'This is a book for practitioners by practitioners. It offers must-read insights into the potential of data to transform. Whether de-mystifying the subject for busy C-Suite leaders, or offering practical checklists for first-time CDOs to benchmark progress, there's something here for anyone who cares about harnessing data to improve outcomes.
Read. Smile. Exploit.'

Tim Carmichael, *Chief Data Officer and Chief Analytics Officer, British Army*

'Brilliant overview for CDOs and senior leadership teams on this emerging and disruptive role. It also offers the reader an understanding of how the CDO – as a catalyst – has the dual task of creating transformational value from data and to greatly contribute towards the new data-driven DNA of the organisation's vision of the future.'

Matt Corey, *MD, Change Force*

'*Nothing, literally nothing, works in a company without the input of data in some shape or form* . . . well said Caroline and Peter! *Data is indeed here to stay. We've got pundits exclaiming that, data is the new oil, the new currency, the new bacon* . . . To all Chief Data Officers and companies looking for a Chief Data Officer, this book is all you need to get started. Caroline and Peter have thought of everything including the first
100 days in the CDO office!'

Vanessa Eriksson, *Chief Data Officer Advisor, PwC*

'Without any doubt, this playbook is a must read for the primary audience, the CDOs. In my opinion, it is equally a must read for the secondary audience, the C-Suite, for the insight on how the role complements their businesses.'

Sham Kashikar, *ex-Chief Data Officer, Sales & Marketing, Intel*

'*The Chief Data Officer's Playbook* is the best overall resource available for CDOs and their teams. The release of this book is perfectly timed. The CDO Club tracks CDO hires globally, and last year alone the number of new CDO hires quintupled. The *Playbook* is a compendium of essential knowledge anyone operating in the current data environment must have.'

David Mathison, *Chairman, CEO and Founder, CDO Club/CDO Summit*

'In today's information-rich world, data-driven organisations have the competitive edge. Data analytics and data-driven insight make the difference between guesswork and timely, evidence-based decision making. Understanding the role of the Chief Data Officer (CDO) is the key to unlocking this potential. This handy, practical book gives you access to the expertise of market-leading practitioners who have harnessed the power of data to deliver real business gains in large-scale companies and organisations. Whether you are an executive looking to transform the use of data in your organisation or an aspiring CDO looking for hints and tips on how to develop your career and make a real impact, this is the book for you.'

Nick Poole, *Chief Executive Officer, CILIP*

'This practical guide is a must-read for data leaders building the foundation of value creation from data.'

Katia Walsh, *Chief Global Data and Analytics Officer, Vodafone*

The
Chief Data Officer's
Playbook

Caroline Carruthers and Peter Jackson

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Preface

We were recently on a panel at a conference discussing how to harness value from data – we've changed the discussion topic slightly so as to not identify the conference, event or other participants; to protect the 'not-so-innocent'. This topic, or a closely related one, has been a regular feature of the panels and discussions we've been involved with over the past two years. It seems everyone is trying to get to the heart of that question and find the answer. Data has been seen as such an inconsequential thing, that just seemed to be there, in the past; but there is a growing respect for data as a really fundamental asset – which is a great thing.

Everyone knows, because we've all been told many times recently, that data is the new oil. The question that then leads out of this is the one we have been facing: if data is the new oil, how does an organisation get value out of it? It is all very well having struck oil, but if you don't know how to get it out of the ground, or how to refine it into useful products, or that it can be transformed and manufactured into valuable products or consumed to create energy – what use is the oil in the ground?

On that recent panel we began by responding to some prepared questions. There were some great and experienced minds on the panel: leaders in their respective fields and all practitioners from the hard edge of industry, business and commerce. We each took turns to discuss the great value that could be derived from data. We each provided stunning examples of what could be done with data to transform, disrupt and innovate organisations and industries. It is interesting to note that the topic was definitely worded as 'digital assets' but we all spoke about 'data', and used the term data and not digital asset. After 30 minutes the Chair opened the discussion to questions from the floor, and there

it was; the question that has been asked in our experience over and over again, and this is it nearly word for word:

> Thank you for the excellent discussion and the inspiring examples, but I would like to know how my organisation gets from where we are now to be in a position to exploit the opportunities in our data; to extract the sort of value which you have all been talking about.

Here is the pattern of responses that get handed down from the panels in answer to that question: 'What you need is master data management', 'You need to bring all your data into a data lake/warehouse', 'You need to be able to ask the right question of your data', 'You need to establish true data ownership within the business'. On many occasions the audience are either happy with the responses, or aren't happy with the responses but don't want to show their ignorance and push for the sort of answer that they want. Either way, the outcome is pretty much the same, and that is where the discussion ends. But not on this occasion: the questioner listened patiently to the answers from this impressive panel and came back with his follow-up:

> Thank you again for your insight and suggestions. But how do you do those things? How does my organisation, and I am sure many others in this room, get from where we are today to be able to do the things you have just suggested so that we can then derive the fantastic value from our data like the examples you presented earlier? And I have written them all down to read up on later because they were like a foreign language to me.

