Translating Data Into Insights

Facilitator Guide

copyright text

Translating Data Into Insights – Modules 1-3

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150 minutes

Goal:

Use data to support the decision making process.

Objectives:

Set up projects by

- Ensuring you are answering the right business question and setting the scope of topics that need to be tested;
- Setting the project's milestones and timelines to meet deliverable dates; and
- Identifying interim stakeholder update requirement.

Manage projects by

- Dealing with data challenges; and
- Developing effective stakeholder update presentations

How to Use the Facilitator Guide

This guide has been designed to provide you with everything you need to effectively facilitate the course. To prepare for the delivery of the course, please:

- Review this guide in its entirety;
- Review the PowerPoint presentation;
- Review the participant workbook;
- Read through the Facilitator's Guide a second time making comments and adding in your personal examples/stories;
- Practice delivering the course multiple times to avoid reading from the script during the delivery of the course.

Facilitator Guide Features

Facilitator Note

Explain

Ask

Review

Activity

Transition

Key Points

Q&A

[ ] In Text Facilitator Note

Workshop Set-up & Equipment

<u>Set-up</u>

Tables set up for groups of 4-5 people for group discussions. Convenient set up for facilitator to move around.

<u>Equipment</u>

Projector, screen, pens, participant workbooks.

Translating Data Into Insights

2 minutes

Key Points

- Introduce Facilitator
- Importance of answering the right question

Explain

Introduction

Hi everyone. Welcome to our first session in the Translating Data Into Insights course. This course was designed for Business Analysts, Research Analysts, and Marketing Analysts, who want to really learn to leverage data to solve supply chain issues and support business goals.

[ ] [Introduce yourself.] I have worked as a consultant, predominantly in the supply chain space, across multiple sectors and around much of the world. A common theme in this work was setting out the cost trade-offs through the supply chain, to allow senior stakeholders to make decisions on how best to develop their business.

I have also had roles in 3PLs, working alongside the operational teams, to provide insight into the current operation, and support developments, both within and along the supply chain.

In these roles, it was not just important to get the right 'answer' – though that is vital – but to work out how best to translate all of the relevant insight that has been generated into a format and form that can be used by the customer.

That is what this workshop will be covering.

Turning Data Into Insights

Key Points

- Learning Outcomes

Explain

Today's session looks at setting up and managing great data projects.

So by the end of this workshop, you will be able to set up the project by:

- ensuring you are answering the right business question and setting the scope of topics that need to be tested;
- setting the project's milestones and timelines to meet deliverable dates; and
- identifying interim stakeholder update requirements.

You will also manage the project by:

- dealing with data challenges; and
- developing effective stakeholder update presentations.

Let's look at an example of a data analysis report. What information does this give the stakeholder?

[Lead a discussion to what could have been included as insights.]

5 minutes

Setting Up the Project

Setting Up the Project

Module 1.1
23 minutes

3 minutes

Slide 5

Key Points

- Clarifying the question – motive/preconceived ideas
- Rational, intuitive & creative decision makers
- Check-in session with project owner
- Tie question back to the story
- Building out milestones
- A plan brings Clarity

Explain

Clarifying the Question

Setting up the project involves clarifying the question, setting the scope and milestones, and Identifying interim stakeholder update requirements.

So let's look at Clarifying the Question

What happens when we are asked a question? Well, we have to translate the problem into an analytical exercise. You have to…

- Understand the motive behind the question - what are the reasons this question is being asked.
- And you have to examine any preconceived ideas that may be the 'leading answers'.

Let's look at an example. If the question asked was: *"Where should we build a new distribution centre?", what are the motivations?*

Examine what preconceived ideas there might be about the problem. What preconceived ideas might your manager or client have?

[ ] [Allow one minute for responses.]

For example, they may think the number of distribution centres can be limited to a small number, but they have not factored for geography or weather.

How might you reframe things to address those preconceptions? [Allow one minute for responses.]

