

PMO *Conference* LONDON 2023





Synopsis Abstract

INFORMATION

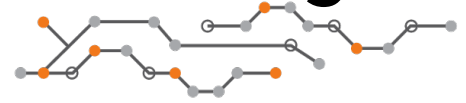
Data is fundamental to any organisation and adding value to the organisation should be top of the PMO goals.

Therefore, is crucial to understand the data that PMO's use and transact with on a daily basis.

Understand how that data needs to be of a high quality, and how it needs to be accurate and up to date to ensure stakeholders are informed with the latest available information.



What We're Going to Cover Today



- What is accurate and good quality data.
- Why linking good data adds value and insight
- Having a central data view that can be sliced in many ways, helps inform the organisation.
- Why having disparate sources of data is not ideal, there should be one source of the truth.
- How data should be freely available to process in whatever way required.
- Why your data & process should define how you work, not which tool you use.



What we're talking about when we're talking about 'data', 'data models', and 'tooling'

Data – facts and statistics collected together for reference or analysis. Data is a collection of discrete values that convey information

Data Model – is an abstract model that organizes elements of data and standardizes how they relate to one another and to the properties of real-world.

Tooling – by this we are referring to PPM tools, SharePoint sites, or Business Intelligence tools (e.g. Power BI).





Some Questions

- **Does the tools you use drive your process, or does your data support your process, agnostic of the system in which it is held?**

As developer I implemented solutions where **there was a 75% fit on requirements**. However, it was the **other 25% where the majority of work was done**, and the solution that were being configured were not fit for purpose

- **How accessible is the data model to interact with Reporting and BI Tools?**



What You'll Take Away from Today

INFORMATION

- That you question and understand the data you have, and how different bits of data are linked.
- How individual and collective pieces of data can add value & insight to your organisation.
- How you can use that data in a meaningful way.
- How data should be openly accessible, and agnostic of reporting tools.
- That data when interacted with, in an accessible environment, adds value to an organisation and can support rapid delivery and reporting.



What is accurate and timely data?



Accurate
*“the quality or state of
being correct or precise.”*



Timely
*“done or occurring at a
favourable or useful time;
is it up to date?”*

This is where your PMO skill comes in to ensure there are clear frameworks, standards and processes documented and in place, and this is where you are adding your value to the data.

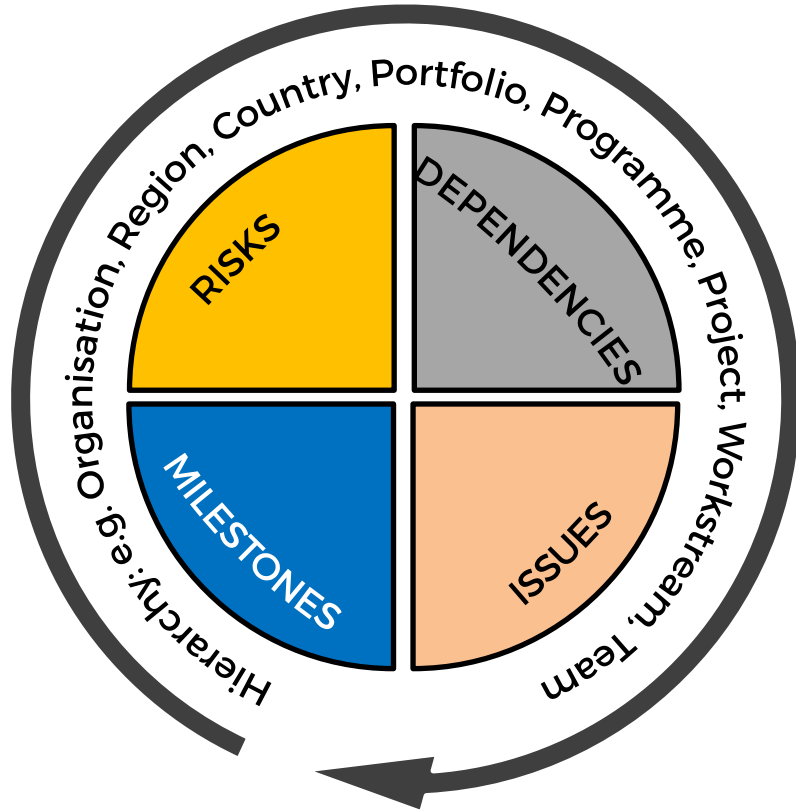
Three Examples

A risk that clearly articulates a potential problem can be **accurate**, but it hasn't been updated in four months, so it is **not timely**

A milestone clearly describes a delivery is **accurate**, and the latest update delivered on time says it is overdue. This **is timely**. Even those the milestone is overdue with a forecast date in the future.

A project manager regularly updates his risks and issues, it **is timely**, however the data is of such a poor quality it is useless to report. This is **not accurate**

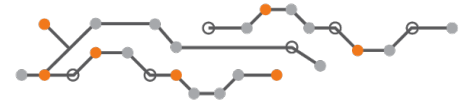
Why linking good data adds value and insight



4 key data points most PMOs are familiar.
Risks, Issues, Milestones and *Dependencies*

- A *Risk* when realised becomes an *Issue*
- Both *Risks* and *Issues* can link to *Milestones*
- *Milestones* can be linked to *Dependencies*
- *Dependencies* therefore are linked to *Risks* and *Issues*
- All are linked to *Project, Programmes, Portfolios*, etc

In isolation they don't really hold much value or insight



What is 'value' and 'insight'?



Value – the regard to which something is held, or its relative importance



Insight – the capacity to gain accurate and deep understanding.

Risks, Issues, Milestones and Dependencies (the data points) can all provide useful information on their own.

But when linked together they can be powerful and informative

How Can Data Be Valuable and Insightful?

INFORMATION

Risks, Issues, Milestones and Dependencies are considered to be the four most valuable (the data points) and have their own metrics and value-added information.

The following slides provide examples of how these individual data points could be enhanced to add value and provide the insight to support the PMO through standardised metrics.

Your processes and reporting should be reflective of what your organisation requires. No two organisations will be the same



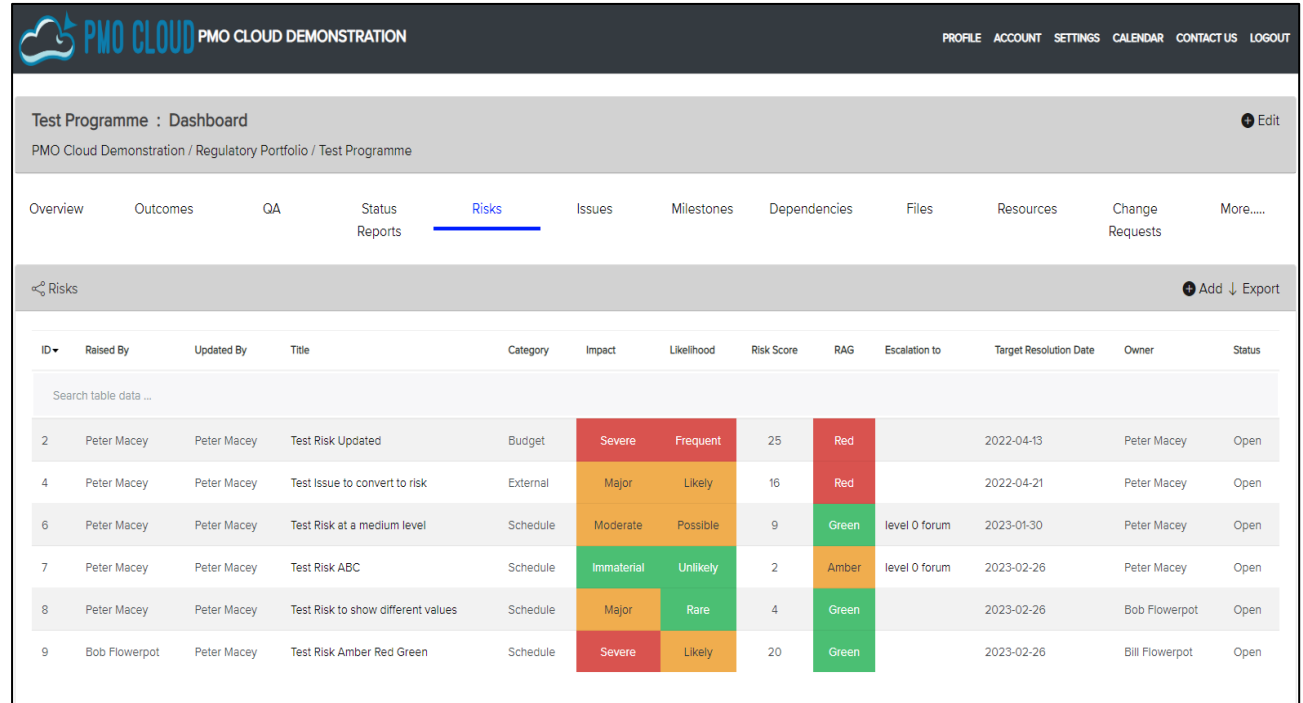
Risk Score (Impact x Likelihood)