Many of the conference-goers who attend these sessions focusing on deriving value from data are 'from the business'; they tend not to be 'data' professionals. They are CEOs, COOs or perhaps CFOs who want to understand how value can be derived from their data and if data is the new oil how do you unleash the energy within it?

Our answer to that question is 'Get yourself a Chief Data Officer as quickly as you can'. The Chief Data Officer (CDO) is the person who will take your organisation on the journey from where you are now to where you want to be. The CDO won't do this alone, the whole organisation will need to be part of making that journey possible, but the CDO will be the enabler, the one with the vision, the strategy, the

technical specialism and the experience to guide the way. The first step for any organisation wishing to make that journey is getting to that realisation and then making the decision to recruit a CDO.

In the past few years many organisations have got to this point, and there will be many more reaching this point over the next three years. Perhaps even the astute questioner's organisation reached that point and recruited a CDO shortly after that conference. Throughout the book we use the title Chief Data Officer (CDO) but we realise that organisations do assign different titles for the person/role that effectively has the function of the CDO within their organisation. This book is written for all of them and is meant to be inclusive for all in the senior data community.

The past two years

We have attended and spoken at a lot of conferences over the past two years. Many have been topic-specific, like the one just discussed: harnessing value from data, the power of Big Data, the opportunities of advanced analytics, master data management, among many more very specific data topics. Others have been aimed much more at data strategy and the function of this new emerging CDO role.

We had three motivations to write this book. The first was that lots of people were asking questions about the role: what does it do? Where does it sit in the organisation? Where do you recruit one? How do you recruit one? Who does it report to and how do you become one? The second was that no one seemed to have the answers: there was a lot of great discussion but no clear set of instructions. The role was so new, emerging rapidly and evolving as it emerged. Finally, the current population of CDOs is quite small; the network is tight and interacts extremely well. We have found that this small emerging group of professionals are very open to helping each other, discussing their experiences, sharing best practice, sharing their disasters and dilemmas. We have found that the network of CDOs is incredibly mutually supportive and eager to create a sustainable professionalism about what we do. Perhaps it is a case of pioneers sticking together.

These motivations came together for us at a data conference in London in November 2016. The enabler was meeting each other at this conference and agreeing that people who are taking up this role of CDO

might benefit from having some sort of handbook or manual. That was the genesis of this book and we sincerely hope that it does help the growing community of CDOs and future CDOs.

Facet has always felt like the right place for this book because, although this is aimed at the CDO community and those looking to work with a CDO, it will also hopefully be useful reading for all the information and data practitioners and educators who might want to expand into this exciting space.

Originally the word 'playbook' was a sporting term used to denote various strategies for a team that when used tended to result in a win for the team. That is what we have created for you – various strategies, tools and results of our real-life experiences which can help you leapfrog some of the mistakes we have made and learn from where it went well for us. It is meant to be useful to you whenever you need some ideas about the next steps, whether that next step is the new role you are looking to try for, or if you are already a Chief Data Officer and just need a reference guide to help you in the areas you might not have focused on in the past. It is deliberately simple and easy to read so that you can read the whole thing, or jump to the areas that you will get the most from.

When writing this book we had in our minds, and hearts, the present and future community of CDOs, so when we refer to 'you', we do mean 'you' the CDO. We have written the book in this style to personally address our friends and colleagues. Sometimes it has seemed more appropriate to refer to the CDO in the third person, but the CDO remains our primary audience.

However, though this book may be primarily written for present and future fellow CDOs, we do recognise that there is a secondary audience to address, and that is the rest of the C-Suite. We have tried to address this secondary audience to help them understand the value that a CDO can bring to an organisation, what they do, how to recruit one, where they should sit within the organisation and who they should report to. This is a playbook for the CDO and their colleagues. Full of real experiences and the methods that we have used in our roles.

The first two chapters 'Why does any organisation need a Chief Data Officer?' and 'The secret ingredients of a Chief Data Officer' are addressed to the widest audience. Chapters 3–5, 'The first 100 days', 'Delivering a data strategy in the cauldron of BAU' and 'Avoiding the

hype cycle' are aimed at our primary audience, the CDO. The next two chapters, 6 and 7, 'Relating to the rest of the business, especially the C-Suite' and 'The Chief Data Officer as a disruptor' broaden out to the wider audience again. Chapters 8–12 are again primarily aimed at the CDO, or potential CDO, and discuss the CDO and the CDO role. Chapter 13 is a point of pivot in the book and in some ways finishes the first half. Enjoy this chapter, written by Tim Carmichael; it is an example of the power of the CDO story-telling. Chapters 14–18 discuss particular issues and topic areas that are relevant primarily to the CDO but of value to the whole audience. Chapter 19 concludes the book, providing advice to the business and CEO about the CDO and how to approach recruiting a CDO.

