

Software Support for Benefit Realistaion

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Introduction

This paper introduces Benefit Realisation and looks at what software tool capabilities you should look for to support Benefit Realisation, beyond using spreadsheets.

Consider modelling the relationships between all your strategic objectives, outcomes, investments and projects. Then having the ability to see the effect on costs, schedules and return on investments for different 'what if' solutions.

Consider having visibility of whether planned benefits are not occurring as expected so new projects can be quickly implemented to help realise the benefits, such as training or marketing.

Consider a repository of risks with mitigation and contingency plans and costs that can be contributed as a percentage to different solutions so as to see the complete picture.

Consider Project Managers and Business Analysts immediately being able to see the effect of change requests and to analyse the effect of external events on their project to see whether plans and deliverables need to change to achieve the expected outcomes.

The paper helps you think about tool requirements for modelling, measurement, analysis of different solutions, and audit trails for capitalisation of investments. It will provide a feature checklist with justification for you to evaluate Benefit Realisation software tools.

A Background to Benefit Realisation

Definition

Benefits are desired outcomes that a business expects to achieve as a result of an investment.

Investments are projects or other initiatives that take time, incur cost, use resources, and have risks. Thus realising the business benefits that provide a return on the investment (ROI) is important.

Finishing a project on time and in budget is still a cost and unless benefits can be realised then it has no value to the company. Have you ever celebrated the completion of a project only to realise that its outcome is no longer needed, or it depends on a project that was cancelled or delayed, or that another project has the same outcome, or that no one is taking responsibility for actually using the outputs to achieve business benefits?

Benefit Realisation is not just about measurement. It is also about identifying new investments to realise the benefits. It could be argued that the number one reason why a company should measure benefits is so that new projects can be started to help realise benefits that are not occurring as expected.

Business benefits may be financial (increasing or decreasing), non financial (eg: decreased staff turnover), reduced business risks (eg: the risk of non compliance or reliance on old technologies), conformance to standards (eg: environmental and safety) or a stronger alignment with company values improving image and ultimately share value.

Not all outcomes are direct business benefits. Some outcomes are "enablers" for other investments that in turn are used by other projects that contribute to a business benefit.

Benefit Realisation Modelling is the process of creating a model of the relationships between *all* investments (projects), strategic objectives, outcomes, benefits and risks. A top down and bottom up approach is typically taken together. Bottom up involves listing all current and planned investments and recording desired outcomes as to why they are needed and their dependencies. Top down involves looking at the business strategic objectives, the outcomes required to achieve the objectives and then identifying

or mapping them to projects. 'What if' scenarios may be modeled to determine the best approach to take to fix a problem or realise an opportunity.

Benefit Realisation Characteristics

So what are the characteristics of Benefit Realisation and how do they differ from traditional program or project management?

1. Traditionally program or project management focuses on delivering agreed **"outputs"** to time and within budget with a focus on *what* is delivered and *how* will it work. Benefit Realisation focuses on **why** a project is being done and what are the **'outcomes'**.
2. When a company focuses on realising benefits, not just after but **during** a project, changes to projects are driven by benefits changing. An external event may make a benefit more or less attractive which in turn may change project deliverables and plans (or stop it altogether). A project may be deemed successful even if the budget and time are over and the scope and solution are changed dramatically from the original requirements, providing the benefits justify the changes.

An example "Keeping the Lights On"...

Consider a problem where a city has forecast that demand for electricity will outstrip supply in three years. The intended benefit is to ensure that during periods of peak demand "the lights will always stay on".

Say there are three main options for realising this benefit: building a generator; building a new transmission line; or reducing demand by subsidising businesses to refit air conditioning units etc, each having different costs and different benefits over time in terms of increased instantaneous capacity and increased volume of electricity.

Lets say building a transmission line was selected as the best ROI.

Part way into the project, a new outcome from the environmental impact assessment meant that more of the line was going to have to be put underground, causing a huge increase in cost and time.

By focusing on the benefits we are trying to realise rather than how we intended to realise them, we are able to change the plan to reducing demand, which was less than the new cost, managed the risk of not getting the line built in time, and still realised the intended benefit of keeping the lights on.

