

## ***Applying Earned Benefit Management<sup>1</sup>***

# **The Value of Benefits**

**If you can't track it, you can't manage it!**

**By Crispin (“Kik”) Piney, PgMP, PfMP**

### **Introduction: Reminder on Benefits Maps**

In the first of this series of articles [Piney, 2018a; Piney, 2018b], I presented the basic ideas around program and portfolio. These concepts were illustrated on a simple case study. This introduction provides a brief reminder of these ideas.

### *Benefits and Benefits Mapping*

As stated in the earlier article, whereas, for projects, you need to be able to specify precisely **what** you want to create, for programs as well as for portfolios, the objective is different. The question to be answered in this case is “**how** can I achieve a specific business or strategic benefit?” The approach for defining the solution is to create a benefits map. The output of this mapping exercise is a logical network that can be read in two directions.

The map illustrates **how** to make the benefits happen. Once the required benefits have been defined by the strategic sponsor, you need to determine all of the steps that are required in order to identify the component projects required in order to achieve the strategic objectives. The dependencies between these logical steps are quantified with respect to the size of the contribution of the source node to the required result. In conjunction with the forecast value of the strategic objectives, this link information allows the forecast contribution of every node in the benefits map to be evaluated. Comparing the calculated contribution of each component project with its estimated cost provides a measure of its business value: its forecast benefit-cost ratio.

### *The Case Study*

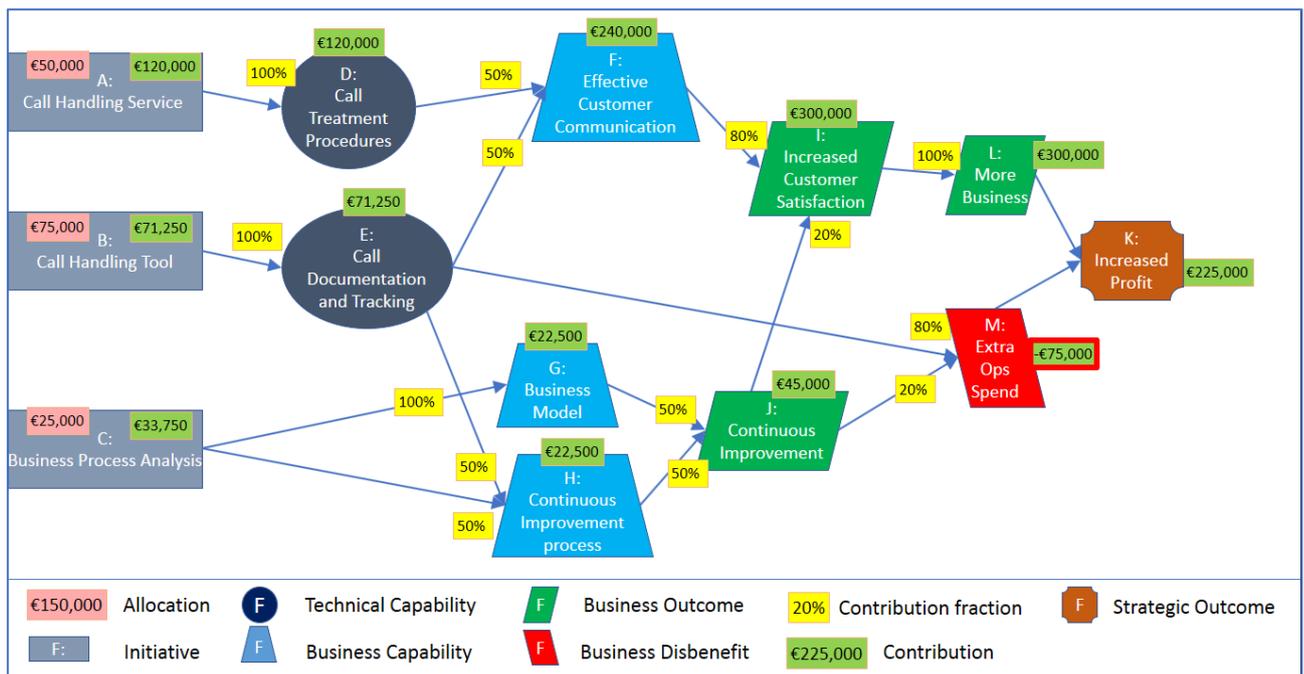
The business objective of the program in this example is to increase profits for an organization in the area of customer service. For the purpose of the case study, strategic analysis has shown that increased customer satisfaction with after-sales support enhances business results and has the potential for delivering a benefit of €300,000 per annum compared with the current level of business. The steps to achieving this benefit have then been developed from this required strategic outcome all the way across to identifying the projects required. Analysis of this solution indicates that it will also lead to an increase in operational costs amounting to 25% of the corresponding benefit, thereby reducing the net benefit to be achieved by the program. The benefits map for this program, including all of the financial