The past two years has been a whirlwind journey for us. Data is a fast-moving and an evolving environment and we get the sense that the pace of change is getting faster every month, perhaps every week. Ideas, approaches, opportunities are emerging in quick succession, there are lots of organisations in the market to recruit a CDO, relevant conferences, webinars, round tables and dinners abound. Suppliers and consultancies in the data space are pressing to demonstrate and pitch their skill and wares. The pace is both hectic and amazing. Data is an exciting place to be.

Acknowledgements

We have met many inspiring people and we would like to thank them all. There are far too many to name every single one; but we would like to thank everyone who has taken to the stage or podium, everyone who has given up their time to participate in round tables and discussions, quite simply to our fellow data professionals who have stepped forward to share their wisdom, skill and experience – perhaps most of all to share their passion for data. We, and we are sure the whole data community, has learnt so much from you. We would also like to thank the conference and event organisers, and the suppliers, who have brought the data community together on so many occasions.

After we made the decision to write this book back in November 2016, we started to write short articles about the role of the CDO and published them weekly. The purpose of this was to test our ideas in the community of our peers and to gauge if there was any demand for the book. We would like to thank everyone who read the articles and commented on them. We were overwhelmed by your support and engagement, and you spurred us on to transform the short articles into this book.

We do need to pick out a few people and organisations that have helped us shape our thinking around this book, have supported its production and those that have contributed small or large pieces. First we would like to thank all our colleagues who have provided quotes or snippets; we have tried to attribute each one. If we have missed anyone we apologise unreservedly. More specifically we would like to thank the following for their contributions:

Adrian Wyman for his absolutely fantastic cartoons which introduce each chapter.

We are only too aware that we don't have all the answers, we certainly don't know all the questions, but we hope that you find this book helpful and engaging. We have written it from the point of view of two practitioners trying to deliver value from data for their respective organisations; this is what has worked for us and the other amazing people we have met on this journey.

About the authors

Caroline Carruthers

Caroline is a ridiculous optimist whose natural curiosity never stops. She is also the first Group Director for Data Management for the Lowell Group and previously was Network Rail's first Chief Data Officer but has been a data cheerleader for more years than she can remember. Caroline is a strong advocate of 'getting the basics right' and the KISS principle despite being a complete geek when it comes to any form of technology. As a trustee for CILIP (Chartered Institute of Library and Information Professionals) she champions the growing professionalism of the data and information related disciplines so we can all head towards data nirvana a bit quicker. All her ideas and ramblings are run past her long suffering husband, son and dog, who all have far more patience than she deserves.

Peter Jackson

Peter is passionate about data, and about how data can drive innovation to transform organisations. He was the first Head of Data at The Pensions Regulator, the first Head of Data at Southern Water and went on to be the first Chief Data Officer at Southern Water. So he has been through the mill twice in recent succession as a first-generation CDO. However, before joining The Pensions Regulator, Peter had been developing data strategies for businesses in the FMCG and Financial Services sectors for over a decade. First and foremost Peter is driven by a strategic approach to data, and believes strongly in the value of demonstrating the 'art of possible' and expanding colleagues' understanding about data management, data technologies, data science

and data governance. Peter firmly believes that data strategies must have a business outcome and should be aligned to the business objectives. Given any opportunity Peter will talk about data and try to enthuse those he is with.

Glossary of technical terms

Analytics The discovery, communication and interpretation of meaningful patterns in the data.

Assurance Activities to measure confidence in a given process, framework or data set.

Audit An exercise to determine compliance against governance documents and policies.

Big Data Data sets that are so large and complex that traditional software can't deal with them efficiently. It has 'big' characteristics of three of the five 'V's of data: Volume, Variety and Velocity (the other two being Veracity and Value).

C-Suite A member of the leadership team. Traditionally these roles start with 'Chief' at the beginning of their title, such as Chief Data Officer.

Compliance Adherence to requirements such as regulatory, governance or other requirements.

Conceptual data model Hides the internal details of physical storage and targets entities, data type, relationships and constraints and is closely linked to business processes. The highest, the least detailed and the least granular element of the hierarch of data models Physical/Logical/Conceptual. See also Logical data model and Physical data model.

CxO (Chief x Officer) is a short hand way of collectively describing the C-level of an organisation, whose jobs typically start with Chief or have Director in the title such as Chief Finance Officer or Chief Executive Officer.

Dashboarding Making sense of your information by utilising a dashboard so you can visualise key information.

Data Data is a fact and a base component. Data on its own doesn't give you very much as it is a fact without context; it is a raw material which needs to be processed in order to be useful. 42 is a piece of data but without knowing the context you can't do anything with it.

Data architecture One of the four enterprise architectures: a discipline focused on the models and policies that describe how data is structured, looked after and used.

Data cleansing The process of detecting and correcting corrupt or inaccurate records.

Data dictionary A catalogue and definition of all data elements.

Data governance The processes and framework which ensure that important data assets are managed appropriately.

Data lake A single source or store of all the data within an organisation, often held as unstructured data.

