

RESEARCH PAPER

For the Many or The Few? What's the Best Approach to Building a Data Guided Organisation?

October 2019

Sponsored by



CONTENTS

Introduction	p 3
Key findings	p 4
Common data strategy goals	p5
Mixed results	p6
Why are data strategies failing?	р7
Organisational structure	p9
Data democratisation	p10
Facing the future	p10
Conclusion	p1 1
About the sponsor, Cynozure	p13

This document is property of Incisive Media. Reproduction and distribution of this publication in any form without prior written permission is forbidden.

Introduction

The digital economy and the technology that enables it are generating unprecedented qualities of data. Many organisations have been hoarding data for some years but unlocking the immense value of that data is a challenge that every business faces. It is a cross-organisational challenge spanning technology, leadership, cultural, and ethical considerations. The organisations which stand to gain the most from their data are building a data-guided strategy encompassing vision, people, operations, governance and technology.

Computing surveyed 150 decision makers, representing organisations from a wide variety of industries, including banking and finance, logistics, manufacturing, retail and the government sector, in an attempt to answer the question: When building a data-guided organisation, should data analysis be done by the many or the few?

This paper explores commonly shared objectives of data strategy and the success rate to date in meeting these objectives. We then cover what's holding back some businesses and the importance of the organisational structures that are constructed to derive insights from data, as well the part that new and emerging technologies are playing in data strategy: its key findings follow.

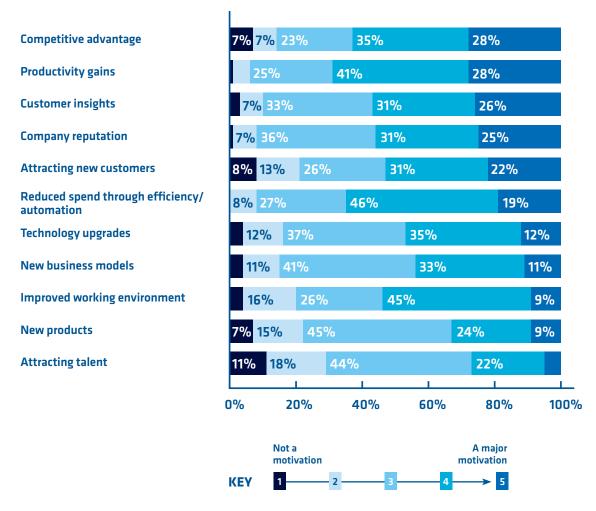
Key Findings

- Seventy-eight percent agreed or strongly agreed that having a data-literate business team was crucial to the future of their business, and 61 percent agreed that all organisations benefit from a data-guided culture, these are all areas that they are likely to be working on.
- The most commonly cited objectives of enterprise data strategy are productivity gains, reduced costs via greater efficiencies and automation, and competitive advantage.
- The success rate in meeting these objectives is decidedly mixed. Only 38 percent believed that their organisations data was at least mostly well managed and only 27 percent said it was easy to make data guided decisions.
- Only 28 percent of respondents said that they considered their organisations' data strategy to be anything more than "moderately" successful.
- The most frequently given reasons for data strategies failing to meet objectives are
 implementation costs, a lack of expertise and data governance issues. These headline
 reasons sit above a much more complicated picture consisting of infrastructure complexity,
 mismatches between data strategy and wider desired business outcomes, skills shortages,
 and organisational issues.
- In terms of organisational structure, having local specialist data teams across the business was the most popular way of organising data analytics, with a dedicated central team the next most popular option.
- Only 29 percent of respondents had implemented data democratisation by empowering individuals with their own analytics tools and platforms.
- Our survey recorded a fairly positive approach to the concept of data democratisation.
 41 percent agreed that it was likely to be the best way forward for their business, and only six percent disagreed.
- The success of data democratisation depends on a host of factors organisational, technical and cultural.

Common data strategy goals

Before we discuss how businesses are building data-guided organisations - and how successfully they are doing so - we must first establish what their motivations are when shaping data strategy. We asked respondents to rank several factors in their order of importance in shaping these strategies.

