



## A Healthy Project Portfolio – Impossible to Achieve? Meisterplan and Primavera P6 – How to Achieve Intuitive Project Portfolio and Resource Simulation in Real Time

This article supports the statement, why it is so cumbersome just to produce a stable project portfolio. And why secret Excel sheets often exist outside of P6 in the dark when it comes to planning a project portfolio. The suggested solution to this problem is an innovative, collaborative and intuitive software, Meisterplan. This software can be used with Primavera P6 to simulate scenarios and optimize your project portfolio.

### Why Project Portfolios Don't Function

Which projects can we execute next year? Which ones are already running or apply to the following year? Can we really execute all of the proposed projects? These are the pivotal questions many companies face when trying to manage project portfolios, and were usually answered by exclusively looking at the budget. The addition of P6 through OPPM can in many cases contribute to optimization, but a key functionality was still missing; an overview combining strategy, budget and most importantly: resources.

In the past, the projects were approved by using a "top down" budgeting strategy. This approach is OK and definitely helps to establish a first assessment. But this tactic is not optimal and resulted in two problematic circumstances.

First, this approach disregarded the labor. A valid and optimized plan detailing the true working capacity of the workforce was lacking. Thus, a single bottleneck resource could thwart the carefully planned project portfolio for an entire year.

The reason for this disaster? People and budgets are fundamentally two distinct factors. In emergency situations, tight budgets can be increased, pushed from month-to-month or redeployed to other areas - people cannot. Employees cannot be easily "increased" or pushed from month-to-month. Even outsourcing options are often met with a myriad of coordination, skill set and work-load difficulties.

The second problem using this approach, which especially applies to larger companies, is that internal project portfolios are often in general opposition. Take for example the situation with the IT and Marketing departments. While everything in marketing seems to be laid out well, it's possible that the conditions in IT are completely different. Conversely, an IT manager seeking to exploit their bottleneck resources, may inadvertently hinder the time-to-market plans of another department. Such independent planned oppositions often lead to accusations, escalations and management interventions.

Do you see a problem here? This doesn't have to necessarily be the case, but could be the reality when working with a sub-par project portfolio. If your business is regularly under pressure with an overstretched workforce and shorted time-to-market expectations, your project portfolio needs to be "healthy." Not just "healthy" in budget, but also "healthy" in capacity and aligned to a strategy.

### Forget Automatic Optimization

It gets worse. Even if you have your internal processes in order with distinct rules for setting and tuning-up the portfolio, you are haunted by the tragic realization that your data quality is insufficient. The reason for this is that in a perfect world, you could impeccably plan projects that could be automatically optimized. The effort you have to provide just to achieve this data quality would however, not be justified by the benefits of the result. Why? Because this data is dynamic: Projects themselves are risky and inevitably characteristic of changing. Therefore, the fine tuning of



mediocre data carries a pointless result. But nevertheless it is done, further complicating the situation with secret yet critical Excel sheets existing in the dark outside of P6, to provide at least some guidance.

### This Perpetual Back and Forth

But maybe after extensive preparatory work, you believe you've achieved a state of the project portfolio data. With a clear conscience, you present the data at the portfolio board (or whatever the decision-taking entity is called at your company) and realize that you are once again a prisoner of our own processes.

During the decision rounds, fast ideas are born about how next year's portfolio could be transformed. Worse yet, during a budget savings round, general savings constraints and strategic reorientations demand complete re-planning that simply cannot be done in a timely manner with the incumbent tools. Further rounds of negotiating ensue, rescheduling, new statements ... soon you're back to square one and there's talk of pulling an all-nighter to

get everything set straight. And still inescapably, all of this complexity can only be semi-achieved using Excel files and paper reports.

