Microsoft®

Modernization of Medicaid Management Information Systems (MMIS)

Date: June 2005

Prepared By: Microsoft Corporation

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Executive Summary

Microsoft provides the following information as an overview of the benefits (and capabilities) that customers have realized as a result of selecting a Microsoft platform to implement a Medicaid Management Information System (MMIS) solution using the software and hardware provided by Microsoft.

The MMIS solution offered by Microsoft provides the best return on investment (ROI) in the industry, as indicated by various industry-standard benchmarks and published cost structures, for line of business (LOB) applications that include: HIPAA Security, Electronic Document Management, Pharmacy Benefit Management and Point of Sale, Recipient, Provider, Claims encounter, and Financial.

A high-level overview of the Microsoft solution—the realized benefits in such areas as user adaptability, interoperability and scalability—are all described in this document emphasizing overall cost savings through the use of Microsoft technologies. This document will also describe the "value proposition" that Microsoft brings to its customers; one that we firmly believe is consistent with the goals of delivering a quality MMIS system.

Microsoft has found that Health and Human Services organizations improve their performance, decision making capabilities, and service levels by enhancing their MMIS applications with an implementation strategy based on well-defined requirements.

As described from specific MMIS opportunities, there are various benefits of an MMIS system that include:

- Efficient Claims processing
- Member and provider eligibility
- Management and administrative reporting (MARS)
- Fraud and abuse reporting (SURS)
- Third party liability (TPL)
- Pharmacy benefit management capabilities (PBM)
- Data warehouse/decision support system (DW/DSS)

Careful consideration of technologies and underpinning architectures can increase the level of cost savings. We believe that Microsoft technologies can directly contribute to these savings. Direct cost savings from Microsoft technologies are available in several key areas including:

- Less expensive hardware
- Lower software licenses and maintenance fees
- Lower infrastructure operations costs
- Lower application development and maintenance costs

An MMIS solution is designed for portability and interoperability across a wide variety of enterprise platforms. Beyond proven cost savings, this document will demonstrate Microsoft's core MMIS system as low-risk, reliable, and best for citizens and constituents to use for wide adoption.

Microsoft welcomes discussions to share best practices of our knowledge of implementing MMIS systems. Our intention is to explore and help identify any areas where our customers can increase citizen services, cost savings and efficiencies.

Health and Human Services Architectural Vision

State, county, and local governments provide a range of health services. State Department of Health agencies must comply with federal regulations specified in the more than 20 major federal programs that provide the largest amount of funding. In total, health service expenditures constitute a large percentage of State budgets.

Health agency executives must respond to complex social problems with limited resources that are only partially under their control:

- The public demands less spending while expecting continued maintenance of essential services
- Vocal interest groups drive public opinion to increase resources
- Congress requires compliance with laws such as the Health Insurance Portability and Accountability Act (HIPAA) or the Americans with Disabilities Act (ADA)
- Courts review and define appropriate access to care
- World events require the dedication of resources to protect against environmental and bioterrorism

Resolutions to these problems require coordination across departments and political boundaries, but many of these entities are disconnected. Multiple legacy systems are built without reference to one another and many times provide support services to the same persons or families. In other words, clients may be served by multiple agencies that are unaware of each other's involvement. High-risk predictors may come to the attention of one program and not be shared with another. Changes in a client's life circumstances, such as incarceration or employment, may be captured by one program but not another. As a result, crises occur that might be averted; state and local governments fail to maximize federal revenue streams; and ineligible clients continue to receive benefits.

The Microsoft Health and Human Services (HHS) Architectural Vision presents a flexible model for addressing these challenges. In the past, efforts to integrate services and administration have been stymied by the assumption that they required large-scale reorganization of departments. Advances in information technology now enable a client-centered, multi-programmed approach that can:

- Leverage existing infrastructure
- Simplify administrative processes
- Preserve the organizational integrity of individual providers and agencies
- Enhance service outcomes
- Ensure secure, role-based access to information

The HHS Architectural Vision offers a delivery network that drives efficient program operations; enables responsive, effective coordination of assistance across multiple organizations; and enforces full policy compliance.

The network maintains comprehensive, accurate, and timely views of the client, provider, and service data. Secure access to the information is available when, where, and in whatever form it is needed so that it can be analyzed and presented to support critical delivery decisions.

The HHS Architectural Vision provides improved program performance throughout the network of human services organizations resulting from:

- The selection and deployment of new foundation technologies such as portals or business intelligence tools

- New and improved links between applications
- Enhanced and extended existing applications by developing HHS-specific, reusable application components

Figure 1.0 depicts the network of federal, state and local organizations and private-for-profit and not-for-profit organizations involved in the delivery of health and human services. This HHS ecosystem must function effectively across multiple agencies, multiple jurisdictions, and multiple levels of government.

State and local governments are highly dependent on this extensive network of private-for-profit and not-for-provide providers to deliver an enormous range of services, from in-home nursing assistance and ambulatory care to substance abuse counseling, management of group homes, services to the aging, vocational rehabilitation, emergency assistance, child care, adoption services and family and youth counseling services. The challenge of coordinating service delivery across this vast network in all kinds of urban and rural settings is an enormous task, as is evident from the graphic.

Developing a practical cross-boundary integration model requires cooperation in defining integration requirements related to specific business outcomes. For example, it may be sufficient simply to pass information on a client from one system (e.g., TANF) to another (e.g., Child Care) in order to support service eligibility determination. Alternatively, it may be necessary to aggregate data from multiple agencies (e.g., TANF, Child Welfare, Courts and Schools) into a new database to enhance a business process (e.g., revenue maximization) or offer a new service. In some circumstances—particularly in the case of new organizations and redesigned business processes—it may be desirable to consolidate multiple databases and redundant collection processes into a single new application.

The HHS Architectural Vision assumes that practical integration strategies must, at least initially, build on existing agency technology infrastructure rather than replace it. The Vision's component structure facilitates incremental technology investment, such as implementation of new standards, common applications, and organization and process changes, consistent with emerging best practices in the field that leverage the existing investments while building the systems of the future.

