Why finance professionals are well placed to

lead the Business Intelligence process

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What you will learn

Business Intelligence

- What is Business Intelligence?
- Data in today's business world
- Making the most of today's tech
- Why finance professionals are well placed to take advantage of BI technologies
- CIMA paper re-inventing finance for a digital world
- Benefits of a Business Intelligence solution

Best of breed BI tool – **Power BI**

- Best of breed BI tool Power BI • How to get going with Power BI
- What is Power BI
- Can I get it and what does it cost?
- How do I use Power BI?
- What you can do with Power BI
- Examples of Power BI in action

- Next steps in your Business Intelligence journey

Case study

Getting started in Power BI

- The Power BI canvas
- Over to Power BI:
 - Load data
 - Shape data
 - Create reports
 - Power BI service





What is Business Intelligence?

- Business Intelligence:
 - Technology driven process of analyzing business data
 - Create insightful information
 - Informed decision-making



Why BI tools are relevant

Data in today's business world

• Exponential growth of data



- Up to 75% of data available to enterprises goes unleveraged
- Only one out of three businesses use analytics in M&A deals activities



Why BI tools are relevant

Making the most of today's tech

Business intelligence tools >> now very affordable

• CIMA and ICAEW – introducing data analytics learning

• BI tools – now moving into Artificial Intelligence





Data Visualization Certificate



Why finance professionals are well placed to take advantage of BI technologies

Finance professionals have the skillsets and knowledge to make them natural leaders in the BI process

Data management skills

- Well versed in handling large volumes of financial data
- Can extend these skills to operational and other data
- Experience with data accuracy and validation critical for BI process

Financial expertise

- Deep understanding of financial concepts
- Budgeting, forecasting, financial reporting, performance metrics
- Knowledge is vital for turning financial data into insights



Why finance professionals are well placed to take advantage of BI technologies (2)

- Regulatory compliance expertise
 - Finance professionals are responsible for stewardship of statutory financial reports
 - Ensure that financial reporting and data adhere to regulatory standards and accounting principles
 - Can be trusted in data handling extend to BI process

• Finance professionals work with processes that lend themselves to BI technologies

- Budgeting and planning
- Understanding revenue and cost drivers
- Performance measurement financial and non-financial metrics

Strategic decision-making

- Provide strategic insights backed by data
- Enable informed decisions aligned with financial objectives

nancial reports ords and accounting



Why finance professionals are well placed to take advantage of BI technologies (3)

Cross functional collaboration

- Finance professionals regularly collaborate with other departments
- E.g. marketing, operations, and sales
- Bridge the gap between finance and other functions
- Can be trusted to facilitating data-driven decision-making across the organization

Assume the leadership role in the BI process

- Drive data-driven decision-making
- New insights lead to improved financial performance
- New business opportunities



CIMA Research Paper - re-inventing finance for a digital world

Moving from cost to value in a digital world

Challenges business face

- Technology is key driver of change for organisations and finance functions
- Tech innovations alone, alongside access to real-time data, blows a hole in the long-held assumption of the value inherent in finance reporting cycles
- In a digital world, stakeholders are demanding more frequent performance information
- In an increasingly complex environment, it is crucial that organisations have high-quality decisionmaking capabilities

Challenges for the finance function

- Focus historically on promoting organisational efficiencies and reducing operational costs.
- Can now be automated
- Needs to refocus its energy on revenue and value creation
- Finance functions need to adopt new tools & technologies
- Spend more time analysing non-financial data to assist decision making, moving from an information to influence and impact focus



Why Business Intelligence tools are relevant

Benefits of a Business Intelligence solution

Turbocharge business performance
Improved decision-making
Empower your employees





Why BI tools are relevant

Case study – OPEX reporting

Situation	Task	Action	Res
Manual spreadsheets	• Fix processing	 Integrated database 	Automated spreadshee
 2-3 days to update 	 Reporting platform 	Automated processes	• 5 mins to u
No reports	 Understand cost variances 	 Reporting platform 	Reporting
 No cost control 		 Intelligent reports 	• Intelligent
 Used 3rd parties 			 Monthly O meetings
			• Cost contro
			 3rd party ve manageme in-house
			• Significant

Result

- ated sheets
- to update
- ng platform
- ent reports
- y Opex gs
- ntrol
- y vessel ement brought se
- ant savings



Best of breed BI tool – Power BI

Gartner Magic Quadrant for Analytics and Business Intelligence Platforms





What is Power BI?