### The Meisterplan Hypothesis: Get Closer to the People

When automatic optimization isn't a solution, when one must support decision rounds, and when the available data budgets, capacity and priorities is provided from semi-trusted sources, IT clearly reaches its limit. The approach presented in this paper is based off the law of requisite variety. This law states, that only a complex system can be controlled from an even more complex system<sup>1</sup>. What system could be more complex than a collection of project budgets, dependencies, resources, skills, etc.? A system that consists of more links, the human brain.

And, this is precisely our hypothesis; a group of savvy experts, who know the company by heart, who can understand the data they're receiving, who can judge if a department is over-allocated or not and who can complement

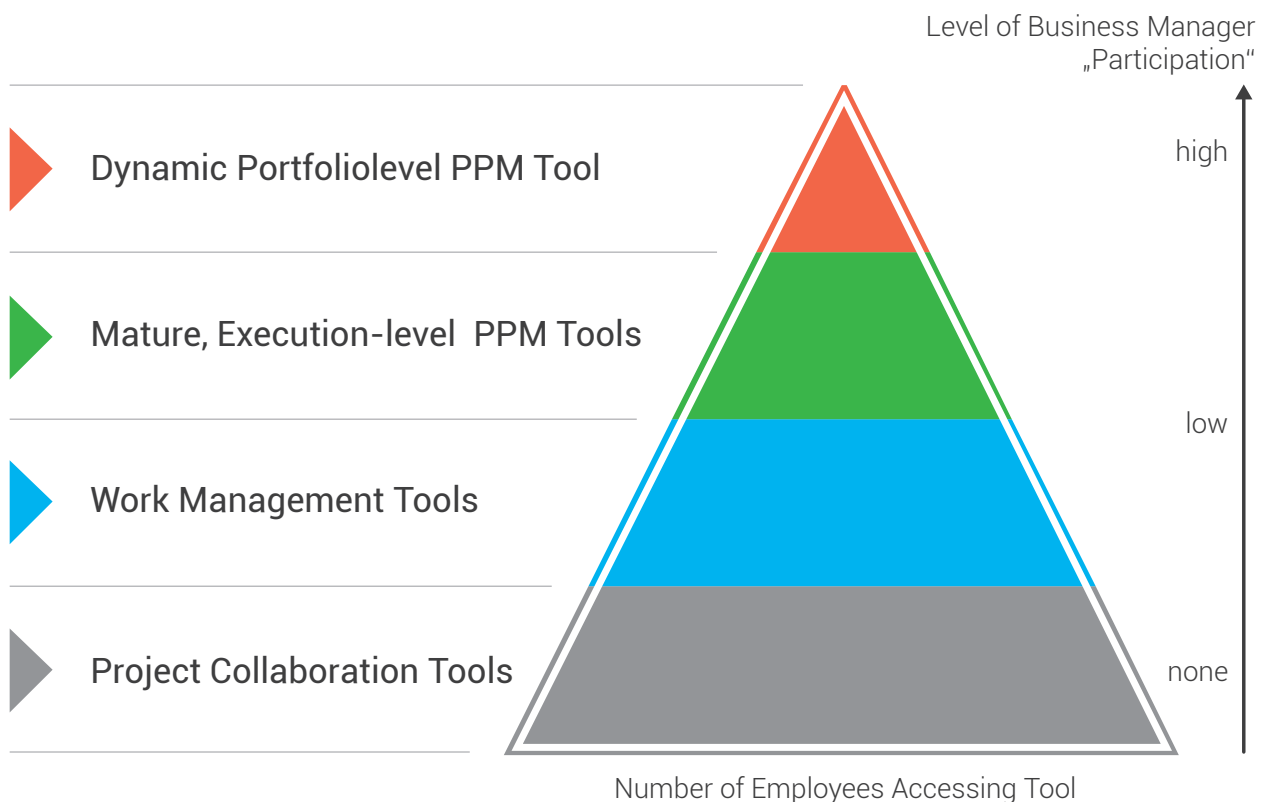


Figure 1: Meisterplan is a dynamic PPM tool.



the missing data directly, will be empowered to find better solutions. What's important here to highlight, is that there is one fundamental requirement of this group: all creative

