STC Marketing Work Management Solution (SMWMS)

User Manual

Version 1.0

06/03/2025

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1. Introduction

This User Manual (UM) provides the information necessary for STC marketing employees to effectively use the STC Marketing Work Management Solution (SMWMS).

1.1 Overview

The system consists of a website to be hosted on STC's domain, and contains several core features:

- **Data Management Interface:** Users can easily create, edit, and remove data entries concerning project and task information. Project information can also be downloaded to your personal device as a tabular CSV file.
- **Project Summarization:** Based on the entered data, the application generates metrics and visualizations to aid project planning and monitoring. Metrics include the project's total budget, total loss (budget - actual cost), and the number of completed tasks. Visualizations include a Critical Path Method (CPM) graph, a Gantt Chart timeline, and an Earned Value Management (EVM) plot.
- **Internationalization:** English and Simplified Chinese are currently supported, though the infrastructure exists for language options to be edited on an as-needed basis (see technical documentation).

These features will be discussed more in more detail, along with many smaller Quality-of-Life features. Please refer to the technical document for technical diagrams and details.

2. Getting Started

2.1 User Access Considerations

As of this version, there are no separate user groups. All users require an email and password, and all users have the same-level permissions with regards to the application's functionality.

2.2 User Assumptions

Users are expected to know how to use a mouse and keyboard. The user also knows how to hover a mouse over something, in case they are not sure what it does.

Users are also expected to know what a project and what a task is, as well as project and task statuses: TODO, Work in Progress (WiP), On-Hold, Cancelled, and Done.

2.3 Accessing the System

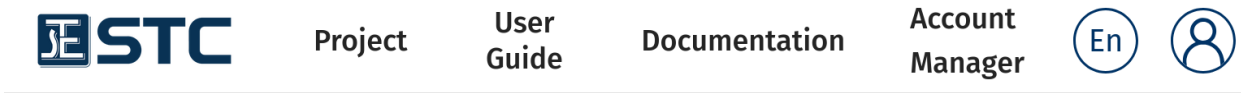
You can access this system via the browser of your choice for your personal device. For optimal experience, use a personal computer or desktop. You can also use mobile devices (e.g., phone, tablet), but the application is not designed for mobile use.

To access the system…

1. Go to [URL]. If you are not signed in, this should take you to the login page.
2. Enter your username and password.
3. Press **Enter** or click on *Sign In*.

If you are not registered or forget your login details, contact the admin (see Support).

2.4 System Organization & Navigation



Navigation of the system is done with the **Navigation Bar** (see above).

- Clicking on the ***STC logo*** or on ***Project*** will take you to the **Project Dashboard**.

- Clicking on ***User Manual*** or on ***Documentation*** will take you to a PDF viewer.
- If you are an admin, clicking on ***Account Manager*** will take you to a page where you can register accounts for your team members.
- On the right hand side of the top header, there is a **Language Toggle** to switch between language options and a **User Menu** to access additional options, like logging out of the application.

3. Using the System

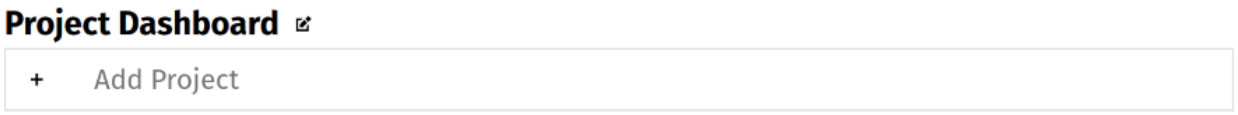
The following sub-sections provide detailed, step-by-step instructions on how to use the various functions or features of the SMWMS.

3.1 Project Dashboard

The **Project Dashboard** allows users to create, edit, delete, and archive projects.

3.1.1 Project Rows

3.1.1.1 Adding Project Rows



A **Project Row** is a data entry for a project. To create one…

1. Find a row that says *Add project*.
2. Click on the row.
3. Type the name (you should see letters appearing).
4. Finish creating the Project Row by…
    a. Pressing **Enter**.
    b. Clicking on the **+** sign.

There should now be a new entry in the list of Project Rows.

3.1.1.2 Metrics

ID	Name	Status	Tasks	Start Date	Due Date ▲	PiC	Budget	Actual $	Diff. (Loss)	
P1	Awards Ceremony	Todo	3 3 2 1			Alexander	800	362.5	437.5	Download
P2	Create Flyer	Todo	1 1 0 1			Alexander	145	155	(10)	Download
P4	Awards Ceremony 2024	Todo	9 4 3 5			Alexander	5,037	2,865	2,172	Download

Each Project Row has values you can change (e.g., *Status*), and summary numbers that will automatically change based on the Task data entered (e.g., *Budget*). For more details about summary numbers, see **Task List**. All columns can be sorted in ascending or descending order. For example, the above project list is sorted by ascending *Due Date*. All project-related data can be downloaded via the **Download Button**.