- **Microsoft:** Unified, scalable platform for self-service and enterprise business intelligence (BI)
- Desktop version:
 - Easily **connect** to your **data**
 - Clean and shape your data
 - Create interactive reporting dashboards
- Power BI Service:
 - Share reports with team members online



What is Power BI?

Can I get it and what does it cost?

- Microsoft: Power BI Desktop always free
- **Download** the desktop version from the **Microsoft App store**

Licence	Cost/user/ month	Desktop version local computer	Service version www.powerbi.co
Free	Free	Build reports	Share to personal o
Pro	\$9.99	Build reports	Share to shared wo
Premium	\$20	Build reports	Access premium fea

om

or public workspace

orkspaces or apps

eatures e.g. advanced AI



Power BI - How do you use Power BI?

Power

Simplify complex data into one powerful dataset •

Load your data into Power Bl •

Clean and shape your data •

Build real-time interactive dashboards •

Explore your data – slice & dice, drilldown into the data •

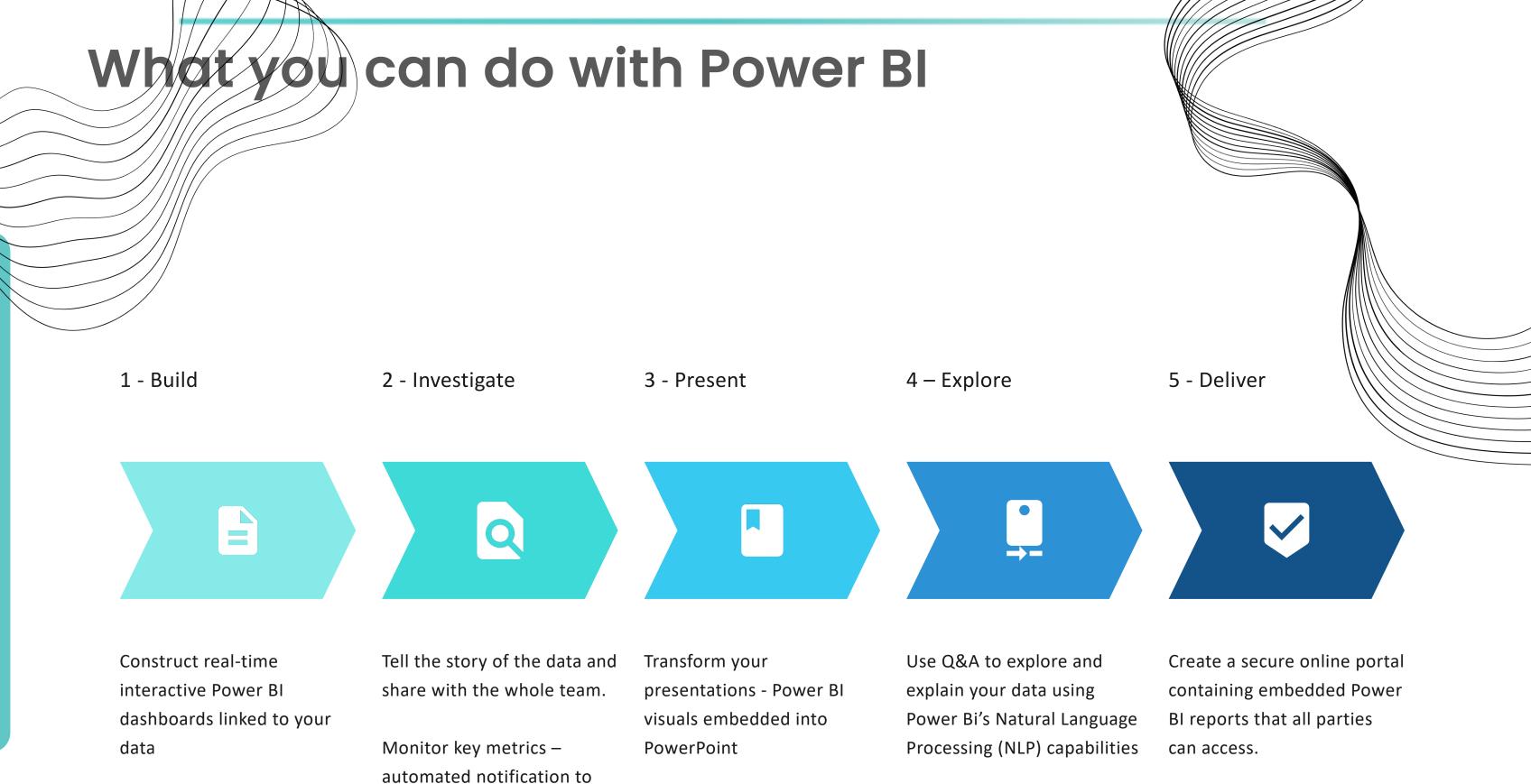
Find hidden insights and trends •

Share reports with team members online •









goal owners if thresholds

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Power BI in action

