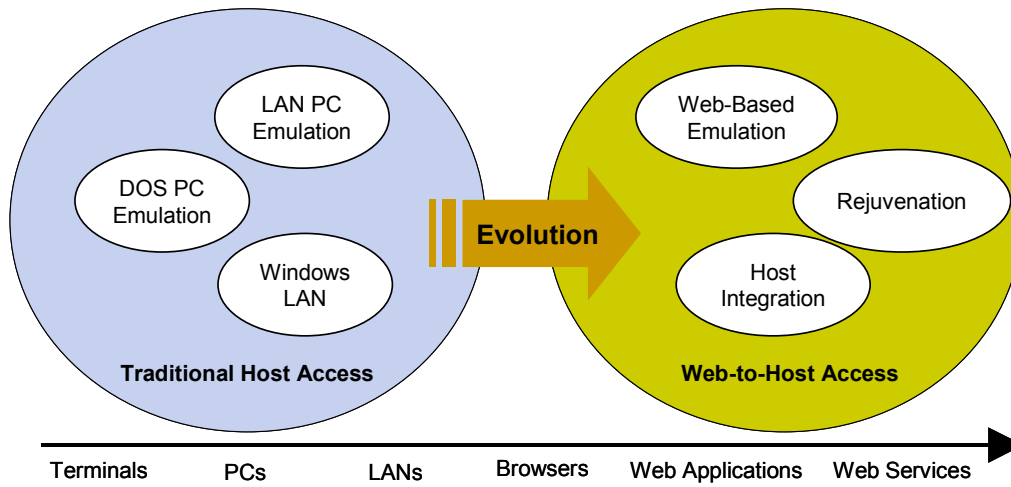
Host Modernization

The IBM mainframe continues to adapt and integrate evolving desktop, network, and software architecture and standards into the environment. This migration started with the first shipment of PC emulation software as the PC began to replace the terminal at end-user desktops. Host access software has continued to improve and keep pace with technology evolutions. It is currently available for the latest version of the Windows XP operating system and can be utilized via Web browser and portals. Communications for this environment is no longer limited to SNA proprietary networking, and the mainframe is now viewed as a standard server with TCP/IP communications. Figure 1 illustrates the progression of host access software.

The benefits of modernizing host access go beyond consistency in architectures. The ability of end users to access a host system from any desktop expands the user population of host information to unprecedented levels. Training on traditional host applications is time-consuming and typically restricted to a select trusted user population, such as a call center, accounting, human resources, and so forth.

FIGURE 1

Progression of Host Access Software



Source: IDC, 2004

Web Services and Service-Oriented Architecture

One of the primary concepts behind a service-oriented architecture (SOA) is that levels of abstraction are built between data, process logic, and functional code to promote reuse with new application development. Web services standards have captured tremendous vendor support and are serving to facilitate the development of common formats and protocols across software solutions, breaking down the proprietary nature of previous-generation products.

By leveraging technology now available to access legacy data and business logic at a granular level and encapsulate it in a reusable format, developers can transform legacy applications to be integrated and extensible with newer, Web-based systems. IDC's case study research for this ROI study showed this to be a critical factor for some enterprises in selecting an Attachmate *myEXTRA! Smart Connector* solution.

Security

The robust heritage and centralized nature of the mainframe architecture works to its advantage when customers' security concerns are paramount. Security authentication and authorization is typically built into the mainframe system and can be further enhanced through integration with network security technology that provides for authentication, encryption, certificate authorities, and Internet key exchange.

OPTIMIZING THE USE OF HOST RESOURCES

Today, most large organizations are struggling to simplify their environments to reduce costs and, at the same time, become more agile to address current business needs. But with the volumes of important information and processes spread across a variety of system environments, the risks and challenges for change can be daunting.

