
shapecast
Data-Driven Business Change
And why it is important to you

CONTENTS

EXECUTIVE SUMMARY

Unfortunately, the IT field is littered with stories of business change efforts which significantly run over budget or fail to realise their benefits[123]. One of the major causes of failure is the lack of appreciation at the outset of the level of complexity in understanding the business or spending enough time planning the outcomes and changes required throughout the change.

Data-driven business change is a method for capturing the real detail about the current organisation, modelling the future (post-change) organisation in detail and developing a comprehensive change plan which is based on detailed understanding of what needs to change and why.

This approach brings major changes to traditional change methods but also brings some significant changes to traditional change approaches which organisation leaders should be aware of from the outset and plan for.

ARTICLE CONTENT

White paper overview

This article is for business leaders and business change practitioners that help mid and large organisations who are interested in new, more computationally led methods which can radically improve business change outcomes. This method and change applies to business leaders involved in strategy setting and execution, general corporate business change, digital transformation or any specific area of business change including operational or IT change.

Objectives

This whitepaper will provide an overview of a data-driven business change and its benefits over traditional business change methods. It will describe how to go about data-driven change and some of the pitfalls and challenges that we have experienced. By spending many man years going through and supporting our clients in strategic transformation change, we at Shapecast believe that data-driven change methods have the power to revolutionise the way organisations plan and execute change and can lead to incredible outcomes not possible through traditional methods. As a result, we have transformed our business from being a people-driven change consulting business to a wholly data-driven business with a transformation methodology and supporting analytics platform.

In this white paper, we will review what data-driven business change means, how you can go about starting your journey and what improved outcomes you can expect.

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1. https://www.theguardian.com/society/2013/sep/18/nhs-records-system-10bn
2. https://en.wikipedia.org/wiki/List_of_failed_and_overbudget_custom_software_projects
3. https://www.computerworld.com/article/2533563/it-project-management/it-s-biggest-project-failures-and-what-we-can-learn-from-them.html

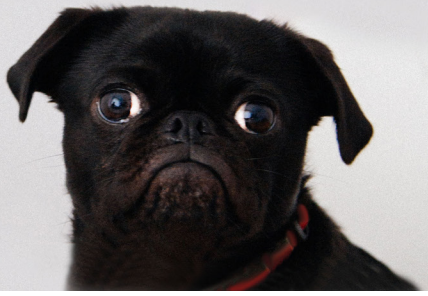
What is data-driven business change?

Almost any business change method which takes an organisation through significant change from its operations, products, services, strategy or IT, requires detailed understanding of areas of the organisation that will be impacted. Frequently, when organisations go through significant change, in the early stages, either they or change service providers develop an initial baselining process to capture information about current processes or systems.

Data-driven business change is the process of building detailed models of the current and future organisations in much more detail. The modelling process is used to then analyse the changes required and to generate a change plan based wholly on information.

The models of both the as-is and future organisations can be analysed in great depth and then used to drive decision making and change planning.

"No wonder then that transformation outcomes frequently see mixed results"



In our experience, this process is typically performed at a cursory level and the information about the current organisation isn't used to define detailed models of the future. These aspects of change traditionally are covered by experts such as transformation professionals, business strategy leaders or Enterprise Architects. Frequently, interactions between these roles and the leadership team are low and are wholly dependent on the quality of the individuals involved and how they work together.

This method is driven by facts, data and insight rather than the experience of key staff. However, leadership team members and key professionals are required to make the decisions about the future direction of the organisation, data-driven models guide and support the leadership team in this process.

Who is data driven change for?

One might think that organisations that consider themselves to be low maturity in data management or business change, aren't suitable for data-driven change.

