

Total Project Management System for XA

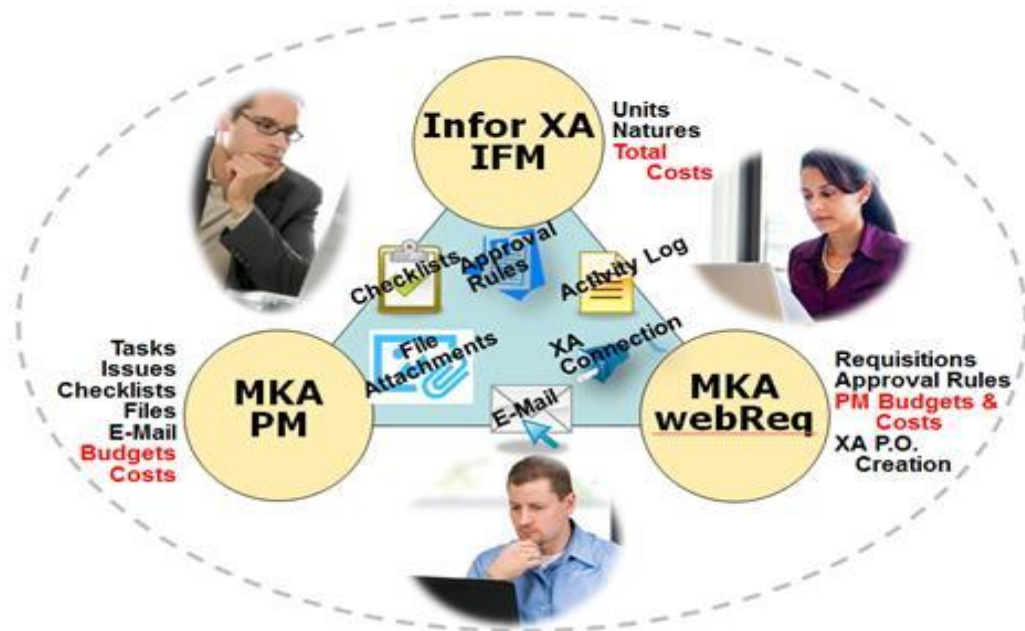


TABLE OF CONTENTS:

- A. What is Total Project Management? Can I run it stand-alone?
- B. Common Problems
- C. Increased Efficiencies: How the System Works

A. What is Total Project Management?

Total Project Management can mean many things to many people. It's not ERP. It's not PLM. It's not just Project and Task Management. It's not just tracking purchases to a new model launch or a capital project. It can include requisitions, or not.

Total Project Management is a web-based portal providing enterprise accessibility to Project Management and Project Cost Management. It is a combination of:

- Project and Task Management
- Integrated workflow processes for all approvals and tasks associated to a project
- Project Costing, Visibility, and Control throughout the project
- Integration with the XA ERP System

An ERP system has dozens of integrated modules that work seamlessly to run the enterprise. Likewise, Total Project Management seamlessly integrates project definitions, tasks, documents, people, phase gates, issues, purchases, inventory, costs, and systems. This leads to more effective and efficient management of programs/projects.

The Total Project Management System

The key points to MKA's Total Project Management approach are that the system will:

- Give visibility to—and provide the status of—all projects, people, tasks, and resources as well as the status of the **COSTS** of the Program or Project (and compare to budget).
- Provide the right information to the right user at the right time. Users shouldn't have to always go look and search for project information.
- Have automatic alerts and notifications, such as an automatic process that alerts users of their tasks and what needs to be done.
- Manage Task progress updates via an automated update Wizard or simple e-mail response
- Let Project Managers add new tasks "on-the-fly."
- Let users create and track open issues.
- Allow Purchasing and all users to see what they need when new components or services are sourced.
- Keep detailed history of a project so users can use it for evaluation and estimating future projects (as well as have an audit trail and create "templates" based on past projects).
- Have a log of meeting notes, emails, and project history.
- Integrate with Infor XA to provide item and BoM information, supplier information, purchasing information, accurate costs from the system, and integration with the IFM General Ledger system