Key issues and opportunities that can have a huge impact on the IT organization and its host investments include:

- ☒ **Reducing complexity.** The overwhelming complexity of maintaining multiple systems on different platforms, especially legacy systems, puts a tremendous burden not only on software and hardware investments but also on labor. Issues include:
 - ❑ **System and application consolidation.** Today, many organizations are undergoing platform and application instance consolidation projects as a step in reining in costs. By maintaining a single-vendor solution, an organization can realize savings while negotiating license contracts, deploying solutions, reducing training efforts, simplifying integration tasks, and reducing the complexity, risk, and time lines associated with upgrade cycles.
 - ❑ **Centralized system and client management.** IDC research has indicated that the use of a unified platform for integration and systems management is where long-term total cost of ownership (TCO) savings can be realized just by simplifying the task of managing change. This is especially true for a highly distributed and/or heterogeneous environment across both server and client topography.
- ☒ **Increasing productivity.** IT executives must constantly weigh technology decisions in the face of an available and affordable skill base. The ability to utilize known technology and business resources with specific knowledge geared to one's own company and its industry and business model is becoming ever more critical. Also, because resources may be limited by budget or desirable fit, one must leverage whatever resources are currently at hand in the most productive way. Issues include:
 - ❑ **User and IT skill sets.** By abstracting, and perhaps simplifying, the processes that require explicit host systems, data, and process knowledge, one can better leverage individuals who have experience on newer, network-based technologies.
 - ❑ **User access and interface design optimization.** Accessing host information is a constant drain, not only from a systems point of view but especially from a user and developer training and time productivity perspective. The ability to layer a more intuitive interface onto host-based screen flows and data should increase productivity and frequency of access.
- ☒ **Integration and extendibility.** IDC research has indicated that the number one challenge in addressing integration is in dealing with legacy systems. As previously discussed, the criticality of the information currently housed on mainframe systems

is immense — as are the costs and risks associated with a rip-and-replace option. By allowing timely and secure access to appropriate data in a controlled fashion, organizations can develop new applications and use cases more readily, additionally extending these to different users and access scenarios. Issues include:

- ❑ **Internal and external reach.** According to the same IDC integration study, organizations are struggling to address both their internal and external integration requirements, with the former still taking a bit more precedence. By providing easier, consistent, and cleaner access to legacy systems, especially those housed on the mainframe, organizations not only increase their ability to engage a wider internally focused audience, but they also reap benefits throughout the entire value chain. Much of the current development initiatives, especially those utilizing Web services, are in building and extending Web-based systems that provide customized access and self-service capabilities to partners and customers.
- ❑ **Adaptability.** Why are organizations focusing attention on integrating their systems? The majority indicate their primary impetus is to be able to better adapt to changing business requirements. In our interviews for the ROI study, we found that the ability to move quickly on business opportunities was an important, if not the primary, driver for investing in Attachmate's technology.
- ☒ **Standards and industry-accepted platform support.** A growing requirement for most organizations is that technology adheres to industry-accepted and company-specific standards. This applies to systems hardware as well as software. When asked what standards meant to their organizations, respondents to a recent IDC study also mentioned characteristics such as "stability", "quality," "security," "satisfaction," "cost of ownership," "reliability," "consistency," "ease of use," "speed," "value," and "compatibility." Although the primary reason enterprises adopt standards is to simplify their computing environment, the policy has become increasingly critical in protecting technology investments for years to come. Issues include:
 - ❑ **Client interfaces and desktops.** Supporting and optimizing the users' point of contact with the system's interface and desktop environment are critical. The ability to address multiple types of systems and configurations is essential to supporting the extended enterprise and adjusting quickly to events such as a merger or acquisition, a new partnership arrangement, or a mobile initiative.
 - ❑ **Deployment and Web services protocols.** Because of the need to address future interoperability requirements, adherence to platform standards, such as J2EE and .NET, is a critical dimension in managing the ever-evolving deployment and integration environment. Growing industry support for Web services standards is another key dimension as nonproprietary interfaces make way for a more simplified model utilizing a common stack of XML-oriented protocols.

ATTACHMATE SOLUTIONS

One company that is offering the benefits of host access, Web enablement, and legacy integration is Attachmate, whose *myEXTRA!* product line provides solutions for a full spectrum of needs in host access and optimization. The product line includes:

- ☒ *myEXTRA! Enterprise* provides a full spectrum of host access functionality.
- ☒ *myEXTRA! Terminal Viewers* offer thin client access to provide flexible deployment options for host access.
- ☒ *myEXTRA! Presentation Builder* transforms, remodels, customizes, and extends host applications for Web usage.
- ☒ *myEXTRA! Smart Connectors* make it easy to access and integrate legacy data and applications with new application development.
- ☒ *myEXTRA! Management and Control Server* provides a single-server solution to share callable services, assign security rights, and manage all host access clients.