Fig. 1: On a scale of 1 to 5, '1' being not a motivation and '5' being a major motivation, how much of a driver were the following factors when it came to shaping your organisation's data strategy?



Increased productivity was the most frequently cited motivation. There are untold ways to use data analytics to increase productivity via optimising processes, identifying duplication and reducing waste. Data analysis can identify when employees are at their most productive and predict the purchasing patterns of customers. The possibilities are truly endless. Helping to boost productivity was the reduction of costs via greater efficiency. Business Process Automation (BPA) software is enabling businesses to automate repetitive business processes such as the purchasing and invoicing cycle, thus boosting productivity and reducing the costs inherent in manual procedures. Competitive advantage (our third most frequently cited motivator) theoretically follows.

Mixed results

We have a clear understanding of the common goals of data strategy. How successful have our respondents' organisations been in achieving these goals? Overall, the picture is best summarised as mixed. When asked the extent to which they believed that their organisation's data was well managed, only 32 percent answered "mostly," and only six percent "highly." These responses alone begin to hint that all is not well in the realisation of their data strategy goals, particularly when the fact that 26 percent of respondents simply answered "somewhat," or "not at all."

Fig. 2 : On a scale of 1 to 5, '1' being very difficult and '5' being very easy, how easy is it to carry out data-guided decision making at your organisation?

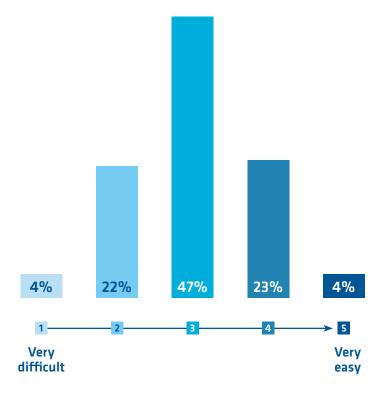


Figure 2 further illustrates participants' general lack of confidence in their organisations' ability to carry out data-guided decision making that is so key to them realising enhanced productivity and competitive gain. Whilst the greatest proportion of respondents' plump for the middle ground, more than a quarter of state that it is either difficult or very difficult.

To conclude the section of the survey on the success of data strategies, we asked, **"To what extent do you consider your organisation's data strategy a success overall?"** Again, a considerable majority of respondents appeared distinctly unenthused. Whilst 28 percent were reasonably positive with responses of "largely" or "highly" successful, 40 percent would only go as far as "moderately" successful. A further 32 percent of respondents were far less complimentary, only being able to muster either a "somewhat" successful or not successful at all.

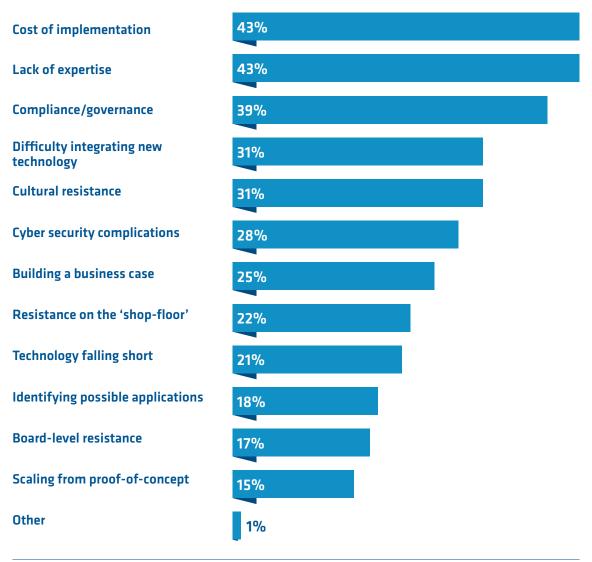
The fact that so many of our respondents are, at best, underwhelmed by the degree to which their organisations' data strategies have succeeded begs an obvious question: why?

Why are data strategies failing?

There is a range of reasons why businesses are failing in becoming data-guided. Computing asked those participating in our research to share areas where they had encountered obstacles during the implementation of data strategies.

