8 R&D Project Mgt.

Provides a dynamic and integrated global view
of all activities in technology, market and business

For the Research & Development (R&D) of a new product, the most influential areas would be the technical feasibility, the existence of the market into which to sell the product and the business resources to make it happen. Traditional project management or project management tools couldn't provide the integrated view or the cause-and-effective relationships of how the performance of each activity in each of the areas can affect the others.

The project personnel seldom have the ability to see the cause-and-effective relationships and even some minority can see them, they rarely can keep up with the rapid changes in these 3 areas. The traditional R&D project management weakness can be overcome by computer-assisted project management with focus on the integrated view of the real-time information for the Big Picture as described in the diagram below.

In other words, the modern project management tool should no longer focus on automating the static methodology but providing the dynamic integrated view of the activities in the 3 areas as described in the Big Picture diagram below.

Technical

Marketing

Success

Business

Big picture of R&D project
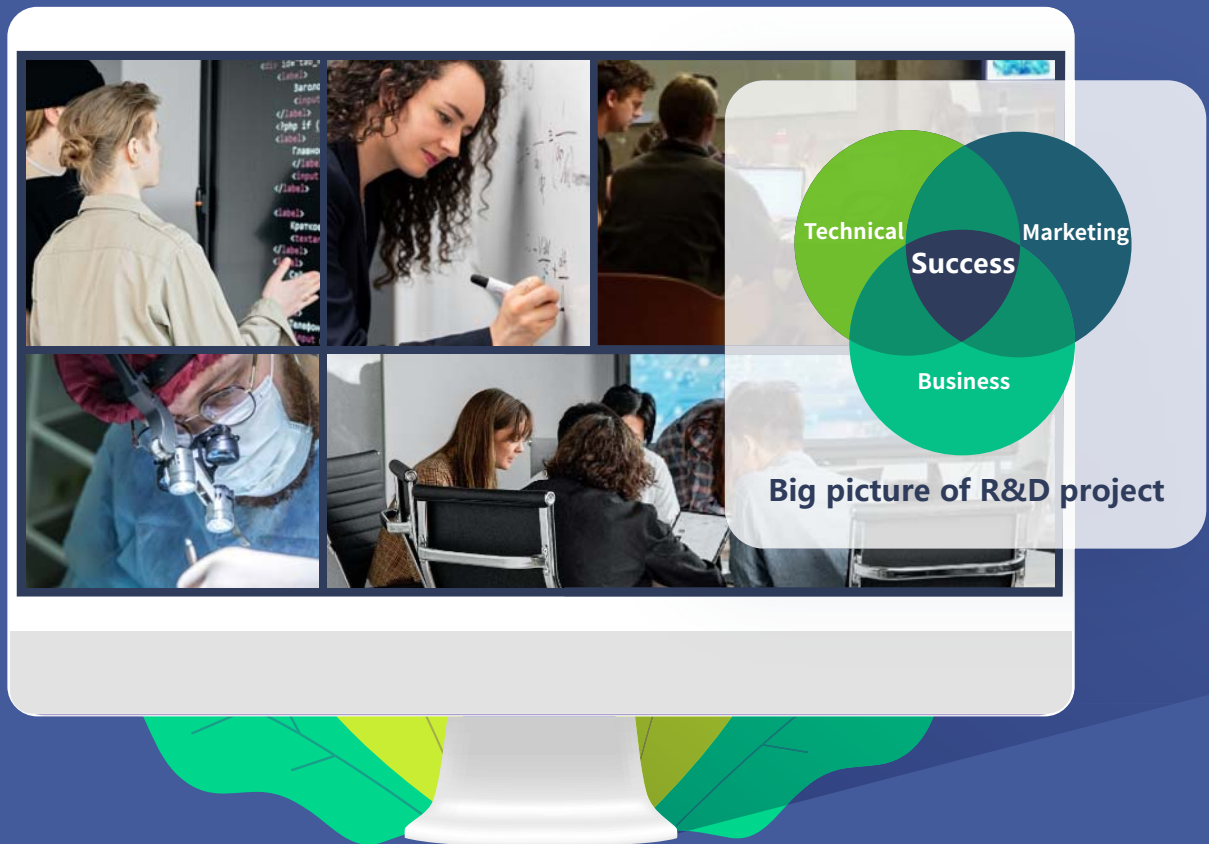
⑧ allows the project manager to specify the needed strategies and their associated activities and reality checks to ensure things such as the following:
• Feasibility of achieving the technical development objectives
• Customer involvement and verification of customers'needs
• Certainty of market formation
• Clarity of marketing and sales channels
• Participation by the operating personnel and reliability from production standpoint
• Certainty of commercialization (steady outlook, project period is appropriate)