In developing the *myEXTRA!* product line, Attachmate focused on a number of specific attributes including:

- ☒ **Centralization.** With the *myEXTRA! Management and Control Server*, customers can centrally manage, configure, and deploy host access clients with all *myEXTRA!* products from one centralized server. The management console gives customers the flexibility of deploying the appropriate products for specific types of users with minimal management time, the ability to track host access and license usage, and the ability to incorporate common directory services and security standards like Active Directory, LDAP, and RACF.

IDC spoke with one customer who chose Attachmate solutions based on the functionality in *myEXTRA! Management and Control Server*. This organization felt that the benefits of using central configuration and management saves a significant amount of time and increases efficiency of the IT organization. The company is migrating toward creating simpler desktops and easier user interfaces, and with *myEXTRA! Management and Control Server*, the client is able to reach this goal.

- ☒ **Consolidation.** Enterprise customers continue to want to consolidate the number of vendors they work with. Attachmate enables customers to standardize on their platforms, regardless of the types of host systems installed. Attachmate provides the following host connectivity options: IBM (3270, 5250), Unisys (T27, UTS), Unix, VT, Tandem, HP, and X-Windows. In addition to providing a variety of client options including thick, thin, and custom, Attachmate supports Java, JDBC, ODBC, ADO, OLE DB, ActiveX, .NET, COM(+), JCA, XML, SOAP, HTTP, and HTTPS.

IDC spoke with many Attachmate customers who were consolidating their host access solutions with one vendor for easier manageability and cost effectiveness. These organizations believe Attachmate to be highly

knowledgeable in this area of technology and able to provide the breadth and scalability they require to manage the largest of user populations. Others also commented positively on the level of product stability that Attachmate offers.

- ☒ **Usability.** With its advanced user productivity tools, Attachmate continues to enhance the host emulation products with features that enable a user to work with a host application and still enjoy the benefits of newer Windows and browser functionality. Some of the productivity tools include spellcheck options, auto complete, and auto expand options for more rapid and accurate entry as well as productivity toolbars that include scratch pad, recent typing, and history.

One IT group switched to Attachmate because its user population was constantly trying to change the colors of the host application. This created a problem because the emulation software they were using did not respond well to color changes. As a result, the IT help desk was spending 10 hours a month just fixing color changes. With Attachmate, the company estimates it now only spend about 10 minutes a year on color changes.

- ☒ **Connectivity and sources.** With Attachmate *myEXTRA! Smart Connectors*, enterprises can access and integrate legacy applications and mainframe-based data sources including 3270, 5250, UTS, T27, CICS, IMS, IMS/TM, CICS 3270 Bridge, VT, VSAM, Adabas, DB2, and IMS/DB. Based on a service-oriented architecture, along with open and industry standards, easy-to-use tools unlock legacy systems to leverage not only the mainframe's assets but also to capitalize on its performance, reliability, security, and scalability.

IDC spoke with one customer who was able to automate an invoice entry application. Prior to using Attachmate, the field representative had to enter information into one system; the information would be printed out and then manually retyped into the mainframe system, creating possibilities for error as well as duplicated efforts. With Attachmate, the client has reduced costs and increased accuracy by automatically populating subsequent forms based on the initial order entry process, eliminating the need to input data twice. Another organization had lost connectivity to its mainframe service but with Attachmate was able to quickly reroute via TCP/IP.

- ☒ **Platform and standards support.** Attachmate continues to evolve with changing desktop and server environments, meeting Windows XP certification requirements with *myEXTRA! Enterprise* and supporting the latest directory standards such as Active Directory, LDAP, and RACF with its *Management and Control Server* technology. The *Management and Control Server* is supported on all midtier platforms as well as IBM's OS/390 and z/OS host operating systems. J2EE, .NET, COM(+), JCA, XML, SOAP, HTTP, and HTTPS are supported standards in Attachmate solutions. *myEXTRA! Smart Connectors* support these environments, architectures, and communication protocols and will interface with the customer's existing clients as well as with IDEs.

