Chapter 5

End Users’ Critical Success Factors: Using MS Project 2010

In This Chapter

Here we examine, from an end user’s perspective, those critical success factors (CSFs) that can have a significant impact on the appropriate and effective use of Microsoft Project. CSFs are used in project management (PM) to identify key areas that need to be considered to make a project succeed.

We explore key factors associated with the effective use of PM tools in small businesses and large enterprises, from the individual desktop client through to the departmental and enterprise server. Scalability, configurability, ease of use, integration, and collaboration are five key factors that will positively impact organizational effectiveness and end user satisfaction.

What You Will Learn

* How organizations learn how to get things done, using an effective set of processes, tools, and technologies
* How PM is effective in small business and the enterprise
* The impact of organizational maturity on PM success
* How to initiate and manage projects using the Microsoft Project client
* The key steps for effective scheduling and resource planning using the Microsoft Project client
* Ways to perform collaborative work management through integration with SharePoint
* How agile work management and Project Server worlds are coming together
* How to integrate project-specific information using Project Professional
* Why the moving target is now feasible leveraging Project Server
* How customizing is as easy as right click/left click using the new ribbon
* About Project Frontstage and Backstage

Project Management in Small Business and the Enterprise

Organizations of all sizes utilize some form of work, resource, or PM methodology and tool set. PM methods and disciplines vary widely: from ad hoc, reactive approaches to much more advanced PM or product line management (PLM) approaches. PM tools also range widely from individual desktop clients to centralized server-based software solutions.

PM tools can also be stand-alone or highly integrated with organizations’ enterprise resource planning, human resources, customer relationship management, or other line of business systems. No one size fits all and some organizations may have a little bit of everything with various solutions and approaches also being acquired through organizational acquisition and merger.

For the purposes of brevity and inclusivity, any reference to PM is meant to include all three management practices: project, program. and portfolio management. These are sometimes referred to as project portfolio management (PPM).

Project Management and Organizational Maturity

As organizations improve in their understanding of how to get things done, an effective set of processes, tools, and technologies are typically implemented, usually resulting in improved organizational efficiency. This move from a task-oriented (ad hoc) approach to a higher level of work management rigor requires a different approach to managing the work, resources, and other project metadata of the organization.

A wide array of various work and PM methods and best practices are available: from a more agile or scrum-based software development technique to the more methodologically driven approach, such as PM or system development life cycle (SDLC).

Portfolio governance and lifecycle management enable organizations to define processes that synchronize the efforts of distributed teams to consistently create the best possible products (Cooper, Edgett, and Kleinschmidt, 1998), capture greater market share, and increase customer satisfaction.

Figure 5.1 Project Management Process Areas [05-01-projectManagementProcessGrouping.tif ]

Source: Advisicon

Typically there are five key phases to initiate and then manage a project through its lifecycle. You may recognize these as the Project Management Institute PMBOK® Process Areas (PMI, 2008) illustrated in Figure 5.1.

1. Initiation phase

2. Planning phase

3. Executing phase

4. Monitoring and controlling phase

5. Closing phase

Initiation Phase

The initiation phase is performed when defining a new project (or a new phase of an existing project) by creating an outline of the work to be performed and obtaining authorization to initiate the project.

Because Project Server actually can start in the pre-sales or pre-initiation phase via the activities, documents collected, and information tracked even before a project is “approved,” understanding the key artifacts (i.e., documents) and metadata associated with taking a project from pre-planning or a proposal phase to a full-blown project is now more important than ever.

For example, a manager may not want to invest too much time in creating an elaborate schedule yet needs a high-level resource proposal or a resource plan to allocate possible resource needs that could be weighed against the overall existing work in the project portfolio. The example continues with a person still planning and organizing information and documentation associated with what the project will be. Doing this requires collecting, capturing, and storing all related artifacts in a central repository or possibly a SharePoint site. Microsoft Project Professional and Microsoft’s full PPM solution can provide all of these capabilities to a project manager (or a person planning a project). The great thing is that every action can be scalable, based on the level of information and details needed at that point in time (phase or stage).

One of the key artifacts in successful PM during the initiation phase is the project charter. One of the primary elements of the project charter is a high-level schedule of the project. At this stage of the project lifecycle, there may be little detailed information in terms of the work packages or tasks to be performed. As a result, this initial schedule is likely to contain high-level information just to sufficiently describe the key deliverables and target dates or milestones and to provide some statement of the resource capacity required to produce the deliverables of the project within the allocated time frame.

Other key outputs of the initiation phase typically include a high-level (milestone) schedule, a high-level cost estimate, an outline of the project team, and role definitions for each project team member.

A project manager is also assigned at this time and provided with the authority to deliver the project’s product on time and on budget, according to a set of requirements that outline specific functionality and deliverables.

Planning Phase

Detailed planning is required to establish the scope of the project, refine the objectives, and define the course of action required to attain the objectives that the project was undertaken to achieve. The planning phase includes activities both to do detailed planning of activities and to perform resource assignment.

Two perspectives must be considered: a portfolio perspective and a project perspective. From a portfolio perspective, activities revolve around overall capacity planning and maintenance of the project portfolio delivery schedule. From a project perspective, planning involves detailed project planning and assignment of named resources to a project.

Project Server provides a fully integrated Portfolio PM solution that supports both perspectives:

1. **Portfolio management planning and analysis tools.** These include demand capture, capacity planning, business alignment and prioritization, constraint analysis, and reporting.

2. **Program and PM planning tools.** These include detailed scheduling, resource assignment, task status and timesheets, issue and risk management, collaboration, business intelligence, and reporting.

Key outputs from phe Planning stage include the project plan and the schedule, which are two distinct elements. The schedule is really a subcomponent of the project plan detailing the timeline for the deliverables and is (hopefully) resource and cost loaded to ensure an accurate depiction of who is going to deliver what by when. Schedules do not necessarily need to be resourced at this point; however, without resources, they are only a depiction of work elements and their associated milestones. Those milestones may not be attainable due to resource constraints.

As an organization’s business environment fluctuates, the delivery of the project portfolio will also be affected, resulting in potential increases and decreases in scope, schedule, and budget. Changes in market forces can also result in new priorities. Ongoing reoptimization of the project (or the portfolio of projects) is necessary to ensure alignment with the organization’s strategy. Replanning likely will become a necessary factor to consider.

Execution Phase

This is the stage where tasks and activities, which are defined in the detailed project plan, are executed to satisfy the project specifications (i.e., where the “product” of the project is produced).

The primary outputs from the execution phase are the deliverables (i.e., the products of the project). Results from the project’s execution phase may also require replanning and rebaselining of the project schedule. Changes may be introduced due to resource productivity and availability, unanticipated risks, or changes in scope.

During the execution phase, project managers and team members progress their work using either the Microsoft Project Web Application (PWA) or the Project Professional client, via the My Tasks view or time-sheeting capabilities, or directly to the project schedule, depending on the approach used to manage the project.

Issues might be encountered during this phase that will need to be resolved. Potential risks identified during the planning stage might occur and require the innovation of a planned mitigation. The dynamic nature of the project execution phase needs to be carefully monitored and controlled to ensure that all of this uncertainty will be managed.

Monitoring and Controlling Phase

Successful projects require that we track, review, and regulate the progress and performance of the project; identify any areas in which changes to the plan are required; and initiate the corresponding changes.

