



How to use “Project Management & Budget Control” platform?

“Project Management & Budget Control” provides a comprehensive and detailed overview of all projects and sub-projects, including information on activities, their assignments, and progress. It also keeps track of billing information, allowing for easy issuing and collection of payments.

One of the most valuable aspects of this app is its ability to monitor the overall performance of the project, comparing the budget to actual hours & costs and shows cash flow

The screenshot displays several key components of the platform:

- ETC/Hours Table:** A table with columns for ETC/Hours, VarHours, BudgetCost, ActCost, ETC/Act, and VarCost. It shows a total budget cost of \$13,300.00 and an actual cost of \$17,265.00, resulting in a variance of -\$2,814.70.
- Activity List:** A table listing activities with columns for ActivityCode, Hierarchy, ActivityName, Type, choose invoice for, and ActivityStatus. Activities include 'M32-Design database & interface', 'Design-Flow-structure', 'Interface-development', and 'M32-Implementation'.
- Employee List:** A table listing employees with columns for EmpCode, Name, Role, and Dep. Employees include Abdelrahman Medhat Zaky, Ahmed Farag, Ahmed Zaid, Ahmad Tapan, Ibrahim Hegazy, Mohamed Aly, Medhat Zaky, Hebahm Anwar, Nagaa Rushdy, Kamil Hanafy, Mohamed Elshaham, and Omar Medhat.
- Chart of Budget vs Actual Hrs:** A stacked bar chart comparing BudgetHours (green), ActualHours (red), ETC/Hours (orange), and VarHours (blue) across various activity categories.
- Overtime Trend:** A bar chart showing the trend of Regular Hours (red) and Overtime Hours (green) over time.
- Approval Table:** A table with columns for ApprovalStatus, TotHours, RegHours, OTHours, FR-RegHours, and FR. It shows approval status for various activities.

The document is explaining how the platform works in a simplified way:

- Symbols & Colors and their Meanings
- General terms
- How the calculation work – it is bottom up methodology?
- Platform brief description
- Contradictious Activity Data Table
- Integration with MS-Project



Symbols & Colors and their Meanings

	Project	Sub-Project	Activity
Color (Green)	Active	Active	Active
Color (Red with Strikethrough)	Closed	Closed	Closed
Color (Blue)	Hold	Hold	Hold
Presented symbol			invoice
Missing subordinated	M80 Project without sub-Project	M55,S001 Sub-Project without activity	
Exporting and Importing			Import from CSV Export to CSV
Check Invoices Amount	Project contract amount as per its sub-projects Is not matching with the amount of the invoices as per activity records		
Need Redistribution		Budget hours is not matched with distributed budget hours Applicable for cost as well	

General terms

TMSH	TMSH is always refer to the time-sheet
Σ	Means sum of all subordinate values
ETC	Estimate To Complete
Var hours	Variance hours Budget hours – (Actual hours + ETC hours)
Var Cost	Variance cost Budget cost – (Actual cost + ETC cost)
% completion	It is an entry at activity level for progress purpose 100% at activity level, means the actual end date and the status of the activity should be reviewed carefully by the user for closing purpose. <ul style="list-style-type: none"> Is calculated at subproject and project level according to the following formula: actual cost / budget cost



How to use “Project Management & Budget Control” platform?

	The formula might be customized from organization to another according to its working way
EstStartDate	Estimated Start Date
EstEndDate	Estimated End Date
ActualStartDate	Actual start Date of activity / issued date of the invoice
ActEndDate	Actual End Date If exists, It should close the activity
PayPeriodDays	As per contract (subproject level), it represents no of days the invoice will be collected (paid) after the issuing

How the calculation work – it is bottom up methodology?

	Hours (bottom up)			
	Bdg	Dist Bdg (labor)	ETC	Actual
4-Project	$\sum E$	-	$\sum \sum G$	$\sum \sum \sum A$
3-Sub Project	Entry E *1	$\sum C$ *1	$\sum G$	$\sum \sum A$
2-Activity		Entry C	$G = C (1-\% \text{completion})$ *2	$\sum A$
1-TMSH				Entry A

***1** means, apply comparison for alerting 5% (+/-)

***2** means, the ETC (by default) is based on budget hours and % completion

This formula might be changed according to the requirement as mentioned in the next part

ETC, there are three ways of calculation at Activity Level:

First	Distributed budget x (1 - % completion)	Realistic
Second	Distributed budget – Actual	Fixed budget principal
Third	Actual x (1 - % completion) / % completion	Proportional to Actual

	Financial (bottom up)							
	Bdg Cost	Bdg DLC	Bdg DNLC	Dist Bdg (labor)	ETC	Actual	Actual DLC	Actual DNLC
4-Project	$\sum F + P$			-	$\sum \sum H$	$\sum \sum R$		
3-Sub Project	$F + \sum P$	Entry F *3	$\sum P$	$\sum D$ *3	$\sum H$	$\sum R$		
2-Activity				$D = C \times \text{rate}$	$H = G \times \text{rate}$	$R = \sum B + \sum Q$	$\sum B$	$\sum Q$
1-TMSH							$B = A \times \text{rate}$	
1-Expenses (ACT)								Entry Q
1-Expensed (Bdg)			Entry P					






How to use “Project Management & Budget Control” platform?