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<sup>1</sup> This series is by Crispin “Kik” Piney, author of the book [Earned Benefit Program Management, Aligning, Realizing and Sustaining Strategy](#), published by CRC Press in 2018. Merging treatment of program management, benefits realization management and earned value management, Kik’s book breaks important new ground in the program/project management field. In this series of articles, Kik introduces some earned benefit management concepts in simple and practical terms.

numbers mentioned above is shown in **Figure 1**. One important point about this case study is that, although the overall figures show a healthy return on investment, one component project (B: Call Handling Tool) costs more to develop than it contributes to the final benefit. The first article, however, explained why its inclusion was justified.

The benefits map provides you with a static view of the forecast result of the completed program. However, the addition of the Earned Benefit concept to benefits mapping provides additional, essential information for tracking the performance of the program during implementation.



**Figure 1: Complete Benefits Map**

**The Earned Benefit Concept**

To understand the Earned Benefit concept, let us start from a known technique: Earned Value (Abba, 2000; Lucas, 2012).

The Earned Value Method (EVM) is ideally suited for managing the performance of project delivery. The essence of a project is to create one or more deliverables as specified by the client – whether the client is internal or external to the delivery organization. So, the “value” earned by a project is the value to the delivery organization which is equal to the price agreed with the customer – this explains the focus of the earned value method on “work performed” and on the corresponding allocated budgets. For programs, however, the “value” to the business is the potential contribution of the work performed – normally across multiple component projects – to the program’s benefits.

As explained in the introduction, once the algorithm for calculating the contributions has been carried out across the entire benefits map, the contribution of each component project to the total forecast benefit is known. The sum of the contributions of all of the component projects is therefore equal to the total forecast benefit. If any component project is incomplete or missing, its contribution will obviously be reduced proportionally or not occur, and the total benefit of the program will be reduced

accordingly. It is just a small conceptual step, now, to define the earned benefit of a component project and, by extension, the earned benefit of the program.

The convention in this case is that, for any component project, its benefit contribution is linearly proportional to its percentage complete as calculated using the standard EVM. The sum of these contributions gives the Earned Benefit of the program. There are some additional concepts to be added once this idea has been fully understood, but the first, major step is to assimilate the basic rules of the Earned Benefit Method (EBM). To make this idea clearer it will now be applied to the case study.

**An Earned Benefit Example**

The business benefits forecast and technical implementation estimates have been used in order to build the quantified benefits map as explained in the first article in this series and shown in Figure 1. The next step is to use the component projects’ schedule forecasts to evaluate the expect implementation performance. This additional data for the case study are as follows:

The program is planned to run from the start of January to the end of June and the component projects are planned accordingly as shown in the Gantt chart (Figure 2).

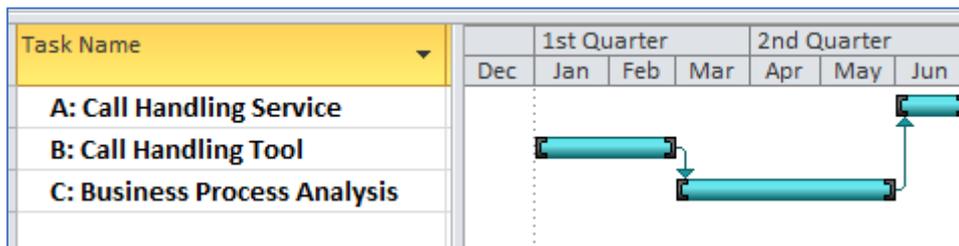


Figure 2: Gantt Chart for the Case Study

As shown in the Gantt chart, the component project schedules are as follows:

- A: Call Handling Service run from 1 June to end June
- B: Call Handling Tool runs from 1 January to end February
- C: Business Process Analysis runs from 1 March to end May

Let us now use this in a hypothetical implementation, tracking progress across the lifetime of the program. The planned and actual percentages for each of the component projects in this example are shown in Table 1:

Table 1: Schedule Planned and Actual Values

	Jan	Feb	Mar	Apr	May	June	July
<b>Call Handling Service</b>							
Planned Percent Complete	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
Actual Percent Complete	0.00%	0.00%	0.00%	0.00%	0.00%	80.00%	100.00%
<b>Call Handling Tool</b>							
Planned Percent Complete	50.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Actual Percent Complete	30.00%	65.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Business Process Analysis</b>							
Planned Percent Complete	0.00%	0.00%	33.00%	66.00%	100.00%	100.00%	100.00%
Actual Percent Complete	0.00%	0.00%	30.00%	60.00%	100.00%	100.00%	100.00%

By applying EVM and EBM to this example for each monthly reporting period, we can generate the following table (Table 2) from which we can plot the corresponding curves (Figure 3).

Table 2: Earned Value and Earned Benefit Figures

	Jan	Feb	Mar	Apr	May	June	July
Program Planned Value (PV)	\$37,500	\$75,000	\$83,250	\$91,500	\$100,000	\$150,000	\$150,000
Program Earned Value (EV)	\$22,500	\$48,750	\$82,500	\$90,000	\$100,000	\$140,000	\$150,000
Program Planned Benefit(PB)	\$35,625	\$71,250	\$82,388	\$93,525	\$105,000	\$225,000	\$225,000
Program Earned Benefit (EB)	\$21,375	\$46,313	\$81,375	\$91,500	\$105,000	\$201,000	\$225,000

