



**NUCLEUS  
RESEARCH**

RESEARCH REPORT D123 | FOR USE WITH NUCLEUS FINANCIAL MODELING TOOL D123W

# ROI Evaluation Report

## Microsoft Office Enterprise Project Management Solution

### **THE BOTTOM LINE**

*Microsoft Office Enterprise Project Management (EPM) Solution can provide organizations with a better view of their project portfolios to improve resource allocation and increase the productivity of project teams. With the Microsoft Office EPM Solution, organizations can implement a streamlined project management process that can result in reduced administrative overhead and improved business performance through more predictable project delivery.*

### **KEY RETURN AREAS**

- Improved process management
- Reduced administrative overhead
- Increased productivity
- Improved resource utilization
- Reduced or improved time to market

## RELATED RESEARCH

- D111 Microsoft Office 2003: ROI from Collaboration
- D87 Microsoft InfoPath ROI Case Study: Windows Test Team
- D83 Microsoft Office InfoPath ROI Case Study: MCS
- D42 Microsoft Exchange Server 2003 ROI Report
- D14 Microsoft Business Intelligence ROI Report
- C41 Quantifying Productivity Returns

## MICROSOFT OFFICE ENTERPRISE PROJECT MANAGEMENT SOLUTION

The challenges of effective project management involve the ability to schedule, track, and manage all facets of a project and coordinate the efforts of all those involved in the project. Project managers face other growing challenges:

- **Geography.** The geographic dispersion of most organizations' work forces requires the ability to collaborate effectively with remote workers and provide a central repository of project information that everyone can access.
- **Cost concerns.** The project management process has increased in importance and scrutiny as organizations focus on containing costs and achieving a higher ROI on their business initiatives.
- **More stakeholders.** Higher visibility of the project management process necessitates the inclusion of additional stakeholders in the project management process who need to have a clear view into project information to monitor progress and easy access to accurate data on project costs, timelines, and resource allocation for informed decision making.

The Microsoft Office Enterprise Project Management (EPM) Solution provides executives and business managers with greater visibility into project performance and a portfolio view of all projects to ensure that they align with business objectives. Project team members will benefit from the EPM Solution's tight integration with other applications they currently use to better share project information and foster more effective collaboration. The emphasis of the new release of Microsoft Office EPM Solution is to widen the number of participants who can access project and resource information and to improve the project management process by streamlining administrative tasks and improving the integrity of project data that is captured.

The Microsoft Office EPM Solution is composed of Microsoft Office Project Professional 2003, Microsoft Office Project Web Access, and Microsoft Project Server 2003.

- Microsoft Office Project Professional connects with Project Server to enable planning, resource management, portfolio analysis, and reporting capabilities. Project Managers can create project plans, assign resources to work on tasks, and publish the plan information to the Project Server where team members can view and update it.
- Microsoft Project Web Access provides a Web-based view into the information stored in Project Server. Through this Web portal, project participants and stakeholders can view, update, and analyze project and resource information. Project-related documents, issues, and risks are also accessible via the portal, enabling team members to collaborate and exchange information in real time.
- Microsoft Office Project Server serves as the central repository for project information and supports the portfolio management, resource management, and collaboration features of the

enterprise project management system. Project Server is integrated with Windows SharePoint Services (WSS) to support document management and issue and risk tracking. A shared project workspace is created for the participants to view and update information through their Web browser. Project deliverables can be managed through capabilities such as version control and document check-in/check-out. With the latest release, Project Server's integration with WSS now provides the capability of risk tracking. Information about a risk factor can be captured and tagged with details on cost impact, probability, mitigation, and contingency plans and can be mapped to all the project tasks that would be impacted by the risk.

### **KEY BENEFIT AREAS**

Nucleus Research has identified two key areas where companies are likely to gain benefits by using the Microsoft Office EPM Solution to manage their projects. These are increased productivity and improved business performance.

#### **Increased Productivity**

The Microsoft Office EPM Solution offers role-based capabilities that increase productivity for different categories of users based on their responsibilities and the tools and applications that they use.

##### Line of Business Managers and Executives

Executives need to access top-line information about their project portfolio to ensure that key initiatives align with business objectives and provide the return on investment required to grow the business. Through the project workspace, they can see a scorecard view of their project portfolio to evaluate project initiatives based on key metrics such as status, costs, risks, and ROI. They can also model changes to their portfolio through "what-if" scenarios to identify opportunities and address resource constraints and schedule issues.

