

Applying Earned Benefit Management¹

Benefits Maps You Can Count On

If you can't measure it, you can't manage it!

If you measure it wrong, you can't control it!

By Crispin ("Kik") Piney, PgMP, PfMP

Introduction: The Limitations of Current Benefits Maps

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 building the solution is to create a benefits map. There are four principal models for this (Fujitsu's/Thorp's 'Results Chain' [2007]; Cranfield's 'Benefits Dependency Network' [Peppard et al. 2007]; MSP's 'Benefits Map' [Office of Government Commerce 2011]; and Bradley's 'Benefits Dependency Map' [Bradley 2010]) and they all work on similar principles [White 2015, Jenner 2013, and Jenner 2014]. The output of the mapping exercise is a logical network that can be read in two directions as explained next.

The map illustrates **how** to make the benefits happen. Once the required benefits have been defined by the strategic sponsor, the following steps allow you to build the map. You need to determine, in order: the changes to the environment that are required in order allow the benefit to occur ("outcomes"); what we need to be able to do if we want to change the environment in this way ("capabilities"); what tools we need in order to create these capabilities ("deliverables"); and, finally, what we need to do to create the tools ("component projects").

This chain can be read in the reverse direction to explain **why** each step is necessary: from project to deliverables, to the capabilities of these deliverables, to the outcomes of applying the capabilities, to the benefits associated with the outcomes.

The diagrams associated with the development of the case study explained below provide examples of benefits maps (figures 1 to 5).

In the same way that the London Underground map gives no indication of cost or distance, current benefits maps do not provide a complete set of numbers to allow you to plan every aspect of your journey. I have found some tools that go part of the way to quantifying the map

¹ 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.

– such as P3M [P3M] and the tool from Amplify [Amplify]. However, even these tools do not provide a credible view of the allocations and contributions for every node in the map.

Without these numbers, business justification and modelling are incomplete. The same holds for performance planning, optimization, tracking, and review with respect to the required benefits.

This article explains how to fill this gap and evaluate some of the missing numbers. It is explained based on the following case study.

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 is shown in Figure 1 and explained next.

Reading from right to left, and starting from the required strategic outcome of increased profit, you first see that this profit is built up (as usual) of increased revenue and (unfortunately!) increased costs - a negative business outcome identified as a “disbenefit”. Each of these business benefits is then analyzed in turn.

By hypothesis in this program, more business (node K) is generated by increased satisfaction (I). This satisfaction depends on both effective communication (F) relating to after-sales issues, as well as being enhanced by general improvements (J).

Effective communication (F) will be based on a tailored call handling process (D) defined and created by a specific project (A). It also depends on correct and up-to-date data delivered by effective documentation and tracking (E).

Effective documentation and tracking (E) will be delivered by a newly-created call handling tool (B).

Continuous improvement (J) requires both a model (G) and a process (H). These capabilities will be delivered by a specific business process analysis project (C).