If we had focused on the what and how of our project, we would probably insist on sticking to building a transmission line, going over budget and possibly not getting it finished on time.

3. Another characteristic of benefits is that they often occur at a higher level of abstraction to costs. Costs are typically incurred within a project for resources and materials whereas benefits typically occur as the result of multiple investments.
4. Benefits also occur at different points in time to costs. The major cost of a project is more likely to be incurred during a project where as benefits are generally realised over a longer time, generally after a project has finished.
5. Some projects will not have outcomes that are actual financial business benefits. However, these are still important projects if their outcomes are enablers for other projects. Although an enabler project is actually just a cost, a proportion of the cost may be capitalised if an audit trail can be proven to relate it with a project that does have a business benefit.

Tool Requirements for Modelling

Modelling Strategies, Objectives and Investments

Before we look at tools for estimating and tracking the benefits, we need a repository for the benefit model. That is:

1. a top down model of strategic objectives and required outcomes; and
2. a bottom up model of all *current* investments and *proposed* ideas.

Strategic Objectives Repository

Strategic objectives and required outcomes will typically already exist but may need collating. Objectives may be rather textual and not definitive or mapped clearly to required outcomes. Different divisions or business units may have different lists of objectives and, partly due to a lack of overall visibility, some may be duplicated, compete or even conflict. They may not be defined in measurable terms with milestones and have no one accountable for realising the benefits.

Project Portfolios and Ideas Repository

Portfolios of current investments and proposed ideas also need to be collated. There may be multiple lists of projects and ideas in different divisions. The *reason* for each project (the expected outcomes or objectives) may not be readily accessible or clearly documented. Dependencies between projects may not be clearly defined ("result chains" [DMR]) or projects may have not been prioritised to take account of dependencies or cross division budgets etc.

A modelling tool would help resolve these issues.

Mapping Objectives & Outcomes to Investments & Projects

Once these top down and bottom up modelling activities are near to complete the next step is to map required outcomes to investments. There are several interesting practicalities of a tool to consider when performing this mapping.

There may be **many to many relationships** between objectives, outcomes and investments. One project may contribute to satisfying more than one outcome relating to different strategic objectives. For example, a project to implement Benefit Realisation into a company may achieve both the outcomes of putting a financial value on benefits so projects can be capitalised, and also to allow projects to be prioritised to help maximise ROI.

Some projects do not map to outcomes that have direct business benefits. These projects may still be important if they **"enable"** other projects to occur. For example, implementing a fast network between offices may not have a direct business benefit but is an enabling project to a customer portfolio system that allows products to be cross sold between existing customers (that does have a direct business benefit of increased revenue).

A project may go through many phases or releases, and some projects are continuous, and so an outcome may need to be **mapped to a project milestone** that may be related to a phase or release or to an external event such as quarter year.

Outcomes may relate directly to other outcomes (without a project in between). For example, increased productivity and increased sales may directly result in increased revenue.

Types of Outcome

In a simple benefit realisation methodology, the type of each Outcome can be defined as one of:

- Enabler (used for other projects)
- Capability Enhancement (eg: improved skills or processes)
- Benefit (provides direct business benefit)
- Dependant (ie. outside the area being considered and thus how one arrived at the Outcome is not relevant to the model.)

The exact types you will use will depend on your methodology.

Tool Requirements for Model

So one of the requirements of a Benefit Realisation tool is a repository for both objectives and projects that can support the following.

- A hierarchical structure (like a tree).
- Many to many relationships between objectives, outcomes & projects.
- Allows an objective or project to occur at different places in the hierarchy at the same time.
- Configurable to your company's terminology.
- Allow different 'what if' scenarios to be modelled and saved as there are often many ways of achieving an outcome with different cost/benefit tradeoffs.
- A simple user interface to allow easy changes with an audit trail of the changes.
- Dependencies between projects or to the middle of projects.

Diagrams or Tree Structures? (a user interface consideration)

Often a Benefit Model is drawn as a diagram. This is good for small models and good for visual people but consider this.... Qantas has a portfolio of more than 700 projects [Project Insight President address] which would not display well diagrammatically. Further, many to many relationships that cross multiple projects and outcomes would soon make a diagram either unreadable or incomplete. To get a complete picture of the model, both forwards (successors) and backwards (predecessors) relationships need to be viewed, requiring reverse relationships to be shown. A tree user interface may help more in this case.

