


CONSTRUCTION

*Microsoft Dynamics SL Project Management
and Accounting for Construction*

Construction Challenges...Microsoft Solutions



Microsoft Dynamics® SL

A black and white photograph of a man in his 40s or 50s, wearing a white hard hat and a high-visibility safety vest over a plaid shirt. He is smiling slightly and looking towards the camera. The background is a blurred construction site with scaffolding and other workers.

“We use Microsoft Dynamics SL in every facet of our business, from general accounting and payroll, to project management and manufacturing. It standardizes our entire company on a single, integrated business-management solution.”

Jim Bivins,
Business Applications Manager,
TDIndustries, a specialty construction firm
specializing in HVAC, electrical, plumbing,
and other building systems.

“Our business is diverse, with commercial construction, systems service, facilities maintenance, multifamily construction, and manufacturing operations. I don’t know of any other business management solution that covers so many areas of business while also keeping everything integrated in terms of accounting. With our new manufacturing module, for instance, whenever we produce something in our shop, we can charge it directly to a project and ship it out to the field—and it’s all done within Microsoft Dynamics SL.”

Bob Hauck,
Systems Analyst,
TDIndustries

CONTROL

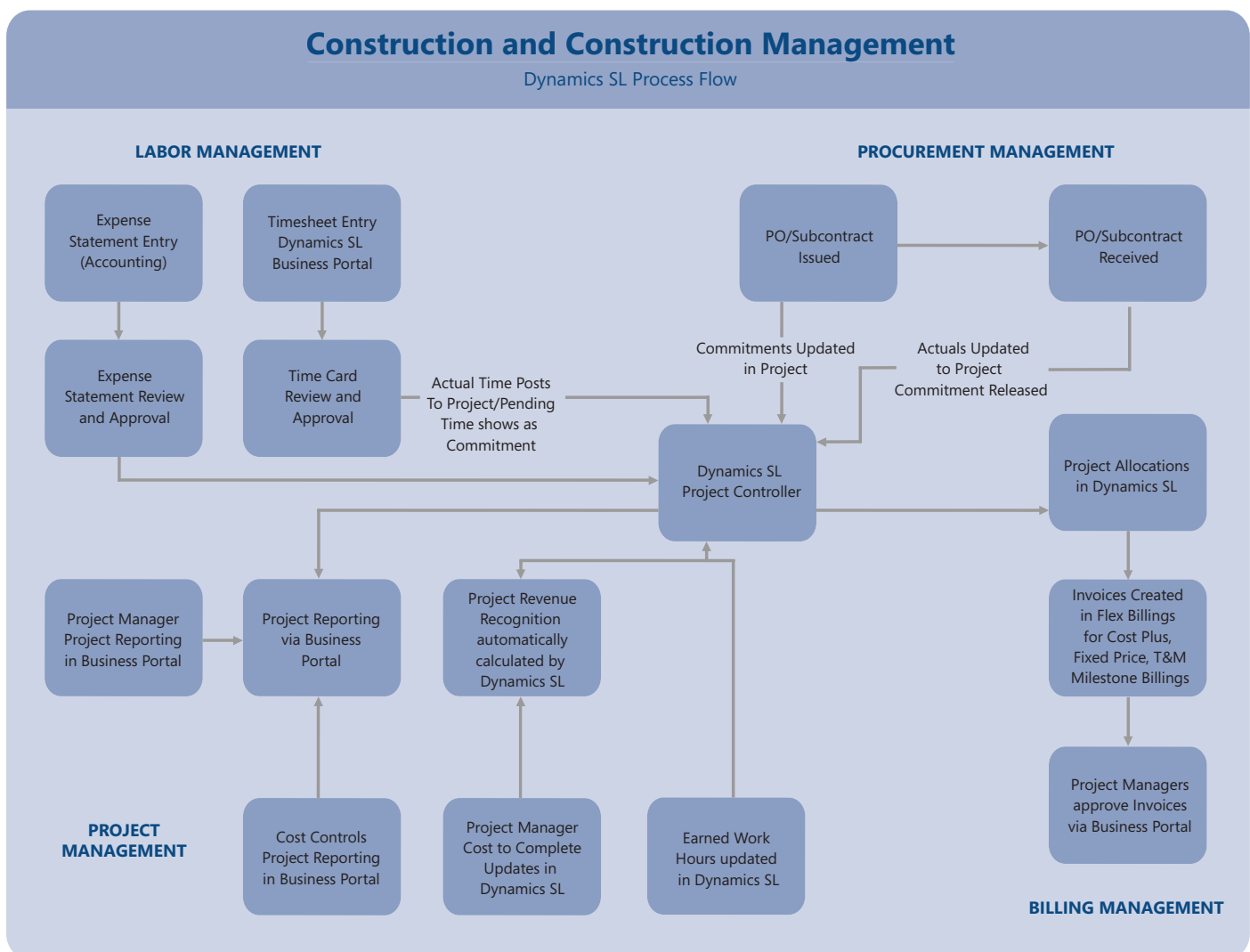
Microsoft Dynamics SL

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 Construction company is performing construction projects that include time, materials and subcontractors, or you are performing construction management services, Microsoft Dynamics SL is built for your unique needs and has the tools you need to help you run your business more effectively. Join other Construction companies that have relied everyday on Microsoft Dynamics SL and Microsoft Office SharePoint to manage their project-driven organization.