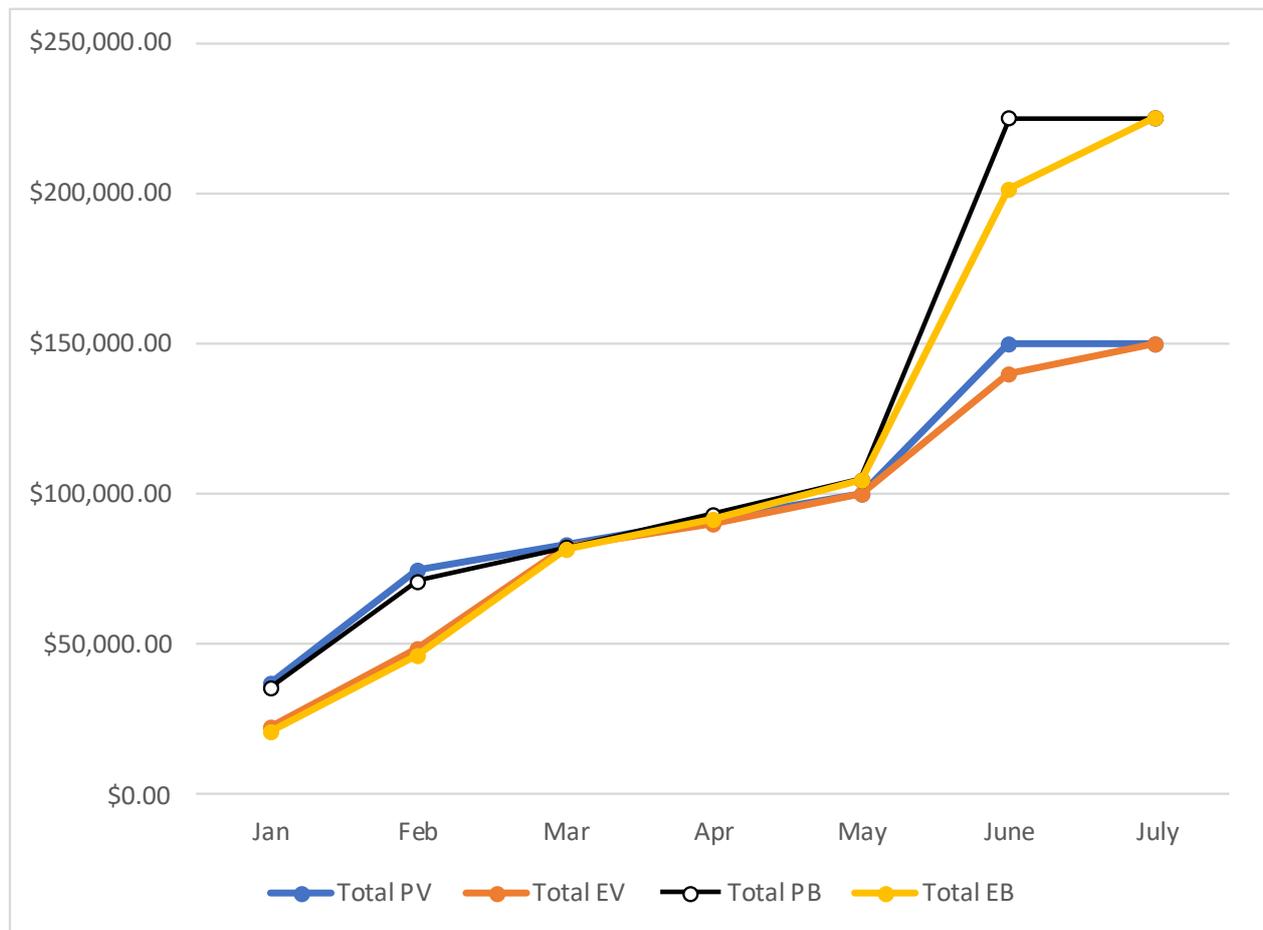
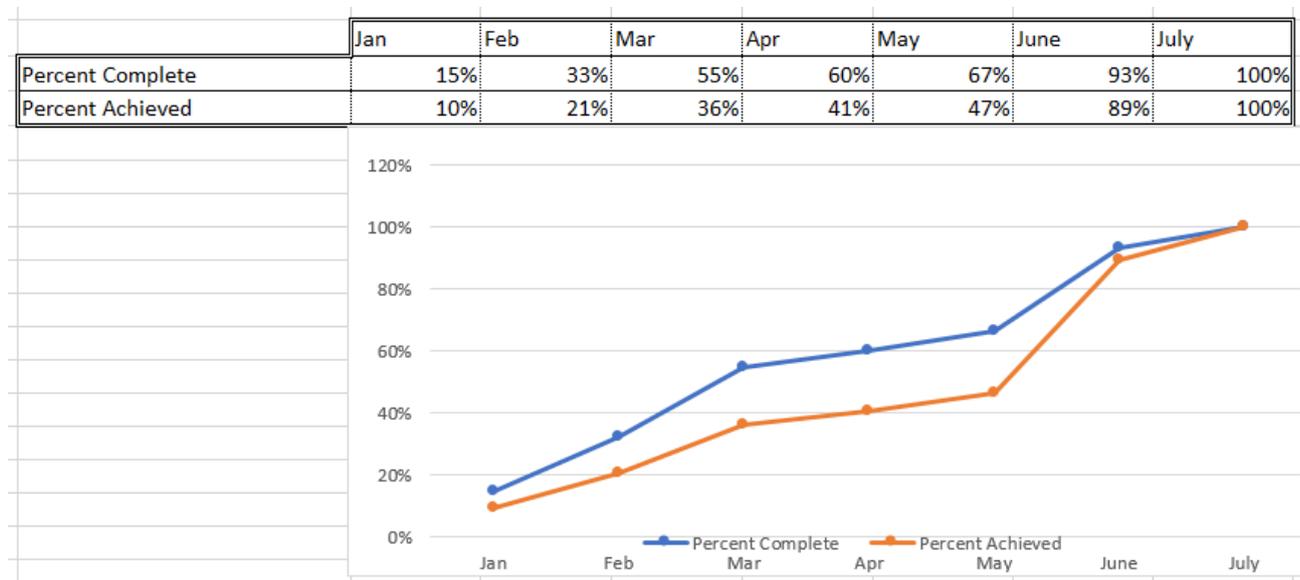


Figure 3: Planned and Earned Value; Planned and Earned Benefit

From Table 2, you can see that the Earned Benefit figures lag behind the Earned Value ones during the first half of the program’s lifetime. Earned Benefit less than Earned Value indicates a negative return on investment (ROI) forecast (i.e., the added value is less than the cost) at that point in the program. Unless the reason for it is understood and accepted, this negative ROI could send the wrong message to management, and might result in premature cancellation of the project and loss of the investment to date. In this case study, Figure 3 shows that this loss could amount to the actual spend at the end of March corresponding to a planned value (PV) of \$83,250 – over half of the total program budget. As explained earlier, the reason for the negative ROI during this stage is that component B, the Call Handling Tool, delivers on its own less of a benefit than it costs. However, due to synergy effects, by the

time the other components start to come online, the total Earned Benefit far outweighs the Earned Value. In the example, the program’s ROI really takes off in the last two months of the program. Earned Benefit forecasting can provide this positive message to management at every status review in order to ensure continued executive support for the program. In order to provide a complete picture of performance to date, progress measurement indicators that are reported should address both Earned Value and Earned Benefit. Some of these indicators are mentioned next.