Risks can be measured by multiplying the Impact with the Likelihood using a 5 box model.

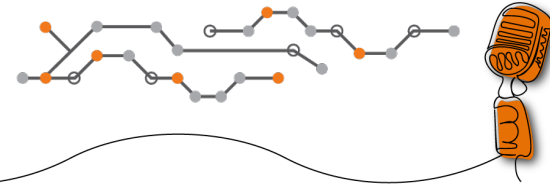
From 1 (Immaterial & Rare)
To 25 (Severe & Frequent)

The Risk Score provides a relative value which will enable PMO's to provide insight to not only the individual risk, but measure it alongside other project or programme risks, and provide a risk profile average.

This can provide insight to other data sets within the PMO scope.



ID	Raised By	Updated By	Title	Category	Impact	Likelihood	Risk Score	RAG	Escalation to	Target Resolution Date	Owner	Status
2	Peter Macey	Peter Macey	Test Risk Updated	Budget	Severe	Frequent	25	Red		2022-04-13	Peter Macey	Open
4	Peter Macey	Peter Macey	Test Issue to convert to risk	External	Major	Likely	16	Red		2022-04-21	Peter Macey	Open
6	Peter Macey	Peter Macey	Test Risk at a medium level	Schedule	Moderate	Possible	9	Green	level 0 forum	2023-01-30	Peter Macey	Open
7	Peter Macey	Peter Macey	Test Risk ABC	Schedule	Immaterial	Unlikely	2	Amber	level 0 forum	2023-02-26	Peter Macey	Open
8	Peter Macey	Peter Macey	Test Risk to show different values	Schedule	Major	Rare	4	Green		2023-02-26	Bob Flowerpot	Open
9	Bob Flowerpot	Peter Macey	Test Risk Amber Red Green	Schedule	Severe	Likely	20	Green		2023-02-26	Bill Flowerpot	Open



Risk Score (Impact x Likelihood)

Risks can be measured by multiplying the Impact with the Likelihood using a 5 box model.

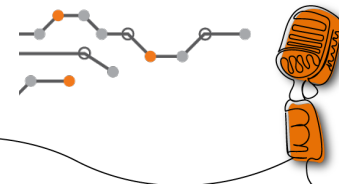
From 1 (Immaterial & Rare)
To 25 (Severe & Frequent)

The Risk Score provides a relative value which will enable PMO's to provide insight to not only the individual risk, but measure it alongside other project or programme risks, and provide a risk profile average.

This can provide insight to other data sets within the PMO scope.

		Impact				
		Insignificant	Minor	Moderate	Major	Critical
Likelihood	Rare	1	2	3	4	5
	Unlikely	2	4	6	8	10
	Possible	3	6	9	12	15
	Likely	4	8	12	16	20
	Certain	5	10	15	20	25

Impact	Likelihood	Risk	Risk Score
Insignificant	Rare	Low	1
Minor	Rare	Low	2
Moderate	Rare	Low	3
Major	Rare	Low	4
Critical	Rare	Low	5
Insignificant	Unlikely	Low	2
Minor	Unlikely	Low	4
Moderate	Unlikely	Low	6
Major	Unlikely	Low	8
Critical	Unlikely	Low	10
Insignificant	Possible	Low	3
Minor	Possible	Low	6
Moderate	Possible	Low	9
Major	Possible	Low	12
Critical	Possible	Low	15
Insignificant	Likely	Low	4
Minor	Likely	Low	8
Moderate	Likely	Low	12
Major	Likely	Low	16
Critical	Likely	Low	20
Insignificant	Certain	Low	5
Minor	Certain	Low	10
Moderate	Certain	Low	15
Major	Certain	Low	20
Critical	Certain	Low	25



Issue Score (Impact)

Issues can be measured by scoring the Impact field.

From 1 (Very Low)

To 5 (Very High)

The Issue Score provides a relative value which will enable PMO's to provide insight to not only the individual issue, but measure it alongside other project or programme issues, and provide an issue profile average.

This can provide insight to other data sets within the PMO scope.

PMO CLOUD PMO CLOUD DEMONSTRATION

PROFILE ACCOUNT SETTINGS CALENDAR CONTACT US LOGOUT

Test Programme : Dashboard Edit

PMO Cloud Demonstration / Regulatory Portfolio / Test Programme

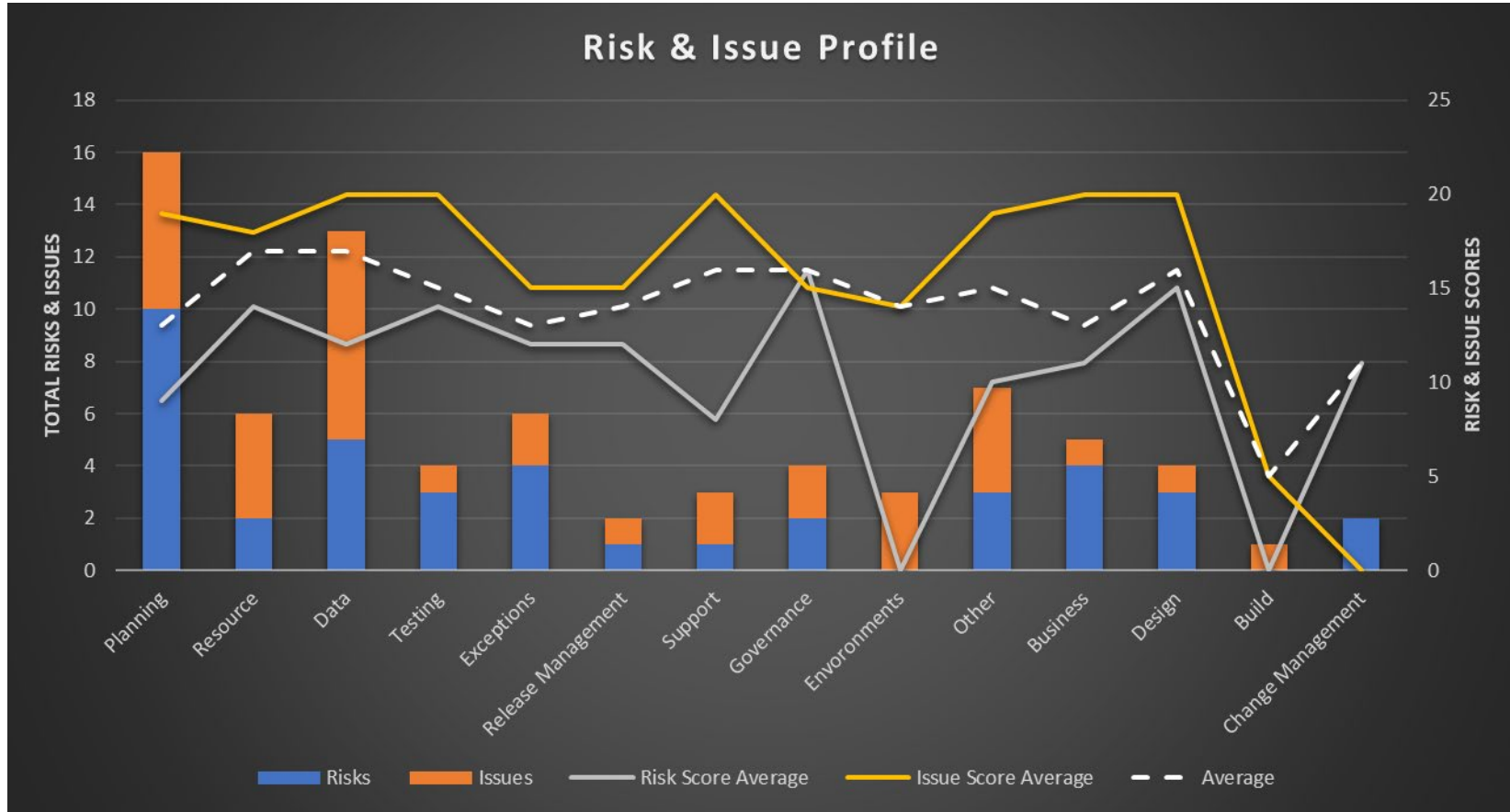
Overview Outcomes QA Status Reports Risks Issues Milestones Dependencies Files Resources Change Requests More....