Simple BR Model

In practise, companies and consulting firms have different 'meta' models for benefit realisation of varying complexities. As an example, here is a simple one where *relationships* are shown in italics. This simple meta model allows many to many relationships and a project or outcome to exist in more than one place in the tree.

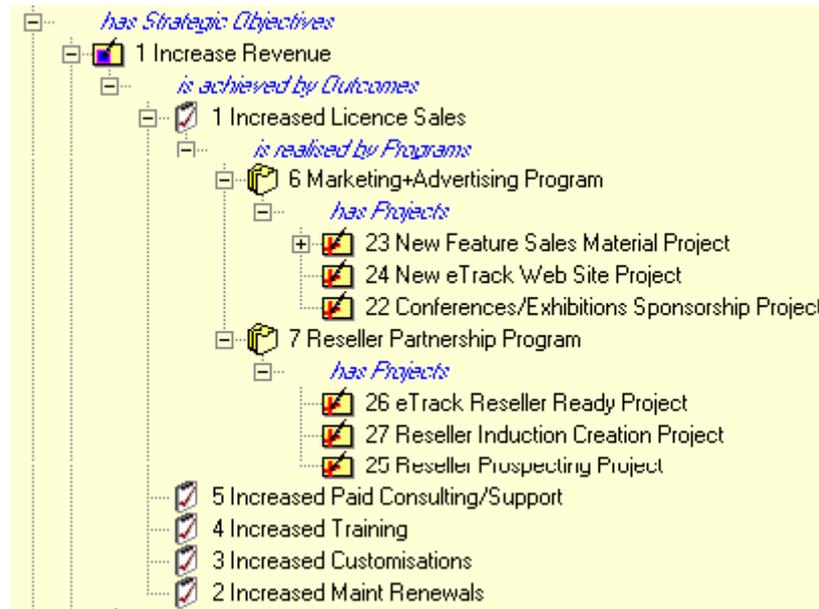
Top down modelling uses...

Strategic Objective
is achieved by
Outcome
is realised by
Program and Project

Bottom up modelling uses the reverse of these relationships...

Program and Project
has Outcomes
Outcome
contributes to
Strategic Objectives

Here is an example.



Benefits of the BR Model Repository

Having a repository of strategic objectives, outcomes, investments, projects and their relationships is a powerful benefit to a company in itself, even before we start estimating and measuring the benefits!

The repository gives visibility across the company of its strategic direction; it starts to justify why each project is required; and allows alternative 'what if' options to be modelled and compared. Since everything is now collated and visible, duplicate projects or duplicate outcomes can be identified. For example, two projects with the same outcome may be occurring such as screen scraping mainframe customer details screens and creating an export utility of customer details. Some projects may not be needed any more. For example, a project was an enabling project for another project that is without a budget, or been cancelled due to companies merging or splitting and decommissioned products. Also, the risk of project delays can be reduced due to dependant projects not being ready, as the repository shows visibility of project dependencies.

Tool Requirements for tracking Benefits

So now we have a repository and a model of all relationships. Next is to look at the tool requirements for estimation, measurement and tracking of outcomes. These consist of:

- Measurement;
- Accountability;
- Outcome plan;
- Benefit register;
- Reports and Graphs.

Measurement

The first step is to decide what has to be measured, how it is to be measured and how often. This can be very varied and not always obvious. Note also that benefits may:

- be increasing or decreasing;
- be financial or numeric or a percentage;
- have different measurement intervals;
- start being realised during a project or after a series of projects; or
- have different periods between start and end dates.

Financial measurements are generally recorded as Net Present Value (NPV), that is future dollar benefits realised, converted to the value of money today.

The following table shows some different measurements from real world examples.

