



Financial project management

Strategic reporting and management advantages



TimeLog Value Estimator

The data structure in TimeLog Project

At the heart of TimeLog Project is a unique data model, which provides consulting firms with strategic reporting and management advantages.

TimeLog Project's financial project management gives you the opportunity to calculate estimated value and distribute the value on e.g. your consultants to see exactly how much value is created on your projects incl. fixed price projects, which often include complex value calculations.





Index

1	Introduction	3
2	TimeLog's unique data model provides unique analysis opportunities	4
2.1	Data structure of the traditional solution	4
2.2	Data Structure of TimeLog Project	5
2.3	Time registration as business object	7
3	Advanced financial project management for consulting firms	8
3.1	Automated assessment of project progress on fixed price projects	9
3.2	TimeLog Value Estimator	9
3.3	Calculation of project's degree of completion	10
3.4	Calculation of the estimated value	11
3.5	Distribution of the value to consultants	12

3. edition
Written by Søren Lund

TimeLog A/S
Alhambravej 5
1826 Frederiksberg
Denmark
Phone +45 70 200 645

© 2015 TimeLog A/S
All rights reserved.

www.timelog.com
support@timelog.com





1 Introduction

TimeLog specializes in providing solutions for business management consulting firms, where time is the primary product sold. Companies that supply time are found in several industries, each with their own characteristics and special process requirements for a solution.

Industries that have time as a primary product are among other:

1. Communications industry
2. Management consultants
3. IT service companies (service and operation of IT infrastructure for companies)
4. IT project companies (developing IT solutions for companies)
5. IT consulting firms (rent manpower to other companies)
6. Consulting engineers
7. The traditional advertising industry
8. Media industry
9. Architects
10. Tradesmen
11. Staffing functions in companies

Incentive models are often implemented in companies within the first five industries above, where the employees' personal turnover, billing rate, or surplus/deficits determines all/part of the employee's salary.

Other characteristics of this group of companies:

1. They are project-oriented
2. There are more employees on each project
3. The projects can often be long term (over 100 hours)
4. Employees can be included on the same project with different hourly rates (among the employees and between the different tasks on the project)
5. The projects are settled by numerous billing models (fixed price, time spent, maximum budget, monthly service subscription, vouchers, etc.)
6. The projects are often sold with mixed billing types





2 TimeLog's unique data model provides unique analysis opportunities

There are many systems on the market targeting specific industries that use time recording and invoicing. Compared to other suppliers of systems for time recording, project management and invoicing, TimeLog focuses on delivering to the complex industries 1-5. The focal point of the solution is a unique data model, which provides companies with strategic reporting and management benefits that can give companies an advantage over their competitors.

“TimeLog focuses on delivering to the complex industries 1-5”

2.1 Data structure of the traditional solution

Other systems and solutions on the market are typically constructed with three separate system silos, where the exchange of data between systems is unidirectional and occurs in the following order:

1. Time and expense registration (registrations transferred to the billing system)
2. Billing system (invoices transferred to the financial system)
3. Financial system (ERP)

Systems architecture is typically technologically-/logic- specific. The data break between the time recording system and the invoicing system is based on a wish for freedom in invoice generation.

The data model in conventional systems have three significant limitations:

1. You cannot monitor individual performance (and certainly not in real time)
2. You cannot manage companies who invoice and set turnover by the percentage-of-completion method, as revenue recognition is not covered.
3. Work in progress cannot be controlled with sufficient flexibility and precision, as it cannot book as revenue for work on fixed price projects.