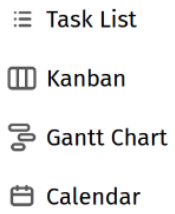
3.1.1.3 Deleting and Archiving Project Rows

To delete/archive a project…

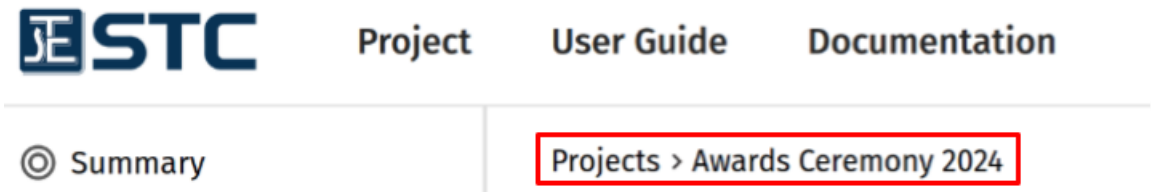
1. Click on the **Edit Button** ( ).
2. Select the projects you want to delete by clicking on the check boxes.
3. Click on the **Trash Button** ( ) / **Archive Button** ( ).

Be careful! A delete cannot be undone.

3.2 Project Page



Here, information for a specified project is shown. On the left is a **Project Sidebar**, where each **Project Tab** contains a separate feature. Project Tabs include Summary, Task List, Kanban, Gantt Chart, Calendar, CPM, and EVM.



To navigate between projects, **breadcrumbs** (see red box above) can be used.

3.2.1 Project Summary

This page displays basic information about the project. To change the project's name, click on the name (below the breadcrumbs).

3.2.2 Task List

Sub Projects

+ Add Project

Tasks

+ Add Task

ID	Name	Status	Depends On	Start Date	Due Date	PiC	Budget	Actual $	Est. Days	Actual Start	Actual End
T1	Kick-off Meeting	Done	+	15-01-25	15-01-25	-	80	75	1	15-01-25	15-01-25
T2	Confirm Ceremony Date	Done	+	16-01-25	20-01-25	-	50	50	5	16-01-25	19-01-25
T4	Generate Honorable Guest List	Done	+	21-01-25	25-01-25	-	75	80	5	22-01-25	24-01-25
T3	Select and Confirm Venue	Done	+	21-01-25	31-01-25	-	500	520	11	21-01-25	03-02-25
T5	Invite Honorable Guests	Done	4	26-01-25	04-02-25	-	120	115	10	26-01-25	05-02-25
T6	Define Ceremony Theme	WiP	4	05-02-25	10-02-25	-	250	180	6	05-02-25	
T9	Select Ceremony Emcee	WiP	4	10-02-25	14-02-25	-	120	400	5	11-02-25	
T8	Confirm Guest Attendance	WiP	7	06-02-25	15-02-25	-	150	90	10	07-02-25	
T11	Obtain Venue Floor Plan	On Hold	10	10-02-25	15-02-25	-	12	60	6	11-02-25	

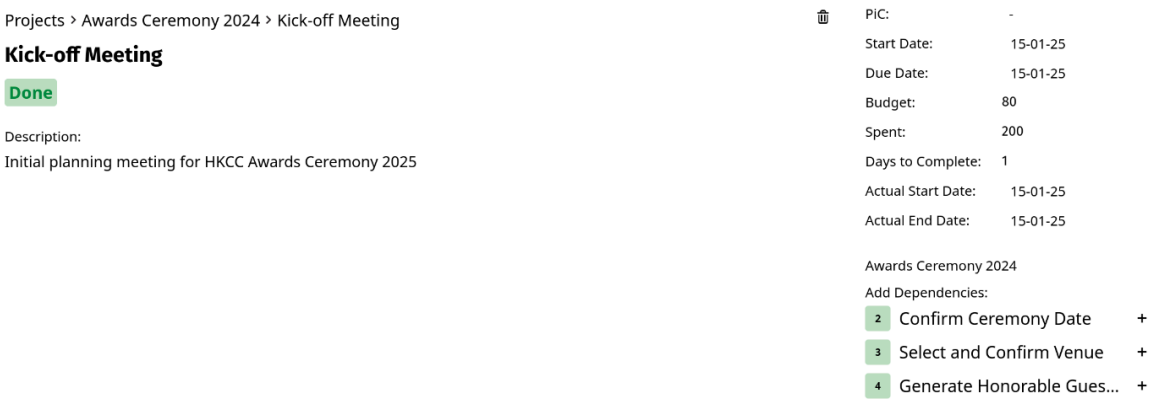
A project can contain other projects, called **Sub Projects**. Refer to Project Dashboard for instructions on how to use the **Sub Project Dashboard**.