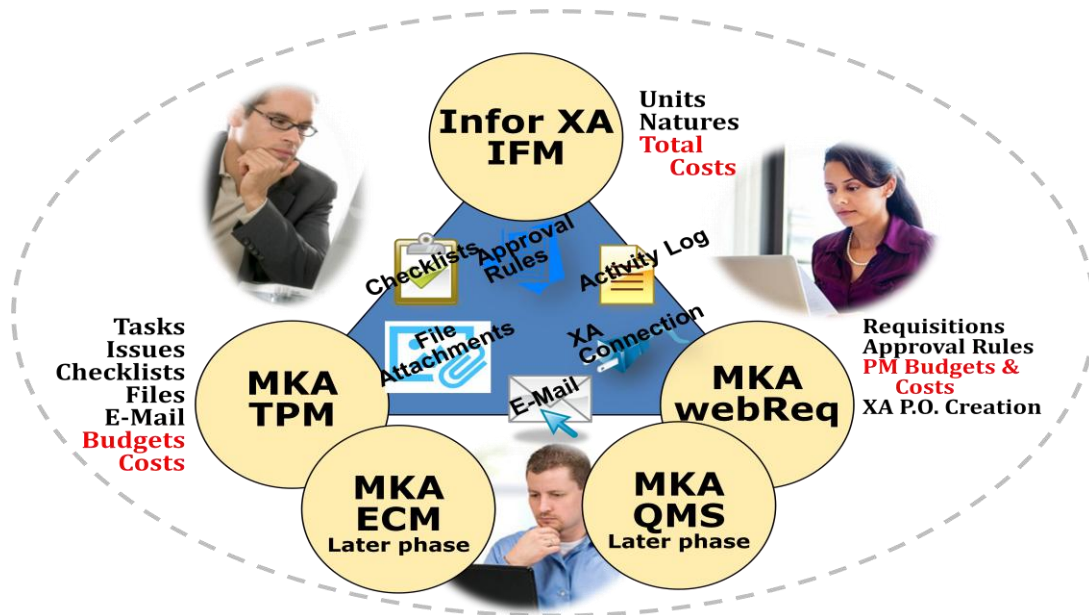
Summary of TPM

The **Total Project Management** System can be implemented as a single application, but use of the Web “Electronic Requisition Approval System” greatly enhances Total Project Management capabilities and effectiveness. It does this by providing:

- Managing proper approval of spend **before** it happens
- As part of the requisition process, spend is coded properly with unit/natures or charge numbers for accurate reporting
- Approvers have real time visibility to the same budget/spend as project managers during the approval process
- Projects can be *closed* to stop spending against them or *suspended* to prevent additional spending
- Additional security can be set to *Require Budget Review*. This stops all over budget spending against the project until the budget overage has been resolved

The Web-based e-Requisition System is not a requirement for TPM, though the e-Req System is integrated with TPM and provides a great deal of additional control of expenditures.

Likewise, the Engineering Change Management (ECM) System and the Quotation Management System (QMS) can be integrated with TPM.



B. Common Problems

There is a significant need and business case at most companies to improve and automate processes for **managing programs and projects**. In reviews of the MKA Total Project Management System, customers have talked about the following current problems.

CURRENT PROBLEMS WHEN MANAGING PROJECTS

- Lack of information flow
- Lack of Task assignments
- Limited visibility as to where a Project really stands in the process
- Too much manual effort
- Too many e-mails, spreadsheets, and meetings
- No automated system
- Lack of integration with XA (the ERP System)
- No real cost tracking or cost status compared to budget
- No “templates” for setting-up projects/programs
- Manual approvals
- Open Issues are not managed with the Project schedule
- Critical e-mails are in “in-box silos” and completely disconnected from the Project
- Responses from the Project team are not timely
- Resource commitments across multiple Projects are unknown

These issues stem from the lack of a good, integrated, formal system for creating, approving, and managing projects. Most companies create elaborate spreadsheets and manual processes to try and track programs and projects. Current processes revolve around a LOT of data, but take manual effort. There is no automated process to follow, there is no electronic approval process, and there is no easy way to get good visibility as to where a project stands. The process isn't very efficient and effective.

It's interesting to note that many companies also have issues or problems with the requisition process. These problems are *solved* with the Electronic (web) Requisition Approval System.