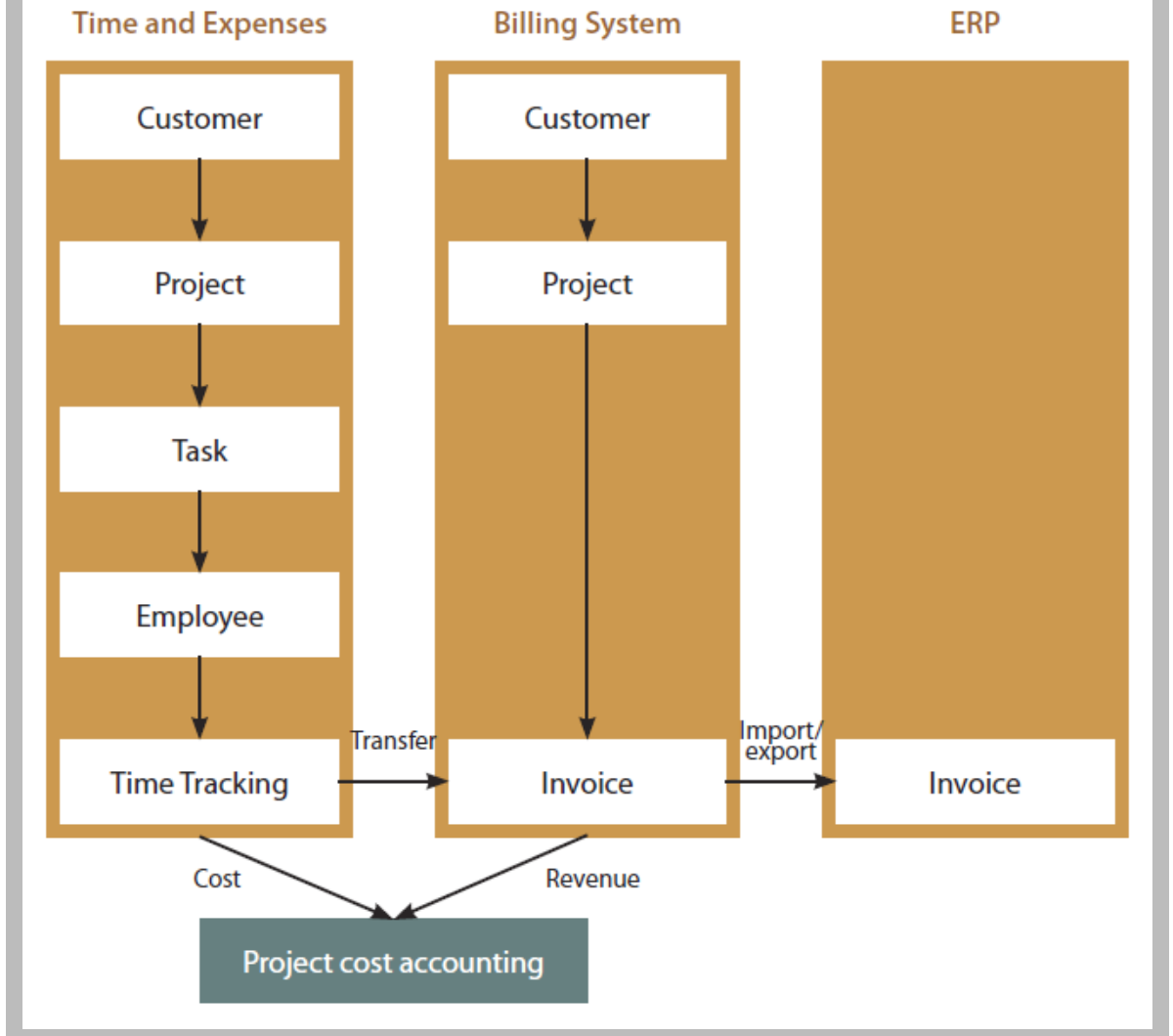
See **Figure 1** on the next page.





Figure 1

Traditional data structure in a consulting firm with three separate system silos



2.2 Data Structure of TimeLog Project

Compared to traditional systems, TimeLog Project's data model is extended at a very central area – each time recording is elevated to an independent business object so each time registration can be cost accounted. The entire data chain, from customer to invoice, is maintained in a coherent system, and when invoiced/booked as revenue, the value booked as revenue is distributed back to the subjacent time records (we call it backdraft).





The subjacent time registrations retain the reference to the individual income statement line, which, in turn, links to the individual invoice line, so that the time registrations will always show the invoice line to which they were invoiced, and more importantly, where appreciation/depreciation of hours and value occurred.