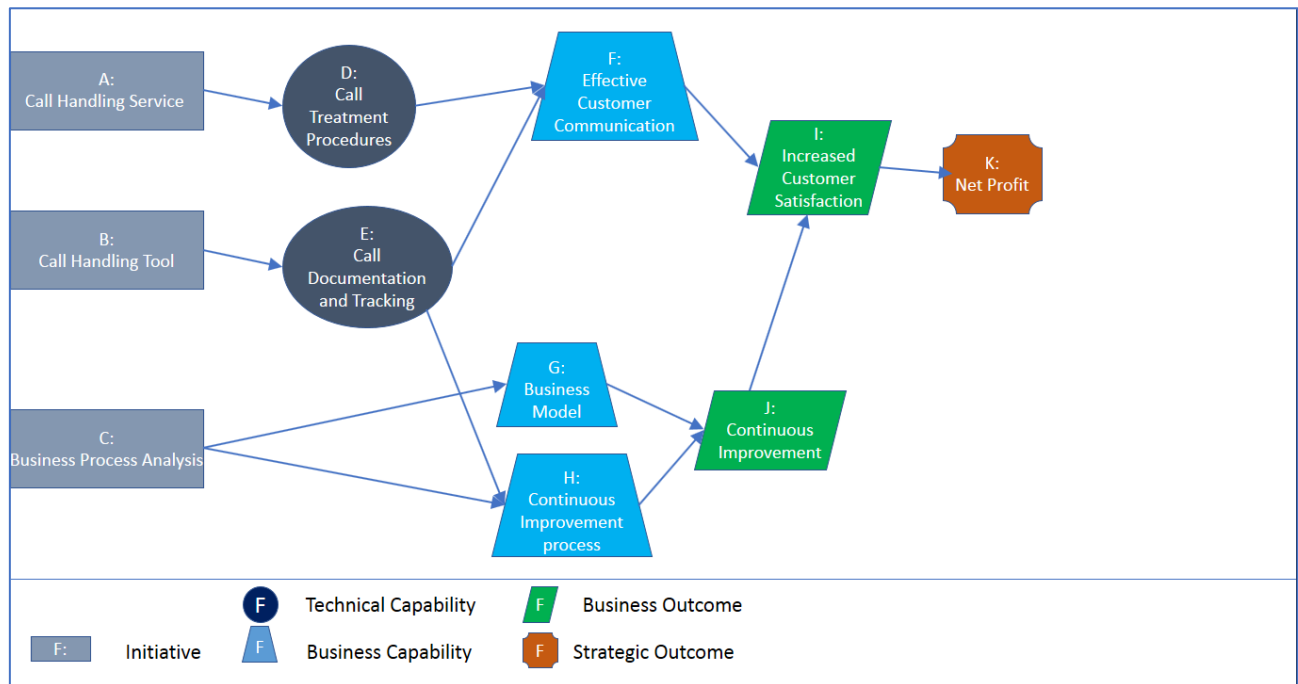


Figure 1: Structural Benefits Map for the Case Study

Once we have the structure of the map, we need to start to put in the numbers that we know.

Adding Financial Numbers

When the program was defined, we were given the business assumptions. These were the financial contribution of the extra business (€300,000) and the increased operational costs (25% of €300,000 = €75, 000). These numbers allow us to calculate the profit ($K = €300,000 - €75,000 = €225,000$).

We also know the component projects that are required A, B, and C). Each of them obviously needs to be specified clearly enough for technical experts to come up with a reliable estimate. In order to ensure that the estimates are unbiased and technically valid, the experts should be put under no pressure to come up with numbers that would support a program business case. This business case can then be evaluated objectively. For the purpose of this case study, the estimates for the financial allocations to the projects are as follows: Call Handling Service (A) = €50,000; Call Handling Tool (B) = €75,000; Business Process Analysis (C) = €25,000.

These numbers can be added to the map, as shown in Figure 2.