Issues Add ↓ Export

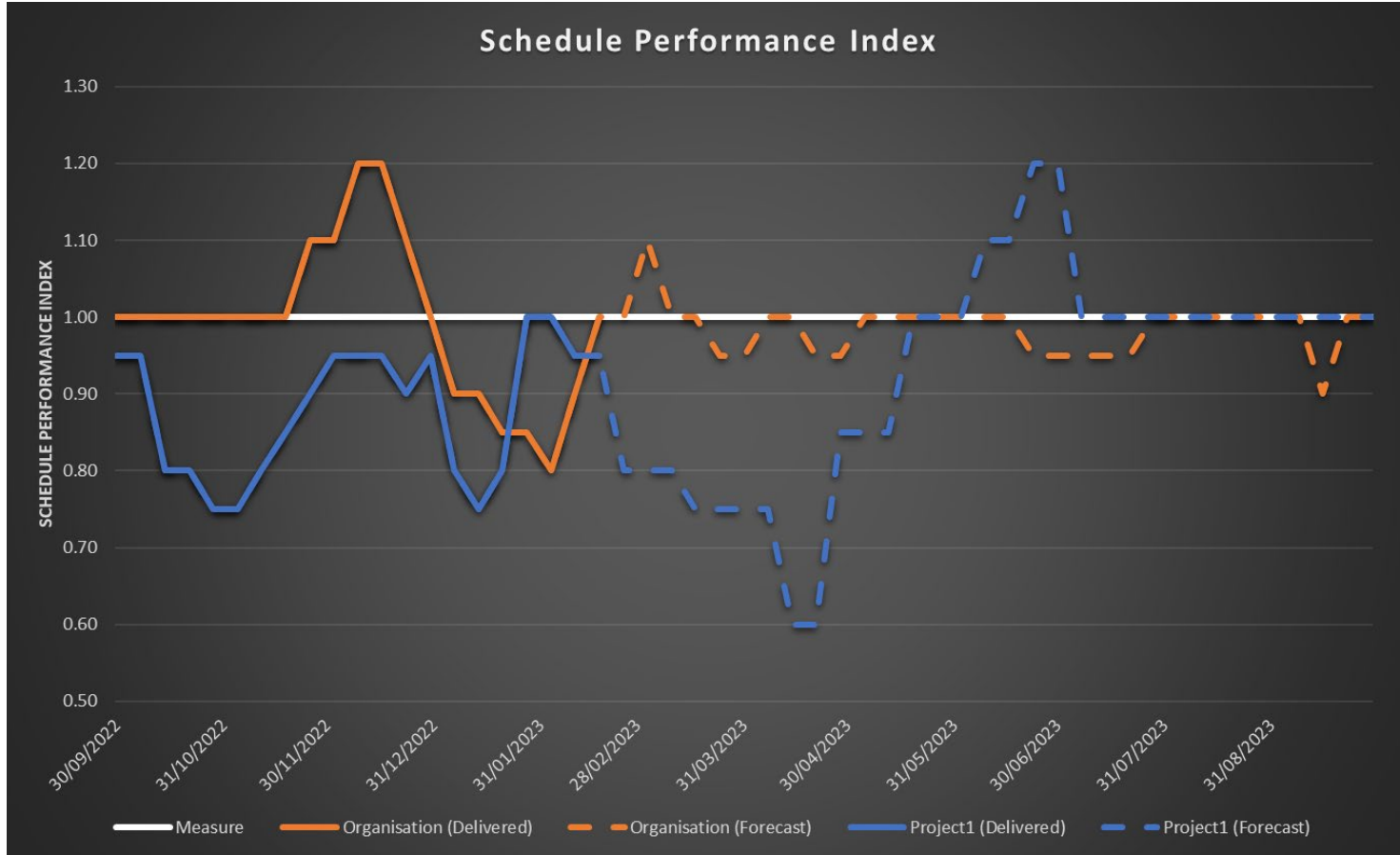
ID	Raised By	Updated By	Title	Category	Impact	RAG	Escalation Level	Target Resolution Date	Owner	Status
2	Peter Macey	Peter Macey	New risk to convert	Scope	Very Low	Red		2022-04-27	Peter Macey	Open
3	Peter Macey	Peter Macey	Test Issue	Budget	Very High	Red		2022-05-05	Peter Macey	Open



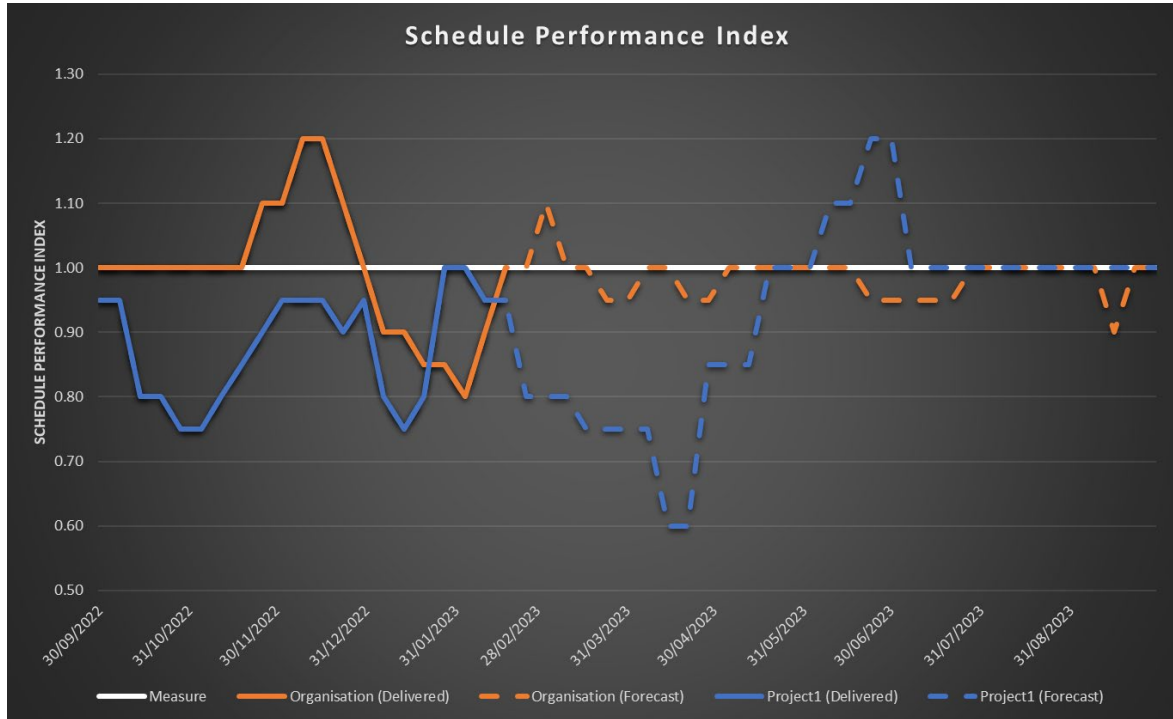
How Risk and Issue Data Can Be Used



Milestone Delivery Metrics



Milestone Delivery Metrics



One way to track milestone delivery is to measure your baseline plan versus your forecast plan.