⑧ is by no means to replace human judgment but provides the most effective integrated information as possible to aid timely and effective decision-making. A R&D project by its nature is unpredictable since the technology, market and business are all constantly moving. The winning team will be the one that can make effective selection before the project starts and can effectively monitor the dynamics of progress and changes and take effective actions within the bounded marketing window and limited business resources to cope with the impacts after the project starts.
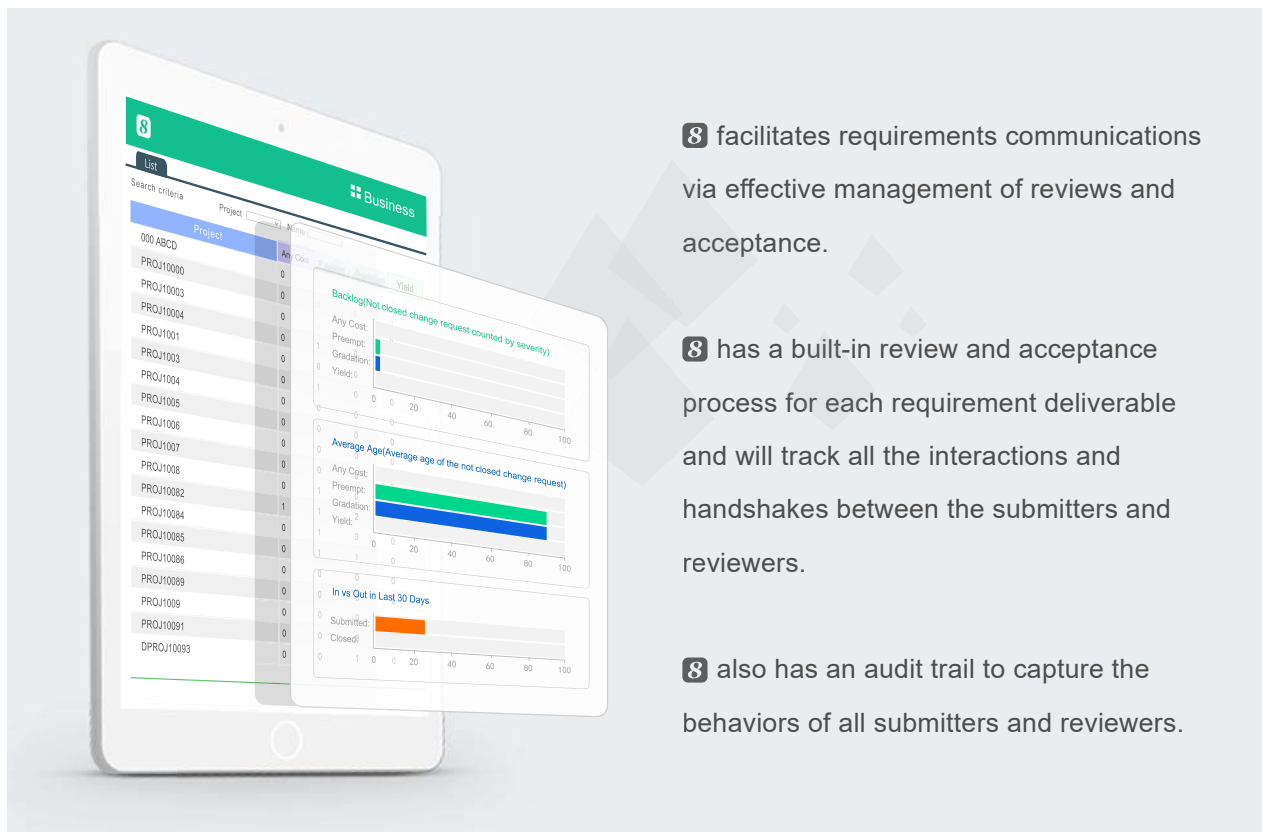
Pre-project Selection

The project and organization selection is critical to R&D project success because a conscious project and organization selection will mean only the project with true market needs and the organization with staff that have relevant capability and capacity would be chosen.

8 provides project request, evaluation and strategy formulation management to ensure each R&D project request will be thoroughly evaluated based on true market needs and ROI and the responsible organization has the relevant staff and experience to do the project. After the R&D project gets a preliminary green light, the responsible organization will need to formulate the strategies to maximize the likelihood of success of the technical development and implementation of the results. Each strategy or sub-strategy must be substantiated by the projects or activities that will yield the results. 8 also provides real-time metrics to allow tracking of interim results against targets.

The pre-project selection is both the wisdom and the formulation of an execution management framework for a R&D project.

Requirements Management

In a R&D project, the key in requirements management is managing requirements completeness, human communications and change impacts. All initial and interim requirements of R&D projects wouldn't be 100% complete but whether they are representing 80% or 20% of the big picture would make the biggest difference in estimating the business resources needed to complete the project and controlling the window of opportunity to market the product. The overlook of what percentage of the current requirements representing the big picture is the major cause of failure in R&D projects since the views of technical development, business resources and marketing window aren't integrated or aligned. ⑧ provides a Requirement Matrix to allow all stakeholders to view the total requirements of their R&D project and detect discrepancies at the earliest possible time. Each requirement or sub-requirement is also linked to the activities that will implement it. ⑧ can also detect the percentage of the requirements activities that have customers and operation personnel's involvement and will reflect that in the requirements light color.

⑧ facilitates requirements communications via effective management of reviews and acceptance.

⑧ has a built-in review and acceptance process for each requirement deliverable and will track all the interactions and handshakes between the submitters and reviewers.

⑧ also has an audit trail to capture the behaviors of all submitters and reviewers.

Requirement changes are unavoidable in R&D projects. However, a R&D project must be based on the integrated view of its Big Picture to make effective decisions and tradeoffs whether each change makes sense and is affordable to do or not. ⑧ allows the R&D project personnel to see the impacts of each change in the Plan&Execution page on exactly what activities will be affected and how they are affected and the summary of the total impact. The clear impact information will arm project personnel to make decisions and tradeoffs more effectively.