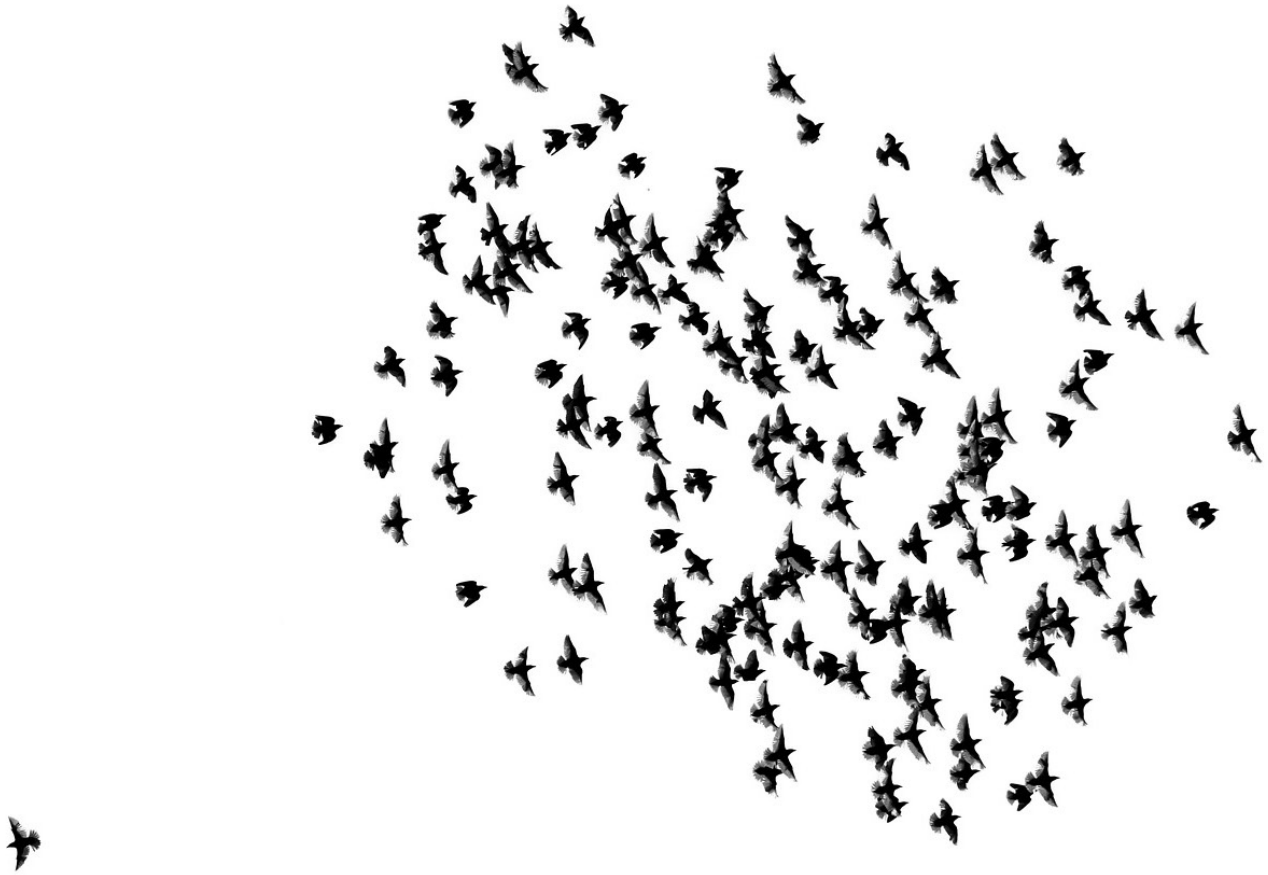
In our experience, any organisation can adopt data-driven change methods as quickly and easily as any other change methods, if the leadership team are willing to adopt a new approach. Indeed, if you have very little experience in traditional change, adopting data driven methods are a sensible step to improving your change capability rapidly.

The key success factor is a willingness by the leadership team to use data-driven change to understand who/what and how to change the organisation.

Who is this method not for?

However, all new methods, even very powerful ones can be comfortable to adopt. It can be comforting to fall back to contact consulting firms to support change, despite known challenges and patchy results.

This approach is therefore not ideally suited to executives that only want to use traditional, people driven change and the comfort of traditional ways of going through change programmes.



SECTION 1
THE CASE FOR DATA-DRIVEN BUSINESS CHANGE

A NEW WAY OF DRIVING CHANGE

Data-driven business change is an approach to business change which uses data and information about the organisation to drive the business change process. At its heart, is a comprehensive approach to capturing data about the current organisation[4], then linking data together to give a complete view of the organisation.

Then, it employs a complimentary approach to developing equally detailed model(s) of the future organisation which can be tested and tuned as required to support specific future scenarios.