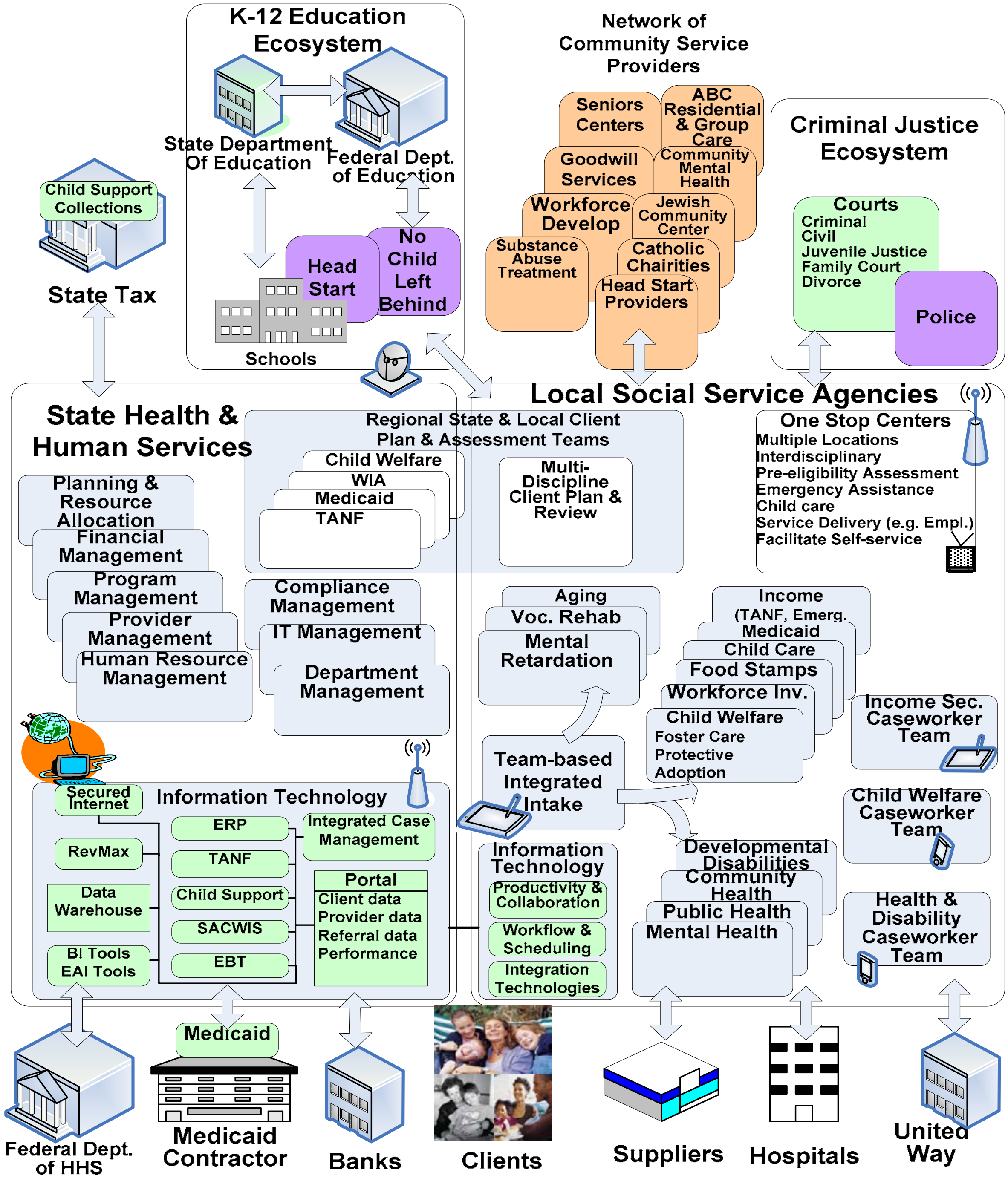


Figure 1.0—Complexity of the Health and Human Services Ecosystem: *The network of federal, state and local organizations and private-for-profit and not-for-profit organizations involved in the delivery of health and human services. The challenge of coordinating service delivery across this vast network in all kinds of urban and rural settings is an enormous task.*

HHS Conceptual Architecture

The HHS Architectural Vision consists of a portfolio of core business systems integrated through the use of best-of-breed technical components on the front and back ends of the applications (see Figure 2.0). It incorporates a variety of tools that support component development and implementation strategies that leverage the existing infrastructure. These tools include:

- Web portals to streamline client access to services
- Provider portals to simplify business transactions and coordinate the management of purchased services
- An enterprise data warehouse and data marts
- Business intelligence tools to facilitate analysis, planning, and resource allocation
- Messaging and mobile devices to enhance data access, improve coordination, and increase worker productivity

The architecture places a premium upon security to ensure that access to confidential information is role-based and limited to pre-approved individuals.