This phase includes key activities to track the overall progress of projects. During this phase, there are three primary areas of focus:

1. Schedule tracking and schedule forecasting take place on an ongoing basis throughout the project. Schedule tracking is performed to ensure that the deliverables (i.e., products) of the project are occurring in a timely manner. Schedule analysis techniques are often utilized to determine corrective action to the schedule (e.g., in the event of schedule slippage). In some industries (e.g., construction), in litigation and damages might result when projects don’t go according to schedule.

The Project desktop client, both as a stand-alone product and when connected to Project Server, provides a powerful and dynamic means of tracking team progress to allow project managers to forecast timeliness of the deliverables and ability to deliver the required functionality and to project an estimated cost.

2. Resource management primarily occurs at the project level and involves the onboarding and offboarding of project team members and the assignment of resources to tasks.

Project Server provides a centralized resource pool for managing the assignment and tracking critical team resources.

3. Determining actual project costs and forecasting future project costs is required to ensure that a project is working within its financial boundaries. At the portfolio level, cost analysis can contribute to tracking overall performance of a group of projects.

By now it should be clear that one of the critical capabilities of Project Server is its ability to continuously forecast the project end date and cost. The uncertainty of some estimates in project planning, coupled with the dynamic nature of projects, establishes a critical case for a solution that can track people resources and hard costs according to the agreed-on plan. Federal and state governments are now demanding the use of earned value management (*Federal Register*, 2011), a performance-based tool that gives agency managers an early warning of potential cost overruns and schedule delays during the execution of their projects.

The Microsoft Project Server solution makes it much easier to comply with Office of Management and Budget Circular A-11 (Executive Office of the President Office of Management and Budget, 2011) and American National Standards Institute/Enterprise Application Integration (ANSI/EAI) Standard 748-A (National Defense Industrial Association, 2005).

Closing Phase

Once the project has completed, the closing stage is where we finalize all activities across all PM process areas to formally close the project. Key outputs of the closing stage typically include administrative and contractual closure, along with lessons learned and all other project related artifacts (e.g., schedules, status reports, risks and issues logs, etc.).

Microsoft Project schedules are updated throughout the project lifecycle, so there is little to do other than archiving a read-only copy for project audit purposes. Completed project schedules also make great templates for estimating projects that are similar in scope or approach.

Project Management in Small Business Using Microsoft Project Desktop Client

Successful PM requires tools that are easy to learn and use. This requirement presents a challenge to information technology (IT) departments responsible for selecting PM tools that can support better management of small projects.

The capabilities of the Microsoft Project Desktop client may meet the majority of PM needs of a small business.

Project Desktop

Now that we understand the PM lifecycle, let’s take a look at how we can effectively use the Microsoft project client in small business.

First, we need to break the scope of the project into specific deliverables or work packages to provide a more outcomes-based approach to the project (i.e., an approach that considers the key deliverables or outcomes that need to be delivered to adequately meet the requirements of the project).

A milestone (Level 1) chart is a good first step in developing any project or program, regardless of the size or complexity of the initiative. Figure 5.2 is an example of a milestone chart produced using the Microsoft Project Timeline View.

Figure 5.2 Milestones Chart with Microsoft Project Timeline View [05-02-milestonesChartWithMicrosoftProjectTimelineView.tif]

Source: Advisicon

A properly defined and maintained schedule (e.g., all tasks are connected into an activity network, there is a minimal use of constraints, milestones have been defined, etc.) can then be used as an effective “Forecast” (Uyttewaal, 2010) to assist the project manager and other project stakeholders with a forward-looking view of the remaining work for a project. Figure 5.3 illustrates an example activity network using the Microsoft Project Gantt Chart.

Figure 5.3 Activity Network with Microsoft Project Gantt Chart [05-03-activityNetworkWithMicrosoftProjectGanttChart.tif]

Source: Advisicon

The forecast schedule can then be used to determine if the work packages and deliverables are most likely to land according to schedule.

This approach lends itself to the dynamic nature of projects and works much like a car GPS: It provides a constantly updated picture of where the project is headed while allowing manual course correction for unforeseen circumstances.

Enterprise Project Portfolio Management with Project Server on SharePoint

Microsoft Project Server 2010 brings robust project, program, and portfolio management together with extensive collaboration capabilities. Project Server 2010 is fundamentally a business application that is built on top of SharePoint 2010, and SharePoint is hosted centrally so that the information is available throughout the enterprise.

Portfolio Management

Project Server 2010 also unifies project, program, and portfolio management to help organizations align resources and investments with business priorities, gain control across all types of work, and visualize performance using powerful dashboards. Figure 5.4 provides a view of the portfolio analysis capabilities of Project Server. Cost and resource constraint-analysis tools provide the ability for organizations to perform what-if scenarios to determine prioritization and optimal selection of projects that will go forward for detailed planning and execution.

Figure 5.4 Project Server Portfolio view [05-04-projectServerPortfolioView.tif]

Source: Advisicon

A common challenge today, which often is considered a resource management issue, is the work or activities that are being managed outside of a centralized work or resource planning system. This can result in the overallocation of key resources since their actual availability is not accurately managed or measured. Portfolio PM is a critical first step toward solving this issue. If properly implemented, it can become a control point for all work demand and resource allocation for the enterprise.

Project Management

Microsoft Project 2010 Pro desktop and the Microsoft Project Server 2010 environment both offer a fully integrated and collaborative PM information system.

Figures 5.5 and 5.6 illustrate the powerful Project and Schedule views that are easily accessible through the Web. This is great because Web-based tools accessible via intranet, extranet, or Internet provide companies with availability, accessability, and redundancy advantages over desktop-only solutions. Collaboration and communication are easier and offer a flexible, transparent PM solution.

Figure 5.5 Project Server, Project Center view [05-05-projectServerProjectCenterView.tif]

Source: Advisicon

Figure 5.6 Project Server, Schedule view [05-06-projectServerScheduleView.tif]

Source: Advisicon

Project Server provides a number of key SharePoint functions. These include:

* Project Sites and Workspaces
* Version control
* Task synchronization between Project Server 2010 and SharePoint Server 2010
* Governance workflows
* Tagging
* Wikis
* Discussion boards
* Connectivity with remote team members via the Web and mobile devices
* Business intelligence for dynamic reporting

PM capacities, such as risk and issue management, status reports, deliverables, team discussions, tasks, and calendars, are built into this enterprise PM solution.

Figure 5.7 illustrates the collaboration functionality of Project Server, through its integration with SharePoint Team Sites, to provide a fully centralized PM portal for managing projects.

Figure 5.7 Project Server, Team site [05-07-projectServerTeamSite.tif]

Source: Advisicon

Project managers and team members can now manage their work and deliverables using an integrated scheduling and collaboration solution.

Critical Success Factors

Here are the CSFs that we have learned about so far for PM in small business and the enterprise:

1. To be an effective organization, we need to understand and employ a PM lifecycle.

2. To attain the objectives that a project was undertaken to achieve, detailed planning is required to establish the scope of the project and define the specific course of action required to produce the required deliverables or the project product.

3. To regulate the progress and performance of the project, we must track, review, and identify areas in which changes to the plan are required and then initiate the corresponding changes.

4. To attain higher levels of successful PM, project managers need tools that are easy to learn and use.

5. Project Server 2010 unifies project, program, and portfolio management to align resources and investments with business priorities, gain control across all types of work, and visualize performance.