Below the Sub Project Dashboard, there is a **Task Dashboard**, which has a list of **Task Row** entries. Basically everything that can be done with the Project Dashboard can also be done with the Task Dashboard. Important differences include…

- *Task Dependencies*. For tasks A and B, “task A depends on task B” means that task B must be completed before task A can start. Under the column “Depends On,” dependencies can be set. See Task Dependencies for more details.
- *Task Assignees*. For each task, a PiC can be assigned (see column PiC). The assignee will receive email updates related to that task. See Email Notifications for more details.
- *Task Data Aggregation*. Entered task information are used to make the summary numbers for Project Row, including ‘Budget’ and ‘Status’.
- *Task Overdue Coloring*. Overdue tasks are colored in red (in the above example, the tasks T6, T8, T9, and T11 are overdue).

ID	Name	Status	Depends On	Start Date	Due Date	PiC	Budget	Actual $	Est. Days	Actual Start	Actual End
T1	Kick-off Meeting	Done	+	15-01-25	15-01-25	-	80	75	1	15-01-25	15-01-25

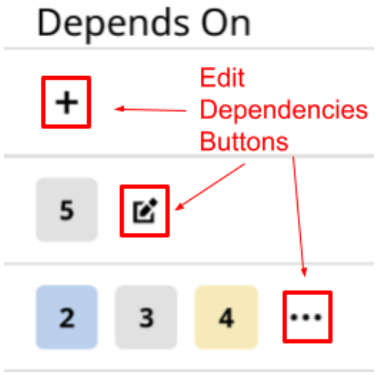
Users can choose to edit task information on the task row (see above) or in a popup window by clicking on the *Name* or *ID* (see below).

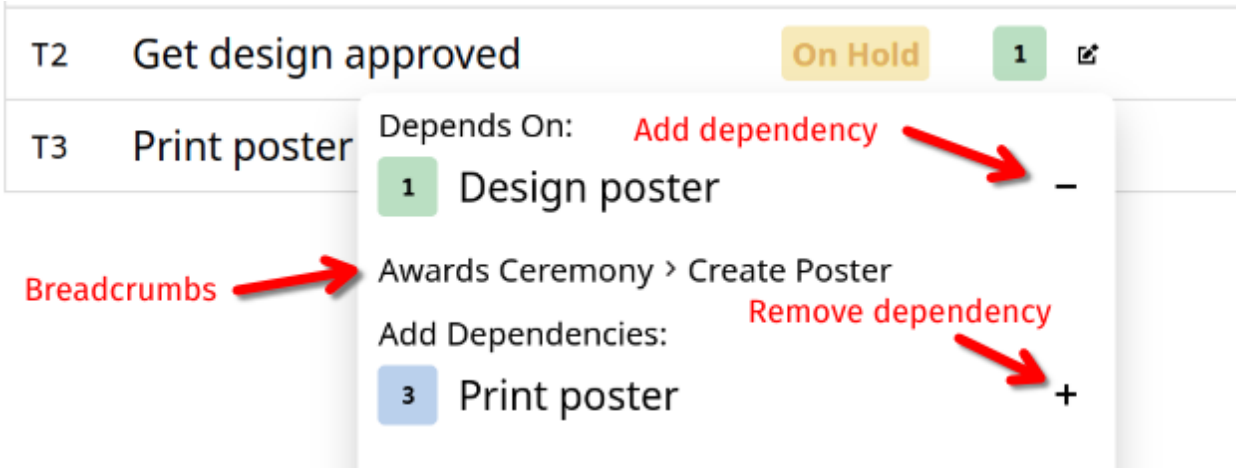


3.2.2.1 Task Dependencies

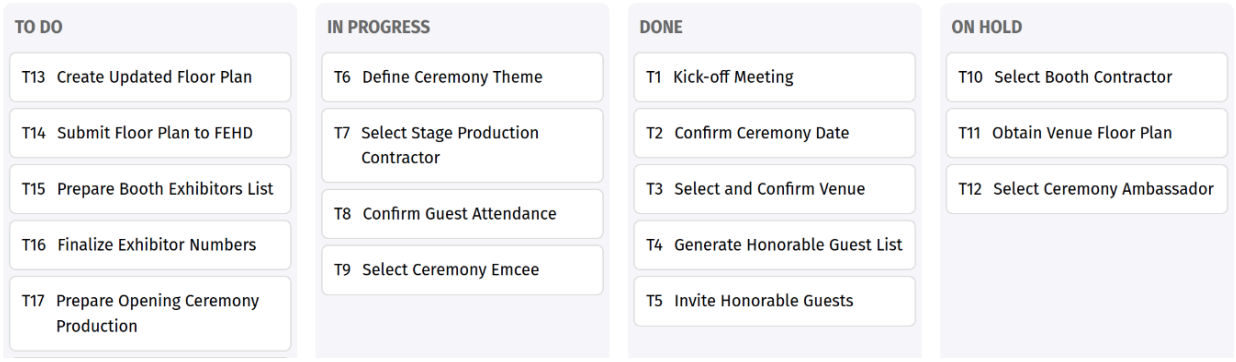
Click on the **Edit Dependencies Button**. This will open a popup to edit task dependencies.

