ETC – Kick start your project management

Introduction to Estimated Time to Completion

How to get successful project estimation

Manage your projects and deadlines

This document contains a review of the ETC function in TimeLog Project.

With ETC – Estimated Time to Completion – you always have an overview of the project plan and progress together with a solid tool to strengthen the communication between project managers and project members.

Index

Value your time...

1 Projects on track

The ETC function helps you handle major projects, meet deadlines and keep up to date on project progress.

1.1   ETC – what is it?

ETC is short for **Estimated Time to Completion** and is a term used within project management used to indicate how long it takes to complete project tasks. In this way, the ETC function is also a communication tool between project managers and project members. The project manager has an immediate overview of how far the employees are with a given tasks, and how much time they estimate they need to finish it.

1.2   When is ETC used?

ETC is used on projects where employees are added to specific tasks; typically projects with a time budget, e.g. customer projects or internal investment projects with a completion date. In other words, projects that are not performance specific. To benefit from the ETC function, your employee needs to have a task which is compared to an overall time schedule and a budget. Then your employee is responsible for updating the project manager on how many hours are needed to complete the task.

1.3   How is ETC used in daily life?

To give the project manager an overview of the exact remaining work, and thereby provide the best requisite for setting a realistic deadline for the project, the employees need to enter their personal ETC estimations for allocated tasks. An employee may e.g. estimate that (s)he needs 20 hours to complete a task, even though s(he) has used 40 of the 50 budgeted hours. Hereby, the project manager sees that an employee expects to use additional 10 hours to finish the tasks; 60 hours in total. To give the project manager an understanding of why the additional hours are needed, the employee may enter a comment to the ETC estimate, and state the level of uncertainty; high, medium or low. In this example the employee may e.g. enter that there is high certainty that (s)he needs 20 hours before the task is completed.

Value your time…

Figure 1

Submitting ETC – here, the employee may enter his/her estimates incl. the number of hours and if the uncertainty level is correct.

The employee's estimate is included in the project manager's project progress, and (s)he sees the estimations of all employees held up against the original budget. At the same time, the project manager sees how many hours have been tracked on each task. If you add the total time spent to the entered ETC on each task, you get the EAC - –the total end estimate called **Estimate At Completion**, which is the time you expect to have used at the end of the project.

(See Figure 2 on the next page.)

Figure 2

Here, the project manager sees the total ETC and EAC on each task, and the status on the actual time spent vs. budgeted time on the project.

1.4   Easy overview for the project manager

It is important that the project manager can get an easy and quick overview of inconsistencies in the budget. If there is a conflict, the EAC is marked with red. This enables the project manager to quickly skim through the different tasks and find out where to take action.

With the ETC estimates from the employee, the project manager is able to see a percent wise status on the progress both on a task and overall project level based on the number of spent budgeted hours.

If an employee has finished a task, it may be marked as completed using ETC reporting which immediately informs the project manager. When all employees on a task have ended their allocation, the overall task's status will change to **Completed**. In this way, the project is always up to date.

1.5   Avoid surprises before deadline

If the project manager receives ETC estimates from the employees each week, it strengthens the project planning. Deviations from the time schedules are seen right away, and the project manager can react in time before deadline. The project manager is a step ahead with the ETC estimates, and can enter into a dialogue with the employee about the reasons for a higher than originally estimated time consumption. In this way, the project manager can avoid surprises before deadline.

1.6   Handling uncertainty and risks

As mentioned previously, the ETC function gives the employee the opportunity to enter the uncertainty level on a task. If the project manager sees that an employee is uncertain about the estimate, it is possible to react on this and talk to the employee about it. An uncertain time estimate may be due to an incomplete tasks description or a project where the scope has been changed several times causing confusion among employees. The project manager maybe discovers that the project needs better feasibility studies, or that a pilot study is necessary for the employees to provide certain time estimates.

In this way, the ETC function is part of a risk assessment of the project plan. Off course, it is possible that employees enter high certainty estimates that turn out to be wrong and vice versa. Here, the project manager's experience and common sense play a part in assessing the accuracy of the estimates.