Construction Process Flowchart for Dynamics SL



Labor Management

Operational Activity

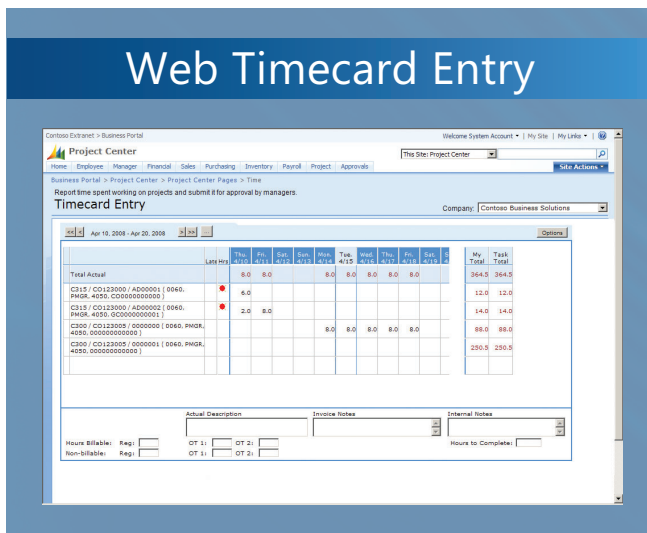
- Construction resources (whether a crew or individual resources) daily update the jobs on which they are working to communicate status, percent complete and concerns by task. This is done either individually online via SharePoint Business Portal or through administrative staff batch entry from timecards. Microsoft Dynamics SL workflow is designed to allow timecards and expense statements to be routed for approval automatically from the construction resources 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 Project
 - Payroll Reporting and Processing
 - Labor Costing (standard, actual or burdened)
 - Budget versus Actual Comparisons
 - Estimate to Complete Analysis
 - Forecast to Completion Analysis

Decision Making

- Project 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. 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

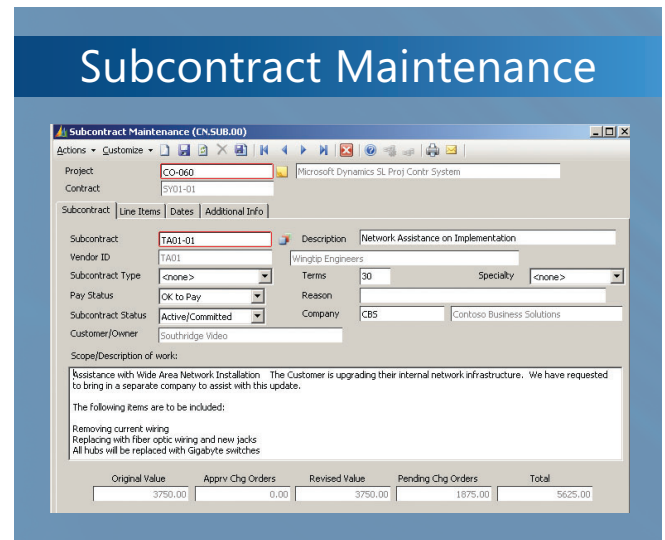
- Procurement personnel daily procure materials or subcontractors using Requisitions, Purchase Orders and/or Subcontracts. Dynamics SL workflow is designed to allow requisitions and subcontracts to be routed for approval automatically based on the rules of the project, department or company. The procurement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

Financial Tracking

- Project 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 as soon as it occurs to allow for:
 - Material commitment and actual analysis
 - Subcontract Labor commitment analysis
 - Subcontract Labor Reporting
 - Subcontract Labor Costing (standard and actual)
 - Budget versus Actual Comparisons
 - Estimate to Complete Analysis
 - Forecast to Completion Analysis

Decision Making

- Project 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 Construction company. 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