Data lineage Describes where the data comes from, what happens to it and where it moves over time, often mapped between systems, applications or data stores.

Data maturity Where your organisation is in terms of its data usage and where it could be.

Data migration The process of transferring data between storage types or systems.

Data warehouse A central repository of integrated data from disparate sources.

Digital The electronic technology that generates and processes data.

Enterprise architecture Made up of four architectures: application, business, data and system. It is a practice for analysing, designing, planning and implementing enterprise-wide changes.

FCDO A first-generation Chief Data Officer – see Chapter 10.

GDPR The General Data Protection Regulation.

Information is derived from data; it is data which has been manipulated into something useful.

Information architecture A discipline focused on the design and organisation of information.

Logical data model Schema of a particular problem domain or business process expressed independently of a particular database storage system but in terms of structures such as relational tables and columns, object classes or XML tags. Part of the hierarch of data models Physical/Logical/Conceptual. See also Physical data model and Conceptual data model.

Master data A single source of common data used across multiple processes.

Master data management Curating and managing the master data to ensure its quality.

Metadata Data that provides information about other data, such as how long it is valid for and where, when and how it was created.

Physical data model This shows all table structures, including column name, column data type, column constraints, primary key, foreign key and relationships between tables. The lowest, the most detailed and the most granular element of the hierarch of data models Physical/Logical/Conceptual. See also Logical data model and Conceptual data model.

Proof of Concepts (PoC) A pilot project which demonstrates if something is feasible.

SaaS (Software as a Service) Where software is used on a licences basis and hosted externally by a third party.

SCDO A second-generation Chief Data Officer – see Chapter 10.

Silo Where a department or group do not share information.

Stakeholders Someone (or a group) who is affected by a project or event in an organisation.

TCDO A third-generation Chief Data Officer – see Chapter 10.

Technical design authority (TDA) provides technical assurance across all projects.

TOM (Target operating model) is a description of the operating model of the organisation you aspire to as opposed to the 'as is' model.

3
The first 100 days

This chapter looks at the importance of listening and asking questions during the first 100 days, but also filtering what you hear. The chapter explores some of the critical tasks of the first 100 days: making the 'case for change', assessing the level of data maturity, defining the destination and the scope and establishing the data basics. This chapter is aimed at the CDO, so the 'you' in this chapter is the CDO.

There is little scarier when you are starting a new role than having a blank piece of paper in front of you. This chapter is aimed at helping you over that hurdle. It covers what you need to focus on when you start your nice new CDO role, how do you understand where you are starting from and where you want to get to as well as the steps to get

you there. What makes a good case for change and why is 'coffee and cake' so important? What do you need to do about your 'information basics' of governance, architecture and engagement and what are the tangible examples of how to communicate your visions to people? Why are quick wins so important? All of these questions are covered in the first 100 days.

> . . . having evangelists to drive engagement with the wider organisation is key – without passionate advocates for the power (and importance) of data to the organisation, you run the risk of governance activities being 'red tape'. If staff do not implicitly understand why data is important, you will forever be trying to herd 'data cats'!
>
> (Julian Schwarzenbach, Director,
> Data and Process Advantage)

How do you climb Mount Everest? One step at a time. It can seem like a completely overwhelming task at times but just by focusing on the next step you can look back at the end of your first 100 days and see how much you have achieved.

When you take on this role expect to spend a lot of money on coffee, cakes and biscuits! Such a large part about being a CDO is based on relationship building, so get ready to spend a lot of time meeting people – hence the coffee and cake budget!

Gartner predicted that by 2019, 90% of large organisations will have hired a CDO – but only 50% of these will be a success. Much of what determines your success or failure going forward will take place in the first 100 days. Essentially it is about getting the basics right now and building firm foundations for the future.

What do you expect when you start? The first 100 hundred days are important to set the expectations for the CDO you are going to be. Now, from one (two) CDO(s) to another, expect a real rollercoaster of a ride: there will be amazing highs followed by moments where you sit with your head in your hands wondering what on earth you have done. Basically a microcosm of the rest of your role as a CDO just crammed into a shorter time period.

Pre-work

There's a bit of what we would call prep work that you need to do before you really get stuck in. It's almost your pre-basics and you can't skimp on the time you put into this. You need to understand the business – now we know that almost goes without saying but we're a bit pedantic so we're going to talk about it anyway. There are only two ways into the role, from inside the company or from outside. Obviously if you are from inside the company you have a bit of an advantage here but don't fall back on your laurels; make sure you still do your homework on the organisation, as you might be surprised by what you can find out. If you come from inside the company you more than likely came from a siloed part of the business (based on the fact that the majority of any business is siloed!) which means you have preconceptions about the other areas. Let's not start the role by assuming anything.

If you come from outside you should have a level of data awareness, otherwise why would they offer you the role? So you should know that understanding what you are getting yourself into is pretty fundamental. The focus has to be on not only understanding what the business does but how it does it, how it is currently treating its data and what is the current level of understanding about what value it has. This can start to give you some insights into what is going wrong with the data and where you can start to add value.