The cost of implementation is one of the obstacles most likely to be encountered. This is an expected finding, but what does it tell us about the underlying reality of data in many organisations? Costs are escalating for many complex, related reasons. Infrastructure is typically becoming more and more complex, as more and more workloads move to the cloud, and often that complexity reduces the visibility of data and limits access to it. The basic task of keeping data clean and trustworthy becomes more and more challenging and integrating data and applications even harder (31 percent of respondents cited exactly this integration difficulty as an obstacle). For the many businesses still wrestling with the basics, turning data into actionable insight seems a million miles away.

Fig. 3: In which of the following areas have you experienced obstacles while implementing your data strategy?



Another possible reason for costs becoming an issue is a failure to align data strategy to wider business outcomes. If data strategies are put in place without due consideration being given to what exactly businesses want to achieve from data analysis and, crucially, a tangible value being placed on the realisation of this strategy, it is likely that, as the complexity of projects increases the costs, the executive enthusiasm necessary to support such projects through early obstacles may begin to wane. Any data initiative must start and end with the business case.

A lack of expertise – our second most frequently occurring obstacle – is also likely to feed into the problem of escalating costs. There are various aspects to this skills gap. Whilst there is undoubtedly a shortage of data science and analysis skills in the UK, many businesses could probably make better use of temporary, contract hires and third parties – particularly in the early days of projects. If huge amounts of money are spent on new, expensive hires the pressure to demonstrate early success mounts up. Starting small is more likely to be a successful approach.

There is also likely to be pressure arising from cultural resistance to change (and 30 percent stated that this was a problem for them) among the wider business. If this cultural resistance permeates the boardroom then data strategies are highly likely to fail.

There are also organisational underpinnings to the expertise issue – and indeed that of executive support. If an organisation does not put in place one high level individual with ultimate responsibility for data – its collection, storage, governance, general use and of course deriving increased value and actionable insight from it – they are facing a greater challenge. While a Chief Data Officer (CDO) is responsible for setting and shaping the data strategy for organisations, they cannot create a data-guided culture on their own. It is their job to influence and sell the value of smarter use of data to their executive peers and appoint others to do the same throughout the wider business.

Data governance is also a key area of responsibility for a CDO – and this was our third most frequently cited obstacle to successful data strategy implementation. Good data governance is vital for data strategy to succeed. This goes beyond the importance of compliance with GDPR and other industry specific mandates to the question of whether business decision makers, other employees and indeed customers, can trust how their data is collected, stored and used. This is clearly an issue of considerable concern to many of our respondents. When asked about the degree to which they agreed with various statements about data collection and use, 66 percent agreed or strongly agreed that, "data collection and use presents difficult challenges around privacy."

43 percent agreed or strongly agreed that it presented equally tough ethical questions.

It's not controversial to state that public trust in how private enterprise takes care of their data and exactly what they use it for is at a historically low ebb, although interestingly relatively few users of the social media platform most directly associated with murky data privacy ethics have actually changed their behaviour as a result of becoming aware of them¹. Nonetheless, enterprises have a set of ethical obligations around data collection, storage and analysis. Customers and any relevant third parties have an ethical right to be informed of how their data will be used and secured and what, if anything, they stand to gain from it.

The obligation to make the motives and processes of data collection and analysis more transparent is not just an ethical obligation. It has weight of the law and a commercial imperative at its centre (though often the ethical line is drawn before the legal one). This is because trust is very much a two-way street. Whilst customers have a right to know that their data is being used responsibly, business users have to trust in the veracity of data for analysis. If they don't, the objective of deriving business value from the application and analysis of data will not be met.

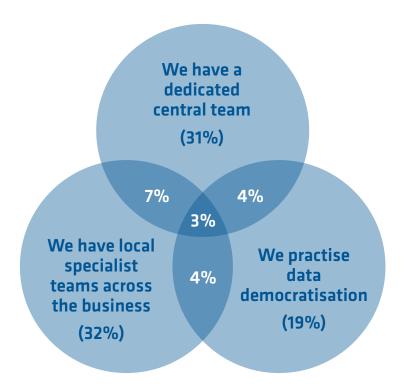
https://www.socialmediatoday.com/news/will-attitudes-towards-digital-privacy-changein-2019/545242/

Organisational structure

A crucial determining factor in how successful data strategy is likely to be is the organisational structures that businesses have in place to derive insights from data. The diagram below shows us that businesses are split in their approach, and that what works well in one organisation will not necessarily work in another. The most popular approach (but only by a small margin) was to have local specialist teams across the business with the dedicated central team the next most popular option. 29 percent were following the practice of data democratisation, where individuals are empowered with their own analytical tools. Very few are taking a hybrid approach of any kind - the most popular, at 7 percent, was a combination of a dedicated central team and further specialist teams across the business.