- Manual processes and no capital budget control for capital projects
- Inconsistent requisitioning by location
- Certain users (such as Project Managers) have responsibility to stay within budget, but they have no control until after the fact; i.e., there is limited VISIBILITY to expenditures (requisitions), so it is easy to exceed budgets without a PM's awareness
- a Req is not systematically associated with a project, so there is limited control and no visibility; again, there is lack of good control of project expenditures
- There is no automated APPROVAL process
- There are no automated requisitioning processes with “rules” that are followed and enforced by a system (such as rules by purchase types, by dollar amounts, etc.)
- no way to automatically create an XA Purchase Order from paper requisitions
- no automated way to have multiple items on a requisition (XA provides one item per req)
- expenditures can happen outside the “system”
- There is no visibility to the status of requisitions (where they are in the approval process)








C. INCREASED EFFICIENCIES: How the System Works

The Total Project Management System is different from most software applications.

The MKA systems utilize BUSINESS PROCESS AUTOMATION to get the right information to the right people at the right time. The system integrates people, data, documents, tasks, and systems. It also *automates* processes. The TPM approach allows for users to respond more quickly. Business Process Automation provides visibility to projects (and all aspects of the project) and provides a CONSISTENT and AUTOMATED process for programs/projects. It provides task management, workflows, notifications, and other capabilities.

You set up your process and workflows. The details of a project, task, or issue will flow through your process.

Task	
 [Initiator]	New Task
 [Assigned]	Perform Task
 [Approval]	Review & Approve
 [Complete]	Task Complete

Issue	
 [Initiator]	New Open Issue
 [ProgramMgr]	Review & Approve
 [Assigned]	Resolve the Issue
 [Responsible]	Review & Approve Resolution
 [Approval]	Review & Approve Resolution
 [Complete]	Issue Complete
 [Cancelled]	Issue Cancelled

The main goal of the Project Management system is to help you manage Programs and Projects more efficiently and effectively by streamlining and automating processes. The system helps companies manage projects, track costs to budget, control costs, shorten the time to complete Projects, manage the project to completion, and win more business.

Common “tools” as part of the application include:

- Workflows/rules
- Electronic “forms”
- File support
- Automated Approvals
- Triggers and Notifications
- Backup Support
- A web-based interface with remote access
- XA integration
- E-Mail Correspondence and Integration
- Performance Statistics
- Audit Trails
- Complete History

The System can provide important information about a project, such as:

- Names, dates, descriptions, requested items, codes, etc.
- Electronic communications and workflows for changes and tasks
- Checklists, notes and comments
- Attachments and/or links to graphic files, drawings, spreadsheets
- An Activity Log of who did what and when
- Notification and approval requirements and timestamps
- Current or historical data from items, bills/materials, or other data
- Complete history
- Time-to-process statistics
- Task Management
- Open Issues

As stated by one MKA customer, “If it’s in the system, it’s your job to get it done.”

That’s basically how the system works. Tasks go to the right users. The system gives users complete VISIBILITY to projects. Projects are easy to access and work with. Users know where changes, costs, or tasks are in the process.

Each user knows their tasks, and the information they need is right in front of them. Management does not need to “chase” people to find out the status of this information. Users don’t need to “go look for” information. Management doesn’t need to wonder what needs to be done—this information should be in the system and visible to anyone with the proper authority.

EXAMPLES—How the System Works

It's easy to set up a project, and a project can be copied from a "template" (tasks and their dependencies can also be imported from MS Project).

The screenshot shows a web-based form for creating a project. The form is divided into several sections:

- Description:** Includes fields for Project Number (with a "New Project" button and an "Auto Number" checkbox), Project Name, Project Description, XA IFM Unit, Project Type, Project Status, and Task Input Method (with options: Import from MS Project, Import from MS Excel, Type in Manually, Copy from Project).
- Project Image:** Includes an "Image File" field with a "Browse" button and "No file selected" text.
- Key Attributes:** Includes a "Load Template" dropdown and a "Save As..." button.
- Key Milestones:** Includes a "Load Template" dropdown and a "Save As..." button.
- Cost Categories:** Includes a table with columns: Row, Item Number, Nature, Description, Budget.
- XA Assemblies:** Includes a table with columns: Row, Item Number, Description.

Yellow callout boxes with arrows point to the following elements:

- Project Number (key):** Points to the Project Number field.
- XA Unit:** Points to the XA IFM Unit field.
- Load Fields from Templates:** Points to the Load Template dropdown in the Key Attributes section.
- Key Project Dates:** Points to the Load Template dropdown in the Key Milestones section.
- Cost Category Items from RFA's:** Points to the first row of the Cost Categories table.