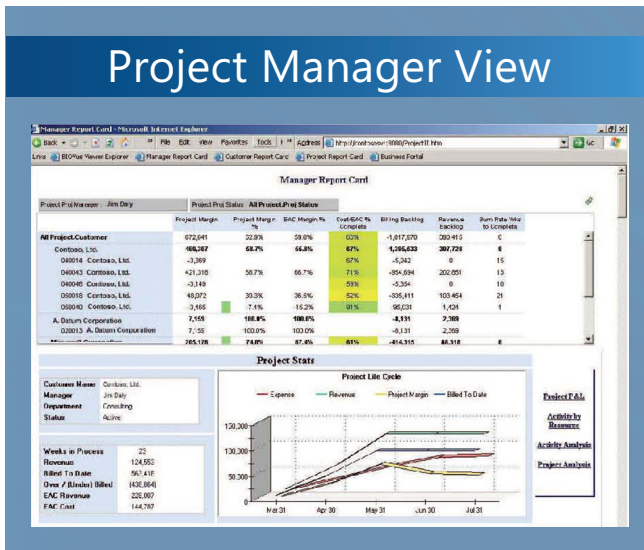
Operational Activity

- Project resources have the ability to update Cost to Complete, Earned Work Hour Information, and Estimate at Completion or Forecast at Completion. Since project managers 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 task for Project Managers 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 Managers and Executives 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 project resources 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 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 Labor Class
 - 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

Project Communicator

- Draft # 0000080663 is Completed** 2/21/2005
Draft # 0000080663 through 0000080663 are Completed for Billing Project: CO002
[Approve](#) [Document Approvals](#)
- Budget revs awaiting approval.** 2/21/2005
[Approve](#)
- Timecards awaiting approval.** 2/21/2005
[Approve](#) [Document Approvals](#)
- Concerns about cost overruns..** 4/11/2008
I am concerned about the overruns on Project CO-003. We are already over 50% overbudget and schedule wise we are 35% complete. We need to identify the plan to bring back into alignment costs and schedule.
- Project Activated** 4/11/2008
A project has been Activated in Dynamics SL, ID = CO79. Transactions can now be recorded against it.

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

Document Approvals

Time and Expense Reports | Invoices

Filter by: All
Customer: []

[Clear Actions](#) [Set all to Approve](#) [Set all to Reject](#) [Set all to Delegate](#) [Commit Action](#)

Customer	Project	Draft #	Preparer	End Date	Amount	Currency	Action to take
A. Datum Corporation	CO062	0000080647 details	SYSADMIN	4/11/2008	\$26,147.50	USD	[No Action]
A. Datum Corporation	CO062	0000080668 details	SYSADMIN	4/11/2008	\$29,238.50	USD	[No Action]
A. Datum Corporation	CO062	0000080669 details	SYSADMIN	4/11/2008	\$593,325.00	USD	[No Action]
A. Datum Corporation	CO062	0000080670 details	SYSADMIN	4/11/2008	\$518,750.00	USD	[No Action]

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

Microsoft Dynamics SL - Project CO123000

Welcome System Account | My Site | My Links

This List: Flexible Billing Invoice

Flexible Billing Invoice

Type	Name	Modified	Modified By
Flexible Billing Invoice	Flexible_Billing_Invoice_CO123000_02-27-2008_000086	2/27/2008 6:39 AM	System Account
Flexible Billing Invoice	Flexible_Billing_Invoice_CO123000_02-27-2008_000087	5/13/2008 8:40 AM	System Account
Flexible Billing Invoice	Flexible_Billing_Invoice_CO123000_02-28-2008_000088	5/13/2008 8:40 AM	System Account

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

KPI Alert Web Part

- Net Sales Period Activity - CBS
This YR(Fis)
- Net Income Period Activity - CBS
This YR(Fis)
- Debt to Equity Ratio - CBS
This YR(Fis)
- Total Cash Period Activity - CBS
This YR(Fis)
- Net Receivables Period Activity - CBS
This YR(Fis)
- Quick Ratio - CBS
This YR(Fis)

Gross Profit Margin - CBS

Year	Target	Actual
2008	100%	100%
2009	100%	100%

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

Project Activity View

Activity By Resource

Resource	Total	Jan 2005	Feb 2005	Mar 2005	Apr 2005	May 2005	Jun 2005	Jul 2005	Aug 2005	Sep 2005	Oct 2005	Nov 2005	Dec 2005
Jim Kelly	100.0%	30.7%	28.3%	0.6%	1.0%								
Paul Tavares	2.9%	0.6%											
Project Planning/MS	30.5%	28.2%	2.4%										
Administrative Support	6.2%												
Monthly Control	32.8%												
Contracting Job Budget	1.9%												
Customer Outreach	24.1%												
Test Site Construct	0.3%												

Activity by Person

Person	Activity	Value
Jim Kelly	Project Planning/Management	6,411
Paul Tavares	Administrative Support	488
Christine Koch	Administrative Support	3,870
Eric Lang	Administrative Support	2,706
Christine Koch	Administrative Support	1,021
Jeff Ray	Administrative Support	338

Realization Rate By Account

Month	Rate
Jan 2005	88.4
Feb 2005	116.6
Mar 2005	113.7
Apr 2005	77.0
May 2005	88.6
Jun 2005	84.5
Jul 2005	85.6

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

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