Meisterplan can be described as "Dynamic PPM", a tool for the steering committee to simulate and reschedule their project portfolios. The principal here is the overall orches-

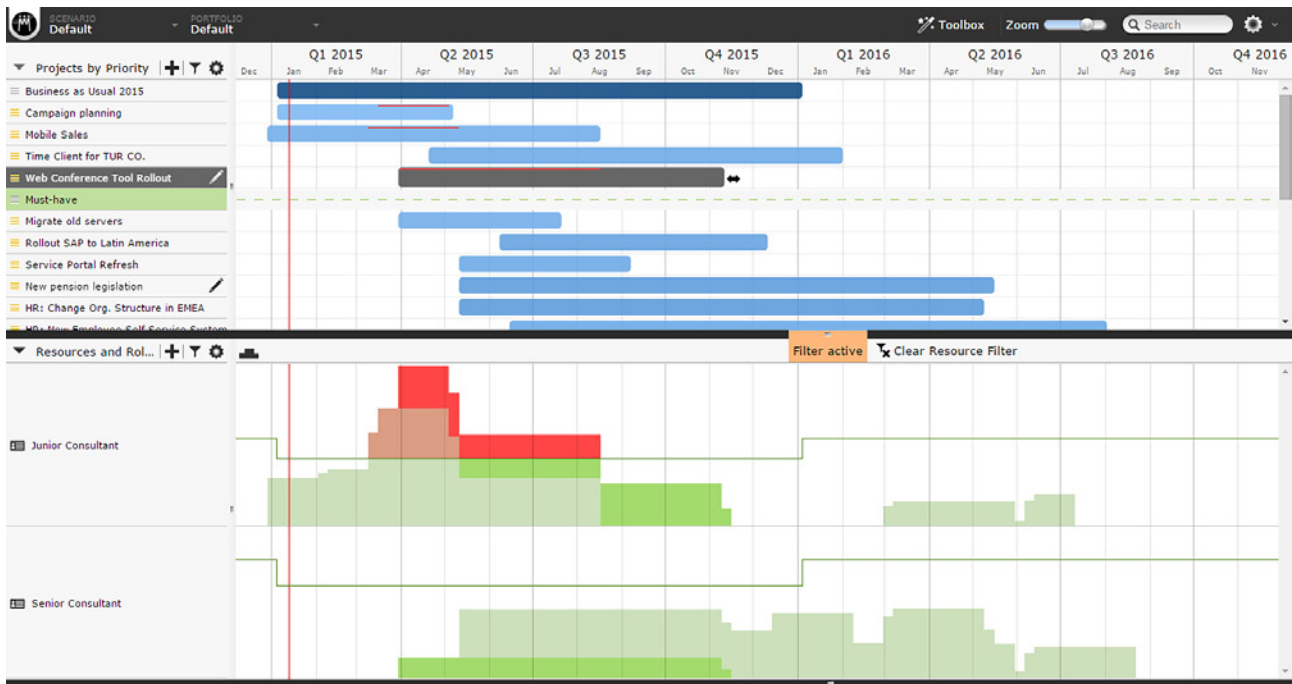


Figure 2: Screenshot showing an over-allocation in the Junior Consultant department

energy, solution-oriented work and discussion must first flow into finding solutions. Instead of wasting this creative energy on Excel data and mechanics, they can focus 100% on pressing questions like, "What happens when we strategically favor Initiative B? Do we have to close facility X?"

Only a completely intuitive tool that instantly, displays the effects of actions can support this discourse. A tool capable of quickly calculating and indicating consequences of human actions, equipping the planning committee to produce master plans. A tool named Meisterplan.

### What is Meisterplan?

Meisterplan is a software to simulate and optimize project portfolios. The system reads the data from P6 and is able to simultaneously also consolidate data from other data sources, for example an Excel spreadsheet or from another PPM software. The key functionality of the software creates one complete overview of the data. This is why

trating of projects, capacity and budgets. The ongoing day-to-day tasks of individual projects still remains the responsibility of the project manager.