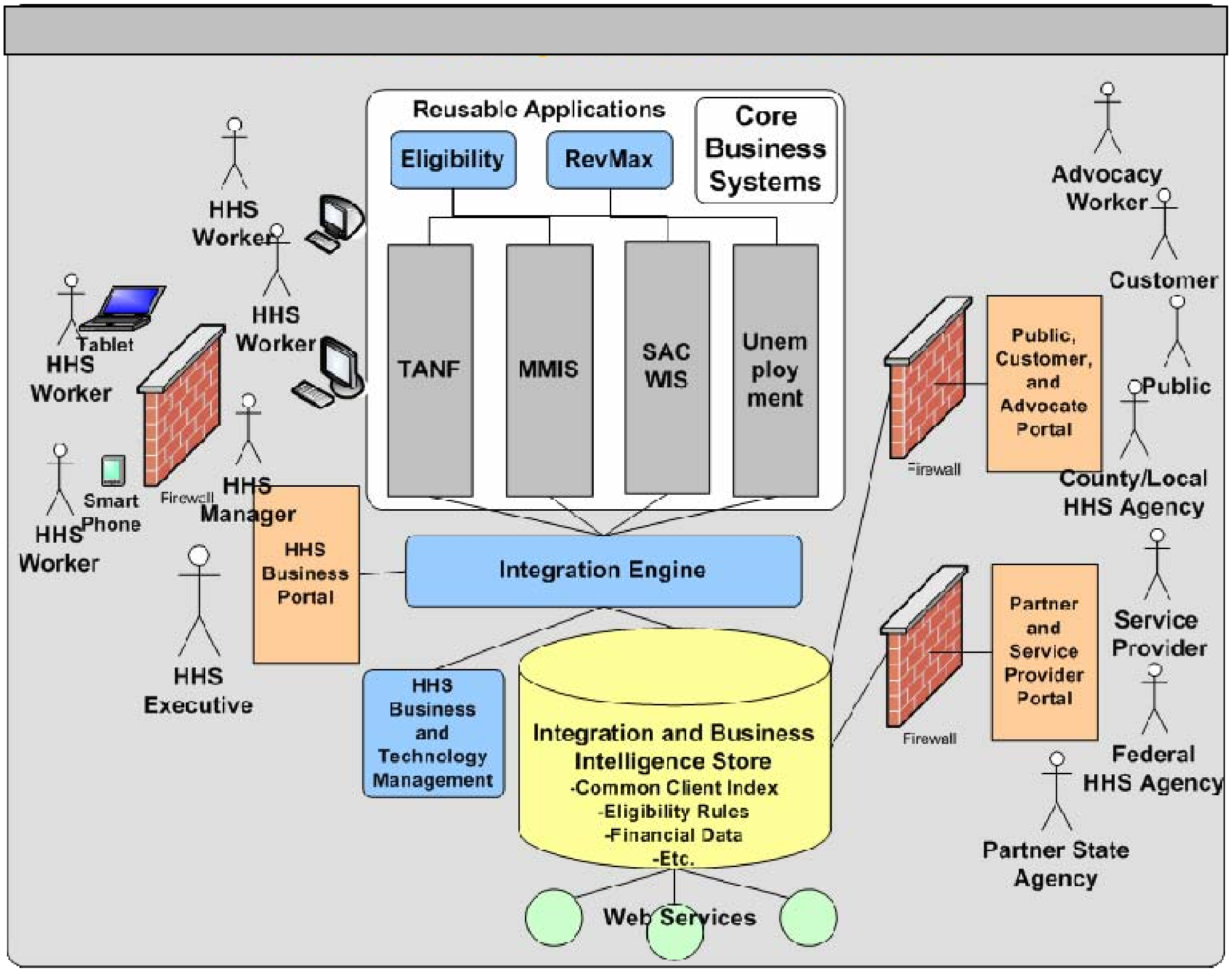


***Figure 2.0— HHS Conceptual Architecture**: HHS Architectural Vision assumes that practical integration strategies must, at least initially, build on existing agency technology infrastructure rather than replace it. The Vision's component structure facilitates incremental technology investment, such as implementation of new standards, tools, common applications, and organization and process changes, consistent with emerging best practices in the field that leverage the existing investments while building the systems of the future.*

Medicaid Background

Medicaid was established in 1965 under authority of the Social Security Act. Medicaid has grown over the years expanding program offerings and expanding the number of eligible recipients to the point today of providing benefits to millions of individuals and families with low incomes and resources. At the same time, Medicaid has become one of the largest single budget items for State governments and thus, is the focus of intense scrutiny. For example:

> While spending on health care is typically 31% of a State's total budget, Medicaid generally accounts for 71% of a State's health care budget. The total cost of Medicaid is usually shared by State and Federal Governments. The Federal Government's share, Federal Medical Assistance Percentage (FMAP), can range from 50-83% of total Medicaid costs. The FMAP guarantees the Federal Government to pay at least half of the State's Medicaid costs. *(adapted from INPUT © 2005)*

There is increasing pressure at the Federal level to reduce Medicaid spending and while no legislative changes have taken place for FMAP, there is growing pressure to decrease Federal contributions to Medicaid. The result is putting tremendous pressure on States to increase efficiency, reduce costs and improve flexibility in programs and administration; especially their Medicaid IT systems.

Furthermore, States can no longer receive Federal funding if they operate IT systems that do not comply with federal regulations. The Centers for Medicare and Medicaid Services (CMS) provide oversight and work with the states in administering the Medicaid program and certifying their MMIS. Since an MMIS is the leading IT-related health care expenditure within a State's budget, there is an urgent need for systems modernization and increased efficiency. The MMIS market is large and growing; the estimated market for outsourced MMIS development and maintenance is over $5.1 billion and expected to grow 20% to $6 billion over the next three years. These factors and the late lifecycle stage that most MMIS systems are currently in (i.e., mainframe, 10-20 years old, inflexible) have caused the States to look to modernization initiatives for their MMIS systems.

Trends in the MMIS Market

The trend toward modernization of Medicaid Management Information Systems, and the trend toward outsourcing within the States, has initiated modernization initiatives in nearly half of the fifty states that would provide billions of dollars in new business opportunities over the next 18 months. Outsourcers and systems integrators that manage and operate Medicaid Management Information Systems must comply with greater and more complex government regulations while providing increased access and efficiency as they pursue these new opportunities. Some of the drivers for the growing MMIS markets are requirements for a greater health care system and administrative efficiencies, and federal standards (i.e. MITA). Because States are under tremendous financial pressures, both from federal scrutiny of Medicaid programs and decreasing tax revenues, States are taking action with procurements that involve technology upgrades and replacements. There are trends toward outsourcing, for states that are still processing claims in-house and further trends toward upgrading the core MMIS system.

States are looking at new systems that are using the latest technology to modernize the architecture and increase the efficiency of their Medicaid programs. The major systems integrators and business process outsourcers are also modernizing their offerings to provide the best, most cost efficient solution to their customers. These modernization initiatives can be complex and time consuming, whether outsourced or embarking on a full-scale replacement of the legacy system. A less time consuming, lower risk approach to modernization is to first focus on enhancement and upgrade of peripheral or “edge” systems and associated business processes, then follow with a complete overhaul or replacement of the core MMIS system. This provides increased benefit, earlier in the MMIS replacement phase.

MMIS Architecture

The recommended technology strategy for a modern MMIS system is based on Microsoft solutions – in line with many state-wide or agency-wide technology directions and with the Medicaid IT Architecture (MITA) direction – which promotes a Service Oriented Architecture, Open Standards, Interoperability and inclusion of COTS components wherever possible.

The core business requirements for a state-of-the-art MMIS system; such as eligibility determination, case management, enrollment, participant communications, fiscal management, reporting and compliance, improved accessibility and service levels, are all underlying elements of this Solution Architecture.