KPI (measure)	Source	How Measured	Measurement Type	How Often
New Sales Revenue	Accounting System	Gross profit, licence sales excluding consulting, training and maintenance.	Increasing Financial	Monthly
Staff Satisfaction	Questionnaire to all staff.	Average of questionnaire score.	Increasing Numeric	Quarterly
Product Quality	Help Desk System	Number of production support queries of priority 1 or 2 defect.	Decreasing Numeric	Quarterly
Fund Membership Growth	Fund Management System	New members joined minus members left fund.	Increasing Numeric	Yearly
Compliance	Industry Institute Audit	Audit Score.	Constant Numeric	Yearly
Staff Turnover	HR System	Total permanently employed staff who have left the company.	Decreasing Numeric	Yearly
Patient Growth	Booking System	Total number of patient visits.	Increasing Numeric	Monthly
Internet Purchases	Order System	Total number of purchases over the Internet as a % of total of all purchases.	Increasing Percentage	Monthly
Call Processing Time	Call Centre	Times talking with customer.	Decreasing Percentage	Weekly

Accountability

Measurement accountability must not be confused with accountability for realising the benefit. Although it could be the same person in general it is not.

The Project Office or equivalent could typically do the measurements and be responsible for flagging any poor variances between estimated and actual measurements to the business sponsor.

However, someone also needs to be responsible for making sure the expected outcome is realised. Being able to act quickly by implementing new or alternative projects when expected benefits are not being realised is arguably the most important reason for tracking benefits. As a simple example, if a weekly timesheet tool is deployed but managers at various levels are not instructed as to what reports are available, staff may soon realise they are wasting their time and stop inputting their time accurately.

Tool support for accountability consists of:

- assigning someone to do the measurement;
- sending a notification to the person, for example by email (after all, measurements can be a year apart!);
- escalation (by email) to sponsors if the measurement is not done by a given time after it was scheduled (for example if the assigned person had left); and, most importantly
- assigning a sponsor or manager to be responsible for realising the outcome, sometimes called the *benefit phase* of a project.

Outcome Plan

For each outcome we need to plan the benefits over time and then track actual measurements against the plan. Consider an example where the measurement period is three years with yearly intervals between measurements and a measurement type of *increasing* and *financial*.

The following table shows what a tool should track.

In this example, there is an improvement even if the project is not done (see row 2, the control). The Actual measurements show that the planned expectations after the project is done are not being fully realised (row 7), although they are better than if the project had not been done (lines 5 and 6). The person responsible for measuring should flag this fact to the manager responsible for realising the benefit. This manager may consider changes or additional investments to get better results in the future, particularly since the difference between actual and planned benefits is getting worse (increasingly negative) (row 7). Examples of new investments might be further training or more marketing.

	Data	Meaning	1	2	3
1	Period	The dates when measurement is to occur.	1/7/04	1/7/05	1/7/06
2	No Action Target (Control)	The expected measurement if the investment was not made.	\$100K	\$200K	\$300K
3	Planned Target	Original expectations	\$110K	\$240K	\$390K
4	Planned Variance %	(Planned Target - Control) *100 / Control	10%	20%	30%
5	Actual Target or Estimated Target	Actual Measurements up to today and Revised Target for the future. As measurements occur, future targets may be changed.	\$108K	\$230K	\$360K

6	Actual or Estimated Variance %	(Actual or Estimated Target – Control Target) *100 / Control	8%	15%	20%
7	Variance of Actual or Estimated against Plan	(Actual or Estimated Variance – Planned Variance)	-2%	-5%	-10%

Another example may have the 'control' increasing and the project is aimed at decreasing the outcome so that it is zero, for example staff turnover.

Some tools may have other rows such as a Revised Target. Later on we will also consider tracking the costs of the project and ongoing costs of achieving the benefit and comparing them with the above.

Benefit Register

The Benefit Register is one list of all Outcomes with a summary of each outcome.

The key to the register is that it can apply at any point in the model, listing all outcomes and summing the financial benefits. For example:

- a) applied to a project to list all outcomes of that project;
- b) applied to a program to list all outcomes of that program;
- c) applied to a strategic objective to list all outcomes that contribute to that objective;
- d) if projects are related back to a department, a division or a business unit then the register can be applied to see all outcomes of that group;
- e) applied to a major company milestone such as end of financial year;
- f) if outcomes are related to a product release, then the register can be applied to see all outcomes of the release;

and so on, applying the register to any part of the model that is being tracked.