The software was designed with the intention to create "boardroom-ready" plans. Executive management can easily see not only what is being displayed on the screen, but also grasp the effects and consequences of ad-hoc simulations.

Put simply, Meisterplan allows you to focus on the problem instead of the tool. Project portfolio solutions can then be found in joint meetings or in distributed environments. Meisterplan is synchronized so all users are informed in real time of any changes made in the portfolio.

Figure 2 shows a typical Meisterplan display. In this portfolio sample, the top half of the screen shows the Meisterplan Gantt display. A red bar is visible in three of



the projects, indicating an existing problem. Clicking into the project immediately shows a synopsis of information and who is in charge of this project. When the project is opened, two additional views are displayed on the same screen below: the resources and roles and the financials. Looking into the resources and roles view, an overload in the "Junior Consultants" department has occurred. In this example, a solution can easily be found using the drag and drop feature. By simply dragging the project to another

Trace" mode: the allocation histogram for the selected resource is shown.

All corresponding projects are stacked and sorted by rank with the highest-ranking project at the bottom. Moreover, Meisterplan denotes what the total capacity is. All key information can be easily changed and their effects be viewed here: reprioritizing, capacity reductions, changes in projects, etc. There is also an integrated bottleneck search.

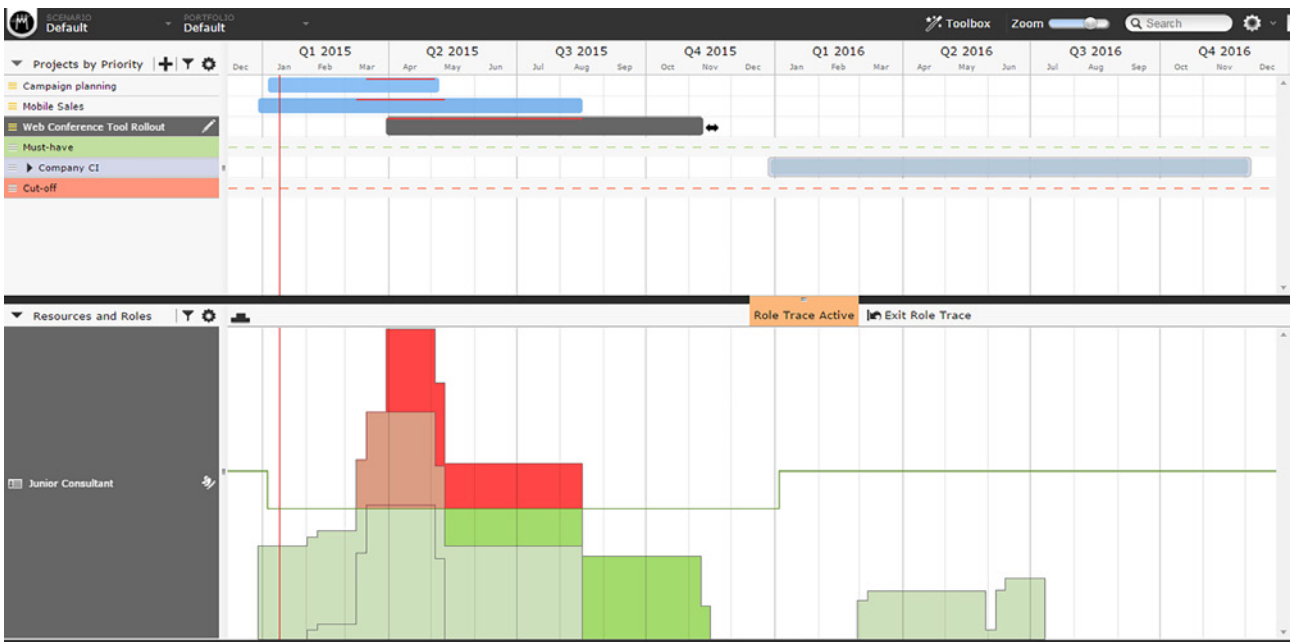


Figure 3: Screenshot showing the "Trace" functionality for a department

time frame simulating the Meisterplan technology in the millisecond range an alternative solution can be found without constraints. Other operations such as lengthen, shorten, cancel / suspend, edit, resource utilization, etc., can also be exploited.