Setting Up the Project

Explain

Types of Decision Makers

In addition, you should consider the types of decision makers you are dealing with. While it should not impact your analysis, it will impact how you present your findings. Try and understand whether your key stakeholders are:

- can improve the quality and effectiveness Rational - This approach is based on logic and reason, and involves a thorough search for and evaluation of alternatives. It can be objective and reduce the chance of errors and assumptions by using scientifically obtained data
- Intuitive - This approach relies on hunches, feelings, heuristics, rules of thumb, and past experiences. It can be ideal for situations where there is low certainty, high complexity, and limited time and resources
- Creative - This approach of decisions, increase confidence and satisfaction, and enhance learning and growth.

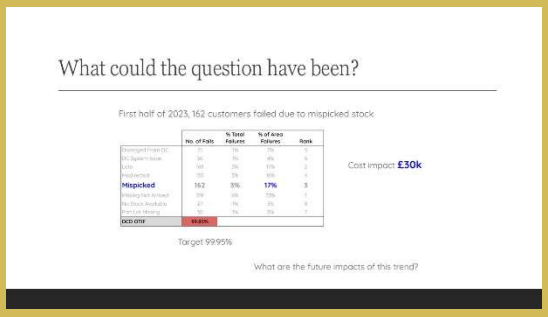
1 minute

Slide 6

Setting Up the Project

2 minutes

Slide 7



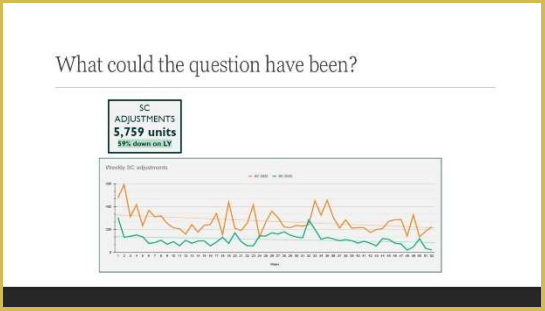
Examples

Let's look at an example…
Here is the data for the first half of 2023: 162 customers failed due to mispicked stock… So what was the question?

Setting Up the Project

2 minutes

Slide 8



Examples

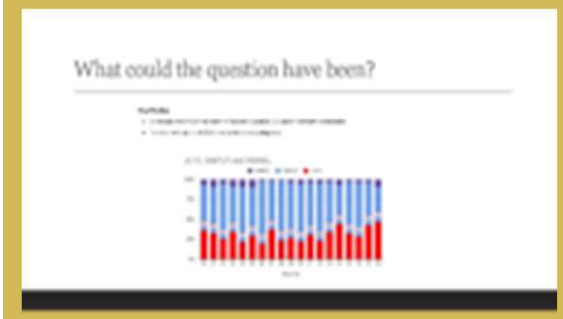
What about this example for SC Adjustments?

[Slide 9] What about this example for Uncovering the Impact of JI 3 on Pallet Pathway Efficiency?

Setting Up the Project

2 minutes

Slide 9



Examples

What about this example for Uncovering the Impact of JI 3 on Pallet Pathway Efficiency?

Setting Up the Project

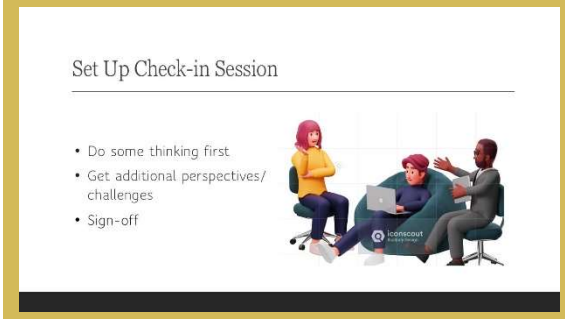
Explain

So how would you respond to the initial question?

- Be proactive – set up a ‘cross-check’ session with the project owner, but ensure you have done some thinking first. Don’t just go in with questions.
- Work with others to get additional perspectives/ challenges before the session. This does not need to take long.
- And the sign-off does not need to be over 20 pages. It should just cover the understanding of the questions and scope.