Data management – disparate data sources

CUSTOMER DASHBOARD 2017-18

MOST RECENT CUSTOMER BOOKINGS

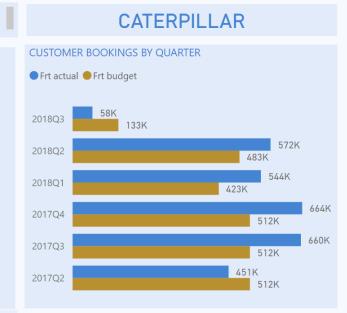
GROUP_NAME	CUSTOMER_NAME	BOOKING_DATE	TRADE	FRT_ACTUAL_DETAIL
CATERPILLAR	CATERPILLAR SARL	Wednesday, July 11, 2018	WEST	\$4,691
CATERPILLAR	CATERPILLAR SARL	Tuesday, July 10, 2018	WEST	\$1,236
CATERPILLAR	CATERPILLAR SARL	Thursday, July 05, 2018	WEST	\$794
CATERPILLAR	CATERPILLAR (QINGZHOU) LTD.	Wednesday, July 04, 2018	EAST	\$14,137
CATERPILLAR	CATERPILLAR AMERICA CV	Tuesday, July 03, 2018	EAST	\$34,134
CATERPILLAR	CATERPILLAR SARL	Tuesday, July 03, 2018	WEST	\$2,624
CATERPILLAR	CATERPILLAR SARL	Friday, June 29, 2018	WEST	\$23,086
CATERPILLAR	CATERPILLAR S.A.R.L.	Wednesday, June 27, 2018	INTRA ASIA	\$20,536
Total				\$101,238

CUSTOMER QUOTES

GROUP_NAME	CUSTOMER_NAME	DATE_ENTERED	APPROVAL_STATUS	TOTAL_AMOUNT
CATERPILLAR	CATERPILLAR LOGISTICS	Wednesday, May 23, 2018	Approved	\$21,190
CATERPILLAR	CATERPILLAR LOGISTICS	Wednesday, May 09, 2018	Approved	\$12,009
CATERPILLAR	CATERPILLAR LOGISTICS	Monday, April 16, 2018	Approved	\$25,425
CATERPILLAR	CATERPILLAR LOGISTICS	Wednesday, April 11, 2018	Approved	\$37,500
CATERPILLAR	CATERPILLAR LOGISTICS	Tuesday, March 20, 2018	Approved	\$17,867
Total				\$113,991