Figure 2

TimeLog's recommended data structure for a professional services organisation

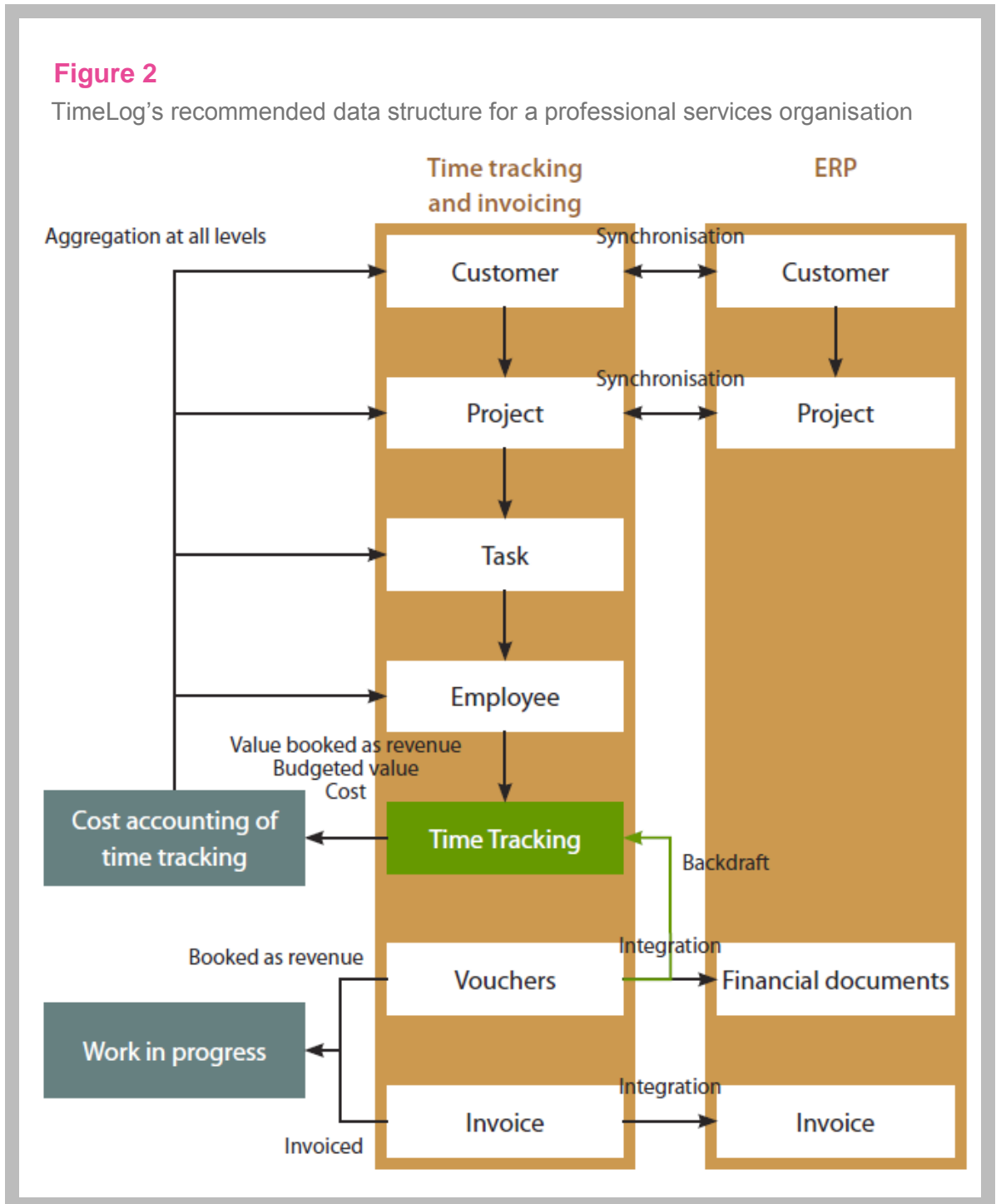




Figure 2 provides unique reporting capabilities, as it:

1. is possible to create summaries at all levels and dimensions from a table in TimeLog Project's database (the bonus ratios and turnover analysis)
2. is easy and inexpensive to develop sophisticated reports for customers
3. is easy to understand and use data from TimeLog Project in other systems
4. is easy to pinpoint back to the original data for each invoice.

2.3 Time registration as business object

Each time registration is imprinted with basic information, such as which employee made the registration, when it was registered, and to which department (using [TimeLog Departments](#)) the employee was assigned when it was registered. Additionally, the registration contains a sequence of unique information:

Registered hours

The employee's registered number of hours (which can also be used for payroll).

Estimated hours

The proposed number of hours for revenue recognition / invoicing. This is relevant if working on contracts with minimum units (minimum 1 hour).

Hours booked as revenue

Recorded number of hours on the registration (for invoicing/revenue recognition).

Cost

The internal cost (based on employee salaries).

Registered value

The reference value of the registration if the work was settled by time spent with a fixed hourly rate and without minimum time and other regulated models applied.

Estimated value

The suggested value for revenue booking. This is particularly relevant when working on fixed price projects, where the hourly rate of registration is adjustable and affected by the project's progress and current booked income (Read more in section [3.2 TimeLog Value Estimator](#)).