Initiating and Managing Projects Using the Microsoft Project Desktop Client

More and more organizations are outgrowing their basic tools, methods, and processes for managing work and resources. Typical tools in widespread use today include Microsoft Excel, Outlook, or Word. Spreadsheets are an excellent way to manage information at the task level; however, when you need to see the impact of one activity on another the need to move toward PM becomes increasingly apparent.

As the number of tasks and interactions increases, so does the complexity level of the scope, budget (or resources), time, and quality of the end product. When organizations move from a basic way of managing work to a more sophisticated level of rigor, they typically utilize PM methods, tools and technologies, and best practices.

Effective Work Scheduling and Resource Planning with Microsoft Project Desktop

Let’s examine the key steps required to do effective scheduling and resource planning using Microsoft Project 2010 desktop.

Work Planning and Scheduling

Figure 5.8 illustrates the new Microsoft Project user-controlled “manually scheduled tasks” feature, which allows freeform entry of task data. Manually scheduled tasks provide users the ability to set the duration and the start and finish dates for a task, without any adjustment by the scheduling engine. Team members can place a manually scheduled task anywhere in their schedules, and Project 2010 will not move it.

Figure 5.8: Project Schedule in Manually scheduled mode [05-08-projectScheduleInManuallyScheduledMode.tif]

Source: Advisicon

Project managers who were accustomed to automatic scheduling with past versions of Project can turn the manual scheduling feature off for specific tasks or the entire schedule. Notice that some of the date fields in Figure 5.8 have text entered in them. This was not permitted in releases prior to Microsoft Project 2010.

This new user-controlled scheduling capability allows project managers to work through planning before allowing the scheduling engine to take over.

Project 2010 also allows for a mix of automatic and manual scheduled tasks. A project option determines which mode for newly inserted tasks.

As Figure 5.9 illustrates, we actually can improve on our estimated completion date for the project by creating an activity network and switching to Auto Scheduled task mode (a three-day improvement on the manual schedule Finish date).

Figure 5.9 Project Schedule in Auto Scheduled Mode [05-09-projectScheduleInAutoScheduledMode.tif]

Source: Advisicon

Dynamic Schedules

A project manager is responsible for ensuring that the products of the project (i.e., the deliverables) are delivered on schedule at a proposed cost. Given that the schedule is the planned use of resources agreed on by all the stakeholders of the project to complete the work, it is extremely important that it can be used to dynamically determine (i.e., forecast) whether we can complete the work according to the planned dates (i.e., milestones).

In order to use a schedule to dynamically forecast the future, four factors must be taken into consideration:

1. All tasks must be connected into a “network” of activities. This allows Project to dynamically calculate end dates for activities and key milestones.

This next diagram illustrates the relationships between tasks and milestones. It is the best view for understanding the interconnected relationship and dynamic impacts of predecessor tasks on successor (dependant) activities.

Figure 5.10 Project Network Diagram [05-10-activitiesAndKeyMilestones.tif] [AU: insert text ref. to figure]

Source: Advisicon

Only tasks that start at the beginning of the project or finish at the end can have open ends. This provides the scheduling software in Project with the ability to calculate start and finish dates for each of the tasks and milestones within the schedule.

2. There should be very few (if any) constraints in the schedule. Be careful to not set start and finish dates for auto-scheduled tasks (see Figure 5.11), as this will set “Start No Earlier” and “Finish No Earlier” constraints on those tasks.

Figure 5.11 Project Finish-No-Earlier-Than Constraint [05-11-finishNoEarlierAutoScheduledTask.tif]

Source: Advisicon

To clear a constraint, simply select the Start or Finish date field and press the Delete key, as shown in Figure 5.12.

Figure 5.12: How to Delete a Constraint in Project [05-12-deletedConstraintOnAutoScheduledTask.tif]

Source: Advisicon

Constraints make it difficult for the Project scheduling engine to perform its job because they “constrain” the dates and the schedule.

4. Utilize a deliverable-based structure for your schedule, with five to ten key activities and a milestone. Link only the activities and the milestone and avoid connecting to the Summary bars. [AU: insert text ref. to figure]

This next picture illustrates the relationship where linking to a summary activity the sub tasks can start earlier based upon their links. If the summary task had been linked Activity 2-1 would have had to start whenever the predecessor task to the summary task would have ended.

Figure 5.13 Linking Tasks in Project [05-13-avoidConnectingToTheSummaryBars.tif]

Source: Advisicon

Microsoft Project Add-ins

There is a very useful add-in for Microsoft Project called WBS Chart Pro, available from Critical Tools. This utility displays a project using a tree-style diagram known as a work breakdown structure (WBS) chart. WBS charts display the structure of a project showing how the project is broken down into its summary and detail levels. (See Figure 5.14.)

Figure 5.14 Critical Tools WBS Chart Pro Add-in for Project Desktop [05-14-criticalToolsWBSChartProAddInForProjectDesktop.tif]

Source: Advisicon

Using a WBS chart is an alternate approach to planning and displaying a project than the more traditional Gantt view shown earlier.

Critical Tools also offers an add-in called PERT Chart EXPERT for Project, which is used to create PERT charts (also known as network charts, precedence diagrams, and logic diagrams). A PERT chart displays the tasks in a project along with the dependencies between these tasks. (See Figure 5.15.)

Figure 5.15 Critical Tools PERT Chart Expert Add-in for Project Desktop [05-15-criticalToolsPERTChartEXPERTAddInForProjectDesktop.tif]

Source: Advisicon

Both of these tools are easy to learn and use, and provide significant productivity during this critical working, planning, and scheduling phase of the PM lifecycle.

Resource Planning

We now have a fairly good picture of the work that needs to be completed (and what order to complete it in) as defined by the activity network. The critical path method schedule that we have just completed is near perfect—that is, until we perform the next critical step.

The next step is to estimate the resource requirements (such as labor and costs) for the work schedule. This often-overlooked step in schedule development is critical to perform. It allows us to identify and commit the critical resources that are required to complete the planned work and ensure that they are going to be available when we need them. Critical resources are those resources that are needed to complete a project. Resources can be physical objects, such as equipment and materials, or intangible concepts, such as labor or costs. It is important for project managers to identify the critical resources as their availability can have a significant impact on a project.

Project 2010 desktop makes it easy to associate all types of resources (named, generic, or team) to work activities. The challenge is that Project 2010 can easily overload resources, as outlined in Figure 5.16.

Figure 5.16 Project Desktop Resource Graph [05-16-projectDesktopResourceGraph.tif]

Source: Advisicon

This split view makes it easy to identify and correct overallocations within a single project. The difficulty comes when we try to manage shared resources across several projects. Later in this chapter we explain how the Microsoft Project Server Resource Pool helps us manage this challenge.

Project 2010 desktop also has a Task Inspector that helps drill into issues and jump directly to views to solve overallocation, task errors, or slippage due to calendars, predecessor tasks, or resource overallocations. The Task Inspector in Figure 5.17 highlights that the overallocation is due to work on other tasks. Note the “Factors Affecting Task” and “Repair Options” sections of the Inspector.

Figure 5.17 Microsoft Project Desktop Task Inspector [05-17-microsoftProjectDesktopTaskInspector.tif]

Source: Advisicon

The Team Planner is a new feature for Project Pro 2010 that gives project managers greater visibility into and control over their team's work. (See Figure 5.18.)