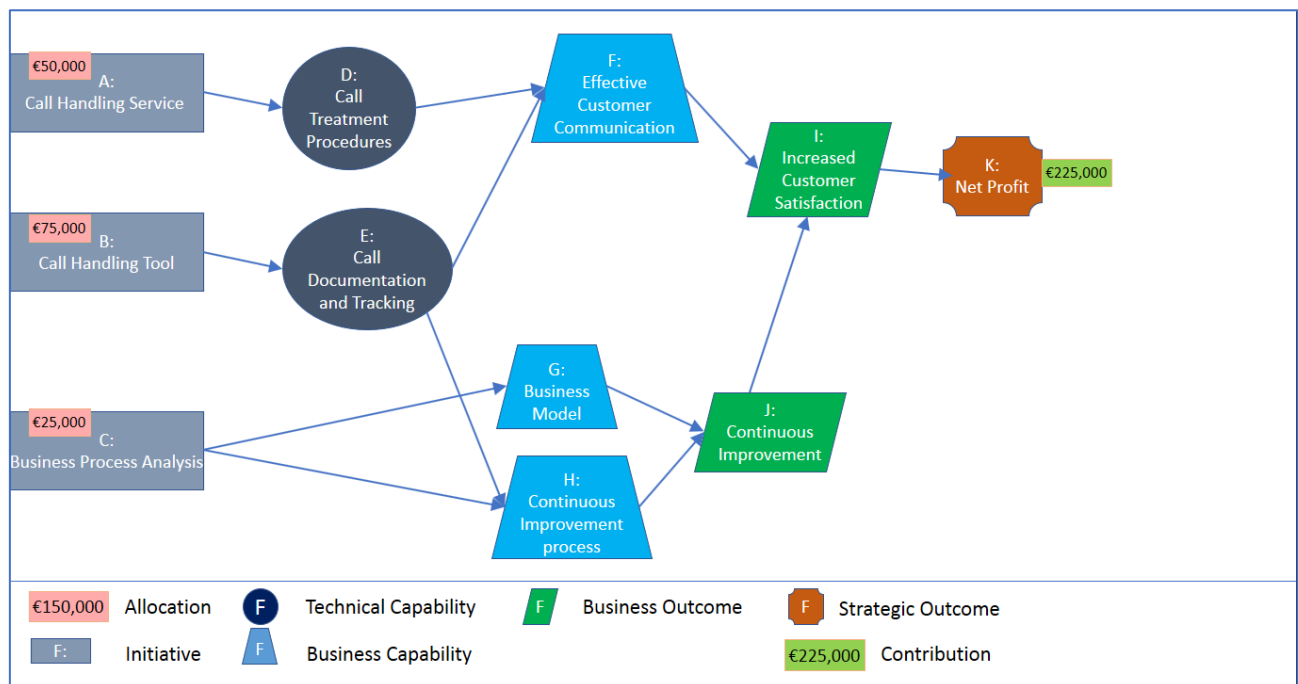


Figure 2: Benefits Map with Financial Numbers

The next question that needs to be answered is “how much does each component in the map contribute to the total program benefit?”. In order to come up with those numbers, we first need to quantify the effect on contributions for each of the dependencies shown as arrows on the map.

Quantifying the Contribution Dependencies

This next step requires the involvement of the business analysts who created the structural map. They should provide an estimate for the importance of each dependency relationship arrow. For I to K, it is clear that the contribution value of K depends solely – and therefore 100% – on I. However, for nodes that have several input arrows such as node I (inputs from F and from J), the “contribution fraction” associated with the node at the origin of each arrow needs to be estimated. By definition, the sum across all incoming links to a given node of the fractions must equal 100% because they comprise the sum total of contributions into that node.

These numbers can then be indicated on the existing map. The result of this step is shown in Figure 3.