% Contribution

The tool needs to allow the percentage contribution of each project to an outcome to be specified. This contribution will be different depending on where in the model it is being applied resulting in a matrix of contributions. For some methodologies as used by leading consulting companies, this will become multidimensional across objectives, outcomes and investments. Here is a simple example for the **Objective** to "**Increase User Licences**" of a product.

Project	Outcome		
	Increased Resales	Increased Direct Sales	Increased Resellers
New Sales Material Project	5%	35%	60%
Conference Sponsoring Program	5%	90%	10%
Web Site Enhancement Project	10%	80%	20%
Update Sales Training Material	0%	30%	70%

'What if' Scenarios

Another requirement of the Benefit Register is to allow you to select which outcomes to include. This is important since nearly all problems and opportunities can be resolved or achieved by different projects, each having different effects on outcomes. For the 'Keeping the Lights On' story, the period, return value and associated project and

operational costs would be very different for the different solutions and each would have to be modelled and compared to find the best solution.

As external changes occur the plans may have to be changed and new comparisons made.

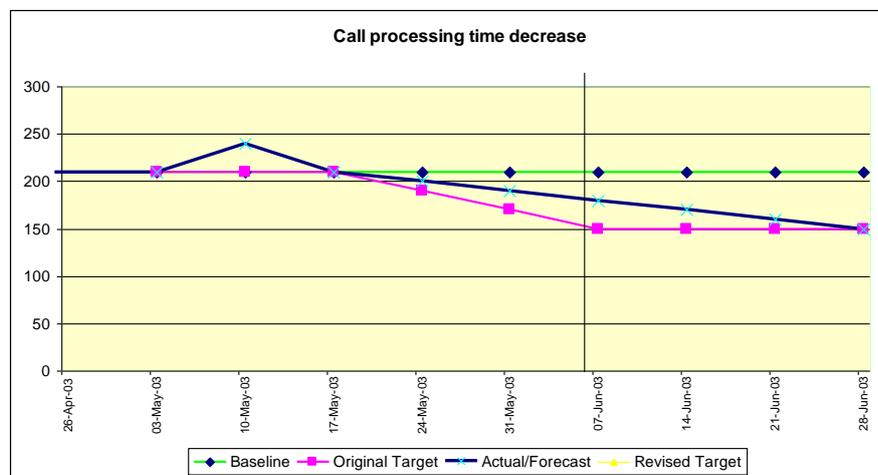
The tool must therefore be able to store different scenarios and also allow selection of the 'current' ones to include in the model.

The result of applying the benefit register to different points in the model and to record 'what if' scenarios mean that there will be many benefit registers!

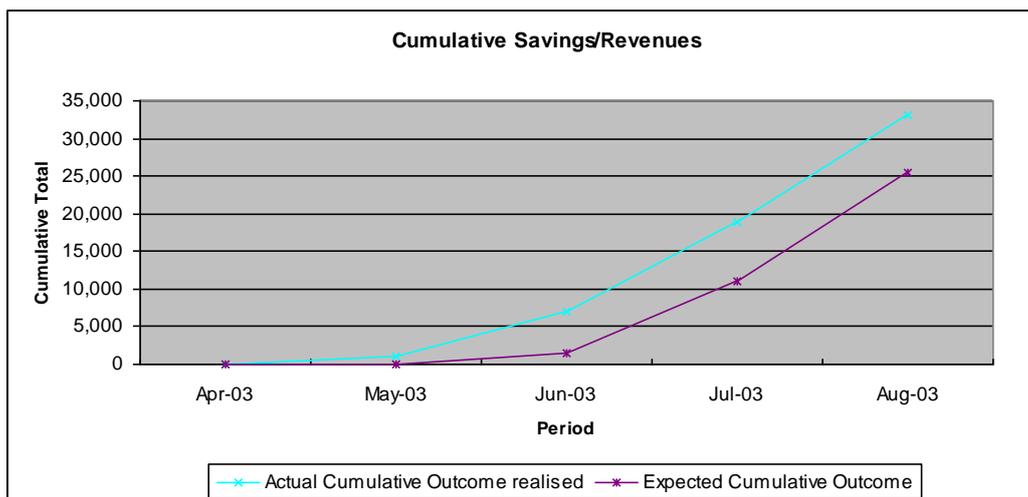
Reports and Graphs

Select a tool where you can access the database so you can export the data and prepare your own reports and graphs. Some standard graphs to look for are Measurement graphs and Benefit graphs of expected verses actual returns such as the following.