In an ideal world, providing decision makers with instant access to data and analysis tools means that time to insight should be reduced, decisions made faster and more easily, and greater agility should result. Having to refer to central data teams slows down time to insight and action, and a democratised model is supposed to remove this bottleneck. However, whether data democratisation works exactly as it is envisioned is dependent on many related factors.

Fig. 4: What organisational structures do you have in place to deliver data, insights and business value from data?



Again, the quality and veracity of data is of paramount importance, as are the abilities of users and degree of "data-centricity," of the prevailing working culture. Much depends on the tools that users have at their disposal. Are dashboards easy to use? Do users understand the implications and limitations of the data? This is where the need to be data-guided as opposed to data-led is clear. Data models are, by their nature, limited, simplified representations of reality, even when

the data is well maintained and accurate. The judgement of those making business decisions based on data remains key.

Going into detail on the usability of analysis tools was beyond the scope of this paper but previous analysis conducted by *Computing* in this area has found that many business decision makers are struggling to get the most out of the analysis tools they have. In many cases, they are only managing to use BI type tools to identify events that have already occurred. This falls far short of the basic data strategy objectives of being a data-guided organisation and deriving insight from data.

Data democratisation

Overall, our respondents were reasonably positive about data democratisation being the best approach to building a data-guided organisation. 53 percent placed their opinion in the "neither agree nor disagree" box. This left 41 percent agreeing or agreeing strongly, with only six percent in disagreement.

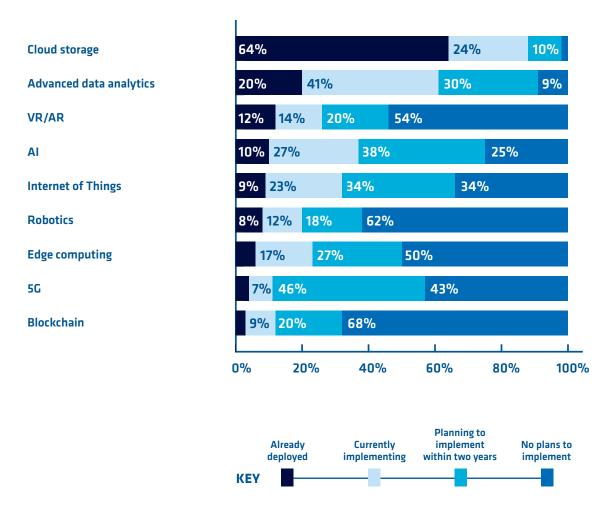
Whether or not data democratisation is successful doesn't just depend on the quality of data and analysis tools. It also relies on the wider organisation and its view of data. This paper has already set out the case for a CDO and what they can bring to a business keen to gain greater value from its data (and indeed public or third-party data.) However, what a CDO cannot do is implement and maintain a data-guided culture by working solo – particularly in a large, distributed organisation. What they can do is build specialist data teams which are accessible to all parts of a business and ensure that they have data champions throughout the organisation who act as evangelists for the greater use of data. These evangelists can train and mentor employees of all levels to understand the importance of data-guided decision making and cultivate an individual sense of responsibility for the collective success of data strategy.

Facing the future

We are collectively drowning in data, yet the future looks likely to present us with ever increasing volumes of it as well as diversifying data types and increasing speed thanks to 5G. All of this should be considered when building and executing data strategy. *Computing* asked respondents about their plans for various new and emerging technologies. The most popular technology to currently be implementing was advanced data analytics. However, the technologies that were in the frame for most respondents within the next two years were 5G, Al and the Internet of Things – in that order.

