



Microsoft®

# ENGINEERING

*Microsoft Dynamics SL Project Management  
and Accounting for Engineering*

Engineering Challenges...Microsoft Solutions

 Microsoft Dynamics SL



*“Microsoft Dynamics and Project Server have transformed the culture of our company. Communication between employees has dramatically increased. Engineers used to focus almost exclusively on their own work, whereas today there is a lot of synergy between engineering groups. People realize that one person’s work might be relevant to a different project. And as a result, we’ve seen improvements in product quality. The ability Microsoft Dynamics SL gives us to drill down and instantly access the information we need is invaluable. Employees in manufacturing and project management have realized the greatest increases in productivity, working up to 50 percent faster.”*

Robin Ash,  
Controller,  
Intelligent Automation Corporation

CONNECTED

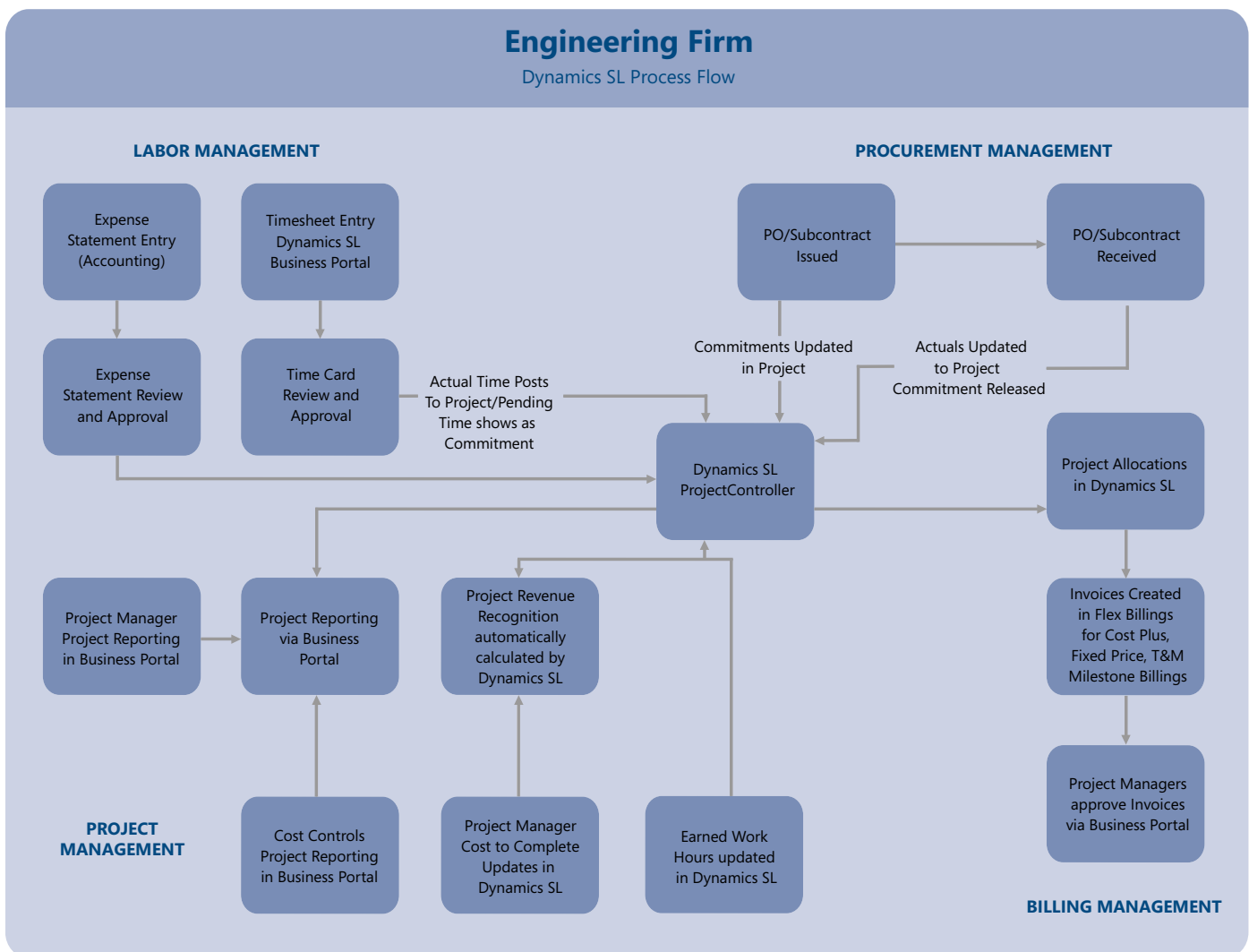
# Microsoft Dynamics SL

## DRIVE PROJECTS WITH A SOLUTION BUILT TO WORK THE WAY YOU DO

Utilize tools from Microsoft that allow you to take the everyday **Operational Activity** tasks you perform in day-to-day project management and turn them into the catalyst used to drive **Financial Tracking** and **Decision Making** information.

Whether your Engineering firm is performing services only or performing Engineering, Procurement and Construction, Microsoft Dynamics SL understands your unique needs and has the tools you need to run your business. Join other Engineering firms that have relied everyday on Microsoft Dynamics SL and Microsoft Office SharePoint to manage their project-driven organization.