Case study interviewees stressed not only the importance of integration but also the ability to control sessions using Windows security. Such support allows for

greater levels of deployment and remote access to systems. It also eliminates the need for specific client installs, resulting in significant cost savings.

- ☒ **Extendibility.** Attachmate's *myEXTRA! Presentation Builder* enables organizations to create new Web-based interfaces for their legacy applications, allowing a new generation of users to utilize the host data for new uses or increased productivity. Customers can also streamline the application workflow and extend the original application by adding Web services and integrating *Smart Connector* reusable objects.

IDC found many clients seeking to create a "self-service" orientation to their host systems. This is where many expect significant savings and the potential for decreased latency in manual steps. One respondent states, "Basically, what's happening is that we're eliminating the workload for the internal folk ... we're pushing it more to the end user, so the end user now has the controls sitting right there on their desktop to be able to process that transaction." Others found the Attachmate solution allowed them greater independence from their host solution provider, reducing specialized customization costs as well as session costs.

- ☒ **Integration.** Especially with its *myEXTRA! Smart Connector* technology, Attachmate provides a mechanism to systematically present legacy systems information in a reusable fashion that can be integrated into other systems and interfaces, especially in heterogeneous environments. For many companies, this can translate into significant savings.

In one interview, the Attachmate customer reported a dramatic reduction of emulation users from 100 to 10, made possible by pushing data entry as close to the customer as possible. This allowed the employees to be redirected to other tasks.

IDC'S ROI METHODOLOGY

This study was conducted by interviewing 10 companies regarding various aspects of their host environments, prior to and after the implementation of Attachmate solutions. The study primarily focuses on the costs to purchase, deploy, and support these solutions and the impact these solutions had on IT resources, end users, applications and networks, and the business.

Benefits

IDC quantifies the total business benefit by examining the dollar value of cost savings and additional revenue that occurs in the ways described in the sections that follow.

Cost Reduction

IDC measures the following areas of reduction in actual hard costs associated with optimization of host resources:

- ☒ **IT staff efficiency.** Automation enables IT staff in direct support of users to do more with less and therefore downsize or redeploy IT staff assets, or — in a high-

growth user environment — to postpone or eliminate additional hiring. IT staff efficiency costs are based on the loaded annual salary (1.4 x salary).

- ☒ **IT travel.** The enhanced ability to launch applications and solve problems centrally reduces travel costs for IT staff.
- ☒ **Replacement of other management tools.** These costs are associated with the ongoing support and upgrade of the replaced tools.
- ☒ **Elimination of outsourcing contracts.** With better reliability or automation, companies can eliminate outsourced consulting and software development and support contracts.
- ☒ **Equipment purchase avoidance.** Better management and consolidation of resources enables the business to meet growing demands without adding systems.

IT Productivity

IT productivity measures how IT managers and their staff use their time. If the deployed solution decreases the time required to execute various deployment, user administration, and legacy to ebusiness operations, it frees managers and staff for more proactive, business-related activities. IT staff productivity is a "soft" cost. The value is estimated as hours saved x loaded hourly salary.

User Productivity

User productivity is a factor of availability. Availability is defined as the time that the business application services are accessible to the internal and external users. Our survey respondents reported that after implementing the Attachmate solution, they reduced the impediments to availability. This included the time lost through configuration, help desk, training, outages, access, and software delivery. The result is that internal users were able to work additional hours using applications and therefore the value of their loaded salaries was regained. Because users can continue to contribute to the company's business when they do not have access to the solution, we only count a portion of regained availability.

Impact on Revenue

IT impact on revenue always varies widely in these studies and is largely dependent on the type of business. Service providers and many financial institutions have external-facing applications that generate a significant share of their revenue. IT solutions can reduce downtime, create new revenue sources, or simply speed up time to market. Financial institutions can lose over \$1 million per hour of downtime, while many other companies suffer no loss of revenue in a downtime situation.

Deployment

Because IT products require a deployment period, the full benefits of the product are not available during deployment. To capture the delayed impact of the benefits, IDC calculates the benefit on a monthly basis and then subtracts the deployment time from the first-year savings.