For the EBM, “percent achieved” is the progress indicator that is conceptually similar to “percent complete” in EVM, and is defined as ( $\frac{\text{Earned Benefit}}{\text{Earned Benefit at Completion}}$ ). Once the schedules for the component projects are known, the Planned Benefit can be calculated based on the Planned Value for any date, in a similar manner to Earned Benefit. The contrast between the Planned Value and Planned Benefit progress indicators for the case study example is shown in **Figure 4**. For this example, the EVM percent complete figures are more optimistic than the EBM percent achieved ones throughout the program. This difference comes about because the component project with the largest ROI (i.e., A: the Call Handling Service) is the last one to reach completion and provide its contribution to the total benefit. This “late surge” indicates that the risk of failing to achieve the strategic objectives is considerable right up until the last moment. In this way, in addition to enabling business-focused performance management, the EVM also provides valuable information for managing overall program risk and verifying the program’s compatibility with the organization’s level of risk appetite at any point during the execution of the program. In this case, as just mentioned, management needs to understand that the actual benefit of the program only occurs late on in the implementation phase, and that the financial exposure up until that point is higher than might be expected from looking at the scheduling and planned value forecasts.



**Figure 4: The Percent Complete and Percent Achieved Results**

This example shows that the approach of tracking and reporting on the figures from both EVM and EBM can provide a complete image of the program status and a powerful means of ensuring the final success of the program.

## **Key Messages**

The example underlines one important message that applies to all programs:

Although EVM is an extremely useful technique for evaluating and forecasting progress towards creating or receiving the result of a project, it only measures the value with respect to the delivery organization or the purchasing function in the receiving organization. Put another way, EVM focusses on *what you put* into achieving a result. Business management, on the other hand, is interested in *the benefit to be gained* from the results of the work, so this needs to be measured using the EBM. The addition of EBM to EVM provides a more complete picture of performance across the lifetime of a program.

## **Additional Numbers - Completing the Map**

The first two articles have explained how to create the benefits map, quantify the dependencies, calculate the contribution of each node to the required benefits, and compare the cost allocation of each component project to its contribution. The way in which these numbers can be used in the Earned Value and Earned Benefit methods for approving, tracking and forecasting the program benefit has been explained.

Even with all of these numbers, the map is incomplete until we can fill in the costs that should be allocated to each of the intermediate nodes.

So long as these intermediate allocation numbers are unavailable, the viability of the intermediate steps between the component projects and the planned benefits cannot be objectively assessed. However, once the means for calculating these numbers is available, the benefits mapping technique becomes considerably more powerful. For example:

- different scenarios based on the original benefits map can be reviewed and the solution strategy optimized accordingly;
- later adjustments to the solution strategy can be catered for without invalidating all of the earlier analysis. This capability reduces rework and prevents people from “moving the goalposts” to hide performance issues;
- intermediate cost-benefit performance indicators can be defined, based on the achievement of planned capabilities or outcomes.

These ideas will be expanded in the forthcoming articles in this series.

## **References**

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## About the Author



### **Crispin ("Kik") Piney**

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After many years managing international IT projects within large corporations, **Crispin ("Kik") Piney**, B.Sc., PgMP is now a freelance project management consultant based in the South of France. At present, his main areas of focus are risk management, integrated Portfolio, Program and Project management, scope management and organizational maturity, as well as time and cost control. He has developed advanced training courses on these topics, which he delivers in English and in French to international audiences from various industries. In the consultancy area, he has developed and delivered a practical project management maturity analysis and action-planning consultancy package.

Kik has carried out work for PMI on the first Edition of the Organizational Project Management Maturity Model (*OPM3*<sup>™</sup>) as well as participating actively in fourth edition of the *Guide to the Project Management Body of Knowledge* and was also vice-chairman of the Translation Verification Committee for the Third Edition. He was a significant contributor to the second edition of both PMI's Standard for Program Management as well as the Standard for Portfolio Management. In 2008, he was the first person in France to receive PMI's PgMP® credential; he was also the first recipient in France of the PfMP® credential. He is co-author of PMI's *Practice Standard for Risk Management*. He collaborates with David Hillson (the "Risk Doctor") by translating his monthly risk briefings into French. He has presented at a number of recent PMI conferences and published formal papers.

Kik Piney is the author of the book [\*Earned Benefit Program Management, Aligning, Realizing and Sustaining Strategy\*](#), published by CRC Press in 2018

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