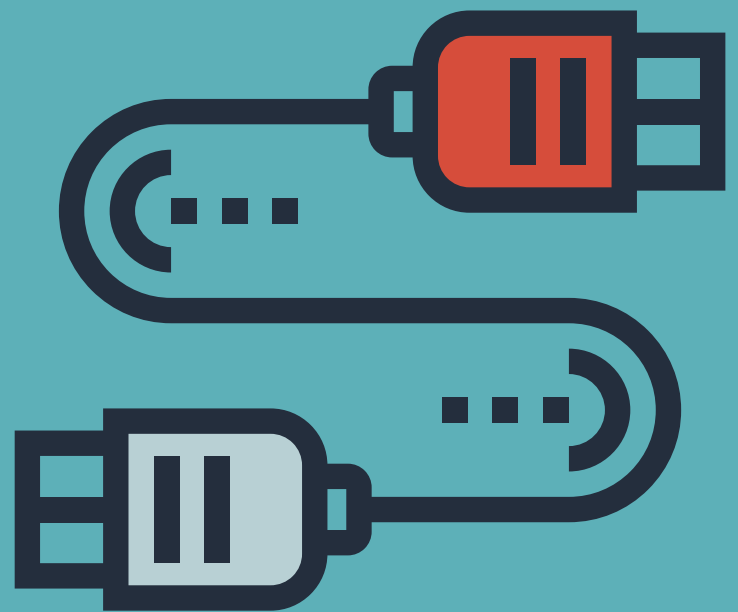# LONDON RESEARCH

Adobe

HOW SMART BUSINESSES USE DATA TO EMPOWER THE ENTIRE ORGANISATION

Data is a company's most valuable asset. Just look at *Forbes*' World's Most Valuable Brands 2018 list. No longer is a company's worth evaluated by its tangible assets—data has changed all that.

Apple, Google, Microsoft, Facebook and Amazon rank one to five. They have been known to trade for more than ten times the value of their tangible assets, and they are now among the most valued organisations in the world. Their success is built on collecting, owning, protecting and using customer data.

But it's not just tech brands that rely on data. Every business today generates a huge volume and variety of data from a growing number of external and internal sources. The ability to analyse this information scientifically is critical to gaining a competitive edge.
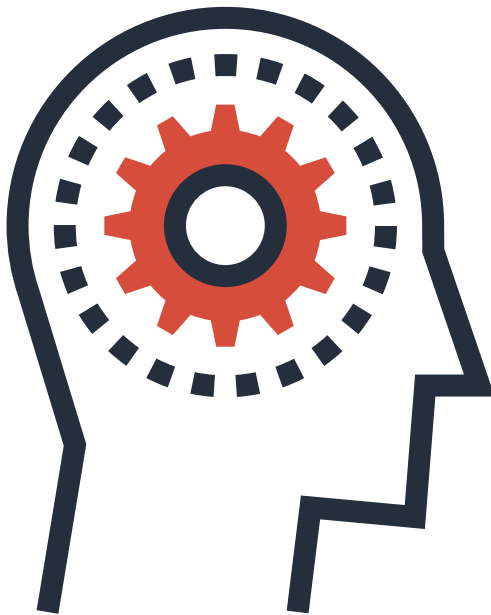
Data-driven or data-centric?

So, no doubt your organisation has plenty of data. But are you data-driven, or are you data-centric?

Data-driven: Being data-driven means getting the tools in place to achieve better data quality, and encouraging a culture that acts on data. It is about being able to actively use data in order to make decisions. It is part of the journey towards data-centricity.

Data-centric: Being data-centric means data science has been embedded into the core of the business. It relies on re-organising the company around data, and empowering decision makers with a 360-degree view of the whole business and a comprehensive understanding of how data is being used.

Global strategic consulting firm Winterberry Group defines data-centricity as "reflecting the extent to which an organisation is culturally and operationally prepared to apply audience data as a source of actionable insight in support of advertising, marketing and audience engagement".