1 minute

Slide 10



Setting Up the Project

15 minutes

Slide 11

Activity

Now it's your turn. On page 3 of this workbook, you will find details for our first activity.

Think through these questions, and work in groups to plan a 'check-in' session with the project owner.

Imagine you are talking with the Head of Sales, and he says:

"What is happening to returns for furniture – they seem really high this season?"

Or you are talking with the Head of Warehousing, and he says:

"Why is the picking cost per unit so high right now?"

[Walk around and give feedback.]

All right. I heard some great thoughts.

[ ]

Setting Up the Project

Explain

Tie the Question Back to the Story You Tell

The question is important to help you gather the right data, but it also plays a part in your stakeholder updates. So as you can imagine, this is where the storytelling comes in. You have to tie the business question being answered back to the story you want to tell.

So if the question is: *We ran out of warehouse capacity over the festive season. Where do we put the next warehouse in our network?*

For the **SITUATION**, you will explore the options for adding capacity.

- Do you just need temporary seasonal sites?
- Do you need permanent additional warehouses?
- Can you annex the existing site?
- Can you make improvements to the existing site?

To develop your **HYPOTHESIS**, you will answer questions like…

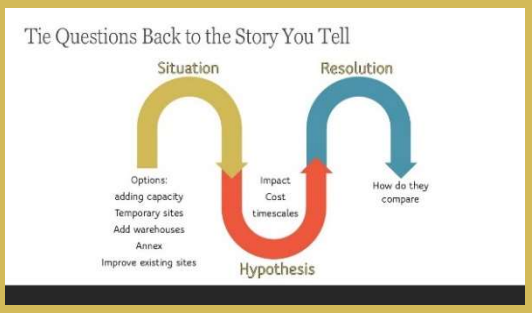
- What impact would each of these options have?
- How much would they cost?

And to select your **SOLUTION**, you will answer questions like…

- How deliverable is this solution given the timescales?
- How do the solutions compare against each other?

1 minute

Slide 12



Setting Up the Project

Module 1.2
12 minutes

1 minute

Slide 13

Explain

Building Out Milestones

Now that you are clear about the business question, it's time to identify the project's milestones.
You need to consider three perspectives:

1. Your milestones;
2. Your manager's milestones; and
3. Your sponsor's milestones.

YOUR MILESTONES will include things like:

- understanding the scope of the question that is being asked;
- When all the data is sourced;
- When all the data is reconciled and triangulated;
- When insight from the analysis appears; and
- When the final slides are ready.

YOUR MANAGER'S MILESTONES will include things like:

- When the scope is signed off and the sponsor is happy;
- When all the data is reconciled and triangulated;
- When insight from the analysis appears;
- When the final slides are ready.

And YOUR SPONSOR'S MILESTONES will include:

- When insight from the analysis appears;
- When the final slides are ready.

Setting Up the Project

Explain

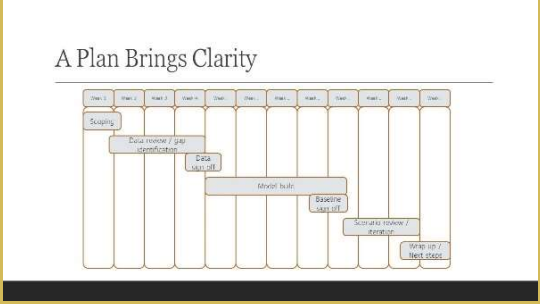
A Plan Brings Clarity

A plan brings clarity. So let's take a look at a sample plan.

- **The scoping sprint** may take a week or ten days.
- **The data review sprint** could take around three weeks.
- Factor about a week for **data sign-off**.
- Then the **model build** (sprint) could take about a month.
- Towards the end of the model build, you will have a **baseline sign-off**.
- With that in hand, you will do a **scenario iteration (sprint)**. This could take 2 - 3 weeks.
- And finally, you will get to **wrap-up and next steps**.

