

Global Pharmaceutical Company Expects to Save \$2M Annually with Automated Reports

Overview

Country or Region: United States

Industry: Pharmaceuticals & Drugs

Customer Profile

End-to-end global pharmaceutical company with 60,000 employees discovers, manufactures, and markets a range of products to improve health of humans and animals through prescription drugs and vaccines.

Business Situation

The company's IT Lab is developing visual graphic reports to help speed project completion to reduce time-to-market and offset patent expiration pressures. The IT Lab works closely with business partners.

Solution

The company developed a set of new tools and reports using Microsoft® Office Visio® 2007 to visualize project status and explore resource availability while reducing project management effort.

Benefits

- Reduce up to 25% in management hours (10 hours per week)
- Estimated savings of \$2M in additional productivity
- Estimated savings of 10k project management hours per week



“We have enabled our project managers to produce real-time resource capacity reports while eliminating the manual status tracking process.”

Senior Project Manager , IT Lab

The IT Lab of a global pharmaceutical company is responsible for evaluating new technologies to determine viability for the entire enterprise. Due to increasing business pressures from patent expirations, the Lab is tasked to find solutions to reduce time-to-market by running projects more efficiently. Optimizing staff allocation is currently difficult because obtaining resource allocation information is a cumbersome manual effort. To solve this problem, the Lab deployed Microsoft® Office Visio® 2007 to automate reports to better analyze their project and resource data. With over 1,000 project managers from R&D to Marketing, the team expects large scale efficiency gains to be generated by these new reports. Based on the success of the initial pilot program, the lab expects the company to save over \$2M annually on project status tracking and staff allocation efforts.



Situation

The customer is a global research-driven pharmaceutical company with over 100 years of history in drug discovery, development, manufacturing, and marketing. The company employs over 1,000 project managers across 5,000+ projects throughout the company from R&D to manufacturing to marketing. The company's IT Lab provides a collaboration space where managers can work closely with the team to address business challenges with IT solutions.

Business Priorities

To remain a leader in pharmaceutical development the customer wants to address the following business priorities:

- Accelerate project completion
- Provide a standard company-wide tool with easy-to-read reports and real-time data for project managers
- Determine whether staff are spending their time on the right activities
- Optimize the match of resource skills and project needs

Reaching these goals has the potential to help the company reduce time-to-market for its critical life-saving products.

Challenges in the project management and staff allocation process

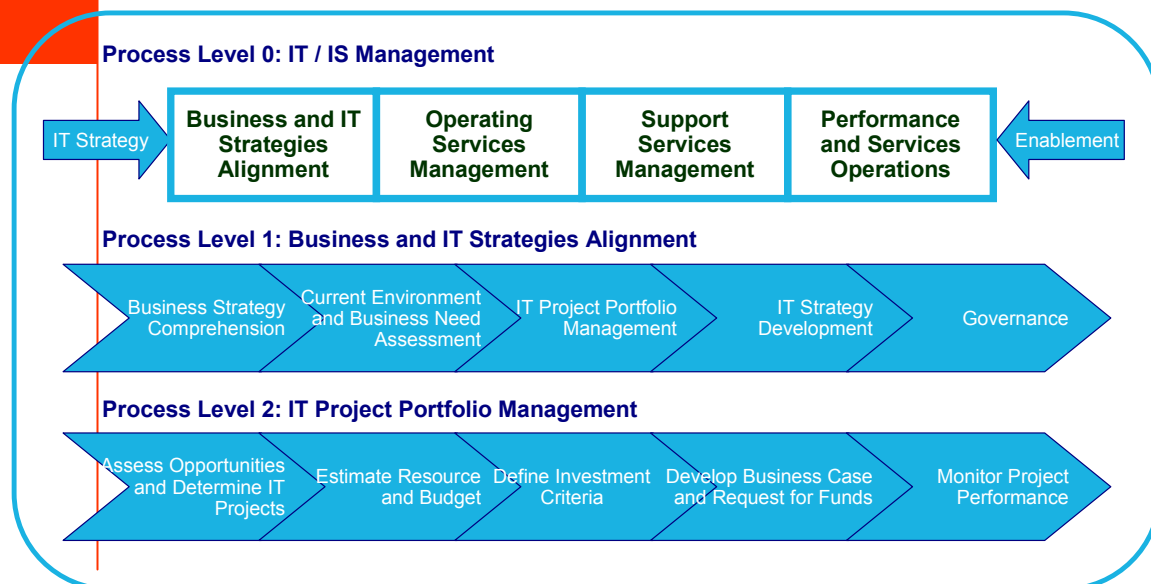
The company faced a number of challenges in the way it monitors and reports project status as well as allocates resources to projects according to skills and experiences. For this project the IT Lab used the proposed solution on its own work environment. The Lab's project management environment is similar to the rest of the company as they are also responsible for managing multiple projects at a time.