1.7   Include your employees in the project planning

Often when the project manager plans a project, an estimated time budget on the tasks is made and employees are allocated with a certain number of hours. With the ETC function, the project manager can set TimeLog Project up to ask allocated employees to make ETC estimates according to the entered budget and enter the level of uncertainty.

To help the employees make certain ETC estimates, the project manager can describe each single task in the task description before sending out the ETC request. When the employees have estimated their tasks, the project leader can hold the estimates up against the budget and ask the system to automatically update the project plan with the employees' ETC estimates.
This method is also called "bottom up" estimation which is a strong tool for dialogue and delegation of responsibility between project manager and project members.

Figure 3
Notifications overview

Notifications

Type	Subject	Recipient	Active	
Email: Project	Project: <#ProjectName#> (<#ProjectNo#>), Customer: <#CustomerName#>	Project manager / Ot...	☑	✎
Email: Move allocations	Project: <#ProjectName#> (<#ProjectNo#>)	Project manager / Ot...	☑	✎
Email: Non-allocated employee's registered time	Not allocated employee registered time on your project <#ProjectName#> (<#ProjectNo#>)	Project manager	☐	✎
Notification: Allocation exceeds task's dates	Notification: Allocation exceeds task dates for task <#TaskName#>	Project manager	☐	✎
Notification: Allocation uncompleted	Notification: <#ActiveUser#> has marked the allocation as not completed on <#TaskName#>, <#ProjectNa...	Project manager	☐	✎
Notification: Allocation uncompleted	Notification: <#ActiveUser#> has marked the allocation as not completed on <#TaskName#>, <#ProjectNa...	Allocated employee	☐	✎
Notification: Allocation completed	Notification: <#ActiveUser#> has completed the allocation on <#TaskName#>, <#ProjectName#> (<#Proje...	Project manager	☐	✎
Notification: Last allocation on task closed	Notification: The last allocation on the task <#TaskName#> is closed	Project manager	☐	✎
Notification: Last allocation on task closed	Notification: The last allocation on the task <#TaskName#> is closed	Manager	☐	✎

Update

When all discrepancies regarding the budget are clarified, the project manager may e.g. each week relate to the ETC estimates coming from the employees. This is a form of contract with the employees allowing them to develop skills in estimating time on tasks and give them more responsibility for their own work. Relating to the question "How many hours do I still need to perform?" all the time creates consciousness about what tasks time is spent on. If an employee e.g. keeps asking for more time because the progress after 10 hours of work in fact only corresponds to 5 hours, it is one of the things you can take with you when planning the next project including time estimation.

1.8 Automatic notifications and logging of ETC estimates

It is possible to activate different automatic e-mail notifications (see Figure 3 on the next page) which are send after certain actions. E.g. when a task is marked as completed by one or more employees. Here, you may set up that the project manager receives an e-mail notification.
When making ETC estimates, the employee may write a message to the project manager. It is shown in the project plan and collected in a log. If the project manager senses that an employee has trouble making correct estimates, (s)he can use the log function to check previous estimates and see if it has happened more than once.

1.9 Realistic workload for employees

If you use the ETC function, you are always up to date on time, project planning and the expected delivery date. If you update the employees' allocations based on the EAC at the same time, you will see a realistic view of the workload on your employees in the resource planner. In this way, you can better manage projects in progress and have a realistic overview of your company's total workload to see if you have room for new projects.

1.10 Use of ETC in the quotation stage

Besides using the ETC function on projects in progress, it is a good way of estimating a realistic time consumption when making quotations to customers. By marking the project status as **Quotation** and asking the employees to estimate their time consumption on the different tasks, the project manager can make an overall quotation.

Afterwards, the project manager can compare with knowledge and experience from previous projects and make the most accurate quotation. Once you have developed excellence in estimating your time consumption prior to contract signature, the outcome will be realistic deadlines, fewer unpleasant surprises and ultimately a much higher contribution ratio on the projects.

Value your time...