“*3” means , apply comparison for alerting 5% (+/-)

	Billing (bottom up)		
	Contract amount	Invoice amount	Invoice payment
4-Project	$\sum M$	$\sum \sum N$	$\sum \sum \sum L$
3-Sub Project	Entry M	$\sum N$	$\sum \sum L$
2-Activity / invoice		Entry N	$\sum L$
1-Invoice Payment (collection)			Entry L





	Dates (bottom up)					
	Start Date	End Date	Est Start Date	Est End Date	Act Start Date	Act End Date
3-Project	Smallest	Biggest	-	-	-	-
2-Sub Project	Smallest	Biggest	-	-	-	-
1-Activity / invoice	Smallest S1/E1	Biggest S2 / E2	Entry S1	Entry S2	Entry E1	Entry E2

Platform brief description

Page Name	Description
 My registered TMSH records	<p>This page displays (inquiry) all Posted and Unposted TMSH records associated with the authenticated user. The interface facilitates the entry of new records and the modification of existing 'Unposted' drafts via the OASN Solutions web portal.</p> <p>Total Hours (\$TotHours\$): The aggregate sum of all Regular Hours (\$RegHours\$) and Overtime Hours (\$OHours\$)."</p>
 TMSH calendar	<p>Inquiry Dashboard: This interface displays the daily volume of TMSH entries recorded in the system (at calendar format). To ensure data integrity, entries are categorized by status using color-coded indicators: Red denotes a finalized or 'Posted' record, while Orange indicates an 'Unposted' draft awaiting further action</p>
 Departments	<p>The platform displays the departmental organizational hierarchy as defined within the HR platform. This interface enables the configuration of target utilization rates, facilitating a direct variance analysis against actual utilization. The system generates a comparative utilization trend chart (Actual vs. Target) and maintains a historical repository for all captured performance data.</p>



How to use “Project Management & Budget Control” platform?

 Resources/Roles Entry	<p>"Resource Inquiry Interface: This page facilitates the review of Employee and Role records synchronized from the HR platform.</p> <p>Common Parameters (Employee & Role):</p> <ul style="list-style-type: none"> • Labor Cost Calculation: The Regular Hourly Rate (\$RegHourRate\$) and Overtime Hourly Rate (\$OTHourRate\$) are utilized to compute Actual Direct Labor Costs based on submitted Time Sheets (TMSH). <p>Employee Record Specifications:</p> <ul style="list-style-type: none"> • Resource Classification: Must be set to Employee. • Utilization Threshold: The Working Week Hours (\$WorkingWeekHour\$) defines the mandatory hourly quota required to validate and authorize the posting of a weekly TMSH. <p>Role Record Specifications:</p> <ul style="list-style-type: none"> • Resource Classification: Set to Phantom. • Engagement Type: Defined as Full Time. • Budgetary Integrity: Used primarily for cost estimation. To maintain the accuracy of activity and project budgets, it is strictly recommended not to modify existing Phantom rates. Instead, users should create a new Role record and deactivate the obsolete version based on the relevant fiscal year.
 TMSH Dates / status	<p>TMSH Configuration & Compliance Management: This function facilitates the definition of TMSH cycle dates (e.g., Thursday cut-offs) and governs record entry by monitoring missing submissions from active employees. The interface provides administrative controls to enable or disable TMSH submissions and the final posting process across the organization.</p>
 People vs TMSH	<p>Inquiry page to monitor the Posted TMSH records per employee</p>
 Client & Portfolio	<p>Client Portfolio & Project Analytics: This inquiry interface provides a comprehensive overview of the Client-Project hierarchy. By mapping each client to their associated engagements, the page incorporates critical performance metrics designed to facilitate real-time progress monitoring and executive oversight.</p>
 Project overall performance (ETC)	<p>It is a Project Executive Dashboard features a suite of advanced data visualizations designed to streamline decision-making and project oversight:</p> <ul style="list-style-type: none"> • Project Valuation vs. Estimate to Complete (ETC): A comparative analysis of current project standing against remaining hours requirements. • Activity vs. Assignment Mapping: A visual audit of project tasks against designated resource allocations. • Resource Workload (Phantom ETC): High-level visibility into the total remaining effort assigned to phantom roles.