## Engineering Process Flowchart for Microsoft Dynamics SL



# Labor Management

## Operational Activity

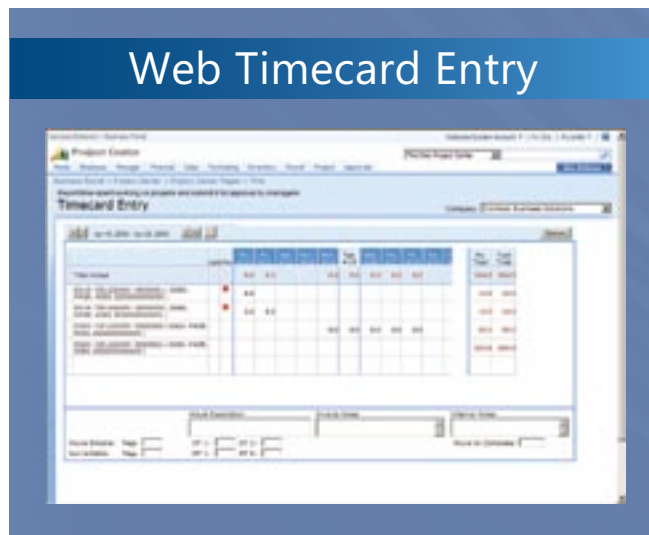
- Engineering personnel will provide daily status updates on their projects to communicate status, percent complete and concerns by task by entering this information online via SharePoint Business Portal. Microsoft Dynamics SL workflow is designed to allow timecards and expense statements to be routed for approval automatically from the engineering resource to the project manager and/or supervisor. This communication occurs for:
  - Timecard Entry
  - Expense Statement

## Financial Tracking

- Project managers are able to analyze labor for both labor commitments and labor actual hours and costs. This information is available to project managers and supervisors for:
  - Labor commitment analysis
  - Labor Reporting by Discipline
  - Payroll Reporting and Processing
  - Labor Costing (standard, actual or burdened)
  - Budget versus Actual Comparisons
  - Estimate to Complete Analysis
  - Forecast to Completion Analysis

## Decision Making

- Engineering managers are able to make real-time decisions based on up-to-date information, rather than having to wait two weeks for payroll processing to occur. Engineering supervisors and project managers know immediately whether the project is behind schedule or ahead of schedule.



Capture time information, even from employees working remotely, with data automatically routed to the appropriate managers.