The graphic opposite shows a Schedule Performance Index, which plots the number of milestones you said you would deliver, against the number of milestones you did deliver. The perfect score is 1.

Over 1 and you are over delivering on your plan.

The usual boundaries used are:

0.00 - 0.69 = Red

0.70 - 0.84 = Amber

0.85 and Above = Green

Milestone Score (Baseline v Forecast)



PMO CLOUD DEMONSTRATION

[PROFILE](#) [ACCOUNT](#) [SETTINGS](#) [CALENDAR](#) [CONTACT US](#) [LOGOUT](#)

Test Programme : Dashboard

[+ Edit](#)

[PMO Cloud Demonstration](#) / [Regulatory Portfolio](#) / [Test Programme](#)

[Overview](#)

[Outcomes](#)

[QA](#)

[Status Reports](#)

[Risks](#)

[Issues](#)

[Milestones](#)

[Dependencies](#)

[Files](#)

[Resources](#)

[Change Requests](#)

[More....](#)

[←](#) View Milestone: ID (2): sdfsd sdf

[+ Edit](#)

Level*

Name*

Raised by*

L0



sdfsd sdf

Macey, Peter



Description

sdfsd sdf



Forecast Start

Forecast Finish*

dd/mm/yyyy

30/03/2022

Current Baseline Start

Current Baseline Finish

dd/mm/yyyy

16/03/2022

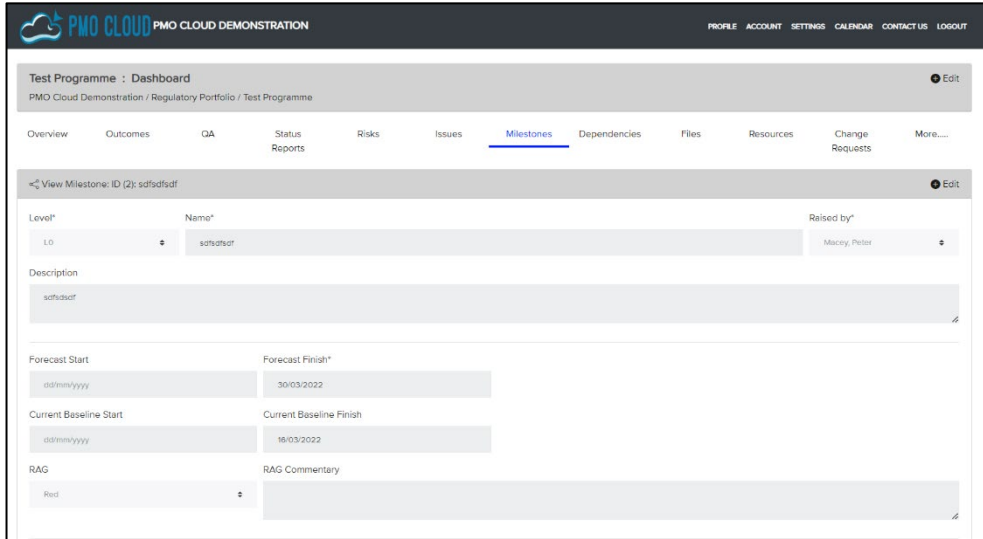
RAG

RAG Commentary

Red



Milestone Score (Baseline v Forecast)



Test Programme : Dashboard

PMO Cloud Demonstration / Regulatory Portfolio / Test Programme

Overview Outcomes QA Status Reports Risks Issues **Milestones** Dependencies Files Resources Change Requests More.....

<< View Milestone: ID (2): sdfdsdf

Level* L0

Name* sdfdsdf

Raised by* Macroy, Peter

Description sdfdsdf

Forecast Start dd/mm/yyyy

Forecast Finish* 30/03/2022

Current Baseline Start dd/mm/yyyy

Current Baseline Finish 18/03/2022

RAG Red

RAG Commentary

- Lets take a different approach with **Milestones**
- **Milestones** can provide a metric of delivery. By using the baseline finish field the delivery of the milestone can be measured against the forecast finish field.
- But **Milestones** are also associated with **Risks and Issues**.
- We start with a Milestone Score of 1.
- If the Milestone has missed it's baseline finish date then we remove 0.5
- If the Milestone is forecast to miss it's baseline date then we only remove 0.25
- Next we need to take into account the Risks and Issues Score, and subtract that from the **Milestone Score**.

Milestone Associated Risks & Issues



PMO CLOUD DEMONSTRATION

PROFILE ACCOUNT SETTINGS CALENDAR CONTACT US LOGOUT

Escalation Level:

Escalation Reason:

Related Risks

ID	Raised By	Title	Category	Impact	Likelihood	RAG	Escalation to	Target Resolution Date	Owner	Status
Search table data ...										
2	Peter Macey	Test Risk Updated	Budget	Severe	Frequent	Red		13 Apr 2022	Macey, Peter	Open
4	Peter Macey	Test Issue to convert to risk	External	Major	Likely	Red		21 Apr 2022	Macey, Peter	Open

Related Issues

ID	Raised By	Title	Category	Impact	RAG	Escalation Level	Target Resolution Date	Owner	Status
Search table data ...									
2	Macey, Peter	New risk to convert	Scope	Very Low	Red		27 Apr 2022	Macey, Peter	Open
3	Macey, Peter	Test Issue	Budget	Very High	Red		5 May 2022	Macey, Peter	Open

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Milestone Score (Risks & Issues)

PMO CLOUD DEMONSTRATION

PROFILE ACCOUNT SETTINGS CALENDAR CONTACT US LOGOUT

Escalation Level: 2 Escalation Reason:

<< Related Risks

ID	Raised By	Title	Category	Impact	Likelihood	RAG	Escalation to	Target Resolution Date	Owner	Status
2	Peter Macey	Test Risk Updated	Budget	Severe	Frequent	Red		13 Apr 2022	Macey, Peter	Open
4	Peter Macey	Test issue to convert to risk	External	Major	Likely	Red		21 Apr 2022	Macey, Peter	Open

<< Related Issues

ID	Raised By	Title	Category	Impact	RAG	Escalation Level	Target Resolution Date	Owner	Status
2	Macey, Peter	New risk to convert	Scope	Very Low	Red		27 Apr 2022	Macey, Peter	Open
3	Macey, Peter	Test Issue	Budget	Very High	Red		5 May 2022	Macey, Peter	Open