There are many ways to see a Project, such as By Customer, By Job Status, Type, Number, Project Manager, and so on.

The screenshot shows the 'Express Project Management' interface. At the top, there's a navigation bar with 'Jobs' highlighted. Below it, a 'Filter' dropdown is set to 'By Number'. A table lists jobs with columns for Status, Customer, Program, Job Type, and Part Number. The table contains 12 entries, including jobs like 'Sample Job', 'LT4 Corvette Cover', and '572 12:1 Deluxe'. At the bottom, it shows 'TOTAL JOBS: 12' and navigation links for FAQs, Technical Support, Security, and Our Company Site.

And there are many ways to see Tasks:

- All Tasks
- My Tasks
- Critical Path
- Customer
- Overdue
- Risks
- Obsolete

A Program Manager can easily drill-down into tasks and see where tasks are at, how much time tasks are taking, and if tasks are on-time, at-risk, or late.

N12859 - Electromac GM - GAMMA
 Last Sync with MS Project: Thursday, September 19, 2013 6:02 AM
 Project Manager: Steve

Filters: View: Default Show: All Tasks Assigned To: All

Stat	Num	CP	Name	Cust	Pred	Responsible	Duration	Start	Finish	% Cmp	Risk	Notes
	1		N12859-Die Complete?				145.1 days	Sep 11, 2013	Apr 1, 2014	3%		
	2		Kick off				1.4 days	Sep 11, 2013	Sep 12, 2013	100%		
✓	3		Receive PO			Larry	1.4 days	Sep 11, 2013	Sep 12, 2013	100%	0%	
✓	4		Receive data			Larry	1.4 days	Sep 11, 2013	Sep 12, 2013	100%	0%	
✓	5		Receive GD&T			Larry	1.4 days	Sep 11, 2013	Sep 12, 2013	100%	0%	
✓	6		Start date			Larry	1.4 days	Sep 11, 2013	Sep 12, 2013	100%	0%	
	7		Simulation-Process				15.0 days	Sep 12, 2013	Oct 3, 2013	0%		
	8		Flow chart-Simulation		6	Brian	12.0 days	Sep 12, 2013	Sep 30, 2013	0%		
	9		Review process and simulation		8	Brian	1.0 days	Sep 30, 2013	Oct 1, 2013	0%		
	10		Complete flow chart and simulation		9	Brian	2.0 days	Oct 1, 2013	Oct 3, 2013	0%		
	11		Design* S110)				37.0 days	Oct 3, 2013	Nov 25, 2013	0%		
	12		Preliminary designs		10	Larry	20.0 days	Oct 3, 2013	Oct 31, 2013	0%		
	13		Design review-Internal and external		12	Larry	3.0 days	Oct 31, 2013	Nov 5, 2013	0%		
	14		Release for pattern		13	Larry	3.0 days	Nov 5, 2013	Nov 8, 2013	0%		
	15		Complete designs		14	Larry	5.0 days	Nov 8, 2013	Nov 15, 2013	0%		
	16		Final review		15	Larry	2.0 days	Nov 15, 2013	Nov 19, 2013	0%		

And integration with XA is critical. Project Management shows users information from XA like:

Legend

- Parts are on hand
- Parts are on order
- No Parts Available or Ordered

Program Managers can quickly see the status of a program and where they stand on budgets and costs.