So start by listening, listening and listening and when you think you are done with that listen some more. Don't ask questions about the data – to be honest, as we have said before, data is a bit of a four-letter word for most people in the business. We might care about the difference between data and information or the value in well placed metadata but that's probably not how the rest of the business sees the world.

Ask your peers and anyone else you can to find the time to share a coffee with you and ask them what problems they are facing, what keeps them awake at night and what they are really proud of. In other words, use language they would use and ask them lots of nice open questions that lets them talk to you about their priorities. People naturally gravitate towards the data and information problems they are having because they are aware of what your title is but you can find some real gems in the areas they don't even realise are data-related. You will be truly amazed by how many big company-wide problems are really data-related somewhere near the root cause. Everyone in a

company is busy but directors, especially, are really busy people; however, they will happily talk to you about the shopping list of things that they need done to help them.

Two other things that you need to be aware of while you are investing your fortune in coffee and cake: first is the politics in play. Every organisation has politics in some shape or form: you might not need to take part but you definitely need to understand it; it helps you avoid any verbal landmines and also could lead you to find some important sponsors/stakeholders out in the business who are worth focusing on. The second is the need to filter the information you are getting through the importance filter. Is something really on fire or is it just smouldering while London is burning behind it? Is it someone's pet hate and fixing it could have a much larger gain in credibility? How strategic is it – will it take a long time to fix or can it be a quick win? These are all things that you need to factor into your planning.

Ah yes, we used the 'planning' word. We're not suggesting that you come up with a 1000-line Gantt chart (but if that floats your boat then carry on) but let's not pretend that you can complete a journey without a map of some description. Your first plan probably won't be pretty and it will change but it will give you the next step to take when you have lost your way.

While you are meeting with all these stakeholders find out what the heartbeat of the organisation is, what pattern there is to meetings, what crucial meetings you need to be part of and make sure you stay plugged in to. Basically, what makes the company run?

We know this probably sounds like a great deal of pre-basics but we are coming to the end of the list and they are all really critical! Finally, make sure you understand your procurement and finance processes. Many a slip-up in a project has happened because the right process was not followed, and Finance has those checks and balances in there for a reason. So while you might want to rail against them you aren't going to win any friends that way and by following the process from the outset things will go a lot more smoothly.

The case for change

So now you have covered your pre-basics the very first thing you need to start doing in your new role is to understand your organisation's case

for change; if it's not there, create it; if there is one and it needs help, redefine it. But whatever you do, make sure you have a clear easy-to-describe case for change. In order to be an effective CDO you will be changing the organisation, and no change starts better than with a burning platform or an absolutely massive benefit delivered quickly. If you can't establish the case for change then you might as well go home at this point; without it you are doomed for poor results or outright failure.

The case for change helps you set the vision of what benefits you are aiming for, whether they are saving the organisation from repeating mistakes or gaining insight to derive more value. It's the compelling argument that makes people want to help create the future you are selling. It also helps to set your scope and start to set expectations about what you will and won't be doing. People often forget about the 'not doing' part of a scope but it is just as important as what you are doing, if not more so: without it people can overlay their own expectations and just assume they are getting everything they've always wanted just because they have misinterpreted what you meant. While you need to create a compelling vision, it's best to be realistic about where you can go, what it will feel like, and how long it is going to take to make a difference.

What makes a compelling case for change in the world of data?

Firstly you need to check your understanding of the Problem. Is it something that just you or a small group is facing or do you have more company-wide systemic problems? It is very likely that if the root causes of the issues you are facing are data-related then it will be a company-wide problem, as data affects every single part of your organisation. You will see issues like not sharing information, not having one source of the data, no one treating the data as an asset, people repeating work because they can't find something that has already been completed . . . this list can go on and on.

Gather your advocates around: if you have checked that other parts of your organisation are facing similar problems that you can trace back to similar causes then you should have others in your corner who understand the value of data and why things need to change. This really helps because you will have a lot of persuading to do to win over the company to get things moving, so take any help you can get.

Articulate your case: what are the problems you are trying to solve and what is the wonderful data utopia you are going to create? What is your big picture? Make this a nice simple, consistent message; if you have all these advocates helping you then you need them all to be saying the same thing. Confusion is not going to help you convince anyone that you know what you are doing. There has to be a single voice heard, no matter who is speaking.

Maturity model

It might be helpful to look at the level of data maturity of the organisation which you can factor into where you are going to make improvements. It can also give you a baseline to demonstrate what you have been doing and where you have made a difference. The first time you run a maturity assessment you will need to include as many stakeholders as you can, to get an unbiased view of as much of the organisation as possible. It's going to be time-intensive, as you need to spend time helping people through the questions and the under-standing of why they are spending their time giving you this information. As the maturity of the organisation grows you can use this information to form part of your assurance process and benchmarking activities as well as tailoring your approach to your work ahead. The company will not need a full assessment every year, as that is potentially too intensive for an organisation to undertake, but a few well placed self-assessments can make sure you stay on target.