CUSTOMER NOTES

GROUP_NAME	CUSTOMER_NAME	DATE_ENTERED ▼	NOTE_NAME
CATERPILLAR	CATERPILLAR LOGISTICS	Friday, September 08, 2017	9/13 MTG AGENDA

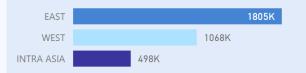


TRADE Select all EAST INTRA ASIA WEST

GROUP CUSTOMER

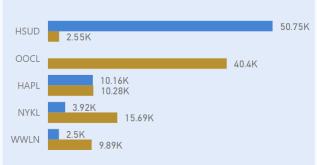
Q	cat
	CATERPILLAR
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CUSTOMER BOOKINGS BY TRADE



CUSTOMER PIERS UNITS BY CARRIER

STATUS RORO EXPORTS RORO IMPORTS



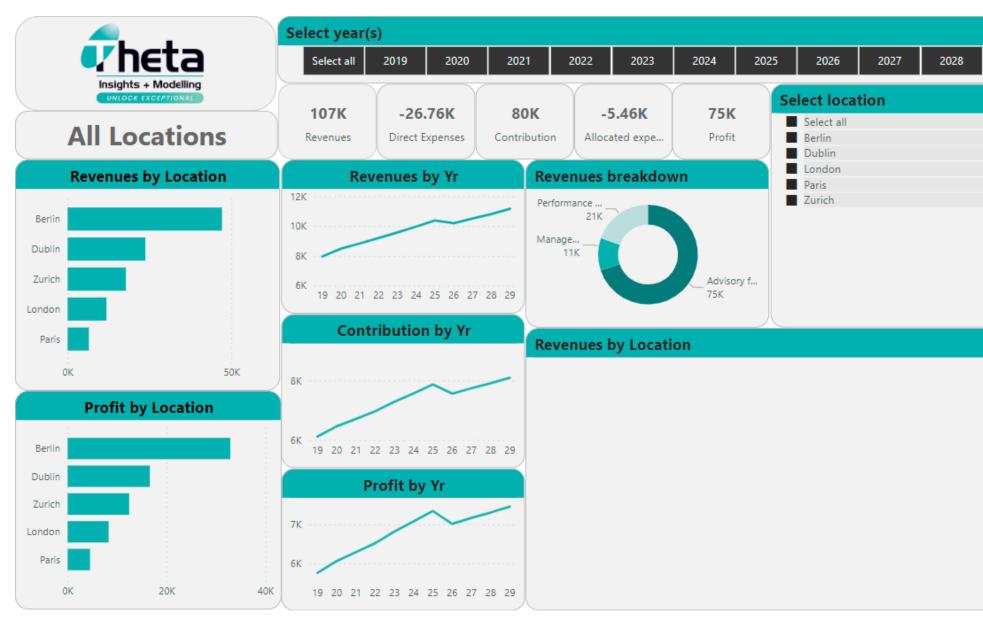
CRM dashboard created for remote sales manager

 Data came from 3 totally disparate sources



Power BI in action

Power BI dashboard embedded within Powerpoint presentation



Power BI training dashboard, Summary

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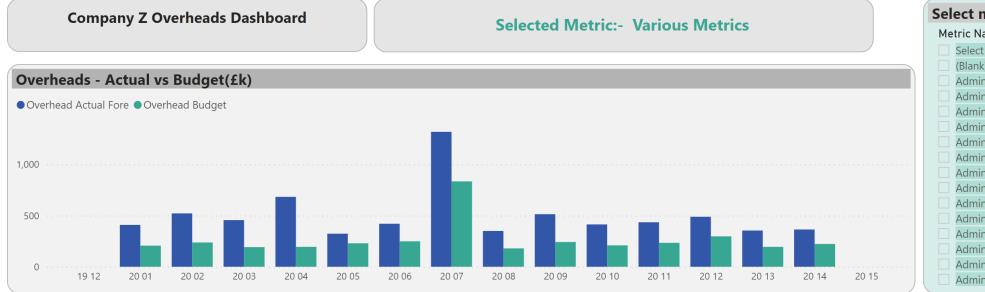