##### Team Members

Tight integration with Microsoft Office tools enables team members to participate in the project management process without having to learn a new tool. Project tasks can be assigned by the project manager and automatically sent to team members via e-mail. These project assignments can be viewed and scheduled in their Microsoft Office Outlook calendar. Users can update their progress on tasks on the calendar entry and have the information automatically submitted to their project manager. This enables team members to be more productive because they can use familiar applications to easily incorporate task update and status reporting activities into their workday. The result is a savings on training for organizations already using Outlook for e-mail and calendaring. Team members can also view project tasks, issues, and other documentation through the project Web portal.

**An IT consulting firm achieved an ROI of 114% with a payback period of approximately one year with the Microsoft Office EPM Solution. The system enables project managers to automate the process of generating performance measurement reports, freeing up their time for additional billable hours.**

#### Project Managers

Project Managers can set up and manage projects with the help of project plan templates and wizards, saving them time and increasing their productivity. The ability to assign project tasks and receive status updates through Outlook reduces the project manager's administrative work. With the streamlined reporting mechanisms, project managers can get project status updates done faster and ensure that project plans are up-to-date and accurate. In addition, the ability to export project information to Office applications such as Word, Excel, Visio, and PowerPoint makes it easier for project managers to share information with a variety of audiences, for presentations, reports, or executive updates.

**Automated reporting and updating of tasks enabled project managers at an IT consulting firm to reduce administrative time by 33 percent.**

#### Resource Managers

Using Project Web Access, resource managers can add team members to project teams, modify team member information such as skills and availability, and model how to distribute workloads and plan resource allocation across projects. Having visibility into all available staff skills and utilization enables resource managers to respond quickly to adjust resources to meet business needs and speeds the process of identifying and assigning the best-suited team members to projects and enables better forecasting and staff planning.

**A leading manufacturer of power protection and environmental control equipment anticipates a productivity gain of 5 percent from the Microsoft Office EPM Solution time tracking and resource capabilities alone.**

#### IT Staff

An expanded set of application programming interface (APIs) for Project Server has been added to the Microsoft Office EPM Solution to make it easier for corporate developers to create custom solutions and build integrations via XML with other LOB systems such as financial packages and enterprise resource planning applications.

- Accelerated deployment procedures, such as an installation wizard, walk an administrator through the process of installing Project Server in a multiserver environment, saving IT staff time and enabling the EPM Solution to be in production sooner.

- Because the EPM Solution is integrated with Microsoft's Active Directory environment, IT staff can synchronize resource and security information so that data contained in the Active Directory can be shared with the Project Server. This saves the IT staff time in resource and permissions administration tasks for the EPM solution.

**For organizations evaluating an upgrade from Microsoft Office Project 2002 to Project 2003, early customers told Nucleus that they found the new release of the product to deliver much better performance than they experienced with earlier versions of Project. One company anticipates a significant reduction in support calls to the help desk.**

### **Improved Business Performance**

The adoption of the enterprise project management system provides a framework to standardize project management processes and best practices across an organization. For example, one company uses the Microsoft Office EPM Solution to manage 800 to 1000 technology projects each year. Previously, the company's project managers organized and managed their projects independently, using the standalone version of Project. Using the EPM Solution, company management now has a consolidated portfolio view of all the IT projects under way, can evaluate projects consistently, and can readily identify redundancies and areas of risk. Previously, they experienced situations in which several different project teams could be working at a field location without any knowledge of why the other teams were there and what they were doing. With the new level of project visibility, the company can coordinate efforts, share resources across projects, and cut down on costs, such as unnecessary travel expenses, by managing their assets proactively.

#### Optimized Project Portfolio

With the Microsoft Office EPM Solution, executives can view and evaluate key initiatives from a portfolio perspective, providing a central radar screen for better project intelligence and faster decision making. Improved business insight into project information enables executives to analyze project operations against business objectives and make changes such as consolidating projects to gain cost efficiencies or killing projects depending on organizational priorities and resources. Executives can also evaluate their portfolio to balance the mix of projects, much as they would balance high-risk and low-risk investments in a stock portfolio, to ensure that they have the desired return rate to achieve their business goals.