Monitoring project status is currently a very cumbersome and highly manual process for project managers since there are many points of update, including:

- Verbal staff updates during regular weekly meetings
- Post-meeting follow-up updates via multiple channels (e.g., in-person, email, phone, instant messages, thumb drives)
- Ad-hoc status updates anytime also via multiple channels

These various communication channels, frequency, and time of week for updates can grind project manager productivity to a near standstill. Project managers also need to gather updates from multiple locations due to

Figure 1. IT / IS Management process and subprocesses



“Current methods for reporting project and resource status consume more than 20% of a project manager’s time.”

Senior Project Manager , IT Lab

the diversity of roles such as developers, testers, and business users who sit in different locations. Project managers need to stop what they are doing when new status comes in. Regarding the tracking process, the Senior Project Manager of the IT Lab says, “Current methods for reporting project and resource status consume more than 20% of a project manager’s time. This is time that we would like to use for other activities.”

Project report format is also an issue since there is no standard format across projects which make it difficult for project managers to manage across projects.

Status reports are currently produced in Microsoft® Office Excel® documents, a format that is difficult for lab manager to quickly glean and understand project status. For project managers, updating status reports in text is time-consuming and does not allow them to clearly illustrate weekly status progression.

The IT Lab manager is responsible for assigning staff and IT resources across multiple projects to deliver projects on-time. The Lab manager meets with staff once a quarter to agree upon an estimated workload allocation with bi-weekly updates by staff on actual time spent. The information on actual time spent by staff is sent by email. Updating and processing this information is a time consuming highly manual activity for both staff and the team lead. Furthermore, the turnaround time to reassign staff across projects is lengthy because the team lead needs to wait to receive response from all staff before proceeding. Waiting for response can take up to 2 days since members can be away from their desk at the lab by which time a reallocation opportunity may have already passed.

Manual Process for Aggregating Project Status

In order to provide an accurate picture of overall performance across multiple projects, project managers collect and review many pages of report text. This work is time intensive since project managers need to manually average performance across all projects – a task made more difficult by the fact that status is described in text. Aggregating status across projects is tedious but important as it helps managers understand overall performance against yearly stated goals. See Figure 1 on the previous page for a detailed breakdown of the IT / IS Management process.

Business Pressures to Improve Project Management

Several industry-wide business pressures are motivating the drive to improve project management, among them:

- Continuing evidence of first-to-market advantage
- Increasing cost of drug discovery as many compounds already discovered
- Growing focus on biologic drugs which require high initial investment costs
- Increasing cost of enrolling patients and physicians for testing
- Looming patent expirations in the next 5-10 years

Improvements in project management will help the company reduce project completion time across every function to ultimately result in faster time-to-market.

Critical Success Factors for Improving Project Management Efficiency and Reducing Project Completion Time

A more efficient project management process will help to reduce project delivery time by allowing project managers to spend more time supporting staff rather than collect and update status. This global pharmaceutical company’s IT Lab identified several critical success factors and key performance indicators (KPIs) for managing the process:

- Reduce project manager time spent on status tracking by 90%
- Improve utilization of staff resources by 10%
- Develop easy-to-read reports that graphically represent project status
- Improve on-time project delivery by 10% (through real-time staffing allocation)

The Senior Project Manager of the IT Lab says, "Following the 80/20 rule, we are looking to eliminate a few major inefficient activities and expect it to yield major results to improve our project turnaround."

The identification of the critical success factors for project management process helped the company to recognize a number of areas of improvement.

Solution

In order to address these areas of project and management resource efficiency, the customer engaged Visibility.biz which is focused on Visio consulting and education. In 2006 its CTO was named Visio Most Valuable Professional by Microsoft. For this project, Visibility.biz developed automated visual reports using Visio 2007 from project and resource data residing in SharePoint 2007.

Business Strategies and Tools Used to

Enhance Project Management

By working with the newest productivity tools from 2007 Office release, the company was able to improve and / or automate almost the entire project management reporting process to improve analysis on resource status, project cost, on-time delivery, and staff productivity.

Represent Project Status Graphically

The Data Graphics feature from Office Visio 2007 allows data to be shown with shapes in a diagram and provides visual clues right away on status. Rather than use text, Visibility.biz developed status reports and dashboards to display each staff's utilized hours. Users can select from a library of shapes such as traffic-lights, meters, graphs, and checkboxes that best reflect the type of report data. Data Graphics can also be paired with Data Links to connect data directly to its source.

Figure 3 shows the overall health of projects using the intuitive traffic-light color scheme.