Investment

The investment comprises all hardware and software purchases as well as the costs for installation (including outsourced installation services), training, direct support, and maintenance.

Financial Methods of Computing Benefits

For this model, IDC used the payback and net present value methods for evaluating the ROI for the management software. The NPV method calculates the value in today's dollars for the three-year returns on an investment. The payback period is the point at which cash flow exceeds investment. IDC uses a very conservative approach. Rather than discount the cash flow, IDC only discounts the benefits (at 12%), and the investment is not discounted but treated as if it were all spent in the first year. Therefore, NPV is the discounted benefit less the total nondiscounted investment. ROI is NPV divided by the nondiscounted investment. The payback period is the nondiscounted investment divided by the average benefits x 365 days.

Study Demographics

For this study, IDC spoke with 10 companies that had deployed Attachmate solutions. These companies included service providers, healthcare, financial institutions, and education (see Table 3).

TABLE 3

Profile of ROI Study Respondents

	Average
Revenue	\$2.8B
Number of employees	11,338
Number of IT staff	147
Number of sites with users	228
Number of clients managed	5,217
Number of servers	333

Source: IDC, 2004

STUDY RESULTS AND ROI FINDINGS

myEXTRA! Products

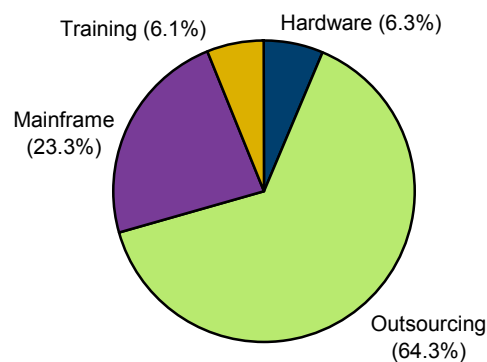
Overall, the companies using Attachmate solutions realized benefits in four major areas:

- ☒ **User productivity.** Reductions in lost time due to operational issues, including configuration, help desk, and access
- ☒ **Cost savings.** Increased IT efficiency, reduced training, hardware, and outsourcing
- ☒ **IT productivity.** Reduction in IT staff time spent in user administration and operational support of host systems
- ☒ **Revenue.** Increase in new revenue and the capture of previously lost revenue

Over the three-year period, the companies surveyed saved an average of \$233,838 annually from increased IT efficiency. These savings amounted to \$4,824 per 100 users. Companies also saved an average of \$914,814, or \$18,873 per 100 users, over three years from the elimination of outsourcing, savings in mainframe and hardware costs, and reduced training costs. More than half the savings came from reducing these outsourcing and mainframe costs (see Figure 2).

FIGURE 2

Breakdown of Savings in Annual Expenses



Source: IDC, 2004

Improvements in IT productivity contributed a further cost savings over three years of \$539,829 annually, or \$11,137 per 100 users. There were significant savings in changing emulation configurations, application deployment, application integration with multiple hosts, redesign of application business workflow, and user administration (see Table 4). Increased user productivity also had a significant impact on savings, contributing close to \$1.9 million annually over three years, or \$39,121 per 100 users. Revenue increased by an average of close to \$2.3 million annually, or \$46,799 per 100 users, including the capture of revenue that was previously lost.

TABLE 4

Average Savings from Increased IT Productivity for myEXTRA! Products

IT Process*	Productivity Increase (%)	Annual Savings (\$)
Changing emulation configuration	50	209,862
Application deployment	16	133,382
Application integration with multiple hosts	14	47,137
Redesign of application business workflow	16	68,733
User administration	14	22,261