How to use “Project Management & Budget Control” platform?

	<ul style="list-style-type: none"> • Hiring Intelligence (Daily Phantom Workload): Granular daily ETC tracking per phantom role to support data-driven recruitment and resource acquisition decisions. • Project & Sub-Project Lifecycle Status: Real-time tracking of progress across the entire project hierarchy."
TMSH overall performance	It is a comprehensive Time-Sheet loading inquiry at department level to visualize the loading vs productive & OH projects.
Contradictious activity data	Inquiry to list the contradictious activity data, regarding activity dates validation, % completion and status closed & active For more details, See “ Contradictious Activity Data “ table
Project Dashboard	The Project Executive Inquiry Dashboard features three distinct analytical perspectives to provide a 360-degree view of project performance: <ul style="list-style-type: none"> • Billing & Profitability Analysis: Evaluates revenue recognition against profit margins (Company vs PM). • Financial Performance Metrics: Tracks cash flow, budgetary adherence, and overall financial health. • Labor & Hourly Analytics: Monitors resource utilization and time-tracking efficiency.
Projects entry/update	Project Status & Management Portal: Designed to categorize projects by their current operational state— Active, Hold, or Closed . The dashboard facilitates full CRUD operations (Create and Edit) for active and on-hold projects, ensuring real-time data accuracy across the portfolio.
Projects All Data	Project Inquiry & Administration Dashboard (tabular format): This interface facilitates the creation of new records and the modification of existing entries. Required mandatory fields include the Project Code, Project Name, and Project Status . Additionally, the module allows for the retrieval of granular data captured from the associated sub-project details.
SubProject Dashboard	The SubProject Executive Inquiry Dashboard features four distinct analytical perspectives to provide a 360-degree view of project performance: <ul style="list-style-type: none"> • Billing & Profitability Analysis: Evaluates revenue recognition against profit margins (Company vs PM). • Financial Performance Metrics: Tracks cash flow, budgetary adherence, and overall financial health. • Labor & Hourly Analytics: Monitors resource utilization and time-tracking efficiency. • SPI and CPI chart
Sub Projects	SubProject Status & Management Portal: Designed to categorize Subprojects by their current operational state— Active, Hold, or Closed . The dashboard facilitates full CRUD operations (Create and Edit) for active and on-hold Subprojects, ensuring real-time data accuracy across the portfolio.














How to use “Project Management & Budget Control” platform?

 SubProjects vs Contract Amounts	Contractual Financial Configuration: This interface facilitates the definition of the Initial Contract Sum and the management of all subsequent Change Orders and associated financial variations.												
 DNL SubProject Budget	Direct Non-Labor Expense Configuration: This interface facilitates the entry and modification of all Direct Non-Labor (DNL) budget expenditures (consultation, accommodation, transportation, ...etc).												
 SubProject Budget Comparison	Budget Allocation & Variance Analytics: This inquiry interface highlights the variance between the total budgeted hours and the hours distributed at the activity level . Consequently, project costs are derived at the activity level based on the singular assigned role designated for each task.												
 Activity Dashboard	The Activity Executive Inquiry Dashboard features two distinct analytical perspectives to provide weekly performance <ul style="list-style-type: none"> • Total cost • Total hours 												
 Activities	Inquiry and entry/update page of the activity data and its progress												
 Activity actual expenses non-labor (DNL)	Inquiry/entry of the actual expenses of Direct Non-Labor (DNL) at activity level												
 DNL Budget vs Actual (Dashboard)	Direct Non-Labor (DNL) Expense Variance Analysis: A comprehensive comparison of budgeted allocations against actual expenditures .												
 Activities vs SPI & CPI	Scheduling performance indicator (SPI) and Cost performance indicator (CPI) at activity level : <table border="1" data-bbox="634 1066 1511 1215"> <tr> <td>CPI>1</td> <td>Performing well budget-wise</td> <td>SPI>1</td> <td>Ahead of schedule</td> </tr> <tr> <td>CPI=1</td> <td>Performing on budget</td> <td>SPI=1</td> <td>On schedule</td> </tr> <tr> <td>CPI<1</td> <td>Over budget</td> <td>SPI<1</td> <td>Behind schedule</td> </tr> </table>	CPI>1	Performing well budget-wise	SPI>1	Ahead of schedule	CPI=1	Performing on budget	SPI=1	On schedule	CPI<1	Over budget	SPI<1	Behind schedule
CPI>1	Performing well budget-wise	SPI>1	Ahead of schedule										
CPI=1	Performing on budget	SPI=1	On schedule										
CPI<1	Over budget	SPI<1	Behind schedule										
 Project Vs SubProject & Activities	Unified Project Analytics Dashboard: This comprehensive interface provides a consolidated view of the project hierarchy—including sub-projects and activities—integrated with real-time Estimate to Complete (ETC) and Actual Non-Labor Cost (NLC) metrics within a single container.												
 Man-Loading	Resource Workload Analytics: This interface provides a comprehensive Man-Loading Inquiry , displaying both Regular and Overtime (OT) hours across Production and Overhead (OH) projects . The module supports multi-dimensional filtering, allowing users to query data by specific Project or Departmental parameters												
 Entry of ETC (manning) for activities (cost-plus)	Entry of ETC manning per each incoming month for cost-plus activities												
 ETC (manning) per activity (cost-plus)	Inquiry of ETC manning per each incoming month for cost-plus activities at activity level												