You will need to address the following questions to your organisation when compiling your maturity model:

- Strategy – mature organisations communicate the leadership's way forward with a business strategy to inform and provide the principles for detailed strategies relating to key areas of the business, of which your information strategy should be one
- Corporate governance – are the key elements of good corporate governance in place and are they well deployed, do they operate in isolation to each other or ensure a well rounded approach is taken? Are relevant and tailorable assurance activities regularly undertaken and well used?
- Framework, process and tools – does your organisation have the

right framework in place to make the rest of your pieces hang together? How do you bring the policies up to date and make sure you keep them that way? Do the tools you have access to help you or hinder you? How many data-related systems are you currently using and are people using them for the right thing? Do you understand the information lifecycle within your organisation?

- Policies – do you have the relevant policies, standards, procedures, etc., to make sure you are setting up the people within your organisation to succeed? Are your instructions clear, consistent and easy to use? Do you have a framework in place to demonstrate the interrelation between your policies?
- Information risk – is your information risk well defined and at what level? Do you understand your business criticality? Are the tools in place to help you manage and mitigate this appropriately?
- Architecture – do you understand how you use information across your organisation, how it cuts across your silos? Have you mapped your architectures out? Who is accountable for which bits?
- Organisation, roles and responsibility – are roles clear and agreed across the organisation? Do you have a team dedicated to being the data cheerleader for the organisation? Have roles been defined to address elements of information management and assurance within your different domains. Do you have a steering board in place which is empowered to make your data and information-related decisions? Are training programmes in place for both your data and information professionals and for the wider organisation?
- Metrics – firstly, are you measuring progress and performance indicators, reporting or benefits capture at a corporate level and then are you measuring the right things to drive the kinds of behaviour that you want in your data-valuing culture?
- Information guardianship behaviour – do you value your data and understand what it can do for you? One indication of this is how much money you have spent on it, and over what time period? Has it been underinvested or has it been well invested but not successful? What were the reasons for this?

One indicator that you probably won't find in a maturity assessment, but will help form your thinking, is finding out why the company is

deciding to put in place a CDO now if you are the first one, or what the previous incumbent has faced if you're not?

Having some set of metrics to help you understand each level in the maturity assessment means that you can replicate this after a period of time. Then you can (hopefully) demonstrate progress and it will help you to identify the areas you need to focus on next. Typically, any kind of measure that takes you from 'totally useless' to 'totally awesome', with a few steps in between, gives you the level of detail you need to demonstrate your organisation's maturity in these areas; probably no more than five or six levels, otherwise you will spend ages arguing about what category different parts of the business sit in and not on solving the big problems you are trying to get them focused on.

Don't forget to stress the urgency of the situation as well. Organisations are being pulled in so many different directions: why do they need to put their limited resources and budget into solving this problem now when it has lasted in this state for years? Without a sense of urgency this will be dropped down the list of important things to do and will probably never see the light of day.

Next on the list is that you will need plenty of facts to back up your big-picture story. Don't underestimate how much time you will need to spend with senior stakeholders to understand the problems they are facing, gaining tangible examples of where poor data management is affecting them or where great opportunities are being missed – and which are personal to them. If you can deliver a little shock value here, you can normally extrapolate some big potential savings from where you know things are already in existing day-to-day activities. Balance this with the need to deliver these savings; don't say anything that you don't believe but be brave and talk about the cost-saving potential. In some cases these numbers look so big at this early stage that they are unbelievable; remember that a lot of blood, sweat and tears will be needed to achieve the big savings but they are possible.

Lastly, it's lots of listening, talking and listening again. You just can't beat talking to people. As the saying goes, we have two ears and one mouth and should use them accordingly. Make sure you listen and hone your case for change until it is indisputable.

Vision and strategy

While the compelling case for change tends to focus on the downside of life (unless you are a disruptor and have a genius idea to leapfrog your business forward) the balance comes in the form of your vision and strategy. At this early stage you should be able to come up with a good strategy that is high-level and visionary. There are so many different variations of a good vision but something memorable, concise and meaningful to your business is what you should be aiming for.

There is no point in starting a journey without having an idea of your destination. You don't need a fixed point that you are trying to drag the company to, rather an idea in mind of where you are leading them. It's a bit like giving them a treasure map where you might not have buried the treasure yet but you know what island you are burying it on and they will get more maps the closer to the goal they get.

Your strategy ties into the vision to create that utopian data future for your business; however, at this point you probably don't know enough to create a strategy in detail. Spending more time with the business, understanding what causes it pain and what will make the biggest difference to it, is needed before finalising your strategy. At this point possessing a broad understanding will be enough to get you going. The more you include other stakeholders with the work, the more likely it is that they will buy in when the work really starts. You also need your team to help you with this so they also feel invested in it. The building blocks of your engagement journey start here.

