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How (and Why) to Build a Data-driven Organisation



Artefact - **Value by Data**

Data is one of the most critical business assets a company can have. “Data-driven companies that harness insights across their organisation and implement them to create competitive advantage are growing at an average of more than 30% annually and are on track to earn \$1.8 trillion by 2021.”

A crucial question remains: how can companies best use the data they possess? How can they identify which data has the potential to boost efficiency, increase ROI, or reveal new sources of revenue? How can they turn data into value, across the entire organisation?

Creating a data-driven company is a powerful strategy for driving growth, profitability, and competitive advantage. One only need look at world leaders like Amazon, Google, or Facebook: they all have data to thank for their dominance, profitability, and constant ability to innovate. Yet many companies striving to become data-driven have difficulty meeting their goal: a 2018 NewVantage Partners survey revealed that, despite nearly unanimous interest in building data-driven organisations, only 32% of companies were successful in their efforts.

What mistakes are companies making?

The biggest problem facing companies is that their data is siloed, with many different sets of data stored in different departments. In fact, the average company keeps more than nine copies of any given piece of information. Different departments might have completely different uses for the same piece of data and might be able to extract completely different insights that are useful to the company. For example, financial and accounting departments may look at performance and sales data and see a way to reduce spending, while the marketing team may see an opportunity to improve existing products or services.

But that cannot happen if the data that is being collected isn't visible to them. To achieve a state of mature analytical competency, data silos must be broken down to enable integration across the company.

When every department across an enterprise, from sales and marketing to finance and customer service, is able to leverage the same data, they will be able to make strategic – and profitable – insight-based business decisions.

What does it mean to be data-driven?

Companies which are data-driven put data and analytics at the heart of their overall business strategy. They leverage data whenever and wherever possible in order to enhance business efficiency and effectiveness. They make decisions based not on mere observation or “gut feelings”, but on data collection, analysis, and interpretation. This approach allows companies to examine and classify data according to importance, enabling them to better serve their clients.

By using data to drive their actions, organisations can rapidly and precisely identify their most valuable prospects and customers, personalise the way they communicate with them, and direct them towards the most appropriate products and/or services they have to offer. Data can also help organisations increase their productivity and optimise their teams' schedules by accurately forecasting trends and sales, and fine-tuning their supply chains to meet changing needs.

What are the benefits of a data-driven organisation?

The rewards of becoming a data-driven company are multiple, but the upshot is that by becoming data-centric, it will enable the creation of long-term value for the company and its customers.

Some of the major benefits include:

- **Consistency:** The dangers of making decisions based on gut feeling alone will disappear, once they can be made using meaningful insights and information.
- **ROI:** Data and analytics enable organisations to unlock hidden business opportunities and revenue streams, thereby increasing ROI.
- **Awareness:** Data-driven companies are more customer focused and benefit from deeper insight into their customers and their journeys.
- **Responsiveness:** Thanks to their improved agility, data-driven companies are better able to meet changing market needs.
- **Longevity:** It is easier to become and remain competitive among forward-thinking companies that are also using data to their advantage.

“Data, like oil, is a source of power. And those who control it are establishing themselves as masters of the universe, just as oil barons did 100 years ago.”

– Bernard Marr, Technology Expert

The five steps to building a data-driven organisation

A data-driven company cannot be built overnight. Crafting or changing the way a company works requires time, effort, and both tangible investments – such as hiring smart talent and purchasing data collection/analysis tools – and intangible investments, such as developing a strategy and training staff.

The following five steps must be taken to build and maintain a data-driven organisation.

– **1. Create a single source of truth:** In large organisations, the same data is often stored in any number of different systems. This is problematic, as users can pull the same metric from different systems and get different statistics. A single source of truth is the practice of structuring information models and associated data schema so that every data element is stored only once. By always storing data in exactly one location, the risk of employing inconsistent versions of that data is eliminated.

– **2. Define a standard data dictionary:** All actors involved in building a data-driven organisation need to agree on a data dictionary with clear, unambiguous definitions to help team members with different areas of expertise get on the same page. It should function as a sort of “super catalogue” to provide all necessary metadata to designers, users, and administrators as an informational resource management tool.

– **3. Make data easily accessible:** Everyone in a data-driven organisation needs access to data (which is not to say everyone should have access to all data – the needs of individual employees must be assessed). Because no matter how high-quality and clean the data, it’s next to useless if the right people can’t access it. Data-driven organisations need to let individuals know what data is

available; they should also feel comfortable requesting access to permitted data.

– **4. Ensure data literacy for all:** As organisations increase data access for their staff at all levels, there’s an implied expectation that they will know what to do with the data once it’s shared with them. But simply making data more accessible isn’t enough. Good access to data must be accompanied by good understanding of data. Training to reinforce basic data literacy across the whole employee base is crucial. Three areas of data literacy with which every employee should be comfortable include:

- **Descriptive statistics:** the analysis of data that helps describe, show or summarize data in a meaningful way such that, for example, patterns might emerge from the data.
- **Data visualisation:** helps users analyse and reason about data and evidence by making complex data more accessible, understandable and usable; it can enhance and accelerate collective problem-solving.
- **Inferential statistical tests:** these are used to reach conclusions that extend beyond the immediate data alone. They may be used to make inferences from existing data to more general conditions.