You can only add or remove a dependency. To add a dependency from a different project (a sub project or a super project), use the breadcrumbs to navigate between projects.





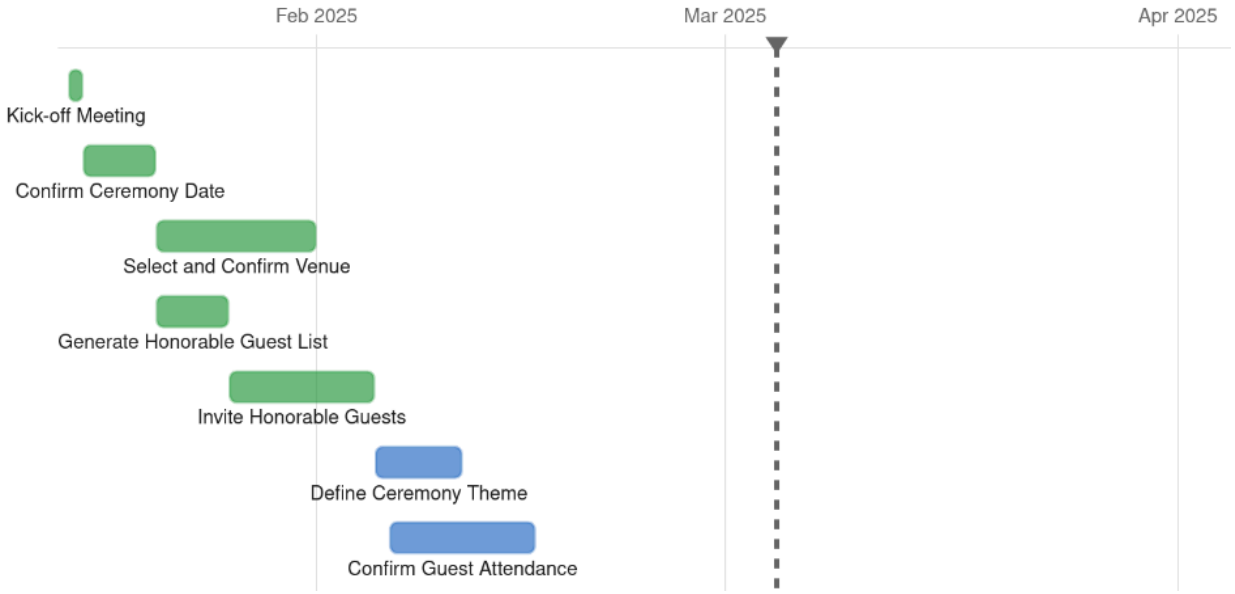
3.2.3 Kanban



This allows users to…

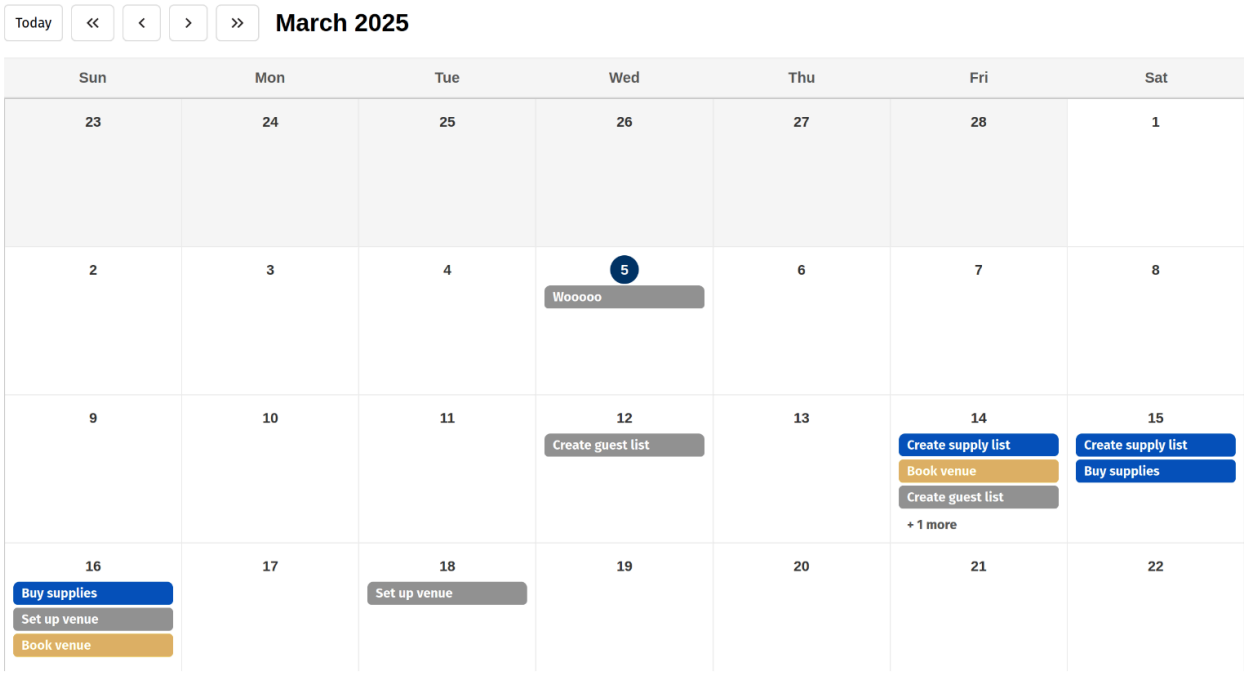
- see tasks organized by status.
- edit a task's status by dragging and dropping the task into a different list.