1 minute

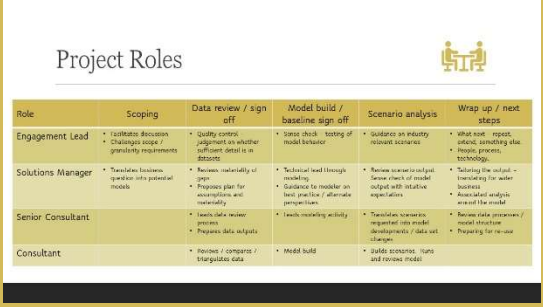
Slide 14



Setting Up the Project

3 minutes

Slide 15



15 minutes

Explain

Project Roles

Let's look at how these sprints match up with the different people working on the project.

How would you match up the sprints and roles? There is a copy of this graphic on page 5 & 6 of your workbook. [2 minutes for discussion.]

[Do a quick debrief of the discussions.]

So as you can see, the people responsible for Scoping are the Engagement Lead and Solutions Manager. But the next three sprints include the Engagement Lead, the solutions manager, the Senior Consultant, and the Consultant in different capacities.

Activity

Given a typical project you work on, think through…

How clear are your milestones?

- How clear is the plan to you and others on the project?
- How well are interdependencies understood by you and the team?

How clear are team roles?

- Which roles are you taking?
- How well are these roles understood by the wider business?

How often do you 'check-in'?

- What is the length of a sprint?
- How do you let people know how things are going?

Work in pairs and write down your thoughts for these considerations. You have about 15 minutes.

Setting Up the Project

Explain

Think Through Clarity

Given a typical project you work on, think through…

How clear is the plan for you and others on the project? How well are interdependencies understood by you and the team?

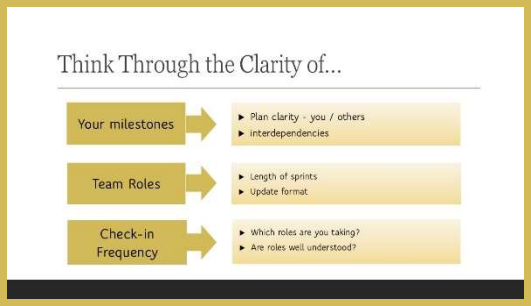
Which roles are you taking? Are you supervising? Are you in charge of analysis? Are you communicating to stakeholders? How well are these roles understood by the wider business?

How often do you check-in? What is the length of a sprint? How will you let people know how things are going?

We will have a quick 10 minute break and when we come back, we will discuss managing the project.

1 minute

Slide 16



Managing the Project

Managing the Project

Module 2
7 minutes

2 minutes

Slide 18

Key Points

- What does Project Management entail?
- Common data challenges
- Data Playback – Showing it Reconciles

Explain

<u>What Does Project Management Entail?</u>

Welcome back. We are now going to break down how to manage the project.

Now that you are clear about the business question, it's time to look at managing the project. What does this entail?

Once you have sign-off, …

You will need to plan what you need to include in the **interim updates** that you scheduled during your project set-up. We will come back to this in the third module.

You will need to **gather data**.

You will need to look at i**ssues around the gathered data**.

What issues have you typically experienced with the data?

[ ] [Allow time for responses.]

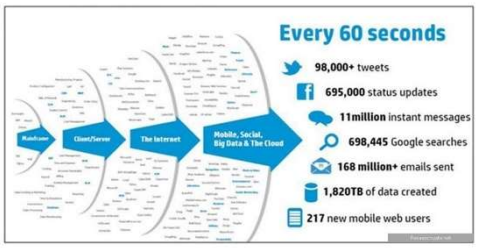
There is plenty of freely available data that we can use for our organisation and beyond.

Managing the Project

Explain

There is plenty of freely available data that we can use for our organisation and beyond.

Slide 19



Managing the Project

2 minutes

Slide 20

Explain

What are the common challenges we face when trying to collate all the data collected?
[Pause for participant responses.]

- So, we may face the issue of insufficient detail;
- We may have an overwhelming amount of data. For example, if you want to analyse at a product category level, but data is only available at SKU level;
- There may be absent data;
- We may have too many sources of data; OR
- The data may be of poor quality.

Managing the Project

Explain

Insufficient Detail

What is an example of insufficient data?