# Procurement Management

## Operational Activity

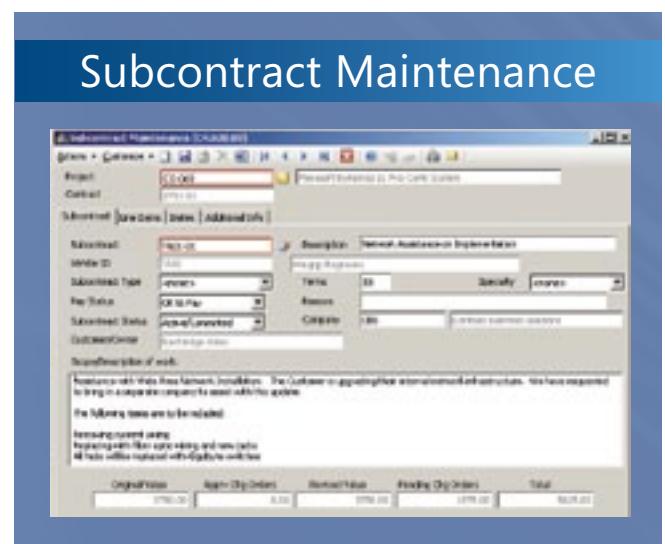
- Engineering procurement personnel may procure materials or engineering subcontracted resources daily using Requisitions, Purchase Orders and/or Subcontracts. Microsoft Dynamics SL workflow is designed to allow requisitions and subcontracts to be routed for approval automatically based on the rules of the project, department or company. The procurement activity for projects occurs for:
  - Item Requests
  - Requisitions
  - Purchase Orders
  - Subcontracts

## Financial Tracking

- Engineering managers are able to analyze material and subcontract labor commitments as well as actual material and subcontract labor hours and costs. This information is available to project managers and supervisors as soon as it occurs to allow for:
  - Material commitment and actual analysis
  - Subcontract Labor commitment analysis
  - Subcontract Labor Reporting by Discipline
  - Subcontract Labor Costing (standard and actual)
  - Budget versus Actual Comparisons
  - Estimate to Complete Analysis
  - Forecast to Completion Analysis

## Decision Making

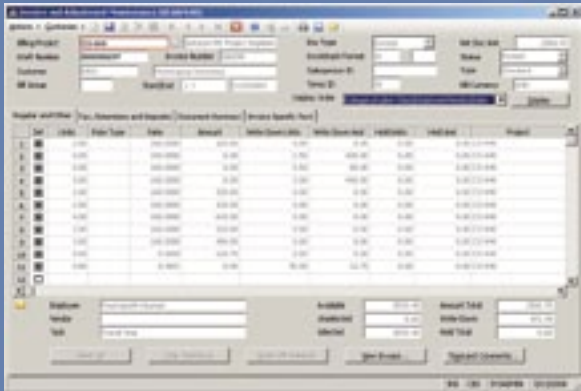
- Engineering managers are able to make real-time decisions based on up-to-date information, rather than having to wait until all vendor invoices for materials or subcontracts hit the project; Project managers have the information from the time it is a commitment until the commitment is an actual cost to the project.



Manage contract documents, change orders, and disbursements to optimize project cash flow and profitability.

# Billing Management

## Flexible Billings Control



Create, adjust, maintain, and view in-process invoices or view billed invoices at a glance.

### Operational Activity

- Project Managers will regularly update Estimated Costs to Complete, Estimate at Completion or Forecast at Completion costs. The purpose of this activity is to update Project Stakeholders of project performance. By using Microsoft Dynamics SL for these updates, Project Billing is allowed to happen automatically rather than relying on Microsoft Excel or other outside billing systems. Microsoft Dynamics SL will create billing records for the following types of billing that can occur on projects:
  - Cost Plus
  - Time and Material
  - Time and Material with a Maximum
  - Fixed Fee
  - Other billing types based on rates sheets or multipliers

### Financial Tracking

- Accounting managers are able to forecast profitability and cash performance because the project billing is created based on the operational activity of the Engineering firm. This information is available to project managers, accounting managers, executives and supervisors for:
  - Accounts Receivable Aging by Project
  - Accounts Receivable Aging by Customer
  - Unbilled Accounts Receivable Analysis
  - Communication of past due Accounts Receivables (automatic notification is available to Project or Business Managers)
  - Budget versus Actual Comparisons
  - Estimate to Complete Analysis
  - Forecast to Completion Analysis

## Flexible Invoice



Invoice customers with different types of services and fees—all at one time.