How to use “Project Management & Budget Control” platform?

 ETC (manning) per subproject with (cost-...	Inquiry of ETC manning per each incoming month for cost-plus activities at subproject level
 Activities (cost-plus) for updating their paramete...	Compare ETC hours as per platform formula with the inserted ETC manning records to take the necessary actions: <ul style="list-style-type: none"> ➤ either % completion correction ➤ Or update the distributed budget hours and the budget hours accordingly
 Billing Enquiry	Show the status of the invoice and its collection overdueDays : over due no of days, where the collection date is already passed according to sub project setting (PayPeriodDays) ExpectedCollectionDate : is a calculated date according to the invoice issue date or EstStartDate and the PayPeriodDays
 Invoice Collection	Inquiry page and entry for the collection action
 Forecast Cash-In Dashboard	It is a dashboard divided into two parts: <ul style="list-style-type: none"> • Expected collection in the future • Aging for the delayed invoice payment (aging clusters will be customized upon the organization requirement)
 TMSH records of the Web Tool	MSH Modification Status Inquiry: This interface displays the Editing Authorization Status for weekly time-sheets based on the following logic: <ul style="list-style-type: none"> • Yes (Open): The user maintains full administrative rights to modify the Time-Sheet for the active period. • No (Restricted): The submission window is closed; the user is currently restricted from performing edits. • Done (Finalized): The record has been successfully Posted, and further modifications are strictly prohibited.
 TMSH to be reviewed by Manager	Managerial Oversight & Approval Workflow: This function facilitates the review and authorization of TMSH records by employee managers. The interface includes a Rejection Protocol , allowing managers to return records to the user for necessary corrections and re-submission.
 Posted TMSH loading (my team)	Inquiry of the Time-Sheet loading of my team (based on employees of assigned manager)
 TMSH ready for Posting by Admin	Admin function for TMSH approval and posting
 About	Shows the Platform name with its icon , and the mentioned release
 Feedback	Allow the user to send a written feedback for OASN-solutions.com

Contradictious Activity Data Table



How to use “Project Management & Budget Control” platform?

The following table is illustrating the eight main conditions that show the activity date in the “Contradictious Activity Data” list

#	Condition 1		Condition 2
1	ActEndDate is empty	And	ActivityPct is 100%
2	ActStartDate is empty	And	ActivityPct > 0%
3	ActEndDate is empty	And	ActivityStatus is Closed"
4	ActStartDate is empty	And	ActivityStatus is Closed"
5	ActEndDate has a date	And	ActivityStatus is "Active"
6	EstEndDate is less than today (has gone by)	And	ActEndDate is empty
7	ActStartDate is future date		
8	ActEndDate is future date		

Integration with MS-Project

- **Exporting from Ms-Project**
 - Use Save project as Excel, Microsoft Excel Workbook Then Press “Save as”
 - In Export Wizard , Select Data , New Map (mark Tasks, Resources and Export including headers
 - Set destination name as per required, and set “All Task” in export filter

From: Microsoft Project Field	To: Excel Field	Data Type
Text1	ActivityID	Text
Text2	SubProjectID	Text
ID	ActivityCode	Text
Name	ActivityName	Text
Active	Active	Text
Early Start	EstStartDate	Text
Early Finish	EstEndDate	Text
% Complete	ActivityPct	Text
Resource Names	EmpEmail	Text



How to use “Project Management & Budget Control” platform?

- Save the MAP “Export-to-Excel-import-to-PMPlatform” to be used later
- Then Export the your required data using the saved Map

- **Importing to “PM & Budget Control Platform”**
 - Open the exported file from MsProject
 - Type the ActivityID , such as XYZ001 , then XYZ002 , ..etc
 - Type the SubProjectID value in all row using the platform for example

```
SubProjectID  
00da0db4
```

- Make sure to save the file in CSV format then Import the file .