



THE VALUE COACH

Are Value studies enough to ensure that the organisation receives maximum value for money? The answer is no. Research on the effectiveness of the ProRail Value Management program shows all conditions for successful Value Studies are met, resulting in a lot of Value adding proposals. Unfortunately the full Value potential is not realised. To reach maximum potential, three aspects need to be addressed: 1) a continuous focus on Value throughout the project-lifecycle, looking at a project from a business goal perspective, 2) implementation of results and 3) timing of the Value-interventions. The management of Value needs to be an integral part of the project. Therefore we introduce a new project management role: The Value coach.

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The role of the Value Coach

The Value Coach's task is to line up project delivery with business goals (Value delivery) and is therefore typically initiated by the business owner. Although, it could also be initiated by the project in order to get the business more involved and to streamline the project. The Value Coach helps integrating Value improving and -assuring processes in the project's planning, assists with the initiation of Value practices and safeguards the implementation process of Value improving proposals. The Value Coach does not facilitate Value studies, but does participate in them. He or she also cultivates Value culture in the project's team and business, for example through inspiration and education. Now let's first explore three aspects of projects that can be improved by a Value Coach.

Conflicting interests between Project Management and Value Management

Take the simplified version of the results of a Value study in figure 1. There are five alternatives, each scored on performance and the estimated investment cost. If the project manager's budget is € 11 million: Which alternative would he probably pick? He would most likely choose alternative 3, since this gets the highest performance for the available budget. But if we look from a business point of view alternative 5 might also be interesting. If the lower performance level is acceptable, it offers the business € 3 million to invest in something else in order to get a higher total performance for the organisation for the same amount of money.

	Total Performance	Investment [mln €]
Alternative 1	80	11
Alternative 2	65	11
Alternative 3	110	11
Alternative 4	78	9
Alternative 5	80	8

Figure 1 – Value trade-off example

So, project management has a task to deliver a specific scope within schedule and budget. A good project does not necessarily lead to best Value for the organisation. This requires the involvement of the business owner or client. The Value Coach can make sure all options get the proper amount of attention from the Business owner.

Too little involvement of the Value Engineer during the implementation of Value study results

In figure 2 you see two value proposals as a result of a Value study on increasing the capacity of a train yard. The left option is

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meeting the customer requirements, while the right one does not fully live up to them, but can be delivered much sooner. The latter was discarded by the project manager during the development phase, because it wasn't meeting customer requirements.



Figure 2 – Train yard example

In this particular example the Value Engineer found out about this by coincidence and was able to intervene. In the end the client chose the 2016 option and adapted the requirements, because the client decided that an earlier delivery was more important than a few more train carriers (thereby meeting requirements). We believe that it is the task of a Value Engineer to look beyond the project constraints and present functionally, viable alternatives which challenge the customer beliefs. To do that, a Value Engineer needs to be part of the implementation process of the Value study results.

Here the Value Coach can also make sure all options get the proper amount of attention from the Business owner, by making sure all relevant options are presented to the Business owner. The Value Coach should be a sparring partner for project management when reporting to the business.

Inadequate knowledge of Value Management in project teams

Probably the biggest irritation of a project manager towards VE is its impact on schedule and cost due to rework as a result of changed insights in a value study. Second is the fact that it takes a rather long time to organize a Value study. The background of these irritations is the fact that Value Management is applied in an ad hoc manner. And this relates to the lack of Value Management expertise within project teams. With the right expertise in a project, a project can program Value studies in order to strengthen project management.

Value Coach example: Caland bridge

Now let's explore what can happen when there is adequate Value Management expertise present in a project team. In this particular project, the Caland bridge, the project's Systems Engineer is also an experienced Value Engineer (PVM). The Systems Engineer manages all requirements for a project, making sure the designs are compliant with these requirements. With his knowledge as a senior Value Engineer he took on the role of Value coach and makes sure all elements of VM are deployed in the best way and helps the project team to make sure the project is aligned with business goals.