THE BENEFITS OF DATA-DRIVEN CHANGE OVER TRADITIONAL METHODS

Most business change programs that we have encountered, whether performed directly by the client or in conjunction with third party consultancies, are based on the experience of a few key change professionals.

Frequently in our experience, the activities undertaken by experienced leaders tend to be based on their own historical and sometimes limited experience of change programmes.

The fully data-driven approach is a systemic, structured change method which is far less reliant on the skill and experience of key professionals. While strong professionals (and executive buy-in) are still required, the process of planning change and defining what the organisation will change in to, is a simpler to operate and very structured process.

4. Includes potentially any aspect of the as-is organisation, but data collection can be focussed on specifically the areas that will drive change (e.g. specific business units, processes, IT systems, staff, etc.).

The ability to rapidly model scenarios not considered before in detail

As markets and competitive conditions change, the ability to ask questions of data-driven organisation models can get complex, very quickly. Where we need to link complex areas of the business together to understand the impact of change, human-driven models rapidly become too complex to consider in detail.

For example, a large organisation might need to identify all of the redundant services and servers that support the European region of a particular model type or line of business. To do this, we need to identify the services, their locations, the users, lines of business and which users fall in this line of business and then identify specifically which services are used in which locations and how they interconnect. For large organisations, this is a very complex assessment which would take days, weeks or months of man effort using traditional methods.

By using rich, interlinked data models of the organisation, its products and services, markets, etc., it is possible to model many variations and scenarios at speed well beyond the capability of (most) humans.

Basing decisions on fact

Inevitably, throughout business change and transformation, import -driven decisions? Data-driven change gives leaders the confidence and insight to make the right decisions, based on fact and derived insights from the outset.

Being able to change at scale

Once collected, the further benefit of data-driven change comes in the form of accuracy, scale and speed. Data collection and modelling of the future organisation can be executed at huge scale and allow business leaders to understand vast programmes of change, their implications and alternatives. The accuracy comes from the knowledge that each change can be reliably linked to the current organisation and the steps needed to realise future business outcomes.

The speed of cloud computing enables changes to be performed many orders of magnitude faster and more cost effectively than any human-based approaches.

Transforming the agility of organisations in changing markets

One of the most significant benefits of data-driven change for modern organisations, is the speed and agility in modelling competitive activity or markets, assess the impact of change and to react accordingly.