Customer As Team Member

Customer involvement is the key to improve product quality and market acceptance. 🎱 allows external users (customers, partners, vendors) and field service personnel to be involved in the R&D project as project team members and each can play a different role such as producer of requirements, reviewer of design or evaluator of product. The customers, partners and vendors can contribute their industry knowledge and help the product to be easier accepted by the market.

Customer and field service personnel involvement is imperative for developing a product that is easy to use, operate, maintain and service. Their involvement best starts in the requirements stage so that usability, operability, reliability, maintainability and serviceability of the product are designed in, not added at the tail end of the development. 🎱 not only allows customers and field service personnel to be project team members, it can also track their level of involvement in the requirements stage and reflects that in the score of the critical success factors of the project.

Customer involvement is also key in the Engineering to Order (ETO) model of creating sophisticated products. 🎱 cross-company and cross-location capabilities supports bringing customers, partners and vendors afar to work together on the R&D project.

Talent Management

The success of an R&D project heavily depends on the abilities, confidence and commitment of project personnel, especially the key resources such as domain expert, product champion, product architect and project manager of the project. The talents will be more committed to the project if the following things are true:

• The project roles that they play match their skills

• Accountability within the team is managed properly

• The project is technically feasible

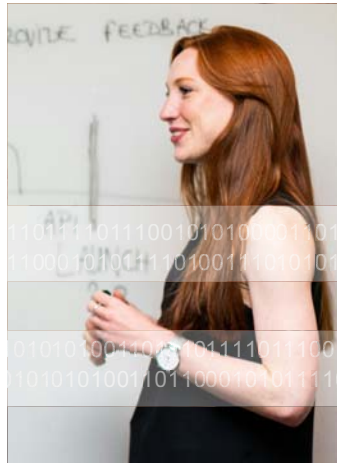• The project result can have significant positive impact

Roles	Responsibility	Skills	Confidence Level

All role, responsibility, skill and confidence level data are interconnected and aggregated in real-time.

⌀ can also automatically detect the skill set gap of each resource allocated to the project activities to minimize mismatches. The accountability of each activity, each deliverable and each review & acceptance is crystal clear to the team. The system is also capable of sending out anonymous reality checks to detect team members' confidence level on project schedule, management ability, technical feasibility, product operability and market acceptance.

⌀ is also capable of sending out reality checks to top management and stakeholders to detect their confidence level on the project. ⌀ provides the useful information to the project manager and the product champion to deal with issues at the earliest possible time so that they can take corrective actions promptly to minimize negative impacts to the team and to the project.

Time & Progress Management

🔠 automatically tracks time and progress of each activity and deliverable of the R&D project. The % of completion of the lower level activities and deliverables are automatically aggregated up to higher level activities. Overdue activities and deliverables are flagged and alert messages will be sent to the affected stakeholders. 🔠 always keeps track of original scheduled time, latest scheduled time and actual completion time and highlights the discrepancies. 🔠 can also keep track of multiple baselines (versions) of the R&D project plan.

My Workbench   Enterprise   Bussiness   Admin

Time Management

WBS	Start		Finish		Status
	Planned	Actual	Planned	Actual	
Requirements	2023 Jul 12	2023 Jul 12	2023 Nov 30	2023 Nov 30	Finished
Design	2023 Dec 05	2023 Dec 01	2024 Mar 10	2023 Mar 08	Finished
Construction	2024Mar 15	2024 Mar 10	2024 Dec 28		Not Yet Due
Front End	2024 Mar 15	2024 Mar 10	2024 Apr 17		Overdue
Back End	2024 Apr 30	2024 Apr 30	2024 Dec 28		Not Yet Due
Testing	2024 Dec 31		2025 Jun 20		Not Yet Due
Acceptance	2024 Jun 24		2025 Jun 30		Not Yet Due

The key in Time & Progress Management for R&D projects is to ensure things created by one expert are reviewed and agreed by another expert; otherwise the % of complete could be meaningless since some work is 100% but the other expert thinks the approach and result were totally wrong. 🔠 has built-in review and acceptance in every single deliverable and claims both the producer and reviewer accountable for the deliverable. 🔠 Time & Progress Management was well designed for R&D work.

