How to use "Project Management & Budget Control" platform?

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
∑	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. Is calculated at subproject and project level according to the following formula: actual cost / budget cost

	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	$G = C \ (1-\%completion)$ *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 + P	Entry F *3	Entry P	$\sum D$ *3	$\sum H$	$\sum R$		
2-Activity				D= C x rate	H=G x rate	R = $\sum B + \sum Q$	$\sum B$	$\sum Q$
1-TMSH							B=A x rate	
1-Expneses								Entry Q

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

	Billing (bottom up)		
	Contract amount	Invoice amount	Invoice payment
4-Project	∑ M	∑ ∑ N	∑ ∑ ∑ L
3-Sub Project	Entry M	∑ N	∑ ∑ L
2-Activity (invoice)		Entry N	∑ 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 TMSH records	To show the unposted / posted records of the TMSH for the login user. Also, allow to edit the unposted TMSH or insert a new TMSH record total hours (TotHours) = sum of all regular hours (RegHours) and sum of all overtime hours(OTHours)
📅 TMSH calendar	Inquiry page, showing how many TMSH lines are already inserted per each day Red color means posted TMSH record Orange color means unposted TMSH record
🔢 Departments	List the inserted department and its hierarchy level. Also allows to insert new department
👥 Resources/Roles Entry	To insert either employee record or role record For both Employee / Role - Regular Hour Rate (RegHourRate) and Overtime Hour Rate (OTHourRate) are used to calculated the actual cost according to the written TMSH Employee record: - Resource type should be Employee

		• Working Week Hour (WorkingWeekHour) is the no of hours that should be registered in the weekly TMSH in order to allow posting the TMSH Role record • Resource type should be Phantom • Contract type should be Full Time • Used for Budgeting the cost, not recommended to change the rate of role (phantom) to not affecting the budgetary amount of the activities and the project accordingly. But, create a new role line and disable the old according to its year
📅	TMSH Dates / status	To setup of the TMSH Thursday dates (control the entry of TMSH records), and observes the missing TMSH of the active employees
👤	People vs TMSH	Inquiry page to monitor the TMSH records per employee
📈	Project overall performance	Project dashboard with charts for showing Project vs Variance cost , ETC per Phantom (role) assignment , ETC Day rate (uniform) and activities status (active, closed & hold)
📈	TMSH overall performance	TMSH dashboard with charts for showing regular hour vs overtime hour per TMSH and total hours per each week
❌	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	Inquiry chart , to show the project % completion vs its sub-projects records Three charts : billing , financial and hour
☰	Projects entry/update	Dashboard to distinguish between the different project status ; active, hold and closed project Allows to insert new project or edit active/hold project
☰	Projects All Data	Allows to insert new record The required data, project code, name and status Also, allows to inquiry the other captured data from subproject detailed
🕒	SubProject Dashboard	Inquiry chart , to show the subproject % completion vs its activities records Three charts : billing , financial and hour
📦	Sub Projects	Inquiry page, Allows to insert new subproject or update Active/hold subproject data
≠	SubProject Budget Comparison	Inquiry page to highlight the different between the given budget hours compared with the distributed budget at activities level Accordingly, the cost will be calculated at activity level according to the assigned role (one only) per each activity
🕒	Activity Dashboard	Inquiry chart, to show the activity % completion vs its TMSH records Two charts : financial and hour
📄	Activities	Inquiry and entry/update page of the activity data + progress
☑️	Activity actual expenses non-labor	Inquiry/entry of the actual expenses at activity level

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Activities vs SPI & CPI	Scheduling performance indicator (SPI) and Cost performance indicator (CPI) at activity level : | 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 |
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
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 formla with the inserted ETC manning records to take the necessary actions: ➢ 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: • Expected collection in the future • Aging for the delayed invoice payment (aging clusters will be customized upon the organization requirement)
TMSH Approval	Admin function for TMSH approval and posting
Re-calculate the TMSH cost of approved records	Admin function for re-allocating the cost according to the posted TMSH
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

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

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

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

  SubProjectID
  00da0db4

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