It's testable

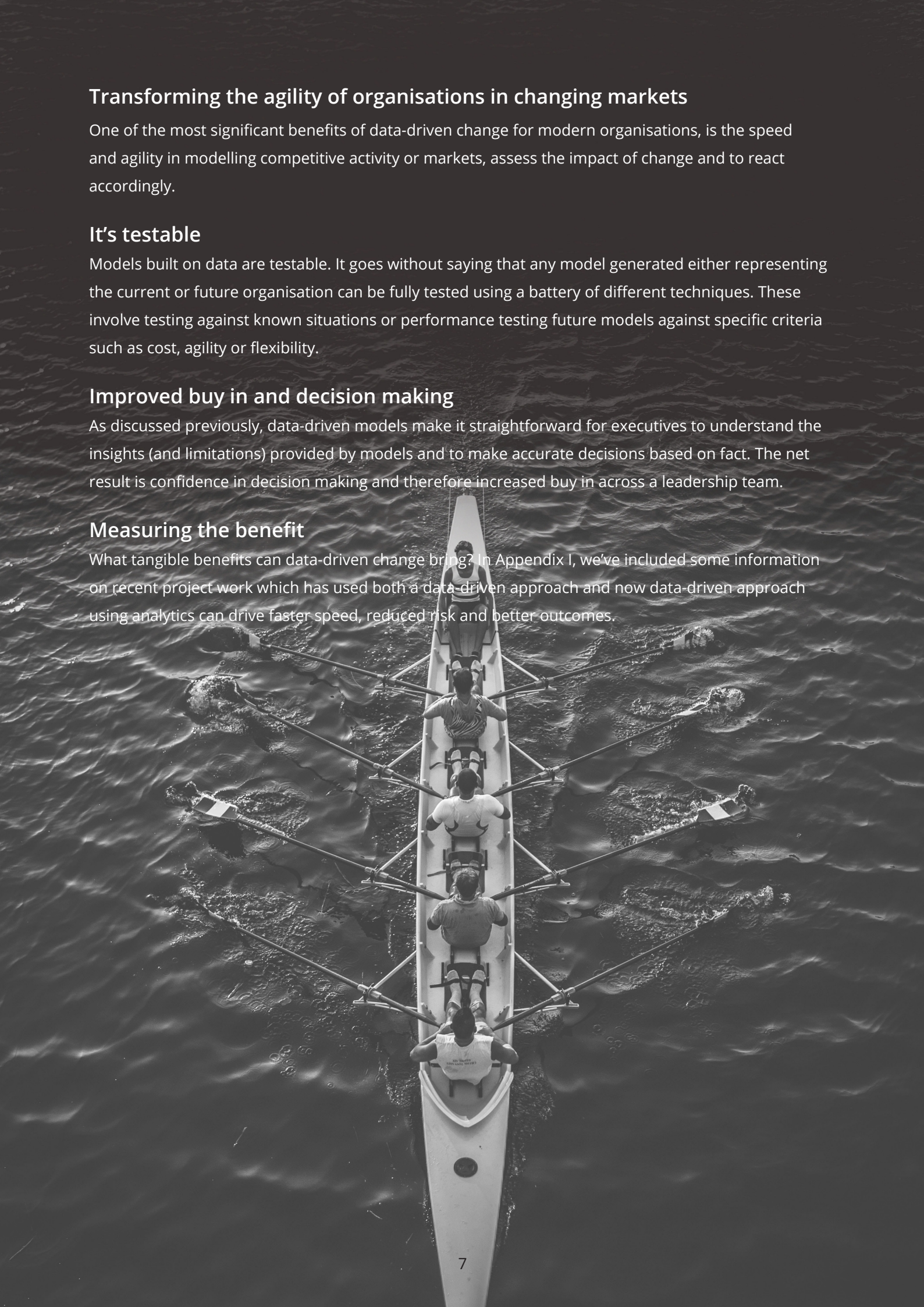
Models built on data are testable. It goes without saying that any model generated either representing the current or future organisation can be fully tested using a battery of different techniques. These involve testing against known situations or performance testing future models against specific criteria such as cost, agility or flexibility.

Improved buy in and decision making

As discussed previously, data-driven models make it straightforward for executives to understand the insights (and limitations) provided by models and to make accurate decisions based on fact. The net result is confidence in decision making and therefore increased buy in across a leadership team.

Measuring the benefit

What tangible benefits can data-driven change bring? In Appendix I, we've included some information on recent project work which has used both a data-driven approach and now data-driven approach using analytics can drive faster speed, reduced risk and better outcomes.



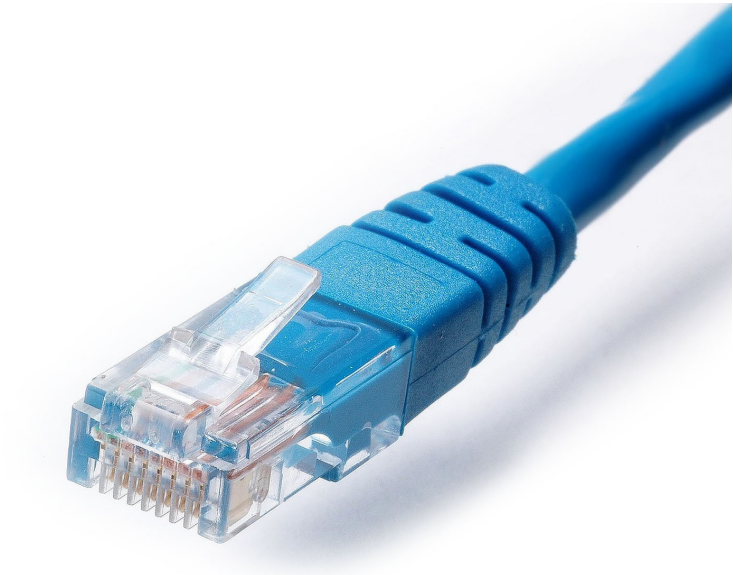
SECTION 2
IMPLEMENTING DATA-DRIVEN CHANGE

Having established the case for data-driven change, the following section summarises the method organisations can go about the process.

WHICH DATA IS USED IN THE METHOD?