“PoC is characterized by the turnover of a project, in the broadest range possible, being booked at the time the costs are incurred”

Value booked as revenue

The value booked as revenue for the registration (for invoicing/revenue recognition). All economic data is also saved for the individual registration in both customer currency and reference currency, so that it is easy to develop international solutions for the organization that support multiple legal entities in several different currencies.

3 Advanced financial project management for consulting firms

As previously mentioned, the consulting industry is characterized by the use of mixed and complex billing methods for customers, while working with an often monthly-based bonus ratio for employees.

This requires:

1. a monthly revenue setting at the project level
2. a monthly division of the generated turnover on projects to the staff working on projects
3. facilities to manage issues that occur when a project is hit by cost overruns, affecting the turnover for the employees working on the project in its final phase.

Consulting firms, who have these requirements, often choose to use the so-called **Percentage-of-Completion (PoC) method** when the company must identify the turnover on a monthly level. **PoC** is characterized by the turnover of a project, in the broadest range possible, being booked at the time the costs are incurred (and not just when the client is invoiced).

[TimeLog EVM](#) (Earned Value Management) is an extension of TimeLog Project, which permits the management of businesses that operate by PoC. With [TimeLog EVM](#), using the progress of the project as a starting point, the value creation for the individual projects can be booked as revenue on a weekly/monthly basis.

Coupled with TimeLog Project’s standard facilities for invoicing, it will be possible:

1. to book the turnover as revenue monthly, without regard for the customer’s payment plans
2. to bill the customer using payment plans (fixed price, subscription, time spent, vouchers)
3. to make an automatic calculation of work in progress
4. to lock the monthly turnover on an accounting level.





3.1 Automated assessment of project progress on fixed price projects

Many consulting firms and IT consultant companies in particular, are very sensitive to project progress, if providing services as a fixed price / voucher agreement. If a project "runs off the tracks", it is important to make budget adjustments on the projects, so the actual value and also the potential revenue contribution for the individual project and the associated consultants are known and visible.

The calculation of value creation (the estimated value in section [3.4 Calculation of the estimated value](#)) is relatively complex. The calculation includes, among other things:

1. The project's contract (contract value and payment plan)
2. The value already booked as revenue for the project in previous accounting periods
3. The hours already booked as revenue for the project in previous accounting periods
4. Current project budget
5. The registered work on the project during the current accounting period

As this calculation must be made across the various projects' accounting models and budgets, it is a very time-consuming process, which is difficult to maintain manually in many small and medium enterprises. For this purpose, TimeLog developed the "TimeLog Value Estimator" algorithm.

3.2 TimeLog Value Estimator

The TimeLog Value Estimator is able to determine the value creation for fixed price projects, and distribute the value to the associated consultants, considering the budgeted hourly rate. If a junior consultant and a senior consultant are working on the same project, TimeLog Project will be able to distribute the created value to consultants based on the difference in their budgeted hourly rate.

The calculation occurs whenever time is registered, when making budget adjustments, or booking as revenue, so the project will always show the updated figures for the estimated value.

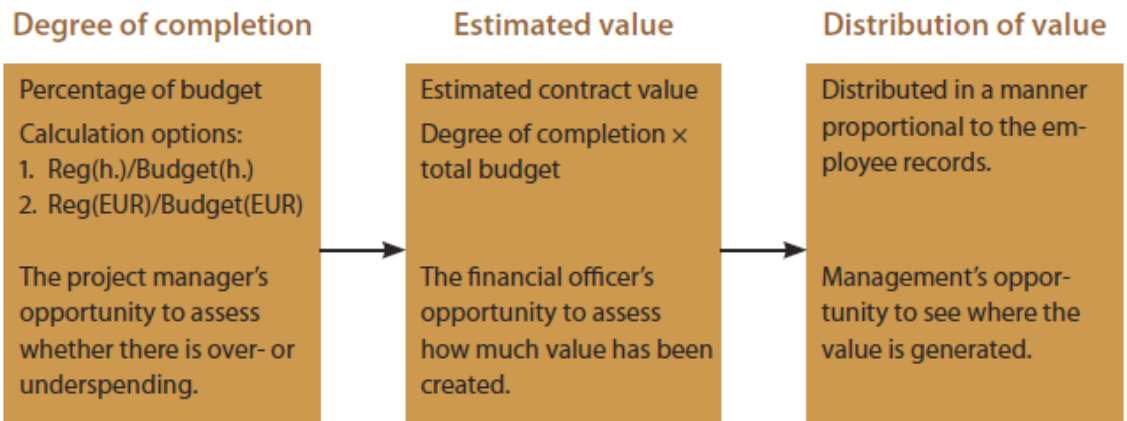
See [Figure 3](#) on the next page.