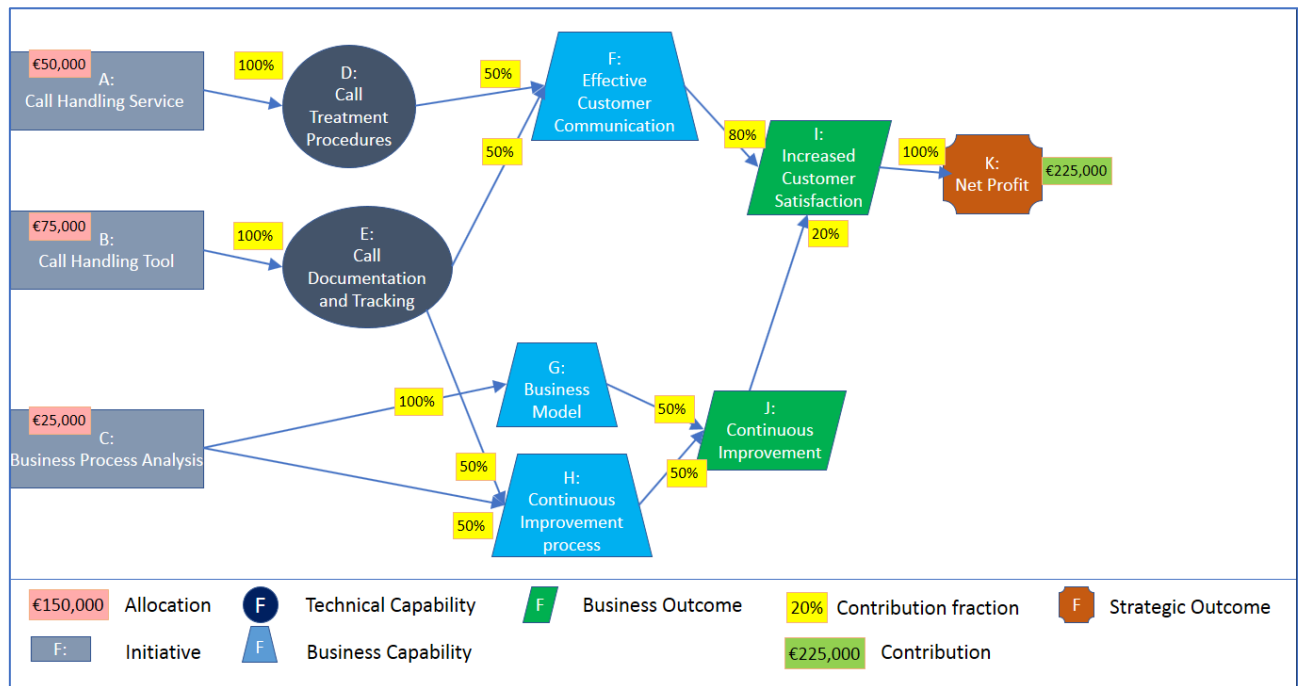


Figure 3: The Benefits Map Including the Contribution Fractions

We are then in a position to calculate the contribution of each node.

Calculating the Contribution of each Node

The contribution fractions can now be used to calculate the “contribution share” of each relationship arrow. The contribution share of a link is the product of the destination contribution by the contribution fraction on that link. For example, the contribution share for link I-to-K is 100% of €225,000 (= €225,000).

The contribution of each intermediate node can then be evaluated as follows. You work back, from right to left, using known contribution values and the contribution fractions. The contribution of a node is the sum of the contribution shares of all of the *outgoing* links from that node.

Once you have worked your way back to the component projects, the corresponding contribution values can be added to the map, as shown in Figure 4.

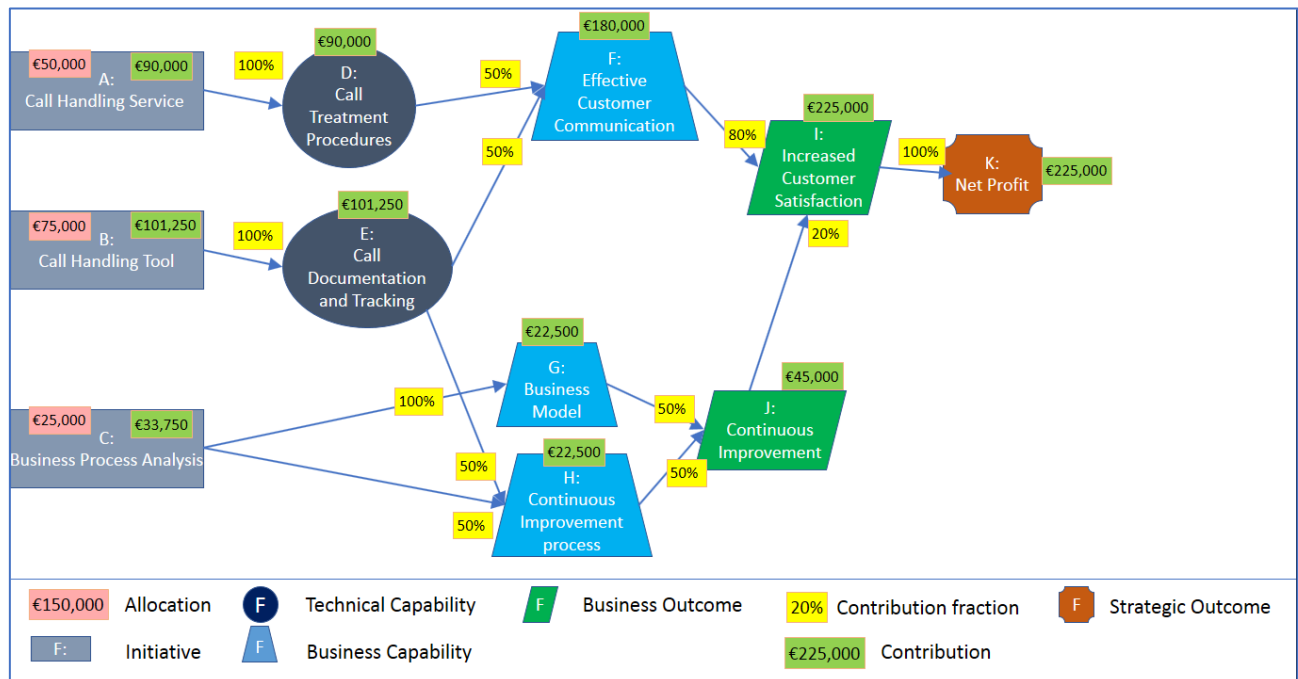


Figure 4: Benefits Map Showing All of the Contributions

This approach can and should be the basis for both the overall business case as well as for the business cases for each of the component projects. Used in this way, the map will ensure consistency of the whole model.