The maturing and convergence of these technologies presents both a huge challenge and a phenomenal opportunity for businesses to transform not just the way that they interact with customers and deliver goods and services, but across their entire operations. All already has the capacity to allow business to automate at least some data preparation and cleansing, and the tasks which can be automated are likely to become more complex. This points the way to further data democratisation as self-service analysis tools become increasingly user friendly – and the importance of a data-guided culture becomes received wisdom.

Fig. 5: To what extent have you implemented the following new and emerging technologies in your organisation?



Conclusion

As the volume and variety of data available to the enterprise have expanded, the realisation has set in among business leaders that the data itself is of little value. It is the analysis of this data which presents the opportunities to business and the potential commercial gain. Participants in our research hoped to use this analysis to find ways to make their businesses more productive and more efficient – and gain a sharper competitive edge as a result.

However, our research uncovered a decidedly patchy success rate in this endeavour. Fewer than 40 percent of those we spoke to believed that their organisations data was at least mostly well managed. More than a quarter were decidedly negative in their responses. The same proportion said that it was difficult - or very much so - to make data-guided decisions. Overall, only 28 percent said that they considered their organisations data strategy to be more than "moderately" successful.

Data strategies are failing to hit the mark for many reasons. Escalating costs, a lack of the necessary expertise and concerns about compliance with legislative and industry mandates were the most frequently cited concerns but these are in themselves made up of many contributing issues.

Many of these challenges arise from problems in the organisational structure of the enterprise. In some ways the responsibility for data strategy should be distributed across the board table – and beyond to the wider business because whether it succeeds or fails is certain to affect commercial success, and ultimately survival. Concentrating the high-level responsibility in a CDO makes sense in the medium term, (provided they command equal clout with their peers,) because data strategy needs to be a full-time occupation rather than simply part of a much wider set of responsibilities.

Beyond the boardroom, should data analysis be for the many or the few? It's complicated. There was some agreement among our respondents, although it fell short of consensus, that greater democratisation of data was likely to be the most effective way of building a data-guided organisation. Having said that, only 29 percent of respondents were actually doing this. More popular options were a dedicated central team or local specialist teams throughout.

How successful data democratisation is at providing the foundations for a data-guided organisation depends on a host of other factors. They include the quality of visualisation and analysis tools, the culture and aptitude of employees, the availability of specialist skills when supplementary expertise is required, the size of the company, the industry in which it operates, and the ability of CDOs to establish data evangelists to sell the possibilities of data-guided business culture and help others make it happen. Given that 61 percent of our respondents agreed that all organisations benefit from a data-guided culture, these are all areas that they are likely to be working on.

One area that a very high proportion of our respondents agreed upon were the stakes in the digital economy. Seventy-eight percent agreed or strongly agreed that having a data-literate business team was crucial to the future of their business. The only surprise was that this number wasn't higher, because whether data-guided decision making happens is going to determine whether an enterprise thrives in the digital economy or withers on the vine.

About the sponsor, Cynozure

A data and analytics strategy consultancy, Cynozure is on a mission to change the way business is done through positive use of data.

In collaboration with forward-thinking organisations, governments, and individuals Cynozure advises – and delivers on – all aspects of data and analytics strategies. This is achieved through advisory services, coaching and mentoring, solution and organisational design, technology implementation, business change programmes, and on-going support services.

Cynozure's team and associates are thought leaders and experts in this space. Many have a background in industry, and frontline experience of what is required to create leading data-guided organisations. Now they have a united goal: equip leaders and their organisations with the ability to understand and leverage their data. Cynozure will help identify the value that exists within data, and how it can be used to transform business strategy, products, services and operations. There is a clear focus on ensuring that incredible business (and social) value is delivered, to maximise the transformational power of data across society.

Organisations that have benefited from Cynozure's approach include The National Trust, Soho House, Tokio Marine Kiln, MSD, The Really Useful Group, Camden Council, Lloyd Webber Theatres, Kondor and Tungsten Network.

For more information:

Web: www.cynozure.co.uk

Twitter: @cynozure_uk

Linkedin: linkedin.com/company/cynozure

Email: hey@cynozure.co.uk