### Decision Making

- Backlog reporting allows for automatic analysis of Backlog based on actual billing compared to Contract value for all projects. This ensures that all decisions are being made based on either Unbilled or Actual Billed values on projects. Project managers can make real-time decisions because all billing information is updated as operational activity occurs.

## Project Analyst



Using Business Analytics for Microsoft Dynamics SL, advanced reporting and analysis of financial results and operational activity is available to truly understand what is happening within projects and the business overall.

# Project Management

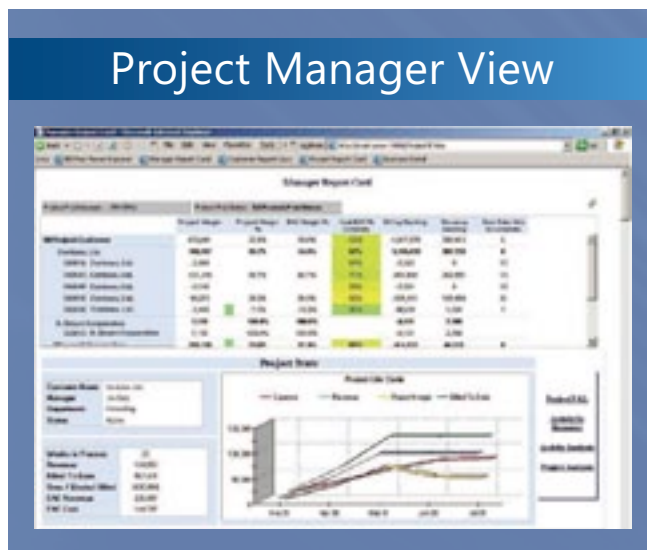
## Operational Activity

- Engineering staff that are either project managers or part of project controls have the ability to update Cost to Complete, Earned Work Hour Information, and Estimate at Completion or Forecast at Completion. Since project managers or project controls must keep up with this information, the Microsoft Dynamics SL solution provides the ability to capture this information so that it can be used for calculations and reporting. Daily or weekly tasks for Project Managers or Cost control usually are as follows:
  - Cost to Complete Maintenance
  - Estimate at Completion Maintenance
  - Forecast at Completion Maintenance
  - Earned Work Hour Maintenance (required for EV reporting)
  - Project Communicator Alert Management

- Budget versus Actual Comparisons
  - Revenue
  - Costs
- Estimate to Complete Analysis
- Forecast to Completion Analysis
- Financial Performance versus Earned Value Reporting

## Decision Making

- Project stakeholders can analyze projects that are ahead of schedule, behind schedule or compare between Financial Performance versus Earned Value performance. Project stakeholders no longer have to create project management sub-systems to account for the gap between actual costs and accounting job costs. As engineering personnel are performing their daily jobs operationally, the Microsoft Dynamics SL system is taking those operational transactions and creating real-time financial reporting for both Project Management and Accounting.



*This example of a project manager's report card illustrates the value of perspectives that are uniquely configured for individual roles. Quickly access relevant information about a project including: margins, over/under billings, activities, and more.*

## Financial Tracking

- Project Managers, Engineering managers, Project Cost Control managers and Executives are able to analyze projects online from Business Portal on a real-time basis. This information is available to project stakeholders to allow for:
  - Labor commitment analysis
  - Labor Reporting by Discipline
  - Labor Costing (standard, actual or burdened rates)

## Business Analytics & Collaboration

BIO for Microsoft Dynamics SL is an easy-to-use analytics solution that helps amplify the impact all people can have in an organization through relevant insight into business drivers, keeping your team focused on the health and success of your business every day. Work from one set of company data by bringing operations and finance data such as projects, sales, inventory, customers, accruals, revenues, budgets, and more all together into one information tool.

Interactive and self-service, BIO for Microsoft Dynamics SL provides personalized, role-based scorecards for everyone in your organization based on a common set of data. All business users are empowered to build, manage and utilize scorecards and reports through familiar tools.