Measurement Graph



Benefit ROI Graph



Tool Requirements for tracking Risks

There could be large errors in Benefit Realisation analysis unless Risks are also modelled and tracked.

There are two types of Risks. Projects Risks being the probability and cost of a project not completing, and Business Risks being the probability and cost to the business should the benefit not be realised. A tool can be used to track Project Risks but the focus in this paper is on Business Risks.

Your Benefit Model needs to include the risks associated with each outcome not being realised. There are two parts to each risk: a) the **probability of the risk occurring**; and b) the **contingency cost** of implementing an alternative solution should the risk occur. There may also be a **mitigation cost** associated with each risk. Remember, if the mitigation is to be applied (and therefore the cost included) then the contingency cost should be the cost after mitigation.

For example, in our 'Keeping the Lights On' example, the option to reduce demand by persuading business to replace their air conditioning units may be the most cost effective solution but is a relatively high risk solution, and the cost of an alternative, say putting in a transmission line later on and then having to drill from both ends of the tunnel to make up time, may be very costly.

Risks analysis needs to use Net Present Values (NPV). For example, in many cases mitigation strategies are implemented to delay investment costs, thus making the Net Present Value of the cost (ie. in today's money) less.

The simplest functionality to look for in a tool is as follows.

- Risk repository.
- Ability to relate Risks to different Outcomes that result from different 'what if' analysis.
- Track risk mitigation and associated costs. (These may be rolled up in to the project and operational costs.)
- Calculate and record the contingency cost of implementing an alternative should the risk occur. This may of course be a complete project plan with its own dependents, outcomes and risks! (Another reason why you should have project tracking integrated with benefit tracking.)
- Apply a percentage probability of the risk occurring to each of the proposed solutions.

So, for **each 'what if' analysis**, the full Investment Cost is

$$\begin{aligned} \text{Investment Cost} = & \text{Project Cost} + \\ & \text{Operational Cost over Benefit Period} + \\ & \text{Risk Mitigation Costs} + \\ & \text{sum for all Risks of } (\% \text{Probability} * \text{Cost if Risk occurs}) \end{aligned}$$

Additional tool functionality may allow sensitivity analysis to be performed on each risk. (However, this can get very complicated and economists will tell you that there is no better tool than a Microsoft Excel spreadsheet for this!)

Note that some 'Risks' are guaranteed to occur, for example, compliance costs or obstacles that have to be removed (such as decommissioning an old system).

Tool Requirements for tracking Projects and Changes

There are three main types of investments that are basically costs:

- a) project costs (at all levels of program, project, phase, release etc);
- b) operational costs, that generally occur after a project has finished during the 'benefit phase' of a project; and
- c) costs due to changes or variances that can occur during or after a project.

Many companies use spreadsheets and tools to track benefits that are not integrated with tools to track the costs of the projects or the operational costs of realising the benefits. This is a major drawback since it means that the analysis of solutions is less likely to take account of the associated costs.

Why integrate your BR and Project Tracking Tools?

The ideal Benefit Realisation tool is completely integrated with project, change and operational costs for the following reasons.

- a) A benefit may not look so attractive if the costs of achieving it are considered!
- b) During analysis when doing 'what if' scenarios, generally a combination of changing project costs and benefit returns is performed to arrive at the best solution.
- c) As changes occur, you'll need to drill down into a project or operational cost to see how relaxing or changing a particular outcome would affect it.
- d) You'll need all your projects to be listed in your repository and you don't want them separately listed in another project tracking tool since duplication always adds to administrative overheads to keep them consistent. The same applies to people you want to assign as accountable.
- e) The costs of measurement are sometimes very significant and thus need functionality to record and track this.
- f) By integrating all work in one place both resource management and invoicing (client or cross department) is made easier.