#### Improved Process Management

The Microsoft Office EPM Solution can help reduce an organization's project cycle times and time to market by improving on its process management capabilities. Faster time to market can provide a

crucial edge to stay ahead of the competition. Project managers can more efficiently manage projects with collaboration tools that automate the communication of tasks, schedules, and status to and from the project team. Project managers can also significantly reduce the administrative time necessary to orchestrate project logistics and prepare status reports.

**One project manager was able to cut two-thirds of the time spent monitoring projects by phone through the Microsoft EPM Solution's automatic information collection capabilities.**

Microsoft Office EPM Solution's central project repository allows organizations to enforce standards to drive the way they organize, share, and report project and resource information. With resource information centralized, companies can view all available resources to better balance, adjust, and prioritize resources for more predictable project delivery. Automated scheduling, standardized templates, and centralized time reporting provides a greater level of project management control, resulting in process efficiencies with everyone using the same methodology.

Standardization on project management processes results in a consistent method for collecting business metrics, improves the quality and quantity of data collection, and provides the foundation for rolling up project data so that meaningful analysis can be conducted on project operations. With a broader and deeper view into the project information, management can ensure that initiatives align with business objectives and track progress against consistent business metrics.

**One Microsoft Office EPM Solution customer said that while the organization's IT staff resources have decreased 31 percent, it can still deliver the same number of projects it did with the previous staffing level, and it has gained a new project discipline through use of the tool.**

Better management of day-to-day project costs can result in lower overall project expenses. With real-time project information, organizations have the ability to more quickly access and analyze status and make sound business decisions based on that data. Improved visibility into project operations will identify redundancies within an organization that can be eliminated or redeployed to reduce costs.

#### Improved Resource Utilization

As many organizations today face the challenges of doing more work with less staff, resource management, including both human and capital resources, has become a key factor in containing costs. Using the Microsoft Office EPM Solution, resource information can be defined, grouped, and viewed to determine the availability of people for projects. For example, a manager can view a list of

available resources, which is matched against the appropriate criteria required, such as skill, location, and availability, and then add staff members to the project. With this level of visibility into all available resources, organizations enhance their management capabilities to readily identify and deploy their employee costs effectively. It also provides a mechanism for better balancing of project requirements and team members' workloads.

By capturing and storing resource data in the central repository, organizations will have the ability to analyze resource utilization from a historical perspective. Better data on resource usage can improve forecasting for future staffing needs; managers can analyze previous projects to determine the most effective resource mix for project success. The ability to view project resource needs across the organization provides key data for assessing the need to recruit new workers, outsource project tasks, or scale back headcount depending on business conditions.

#### Reduced Administrative Overhead

The Microsoft Office EPM Solution provides a consolidated view of project schedules, costs, and resource information that reduces the administrative time necessary to pull all this data together to generate reports. Project managers can automatically receive team member updates, access relevant resource information, and consolidate information to generate reports. Reports can be compiled without IT staff involvement because all the data resides in the Project Server.

**Moving from a manual project reporting process to Microsoft Office EPM Solution's automated report generation capabilities will save an environmental engineering company more than three days of employee time each month.**

Integrating the Microsoft Office EPM Solution with back-office and LOB systems can provide even greater efficiencies in aligning project management activities into the organization's general business operation processes by eliminating the time spent reconciling information between disparate systems and reducing the overhead costs associated with compiling consolidated reports. Faster reporting improves the accuracy and timeliness of information. This supports better decision making and increases business agility as management can quickly take the appropriate action based on the aggregated information.

**One user expects the Microsoft EPM Solution will enable it to reduce the number of employees involved in the project data collection process by one-half. Rather than devoting time to building and maintaining standalone data collection tools and rollup reports, these employees can focus on other job responsibilities.**

Organizations can also take advantage of cost savings by eliminating unnecessary travel. The Microsoft Office EPM Solution provides a virtual project workspace that can be accessed via a Web browser, so team members can span various geographic locations and time zones but easily work from their home base.