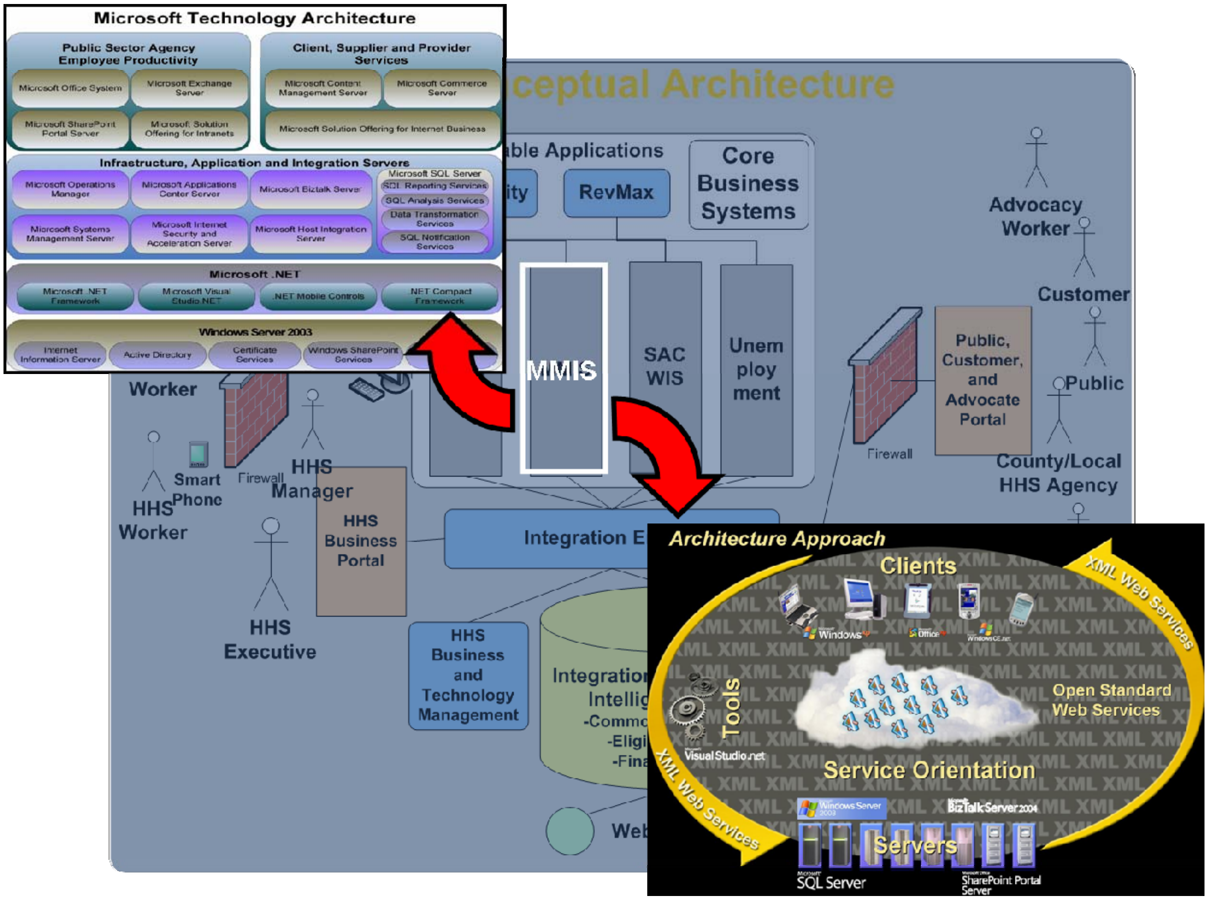

Microsoft Technology Architecture
Public Sector Agency Employee Productivity
Microsoft Office System
Microsoft Exchange Server
Microsoft SharePoint Portal Server
Microsoft Solution Offering for Intranets
Client, Supplier and Provider Services
Microsoft Content Management Server
Microsoft Commerce Server
Microsoft Solution Offering for Internet Business
Infrastructure, Application and Integration Servers
Microsoft Operations Manager
Microsoft Applications Center Server
Microsoft Biztalk Server
Microsoft SQL Server
SQL Reporting Services
SQL Analysis Services
Data Transformation Services
SQL Notification Services
Microsoft Systems Management Server
Microsoft Internet Security and Acceleration Server
Microsoft Host Integration Server
Microsoft .NET
Microsoft .NET Framework
Microsoft Visual Studio.NET
.NET Mobile Controls
.NET Compact Framework
Windows Server 2003
Internet Information Server
Active Directory
Certificate Services
Windows SharePoint Services
ceptual Architecture
able Applications
ity
RevMax
Core Business Systems
MMIS
SAC WIS
Unem ploy ment
Advocacy Worker
Customer
Public
Public, Customer, and Advocate Portal
Firewall
County/Local HHS Agency
Worker
Smart Phone
Firewall
HHS Manager
HHS Worker
HHS Business Portal
HHS Executive
Integration E
HHS Business and Technology Management
Integration
Intellig
-Comm
-Eligi
-Fina
Web
Architecture Approach
Clients
Windows
Office
Windows CE.net
XML Web Services
Tools
Visual Studio.net
Open Standard Web Services
Service Orientation
Windows Server 2003
BizTalk Server 2004
Servers
SQL Server
SharePoint Portal Server

Figure 3.0—HHS Conceptual Architecture: *Modern Medicaid solution enabled by a service-oriented architecture on a Microsoft platform.*

The Microsoft .NET Framework

The Microsoft .NET Framework and Microsoft .NET Servers, together with industry leading partners, provide the development and platform capabilities to meet the unique requirements of a modern MMIS architecture.

The goals of providing efficient e-Government services for State and county agencies, and easy access to information and services for Medicaid clients and participants are at the core of this Architecture including the following specific requirements:

- Managing client eligibility
- Real time ability for counties to communicate with the State
- Accurate and timely financial reporting
- Fast automated claim resolution
- Increased agency employee productivity
- Enhanced service delivery
- Web technology customized for individual population's needs
- Flexible financial package integrated into solution
- Collaborative Intranet portal for knowledge management
- Collaborative communication tools for maximum work efficiency
- Unprecedented access to data with familiar analysis tools
- Speed to implement new programs
- Speed to modify existing programs
- A rules-based system that is easily configurable
- ODBC compliant relational database
- Interoperability with in-house developed and legacy programs
- Advanced workflow
- Less coding requirements for customized solution

The Microsoft Product Components

The Microsoft platform and .NET architecture (see Figure 4.0) afford the flexibility to comply with frequent business and legislative changes and provide a lower cost of ownership because configuration and management are accomplished through familiar, time-saving Microsoft Windows management tools such as Microsoft Management Console and Microsoft Operations Manager.

The Windows Server System and .NET framework provide a highly scalable platform that enables a comprehensive suite of functionality. System middleware layers form an integrated framework that reduces development and maintenance costs, and enhances compatibility and efficiency between applications in a networked environment. Integration and Interoperability are provided through Microsoft BizTalk Server and Microsoft Host integration Server.

The core integration with Windows Server System also provides security, privacy, controlled data sharing and single sign-on capability throughout the entire MMIS Solution by using Microsoft Active Directory, Microsoft Identity Integration Server and Integrated Authentication.