The more you use benefit realisation the more of typical project management functionality you will start needing. What you **don't want is to pay for the functionality twice!** Also, to avoid administrative overheads and potentially disastrous inconsistencies, you **don't want to have information duplicated.** Examples include:

- a) Scheduling of when projects and benefits are occurring needs to be a view of the same data as the project schedules. Timescales are typically different, project scheduling being in days or weeks and benefits schedules in months to years, but there is no reason why there can't be different views of the same data.
- b) Modelling dependencies between projects and outcomes are the same as modelling dependencies between tasks within a project.
- c) Alerts to prompt for measurements is likely to be the same functionality as that used to escalate unresolved issues.
- d) Planning, measuring, estimating and calculating variances is basically the same for benefits as for projects.

Why integrate tools for *all* costs?

All the arguments above for tracking benefits in the same tool as projects also apply for tracking: a) operational costs; and b) change costs in the same tool as projects.

Ideally, the tool you choose should seamlessly track Projects, Changes and Variances, Risks, Strategic Objective, Outcomes and Benefits!

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Benefit Realisation *during* a project

A lot of focus is given to managing the Outcomes of Projects **once they have been completed**: making someone accountable after the project has finished for realising the benefits and tracking the returns on investment.

However, consider these situations:

- a) If a project goes 'off the rails' (eg: lack of time or money) before completion the benefits must be reviewed to determine whether to continue.
- b) Investment in a product may go through many iterations over years with the benefits continually being monitored during the project iterations.
- c) Requirements, technology, compliance, regulations, users, key staff or the sponsor may change during a project and cause change requests to occur. The acceptance of change requests or variances must be considered in light of the expected benefit outcomes of the project.

These situations suggest that the process of Benefit Realisation must also occur **during a project** and not just after it finishes. So what are the consequences of this?

Firstly, project managers, business analysts and architects must be involved in and familiar with the concepts and practice of identifying and modelling benefits.

Secondly, someone (typically from the business) must be accountable to start tracking benefits as soon as the project starts costing money.

Consequences if project team do not practice BR

These consequences have significant effect on the roles of Project Managers and Business Analysts. Have you ever seen the following in your company?

- a) Analysts in the business have made a business plan and decided that a project should go ahead but they are not involved in modelling requirements.
- b) Business Analysts that develop the requirements model at the start of the project are not around a) to manage change requests and variances, or b) to oversee acceptance testing.
- c) Requirements Modelling starts with the traditional use of 'Use Cases' describing 'Actor/System' interfaces which are basically features, rather than first modelling objectives and expectations.
- d) Your methodology uses terminology that focuses you on "features" or traditional use cases without processes to clearly define the 'why'.
- e) There is little visibility of how the project is related to Strategic Objectives and required outcomes.

If the relevant project team members do not adjust their roles to take into account Benefit Realisation then the consequence can be disastrous. For example...

If Project Managers or Business Analysts do not fully understand the original business plan, then how do they...

- Decide what is in the first phase or release when the scope is too large so the important benefits are still met?
- Negotiate with stakeholders who have different agendas and needs?
- Decide whether to increase budgets, increase time, reduce functionality or sacrifice quality when a project is in trouble?
- Decide the significance of change requests and when to escalate issues that don't relate to the benefits?

- Close a project to match the original expectations of all stakeholders when it is so hard to record some expectations on paper?

If the original business analysts are not involved throughout the project then, due to changing requirements, the project team might celebrate success in terms of time and budget but they built the wrong thing!...that is the project didn't achieve the benefits.

Using Use Cases to model Benefit Realisation

Use Case Modelling techniques can be extended beyond the formal definition to very effectively model business processes, existing systems, change requests, enhancements or bug fixes as well as green field products. The structured decomposition characteristic of Use Cases makes it also suitable for benefit realisation modelling. Strategies are broken down into outcomes and again to 'change initiatives' that directly relate to programs, projects and investments.

Some popular methodologies focus on "features" and almost ignore 'why' a project is to be done! You may need to modify your methodology and retrain your staff to be able to clearly identify and document project benefits and understand the importance of "result chains" [DMR] and how Outcomes map back to Benefits and Strategic Objectives.

Tool Requirements for BR *during* a project

The key tool requirement to support benefit realisation during a project is to be able to directly analyse project costs and estimated benefits together. Events that happen during a project will effect the Return on Investment such as:

- change requests changing the cost of implementing a project;
- change requests improving the planned benefits;
- dependant project changes or delays affecting project plans and the functionality in releases or at milestones.