The data used should be directly related to the specific area of the business being changed and what aspects of that organisation unit that are implicated in the change. For example, if we are developing a new operating model, the data collected relates to a set of subject areas that are important to assess. For example, we might collect and link data relating to products and services, our customers, markets, suppliers, IT systems, locations and staff, etc.

Within each of these subject areas, there many detailed attributes that we might be interested in. As an example, for staff, we would like to capture staff name, type (whether contract or salary), remuneration, location, reporting structure, etc. Personal information about social security, tax etc. used for payroll may not be necessary to support the kind of information we care about during business change such as which staff will be located to support which aspects of the organisation, where and the cost to the organisation of those staff.



THE CHALLENGE OF COLLECTING DATA

In our experience, the challenges with collecting data fall in to the following broad categories:

1) Data doesn't exist. In some instances, the data required will be wholly missing. In this case, there are few options other than to develop a method and approach to capture the required data. This is discussed in more detail below.

2) Data is incomplete. In this instance the available data should be assessed properly first. It might be that the data is of good quality and up to date but simply hasn't been collated. This could be either because a previous project was not completed or other reasons such as staff have left mid-way through the process or we're reassigned to a different project at the time.

3) Lack of / conflicting documentation. In this case, information to be captured may be complete but any supporting information may be out of date or incomplete. Documentation could be old for many reasons and we prefer in this case to trust the information inside systems or captured through interviews. We would therefore use automated or discovery tools where possible.

4) Subject matter experts have left the organisation. This can be a challenging but rarely is unsurmountable. Where detailed systems are needed to be analysed, as in the previous point, we prefer to use automated discovery tools[5] or in worse case data analysis tools where possible.

5) People are too busy. This case is the reason senior level executive buy in is required. Executives must be asked to prioritise this data capture work given its criticality to the success of the change process.

6) Challenges to the value of capturing as-is. This is rare, but occasionally we have heard stakeholders challenge the value of spending time creating a baseline of the as-is. They argue that the organisation should move to a greenfield vision and leave the complex past behind.

"Nearly every organisation going through change will retain some significant aspect of its staff, operations, processes, customer base or market insight. Therefore, impact assessment is critical and required to a lesser or greater degree"

"For start-ups, this requirement may not apply. However, this change approach is oriented at larger organisations carrying significant amounts of legacy"

5. Discovery tools allow us to identify services faster than people but aren't a perfect solution. Typical examples are network, server and application discovery tools. These can be further enhanced by using Configuration Management Database tools which hold current information about services used. https://www.capterra.com/it-asset-management-software/

Following a structured process

Regardless whether the data required is business information held in people's minds (e.g. business objectives/ strategy), or whether the information is stored in systems, we recommend using a highly structured data & information capture process.

This ensures repeatability and robustness in the face of any challenge. Furthermore, consistency ensures that the following analysis phase of work means that the capture process does not create any logical inconsistencies in to the folding analysis phase. At Shapecast, we have developed a structured methodology called Transformation Science™, that allows us to capture the information in a repeatable, structured way consistently on projects. Regardless of which type of information we capture, it allows our delivery team members to follow a consistent process and for our clients to understand the involvement required at each stage.
You might find creating a similar methodology useful for training and consistency.

What if the data doesn't exist?

A question we are frequently asked through this process is, "how we can drive a data-driven process if the data doesn't already exist or is very poor quality?"

Unfortunately, in order to plan business change effectively, a degree of understanding of the current organisation is required in order to impact assess any future change. The most important first step is to identify what data/information is required to support the development of an as-is organisational model. In our experience with this clarity and a structured method to identify the important data, the process can be fast and generally quite straightforward and typically consists of a few steps as follows:

1) Identify the data needed for the area of change. This involves assessing exactly the kind of analysis required to drive the change and what entities will need to be included.

2) Identify how the data should be linked and related.

3) Identify how this collected data will be used to drive the change process for the outcome required.

4) Assess what data exists already and its fitness for the task in hand.

5) Collect any missing data or data that is not of sufficient quality.

Generating future models from current models

One of the main powers of using model driven business change is the ability to generate not just a single testable future model, but the ability to generate many. Each of these models can be varied in slightly different ways to accommodate different future customer, market, competition, products and services scenarios. Each of these different models can be used to drive a different series of decision execution paths based on future potential scenarios.