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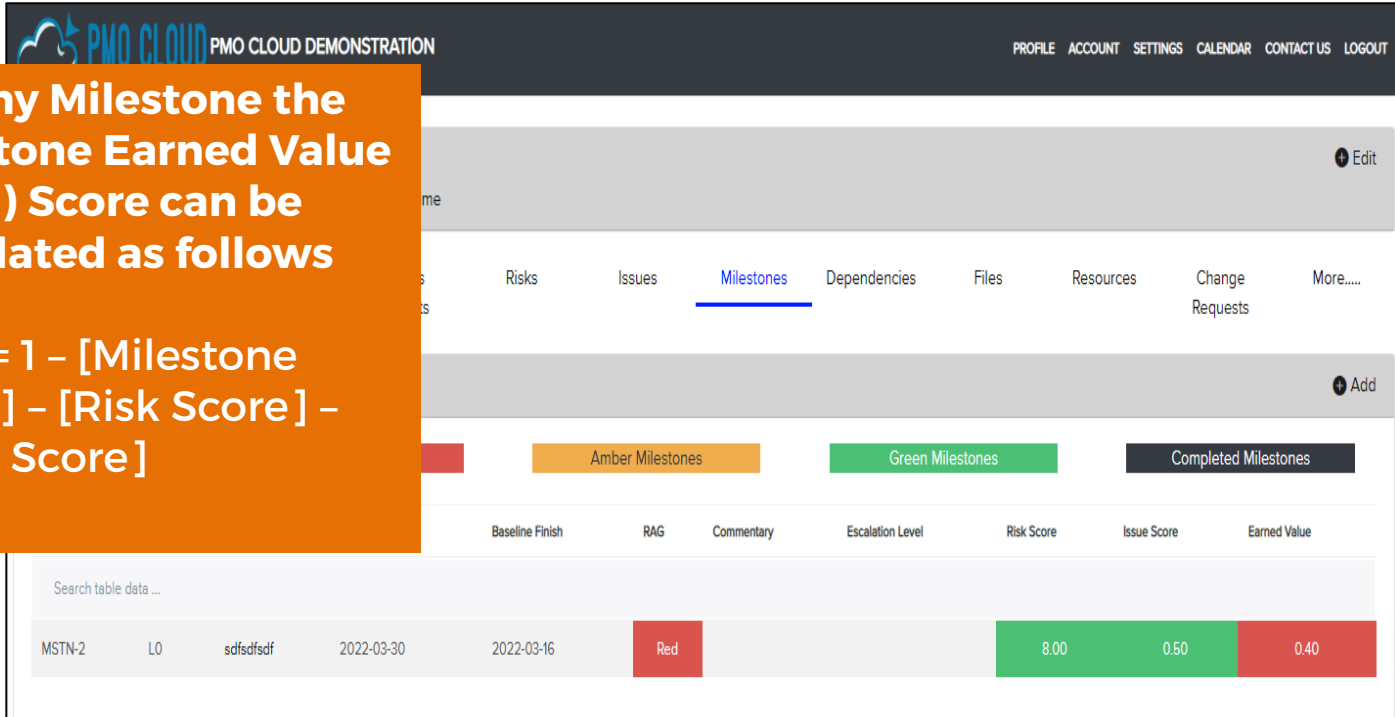
- On the previous slide we identified the first part of the Milestone Score. This will be either 1.00, 0.75 or 0.50.
- Within the milestones we can see the associated Risks and Issues, so by using the Risk Score and Issue Score for the milestone we can identify an Earned Value Score.
- The Risk Score for the Milestone is calculated between 1 and 25. (Divide by 100 to get a score (0 to 0.25)
- The Issue Score for the Milestone is calculated between 1 and 5. (Divide by 20 to get a score (0 to 0.25)

Milestone Earned Value Score = Milestone Score - Risk Score - Issue Score

Milestone Earned Value Score (MEV)

For any Milestone the Milestone Earned Value (MEV) Score can be calculated as follows

$$MEV = 1 - [\text{Milestone Score}] - [\text{Risk Score}] - [\text{Issue Score}]$$



Baseline Finish	RAG	Commentary	Escalation Level	Risk Score	Issue Score	Earned Value		
MSTN-2	L0	sdfsdfsf	2022-03-30	2022-03-16	Red	8.00	0.50	0.40

Milestone is measured between 0 and 1. The lower the score the more risk to the Milestone

Milestone Earned Value Score (MEV)

MEV = 1 – [Milestone Score] – [Risk Score] – [Issue Score]

Milestone Score

Missed Milestone = - **0.50**

Forecast Missed Milestone = - **0.25**

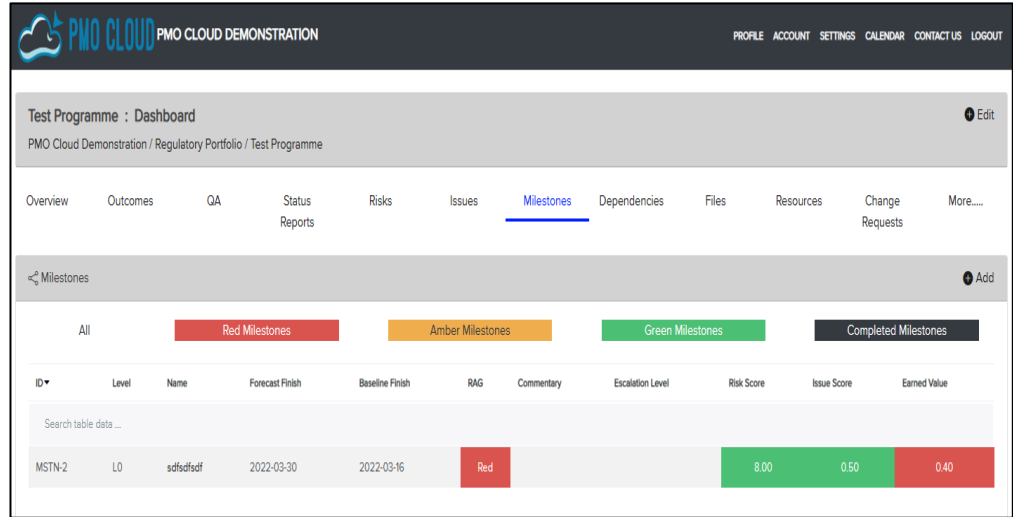
Milestone on Track = - **0.00**

Risk Score

Score between 1 and 25. Divide by 100 to get average between 0.00 and 0.25

Issue Score

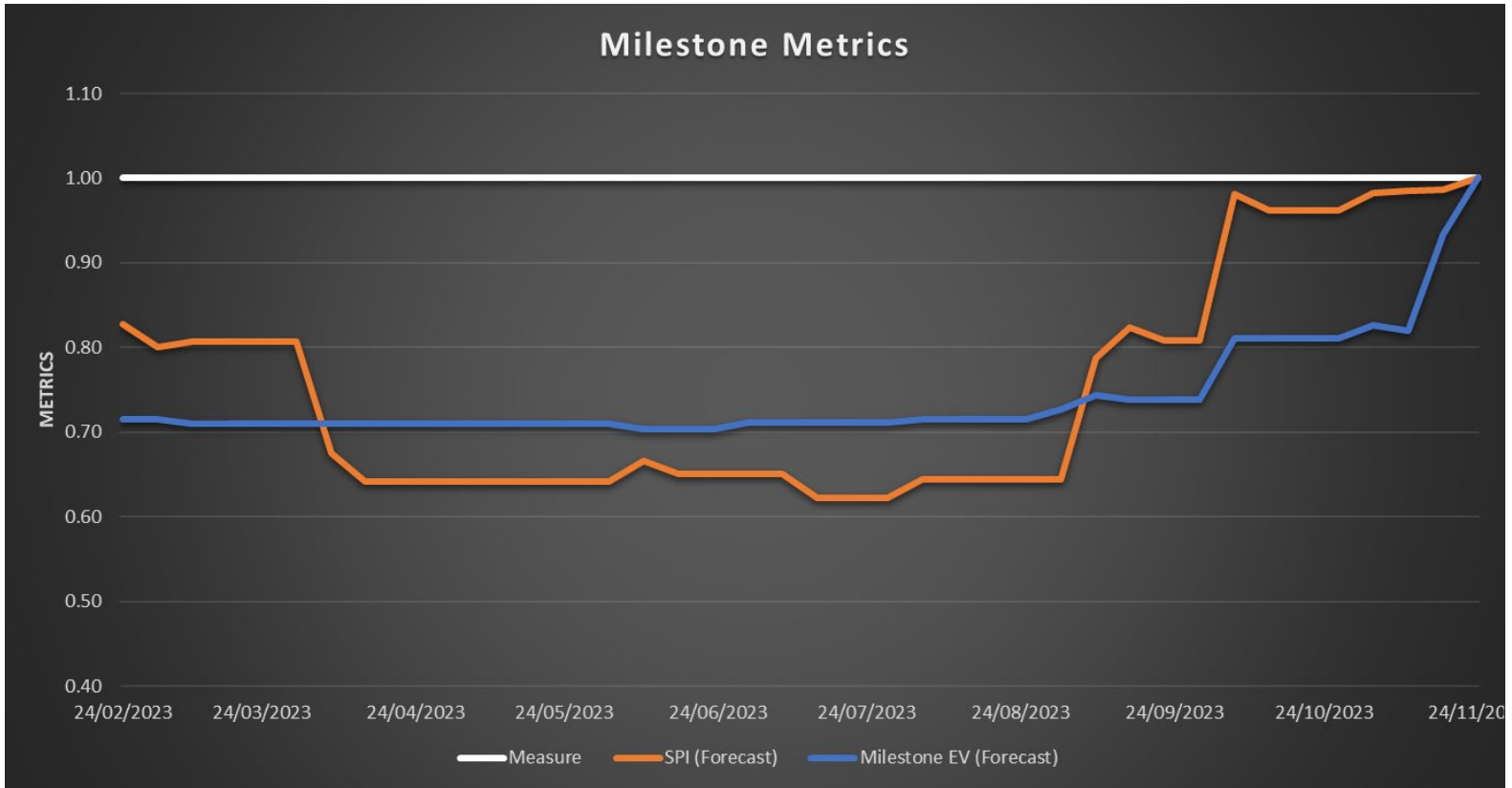
Score between 1 and 5. Divide by 20 to get average between 0.00 and 0.25