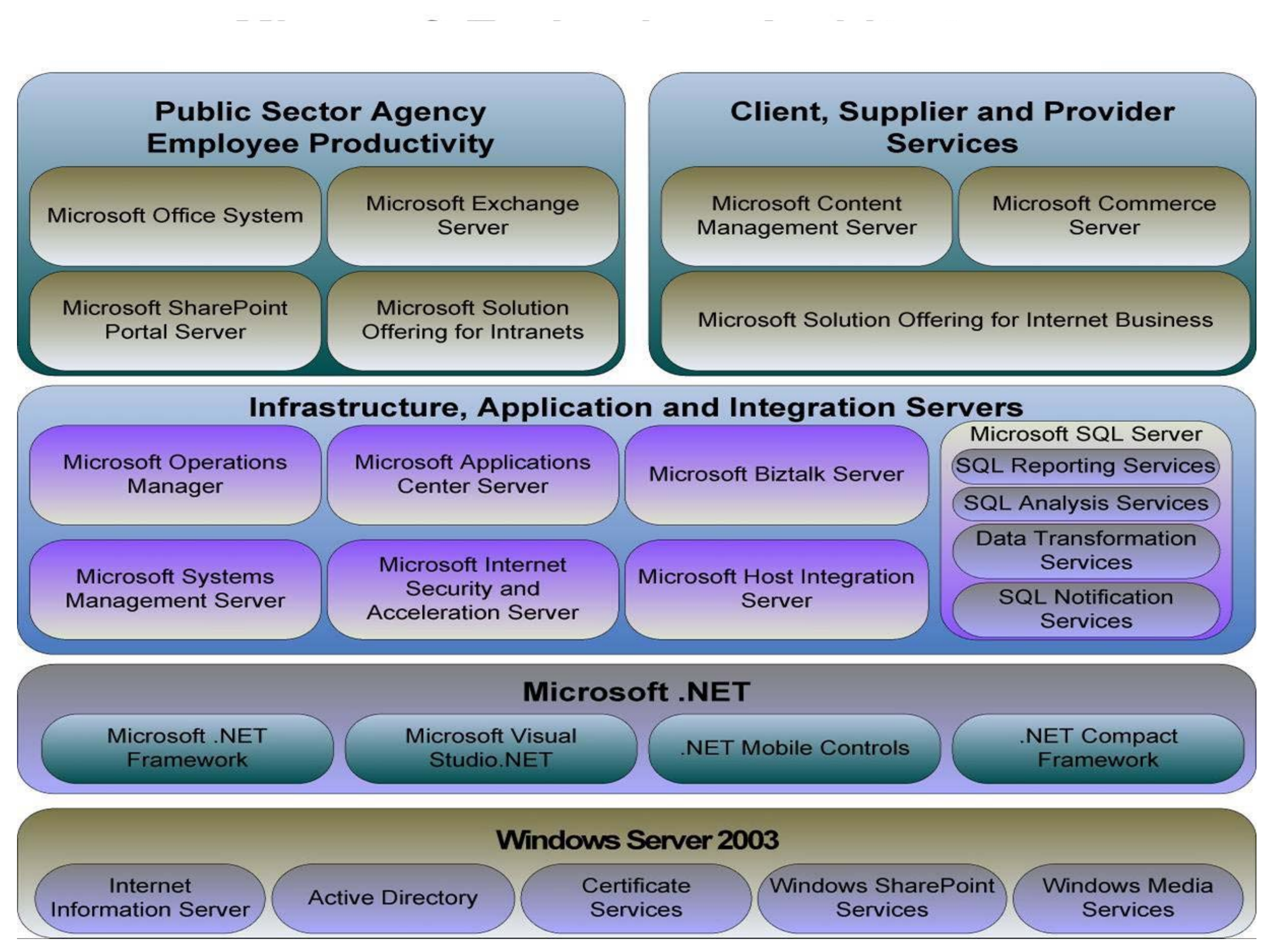

Public Sector Agency Employee Productivity
Microsoft Office System
Microsoft Exchange Server
Microsoft SharePoint Portal Server
Microsoft Solution Offering for Intranets
Client, Supplier and Provider Services
Microsoft Content Management Server
Microsoft Commerce Server
Microsoft Solution Offering for Internet Business
Infrastructure, Application and Integration Servers
Microsoft Operations Manager
Microsoft Applications Center Server
Microsoft Biztalk Server
Microsoft SQL Server
SQL Reporting Services
SQL Analysis Services
Data Transformation Services
SQL Notification Services
Microsoft Systems Management Server
Microsoft Internet Security and Acceleration Server
Microsoft Host Integration Server
Microsoft .NET
Microsoft .NET Framework
Microsoft Visual Studio.NET
.NET Mobile Controls
.NET Compact Framework
Windows Server 2003
Internet Information Server
Active Directory
Certificate Services
Windows SharePoint Services
Windows Media Services

Figure 4.0—The Microsoft Technology Architecture

.NET and Service Oriented Architectures

The advent of Service Oriented Architectures introduces a new set of fundamental architectural elements for architects to work with at a conceptual level. These are software services, messages, state, and processes.

Software services are discrete units of application logic that expose message-based interfaces suitable for being accessed across a network. Service-based architectures permit very flexible deployment strategies; rather than requiring that all data and logic be resident on a single computer, the service model allows applications to leverage networked computational resources (illustrated in Figure 5.0).

The service is defined purely by the messages it will accept and produce, including the sequencing requirements for those messages. Successful routing of messages between services is a complex process, which is best handled by a messaging infrastructure shared across the services an organization exposes.