“A data scientist uses the scientific method with data, a career path for a few people. But for organisations that want to utilize data, (1) reading, (2) working with, (3) analysing, and (4) arguing with data form four key characteristics [of Data Literacy]. People can develop skills in these components to become better in this digital economy.”

– Jordan Morrow, Global Head of Data Literacy at Qlik

– **5. Provide reliable data governance:** Data governance is defined as “the overall management of the availability, usability, integrity and security of data used in an enterprise. A sound data governance program includes a governing body or council, a defined set of procedures and a plan to execute those procedures.”

Data governance is absolutely critical in order to create

a successful data-driven organisation. It establishes the policies and processes pertaining to a company's data assets, including ownership and responsibility, and enables an enterprise to manage usage and approvals, handle inquiries, and resolve issues.

– **6. Prioritise executive sponsorship:** If a company's leaders don't believe in using data themselves, it will be almost impossible to get their staff to adopt a data-driven mindset. Without strong executive sponsorship to overcome organisational inertia, efforts to become more data-driven may be derailed. The process of changing the company requires massive transformations both to the organisation and its mindset, but data adoption by the executive team will smooth the path to success.

When is an organisation ready to become data-driven?

In order to create a data-driven enterprise, five core competencies must be aligned. To know if a company is mature enough to begin the journey, the following questions must be answered.

People

Are there people with the right skills in the organisation? If not, is the company seeking to train employees, hire new talents, or find the right partners to assist their transition? Is the C-suite leading by example?

Processes

Have the processes required to implement a data-driven organisation been designed? Are people at all levels of the organisation prepared to use them properly?

Technology

Has an audit been carried out to see which tools and technologies are needed for a successful transformation to a data-driven organisation? Are they available to users? Are users trained to employ them?

Governance

Is the C-suite committed to leading by example, offering vision and incentives to all employees? Do the decision-makers trust and use data themselves?

Execution

Management, planning, technology, staff: are all elements in place to ensure that the projects necessary to becoming a data-driven organisation can be properly carried out?

Only after these five competencies are in place can a company begin moving toward the goal of being fully data-driven.

The data-driven organisation and AI

Although data is the lifeblood of any data-driven organisation, Artificial Intelligence (AI) is its beating heart. AI technologies can almost entirely automate insight gathering and decision making, dramatically increasing the value of a company's data.

But many businesses are hesitant to leverage and implement AI technologies. A McKinsey & Company survey found that while 40% of companies are contemplating the use of artificial intelligence in business, only 20% have adopted it. This gap may be the result of the inability of some decision-makers to see how AI technology can be used within their own companies, or uncertainty about where to begin.

"AI can deliver significant competitive advantages, but only for firms that are fully committed to it. Take any ingredient away – a strong digital starting point, serious adoption of AI, or a proactive strategic posture – and profit margins are much less impressive. Technology is a tool and in itself does not deliver competitiveness improvements," states the McKinsey survey.

How companies are turning AI into tangible benefits According to a recent Deloitte survey, 83% of the most aggressive adopters of AI and cognitive technologies said their companies have already achieved either moderate (53%) or substantial (30%) benefits.

What are some of these benefits?

– **1. Reduced costs:** With AI, work is performed faster and more accurately, leading to reduced expenditures. Fewer man hours also bring significant savings to the organisation.

- **2. Increased engagement:** Companies can invest more time and money in engaging with the workforce. This creates a stronger company culture and keeps retention rates high.
- **3. Improved efficiency:** Automation improves time to market and enables stronger financial results while companies concentrate on adding value for their customers.
- **4. Enhanced agility:** IA enables businesses to scale up or down at a moment's notice, allowing them to seamlessly meet seasonal or other variable business requirements.
- **5. Better decision-making:** AI can analyse massive amounts of data and turn them into actionable insights that can be used by businesses to more effectively identify and implement the right approaches to achieve improved performance.

Remember: being data-driven is a team sport

In order for firms to successfully adopt AI, it is vital to embed a collaborative culture at every level of the organisation.

“Establishing a truly data-centric culture means every single person – regardless of expertise or tenure – should be enabled to make better decisions based on data,” writes Francois Ajenstat of the Forbes Technology Council. “If data is accessible and made ubiquitous across all layers of an organisation, it helps every employee maximize value across all corners of the enterprise to transform not only their roles or teams, but entire industries. Leveraging analytics at scale not only empowers people to make data-driven decisions, but can also help future-proof organisations by sharpening their competitive edge.”

“Gartner predicts that, by 2020, 80% of organisations will initiate deliberate competency development in the field of data literacy, acknowledging their extreme deficiency. Data and analytics leaders should evaluate and close competency gaps today to secure the data-enterprise of tomorrow.” – Mike Rollings

Artefact - Value by Data

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Our broad range of solutions in data consulting and digital marketing are designed to meet our clients' specific needs, always conceived with a business-centric approach, and delivered with tangible results. Our data-driven services are built upon the deep AI expertise we've acquired with our 1000+ client base around the globe. Our 1000 employees in 20 offices

are focused on accelerating the digital transformation of enterprises thanks to a unique mix of company assets: state of the art data technologies, lean AI agile methodologies for fast delivery, and cohesive teams of the finest business consultants, data analysts, data scientists, data engineers, and digital experts, all dedicated to bringing extra value to every client.

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