BR is a Maturing Methodology

Benefit Realisation is in its relative infancy and thus methodologies and models are likely to change as they mature. Further, your company will already have some processes and these are also likely to change as the process is implemented.

For example, DMR, RBZ Group and Oak Management Services have differences in their methodology meta model and terminologies which are different again from many large companies implementing their own benefit realisation methodology.

It is thus very important to use a tool that allows business structures, relationships and terminology to change. There is still debate for example on whether outcomes can relate directly to other outcomes or only via investments. Whether you start with a commercially available BR methodology and tailor it to your company, or start with a very simple model and extend it over time, you will ideally need a tool that has no fixed hierarchy.

The other capability to look for is one that supports reverse relationships. For example, when a relationship between an Objective and an Outcome is created (say called *is achieved by*), a reverse relationship is also automatically created (say called *contributes to*). This will mean the model can be read both ways and thus will aid navigation and reporting.

Summary

This paper discusses the practicalities of benefit realisation and what to look for when selecting a software tool. Its focus is to discuss the benefits of such a tool over using a spreadsheet.

Tool Requirements

For the reasons discussed in this paper the following is a summary of the requirements to consider when looking for a tool to help your company with benefit realisation.

1. Repository for top down and bottom up modelling.
 - a) A hierarchy where an investment or outcome/benefit can exist at multiple places in the 'tree' with many to many relationships to other outcomes, projects and risks and visibility of 'reverse' relationships.
 - b) Configurable to your companies terminology.
 - c) Allow 'what if' scenarios to be saved and compared.
 - d) Dependencies between investments/projects and relations to milestones within projects.
 - e) Different types of Outcome as Enabler, Benefit or Dependant.
2. Benefit Tracking.
 - a) Record KPI Measurements, source, periods, intervals and assignments for each Outcome.
 - b) Accountability for measurement and for realising the benefit with email notification and escalation.
 - c) Outcome plan showing Control (no action), Planned and Actual or Estimated Targets for benefit returns on investment that may be increasing or decreasing and financial; numeric or a percentage.
 - d) Benefit Register summarising a roll up of all relevant outcomes for different points in the model such as for a project, an objective, a department, a company milestone or a release etc.
 - e) Application of percentage contribution of each Project to an Outcome.
 - f) Ability to try out different 'what if' scenarios where cost/benefit analysis of different investments can be tried to achieve a required outcome. Apply different % contributions in a multi dimensional matrix of relationships between projects and outcomes.
3. Risk Tracking where risk mitigation and contingency can be planned and net present value costs calculated in the tool. Risks are related to different 'what if' outcomes not being achieved by the selected investments and a percentage probability applied. Contingency projects can themselves have their own complete plans, outcomes and risks.
4. Project Tracking and Operation Cost Tracking.
5. Change Request, Variance and Issue Tracking.

Benefits of using a Tool

So why use a tool? What benefits would such a tool with the above functionality have over a spreadsheet? From the discussions in this paper we can summarise the following benefits.

- Up to date visibility to all relevant staff of the strategic direction of the company and the priority and importance of each project so delays and changes can be handled informatively.
- Easy modelling of multiple relationships between objectives, outcomes, programs, projects and risks which eases analysis of rolled up results and eases identification of duplicate, redundant or conflicting projects.
- Visibility and schedules of 'result chains' and dependencies of outcomes and projects on other 'enabler' projects which means reduced risk of delays.
- To achieve a particular outcome, view different 'what if' project scenarios which can be compared using the Benefit Register at different points in the Model.
- Integration with project tracking and change management so that a single repository is used across the company that means the costs and benefits of different solutions and changes can be analysed together.
- Integrated planning and tracking of measurements and risk contingency which means resource management and invoicing (client or cross department) can be easily done across all work.
- Easy extension or change to the underlying meta model as your Benefit Realisation methodology matures.

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If you are interested in finding out more about eTrack, a software product that supports the requirements outlined in this paper, or in finding out about Requirements Modelling training courses and mentoring that implement the Use Case ideas presented in this paper, then please see www.etrack.com.au or contact the author John Warner on +61 2 9960 3787 or info@etrack.com.au.

End of Paper on Tool Support for Benefit Realisation