Including items like accountabilities will definitely help you, as there is nothing more guaranteed to cause problems downstream as poor understanding of who is accountable for what. This is especially the case since this is a new role, so people will believe that you are taking something from them. Whether this is the case or not, it needs to be addressed in a mature and careful fashion. Alternatively there will be gaps where no one steps forward to be accountable; at least by raising the issue of the gaps and helping the business to understand why this causes a problem you can promote the right accountability debate.

Next you will need to clarify the scope of what you are covering; data is a massive area for any organisation and if you are not careful you could find yourself trying to boil the ocean. Setting out what you are focusing on and why, as well as defining the broad scope for now and in the future, helps understanding grow as to what you are bringing to

the company. Something like the POTI (Process, Organisation, Technology and Information) model is a good tool to use and covers the basic areas you need to understand to make sure you have a high-level direction for what you are setting up.

Briefly the POTI model covers:

- **Process** Highlight any operational business models that will have to be changed. As you are creating a new department this is highly likely to be an area you will need to pay some attention to: what will be different, how will it interact with the rest of the organisation, and how will you make changes to the existing structure in order to put the new one in place?
- **Organisation** This area addresses the people changes again. If you are creating a new department from this exercise you will need to define it carefully. What is your aim for the new department? Are you looking to bring in all new people from outside the organisation or blend outside skills with the development of current staff, giving them the chance to enhance and grow their skill set?
- **Technology** This gives you the tools to do your job well and is closely linked to the data flow through the company – but don't assume that you are suddenly in charge of the IT department (you aren't). Let them do their job well so you can do your job well. Focus on the end state you are trying to get to and work with your IT department to understand how they can get you there. Provide the picture – let them put the jigsaw together in the right way.
- **Information** Ordinarily when you are starting out on something new and create your POTI model the area that is not completed in the same way as the others is the information area. This area is nearly impossible to define and something suitably high-level and unmanageable is entered; however, you can really go to town here. Lay the foundations for your information and data strategy for the organisation.

We are going to assume you have a team in place and that you don't have to do that in your first 100 days, knowing how long this process can take. There is a need to have people around you to help, as no one

person will ever be able to change the company without a lot of support. Apart from the need for skills and experience that are varied and wide-ranging, you also need the support when you have some of your rollercoaster lows, to help you get back on the upward track.

So you have a team, a case for change, a vision and the makings of a strategy. Now you need to look at what basics you are trying to get right, what materials are going to make up your foundation.

What are your 'information basics'?

To keep it simple we've broken these down into three main areas. There is more than one way to achieve the following basics and you need to find out what works for you but we have included examples of ways to progress in each area.

Governance

Let's face it, you will be making changes to the organisation and you might not always get it right first time – remember the old saying, 'If you never make a mistake you aren't trying hard enough!' So what must be in place is a way of letting people know what is expected of them, what they are really accountable for – be that policies, standards, procedures or whatever your company uses to help everyone understand their responsibilities – as well as a control mechanism for managing those policies. How do you make decisions on how the organisation needs to treat its data and information? Who is involved in this process? And if you are smart, you get people involved who cover the biggest sections of your company.

The steps to this are simple but don't underestimate how long they will take, as writing a policy is easy but getting people to sign it off can take a considerable amount of time and effort. The following will give you the set of steps needed to put together a plan for this area; how much you get done is dependent on how mature the organisation is already when it comes to governance within your organisation and the willingness and readiness of people to change.

The first thing you need to focus on is finding out what state you are currently in; gather together anything you could call a governance document. This could be anything from a standard to a 'how-to' guide,

it is any existing process and who it touches as well as any decision-making bodies that cover governance in the data space. Have a look at what you have; chances are that you will have overlaps, inconsistencies and gaping holes in your guidance, so it's not really a wonder that people weren't treating the data as an asset – they were probably really confused about what you wanted them to do with it. Now that you have pulled it all together, develop a map of how you are going to sort it out; figure out what you want it to cover and perform a gap analysis in order to see how much effort you need to devote to this area.

We find it helpful to create a guidance tree diagram, where you have the most basic instructions you want everyone to know at the very highest level and then break this down into the different sections you cover within the data domain in your organisation. Keeping each level very simple, concise and easy to understand but in a way that you can keep dropping down a level of detail until you get the amount of information you need to do your job in the area that you need it. In this way you don't produce a vast document that will be the next cure for insomnia and you should make it easier for people to get to the information that is relevant to them when they need it.

At this stage we wouldn't be too worried about how it looks; that is something you can put into your longer-term plan. Right now it is more important that you have a set of guidelines that is easy to use rather than making sure they are all on the same template.

Creating something like the guidance tree diagram is also a building block for when you start to do the education and training for the organisation, as it gives you the basics in each area and the different components you need to focus on when you are looking at how you break down your training offering for the organisation.

The next thing to worry about is how you get sign-off for all these guidance documents and how you make sure that they are all kept up to date. This will probably be two separate processes, as you are drawing together a new community, so it's highly unlikely that you already have the right meetings or stakeholder group set up to sign these off, and what you start with may not be what you need in the longer term. Be open to change with this process especially.