- Used in CIMA webinar from 2020
- A Power Bl dashboard embedded directly into PowerPoint



Power Bl in action

Data drill through – dive down into the detail



Overheads Statement - Month, YTD and year (£k)

Metric Name	Overhead Actual Mth	Overhead Budget Mth	Overhead Variance Mth	Overhead Var Pcnt Mth	Overhead Actual YTD	Overhead Budget YTD	Overhead Variance YTD	Overhead Var Pcnt YTD		Overhead Budget	Overhead Variance	
Admin 10	104	76	-28	-36.2%		1,213	-852	-70.2%	2,065	1,213	-852	\diamondsuit
Admin 01	18	10	-8	-76.5%	961	492	-469	-95.5%	961	492	-469	\diamondsuit
Admin 07	48	32	-16	-49.5%	776	472	-304	-64.4%	776	472	-304	\diamondsuit
Admin 08	46	24	-22	-89.5%	680	314	-366	-116.5%	680	314	-366	\diamond
Admin 11	0	0	0		554	274	-279	-101.8%	554	274	-279	\diamondsuit
Admin 06	19	4	-15	-378.2%	447	224	-223	-99.8%	447	224	-223	\diamond
Admin 02	16	7	-9	-132.3%	438	191	-248	-130.0%	438	191	-248	¢
Admin 04	60	36	-24	-66.5%	261	116	-145	-125.3%	261	116	-145	\diamondsuit
Admin 03	12	7	_1	م الم	257	12/	_133	<u> _106.6%</u>	257	12/	_122	
Total	364	223	-141	-63.5%	7,049	3,721	-3,329	-89.5%	7,049	3,721	-3,329	

Drillthrough not active

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Drilldown into the detailed data