Revenue and Cost Management

🎱 provides the comprehensive revenue & cost budgeting & tracking functionality at both activity level and project level and the full traceability of project revenues with sales orders and contracts and project costs with timesheets, expenses, PO, invoices and payments.
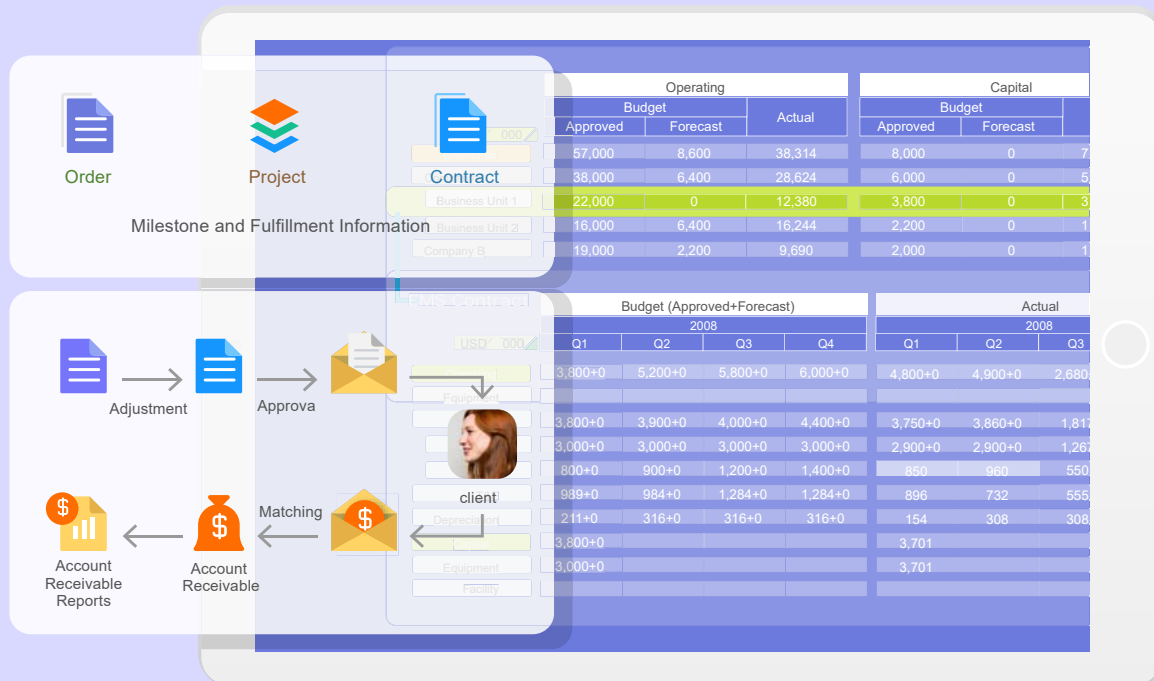
🎱 provides the following features to allow the management team always seeing the most up-to-date financial information of the R&D project:

- Project-defined revenue & cost classifications linking to COA
- Automatic revenue calculation based on sales orders & contracts
- Automatic client invoice generation based on payment terms in orders & Contracts
- Automatic labor cost calculation based on timesheets
- Automatic procurement cost calculation based on PO & contracts
- Automatic expense calculations based on expense reports
- Automatic checking supplier invoices against PR and PO
- Invoice aging and overdue management
- Invoice and payment linkage
- Automatic and real-time revenue & cost aggregation
- Budget variance detection and re-forecast

Business Resource Management

The project personnel utilization and labor cost are important things to manage in a R&D project. ⟨8⟩ provides features for searching, requesting, allocating human and non-human resources in multiple sites, groups, projects and activities and tracking their utilization. ⟨8⟩ also provides advanced resource management features such as project-defined resource roles and resource leveling.

⟨8⟩ resource management features include:

• Automated resource search across sites & groups based on skill & availability

• Facilitating & tracking of resource provision, allocation & utilization

• Resource allocation automates cost estimating & budgeting

• Comparison of resource planned vs. actual utilization

• Automatic detection of overloaded & inadequate resources

⟨8⟩ also provides rich resource planning and utilization reports so that the user can analyze resource provisioned vs. allocated vs. actual at deliverable, activity and project levels over time.

Quality Management

Quality management in an R&D project often involves managing usability, operability, reliability, maintainability and serviceability of the product and the entry-exit criteria and their fulfillment for each sub-process in the total development process. The required level of usability, operability, reliability, maintainability and serviceability needs to be specified upfront in the product requirements to be built-in the product. The development process control needs to be specified in the project requirements or methodology.

⚡ provides Quality Metrics to allow the project manager to set measurement targets and gauge the incremental and final deliverable qualities of the R&D project. ⚡ also allows the project managers to set policies to enforce Review & Approval for controlling qualities during deliverable creation and finalization. ⚡ Reality Check can be used to detect process issues and deliverable quality issues and Real-time Dashboards can be used to disseminate Quality Metrics, Review & Approval and Reality Check information effectively at real-time so that quality problems and achievements can be seen by everyone at the earliest possible time.

Communication Management

Context-oriented Chat	Discussion Forum	Reality Check

Notification	Request, Review, Commit, Approval, Deliver, Accept

🗿 automates the following for R&D project communications:

• Automatic Alerts & Notifications

• Automatic generation & delivery of Weekly Status Report

• Real-time Chat

• Discussion Forum

• Reality Check

🗿 keep permanent records of all the Real-time Chat and Discussion Forum so the R&D project team members can always refer back to their previous discussion. The information is useful to keep people honest and accountable.

🗿 supports Iterative Reviews & Acceptance of deliverables to support the short iteration needs in communication for complex problem-solving. 🗿 also facilitates Structured Interactions and provides real-time information, allowing teams to make informed decisions.