At first just getting the tree diagram and the plan approved to a point that you have a clear mandate is important. This isn't about whether or not you have the right level of authority but this is an important activity

that encourages early buy-in. If you are the new player on the block you will need the interaction of the existing players to help them to understand what you are doing and how it will impact other people and departments.

In your plan you also need to reflect on what your review cycle is. It will seem like you have all the time in the world to worry about updating these guidance documents; after all you have only just created them and they have to be okay for a while. That little while will slip through your fingers more quickly than you can imagine, and without a gentle reminder that you need to look at them again it's easy to forget about them and focus on the more day-to-day concerns of the role. That is not to suggest that they need a full rework every two years – we are aiming for a level of consistency here, so we would hope that was not the case. However, it can be surprising how little things can slip over time. What if you define a role in a governance document that doesn't really gain traction within your company and you end up morphing the responsibilities into some other roles or places? How is someone who is reading the document for the first time supposed to know that? It's just a good housekeeping principle to keep these documents up to date and a review plan will help you do that.

Going forward, you will also need to allow for different governance streams, for instance, the people who are desperately keen on information architecture conversations may not be the people who want to look into the detail of your records management policy. Having smaller focused groups who report into a decision-making body which has the appropriate level of authority breaks down the tasks, so no one should be sitting in a meeting that bores them.

Look at what type of governance works for your company and copy the relevant parts of it (there is no point reinventing the wheel!). Just make sure that you have adequate coverage across your company. Look at areas like your highest-level information domains from your information architecture (see the next section): who is accountable for each of those domains and might they be good representatives to have on your decision-making body? What are the different areas within your business which look at the different architecture models (your IT department especially will have different types of architects)? Bring them together so that any changes to the information architecture are reflected in other levels where appropriate.

Creating a 'heartbeat' of how things happen and are progressed helps your team and the organisation find a rhythm to how they work together. All of this helps with your engagement activities.

Information architecture

Next let's look at your information architecture, not the vast swathes of detail that sit in your data dictionary (at least not at this point) but the big headings. What are the top headings, (perhaps five to ten) which describe all the information in your company and (most importantly) who is the one person who could make a decision on each one? This is not about playing the blame game; that just makes individuals hide from any kind of accountability and leads to a kind of company-wide whack-a-mole game. Remember the quote from above: 'If you aren't making mistakes . . .'. Your information domain owners are accountable experts in their fields who understand specific areas of information within your business and can give firm direction and decisions in their area. Once you have the highest conceptual level agreed then it's time to move on to the next level, adding richer detail as you go. Don't expect this to ever be complete – it will always morph but it should be a firm foundation for better decisions about your information and the use of it.

Engagement

Last and definitely not least, how are you going to engage with the company? Where is your network of evangelists coming from who will sell your message? It's great that you know who can make decisions about the information and that you have clear instructions on how people should treat your company's data but it really is pointless unless you tell them. Naturally we are talking about mass company-wide e-mails, which of course everyone reads every detail of, inwardly digests and miraculously and immediately changes their behaviour . . . in our dreams! This is hearts and minds time here: what is your compelling argument to change, how are you making their life better and what is in it for them that makes it worth changing their behaviour? At the very least tell them what you expect from them.

Working with willing volunteers and enthusiastic amateurs will always outperform press-ganged experts any day. Try to get champions

across the business who give you a good coverage and are well regarded in their own areas. When it comes to getting the message out, having people working with you who other people in their department listen to can make a world of difference. However, if you do have the press-ganged variety of 'volunteers' this can also work to your advantage: while they are much harder to bring over to your side at first, when you do convert them they are the strongest advocates you can have.

Get all that right and at least you know you have covered off your basics while you start your journey.

Quick wins

The next thing you have to do is to get some value from all of this quickly. One hundred days will pass by in the blink of an eye for you but the business has invested in you and will want to see some return on their investment. Have you found any tactical quick wins you can put in place? You need to find something that demonstrates the value you can get from your data early on. You have the vision, the people and an idea of the information architecture – put them to use to find some quick wins to show the organisation why it's worth working with you.

Being in the CxO group doesn't mean avoiding politics and other more established CxO roles may have the power to hamper your intentions. So wouldn't it work better to agree some form of plan, remit or funding before you sign on, similar to how commercial service providers work? Your points around the case for change ring very true though. I've had some great breakthrough moments where a client has asked for some specific help with a data problem and through early consultancy have been able to turn that into a clear statement of the impact of the problem on the organisation's bottom line, thereby giving both the immediate client and their own stakeholders clarity on why effort and support is needed. If you can manage to do that the case and buy-in starts building quickly. GDPR is helping too: the risk of new, massive fines is starting to build the case for solving data management problems that organisations have let slide for years. There is a counter-argument though: discovery and experimentation can often have no known business outcome at the start. It is investment which might have to be written off if the discovery

is that something won't work or won't add value. That's a bolder choice for an organisation to make, but one which can be transformational.

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