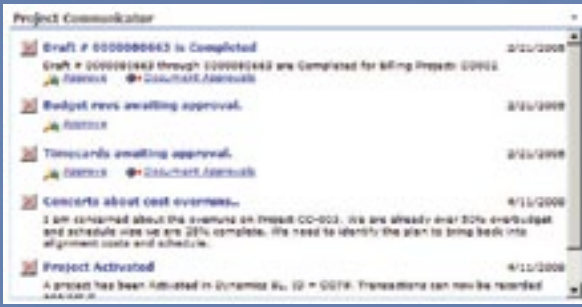
### BIO for Microsoft Dynamics SL allows your people to impact:

- Increasing the lifetime value of customers
- Decreasing the cost of product and service delivery
- Strategic planning to expand your business

## Visibility, Insight, and Control

Web-based access to real-time project information helps project managers stay in control so they can deliver to the client's satisfaction, profitably.

### Project Communicator



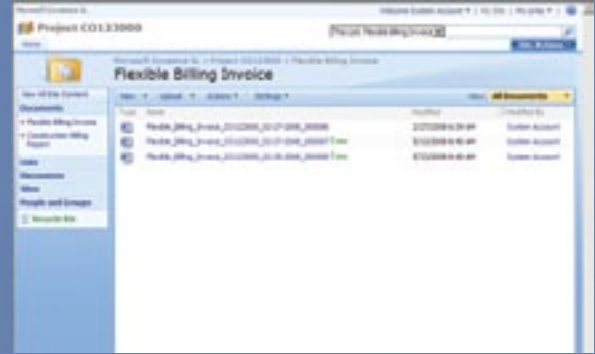
Microsoft Dynamics SL will send alert messages to prompt people to review exceptions or take action. Project alerts help ensure that key project issues are addressed promptly.

### Document Approvals



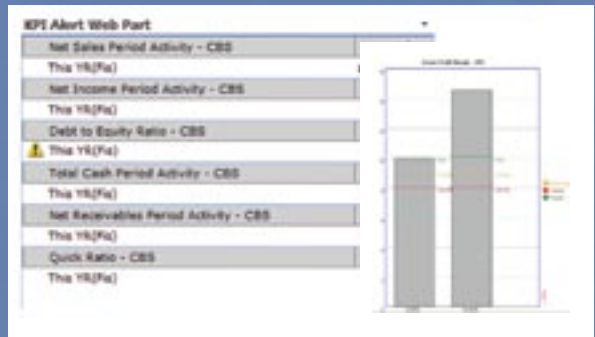
Review, comment on, and approve or reject draft invoices, time cards, and expense reports online in one easy screen to keep cash flow moving.

### Project SharePoint Site



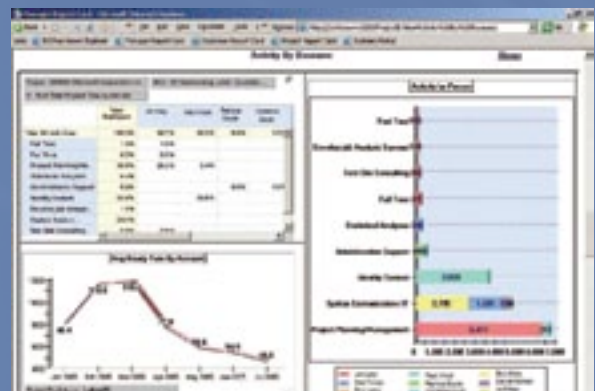
Create document repository sites to make it easier to store and share project-related documents. In this example, invoices are automatically sent to these sites along with engineers' notes and other documents.

### KPI Alerts



At a glance, view key project billing and financial performance indicators.

### Project Activity View



Review project activity by type and person, as well as realization rates over time.

**Microsoft®**

©2008 Microsoft Corporation. All rights reserved. Microsoft, BizTalk, Excel, FRx, MapPoint, Microsoft Dynamics, the Microsoft Dynamics logo, SharePoint, Visual Studio, and Windows are either registered trademarks or trademarks of Microsoft Corporation, Microsoft Business Solutions ApS, or FRx Software Corporation or their affiliates in the United States and/or other countries. Microsoft Business Solutions ApS and FRx Software Corporation are subsidiaries of Microsoft Corporation. All other trademarks are property of their respective holders.