Figure 5.18 Microsoft Project Desktop Team Planner View [05-18-microsoftProjectDesktopTeamPlannerView.tif]

Source: Advisicon

Project Calendars

To accurately reflect resource availability, you need to update the Standard Project Calendar and record any exceptions to the work week. Project calendars are located on the Project tab by selecting “Change Working Time.” (See Figure 5.19.)

Figure 5.19 Standard (Project Calendar) [05-19-theStandardProjectCalendar.tif]

Source: Advisicon

Schedules will not accurately reflect the true finish date of the project until all calendar exceptions have been entered (e.g., holidays, office closures, offsites, etc.). Figures 5.20 and 5.21 illustrate the impact that calendar exceptions have on the finish date of the project.

Figure 5.20 Schedule with No Calendar Exceptions [05-20-noCalendarException.tif]

Source: Advisicon

Figure 5.21 Schedule Impact due to Calendar Exceptions [05-21-withCalendarException.tif]

Source: Advisicon

Project supports calendars at the project, task, and resource level.

Collaborative Work Management: Integrating to SharePoint

Microsoft SharePoint makes it easier for teams to collaborate on projects. Using SharePoint you can set up sites to share information with others, manage documents, and publish reports to help everyone on the team work better together. Figure 5.22 illustrates a SharePoint team site.

Figure 5.22 SharePoint Team Site [05-22-sharePointTeamSite.tif]

Source: Advisicon

SharePoint supports task lists to offer those unfamiliar with formal PM with simple yet sufficient capability to provide a powerful PM solution. Figure 5.23 illustrates the use of the SharePoint project task list, which, once set up, can be easily synchronized with the Microsoft Project Desktop schedule shown previously.

Figure 5.23 SharePoint Project Task list [05-23-sharePointProjectTaskList.tif]

Source: Advisicon

The power of SharePoint task lists lie in their simplicity as well as their ability to share and edit them via SharePoint or Outlook. This means that team members and can view and contribute project status information.

A project manager can now use all the scheduling capabilities of Project Professional in conjunction with the collaborative capabilities of SharePoint. Project plans can be synchronized from Project to SharePoint and vice versa. Any changes made in Project or SharePoint can be easily updated into the other with the click of a button. To use this new capability, simply:

1. Create a Project task list in the SharePoint site that you have authority to access (or ask your IT support team to assist you). Copy this URL.

2. Enter your schedule into MS Project desktop and then select the File menu, click on Save and Send, and select “Sync with Task Lists.”

3. Paste the URL saved in step 1 into the Site URL field and click the ValidateURL button.

4. Select an existing task list or enter a new name. You can also click on the Manage Fields button to select fields to be synchronized between the project plan and the SharePoint server task list.

5. Click the Sync button, and the project plan will be published to SharePoint.

SharePoint tasks can now be viewed and updated by the project team in SharePoint, and the project manager can synchronize the updates to the Project Plan. Figure 5.24 illustrates the MS Project Filetab (backstage) where these steps are performed.

Figure 5.24 MS Project Sync with SharePoint Task Lists [05-24-microsoftProjectSyncWithSharePointTaskLists.tif]

Source: Advisicon

In the next section, we see how Project Server—in concert with SharePoint—can extend the capabilities of the Project desktop tool and provide a fully integrated enterprise-level PM solution.

Visual Reporting from Project to Excel for Charting, Graphing, and Pivot Analysis

Visual Reports is a new feature in Project Standard and Professional 2010 (O’Cull, 2006) that lets you report on your project’s data in Excel using PivotTables and PivotCharts and in Visio using a new feature called PivotDiagrams.

The out-of-the-box Project desktop installation comes complete with a number of prebuilt Excel and Visio templates. You can also create your own templates, which you can share with others in your organization. Figure 5.25 shows those Visual Reports that are included with Project.

Figgure 5.25 Project Visual Reports [05-25-projectVisualReports.tif]

Source: Advisicon

Using Visual Reports, you can easily create reports based on data from your projects using familiar Excel and Visio formats that are already in common use by your team. You can also include templates from other locations, such as a public share. When you create or edit a template, you can specify which project fields and custom fields to include in the template.

Visual Reports works by first creating a database on the computer that contains data for a specified project. A local cube is built, then Project connects the cube to a PivotChart in Excel or a PivotDiagram in Visio.

There are six different cubes to create reports from: resource, task, and assignment in both summary and usage (time-phased) versions. These cubes are completely separate from the Project server cubes.

Figure 5.26 presents an example of an Excel report that is essentially a simple pivot table representing budget cost for a specific project. Figure 5.27 provides an example of a Visio chart depicting the critical tasks for a specific project.

Figure 5.26 Project/Excel Visual Report [05-26-projectExcelVisualReport.tif]

Source: Advisicon

Figure 5.27 Project/Visio Critical Tasks Visual Report [05-27-projectVisioCriticalTasksVisualReport.tif]

Source: Advisicon

Project 2010 Moving Closer to Agile Planning

We would love to clarify a common myth about agile that centers on planning (Bjork, 2011). Agile is a methodology that utilizes an incremental and iterative approach to software development. Requirements and solutions evolve through collaboration between self-organizing and cross-functional teams. A software release results from multiple iterations (or sprints).

Agile, however, is not a method that avoids planning; an agile team does just as much planning as a team that subscribes to a more traditional software development methodology (i.e., waterfall). Nevertheless, there are some key differences between planning on an agile team and traditional planning:

* A traditional approach to planning requires you to gather requirements, review architecture and design options, and develop a project lifecycle plan that guides the development team to a successful outcome.
* An agile planning approach also involves studying requirements, architecture, and design. However, an agile approach puts an emphasis on getting started on the well-known and well-understood requirements versus performing a full lifecycle plan. The idea is that the team will derive greater value from starting on the known requirements than it will from developing an exhaustive end-to-end plan.

As shown in Figure 5.28, the “Manifesto for Agile Software Development” (Agile Manifesto Authors, 2001) places a higher priority on responding to change than on following a plan.

Figure 5.28 Manifesto for Agile Software Development [05-28-manifestoForAgileSoftwareDevelopment.tif]

Source:agilemanifesto.org

The key point is that an agile team expects that, once it gets started, executing the plan is more than likely to change based on what the team learns along the way. Based on its iterative and incremental approach, the team wants to have flexibility to adjust and react to changes as they occur.

This is a common and understandable stance by practitioners who have not yet had the opportunity to work with both methods. Those who have worked with both will tell you the first steps of scrum—particularly for large, complex projects—are to define high-level requirements for the entire project and prioritize them (Perera, 2011).

Agile and Project Desktop

The next most common myth about agile that we would like to dispel is that you cannot use Microsoft Project to develop plans or schedules.

Agile project planning typically is referred to as release planning. An agile release plan (or schedule of work activities) plans multiple sprints that form a release of a particular solution or a product. The plan is not necessarily project oriented; however, the concept for projects is very similar.

Microsoft has developed a Scrum Solution Starter designed to provide guidance on using Microsoft Project 2010 to manage scrum projects, aiming to help individual scrum teams to start using Project to:

1. Manage product backlog

2, Manage scrum backlog

3. Track progress and generate burndown charts

The Microsoft Solution Starter focuses on the Project 2010 desktop client and on the individual scrum team experience.

Scrum is an iterative, incremental methodology for PM often seen in agile software development. Although scrum was intended for management of software development projects, it can be used to run software maintenance teams or as a general project/program management approach.