3.2.4 Gantt Chart



After the user has entered start and due dates for the tasks, the Gantt Chart can be used to see how the tasks are scheduled. The vertical dashed line shows today's date.

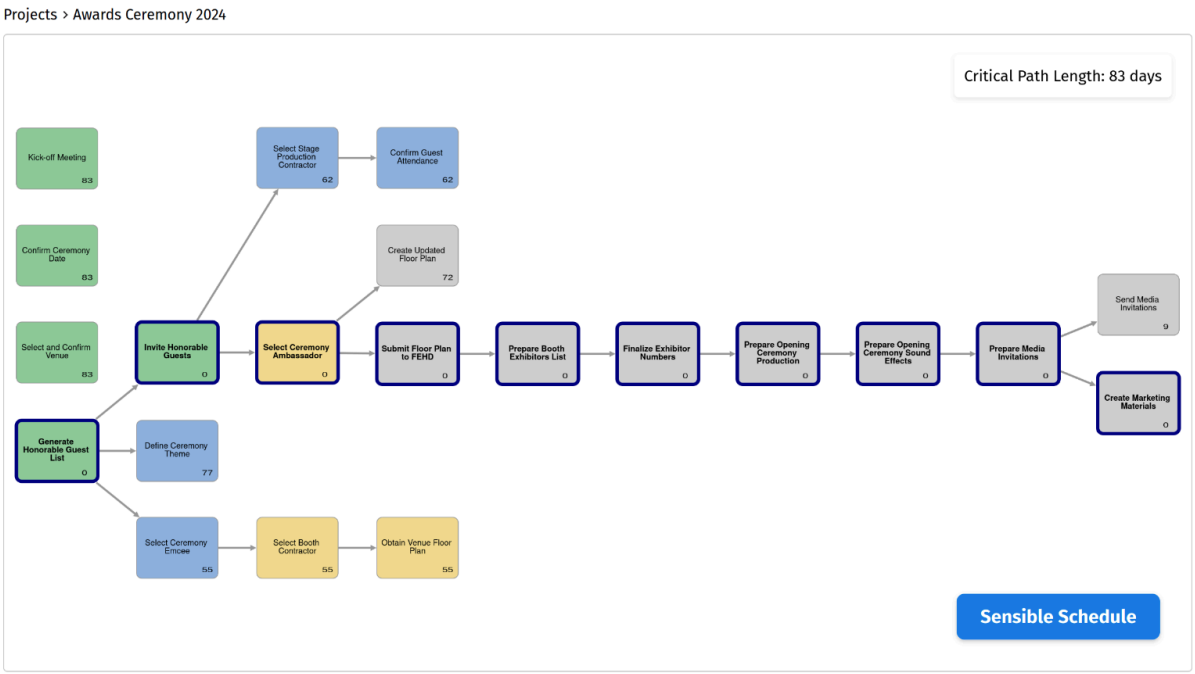
3.2.5 Calendar



The calendar supports 3 main functionalities:

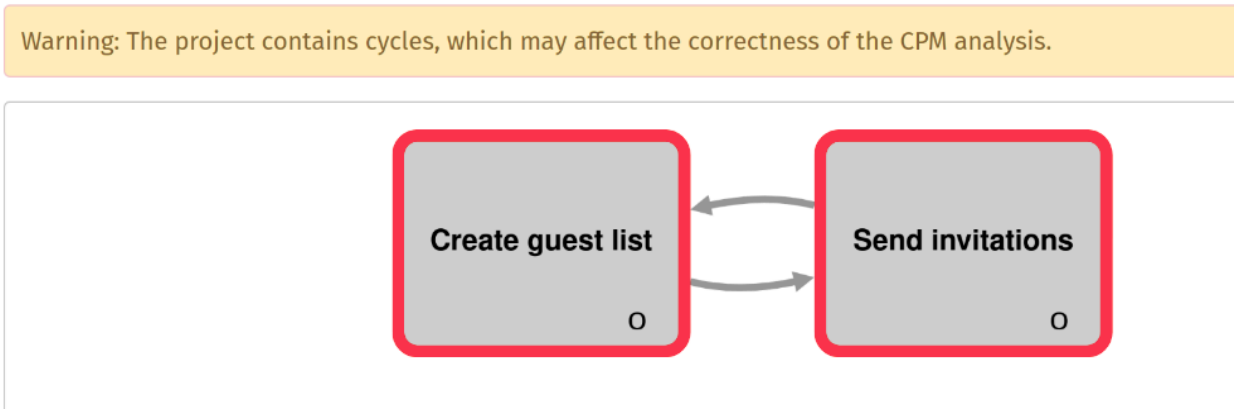
- *See Tasks*. Today's date is circled in blue (March 5th, 2025 in the above example). Existing tasks are also shown with the coloring of their status. Users can choose to move between months (‹ ›) or between years (« »). To return to today's Month and Year, click on Today .
- *Create Tasks*. To create a task, simply click on the day and enter its name.
- *Edit Tasks*. You can edit a task by clicking on it. For more details on how to edit task data, see Task List.