* Not a complete list

Source: IDC, 2004

Payback and ROI

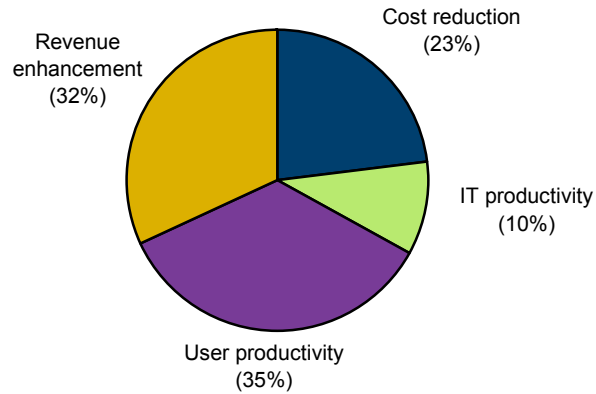
For the companies interviewed, the average savings over the three-year period from deploying *myEXTRA!* had a net present value of close to \$10.5 million. Based on an average investment of slightly more than \$3.3 million over three years, the average three-year ROI from deploying *myEXTRA!* was 314% and the average payback time was 8.8 months.

myEXTRA! Smart Connectors

Over the three-year period, the companies surveyed deploying *myEXTRA! Smart Connectors* saved an average of \$357,837 annually from increased IT efficiency. These savings amounted to \$9,623 per 100 users. Companies also saved an average of more than \$1.3 million, or \$35,858 per 100 users, over three years from the elimination of outsourcing, savings in mainframe and hardware costs, and reduced training costs. Improvements in IT productivity contributed a further cost savings over three years of \$694,834 annually, or \$18,685 per 100 users. Increased user productivity had the largest impact on savings, contributing close to \$2.5 million annually over three years, or \$66,276 per 100 users (see Figure 3). Revenue increased by an average of close to \$2.3 million annually, or \$60,667 per 100 users, including the capture of revenue that was previously lost.

FIGURE 3

**Breakdown of Benefits from Deploying Attachmate myEXTRA!
Smart Connectors**



Source: IDC, 2004

Payback and ROI

Overall, for the companies interviewed, the average savings over the three-year period from deploying *myEXTRA! Smart Connectors* have a net present value of close to \$14.4 million, or \$386,288 per 100 users (see Table 5). Over three years, the average investment was almost \$2.5 million, or \$67,011 per 100 users, including all hardware and software purchases and the costs for installation, training, direct support, and maintenance. Based on these figures, the average three-year ROI from deploying *myEXTRA! Smart Connectors* was 576% and the average payback time was 5.4 months.

TABLE 5

Results of ROI Study for Attachmate myEXTRA! Smart Connectors

	Average per 100 Users
Annual benefit	\$191,118
Investment*	\$67,011
Net present value	\$386,288
ROI	576%
Payback period	5.4 months

* Investment includes hardware and software purchases and installation, training, direct support, and maintenance costs.

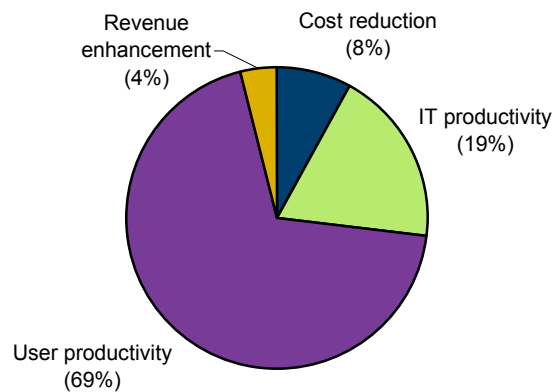
Source: IDC, 2004

Centralized Management

Over the three-year period, the companies surveyed deploying *myEXTRA! Management and Control Server* saved an average of \$91,404 annually from increased IT efficiency. These savings amounted to \$2,548 per 100 users. Companies also saved an average of \$124,597, or \$3,475 per 100 users, over three years from the elimination of outsourcing, savings in mainframe and hardware costs, and reduced training costs. Improvements in IT productivity contributed a further cost savings over three years of \$493,695 annually, or \$13,768 per 100 users. Increased user productivity again had the most significant impact on savings, contributing close to \$1.8 million annually over three years, or \$49,601 per 100 users (see Figure 4). Revenue increased by an average of \$107,422 annually, or \$2,996 per 100 users, including the capture of revenue that was previously lost.

FIGURE 4

Breakdown of Benefits from Deploying Attachmate *myEXTRA! Management and Control Server*



Source: IDC, 2004

Payback and ROI

For the companies interviewed, the average savings over the three-year period from deploying *myEXTRA! Management and Control Server* had a net present value of more than \$5.5 million, or \$153,752 per 100 users (see Table 6). Based on an average investment of \$698,716, or \$19,486 per 100 users, over three years, the average three-year ROI from deploying *myEXTRA! Management and Control Server* was 789% and the average payback time was 4.1 months.