[Pause for participant responses. Either work with an example offered or use the following one.]

Here's an example. You need weekly information, but you only have monthly data.

If you have monthly buckets of data, you need to work out what that works out to on a weekly basis. This could be done in the following way:

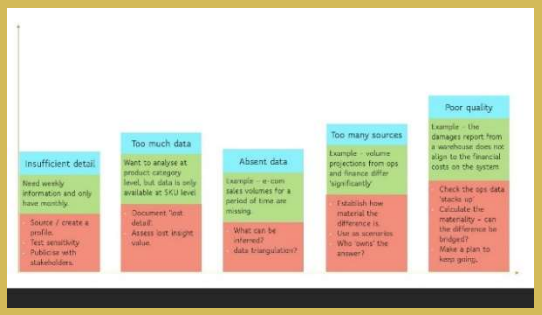
You would source or create a profile. Then find weekly information - likely from past years - to give the required 'shape' of weekly demand. Check whether there is any seasonality to be aware of, and if needed, use the 'correct' month.
Also be aware of any promotions or offers that might have taken place in the past.

[Test sensitivity] Having built the weekly profile, check to see if the shape of the data 'makes sense'. For example, does the biggest week in the month represent a volume that the business could cope with? Have there historically been weeks as large or small as the largest or smallest weeks you are forecasting.

[Publicise with stakeholders] Once you have built the forecast, share it with key stakeholders. Explain the process, and how you are planning to use the data.

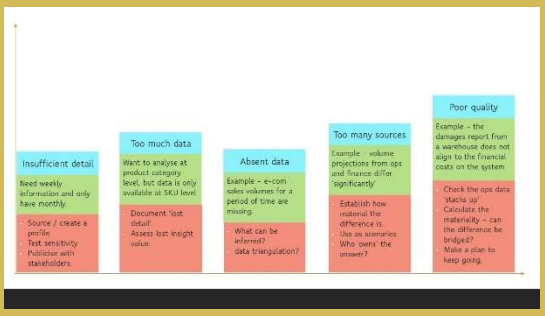
1 minute

Slide 21



Managing the Project

1 minute



Explain

Too Much Data

What about if you have too much data? For example, maybe you want to analyse at the product category level, but data is only available at SKU level. What would you do?

You would need to document the 'lost detail' profile of the product category. For example, if the product or SKU level volume is aggregated into product category level data, the variability of SKU demand will be lost. It would be useful to show how any 'outliers' vs the average SKU behave, to check with the business if this variability is important or not. (For example, is the largest (physical) product selling far more than the average? If so, that might impact handling in the warehouse…)

And you would assess what insight you are losing, and whether it is material.

Absent Data

Or you have absent data. Like when you are looking at e-com sales, and sales volumes for a period of time are missing. You can evaluate:

What can be inferred from trend information. And how can the data be triangulated? The sales information is lost, but what happened to stock, the receipts, the intake)

Managing the Project

Explain

Too Many Sources

You may have competing sources. For example, the volume projections from Operations and Finance may differ significantly. In this case, you will…

- Establish how material the difference is - check assumptions around unit price). For example, let's say the business said it was going to sell 20 million dollars of product in the next year. But Operations said they planned to sell 100,000 units. You need to see if there is a discrepancy. How big is the discrepancy? Why does the discrepancy exist? Is it a question of unit price? Warehouse space? Resources?

- Secondly you can use the two sets of data as scenarios;

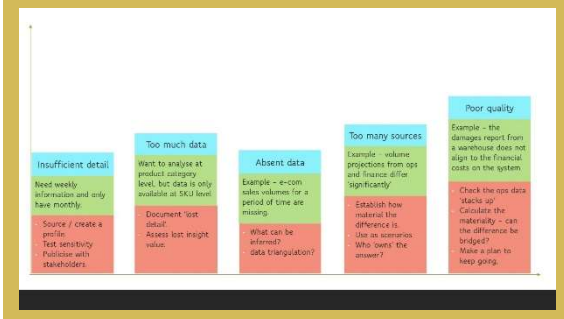
- And finally, you will establish who 'owns' the answer – who will be turned to in the final session.