ID	Level	Name	Forecast Finish	Baseline Finish	RAG	Commentary	Escalation Level	Risk Score	Issue Score	Earned Value
MSTN-2	L0	sdfsdf	2022-03-30	2022-03-16	Red			8.00	0.50	0.40

Milestone is measured between 0 and 1. The lower the score the more risk to the Milestone

Milestone Earned Value (As a graph)



Milestone Earned Value (As a graph)

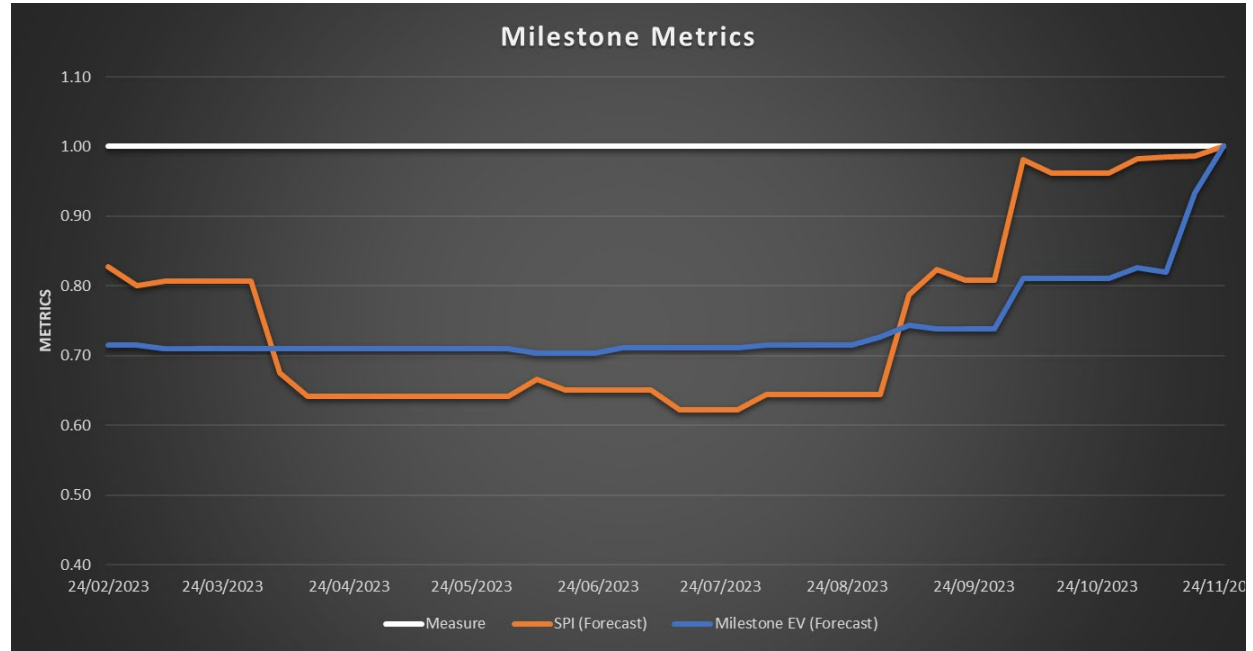
Milestone EV make more sense at the Milestone Level, though it can be plotted on a graph giving a view against the Schedule Performance Index.

The chart opposite shows the SPI (how you are delivering against your baseline plan).

The blue line indicates the inbuilt risk alongside the in built delivery.

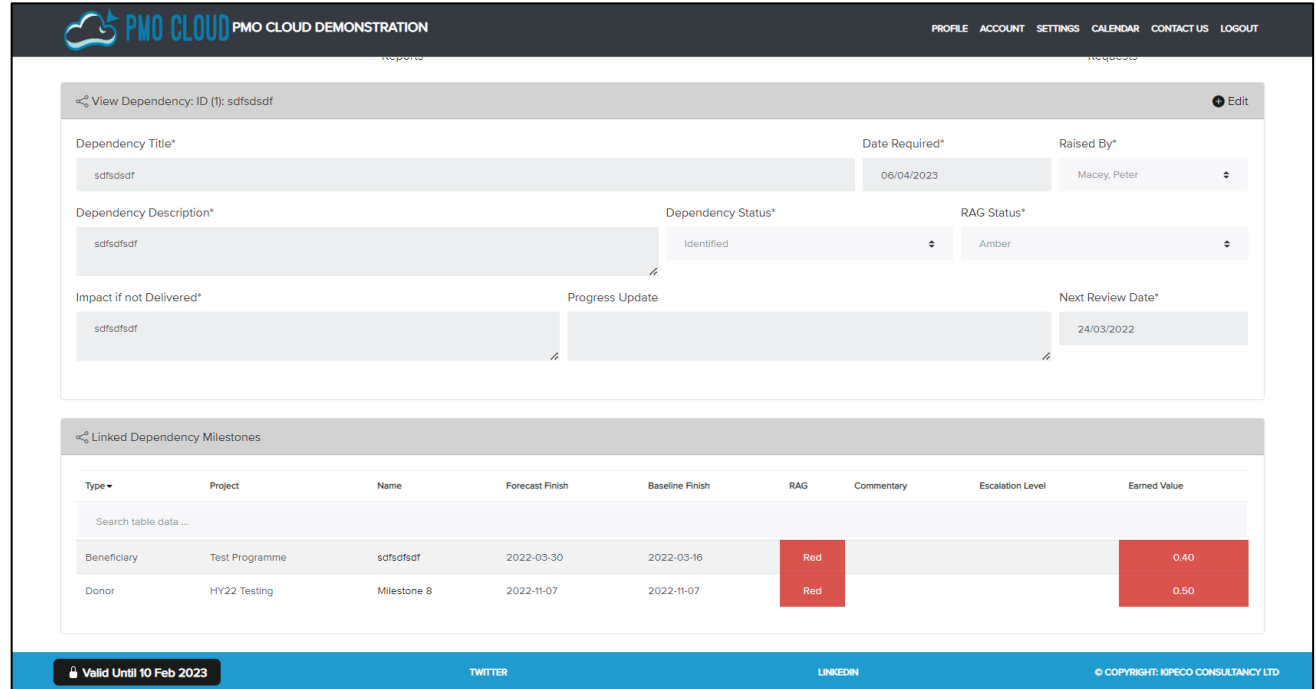
The optimum is to deliver as near to a score of 1 for SPI.