TABLE 6**Results of ROI Study for Attachmate myEXTRA! Management and Control Server**

	Average per 100 Users
Annual benefit	\$72,389
Investment*	\$19,486
Net present value	\$153,752
ROI	789%
Payback period	4.1 months

* Investment includes hardware and software purchases and installation, training, direct support, and maintenance costs.

Source: IDC, 2004

Single Vendor/Multihost Solution

Over the three-year period, the companies surveyed deploying *myEXTRA! Presentation Services* saved an average of \$870,644 annually from increased IT efficiency and savings in outsourcing and hardware costs. These savings amounted to \$8,564 per 100 users. Increased user productivity also had a significant impact on savings, contributing over \$1 million annually over three years, or \$10,279 per 100 users. Not enough companies with *myEXTRA! Presentation Services* were interviewed to generate representative numbers for ROI and the payback period.

Case Study: Financial Services

A financial services provider with assets of nearly \$2 billion and a large distributed base of over 15,000 agribusiness clients had previously run its business with mainframe emulator software installed at the local desktop. Dealing with product offerings ranging from loans, leases, and insurance to financial consulting, record keeping, and tax services required a tremendous amount of high-touch customer service. To keep up with its evolving demands and be able to leverage newer technologies and workflows, the company looked to not replace, but change, its access to the legacy systems.

A primary impetus for selecting Attachmate *myEXTRA! Smart Connectors* was that transactions from mainframe-based applications could be saved as Web services and reused in new applications to streamline operations and eliminate errors. The organization also uses .NET, so the ability to link its Web pages to back-end systems was an ideal solution. Another key factor in choosing Attachmate was the team's strong familiarity with the company and its products and Attachmate's reputation as a leader in mainframe technology.

According to IDC's ROI analysis, the three-year savings and increased revenue from deploying the Attachmate solution have a net present value of more than \$5.2 million. Based on a total investment of \$751,200 over three years, including all hardware and software purchases and the costs for installation, training, direct support, and maintenance, the firm realized an ROI of 701% from deploying Attachmate *myEXTRA! Smart Connectors* and a payback time of 4.6 months.

Other benefits cited include:

- ☒ **Improved responsiveness.** When an alliance partner approached the firm with potential business, it was able to respond to the custom requirements within a short period of time, thanks to Attachmate *myEXTRA! Smart Connectors*. By using resources no longer tied to the manual maintenance of its previous solution, the company was able to handle the new \$100-million-plus revenue opportunity without any new hires. Previously, it would have required an additional 12 full-time employees (FTEs).
- ☒ **Higher productivity.** By taking what was typically considered a back-end process and reorienting it to a Web-based front end, the company provided its customer service representatives (CSRs) with easy access to perform transactions in real time while it provided self-service capabilities for customers. As a result, the company expects its CSRs to become 30–40% more efficient. Additionally, the ability to publish Web services allows the company to extend information to employees on multiple media. By deploying critical sales data onto PDAs, for example, the company expects to make its sales staff up to 20% more effective in their day-to-day tasks.
- ☒ **Cost reduction.** According to the firm's technical solution team leader, the time saved with *Smart Connectors* means that resources are now available for other tasks within the company. For instance, the application development staff can now devote a larger amount of time to programming new applications and designing user interfaces. An application that took two days before now takes only an hour. Also, any problems with the system used to require hands-on deployment of IT staff to service users. Now the systems are configured centrally, which produces more consistent and reliable deployment, and any needed resolution is almost entirely handled remotely.

With the new applications, the use of emulator software has dropped by 90%, allowing all that infrastructure and support to be redirected. Training costs have also been cut. The company estimates that it used to take three to five months to train a new user on the previous emulation product, with most of the time oriented toward adjusting to the processes developed on the mainframe screens. With the redesigned systems enabled by *Smart Connector*, the company spends only four hours training 250 people on the new system.