A key point here, is that a question such as, "What would happen if we were to also accept initiative X?" can actually be played out in a simulation. In the simplest way, and in just a matter of seconds, a new initiative can be added and new resources can be allocated.

Capacity and the respective utilization can be simulated in Meisterplan. The following screenshot displays the "Role

Also unique and useful is the possibility to view the commitment of employees in projects as well as to be able to simulate their replacements. This functionality enables internal checks against external staff while maintaining a certain percentage of the internal expenditures and financial effects of the measured replacement.

### Budgets and Strategy

Meisterplan knows not only the capacity and hourly rate of each employee but also the milestone-based cash flows in the financial management. Thus, capital and operating expenditures can also be viewed as CAPEX and OPEX costs. Figure 4 shows the "finance trace" screenshot depicting an example in solid green of a project's monetary



impact in the overall budget and the benefit it is expected to generate.

Using the integrated strategy module, the company's project goals are categorized and prioritized accordingly. In this manner, one can see a logical overview of how much money, capacity and projects is invested for each corporate goal.

### A Month-Long Introduction? Not with Meisterplan!

It always surprises our clients how quickly Meisterplan can be implemented and used. Instead of week-long workshops, Meisterplan is ready after a few training days. The reason for this is straightforward: user-friendly software requires less time for training. Since all of the essential portfolio functions are already available, the software is

ready to be used once your data is uploaded. Meisterplan can be installed onsite or used as Software as a Service (SaaS). Either option saves you time and money by not requiring additional internal hardware.

### A Healthy Project Portfolio

Will Meisterplan automatically generate an optimal portfolio? Not by itself, but the software provides the tools at your fingertips to do so. Using Meisterplan, you'll be able to find a solution that exploits the existing budgets and capacities while prioritizing the projects that best align to the company goals. As Felix Willing, PhD of Nordex SE from Hamburg, Germany puts it, "Meisterplan opened our eyes for resource bottlenecks and new portfolio solutions."

Meisterplan as a software will help you to plan project timelines, capacities and dependencies. It supports you in