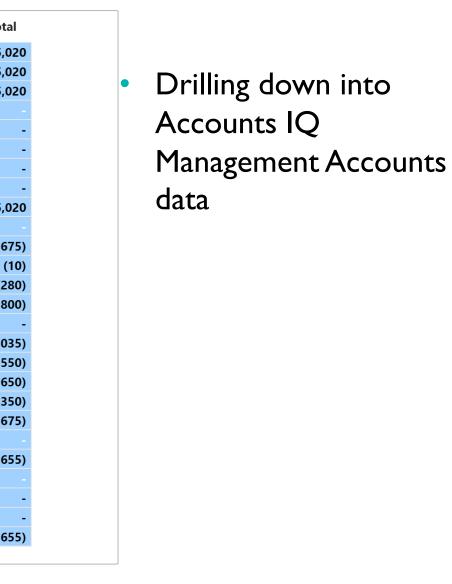


Power BI in action

Linking Management Accounts to Power BI

Test Company - LLP Entity	Consolid	ated Prof	fit & Loss										
Level 1	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021	Jul 2021	Aug 2021	Sep 2021	Oct 2021	Nov 2021	Dec 2021	Total
Revenue	15,020	-	-	-	-	-	-	-	-	-	-	-	15,020
Total Revenue	15,020	-	-	-	-	-	-	-	-	-	-	-	15,020
Total Revenue	15,020	-	-	-	-	-	-	-	-	-	-	-	15,02
Cost of Sales	-	-	-	-	-	-	-	-	-	-	-	-	
Placement agent fees amortisation expense	-	-	-	-	-	-	-	-	-	-	-	-	
Dealing errors	-	-	-	-	-	-	-	-	-	-	-	-	
Management Fees Payable	-	-	-	-	-	-	-	-	-	-	-	-	
Total Operating Profit	15,020	-	-	-	-	-	-	-	-	-	-	-	15,020
Expenses	(24,175)	-	-	(500)	-	-	-	-	-	-	-	-	(24,675
Other Expenses	(10)	-	-	-	-	-	-	-	-	-	-	-	(10)
Travel & Entertainment	(280)	-	-	-	-	-	-	-	-	-	-	-	(280)
Professional Fees	(7,800)	-	-	-	-	-	-	-	-	-	-	-	(7,800
Office Expenses	-	-	-	-	-	-	-	-	-	-	-	-	
Communications	(535)	-	-	(500)	-	-	-	-	-	-	-	-	(1,035
IT & Systems	(1,550)	-	-	-	-	-	-	-	-	-	-	-	(1,550)
Property Costs	(6,650)	-	-	-	-	-	-	-	-	-	-	-	(6,650
Staff Costs	(7,350)	-	-	-	-	-	-	-	-	-	-	-	(7,350)
Total expenses	(24,175)	-	-	(500)	-	-	-	-	-	-	-	-	(24,675
Profit / (loss) before taxation	(9,155)	-	-	(500)	-	-	-	-	-	-	-	-	(9,655
Corporation Tax	-	-	-	-	-	-	-	-	-	-	-	-	
Corporation Tax	-	_	-	-	-	-	-	-	-	-	-	-	
Profit / (loss) after taxation	(9,155)	-	-	(500)	-	-	-	-	-	-	-	-	(9,655

Drillthrough not active

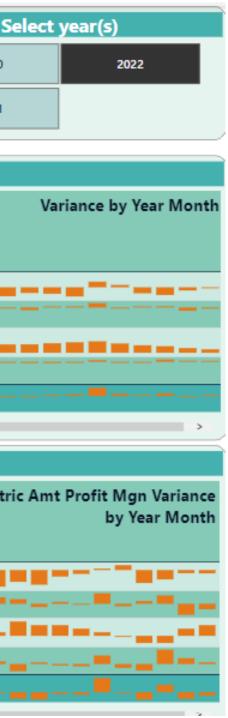




Power Bl in action

KPI cards

Insights + Modelling	Select all Frankfurt Lond		lew York Tok	yo	Current YTD		2020 2021
Revs - Share Class A	Profit % - Share Class A				Revenues - Cu	rrent month	
56.0К Target: 58.0К (-3.45%) 22 12	75.0% Target: 76.5% (-1.9%) 22 12	Year	Share Class	Metric Amount Revenues	Metric Amount Tgt Revenues	Variance	
		2022	Share Class A	55,963	57,966	-2,003	
Revs - Share Class B	Profit % - Share Class B	2022	Share Class B	53,872	60,729	-6,858	
E2 OK	75.0% Target: 78.5% (-4.5%)	2022	Share Class C	43,854	32,890	10,963	
53.9K Target: 60.7K (-11.29%)		2022	Share Class D	51,446	48,057	3,388	
22 12	22 12	Total		205,134	199,643	5,492	
Revs - Share Class C	Profit % - Share Class C			Pro	ofit Margin % -	Current mont	h
43.9K Goal: 32.9K (+33.33%) 22 12	83.4% Target: 83.4% (+0%) 22 12	Year	Share Class	Metric Amount Profit Margin	Metric Amount Tgt Profit Margin	Metric Amt Profit Mgn Variance	
		2022	Share Class A	75.0%	76.5%	-1.5%	
Revs - Share Class D	Profit % - Share Class D	2022	Share Class B	75.0%	78.5%	-3.5%	
51.4K	77 50/	2022	Share Class C	83.4%	83.4%	0.0%	
Goal: 51.4K (+0%)	77.5% Target: 76.6% (+1.3%)	2022	Share Class D	77.5%	76.6%	1.0%	
22 12	22 12	Total		77.4%	78.3%	-0.8%	
		5					



This was used in a CIMA webinar which I hosted in February 2023

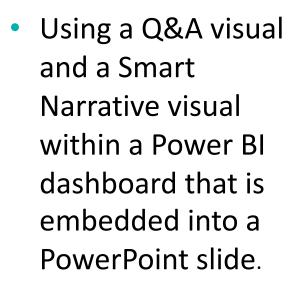
Note that you can select to view the figures either by current month or by YTD which is a really useful feature