Automate Project Status Updates

Each team is given SharePoint access to store their project data in task lists linked to Visio. Rather than contact project managers each time a deliverable or milestone is completed, staff simply updates the

Activity	Current Process	Improved Process	Benefit
Project Status	Meetings with follow-up emails, phone calls, and thumb drives	<ul style="list-style-type: none"> Automated status updates based on deliverables completed 	<ul style="list-style-type: none"> Saves 25% of project manager time per week
Project Status	Call / email each staff to ask time spent across projects / tasks	<ul style="list-style-type: none"> Staff updates and revises time directly in tool 	<ul style="list-style-type: none"> Saves 20% of people manager time per week People manager always has latest status
Project Updates	Type status in text document	<ul style="list-style-type: none"> Use charts and diagrams to communicate status Status automatically updated 	<ul style="list-style-type: none"> Easy to read reports Live status updates
Aggregate Multiple Project Status	Manually roll-up status across multiple projects	<ul style="list-style-type: none"> Update project list for aggregation Status automatically updates and aggregates 	<ul style="list-style-type: none"> Saves 10% of project managers time per week

Figure 2. Table of revised processes and benefits

Engagement Health

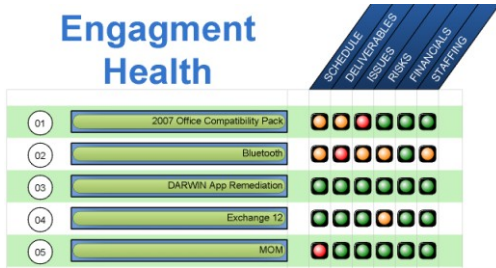


Figure 3. Project health across multiple attributes using traffic-light color scheme

SharePoint task list to provide project managers with the latest status.

Using the new Data Link feature in Visio 2007, each time a staff member completes and checks-in a predefined set of project deliverables the status is automatically updated and reflected in the report without intervention by the project manager. To get the latest status report, project managers simply click the refresh button.

Figure 4 shows a screenshot of the new graphical project status report which shows which deliverables have been completed to date.

Project Milestones



Figure 4. Project status by deliverable milestone

Automate Status Aggregation

With Microsoft SharePoint and Visio 2007, project managers can easily produce aggregate reports by linking multiple status sources to a single document. Reports can be created in a hierarchical fashion to roll up status for multiple streams in a project and then rollup further across multiple projects. Building these reports is easy because the drag-and-drop front-end allows users to quickly select which level of detail they want automatically updated. Furthermore, the new Visio 2007 Pivot Diagram feature allows data to be shown in groups and subtotals – which can be drilled-down for additional detail – so rollout the new tools throughout the entire project manager can select just the subset of projects they are responsible for while the Lab manager can select to see status for every project and a single rollup status of all Lab projects. All graphical indicators in these reports are linked for automatic updates and developed in Visio 2007

Figure 4 shows an aggregated resource utilization report which displays planned vs. actual time spent across projects.

resource allocation process. With the new automated workflow, the IT Lab plans to rollout the new tools throughout the entire company. Below are highlights of the benefits obtained through this project:

- Save 25% of project manager time (10 hrs per week) automating status updates
- Save 10% of project manager time (4 hrs per week) automating status aggregation
- Save 20% of people manager time (8hrs per week) automating staff allocation reports

Figure 6 provides a summary of benefits and how they are calculated.

Commenting on benefits obtained from the pilot program the Senior Project Manager of the IT Lab says, “The new tool has reduced the time my staff and I spend on project management by up to 25%. I expect these tools will also have a similar magnitude of impact to the rest of the company.”

Automated Status Updates

In addition to saving time for project managers by up to 25%, the new process also saves time for staff by eliminating time spent on update calls / emails. The new process also eliminates data entry errors caused by manual processes. This provides project managers with time for higher-value activities. Such a tool helps eliminate manual status tracking and allow project managers to always see the latest status by refreshing the document.

Standard Visual Project Status

The improved project and resource reports help managers quickly understand status and make prioritization and allocation decisions. Shapes and diagrams also help identify bottlenecks and communicate process to new members

Real-time View to Staff and IT Resource Allocation and YTD Goal Attainment

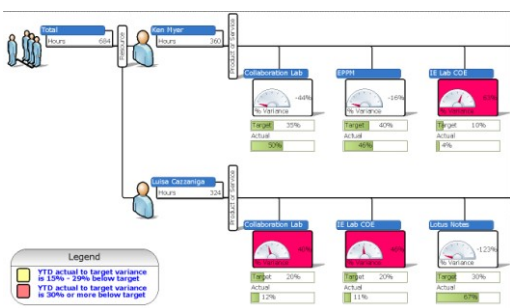


Figure 5. Staff report on planned vs. actual work completed YTD

Benefits

By implementing the 2007 Microsoft Office system the customer experienced several improvements in its project management and

“It’s reasonable to expect managers [across the company] will not only use the resource allocation tool for staff but also for other resources ... The list could go on and on.