3.2.6 CPM



Critical Path Method (CPM) aims to help the user identify which set of tasks need to be prioritized, for the project to finish on-time. Each rectangle (i.e., “node”) is a task, which takes X days to complete (*Est. Days*) and can possibly have dependencies (to add or edit dependencies, see Task Dependencies). The bottom right number is the slack.

Once task information for the columns *Est. Days* and *Depends On* are entered, the chart above will highlight one or more “chains” of tasks in blue, as shown above. These tasks must be addressed with no delays for the project to meet its deadline. Each blue chain of tasks is called a critical path. All critical paths take the same number of days to complete, which is shown in the top right corner of the graph (see above). Assuming all of the tasks are completed exactly on schedule, the project cannot take less than this many days to complete. Done tasks are not factored into the CPM calculation (they are treated as taking 0 days to complete), so the chart adapts as the project progresses.

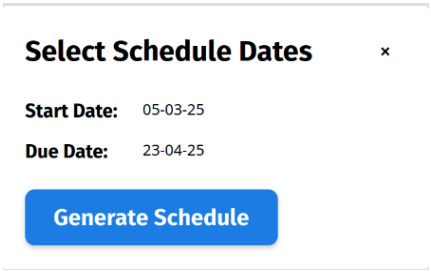


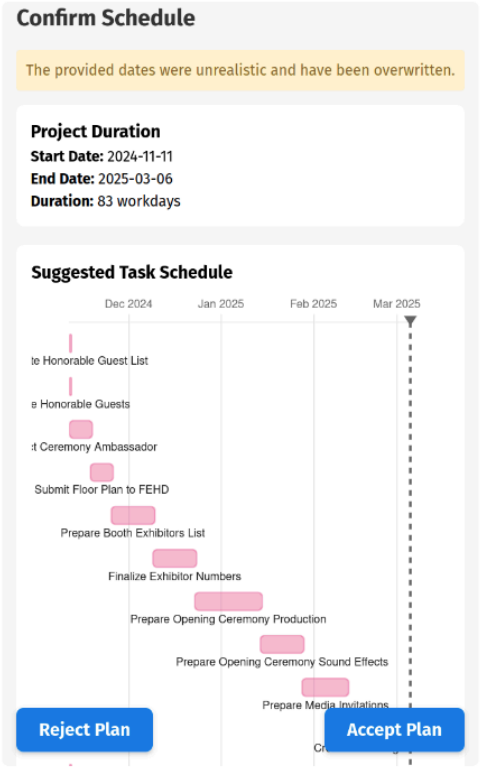
If a cycle is made from dependencies (i.e., “Task A depends on Task B” and “Task B depends on Task A”), the user should fix this as soon as possible for CPM to work properly. The tasks highlighted in red (see above) are in a cycle.

3.2.6.1 Sensible Scheduling

Lastly, there is a feature that automatically sets the planned start and due dates of the tasks, and will spread the days out and count workdays only (excluding weekends). To use this feature…

1. Make sure each task has data for…
    a. days to complete this task.
    b. task dependencies.
2. Click on the *Sensible Schedule* button (see bottom right corner of CPM graph).
3. Set the start and due date of the project.
4. Click on *Generate Schedule*. A *Confirm Schedule* popup should appear.
    a. Note: if the given start and due dates are not realistic, the app will suggest a project schedule with the same due date and an earlier start date (see yellow message).
5. If the suggested schedule looks good, click on *Accept Plan*. If you want to try again or cancel, click on *Reject Plan*.





3.2.7 EVM

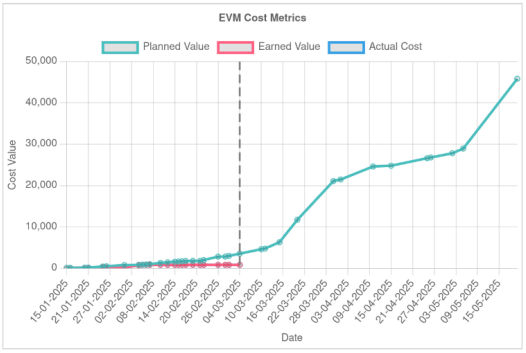
EVM helps monitor project progress.