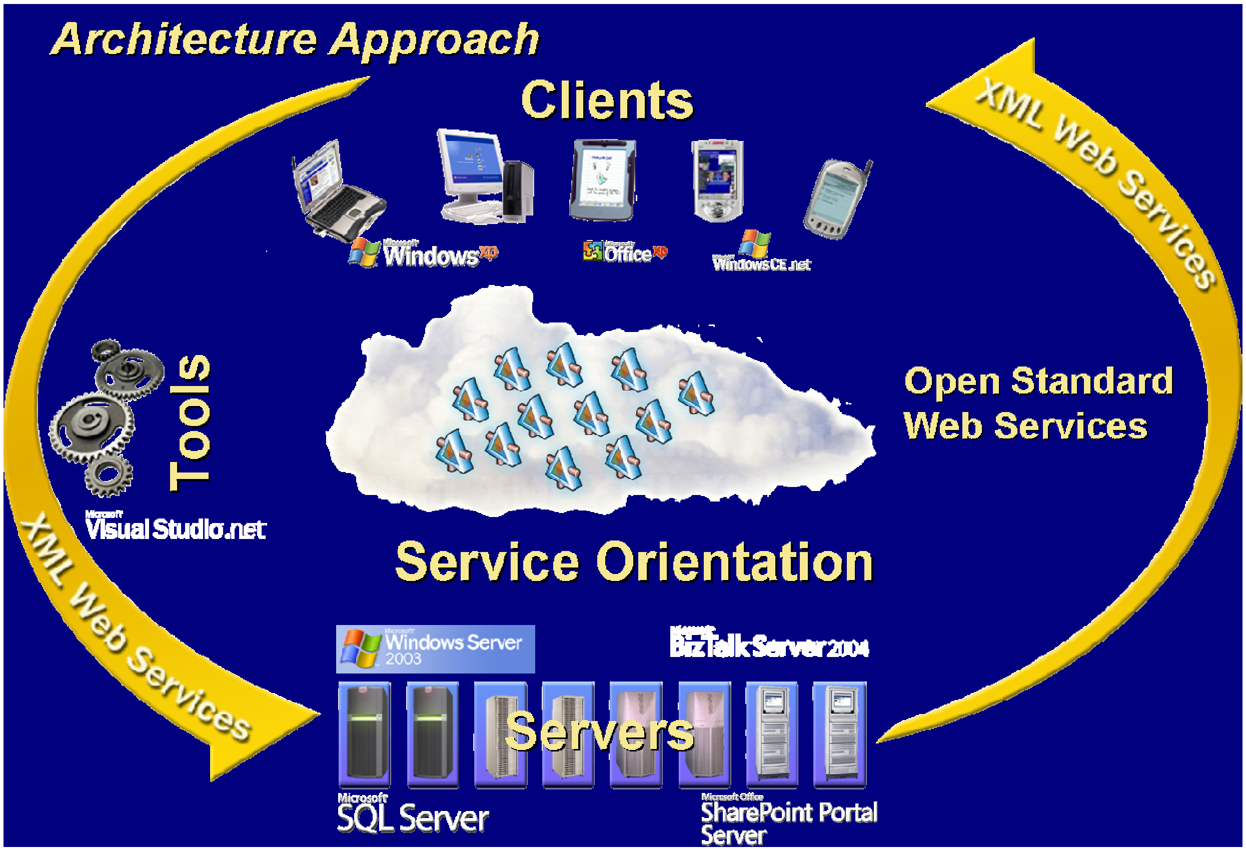


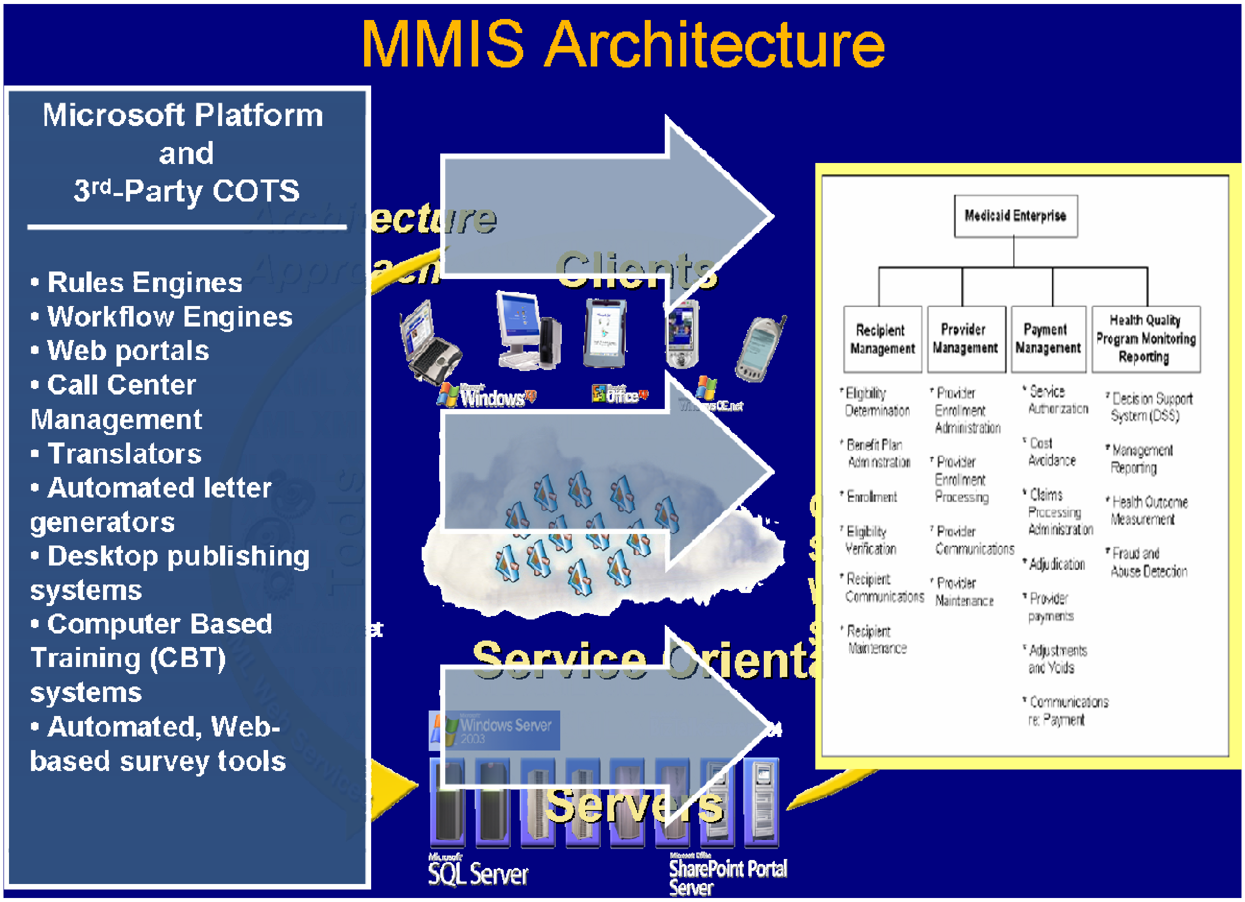
***Figure 5.0—.NET Service-Oriented Architecture:** Implemented using the .NET framework including .NET tools and .NET servers*

Services communicate through service interfaces, which send and receive messages. Service-to-service communication follows a contract, and by making this contract explicit it is possible to change one service implementation without compromising the interaction. Services also need to be managed and secured. A policy consists of a set of rules, and each rule applies to an aspect of the run-time behavior. For instance, a service may have multiple interfaces; you may have rules that apply to the service as a whole and you may have rules that apply to one or more of its interfaces.

Services manage state; this state is the very reason for their existence. Services guard this state and they ensure through their business logic that it is kept consistent and accurate. This state is the only true and current source of information.

Business processes control the step-by-step actions of executing work, moving the system from one state to another. At each step, a business operation is called. These processes can be hosted in a business process service or process service. A process in such a process service will send a message to call a business operation contained within a service, and then move on to the next step, which may require the use of a different service. In the MMIS domain these are referred to as Workflow operations that also include interaction with a Rules Engine.

Applications within a service-based architecture are composed of process services and more elemental services that implement business functions and user interfaces. This model is valid for both traditional applications that have a user interface communicating with business services and for business-to-business scenarios where business services communicate with other business services.



MMIS Architecture

Microsoft Platform and 3rd-Party COTS

- Rules Engines
- Workflow Engines
- Web portals
- Call Center Management
- Translators
- Automated letter generators
- Desktop publishing systems
- Computer Based Training (CBT) systems
- Automated, Web-based survey tools

Medicaid Enterprise

Recipient Management
- Eligibility Determination
- Benefit Plan Administration
- Enrollment
- Eligibility Verification
- Recipient Communications
- Recipient Maintenance

Provider Management
- Provider Enrollment Administration
- Provider Enrollment Processing
- Provider Communications
- Provider Maintenance

Payment Management
- Service Authorization
- Cost Avoidance
- Claims Processing Administration
- Adjudication
- Provider payments
- Adjustments and Yoids
- Communications re: Payment

Health Quality Program Monitoring Reporting
- Decision Support System (DSS)
- Management Reporting
- Health Outcome Measurement
- Fraud and Abuse Detection

Figure 6.0—.NET MMIS Architecture: *Enabling best-of-breed COTS functionality to satisfy MITA requirements.*

MMIS Edge Implementation Approach

The MMIS Edge Modernization Architecture and implementation strategy provides a low-risk and rapid approach to modernizing an MMIS system. This approach enables the modernization and enhancement of most business process and supporting technology while preparing for a later replacement or outsourcing of the legacy MMIS system (see Figure 7.0).

As part of a large replacement initiative, or without taking on a complex, multi-year MMIS replacement, an MMIS Edge Architecture can be implemented quickly and at a low-cost. This approach begins to provide immediate benefits to clients, participants, agency workers, administrators, IT operations staff and fiscal agents responsible for the State's Medicaid expenditures.