The closer the Milestone EV is the less risk the delivery has.



Dependencies and Milestone Earned Value

- The Milestone Earned Value figure can be used to support the information relating to the delivery of a Dependency.
- The milestones and their relative metrics would provide input to the dependency, but that is just one component.
- There are dependency details that can add to the Milestones Earned Values and provide a Dependency Earned Value



The screenshot displays the PMO Cloud Demonstration interface. At the top, there is a navigation bar with the PMO Cloud logo and the text "PMO CLOUD DEMONSTRATION". On the right side of the navigation bar, there are links for "PROFILE", "ACCOUNT", "SETTINGS", "CALENDAR", "CONTACT US", and "LOGOUT".

The main content area is titled "View Dependency: ID (f): sdfdsdf" and includes an "Edit" button. The form contains the following fields:

- Dependency Title*: sdfdsdf
- Date Required*: 06/04/2023
- Raised By*: Macey, Peter
- Dependency Description*: sdfdsdf
- Dependency Status*: Identified
- RAG Status*: Amber
- Impact if not Delivered*: sdfdsdf
- Progress Update: (empty)
- Next Review Date*: 24/03/2022

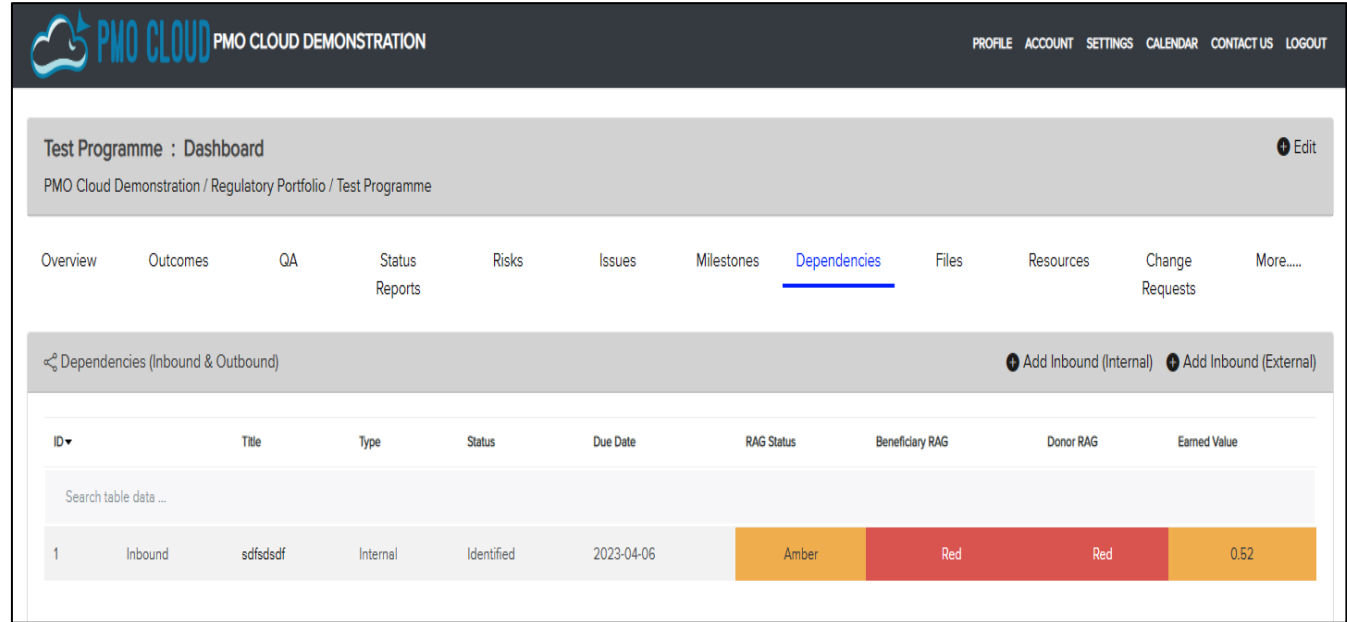
Below the form is a section titled "Linked Dependency Milestones" which contains a table with the following data:

Type	Project	Name	Forecast Finish	Baseline Finish	RAG	Commentary	Escalation Level	Earned Value
Search table data ...								
Beneficiary	Test Programme	sdfdsdf	2022-03-30	2022-03-16	Red			0.40
Donor	HY22 Testing	Milestone 8	2022-11-07	2022-11-07	Red			0.50

At the bottom of the interface, there is a footer with a lock icon and the text "Valid Until 10 Feb 2023", a "TWITTER" link, a "LINKEDIN" link, and the copyright notice "© COPYRIGHT: KIPECO CONSULTANCY LTD".

Dependencies - Earned Value

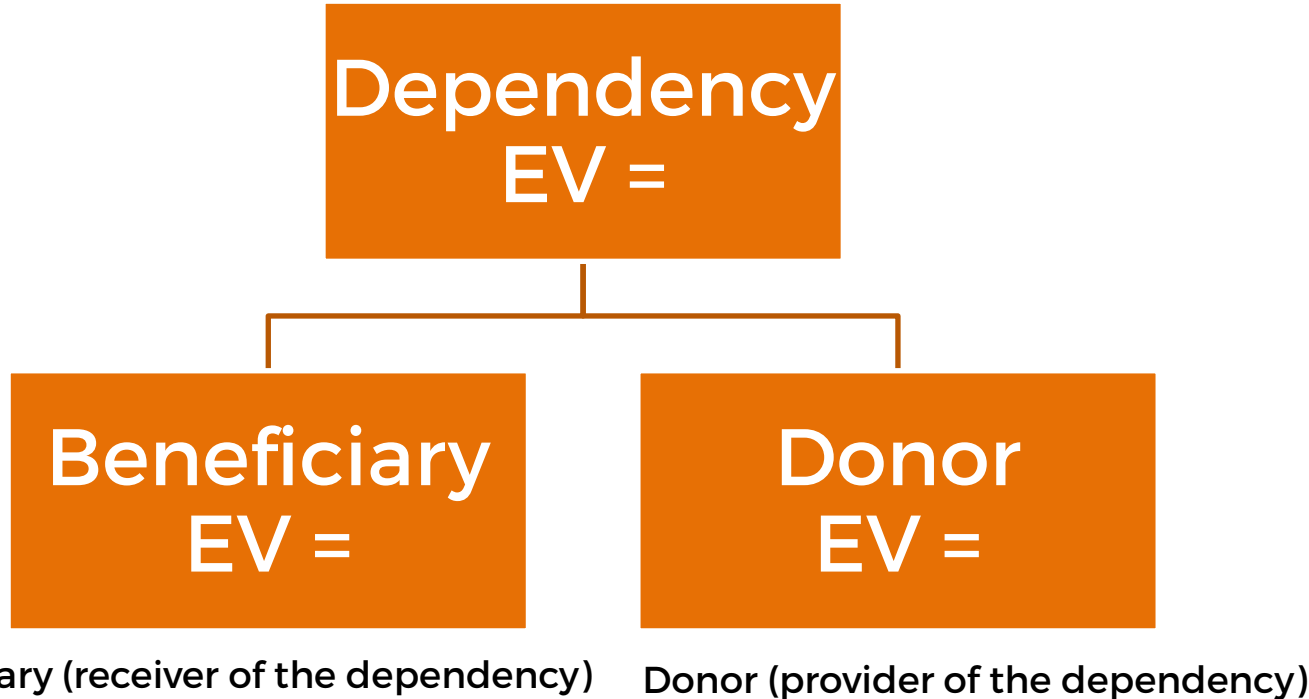
- Starting with the Dependency Status, RAG Status and Date Required, a value for the relative merits of the dependency can derive an initial value, whether it is agreed or not, or whether it is Red, Amber or Green.
- That value can then be enhanced by factoring in the Donor and Beneficiary Milestone Metrics to enable you to derive a Dependency Earned Value Metric that enables you to measure each dependency.