For the **EVM Cost Chart** (see right):

- *Planned Value* (PV) is the planned trajectory of the project. (How much work is planned to be done over time?)
- *Earned Value* (EV) is the actual trajectory of the project. (How much work is actually done over time?)
- *Actual Cost* (AC) measures the actual spending of the project. (How much is actually spent over time?)

For the **EVM Index Chart** (see right):

- *Schedule Variance Percent* (SVP) measures project progress based on cost ($).
- *Time Variance Percent* (TVP) measures project progress based on time (days).
- *Cost Performance Index* (CPI) measures project budgeting.



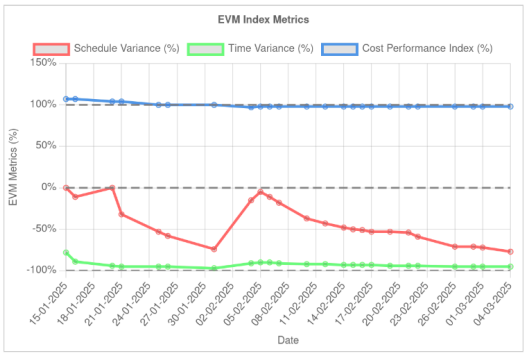


Table 1 - EVM Cost Metrics Table

	Formula	Interpretation (Basically, higher index numbers are better.)
SVP	$SVP = (EV - PV)/PV$	$SVP = 0$ means the project is “on-schedule” $SVP > 0$ is “ahead of schedule” $SVP < 0$ is “behind schedule”
TVP	$TVP = (ES - AT)/AT$	$TVP = 0$ means the project is “on-schedule” $TVP > 0$ is “ahead of schedule” $TVP < 0$ is “behind schedule”
CPI	$CPI = EV/AC$	$CPI = 1$ means the project is “on-budget” $CPI > 1$ is “under-budget” $CPI < 1$ is “over-budget”

Note: Refer to the Glossary to find what ES and AT are.

3.3 Email Notifications

For urgent task-related updates, the email notification system sends emails to the relevant users.

3.4 Email Recipients

For a given task, if the task has a PiC, then the task PiC receives the email. If the task has no PiC, then the project PiC receives the email. By default, the account that creates the project is the project PiC.

Regardless, the task-related email always CC's the project's team email alias (if it exists).

3.4.1 Types of Emails

Below are the types of emails…

- *Overdue Tasks*.
- *Soon-to-be due Tasks*. Tasks that are within [X DURATION] are considered "Soon-to-be" due.

4. Troubleshooting & Support

If the tool crashes for an unknown reason, try returning to the project dashboard page (see: Accessing the System). If the tool is not accessible at all after trying this step, contact support.

4.1 Error Messages

The following are the main error messages of concern:

- Error fetching data. Please check whether your computer has proper connection with the company's intranet.

4.2 Special Considerations

If trying to visit any of the Project Tabs causes an error (e.g., failed to retrieve XYZ data), check whether the project you are viewing has any tasks.

In general, if you find an issue you cannot solve on your own, try contacting IT or an admin (see Support).

4.3 Support

If there is an issue with the application, it is recommended to have a screenshot of the application with a "console log" opened. To see how to open a "console log," search how to do so for your browser of choice (e.g., Google Chrome, Firefox, Safari).

Table 2 - Support Points of Contact

Contact	Organization	Phone	Email	Role	Responsibility
Aster Chiu	*STC*	*<Phone>*	*<Email>*	*admin*	*<Responsibility>*
<>	*<>*	*<>*	*<>*	*IT*	*<>*

Appendix A: Glossary

Table 3 - Glossary

Term	Acronym	Definition
Actual $		How much money it took to complete a task.
Actual Cost	AC	In EVM, the sum Actual $ of all completed tasks for a project. This is computed based on task data about Actual $ and Actual End. AC increases every day by the sum Actual $ for every task completed on that day.
Actual End		The actual date when the task was completed.
Actual Start		The date when the task has actually started.
Actual Time	AT	In EVM, the number of days between today and the project's planned start.
admin		Admin, or Administrator, is a user account with elevated privileges. For this app, admins are allowed to register and manage other user accounts.
archive		Archiving a project means hiding the project from the Project Dashboard, while still allowing the project to be viewed when needed for record-keeping.
assignee		Person assigned to the task.
breadcrumbs		See Project Page.
Budget		How much money is expected to complete a task.
Budget At Completion	BAC	The sum budget of all tasks in a project.
Cost Performance Index	CPI	$CPI = EV/AC$. This measures project budgeting. $CPI > 1$ is under budget, $CPI = 1$ is on-budget, and $CPI < 1$ is over budget.
Critical Path		Used in CPM. The chain of tasks where each task must be completed ahead-schedule or on-schedule for the project to finish on-schedule.