Senior Project Manager , IT Lab

Providing managers with the latest project allocation information allows them to make more informed decisions on how to manage project priorities and resources without taking additional time from staff for input. The real-time view of staff's utilization allows senior management to react faster to open project needs and better staff resources. The dashboard allows managers to better match project requests and with available resources resulting in increased utilization. This dynamic ability also increases employee experience and skill development, leading to overall higher job satisfaction.

The dashboard provides senior management with information to assign resources in real-time to match projects needs. By seeing planned work versus actual work complete, managers can help resource attain their annual goal. The report can capture status on a variety of resources including:

- Staff
- Hardware & Software
- Software
- Lab Floor Space
- Facility Time

The dashboard can also provide links and callouts with information on when resources will become available and what expertise and skills are requested by projects in the pipeline. Information provided by the dashboard can also be tracked over time to

allow managers to plan future project staffing by understanding past needs to increase staffing and timeline forecast accuracy.

Automated Status Aggregation

Having an aggregate view of project status and time spent per project allows managers to identify projects that need help and from a resource perspective as well as to help estimate effort required to complete similar work in the future.

Overall, the new tools and reports have demonstrated their value to all stakeholders in the IT Lab from management, staff, and business users. Regarding the success of the project, the Senior Project Manager of the IT Lab commented, “Based on the demonstrated savings and positive user feedback we believe this tool can be implemented across the company for general benefit. It’s reasonable to expect managers will not only use the resource allocation tool for staff but also for other resources such as testing equipment, manufacturing plants, IT hardware, and physician visits. The list could go on and on.”

Partner Profile

Visibility.biz is an award-winning consulting group with leading experts on Microsoft® Office Visio® offering education and consulting services to help organizations maximize their Visio investment.

Figure 6. Table of benefits calculation

Key Performance Indicator	Type of Financial Statement Related to the KPI	KPI Calculation/ Measurement Method	Baseline Value (before deployment)	Measurement Value (after deployment)	KPI Improvement (in %)	Benefit Calculation in dollars
Hours saved per year collecting project status	Financial Statement	Hours spent collecting status (per PM per month) * Number of PMs * 12 months	Hrs/mo. updating: 40hr (25% * 40hrs * 4 wks) # of PMs: 1,000 @ \$80k salary	Hrs/mo. updating: 4hr (90% time saved) # of PMs: 1,000 @ \$80k salary	90% 36 hrs saved collecting status per project manager per month	Saves 22.5% of available work time @ \$80k = \$18k / PM / yr x 1,000 PM = \$18M
Hours saved per year collecting resource status	Financial Statement	Hours spent collecting status (per Mgr per month) * Number of Mgrs * 12 months	Hrs/mo. updating: 32hr (20% * 40hrs * 4 wks) # of Mgrs: 2,000 @ \$80k salary	Hrs/mo. updating: 3.2hr (90% time saved) # of Mgrs: 2,000 @ \$80k salary	90% 28.8 hrs saved collecting status per manager per month	Saves 18% of available work time @ \$80k = \$14.4k / Mgr / yr x 2,000 Mgrs = \$28.8M
Hours saved per year aggregating project status	Financial Statement	Hours spent aggregating status (per PM per month) * Number of PMs * 12 months	Hrs/mo. updating: 16hr (10% * 40hrs * 4 wks) # of PMs: 1,000 @ \$80k salary	Hrs/mo. updating: 1.6hr (90% time saved) # of PMs: 1,000 @ \$80k salary	90% 14.4 hrs saved aggregating status per project manager per month	Saves 9% of available work time @ \$80k = \$7.2k / PM / yr x 1,000 PM = \$7.2M

For More Information

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For more information about Visibility.biz products and services, visit the Web site at: <http://www.visibility.biz/>

Visibility.biz is an expert in extending Visio with custom shape development, solutions and report automation. Visibility.biz professionals offer Visio best practice usage lectures and hands-on training. Visibility.biz is a specialist in refreshable Visio diagrams for project and portfolio reporting and analysis

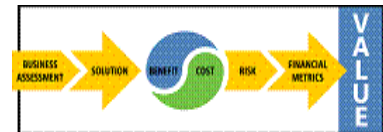
Get a competitive advantage, and increase productivity, with better insight and control of your data, projects, people, and processes with Visio custom solutions and Visio education from Visibility.biz.

For more information about the Microsoft Office system, go to: www.microsoft.com/office

About Business Value Assessment

This business value research study was developed by Capgemini using the Microsoft Rapid Economic Justification (REJ) Framework to assess the business value of the 2007 Microsoft Office system.

For information on how to repeat this study for your organization, contact your local Microsoft representative or go to: www.microsoft.com/value



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