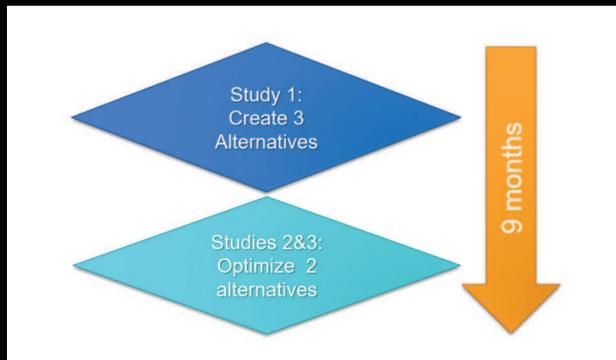
The project at hand is the Caland bridge, a steel vertical lift bridge, which connects the Port of Rotterdam to the rest of Europe for Rail Cargo. Good connections to the rest of Europe are key to maintain the status of the biggest port in Europe. There are two urgent problems with the bridge:

- The bridge is at the end of its technical lifetime in 2020.
- The growth of Rail Cargo is limited by the fact that ships have a right of way over trains.



The Value Coach designed a two step process:

1. A Value study was initiated to generate 3 alternatives, figure 3. To ensure that the project had sufficient political consensus, all relevant stakeholders, p.e. ProRail, the harbour authority, the surrounding companies and municipalities, were involved in the study.
2. After elaborating these 3 alternatives, two classic Value studies were organised to optimize the two most favourable alternatives creating a new route for Rail traffic and renovating the bridge.



Value Management process Caland Bridge

The whole process took about 9 months and led to the following results:

- A Multi Million euro saving on an alternative route of 14 percent
- For the renovation alternative hindrance was reduced by 67 percent
- The design for an alternative route was approved within 1½ years versus approximately 3 years in a regular process
- The design for the alternative route has the best fit for business needs.
- Various parties invested double the amount of money originally intended by the business owner.

The first two results could also be achieved just by performing a Value study. We believe the bottom three results can be related to the Value Coach role. Through these Value studies both alternatives were brought within an acceptable range for the Ministry of Transport.

"Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime."
- Chinese Proverb

Through education and well planned interventions the Value Coach can help deploy Value Management in a project in the best possible way.

How do we make it work?

Based on five large projects and programs where the Value Coach role has more or less been applied, we see that the Value coach can be deployed in three ways:

1. As part of the project/program organisation, like the Caland bridge case. An existing project role, mostly technical or Public Relations, takes on the role of Value Coach. This application implies that the individual has a broader field of attention than the project at hand. This could lead to potential conflicts between business and project interests. Therefore the Value Coach needs a proper business mandate and the project's buy-in to be effective. On the other hand, a project team member knows what's best for the project and can tailor and embed Value processes in the best possible fashion. The downside of this application is that the project team member focusses too much on the project and lacks the bigger picture and critical attitude needed to fulfill the role of Value Coach.
2. External expertise. The project or business hires an external Value Coach from outside the project, to assure Value delivery of the project. Based on the planning of value processed at the start of the project, he checks in at given times and will be informed on the project's progress as the project will be continuously subject to change.
3. A combination of both of the above: an internal Value coach to embed Value processes in the project and identify potential value risks and an external Value coach to periodically assure value delivery and advice business.

Where are we heading?

Our ambition is to position Value Management between the business and projects/programs, as illustrated in figure 4. Value Management can provide the business with more insight on whether the project really is the best fit for their needs and what

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other trade-offs could be made on a portfolio level. Projects and Programs get a better understanding of what is really important for the business and develop the project accordingly.

In this set-up we are looking at a combination of internal and external Value Coaches. There are 7 Value Engineers in place who can fulfill the Value Coach role, 2 external and about 5 internal. And we are training and guiding more system engineers and project developers in Value Management to fulfill the internal Value Coach role. This is a relative easy thing to do, since Systems Engineering and Value Management are highly complementary to one another. Project managers will be trained in Value Management to truly understand the approach and get their buy-in.



Figure 4 – Value Management as interface between Business and Operations

The main challenge is the change in the decision making processes. In order to make that change, we are looking for Value Sponsors to introduce and implement Value thinking in the business and management level of the organisation. Besides the fact that business should be convinced of this approach in order to invest in an external Value Coach. Another challenge for the external Value Coach is to be involved at the start of the project in order to integrate Value process in the project's planning or program organisation. At the moment we can state that in the past 15 years a good foundation has been laid for Value Management in project management, onto which the role of the Value Coach can be built. At the business side Value Management still needs (some) missionary work. The Value coach as a linking pin to a project could just be the catalyst to create a sound foundation at the business side as well.