Power BI in action

Use of Q&A via Natural Language Query







Power Bl in action

KPI Scorecard

Theta training scorecard presentation

Q Filter by keyword

Metrics 6 Overdue 0 Behind 2	• At risk 1 • On track	3 • Not started	0 • Completed
∀ Name ∨	Assigned to \sim	Status ∨	Progress ~
✓ Overall revenues	SJ Simon Jeffery	On track	6.5M/6.5M ^ 3.26% MoM
Revenues share class A	SJ Simon Jeffery	On track	1.4M /1.4M ^ 4.18% MoM
Revenues share class B	Insights+Modelling	Behind	1.3M /1.4M ^ 4.23% MoM
Revenues share class C	SJ Simon Jeffery	On track	1.3M /1.0M ^ 3.37% MoM
Revenues share class D	5)	Behind	2.5M/2.6M ^ 2.14% MoM
Overall profit margin %	To Theta Global Webinar	At risk	0.46 /0.50 * 43.75% YoY

E List view + New ✓
 0
 Trend ✓
 Due ✓
 Feb 27, 2023
 Feb 27, 2023
 Mar 2, 2023
 Mar 3, 2023
 Aug 4, 2023
 Feb 27, 2023

This was used in a CIMA webinar which I hosted in February 2023

Note that you can combine KPI scorecards with Power Automate to provide automatic notifications to goal owners via Teams or emails upon, say, changes in status.



Power Automate - workflow

When current value of a goal changes (Preview)	0	
Get a goal (Preview)	0	
Switch		
+ New step Save		

This shows the Power Automate model I built for providing the automatic notifications to goal owners via Teams or emails upon, say, changes in status.



Getting started with Power BI

How to get going with Power BI

- Take a look around the Power BI desktop
- Have already prepared some Excel data
- Open Power BI Desktop
- Load Excel data
- Perform some data shaping
- Create our first reports!



Getting started with Power BI

The Power BI canvas

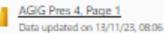
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File Home Insert Modeling View Help Image: Solution of Copy Image: Soluti	Search Recent sources v Queries Search A Transform Refresh data v Queries New Text More visual box visuals v Insert	New Quick Mew Quick Sensitivity Calculations Sensitivity Sensitivity Sensitivity Sensitivity Share Visualizations Build visual Filters	imon Jeffery ● — @ × > Data >> > C Search > I Revenues □ Account Class
		Image: Second state Image: Second state	 Account Ref ∑ Aggr Factor ∑ Amount ∑ Amount Aggr ∑ Amount Target ∑ Amount Target City ∑ Entity Ref ∑ Entity Ref ∑ Entity Ref 2 Salesperson Share Class ∑ Target Factor ∑ Year Y MM



Embedding Power Bl in PowerPoint



Share Class	Total Revenues	Total Expenses	Total Profit	Total Profit Margin	Total Profit Margin by YY MM
Share Class A	2,717,448	1,015,869	1,701,579	62.6%	
Share Class B	2,664,562	993,791	1,670,771	62.7%	
Share Class C	2,707,602	489,962	2,217,640	81.9%	
Share Class D	5,512,478	2,036,025	3,476,453	63.1%	
Total	13,602,090	4,535,648	9,066,443	66.7%	





Next steps

How to continue your journey in Power BI

• This is just a taster of what you can do in **Power BI**

• Resources:

- Plenty of training videos on the Microsoft website
- Microsoft blog for **monthly updates** on Power BI
- Blogs available on Theta website
- Wealth of Power BI videos on YouTube
- Guy In A Cube, EnterpriseDNA, Jason Davidson
- Website & book: exceleratorbi.com.au

• First project:

- Pick a self-contained project
- Simple Excel data
- Build your first dashboard



insights@thetaglobal.co.uk

I heta Insights + Modelling

UNLOCK EXCEPTIONAL