Poor Quality Data

An example of poor quality data is when the damages report from the warehouse does not align to the financial costs on the system. In this case, you would…

- Check if the operational data 'stacks up'. Are the total stock levels adding up?;
- You would calculate the materiality. Evaluate whether the difference can be bridged; and
- Make a plan to keep going and then clarify the assumption in your presentation.

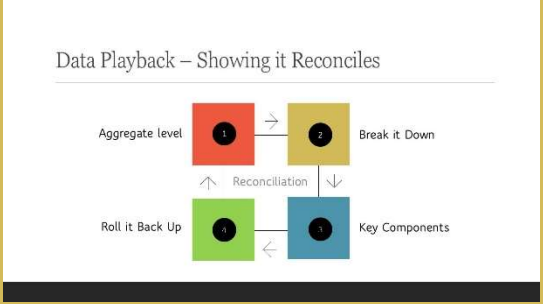
1 minute



Managing the Project

1 minute

Slide 22



Explain

Data Playback – Showing it Reconciles

[Your first level of data is at the **Aggregate** level. You are looking at what the business recognises at a bird's eye level.

The next level is where you **break it down** by looking at a period of time at the micro level, and examining all the variables… What are you selling? What is the price? What is volume?

You then have the **Key Components**. This is where you share the activity rates, the volume flows, and the cost rates that the business would recognise. Target for cost of sales for supply chain - warehouse.

And finally, you **Roll it Back Up**. If you apply those rates to the annual volumes, does it stack up?

Interim Updates

Interim Updates

Module 3
6 minutes

1 minute

Slide 24

Key Points

- Key questions for stakeholder presentations
- When to 'explain' vs. 'explore'
- Hints & tips

Explain

5 Key Questions

When you are producing interim updates, there are five key questions you want to answer.

WHY: You are trying to reassure the project sponsors; you may need to escalate issues; and you want to give an update on your hypotheses - which of them are hopeful hypotheses, which are dead?

Secondly, look at the **'WHO'**. Who is interested in the content; and who needs to be involved. What are the implications? What decisions are needed by them for you to be able to proceed?

Next you have the **'WHAT'**. The greatest challenge is shareholders who are fixated on 'the answer', and are not engaged with the interim information. Also you need to show how your progress links to the hypotheses answers.

Then there is the **'FREQUENCY'**. The frequency of your updates depends on the length of your project. If it is a six month project, you will need to give monthly updates. If it is a six week project, you need to give weekly updates. It's a question of balancing the 'need to produce' with the 'need to get on' with the work.

And finally, you have **'FORMAT'**. How do you provide the information you have processed succinctly and efficiently? Are you exploring the data with your audience or explaining it? Also, consider the engagement of your audience. How much work will this generate for them?

Interim Updates

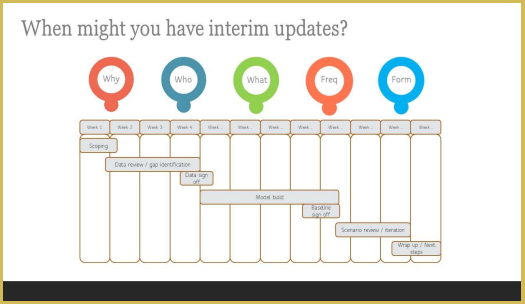
Ask

Now looking at the timescale, when might you have interim updates?

[Wait for responses. Then confirm them.]

1 minute

Slide 25



Interim Updates

1 minute

Slide 26

15 minutes

Explain

Explore vs. Explain

Under Format, we talked about Explore vs. Explain? So what does that mean? Think of it as an archaeology research project. The beach is the wide area we are EXPLORING - we are not looking at the river going into the sea, or the town down the road.

The purpose of exploratory analysis is about understanding what is there, what is interesting; and what is not there. It gives a FRAMEWORK for further analysis and makes clear what assumptions there are going into the analysis. This is the stage at which you are setting the **SCOPE**.