The most powerful communication tool in 🗿 is its Data Agility & Preciseness that help projects tremendously reduce miscommunications and enhance teamwork & effectiveness.
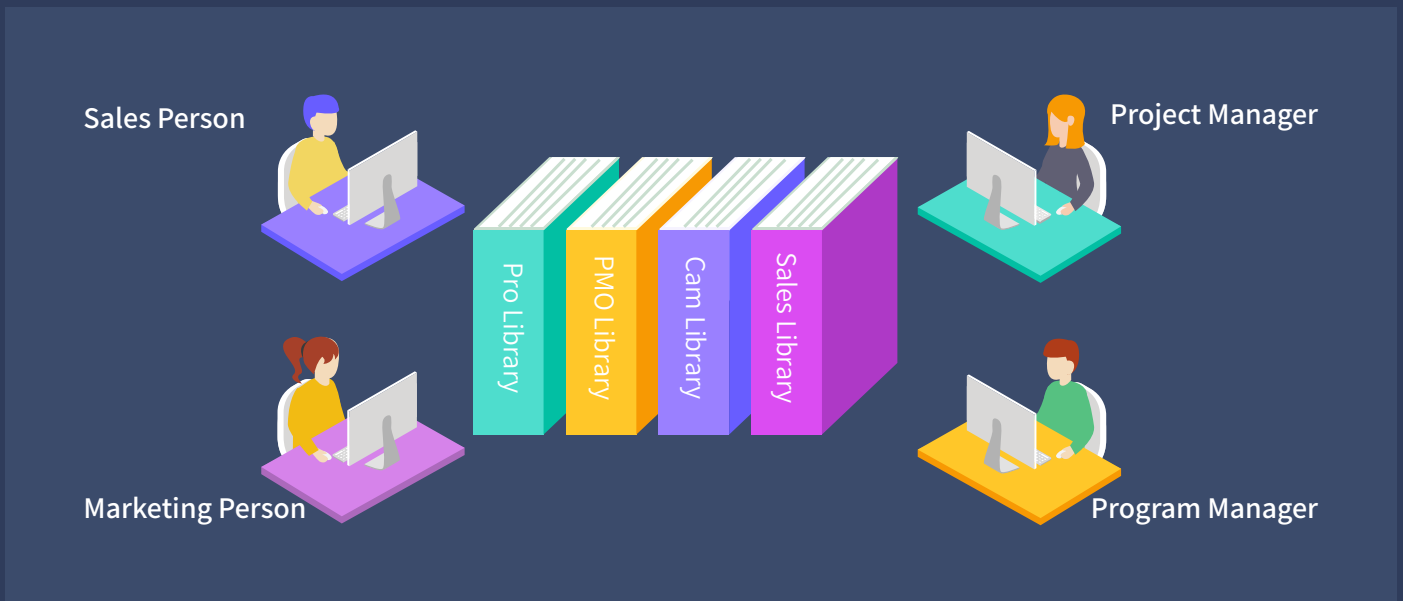
Issue Management

An Issue
- Can be a non - issue → ⑧ issue closure
- Can be a change request → ⑧ change request
- Can be a risk → ⑧ risk register
- Can be an action missing → ⑧ action item

⑧ supports raising, assigning, acting tracking, escalating and closure of issues at activity and project levels and allows the linkages of issues to risks, change requests and actions.

⑧ provides Issue Map to allow the user to walk through the linkages surrounding issues. Escalated issues will be marked in RED and the person(s) that the issue is escalated to must acknowledge the escalation. Issues raised in lower level activities are automatically aggregated up to their upper level activities and to the project.

Document Mgt. & Service Mgt.

Notice Letter

Press Release

Meeting Minutes

Legal Document

Memorandum

M&A

Sales Person

Project Manager

Marketing Person

Program Manager

Pro Library

PMO Library

Cam Library

Sales Library
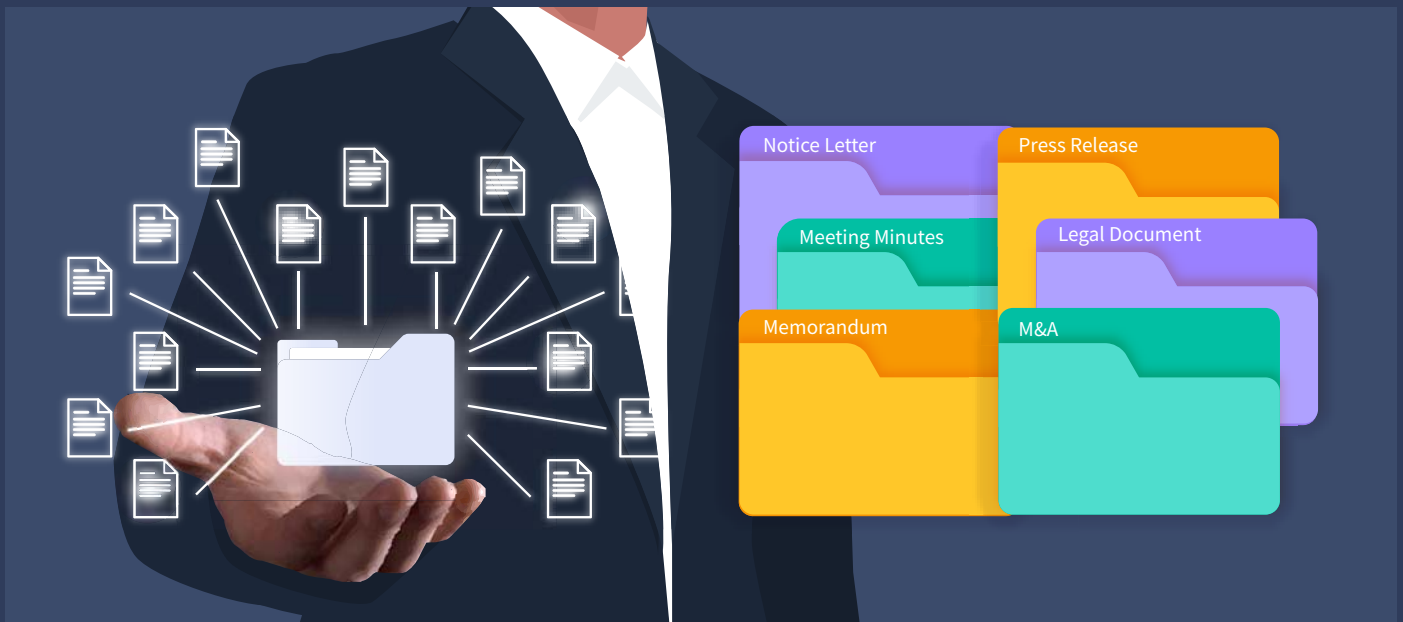
8 has a built-in electronic document management system (EDMS) which can support various viewers of documents of different types (e.g., CAD, CAM). The EDMS supports check-in and check-out management, version control, full-text search and knowledge management.