However, care must be taken to ensure that the initial model is complete before you commit to it. So, let us review the case study analysis that has been carried out so far.

KISS of Death

In the case study example we have just analyzed, we made one simplifying decision that probably seemed to be natural at the time but could turn out to be seriously misleading. We set the Net Profit (node K) as the strategic outcome, with a value of €300,000 – €75,000 = €225,000. Surely that is mathematically and procedurally valid. As often in the project environment, the answer is both “Yes” and “No”.

The “Yes” is because the sum is obviously correct from a mathematical point of view. The reason for the “No” is considerably less obvious.

To understand the “No”, let us complete the map by adding the two nodes that are required in order to show where the net profit (node K) comes from: that is to say increased revenue from winning More Business (node L) and the disbenefit of Extra Operational Spend (node M). The logic relative to these new nodes needs to be added as well: more business (L) depends completely on increased customer satisfaction (I), whereas increased operational spend (M)

happens because of work on call documentation and tracking (node E) as well as on the continuous improvement activities (node J).

The benefits contributions of the component projects in this more complete map can be calculated in the same way as explained earlier.

These additional numerical values can therefore be entered on the map. This more complete, quantified benefits map is shown in Figure 5.

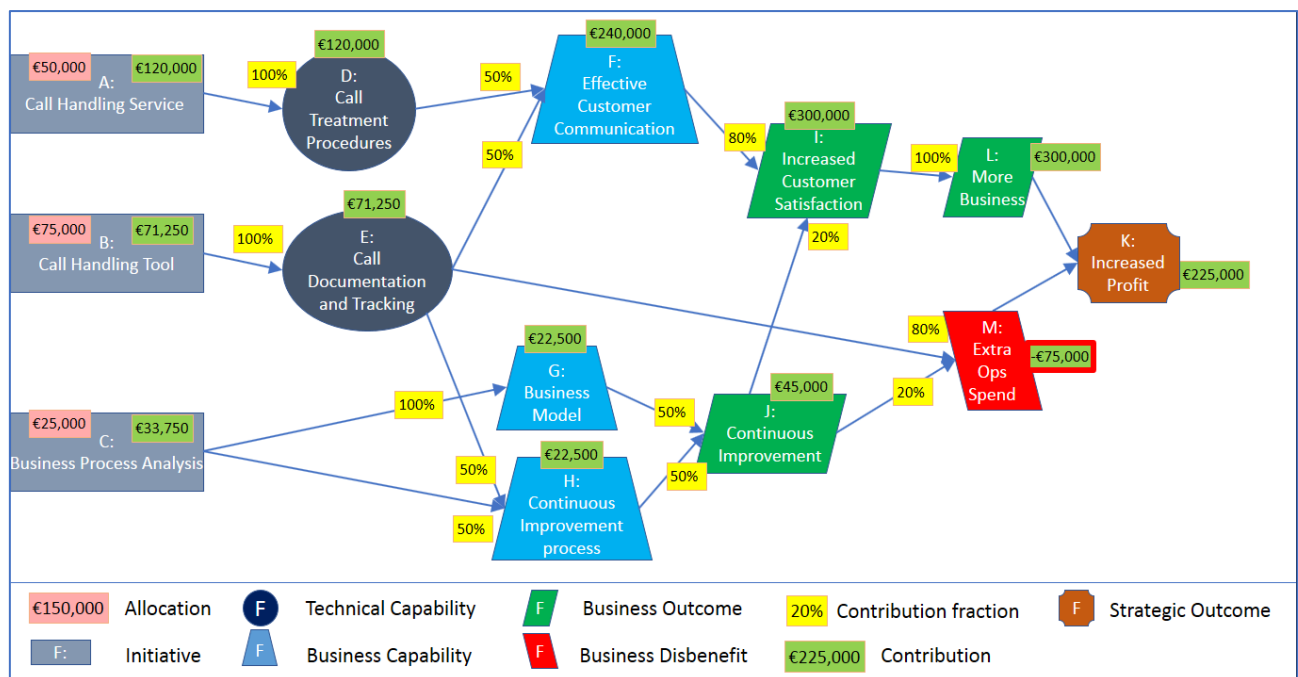


Figure 5: Expanded Benefits Map

A comparison of the two maps provides an interesting insight into the effect of mapping only the net profit (Figure 4) rather than including its component parts (Figure 5). The differences are presented and explained next.