Program	Type	Class/Item	Description	Status	Budget	Vend Inv	Open POs	Open Reqs	Total Cost	Variance	
▼ CHRYSLER FIAT 500 - Chrysler Fiat 500						14,108,287	494,869	12,882,086	158,956	13,535,911	572,376
▼ Assembly						6,026,200	0	5,216,898	0	5,216,898	809,302
▼ Capital						5,073,320	0	4,291,000	0	4,291,000	782,320
		AS091	68070644/5AA Capital	●	270,000	0	141,534	0	141,534	128,466	
		AS093	68071344/5AA Capital	●	60,000	0	107,234	0	107,234	(47,234)	
		AS095	68078788/9AA Capital	●	4,743,320	0	3,985,232	0	3,985,232	758,088	
		AS135	68084084/5AA ASM Capital (Reference ECR F500-030 / ECO 030)	●		0	57,000	0	57,000	(57,000)	
▼ Reimbursable						952,880	0	925,898	0	925,898	26,982
		AS092	68070644/5AA ASM Tooling	●	206,069	0	291,642	0	291,642	(85,573)	
		AS094	68071344/5AA ASM Tooling	●	15,000	0	39,000	0	39,000	(24,000)	
		AS096	68078788/9AA ASM Tooling	●	282,011	0	401,506	0	401,506	(119,495)	
		AS113	68070963AA Reinf RR Closure Inner	●		0	0	0	0	0	
		AS127	68084084/5AA ASM Tooling (Reference ECR F500-030 / ECO-030)	●	218,900	0	93,300	0	93,300	125,600	
		AS128	68084326/7AA ASM Tooling (Reference ECR F500-030 / ECO-044)	●	230,900	0	100,450	0	100,450	130,450	
▶ ECR						301,908	0	428,553	4,100	432,653	(130,745)
▼ Project						1,030,270	2,397	757,614	0	760,011	270,259
▼ Capital						1,030,270	2,397	757,614	0	760,011	270,259
		PR026	FIAT500 WIP Packaging	○	364,120	2,397	345,634	0	348,031	16,089	
		PR036	Agua Roll Form Equipment	○	412,150	0	411,980	0	411,980	170	
		PR037	Puebla Transfer Clamps	●	104,000	0	0	0	0	104,000	
		PR038	Agascalientes Facilities	●	75,000	0	0	0	0	75,000	
		PR039	Toluca Facilities	●	75,000	0	0	0	0	75,000	
▼ Tooling						6,749,909	492,472	6,479,021	154,856	7,126,349	(376,440)
▼ Reimbursable						6,749,909	492,472	6,479,021	154,856	7,126,349	(376,440)

Checklists and Phase Gates can be used.

051A, Toyota
 PROJECT CONSOLE
 Project Manager: Robert Pozsgai

Show: APQP Gates Filter: Summary

Agg	Department	Assigned To	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5	Gate 6	Gate 7
🔴	Purchasing	Robert Pozsgai	🔴	🔴	🔴	🔴	🟡	🟡	🟡
🟡	Mfg Engineering	Bryon Higgins	🟡	🟡	🟡	🟡	🟡	🟡	🟡
🟡	Quality	Ken Gove	🟡	🟡	🟡	🟡	🟡	🟡	🟡
🟡	Manufacturing	Bryon Higgins	🟡	🟡	🟡	🟡	🟡	🟡	🟡
🟡	Product Dev	Greg Vreeland	🔴	🟡	🔴	🔴	🟡	🟡	🟡

Program Management Checklist
 2279, Ford
 Responsible: Program Manager

Filter: All Gates

Stat	Seq	APQP Verification	Answer	Due Date	Complete	Comments	Documentation
🟢	1.01	Is it in Production now?	Y N N/A	10/18/13			
🔴	1.02	Is this a Re-Source Job ...	Y N N/A				
🔴	1.03	Is this a High Volume job now? (>=50K per yr)	Y N N/A	7/16/13	7/25/13		4GW9031-32-17-0 bf
🟡	1.04	Is High Volume coming to an end?	Y N N/A				
🟡	1.05	Do the volumes fluctuate from year to year?	Y N N/A				
🟡	1.06	Is it a seasonal volume program?	Y N N/A				
🟡	1.07	Do we consider volume projection on target for program?	Y N N/A				
🟡	1.08	Are volumes too high for our current facility capabilities?	Y N N/A				

And there are quick views of resource status:

0G137K - GM Chevrolet Performance Tremec Trans Package
 - Tremec Trans package
 Last Sync with MS Project: Monday, October 13, 2014 4:16 AM

Show: Resources Filter: Current Workload

Name	Rating *	Performance
Julie Lenart	58	Complete On Schedule Behind Schedule Early Behind Schedule Late Future Assignment
Tammy Bolden	23	Complete On Schedule Behind Schedule Early Behind Schedule Late Future Assignment
Tom Zettel	11	Complete On Schedule Behind Schedule Early Behind Schedule Late Future Assignment

* Rating = Number of Task days currently assigned

The “system” is an integrated, collaborative solution. The “process management” approach creates an automated, usable, integrated system.