Figure 3

The TimeLog Value Estimator's basis of calculation



3.3 Calculation of project's degree of completion

The first phase of the calculation is determining the project budget's degree of completion.

The calculation can be configured to be based on:

1. Registered hours/Budgeted hours
2. Registered value/Budgeted value

The latter is used if you wish to reflect if the consultant performing the work on a fixed price project is an expensive or less-expensive consultant. If an expensive consultant is working on the project, the progress (measured per hour worked) runs faster than if it is a less-expensive consultant providing hours to the project.

Additionally, the calculation can be configured to:

- be independent of already-existing value booked as revenue on the project or
- taking into account the already-booked as revenue value

Case 2 is used in businesses where you want a joint value distribution to consultants in the project's life cycle. If, at some point in a project, too much is booked as revenue in relation to the project's actual degree of completion, TimeLog Project





automatically equalizes the error over the rest of the project's lifetime, so that all consultants working on the project take a share of the loss, and not just those participating in the last segment of the project.

3.4 Calculation of the estimated value

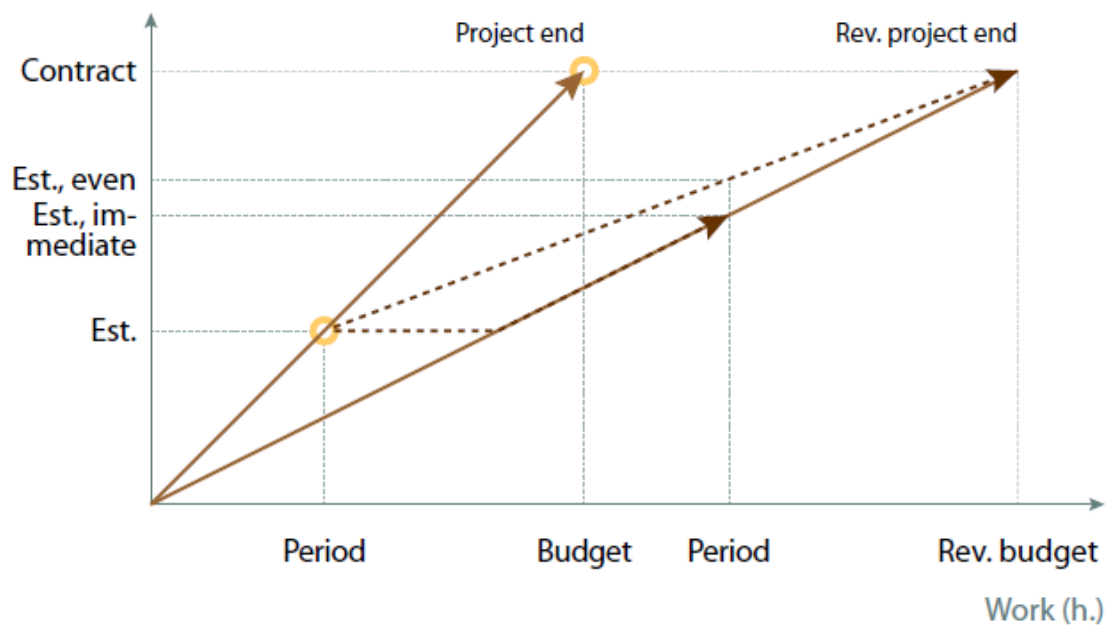
When the degree of completion is known, this is used to determine the project's estimated value creation. Together with the already booked as revenue value of the project, it is now possible to determine how much free (not booked as revenue) value that is created on the hours recorded since the previous revenue recognition. This is a unique element in TimeLog Project, as this facility provides an automatic, ongoing revenue forecast for the individual project in the open period.

Figure 4

Example of calculation of estimated value

Estimated value

Value (EUR)





3.5 Distribution of the value to consultants

Once it has been determined how much free value is created on the individual projects, TimeLog Project is finally able to distribute this value to the consultants who have registered time for the projects.

Value distribution may again be based on:

1. the individual consultant's share of the recorded hours on a project
2. the individual consultant's share of the reported value of a project

This is a unique element in TimeLog Project, as this facility provides an automatic, ongoing revenue forecast for the individual consultant in the open period.