Comparing the Results

The numbers as shown in Figure 4 and Figure 5 are as follows:

In the first case, management had decided to simplify the model by removing nodes L (Extra Operational Spend) and M (Increased Profit), and making node K (Increased Profit) the strategic objective with – as stated – a benefit value of €225,000 (i.e. 75% of €300,000). Calculating across to the left-hand side showed the following contributions, all of which show a positive ROI of contribution vs. cost allocation:

- *Call Handling Service* contributes €90,000 (cost = €50,000)
- *Call Handling Tool* contributes €101,250 (cost = €75,000)
- *Business Process Analysis* contributes €33,750 (cost = €25,000)

However, if we investigate further and include the analysis to show where the extra operational cost comes from, by including nodes L and M, the result is quite different:

- *Call Handling Service* contributes €120,000 (cost = €50,000)
- *Call Handling Tool* contributes €71,250 (cost = €75,000). This project contributes less to the program benefits than it costs.
- *Business Process Analysis* contributes €33,750 (cost = €25,000)

The reason for this important difference with respect to the simplified case is that the call handling tool (node B) has a double effect on increasing the operational costs: once, indirectly, via the continuous improvement work (H) that it supports, and once, directly, because it needs to be managed actively as well (link from E to M). Its €3,750 “overspend” (€75,000 – €71,250) has to be compensated – cross-subsidised in other words – by the benefit from the call handling service (node A) that it enables.

You might be tempted to ask: “why does it matter? After all, the individual contribution values of the component projects do not change the ROI of the overall program.” The answer is that the benefits map is not only used for making the program investment decision. The results of the analysis should also be used for tracking the progress of each project and of each outcome towards achieving their share of the benefits. If the detailed numbers against which you are tracking do not correspond correctly to the business reality, then your tracking will be misleading, resulting in faulty conclusions and unsafe decisions further down the line.

On the other hand, once you have the correct numbers, they can be used in benefits-focussed forecasting and tracking methods based on the Earned Benefit algorithms as described in detail in [Piney 2018] and explained in the next article in this series.

Messages and Next Steps

This article has 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. It showed the importance of ensuring that the map reflects the reality of the situation you are modelling, and underlined two important messages that apply to all programs:

- 1) Simplifying assumptions can lead to faulty analysis of the benefits model and unreliable decisions later on in the program.
- 2) The synergy between program components can justify approving projects that, on their own, show a negative return on investment.

The next article in the series (“Introduction to Earned Benefit”) will explain how to use quantified benefits maps to track progress towards achieving the planned beneficial outcome.

References

- Amplify Portfolio Management Tool. <http://www.amplify-now.com/features/identify>
- Bradley, G. *Benefit Realisation Management: A Practical Guide to Achieving Benefits Through Change*. Routledge, UK. 2010
- Fujitsu and Thorp, J. *The Information Paradox*. 2007.
https://www.fujitsu.com/us/Images/Information_Paradox_Complete_2007.pdf
- Jenner, S and Reid, P. *Managing Benefits: Optimizing Return on Investments*. 2013. Watched on <https://www.youtube.com/watch?v=y1ftPiQ7How>
- Jenner, S. *Managing Benefits*. The Stationery Office, UK. 2014
- Office of Government Commerce. *Managing Successful Programmes*. 2011. London.
- P3M. 2012. Watched on <https://www.youtube.com/watch?v=aNoz-rTATel>
- Peppard, J., Ward, J. and Daniel, E. *Managing the Realization of Business Benefits from IT Investments*. 2007. <http://www.som.cranfield.ac.uk/som/dinamic-content/research/documents/peppardwarddaniel07.pdf>
- Piney, C. *Earned Benefit Program Management: Aligning, Realizing and Sustaining Strategy*. CRC Press, New York, NY, USA. 2018
- White, N. *Benefits Realization Management*. 2015. Downloaded from <https://www.slideshare.net/assocpm/benefits-realisation-management-third-sector-final-13th-may>

About the Author



Crispin ("Kik") Piney

France



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™) 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

Kik can be contacted at kik@project-benefits.com.

To view other works by Kik Piney, visit his author showcase in the PM World Library at <http://pmworldlibrary.net/authors/crispin-kik-piney/>