#### Increased Profits

The operational efficiencies gained in implementing a Microsoft Office EPM Solution can reduce the time and cost associated with project execution. Reduced operational costs can lead to increased profits. For example, improved visibility and real-time data on project status can reduce cost overruns because project managers can identify and manage potential issues and risks before they escalate into expensive delays. Better visibility into project cost actuals enables organizations to pull the plug on money-losing projects before they escalate into expensive mistakes. Accurate measurement of project performance arms organizations with key data that allows them to improve on-time and on-budget delivery of goods and services to customers. More predictable project delivery can lead to higher customer satisfaction. A project management system that enables team members worldwide to collaborate virtually can cut down on travel costs. All of these factors can have an impact on an organization's bottom line.

Key returns from improved business performance include:

- Improved process management
- Improved resource utilization
- Reduced operational costs
- Reduced cost overruns
- Reduced headcount
- Reduced travel costs
- Reduced administrative overhead
- Increased profits

#### **KEY COST AREAS**

Nucleus Research has identified a number of key cost categories that a company should consider when it is evaluating the potential return from an investment in the Microsoft Office EPM Solution. The associated Nucleus financial modeling tool provides further detail and calculations for evaluating the 3-year total cost of ownership of the EPM Solution. Categories for consideration are software, hardware, personnel, consulting, and training.

#### **Software**

Key software costs associated with the EPM Solution include license fees for the desktop product for the project manager, the Web client for the project participants and stakeholders, and the server for central storage of project information. Additional licenses for supporting software may be needed, depending on the features an organization requires. Third-party software that may be added to the Microsoft Office EPM Solution in an organization should also be included in the Nucleus financial modeling tool to determine the

total costs of an implementation. This could include products such as Tenrox and EPK for timesheeting solutions, Forte Systems for reporting and analysis, CS Solutions for risk analysis, or CyWren for Pocket PC Solutions. The following breaks down the software requirements for the three components of the EPM Solution:

- Microsoft Office Project Professional 2003 requires Project Professional license (which includes a Project Server Client Access License (CAL) for access to Project Web Access), Windows 2000 with Service Pack 3 or later; or Windows XP; Microsoft Internet Explorer 5.01 with SP3 or later, Internet Explorer 5.5 with Service Pack 2 (SP2) or later, or Internet Explorer 6 with Service Pack 1 (SP1) or later.
- Microsoft Project Web Access requires Project Server 2003 Client Access License (CAL); Windows 98 Second Edition or higher; Microsoft Internet Explorer 5.01 with SP3 or later, Internet Explorer 5.5 with Service Pack 2 (SP2) or later, or Internet Explorer 6 with Service Pack 1 (SP1) or later. It carries the following additional requirements:
  - Microsoft Outlook 2000, Outlook 2002, or Microsoft Office Outlook 2003 is required for importing tasks to the Outlook calendar.
  - Microsoft Office Web Components (OWC) 2003 running on Windows 2000 SP3 or later is required for viewing Portfolio Analyzer and Resource Availability views. Additionally, a valid end-user license for Microsoft Office 2003 Edition, Project Professional 2003, or any program in the Microsoft Office System is required for full interactivity of OWC to create Portfolio Analyzer views.
  - E-mail requires Exchange 5.5, 2000, or later; Internet SMTP/POP3, IMAP4, or MAPI-compliant messaging software is required for e-mail notifications.
- Microsoft Project Server 2003 requires Microsoft Windows 2000 Server with SP3 or later, Windows 2000 Advanced Server with SP3 or later, or Microsoft Windows Server 2003 Standard or Enterprise Edition; Microsoft Internet Information Services (IIS) 5.0 or later (Microsoft Windows Server 2003 uses IIS 6.0.); Microsoft SQL Server 2000 with SP3, or later. In addition, the use of the following features requires the additional software listed:
  - Windows SharePoint Services is required for project collaboration; Windows SharePoint Services requires Windows Server 2003 or later and the Windows NT file system.
  - Microsoft SQL Server Analysis Services with SP3 or later (included with Microsoft SQL Server) is required for Portfolio Analyzer (OLAP Reporting).

Yearly software maintenance fees for the EPM Solution and other associated software should be included for each year in the calculation of software costs in the Nucleus financial modeling tool.

#### **Hardware**

Server requirements for the Microsoft Office Project Server are dependent on the number of services loaded on the client and the

load on the server. Minimum requirements assume one server for Project Server components and Microsoft SQL Server and Windows Sharepoint Services installed: server with an Intel Pentium III 550MHz or higher processor, 256MB of RAM minimum (512MB of RAM is the recommended minimum), and 80MB of available hard disk space

For Project Professional 2003, requirements include systems with an Intel Pentium 233MHz or Pentium III processor, 128MB of RAM or more, and 130MB of available hard disk space.