Figure 5.29 illustrates the New Scrum Project button that is installed in the Project Backstage tab when the Scrum Solution Starter bis installed.

Figure 5.29 Microsoft Scrum Solution Starter for Project [05-29-microsoftScrumSolutionStarterForProject.tif]

Source: Advisicon

The Project 2010 Scrum Solution Starter comes complete with installation files and documentation; we will not repeat that discussion here. We will, however, highlight some of the key functions of the Scrum Solution Starter.

When a new scrum project is created, the Scrum ribbon tab is presented (see Figure 5.30) from which you can select from the various views (e.g., Product Backlog, Key Dates and Milestones, and Add New Sprint (see Figure 5.31)).

Figure 5.30 Project Scrum Ribbon Tab [05-30-projectScrumRibbonTab.tif]

Source: Advisicon

Figure 5.31 Project Sprint View [05-31-projectSprintView.tif]

Source: Advisicon

The Key Dates view allows users to track nonwork item dates, and visualize them using the timeline view, as shown in Figure 5.32.

Figure 5.32 Sprint Timeline View [05-32-sprintTimelineView.tif]

Source: Advisicon

Microsoft Project can also be used to assign scope to iterations (Aguanno, 2011), providing a flexible yet dynamic way of managing the work of a project. Figure 5.33 illustrates this approach.

Figure 5.33 Assign Scope to Iterations in Project [05-33-assignScopeToIterationsInProject.tif]

Source: Advisicon

The Sprint Burndown Chart button on the Scrum ribbon tab displays the current sprint data from start to end of a sprint. Figure 5.34 illustrates a burndown chart that shows progress/trends in the current sprint.

Figure 5.34 Sprint Burndown Chart [05-34-sprintBurnDownChart.tif]

Source: Advisicon

As there is a tremendous amount of reference material on the Web describing how to use Microsoft Project to plan an agile project (Absolut Agile, 2009), we will not go into specifics here.

Critical Success Factors

Here are the CSFs that we have learned so far about initiating and managing projects using the Microsoft Project Desktop client:

1. Add-ins available for Project through third-party providers to accurately reflect the work breakdown of the schedule and make data entry and reporting easier.

2. To assist the project manager and other project stakeholders, a properly defined and maintained schedule can be used as an effective “forecast” tool.

3. To accurately reflect the true finish date of a project, not only does the critical path need to be represented using a task activity network, but the tasks also need to have resources assigned to them to ensure that the critical resources will be available at the scheduled times.

4. To accurately reflect working times and resource availability, project calendars need to reflect any exceptions to the workweek.

5. To make it easier for teams to collaborate on projects, you can use SharePoint to share information with others, manage documents, and publish reports. This helps everyone on the team work better together.

6. To provide eye-catching reports that are also informative, using formats that are familiar to your target audience, Visual Reports is a feature in Project Standard and Professional 2010.

7. To provide guidance on using the Project 2010 desktop to manage scrum projects, Microsoft has developed a Scrum Solution Starter, which helps individual scrum teams to start using Project to:

* Manage product backlog
* Manage scrum backlog
* Track progress and generate burndown charts

Being an Effective Enterprise Project Manager Using Microsoft Project Server

In this section we discuss the key steps required to do effective enterprise PM using Microsoft Project Server 2010.

Initiating and Managing Projects

The PM lifecycle follows a project from the initial concept, through business case analysis and project initiation, then to using workflow to track the project through various stage gates of the project as it progresses. The PM lifecycleuses these phases as a measurement of success. PPM technologies provide electronic tools to produce accurate and timely reporting of project and portfolio results.

Figure 5.35 is an example portfolio lifecycle that illustrates four key phases (i.e., create, select, plan, and manage). A phase represents a collection of stages grouped to identify a common set of activities in the project lifecycle. A stage represents one step within a project life cycle (e.g., propose idea, request review, full business case, or deliver project).

Figure 5.35 Project Management Lifecycle [05-35-projectManagementLifecycle.vsd]

Source: O’Cull 2009]

Phases and stages are managed in Project Server 2010 through each stage by the use of enterprise project types and workflows.

Enterprise Project Scheduling

This section focuses on the Plan and Manage phase of the PM lifecycle illustrated in Figure 5.35. In this phase, detailed planning and scheduling are performed.

Saving and publishing the schedule are two key steps with Project Server to manage and share the schedule with other stakeholders.

Once the schedule has been developed in the Project desktop tool Figure 5.36 illustrates how the plan is saved to the Project Server. The key difference between the stand-alone and enterprise versions is that the schedule is not saved to an .mpp file. When Project is connected to Project Server, the Save Project command causes the Project Server dialog box to open, where a project name and other attributes can be entered. The Save button then signals Project Server to save the project schedule to a database.

Figure 5.36 Project Server Saving a Project Plan [05-36-projectServerSavingAProjectPlan.tif]

Source: Advisicon

One of the most significant reasons that organizations move to enterprise PM is to better manage their valuable resources. As we mentioned earlier, managing resources is very challenging using the desktop tool, as there is no visibility into the other projects’ utilization of resources.

Project Sever manages all resources through a centralized enterprise resource pool that contains all of the enterprise resources needed to perform project work in the organization (people, costs, and materials required to execute a project). Resource pool attribution drives the ability to track activity-based project costs as well as material consumption. Project cost drives meaningful performance measures, providing cost data that can help make better business decisions.

Project managers use the Project desktop Build Team from Enterprise tool to allocate resources to project plans (see Figure 5.37). Note: This capability is also available using the PWA in Project Server.

Figure 5.37 Project Server Build Team from Enterprise Resource Pool [05-37-projectServerBuildTeamFromEnterpriseResourcePool.tif]

Source: Advisicon

Figure 5.38 illustrates how the Build Team from Enterprise menu is used to match and replace the generic resource project manager with a named resource that has the required skills for a given role.

Figure 5.38 Project Server Build Team Menu [05-38-projectServerBuildTeamMenu.tif]

Source: Advisicon

Enterprise Resource Planning

Project Server 2010 provides the ability to manage three basic resource types: work, material, and cost. Work resources can be used to model people and equipment. Material resources is used to represent the supplies consumed during a project’s lifecycle. Cost resources can be used to track budget costs and budget expenses separate from the work resources that are assigned to tasks. Work resources can affect both the schedule and the cost of the project, while material and cost resources affect only the project cost.

The Resource Center provides graphical and textual views to assess the level of work by resources (demand) against the actual availability of enterprise resources (availability). (See figure 5.39.)

Figure 5.39 Project Server Assignments by Resource View [05-39-projectServerAssignmentsByResourceView.tif

Source: Advisicon

Resources can also be pivoted to view assignments by Project, as shown in Figure 5.40.

Figure 5.40 Project Server Assignments by Project View [05-40-projectServerAssignmentsByProjectView.tif]

Source: Advisicon

Project Server does not restrict you from allocating work to resources and instead provides a capability to propose and then commit resources to a project. Figure 5.41 illustrates how the Booking Type field works in context with the Project Resource Usage view.

Figure 5.41 Project Resource Booking Type [05-41-projectResourceBookingType.tif]

Source: Advisicon

Proposed resources can also be viewed from the now-familiar Gantt chart/Resource Graph split view as illustrated inFigure 5.42.