Term	Acronym	Definition
Critical Path Method	CPM	A technique that enables analysis of which tasks to prioritize. Here is a guide.
cycle		In CPM, a cycle of task dependencies means “Task A depends on Task B” and “Task B depends on Task A.” This is practically impossible, and may cause CPM miscalculations if not fixed. This has no effect on other features… Gantt Chart, Calendar, and EVM will work just fine.
dependency		A task that has to be completed before another task can start.
Due Date		The date on which the task is expected to finish by. A task is “ahead of schedule” if completed before the due date, “on schedule” if completed on the due date, and “behind schedule” if completed after the due date.
Earned Schedule	ES	Used alongside EVM. To compute this, find today’s EV, then see on what day PV is the same. The number of days between that day and when the project is planned to start is ES.
Earned Value	EV	In EVM, this measures the “actual progress” of the project, in terms of cost ($). If EV = PV, then the project is on-schedule. IF EV < PV, then the project is behind schedule. If EV > PV, then the project is ahead of schedule. This is computed based on task data about Budget and Actual End. EV increases every day by the sum budget of all tasks actually completed that day.
Earned Value Management	EVM	A cost-based approach of monitoring project progress. Here is a guide.
Information Technology	IT	People who are better with computers than the average person. They can take a while to respond.
overdue		An incomplete task with a passed due date.
Person in Charge	PiC	Person assigned to the project or task.
Popup		A small window that appears when using the app.

Term	Acronym	Definition
Planned value	PV	In EVM, this measures the “planned progress” of the project, in terms of cost ($). This is computed based on task data about Due Date and Budget. PV increases every due date by the sum budget of all tasks due that day.
Schedule Variance Percent	SVP SV%	Measures project progress based on cost ($). $SVP = (EV - PV)/PV$. $SVP > 0$ means the project is “ahead of schedule”, $SVP = 0$ is “on-schedule”, and $SVP < 0$ is “behind schedule.”
slack		In CPM analysis, this measures the number of days that the task can be delayed while keeping the project on-schedule. For tasks on the critical path, their slack is 0; in other words, critical path tasks cannot be delayed.
STC Marketing Work Management Solution	SMWMS	The name of this web application.
Time Variance Percentage	TVP TV%	Measures project progress based on time (days). $TVP = (ES - AT)/AT$. $TVP > 0$ means the project is “ahead of schedule”, $TVP = 0$ is “on-schedule”, and $TVP < 0$ is “behind schedule.”
Start Date		The date on which the task is expected to start.
status		For a project, it can be TODO, WiP, ON-HOLD, CANCELLED, or DONE. For a task, it can be TODO, WiP, ON-HOLD, or DONE.
sub project		See Project Page.
super project		If project A has sub project B, then project B has super project A.
workday		Monday, Tuesday, Wednesday, Thursday, Friday
Work in Progress	WiP	The task has started and is not complete.

Appendix B: Frequently Asked Questions (FAQ)

- **What is a Navigation Bar?**
  See System Organization & Navigation.
- **What is a breadcrumb? How do I use it?**
  See Project Page.
- **How do I log in?**
  To log in (or sign in), see Accessing the System.
- **How do I log out?**
  To log out (or sign out), see System Organization & Navigation.
- **How do I change the language?**
  See System Organization & Navigation.
- **Can I undo a delete?**
  No.
- **How do I create a project?**
  See Adding Project Rows**.**
- **How do I delete a project?**
  See Deleting and Archiving Project Rows**.**
- **How do I change a project's ID?**
  You cannot.
- **How do I change a project's *Name*?**
  Go to the project's Summary Tab, then click on the project's name on the top of the page.
- **How do I change a project's *Status*?**
  See Metrics.
- **How do I change a project's *Start Date*?**
  See Metrics.
- **How do I change a project's *Due Date*?**
  See Metrics.
- **How do I change a project's *Budget*?**
  You cannot; this is calculated automatically. See Metrics if you want to learn more.
- **How do I change a project's *Actual $*?**
  You cannot; this is calculated automatically. See Metrics if you want to learn more.

- **How do I create a task?**
  See Task List.
- **How do I delete a task?**
  See Task List.
- **How do I change a task's *Status*?**
  See Task List.
- **How do I change a task's *Depends On*?**
  See Task Dependencies.
- **How do I add task dependencies?**
  See Task Dependencies.
- **How do I remove task dependencies?**
  See Task Dependencies.
- **How do I change a task's PiC (Person in Charge)?**
  See Task List.
- **How do I see a task's description?**
  Two ways. One way is by clicking on the Name or ID of a Task Row. Another way is by editing a task on the Calendar.
- **How do I change a task's description?**
  First, find the task's description. Next, click on it and make any needed changes.
- **How can I tell if a task is overdue?**
  See Task List**.**