For Project Web Access, systems should have an Intel Pentium 133MHz or higher processor, Pentium III recommended; 24MB or more of RAM; and 5MB of available hard disk space.

### **Consulting**

An organization's spending on consulting will depend on the deployment scenario, the level of internal expertise, and regional variations in consultants' hourly rates. Consulting activities that organizations could potentially require for the Microsoft Office EPM Solution include:

- Business process and change management
- System implementation, including architecture, design, and deployment
- Development, integration, and customization

### **Personnel**

In addition to IT staff time required to set up the EPM Solution for deployment, resources will be needed for ongoing support and maintenance. During the project planning and management phase, business users will need to work with IT staff on the definition and review of corporate standard templates and on project and resource reporting codes that IT will implement for the EPM system.

A pilot implementation is recommended to test the EPM system and also to gauge the effectiveness of the organization's internal project process workflow using the system. Initial time will be required by project managers to build effective project plans and to test and refine the collaboration features with team members. Nucleus found that typical pilots involved 10 to 15 people and lasted 30 to 45 days.

### **Training**

When organizations calculate the cost of training, they need to consider both the costs of training IT staff to develop and support the Microsoft Office EPM Solution and the cost of training end users to access and fully benefit from the system. In calculating training costs, organizations should include the fully loaded cost per hour of training for each employee undergoing training as well as facilities and trainer costs.

Training time and cost will vary depending on a person's team role and familiarity with Microsoft Office Project. For those upgrading from a previous version of Project, project manager training time would involve learning the new enterprise and collaboration features in addition to updates and changes to base product features and should require limited time. Team member training should be minimal because these users will interact with the EPM Solution via Outlook or a Web browser to access Project Web Access. The portal interface of Project Web Access is easy to navigate, and for organizations already using Windows SharePoint Services (WSS), training time will be even further minimized because the interface of Project Web Access is similar.

**Nucleus found that training requirements typically broke down as follows:**

**Project managers: 3 days for Microsoft Office Professional and Project Web Access (including time to learn the product features as well as how to incorporate existing process workflows with the technology)**

**Team members: 4 hours for Project Web Access**

**Resource managers: 2 hours for Project Web Access**

**Executives and LOB managers: 4 to 8 hours for Project Web Access, with emphasis on reporting and modeling capabilities for LOB managers**

IT training time will include time required to learn and understand the administration of the Project Server. If an organization is planning to integrate its Microsoft Office EPM Solution with additional technologies such as the Windows SharePoint Services or to integrate with other LOB systems via XML and/or SOAP, the IT training required will be dependent on their familiarity with Microsoft technology and XML-based integration techniques. Training time will be significantly less for organizations that have broad experience with Microsoft technologies such as SQL Server, Windows Server, and Windows SharePoint Services.

## **CONCLUSION**

The new release of the Microsoft Office EPM Solution focuses on improving process management, increasing visibility into an organization's entire project portfolio, and widening the number of participants who can collaborate effectively in the project management process. Tighter integration with other Microsoft Office tools and technologies, such as Outlook for receiving and updating schedule and task information and Windows SharePoint Services for delivering a shared project workspace with document management capabilities, can deliver benefits in increased employee productivity, improved business performance, and cost reductions.

Companies that currently use Project on a standalone basis should also see strong returns from the increased benefits of the

collaboration and portfolio management features of the Microsoft Office EPM Solution and its tighter integration with other Microsoft technologies such as Microsoft Office applications, especially if they currently use these technologies.

Key potential returns from the Microsoft Office EPM Solution include improved process management, reduced administrative overhead, increased productivity, improved resource utilization, and improved time to market. Please refer to the associated financial modeling tool to calculate the potential returns from the Microsoft Office Enterprise Project Management Solution deployment in a specific environment.

**Corporate Headquarters**

Nucleus Research Incorporated  
36 Washington Street  
Wellesley, MA 02481  
United States  
+1 781-416-2900

**Europe, Middle East, and Africa**

Nucleus Research EMEA  
17A rue Pavée  
75004 Paris  
France  
+33 1 42 77 75 38