Figure 5.42 Project Proposed Resources [05-42-projectProposedResources.tif]

Source: Advisicon

In addition, Project Server supports a resource plan that can be used for capacity planning. (See Figure 5.43.) Resource plans are great ways to perform rolling wave planning prior to detailed schedule development.

Figure 5.43 Project Server Resource Plan [05-43-projectServerResourcePlan.tif]

Source: Advisicon

It is important to understand that resource plans do not integrate with the Project desktop client. They are Project Server side only. The hours booked to the resource plan will, however, be deducted from the availability of the resource.

Here are some key factors that should be considerated if you are going to use resource plans:

1. The resource plan greatly simplifies the assignment of resources as there are no task-level assignments.

2. Resource plans are a great way to estimate resource usage (i.e., as a placeholder only).

3. Tasks should be used to commit actual resources, with assignments eventually being planned and tracked within the schedule.

4. Assignment data can be pulled from project task assignments up through a specified date. Thereafter, the resource plan assignment data can be used.

Resource plans were developed to provide a way to estimate corporate resource capacity while a number of projects are in full execution and others are still in the planning phase (Ducolon, 2007). They are therefore ideal for the early phases of a project lifecycle, where the project is still just a concept or opportunity and not yet a committed and fully detailed project.

Managing Enterprise Projects

The Project Center provides a centralized view of all projects in Project Server. Filters and views provide the ability to filter, group, and display key fields. Figure 5.44 lists all projects currently in the Manage phase.

Figure 5.44 Project Server Project Center View [05-44-projectServerProjectCenterView2.tif]

Source: Advisicon

Team members update their work assignments through the “My Work” view illustrated in Figure 5.45. In this example, actual hours working on a specific activity are captured, including any adjustments to remaining work or finish date, when the activity will be completed. These updates are then forwarded to the project manager for inclusion into the schedule.

Figure 5.45 Project Server My Tasks View [05-45-projectServerMyTasksView.tif]

Source: Advisicon

Remember the dynamic Project Schedule that we introduced earlier? The view shown in Figure 5.46 illustrates the actual work and cost information against the original plan. This baseline approach is used by project managers, as it aids them during schedule-analysis to take corrective action by pulling the project end date back into compliance.

Figure 5.46 Project Desktop Schedule Updates [05-46-projectDesktopScheduleUpdates.tif]

Source: Advisicon

Due to the Web-enabled connectivity of Project desktop and Project Server, PM has never been easier or more functional than in the 2010 release.

Enterprise project management (EPM) solutions are now being hosted in the cloud (Microsoft Pinpoint, 2011), making onboarding fast and economical for all sizes of organizations.

Business leaders are now seeking work and resource management, business intelligence, and analytic capabilities that are far beyond the current capabilities of their IT infrastructure. Success or failure will depend on the ability of an organization to select and implement the proper PM and collaboration tools while on its journey upward toward high levels of EPM maturity.

Enabling Cultural Adoption and Ease of Use for End Users

Implementing an EPM solution is not going to happen by accident or luck. Success depends on end user adoption of the new solution, which must be based on careful design and forward-thinking enterprise processes.

Successful and sustainable collaborative strategies must be designed around three major factors:

1. **Usability,** which directly relates to the ease of use and learnability of a solution. A compelling experience is an important part of engaging the end user toward adoption of a new enterprise solution.

2. **Impact.** An attractive, easy-to-use interface will help draw end users to the new solution. However, sustained use will come from access to valuable content, the ability to connect and communicate with other stakeholders more efficiently, and incentives that align with knowledge sharing and the new enterprise approach to managing work and resources.

3. **Organizational readiness,** which highlights the discrepancy between current and target environments. Organizational readiness showcases any dissatisfaction with the status quo of the existing project, program or portfolio process and creates a compelling vision of the future state. This increases the degree to which organizational members perceive the change as needed, important, and worthwhile.

By paying close attention to these factors, organizations can position themselves to harness the power of a collaborative solution to support the overall business objectives of the enterprise, not just the priorities of a specific business unit. By doing so, ultimately organizations will drive both top- and bottom-line growth for the business as a whole.

A well-designed and sustainable collaboration platform needs to fulfill two key objectives:

1. It has to be so intuitive to use that there is no appreciable learning curve.

2. It has to be configurable and extensible so that more advanced users can adapt it to their specific needs.

Project and Project Server 2010 fulfill these two key objectives offering best-in-class capabilities enabled by the extensibility of the platform architecture.

Role Based

There are multiple audiences in organizations: from IT professionals, to project managers, to end users. Each audience cares about different aspects and has specific concerns.

End users, for example, don’t need to know all the details of Project desktop, Project Server, and SharePoint. They might be:

* Executives who want to see project or resource status and reporting (i.e., dashboards incorporating KPIs, graphical views, and other Web Parts).
* A team member who only needs to see his or her My Tasks information and the details online (through PWA).
* Team leads who need to edit, update, review, and approve tasks right in PWA versus needing Project client installed.

Project managers, however, require the power and flexibility of a desktop tool like Project to design and manage projects of any size or complexity. PMs tend to be more mobile and therefore need access to a checked-out version of the schedule and the ability to connect with Project Server to share schedule changes and updates with the team.

Agile and Project Server

For software development, Team Foundation Server (TFS) is Microsoft’s software Application Lifecycle Management (ALM) tool. TFS provides a range of ALM functionality including work item tracking, and planning tools and reports, along with other functionality in the areas of Configuration Management and Team Collaboration.

Integration between Project Server 2010 and Team Foundation Server 2010 is significant for organizations that want to bridge the gap between PM and software development (Feissinger 2010). This capability further strengthens Microsoft’s ALM solution by enabling PMs and development teams to work together more effectively (Channel 19, 2010) while not getting distracted or overwhelmed by each other’s processes or data. It enables teams to work together more effectively by:

* Providing executives with insight into project portfolio execution, alignment with enterprise strategic objectives, and resource utilizationby leveraging the data stored in different systems.
* Bridging the collaboration between the PM office and application development by utilizing common information and agreed-on metrics to facilitate better coordination between teams using disparate methodologies, such as waterfall and agile.
* Enabling development and PM teams to use popular, easy-to-use tools such as Microsoft Project, Project Server, SharePoint, Office, and Visual Studio, to work better together to communicate project schedules and product backlogs.

Integrating ALM and PPM improves visibility across the entire application development lifecycle, enabling project managers and developers to manage their work according to their own methodologies yet have seamless connection with each other.

Critical Success Factors

The CSFs for being an effective enterprise project manager using Microsoft Project Server are listed next.

1. To provide accurate and timely reporting of project and portfolio results, a PM lifecycle is used to track projects through various stage gates of progress and final measurement of success.

2. To better manage valuable resources, organizations need to move to enterprise PM, which supports management of all resources through a centralized resource pool.

3. To properly track labor, materials, and costs, three basic resource types (work, material, and cost) need to be defined and updated for every project.

4. To implement successful EPM, sustainable collaborative strategies must be focused around three key factors: usability, impact, and organizational readiness.

5. To bridge the collaboration gap between the PM office and application development teams, common information and agreed upon metrics are required.

Fluent Project Management Using the Fluent UI: Introducing the Ribbon

In this section, we examine the new Fluent User Interface (UI) that Microsoft introduced with the release of Office 2010. In this new version of Office, all applications share a common Ribbon interface, including all Office applications, Visio, Project, Project Server, and SharePoint.