You might use this at the Data sign off stage. You are not presenting insights, just confirmation of the framework.

However, in EXPLAIN, we have something specific to say. We are presenting Insights… understanding…. an 'answer'. The purpose of this is to take the audience on a journey to show what the output is.

For some audiences, the beach is irrelevant; they need to get the insight without understanding where they are.

OK, so let's do an exercise…

You will work in pairs to determine what interim updates you might provide throughout this project.

There is a copy of this graphic in your workbooks on page 11.

Interim Updates

Explain

Hints & Tips

Here are some hints and tips for producing your Interim Updates.

Firstly, treat the update as a mini-presentation. Be clear what the message is, even if there is very little.

Secondly, be needy. What can the project sponsor or wider team source / unlock / or sign-off on for you?

Thirdly, value the pressure of a milestone. Recognise your preference to 'get on', but there is a need to keep a wider population updated.

Fourthly, hold firm when you are pushed for an answer. With the agreed timelines, the 'likely outcome' cannot reasonably be expected to be reached halfway through the project.

And finally, don't hide behind other projects and demands during an update. If other needs have overtaken this project, flag that as soon as possible. And get a resolution from the project sponsor for the problem encountered, whether it is sign-off on new timescales, or the need for additional data.

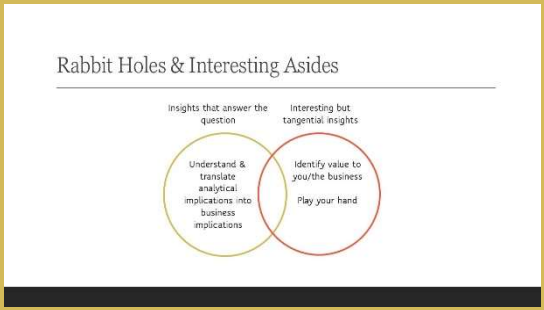
1 minute

Slide 27

Interim Updates

2 minutes

Slide 28



Explain

Rabbit Holes

When doing research, it's easy to go down a rabbit hole. Remember, we are presenting insights not information. But even insights can be tangential.

You will have to consider how you will use the insights that answer the question in your interim updates or milestone presentations. You need to…

- Understand the analytical implications;
- Translate the insights to business implications.
- And challenge yourself to see the 'so what'.

But some tangential insights can be used. How might you use these? And what shouldn't you do?
If you want to use tangential insights, you need to…

- Identify their value to you… and to the business; and then
- Play your hand. Work out how to best share your insights in a way that showcases that you have considered everything that would be in the company's interests.

And finally, how you present the insights impacts how persuasive your communication is, and how credible it sounds.

- Your presentation needs to reframe the analysis output as an answer to the business question. This will be addressed in the next workshop.
- You need to use storytelling to present the output. This will be addressed in the next workshop.
- In your presentation, if you need to deal with commercial vs. operations data sources, you will have to show the impact of different results.
- And think about what you present and leave behind. Your presentation will contain all the key statistics and graphs, together with insights. Your leave behind can be a 3-slides plus notes version of your presentation, or a one pager of insights.

Interim Updates

Explain

Wrap-up

So today, we covered:

- How to ensure you are answering the right question;
- How to set the scope and project milestones;
- How to deal with data that is not what you ideally require;
- How to keep stakeholders updated; and
- When and how to use tangential insights.

In the next workshop, we will go into how you use storytelling in your presentations.

Thinking about everything you learned today. What is **one key takeaway** or strategy you plan to put into practice?

[Pause for responses].

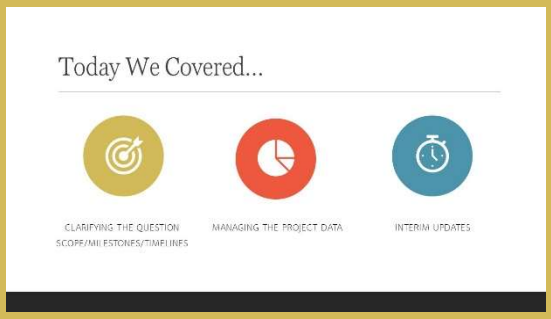
Before our next session, I would like you to review a prior project, and reflect on:

- What you did well;
- What you did not do well; and
- What you would do differently and better

At our next session, you will be asked to share your reflection with the group.