- ☒ **Revenue generation.** A service that used to take a few days can now be delivered in five minutes, which means higher transaction volumes, a significant reduction in the cost per transaction and, ultimately, more deals closed. The firm expects to generate a couple of hundred billion dollars per year in loan value due to this extra capability.

The company has also learned that pushing out technology to new constituencies involves some adjustment. At first, users found they were asked to do more than before. However, within a very short time, users came to realize that they were actually eliminating manual processes, and they have now embraced the new way of doing business. Many of the employees comment that they can't imagine reverting to what it was like before this monumental change.

Case Study: Healthcare

As an integrated healthcare delivery network, this organization must support a highly distributed structure, with multiple hospital campuses spanning across counties and regions and with hundreds of healthcare providers. Quality service is of utmost importance to the institution, and providing access to correct, time-sensitive information is critical to its success.

Primary drivers for the company to select the Attachmate solution included a desire to move in the direction of Web-based systems and Windows terminals and a desire to simplify its enterprise desktop and connectivity environment and engage a single source for connecting its various systems. In doing so, the organization's ultimate goal was to drive down costs and increase worker productivity.

According to IDC's ROI analysis, the three-year savings and increased revenue from deploying the Attachmate solution have a net present value of more than \$3.3 million. Based on a total investment of \$.45 million over three years, the company realized an ROI of 742% from deploying Attachmate *myEXTRA! Smart Connector* and *Management and Control Server*, with a payback time of 4.3 months.

Other benefits cited include:

- ☒ **Easier and faster information access.** As a healthcare provider, the company needs to provide its clinical workers with fast, easy access to critical information at point-of-service. The workers interface with a variety of different products and applications, so the ability to access the knowledge base in a centralized fashion allows them to provide better care. With the Attachmate solution, the company estimates that workers are 5–10% more productive. Easier access has also significantly reduced the required training. Because of the technology's success, the organization expects to utilize it for mobile application deployments in the future.
- ☒ **Reduced development and hardware costs.** The company expects to avoid the development costs of "webifying" specific applications and envisions even bigger long-term cost savings of \$20,000–30,000 annually in hardware investments. The ability to utilize the Attachmate products in conjunction with thin clients reduces the need for fat clients and related installation, configuration, and support costs.
- ☒ **Information quality.** Timeliness and accuracy of information are not only critical to those involved in providing care but also to back-office operations, covering such critical areas as claims processing, fixed payments, and reimbursements to

the organization. The company estimates that the benefit of earlier and cleaner information flows could translate into savings of nearly \$100,000 per year.

- ☒ **Centralized Web management.** The Attachmate *myEXTRA! Management and Control Server* solution has increased usability by providing a common desktop and view to the user. It has also provided the IT staff with tools to centrally control and modify how the Web interface functions, increasing their efficiency by an estimated 5–10%.

CHALLENGES/OPPORTUNITIES

Challenges and opportunities facing Attachmate today include:

- ☒ Attachmate's customer base constitutes some of the most loyal groups of customers in IT, and the company's significant breadth of host-support technology remains a plus for the company. One of Attachmate's primary challenges is to expand its reach within customer accounts to include a new user population that is responsible for accessing, developing, and integrating legacy data and applications in new ways.
- ☒ Many large organizations are currently examining whether to continue investing in their mainframe assets or to replace their business applications on a new, Web-based environment. For the near term, a tremendous amount of traction on the host environment will remain, but evolutionary steps to extract processing away from mainframes is a potential future scenario for many. This may serve to dampen future growth in the long term.
- ☒ By supporting SOA and industry standards such as Web services, Attachmate enables enterprises to extend their existing legacy systems as needed. This methodology is also expected to open the door for increased utilization and integration with diverse user groups and host systems, so organizations could find Attachmate solutions to be critical in enabling such computing models going forward.

CONCLUSION

In speaking with Attachmate's customers, IDC found that the company's products play an important role in expanding the use of their mainframe systems to provide concrete business benefits. Many of these organizations have been able to realize the value from their investments within relatively short time frames.

As mission- and business-critical applications become ever more complex and essential to the very survival of a business, improved solutions for accessing the host system offer essential building blocks to remain more competitive — in the short- and perhaps longer-term future — than the industry ever imagined.

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