With the add-on of the Service Management modules, **8** can also support product service management which involves providing customers and service engineers with support information for repair and maintenance services.

PM Feature List

Feature	Description
Project Request	
Create Project Request	Record project name, project type, requested budget and other info in project requests.
Risk Assessment	Support risk assessment for project requests.
Approval	Support to submit project requests for approval.
Linked to a Project	Support to link an approved project request with a project.
Project Initialization	
Create Project	Allow to create project by different methods, such as creating from the template, importing from mpp file, creating from scratch or copying an existing project.
Define Project Team	Allow to define project planners, project sponsors, project supervisors, managers, project assistants and approvers and grant appropriate privileges.
Define Project Chapter	Allow to define info such as objectives, stakeholders, assumptions, approaches, high-level scope, high-level schedule and budget ballpark in project charter.
Project Scope Document Mgmt	Support the uploading and easy access of scope-related documents.
Project Library	Support user-define library template for creating a new project library.
	Support auto creation of project library automatically when a new project is created.
	Support linkages of project deliverables to documents in project library so that documents created from a project can be accessed independently from project library.
	Support knowledge mgmt in project library.
Project Planning	
Detailed Project WBS	
WBS Operation	The form of 8thManage WBS is similar to Excel format, in which users can re-arrange the activity sequence, outdent or indent an activity by mouse or shortcuts. The system also supports the import and export of MS project files.
Assign Activity Reps.	Able to assign the responsible person of the activities individually or by bulk replace;
	Allow multiple persons to be responsible for the same activity.
Set Up Deliverables	Allow to define deliverables details of activities/projects, including responsible person, scheduled FD, review and acceptance flow, quality standard etc.
Planning Methods	Support "top-down" and "bottom-up" planning methods; by combination of the two methods, it can better ensure the time restriction as well as the flexibility.
Sub-projects	A project can be inserted as an activity to another project's WBS.
Critical Path	Critical path activities are visually displayed on WBS and 8thManage supports showing real-time critical path on web page and exporting PDF document.

Gantt Chart	Able to show the Gantt Chart in real-time and allow exporting it into PDF.
Baseline	Support the establishment of baselines for projects and individual activities.
Resource Plan	
Resource Type	Allow self-defining the resource type such as internal human resources, external human resources, and non-human resources for the projects; allow self-defining the resources properties.
Resource Working Calendar	Allow defining different working calendars; each project and each resource can have different working calendars.
Key Resource Warning	Conflict or overloading of key resources will be alerted.
External Human Resources	Able to manage the external human resources that participate in the projects.
Resource Skills	Able to self-define needed fields to record all the skills of the resources.
Resource Plotter	The system will list the matched resources that meet the requirements based on resource plotter.
Resource Workload Warning	The workload of a resource can be tracked during resource planning process and any overload can be detected and alerted by the system automatically.
Resource Allocation	Support resource tracking and adjustment request on resource allocation according to the resource's usage.
Deliverable Plan & Quality Definition	
Deliverable Review & Acceptance	Allow to define different review and acceptance flow for deliverables.
Minimum Quality Requirement of Deliverables	Support setting the minimum level of quality control for deliverables on Enterprise/Project level.
Minimum Quality Requirement of Milestones	Support setting the minimum level of quality control for milestones on Enterprise/Project level.
Deliverable Completion Methods	Allow to set up metrics to evaluate the quality of the deliverables;
	Support to set up the calculate methods of the completion rate according to the target value and the actual value of the metrics, or according to the review and acceptance status.
Project Budget Plan	
Approved Budget + Additional Forecast & Actual+Accrual	"Approved Budget + Additional Forecast" reflects the approved amount and the estimated amount acknowledged by the executives; "Actual+Accrual" reflects the actual amount and the amount estimated by the project team members. Their differences can provide overrun warnings.
Cost Control Rules	Allow to control the project cost in different cost classification levels and set up conditions when projects or cost should be (re)approved.
Cost Classifications	Allow to self-define different cost classifications by enterprise level or by each project.
Reserve Fund	Support managing the reserve fund of the project.
Asset Depreciation	Support managing the asset depreciation of the project.
Project Approval	
Multi-level Approval	Support multi-level approval function (e.g. allow project manager to approve top-level activities, project approvers to approve whole project plans).

Self-defined Approval Flow	Project approval flow can be pre-defined in the system or confirmed by the project manager when the project is submitted for approval.
Re-approval Restriction	Allow to define there-approval control parameters; when some critical goal was changed, such as the cost, scheduled FD etc., the system will require the project to be re-approved automatically.