1 minute

Slide 29



Notes

Index

Title

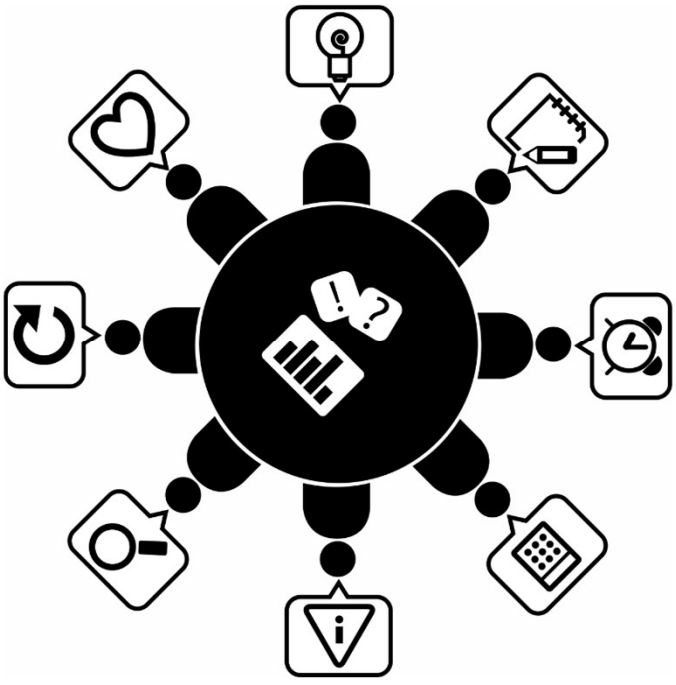
Course Blueprint

Module 1 is about 9 minutes (6.5 + 2) talking time, plus 15 minutes for an activity, and about 7 minutes (5 +2) for participants to answer questions.

Time	Topic/Activity	LOs	Length	Engagement Strategy
8:30	Welcome & Overview		2 mins	
8.32	**Module 1:** Clarifying the Question	LO 1	~ 6.5 minutes*	Show starting point
	Types of Decision Makers	LO 1	10 minutes	Discussions re: Question
	Check-in Sessions	LO 1	[+15 minutes]	Activity
	Tie Questions to Story	LO 1		Anecdote
9.10	Building Out Milestones	LO 2	~ 2 minutes*	
	A Plan Brings Clarity	LO 3	[~ 10 minutes]	Turn & Talk
	Project Roles	LO 3	/15 min. break	Activity
9.40	**Module 2:** Managing the Project	LO 4	~ 7 minutes	
	Data Challenges	LO 4	[~ 10 minutes]	Discussion
	Data Playback	LO 4		
10.00	**Module 3:** 5 Key Questions / Interim Updates	LO 5	[~ 6 minutes]	Discussion
	Explore vs. Explain	LO 5	[+15 mins]	Turn and Talk
	Hints & Tips / Rabbit Holes	LO 5		
10.30	Q&A and Closing		~30 minutes	

Facilitation Techniques

1. Use name tags to call on learners by name to personalize the learning experience.
2. Redirect discussions that get off-topic as well as side discussions.
3. Use high energy music to keep the energy up and the learning environment enjoyable.
4. Use timers to keep on schedule.
5. Create learner engagement by getting people talking to one another and the group using prompts, questions, and activities.
6. Use questions to draw the group and individual participants into the conversation and to dive deeper into responses.
7. Pause for ten seconds after asking a question to give participants time to think and respond.
8. Paraphrase questions and responses so that individuals feel heard and the people in the back of the room can hear the question.
9. Use activities, pairs, triads, and small groups to increase learner engagement.
10. Incorporate physical movement, such as the formation of small groups, presenting information to the whole group, posting ideas on the wall/flip chart, standing exercises, etc.



Notes