Traditionally, within large organisations, this process is executed by teams of Enterprise Architects whose experience and expertise are used to define future models of the organisation. However, due to the vast complexity of many large organisations and the time it takes to generate comprehensive future models, our experience of enterprise architecture is that it rarely generates realistic models in a timely enough fashion to drive business change.

Having generated methods of defining ways of testing the performance of current organisational models, the same methods and approaches can be used to assess the viability and performance of different future organisational models.

Conclusion

We hope you found this introductory white paper useful and informative. It is worth noting that moving from traditional change and transformation practices takes time, commitment and effort.

There are undoubtedly challenges with data-driven methods of change but these mostly reside in collecting and using data about the organisation to drive the process of change. While these challenges shouldn't be underestimated in large organisations that are not used to collecting this kind of information, our experience shows that perseverance can lead to truly transformational outcomes which cannot be easily achieved any other way.

About Shapecast

At Shapecast, we have developed our data-driven methods over years of client transformation work. Through our years of experience of client transformation work, we have built a highly data-driven transformation method and supporting rich analytics engine called Transformation Science™. Together, these drive outcomes at a level of accuracy, pace and scale that we have not been able to achieve through skilled professionals alone.

We would love to hear from organisations or individuals that are going through or planning major change and are interested in this method and approach and how it could help you.

Please get in touch with us at the following
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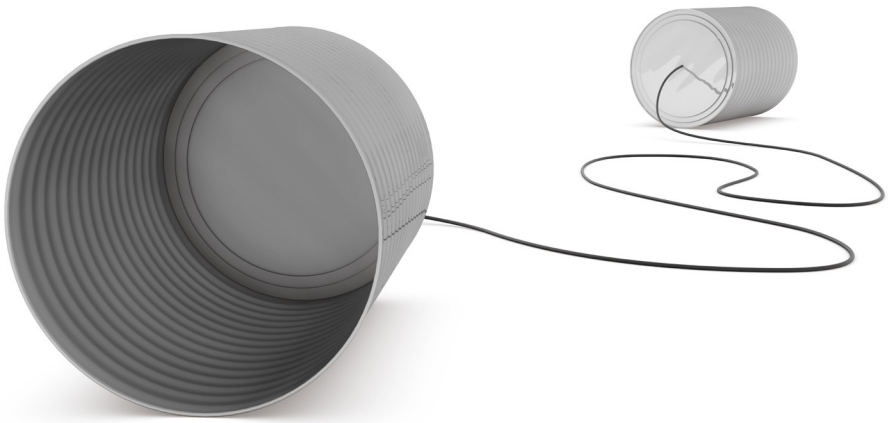

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APPENDIX 1

Measuring Benefits

To give you an idea what level of improvement can be expected, we can talk from first-hand experience of data driven client projects.

While this example is anecdotal, (and not intended to be a case study), we hope this gives you idea of how data driven transformation helps drive change planning at vast speed and scale.

In 2013, we were asked to look at a tier 1 retailer who was mid-way through a complex transformation programme. They were having problems moving to new order management system that would form the beating heart of their supply chain. The problem was the existing systems and processes were so complex and had been hand built over many previous years, that the change would be too disruptive for current operations and the changes required were to complex to fully understand. Multiple third parties, including tier 1 consulting firms had looked at the problem but had not given the client a clear answer how best to proceed.

There was limited information about current systems as many original staff had either retired or left, and the only people that really understood them were involved in support with limited time available for another change project.

Over the course of the 8-week project, we captured and analysed over 20,000 data points about the systems involved, how they were connected, data flows, people using systems processes and many other aspects of the business involved. By linking and using this data, we were able to generate a detailed map of the entire problem area and model in detail, a view of the world post transformation. We were also able to model different scenarios and look at the implications of changing systems in different ways on the business.

Each scenario gave us a detailed understanding of what would need to change and the impact on systems, period, processes and customer.

We were asked to perform a nearly identical project for a different organisation recently. Through modelling using discovery to capture data automatically and analytics engine which is able to model future scenarios at scale we were able to dramatically improve on our first project (. We were able to analyse over ten times the volume of data and integrate many complex areas of the business. Furthermore, we could run in much faster time and at a cost which was less than we charged over four years ago at a time when song process in the market have been consistently going up.

We expect that the next time we run this, the volume of data we can process will increase further still and time to execute and price will fall again.