The screenshot shows the PMO Cloud Demonstration interface. The top navigation bar includes 'PROFILE', 'ACCOUNT', 'SETTINGS', 'CALENDAR', 'CONTACT US', and 'LOGOUT'. The main content area is titled 'Test Programme : Dashboard' and contains a breadcrumb trail 'PMO Cloud Demonstration / Regulatory Portfolio / Test Programme'. A horizontal menu below the breadcrumb includes 'Overview', 'Outcomes', 'QA', 'Status Reports', 'Risks', 'Issues', 'Milestones', 'Dependencies' (highlighted), 'Files', 'Resources', 'Change Requests', and 'More....'. Below the menu, there are two buttons: 'Add Inbound (Internal)' and 'Add Inbound (External)'. The main data area is a table with the following columns: ID, Title, Type, Status, Due Date, RAG Status, Beneficiary RAG, Donor RAG, and Earned Value. A search bar is located above the table data.


ID	Title	Type	Status	Due Date	RAG Status	Beneficiary RAG	Donor RAG	Earned Value	
1	Inbound	sdfsdf	Internal	Identified	2023-04-06	Amber	Red	Red	0.52

Dependencies - Earned Value




These metrics help evaluate the progress and impact of the dependency on both sides.

Consistent Metrics


 PMO CLOUD DEMONSTRATION

[PROFILE](#) [ACCOUNT](#) [SETTINGS](#) [CALENDAR](#) [CONTACT US](#) [LOGOUT](#)

PMO Cloud Demonstration Dashboard

 Organisation & Governance

- Organisation Hierarchy
- Organisation Governance Forums
- Strategic Outcomes

 Resourcing

- Resource Capacity
- Resource Planner
- Dependency Overview

Risks

Issues

Milestones



Earned Value

16.25

3.67

0.13

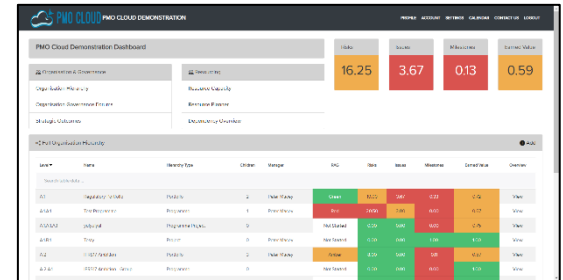
0.59

 Full Organisation Hierarchy  Add

Level▼	Name	Hierarchy Type	Children	Manager	RAG	Risks	Issues	Milestones	Earned Value	Overview
Search table data ...										
A.1	Regulatory Portfolio	Portfolio	2	Peter Macey	Green	19.00	3.67	0.33	0.72	View
A.1.A.1	Test Programme	Programme	1	Peter Macey	Red	20.50	3.00	0.00	0.67	View
A.1.A.1.A.1	yuiyuiyui	Programme Project	0		Not Started	0.00	0.00	0.00	0.75	View
A.1.B.1	Testy	Project	0	Peter Macey	Not Started	0.00	0.00	1.00	1.00	View
A.2	IFRS17 Ambition	Portfolio	3	Peter Macey	Amber	8.00	0.00	0.11	0.57	View
A.2.A.1	IFRS17 Ambition - Group	Programme	0		Not Started	0.00	0.00	0.00	1.00	View

Consistent Metrics

- All of the metrics and Earned Value data can be sliced at all levels of the organisational hierarchy.
- The view shows the summary, the data is rolled up at project, programme, portfolio and organisation level.
- This simple view shows each of the metrics against the subset of their hierarchy and allows comparison to take place.



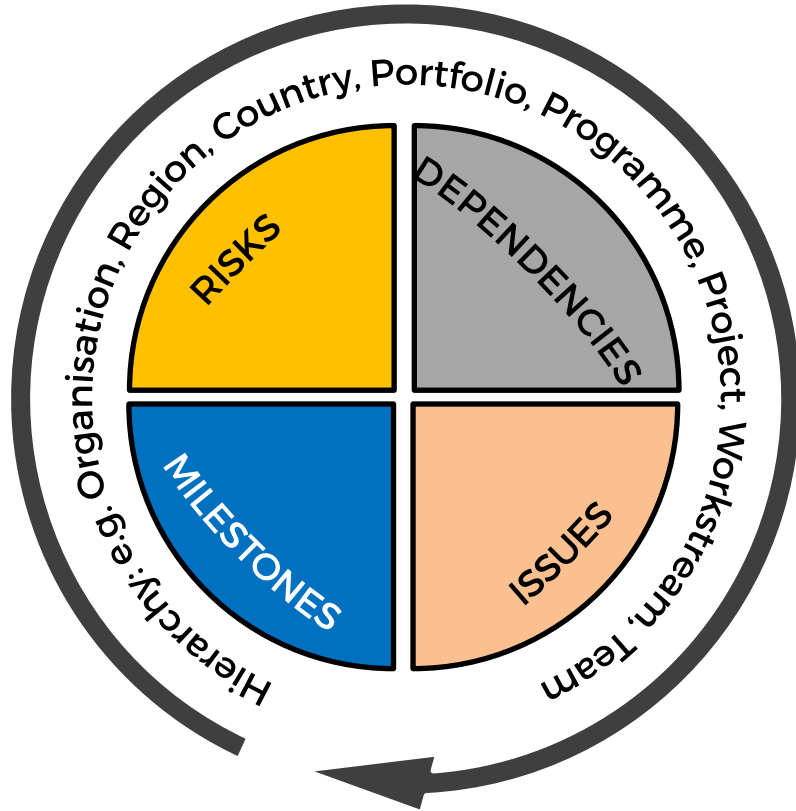
Metrics, so what?

We've reviewed some possible metrics, but how are they useful?

The data points can, and should be, aligned to things such as strategy, outcomes and benefits, so that these can be tracked through the lifecycle of any project programme or portfolio delivery.

The information that can be gained from these types of data slices, allows the PMO to add its own value analysing the metrics and scores to assist leaders

Having a central data view that can be sliced in many ways, helps inform the organisation



Having all the data in (or accessible from) one place, drives the following:

- **Standardised** capture of data
- **Completeness** of data capture across the organisation
- Good **governance** of data within standard architecture
- **Integrity** of data, which when updated frequently, leads to accurate and timely data
- A **comprehensive** set of reportable data



Why having disparate sources of data is not ideal, there should be one source of the truth

Most organisation have prescribed tools for type of activities

None of which are ever joined up, thus overburdening processes and ensuring data is never joined up. At best the data is inconsistent, not accurate and mostly very stale.

Finance Systems

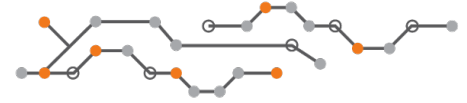
HR Systems

Portfolio and Project Management Systems

Development systems (e.g. JIRA and Confluence)



Disparate Data - What Can the PMO Do?



This is my challenge to you:

- Define the data you want to collect and use
- Define the processes that capture that data, and any processes to run your PMO.
- Identify how the data you have captured is to be used / presented / governed
- Identify information and metrics that add value and define those

Last of all:

- Look at the flexibility of PPM solutions to support **your needs**
- Do your processes fit within the solutions you are using or want to use?



A final thought on data



Data should be freely available to process in whatever way required

Application Programming Interface (API)

“a set of functions and procedures allowing the creation of applications that access the features or data of an operating system, application, or other service.”

In short if the data is held centrally, it should be freely available for all within the organisation to use. The easiest technical implementation of this is through API's which can be used by tools such as Power BI, Excel, or your own custom-built applications



Takeaways

Your data and processes should define the way you work. Not the systems you use

Understand your current PMO Data Architecture.

Map and identify your key data, where can you add value and insight to it.

Think about what might be useful not only now but, in the future, (what can inform senior stakeholders)

Look at how you can pull your data together in one place and make reporting seamless, and openly accessible

Remember that Data and Reporting can add value and insight and assist you in assisting your organisations



Thank you

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