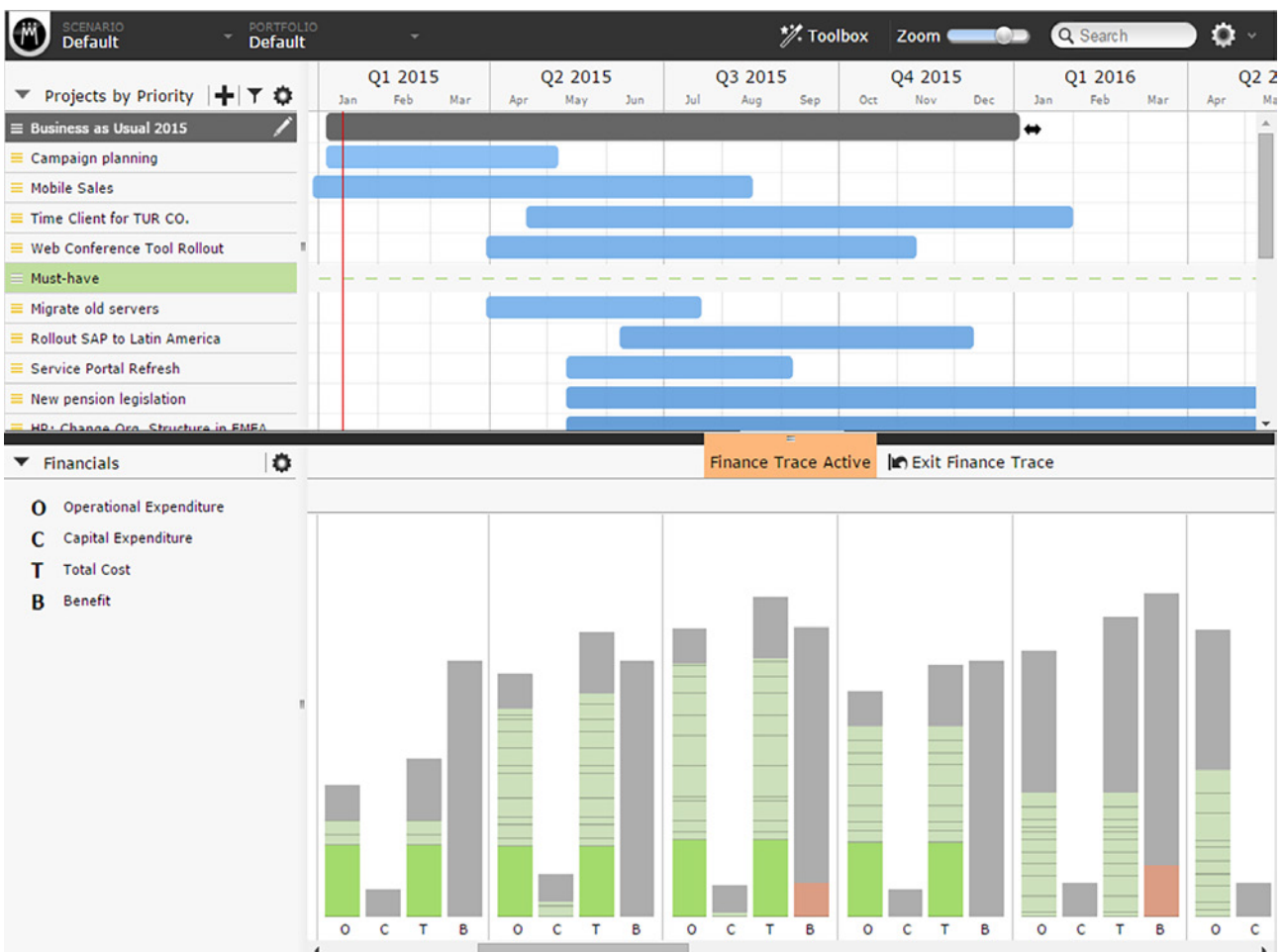


Figure 4: Screenshot showing the financial effects of the projects

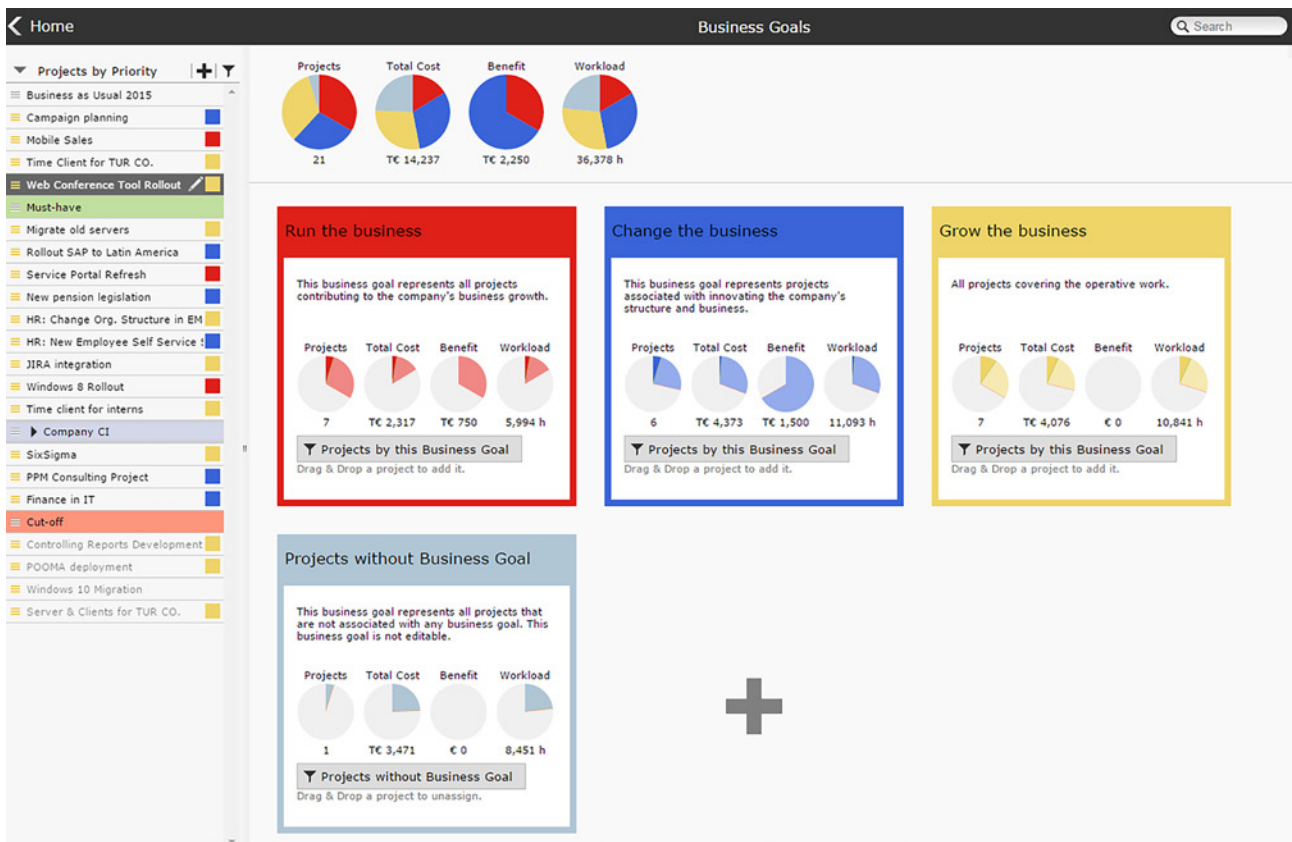


Figure 5: Screenshot showing the Strategy view displaying all projects aligned to business goals

the quest to organize which projects should take priority or which ones can be pushed out depending on cost expenditures and revenue. The tool can also be prompted to make suggestions using the "Suggest Best Fit" feature. As Philipp Detemple of the Consors Bank in Nürnberg states, "Meisterplan saves us a lot of time in our portfolio simulation work. The things we did in half-of-a day are now done in a few minutes."

Meisterplan supports you through the decision-making process for outsourcing by displaying the pros and cons. Additionally, the tool ranks which competencies are important or which ones should be removed. Þórhildur Gunnarsdóttir from Arion Banki in Reykjavik, Iceland puts it this way: "Meisterplan helps us to build feasible portfolios and make sound outsourcing decisions."

Meisterplan supports you to create a healthy project portfolio. Use Meisterplan and build a solid project portfolio without planning confusion, without contradictions, and

without finger pointing. Meisterplan, is a project portfolio management software that actually works.

<sup>1</sup> Original quotation: "If a system is to be stable the number of states of its control mechanism must be greater than or equal to the number of states in the system being controlled." Ashby, William Ross, *An Introduction to Cybernetics*, Chapman & Hall, London, 1956, S. 124.



**Dr. Jörg Leute**

since 1999, Dr. Jörg Leute is managing director of the company itdesign GmbH, located in Tübingen. He also functions as an active member of the GPM, dealing with agile project management as well as management of resources.

Contact:

joerg.leute@itdesign.de

+49 7071 3667-60