This architecture is designed to surround the existing MMIS system with a modern, service-oriented infrastructure and interoperability layer based on the Microsoft .NET Framework and .NET servers. The infrastructure and interoperability services layer enables the introduction of modern, best-of-breed applications such as call-center/CRM, provider/participant portals, workflow automation, IVR, Data Analysis and many other new capabilities. The infrastructure and interoperability services layer also ties all of these modern applications and new user-experiences directly to the legacy MMIS system and data through a fully integrated, synchronized and secure architecture.

This approach provides incremental steps to business process change, new feature and services introduction, data cleansing and management – all leading to a timeline for the possible replacement or outsourcing of the legacy MMIS system.

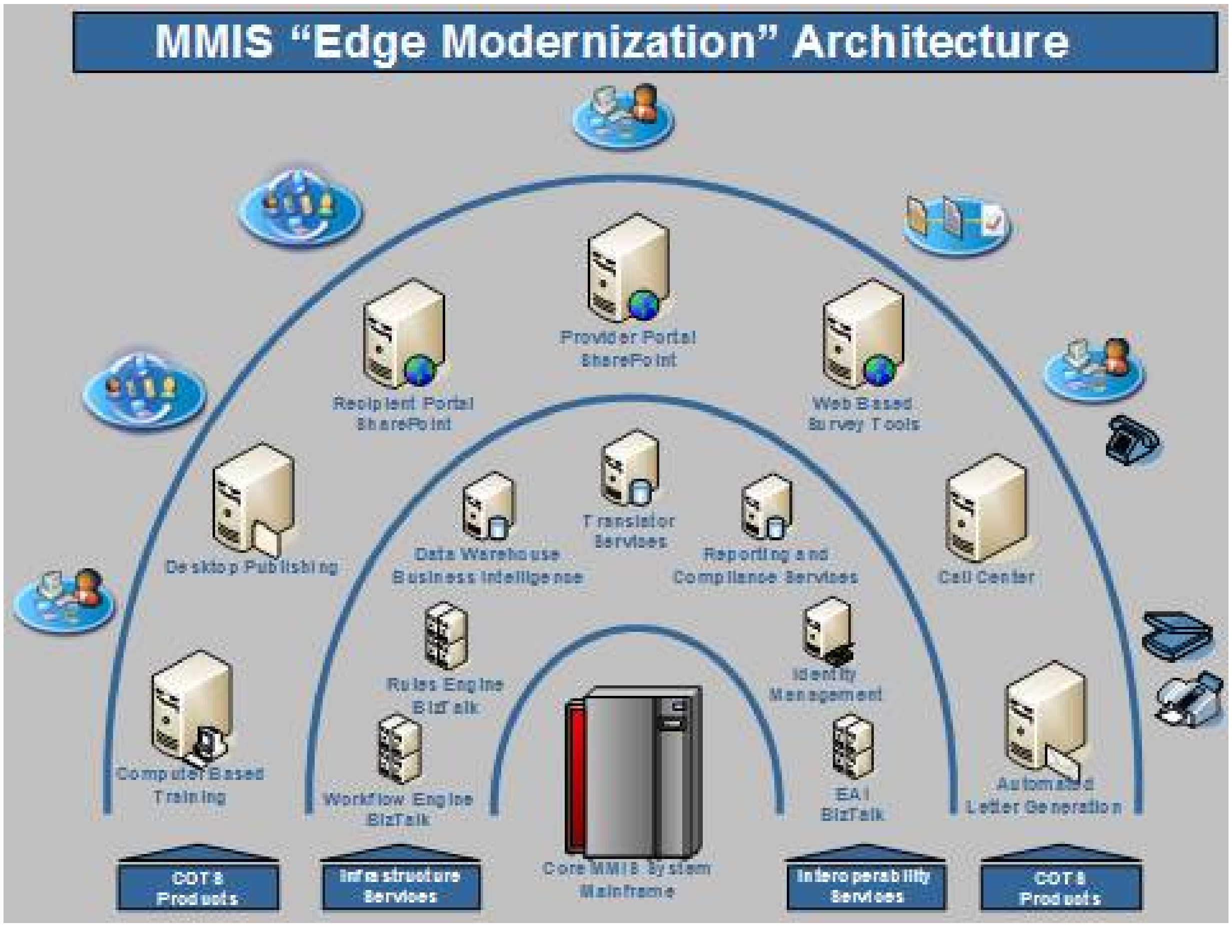

MMIS "Edge Modernization" Architecture
Provider Portal SharePoint
Recipient Portal SharePoint
Web Based Survey Tools
Desktop Publishing
Data Warehouse Business Intelligence
Translator Services
Reporting and Compliance Services
Call Center
Rules Engine BizTalk
Identity Management
Computer Based Training
Workflow Engine BizTalk
EAI BizTalk
Automated Letter Generation
COTS Products
Infrastructure Services
Core MMIS System Mainframe
Interoperability Services
COTS Products

Figure 7.0— The MMIS Edge Modernization Architecture and implementation strategy: *Provides a low-risk and rapid approach to modernizing an MMIS system. This approach enables the modernization and enhancement of most business process and supporting technology while preparing for a later replacement or outsourcing of the legacy MMIS system.*

COTS and Microsoft's Partner Ecosystem

The Microsoft Partner ecosystem is the largest in the world with over 750,000 certified partners providing best-in-class solutions that span the breadth of MMIS business requirements (see Figure 8.0).

These Microsoft Certified Partners have built expertise and support around specific domain areas, such as:

- Rules Engines
- Workflow Engines
- Web portals
- Call Center Management
- Translators

- Automated letter generators
- Desktop publishing systems
- Computer Based Training (CBT) systems
- Automated, Web-based survey tools

Utilizing COTS offerings from Microsoft Certified Partners built on .NET will enhance the overall value of the MMIS and provide rapid time to market, lower cost, and best-of-breed solutions that conform to MITA callouts – SOA, Web Services, etc.