Project Execution

Deliverable Mgmt

Internal Review	Deliverable's responsible person submits the deliverable for internal review; Reviewer reviews the deliverable.
Acceptance	The accepter can accept or reject the deliverables after receiving the deliverables.
Commitment Mgmt.	Allow the commitment management of the deliverables; the commitment process includes commitment-implementation/re-negotiation/commitment breaking.
Deliverable Structure	Allow to define deliverable structure through defining the components of deliverables.
Deliverable Completion Feedback	Allow setting up target value of the metrics to evaluate the deliverables.
	The responsible can update the actual value, and the system will calculate the completion rate according to the target value and the actual value of the metrics, or according to the review and acceptance status.

Resource Utilization

Timesheet	Team members can use the timesheet to record their actual working hours in each project.
Resource Request & Approval	Support the resource request and approval process.
Resource Usage Record	Able to generate the usage records automatically according to the actual timesheet records, able to calculate the project resource costs automatically.
Resource Tracking	Resource tacking feature supports dynamically tracing the resource usage in a project and detecting any overload and resource conflict.
Commitment Mgmt.	Allow the commitment management of the resource allocations; the commitment process includes commitment-implementation/re-negotiation/commitment breaking.

Cost Mgmt

Expense	The system supports the expense flow management from request to payment delivery.
Cost Classifications	The project can inherit the cost classifications of enterprise, or adjust the inherited classifications to maintain its own one.
Budget & Actual Cost	Able to track the derivations between the planned budget and the real cost; able to provide warnings according to the pre-set cost warning rules.

Communication Mgmt

Requests & Responses (Approval, Review, Acceptance)	When the user raises a request, the user being requested (such as the approver) will be able to receive and respond to it to achieve the purpose of interactions.
Notifications	When the plans are modified, or deliverables are reverted etc., the system will send out notifications automatically (the rules can be self-defined by the user).
	The system will also send out notifications to the responsible persons before the due day.
Escalations	Support to escalate to the leaders automatically if the pending requests are not being handled in due time.

Chat & Forum	Provide online chats and forums for instant communications.
Instant Comments & Emails	Allow team members to add comments for the projects, activities, deliverables, issues etc. online or via email at the same time.
	All the communications including the emails will be captured into the system by time sequences.
	Relevant team members will be able to keep track of the historical communication records when needed.

Change Request Mgmt

Change Request	Allow users to record and handle the change request in the system.
Severity & Urgency Queue	Allow to define the severity of the change requests, provide urgency queue function to manage the change requests and to control the access rights.
Audit Trail	Provide audit trail to record all the changes of the change requests.
Self-define Function	Allow privileged user to self-define the basic information page and management flow of the CR.

Purchasing Mgmt

Purchase Order	Support the entire procurement process, including raising the PO for approval, record the invoices received from the suppliers, payment requests and approval etc.
Received Invoice	
Payment Request	

Requirement Mgmt

Requirement	Allow users to record and handle requirements in the system, which includes project requirements and product requirements.
Severity & Urgency Queue	Allow to define the severity of the change requests, provide urgency queue function to manage the change requests and to control the access rights.
Audit Trail	Provide audit trail to record all the changes of the change requests.

Test Case

Test Case	Allow users to record and handle test cases and upload related test files.

Team Building

Project Work Performance Report	Provide various real-time project analysis reports as a reference during the executions, such as workload summary, quality summary, milestone completion status summary etc.
Reality Checks	Provide reality check functions to collect the comments from the project stakeholders and allow to answer the questions anonymously.

Project Monitoring

Cost Monitoring

Earned Value	Use the EVM management method recommended by the PMBOK to monitor the project cost.
Top-down & Bottom-up Budget Deviations	The system will monitor the deviations between the top-down and bottom-up budgets and by real-time.
Cost Overrun	The system will monitor the cost overrunning the approved budget in real-time automatically.

Budget Re-approval	With pre-set rules, when budget being modified, it will trigger the restriction to re-approve the project.
Progress Monitoring	
Dashboard & Warning	Provide project summary dashboard and the alert functions.
Earned Value	Use the EVM management method recommended by the PMBOK to monitor the project schedule.
Quality Monitoring	
Quality Monitoring	The system will keep track of the project quality dynamically by examining the following: uncommitted deliverables, overdue deliverables, deliverables without review and acceptance, rejected deliverables, deliverables with a high rejection rate, the most overdue deliverable etc.
Resource Monitoring	
Resource Overall Monitoring	The system will automatically monitor the overall resource conditions, including overdue resources, unreasonable allocations, overloaded resources, to-be-hired resources, un-committed resources etc.
Resource Effort Analysis Histogram	The system provides resource effort analysis histogram to analyze the total FTE, resource days or resource hours of the planned, requested, approved or actual resources usage.
Resource Effort Analysis Table	The system provide the analysis report to view and compare the FTE, resource days, resource hours of the total resource usage, the resource constraint and the variances.
Different Resource Reports	The system provides different resource reports to help monitoring the resource in different dimensions, e.g. the resource planning report, resource time & cost report, resource allocation & utilization report etc.
Risks & Issue Monitoring	
Risk Detection	Auto detection of the resource risk, schedule risk, cost risk, management risk etc. and demonstrates the risks in the project dashboard.
Risk Mgmt.	Besides from the auto detection of the risk, the system also allows the user to record and monitor the risks found.
	The system supports to plan actions to deal with, reduce or avoid the risk, and supports the whole follow-up process until the risk is relieved or closed.
Issue Handling	Support to keep track of the whole process of dealing with the issues found; including the issue registration, the impact analysis, the actions, actions follow-ups, issues solved and closed.
Library & Knowledge Classifications Mgmt	
Document Library Mgmt	
Library Template	Support the creation of document library templates and the creation of document libraries based on a particular template.
Auto-creation of Project Library	Support creating a new document library automatically when a new project is created. It also supports creating a project document library from template.
Document Version	Provide document version management, able to keep track of all the historical versions.
Access Rights Control	Allow different stakeholders and users to have different access rights; able to grant the rights by library, by specific folders or specific documents.
	Provide check-in and check-out controls to avoid concurrent write into the same version of the document.
	All the view, modification, download, check-out actions etc. will be recorded in the access logs.
Document Searching	Allow to search and view the documents by names, knowledge classifications, key words or full-text;
	Allow to search and track documents of different formats including word, excel, ppt, pdf., etc.