Microsoft has completely revamped the Office Fluent UI, or ribbon. The new user interface design arepresents a dramatic departure from the overloaded menu and toolbar design model of previous releases. Project’s extensive capabilities are now organized into logical, easy-to-find groups that help you accomplish actions efficiently rather than searching for specific functions.

These new capabilities are being driven by end users’ need for a simple yet powerful PM solution. User feedback clearly indicated that people had great difficulty finding, using, and understanding the vast feature set in Office.

Frontstage and Backstage to Create the Optimal Work Management Tool

End users were introduced to a whole new interface with the release of Project Desktop 2010, including the ribbon, the Quick Access Toolbar, and the built-in context menus. Microsoft originally introduced the ribbon extensibility model in the 2007 Microsoft Office system as part of the Office Fluent UI. This was a new way to customize the user interface and create custom tabs and groups that were specific to users’ needs (Microsoft 2010a).

Office 2010 extends the span of the UI extensibility platform by providing support for customization of the new Backstage view, along with the ribbon, the Quick Access Toolbar, and context menus—referred to herein as the Frontstage.

The Microsoft design team identified that there were two distinct types of functions within the Office applications—IN and OUT functions:

1. The IN functions are the ones that most people are more familiar with. These are the functions that act on the content of the document and show up on the page. Examples include commands like bold, margins, spelling, and styles. These functions make up the heart of the application.

2. The OUT functions help people do something with the content they create. Examples include Saving, Printing, Permissions, Versioning, Collaboration, Document Inspector, Workflows, and the like. The primary characteristic is that the OUT functions don’t act on a specific point in the document and their effects don’t appear on the page.

Project Frontstage (the IN Functions)

Let’s take a high-level look at the Project ribbon (i.e., Task, Resource, Project, View, and the special contextual tab Format).

The Task tab includes functions associated with tasks in addition to commands that are also on the first tab of other Office applications (e.g., cut, copy, paste). You can think of the Task tab as the Project desktop home tab. (See Figure 5.47.)

Figure 5.47 Project Desktop Task Tab [05-47-projectDesktopTaskTab.tif]

Source: Advisicon

The Project tab includes functions that affect the entire project. Notice that in addition to the standard project functions, subprojects and linkage to other projects are included here. The ability to compare projects also is included. (See Figure 5.48.)

Figure 5.48 Project Desktop Project Tab [05-48-projectDesktopProjectTab.tif]

Source: Advisicon

The Resource tab is where you access functions associated with resource management. (See Figure 5.49.) The new Team Planner view is accessible from this page (see Figure 5.18 earlier in this chapter).

Figure 5.49 Project Desktop Resource Tab [05-49-projectDesktopResourceTab.tif]

Source: Advisicon

The View tab is where you select the view, filter what data you wish to see and how it is arranged, set up combination views, and run Project macros. (See Figure 5.50.)

Figure 5.50 Project Desktop View Tab [05-50-projectDesktopViewTab.tif]

Source: Advisicon

Additionally, each view has its own contextual tab, labeled Format. (See Figure 5.51.) This tab contains functions that are used to format the content of a particular view. The Format tab provides incredible control over the presentation of tabular and graphical information. You can adjust styles here, select text and chart styles, and even invoke Drawing tools.

Figure 5.51 Project Desktop Format tab [05-51-projectDesktopFormatTab.tif]

Source: Advisicon

Project Backstage (the OUT functions)

The Backstage view is the new end user interface experience seen when you click on the File tab in any of the Office 2010 applications (i.e., Word, Excel, PowerPoint, Outlook). While the other ribbon tabs focus on things you do when you are working with your project (add tasks, edit resources, change formatting, etc.), the Backstage view focuses on things you do to your project as overall—for example, open, save, publish print, and share (ReedShaff, 2009).

Figure 5.52 illustrates the Project desktop Backstage. The key functions of Backstage (Kaufthal, 2010) include the:

* **Info tab,** where you can get high-level status about the project and make related changes.
* **Recent tab,** which provides quick access to recently opened projects and also allows you pin the projects you want to always keep on the recent list.
* **New tab** centralizes a number of ways to start a project (e.g., blank project, templates, from existing projects, etc.).
* **Print tab,** which combines print preview with common print settings, providing an all-in-one interface for printing.
* **Help tab,** which is similar to that of the other Office apps.
* **Options,** which includes the redesigned options interface for Project 2010.

Figure 5.52 Project Desktop Backstage [05-52-projectDesktopBackstage.tif]

Source: Advisicon

Making the Project Backstage even more useful is its extensibility capability. Organizations can build Backstage add-ins for their own employees, customers, or others. For example, an enterprise could build buttons into its version of Project that integrate with the company’s business processes (sending a file to a manager for review, exporting data into a database, etc.).

When the Project desktop client is connected to Project Server, a number of new Info tab options light up on the Backstage, as shown in Figure 5.53. A number of Project Server–dependent functions are now included there, such as:

* The link to the Project Web App home page
* Status of last publish to PWA and a button to publish again
* Buttons to check for updates, manage permissions, and work with the enterprise global template and enterprise resource pool.

The right-side pane now also lets you control the tracking method, edit custom-field values, and link to related information, such as documents, issues, risks, and the project site.

Figure 5.53 Project Backstage when Connected to Project Server [05-53-projectBackstageWhenConnectedToProjectServer.tif]

Source: Advisicon

Project Web Application

SharePoint Foundation 2010, SharePoint Server 2010, and Project Server 2010 PWA are all adopting the ribbon user interface component. The PWA experience will be more consistent with the Project Professional 2010 desktop user experience, so project managers can work in similar ways within both desktop and server applications.

The ribbon interface also makes it easier for users who are familiar with other SharePoint Server applications to move to Project Server PWA.

Pages in Project Server that are frequently used by the project management office (PMO), project managers, resource managers, and team members use the Server Ribbon interface. Figures 5.54, 5.55, and 5.56 show the ribbons that project managers and team members use to access Project Resource and task information when working with PWA.

Figure 5.54 Project Server Project Center Ribbon [05-54-projectServerProjectCenterRibbon.tif]

Source: Advisicon

Figure 5.55 Project Server Resource Center Ribbon [05-55-projectServerResourceCenterRibbon.tif]

Source: Advisicon

Figure 5.56 Project Server My Tasks Ribbon [05-56-projectServerMyTasksRibbon.tif]

Source: Advisicon

Customizing Is as Easy as Right Click/Left Click

The Project Fluent User Interface is fully customizable. This includes the ribbon (O'Cull, 2009), the Quick Access Toolbar, and the built-in context menus. Customizations allow you to personalize the ribbon the way as you want it (e.g., create custom tabs and custom groups to contain frequently used commands).

Project Desktop Ribbon

To customize the Project desktop ribbon, you simply right-click on any menu and select the Customize the Ribbon… item. The menu illustrated in Figure 5.57 is displayed. Here you can create or alter tabs, add or remove commands and groups, or rename stuff.

Figure 5.57: Customize Ribbon menu [05-57-customizeRibbonMenu.tif]

Source: Advisicon

Keep in mind that these changes are specific to your workstation and that each Office application has its own ribbon. Also note that there are main tabs as well as tool tabs. (Recall the Format tab illustrated in Figure 5.51.)

Project Server Ribbon

Although the toolbars are implemented differently for Project desktop and Project Server, the functionality is the same. The ribbon is (and will continue to be) more consistent from Project Desktop to Project Server.