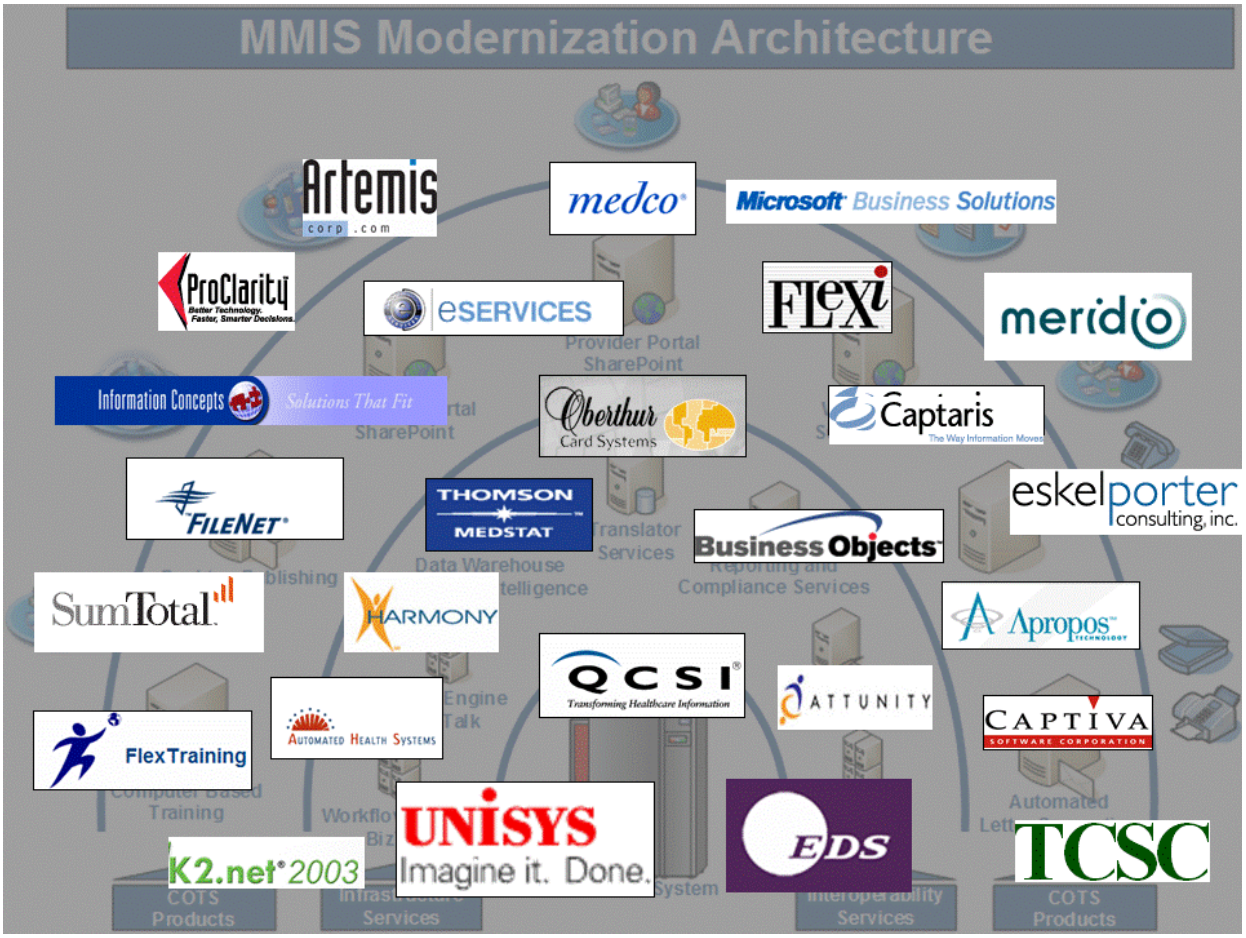


Figure 8.0—The Microsoft Partner Ecosystem: *The Microsoft Partner Ecosystem is the largest in the world with over 750,000 certified partners providing best-in-class solutions that span the breadth of MMIS business requirements.*

.NET vs. J2EE

A study was conducted by Middleware to provide a comparison of two fundamentally different approaches to enterprise software embodied by two different technologies and platforms.
.NET represents Microsoft's longstanding approach, which emphasizes these elements:

- Focus on the Windows platform to provide tight integration between the Operating System and the development framework and tools
- Standardization on Visual Studio.NET as the primary development tool for .NET

The Java / J2EE world emphasizes:

- Independence of the J2EE platform from the underlying Operating System open standards
- Vendor competition and consumer choices for tools and runtime platforms

These two approaches are reflected in the results of this study.

Developer productivity. Microsoft's tight integration approach paid off in the development phase, where VS.NET and the .NET platform proved more productive than either RRD or WSAD with the WebSphere platform. Among the reasons:

- The position of VS.NET as the premier .NET development tool all but guaranteed an equivalence between VS.NET experience and .NET platform experience. For example, a developer with three years experience of .NET experience most likely has used VS.NET for three years, whereas a developer with three years J2EE experience may not have used RRD or WSAD at all

- VS.NET shared some of the best features of both RRD (visual page design; data binding) and WSAD (direct coding of business logic; tight integration with the target platform.

Installation and configuration of software. Tight integration paid off for the .NET team. Most key elements of the .NET runtime infrastructure (basic application platform, Web server, load balancer, session server, message server) were already in place with the basic Windows Server 2003 installation. This fact saved the .NET team a great deal of time and trouble.

The WebSphere team, by comparison, spent a great deal of time during the development phase installing the software and configuring it for basic functional tests. They also spent considerable time overcoming fundamental configuration obstacles, such as patching the Linux kernel for Edge Server and configuring WebSphere for session replication. The .NET team did not face such obstacles.

System tuning. The .NET team completed their tuning process much more quickly. One obvious reason is that they had fewer knobs to turn. A J2EE system has many more moving parts that interact in many combinations, making the tuning process all the more complex. The WebSphere team took a methodical approach to tuning that certainly proved more time consuming.

Manageability & reliability. The .NET implementation consistently and reliably handled service interruptions, both controlled and unexpected. It also allowed the team to deploy application updates much more smoothly.

The WebSphere team, on the other hand, encountered catastrophic failures that they could not diagnose or explain sufficiently to overcome. They also found session persistence performing less than reliably. The team feels they could have solved these problems given more time.

Overall, by most indicators in this study, the .NET implementation running on Windows Server 2003 was better, in some cases significantly so, than either WebSphere/J2EE implementation running on Linux.

It makes sense that using an integrated out -of-the-box operating system and "application server" framework such as Windows and .NET would have a much lower setup cost than attempting to integrate multiple products (albeit from the same company) and a third party OS.

The development productivity results favor the .NET side; productivity has always been one of Microsoft's strong points.

Given that the J2EE approach to enterprise software is very much about competition and choices, we might well ask whether the most significant problems encountered by the WebSphere team could have been helped or eliminated through different choices.

Linux? Given the choice of Edge Server for load balancing, the WebSphere team had to patch and upgrade the Linux kernel to make it work. This process requires skills common to Linux experts but not necessarily to the average J2EE developer or IT team. There is no question that Linux added a layer of complexity to the configuration process.

In conclusion, the initial implementation (including installing all necessary development and runtime software) was carefully measured to determine overall developer productivity. The .NET implementation was completed significantly faster than the J2EE implementation.

Sources:
INPUT/Output © 2005
.NET-WebSphere/J2EE Comparison Report
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Industry White Paper

The Microsoft Vision for Health and Human Services Architecture

This Health and Human Services (HHS) Architectural Vision is a technology roadmap for health and human services executives. The document addresses current business challenges such as planning and resource allocation, revenue maximization, and legacy system replacement. The accompanying executive summary offers a high-level vision for best-practices management and service delivery.
http://www.microsoft.com/resources/government/hhsarchvision.aspx