Document Flow	Support user-defined document forms and allows the current user to fill in and submit documents of different types for approval.

Knowledge Classification Mgmt

Knowledge Classification	Allow the user to self-define knowledge classifications.
Document Searching	Allow the linkage of each document to multiple knowledge areas and provides a knowledge-based search facility.
Deliverable Searching	Allow the linkage of each deliverable to multiple knowledge areas and provides a powerful knowledge-based search facility.

Configurations and Integrations Mgmt. (SVN/CVS)

Configurations and Integrations Mgmt.	Built-in function to integrate with SVN/CVS for instant usage.

Risk & Issue Mgmt

Risk Management

Existing Risk Analysis	Support the identification of existing risks and the analysis of the confidence level of them before the project start.
Risk Mgmt.	The system allows project team members identify, assess, prioritize and record risks and the formulate actions for managing them. The system also records the probability and influence before and after the action to ensure the effectiveness of the actions.
Risk Detection and Reminding	Auto detection of project resource risks, schedule risks, cost risks and management risks and provides extrapolative forecasts to warn people on the systemic risks.

Issue Mgmt

Issue Recording	Allow to record issue for different levels and objects, such as dependency, deliverable, activity, sub-project, and project.
Issue Linkage	Allow an issue to be associated with a risk and its resolution actions associated with change requests.
Change Tracking	The system will track the impact changes of the issue.
Actions Tracking	The system will track the actions to solve the issue.
Issue Map & Warnings	Provide an real-time issue map for the monitoring and visibility purposes and a automatic alert function for the actions associated with issues.

Re-forecast &Investment Attention

Re-forecasting Mgmt.

Schedule Re-forecasting	8thManage supports schedule re-forecasting based on Schedule Performance Index (SPI), present date and mandatory dependencies.
Resources(Efforts) Re-forecasting	Allow to re-forecast the resources(efforts) according to the re-forecasted schedule and the extra resources requests.
Cost Re-forecasting	Allow to re-forecast the cost budget according to the actual cost (AC) and the bottom-up budget cost.

Investment Attention

Bubble	Present multi-dimensional view of projects in the form of bubbles, supporting analysis of projects, project requests pending approval, project requests and projects. Users can set the indicators represented by the horizontal axis, vertical axis, bubble size and bubble color. The main indicators include project type, priority, expected return on investment and risk (percentage of confidence in overcoming risk).

Rank	Support to view performance scoring for each project, including system scores calculated by the system based on the set project traffic light scores, as well as scores manually filled in by management.
Bill of Material	
Bill of Material	Allow to record bills of material. Materials can be products defined or not defined in the Product List, can be selected from Major Material Category, or imported through Excel.
Material Cost & Quote	Support to record cost and quote of each material, and automatically calculate the total cost and the total quote.
Approval & Change Mgmt	Support the approval of the bill of materials, and the changed bill shall be re-approved.
Version	The approved bill of materials will automatically generate a version, and the two versions can be compared in terms of the material composition and costs.
Inventory Request	Allow to generate an inventory request from a bill of material.
Inventory Return	Allow to return materials to inventory.
Purchase Order	Allow to generate a purchase order from a bill of material.
Project Close	
Project Close	Support to complete and close the project in the system.
Deliverable Documents Mgmt.	Allow to move all the attachments of the deliverables into specific project folders in the project library.
Resources Release	Allow to release all the requested resources after closing the project.
Project Documents Mgmt.	Allow to move all the project documents into the project library for better managing and archiving.
Scrum Project	
Requirement & Story Point	Allow to handle ideas and requirements on the story book page, which includes recording responsible person and number of story points.
Sprint & Activity	Allow to record sprints and related activities and to add cover pictures for each activity.
Meeting	Allow to record meetings including planning, daily and retrospective meetings.
Progress Monitoring	Allow to check and update sprint progress by dragging activities from one status column to another.
Burn Down Chart	Allow to check three types of burn down charts.
Acceptance	Allow to check acceptance of activities, requirements and sprints.

8 can provide best combination of standard products & redevelopment services for enterprise management and over 500 corporations in Asia are using our following modules on-premises or SaaS:

8 SRM : Supplier Management, e-Procurement and e-Tender

8 PPM : Project and Portfolio Management

8 CRM : Corporate Client CRM and Consumer CRM

8 Timesheet : Resource Time and Cost Management

8 New Way : Visual Agile and Lean

8 Service : Service Management

8 EDMS : Electronic Document Management System

8 OA : Office Automation

8 HCM : Human Capital Management

8 All-in-one : Enterprise Full Automation