Clicking any Web Part in a SharePoint site, for example, also enables the ribbon keeping the same look and feel for every environment. This is true for Project Server, SharePoint, and Project Professional 2010 and will also be the standard for future releases of Project and Project Server.

Project Server PWA uses the core ribbon API of SharePoint Foundation 2010. Because most PWA pages in Project Server 2010 use the ribbon and Web Parts, and many of the pages use the customizable JavaScript Grid control, PWA is much easier to customize and extend than previous versions.

Some potential customization and development scenarios include:

* Add the ribbon to your own Web pages in PWA or to any other page or Web Part in SharePoint Foundation 2010 or SharePoint Server 2010.
* Design a new ribbon tab by using preexisting controls.
* Replace a command on an existing ribbon.
* Add a command to the ribbon on a specific Web page.
* Product Detail Pages (PDPs) provide a highly customizable project-creation experience. They can integrate with the ribbon user interface in Project Web app, provide Quick Launch navigation elements specific to individual pieces of project data, and dynamically filter custom fields by departmental association.

You can customize PWA Project Detail Pages by using Web Parts and a ribbon interface. Project Server 2010 includes these new Web Parts for PDPs:

* **Buttons Web Part.** Enables users to edit, save, publish, or close a project detail page or to move to the next stage in a workflow. A long page can include multiple Buttons Web Parts.
* **Workflow Status Web Part.** Enables users to check the status of Project Server workflows.
* **Project Fields Web Part.** Enables users to select or edit project custom fields for the PDP. Project summary task fields such as cost and actual work are read-only. Custom fields such as the project name, department, workflow management, start date, and owner are read/write.
* **Strategic Impact Web Part.** Includes all business driver definitions filtered by one or more departments. This Web Part enables users to rate the project impact on each driver.
* **Dependencies Web Part.** Enables users to define dependencies between projects.

Tabs that Empower the Business User

A good way to help the business user quickly adapt and maximize the use of the ribbon is to customize the ribbon by creating personalized modifications and tabs for the end user. You can place key actions, commands, macros and other commonly used features on the ribbon or on the quick launch bar. (See Figure 5.58.)

Figure 5.58 Customizing the Ribbon and Tabs [05-58-customizingTheRibbonExample.tif]

Source: Advisicon

This customization helps to personalize the use of the ribbon and simplifies and streamlines key functions or tasks needed, better than all of the toolbars, buttons, and menus that were in older versions of Project. . The fact that the ribbon is easily changed or customized helps to promote personalization and use of key features.

The authors of this book all have their own personal preferences. We customize existing tabs, create new ones, and embed key features and automated functions (created with macros) to help us maximize our use of the product.

Personalization of the ribbon, commands, and buttons helps expedite end user utilization of new functions, macros, and features. Placing the features they want most or standardizing key approaches and functions designed for a PMO within a single tab will save users time.

Quickly Find and Present Information

Within Project Professional, all the columns are available, including the enterprise fields. In many cases, end users have to insert columns, resize, and then remove them from a view when done. In Project Professional 2010, users can easily add, change, or remove columns. In fact, at the end of any table (the last column) is the placeholder to add a column. Not only can you adjust columns, but you also do not have to request a change from an administrator in Project Server; as the end user, you can personalize the view by moving, hiding, and changing the columns in the PWA view to your liking.

In fact, all users can personalize a screen to their liking. This new feature allows individuals to quickly find, arrange, and present information that is pertinent to them. The best part of this new feature is that the field/column arrangements— hiding or rearranging—persists, meaning that when any user personalizes a view in Project Server, the program remembers the settings and they will be the same when that user returns.

In Project Professional, instead of adding and removing columns, we can to double click to drill down to task, graphical views and get to the data, or we can modify a table (right click in the upper right-hand corner or choose the table dropdown on the ribbon); no more inserting columns, then deleting them.(See Figure 5.59.)

Figure 5.59 Quickly Changing Columns [05-59-quickChangeTableExample.tif]

Source: Advisicon

This is a quicker, more effective way for any project manager, scheduler, or person using Project Professional to quickly get to the views, information, change data, reset the view to something more pertinent, and get back to work.

This little tip always impresses students. It saves them time and countless mouse clicks. In Project Professional and Project Server 2010, the addition of tables, views, and grouping to the ribbon helps to expedite the Microsoft Project workflow and simplify end users’ experiences in working with the entire project-related data.

More Effective Options to Update and Share and Connect Information

Project provides many different options for enabling the end user to quickly access information. Some of these are: links, hyperlinks, deliverables (items flagged and posted to a SharePoint site for anyone to link, review, and consume in their schedule). All of these rapidly connect key data, files and updates into a single web page.

Updating can be done in Project Client, PWA Time, and Task Sheet views; directly in the PWA project details view; and in SharePoint if Project Professional isn’t linked to Server but to a SharePoint page.

Critical Success Factors

Here are the CSFs that we have learned regarding Fluent PM Using the Fluent UI.

1. To accomplish actions efficiently rather than searching for specific functions, Project’s extensive capabilities are now organized into logical, easy-to-find groups on a ribbon.

2. To make the vast set of utility functions in Project easier to find, use, and understand, Microsoft introduced the Backstage with the release of Office 2010.

3. To make the new Office 2010 User Interface more valuable to end users, Microsoft provided the ability to customize the new Backstage view, the ribbon, the Quick Access Toolbar, and context menus.

Important Concepts Covered in This Chapter

In this chapter, we saw how the blending of specific processes, technological capabilities, and end user competencies will allow business users to address critical success factors, using Project 2010 for:

* Project management in small business and the enterprise
* Initiating and managing project with the Project desktop
* Effective EPM using Project Server.
* Using fluent PM with the new Office Fluent User Interface.

There is a critical demand for a simple yet powerful PM solution. The fully integrated PM solution comprised of Microsoft Project 2010, Project Server 2010, and SharePoint 2010 is clearly capable of meeting that need.

Key Summary Points

Key summary points are highlighted here to remind the reader of some of the vital points covered in this chapter.

* Organizations of all sizes utilize some form of work, resource, or PM methodology and tool set.
* Organizations are outgrowing their basic tools, methods, and processes for managing work and resources. There will be a need for a more sophisticated PM method and set of tools as organizations move toward a more mature PM approach.
* There are effective ways to use PM tools in both small businesses and large enterprises, from the individual desktop client to the departmental or enterprise server.
* The five key factors that can positively impact organizational effectiveness and end user satisfaction are:

1. Scalability

2. Configurability

3. Ease of use

4. Integration

5. Collaboration

* As organizations gain in their understanding of how to get things done, an effective set of processes, tools, and technologies is typically implemented, usually resulting in improved organizational efficiency.
* A properly defined and maintained schedule (i.e., all tasks are connected to a network, a minimal use of constraints, deliverable milestones have been defined, etc.) can be used as an effective forecast to assist the project manager and other project stakeholders.
* End users are looking for a powerful yet easy-to-use solution for managing their work, resources, and critical timelines.
* Microsoft has completely revamped the Office Fluent User Interface based on feedback clearly indicating that users had a great deal of difficulty finding, using, and understanding the vast feature set of Office.
* The right technology can shorten the distances between different teams and make collaboration possible. The end users adoption of the technology is critical, however—choose wisely as you may not get a second chance.

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