Data-centricity signals an end to data silos, allowing data to be shared centrally, and applied by multiple departments for multiple purposes. Data-centricity allows organisations to realise the full potential of data scientists. "If you hire good data scientists, they know what algorithm to use," says Anil Kamath. "The challenge for them comes from not knowing what kind of data is available in the organisation, how to get access to it, and then that the data itself is not necessarily clean – or labelled in a common language – and ready for the data scientist to put to use."

Data-centricity is not only within reach for large organisations. Every company can achieve this hallowed state, not just the tech giants. Yet while awareness of the importance of putting data at the heart of an organisation is high, progress is slow. According to Winterberry Group's Data-Centric Organisation 2018 report:

- 90% of marketers and publishers are "intensely focused on achieving data-centricity across their organisations".

- 1% said they were "extremely confident" their organisations have the right expertise, experience, and skills to get the most value out of their data.

- Over 87% cited data analytics as the top skill needed to maximise data usage.

- Only 40% of survey respondents described their organisations as at least "fairly data-centric".

Democratising data

Data democratisation is a cornerstone of creating a data-centric culture. It relies on every employee having access to relevant data that will enable – and enhance – their daily work. It allows people to see how the application of data can drive innovation, spawning new ideas and creating greater value.

Organisations need to banish so-called data mavericks who hoard expert know-how, and instead spread the knowledge. By removing gatekeepers that can create bottlenecks in the data flow, every employee can have access to relevant data at any time to inform business decisions. This drives faster decision making and creates a more agile way of working. It is empowering.

> *"The goal is to enable the business and product teams to capitalise on data assets and drive insights and predictive analytics. With this [data-driven] model, businesses can integrate disparate big data at scale and align stakeholders across the company around a common language, consistent measurement, data governance, and actionable insights."*
>
> **Cynthia Stoddard**
> Senior Vice President and Chief Information Officer, Adobe

The smashing of silos inherent in data-centricity is driven by analytics tools. These can connect previously segregated data, allowing it to be centrally managed. Analytics tools can deliver the right data and visualisations to the right person, giving them the information they need to excel.

For example, Adobe Analytics is able to ingest data from any channel to help provide the best possible real-time insights, attribution and predictive analytics. The software empowers non-data scientists to carry out complex analysis of curated data, allowing them to create reports, and giving them the tools to make quick decisions based on the right insights.

Such advanced analytics enable companies to power customer intelligence. This capability allows for better customer segmentation, cross-channel analysis, audience enrichment and prediction.

Data visualisation is another powerful tool, making sense of data analytics to those who aren't data scientists. It allows employees across the company to quickly identify trends, anomalies and patterns within the company's analytics dashboards and reports.

Sophisticated but simplified analytics tools are driving the adoption of data science and analytics skills among a wider employee base, speeding companies on their way to data-centricity.

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> Research firm Gartner has predicted that by 2019, the analytics output of business users with self-service capabilities will surpass that of professional data scientists.
>
> (How to Enable Self-Service Analytics and Business Intelligence: Lessons From Gartner Award Finalists, October 2017).

> Companies aspiring to deliver the best possible customer experiences must be able to unify different types of information, including behavioural, transactional and operational data.

Open data

Companies aspiring to deliver the best possible customer experiences must be able to unify different types of information, including behavioural, transactional and operational data. These different sources of data will inevitably come from a range of different channels and technology platforms, including marketing technology, CRM and ERP solutions.

According to analyst firm Ovum, one of Adobe's strengths as a vendor is the Open Data Initiative (ODI) launched in partnership with Microsoft and SAP. The initiative is aimed at breaking down data silos and deriving greater value from customers' data to deliver improved and connected customer experiences.

According to Ovum's SWOT Assessment: Adobe Experience Cloud: "With the ability to connect data more effectively across an organisation, Adobe will be better positioned to deliver a new category of AI-powered services for customers allowing them to more readily apply AI and advanced analytics for real-time insights."

The Open Data Initiative is built on three key principles: the ability for customers to own and control their own data; the importance of connected data to power AI-driven outcomes; and the need for the Initiative to be open and extensible.

A good example of a brand benefiting from the ODI is the consumer goods giant Unilever. The company wanted to create a campaign for its recycled packaging targeted to environmentally conscious customers. By stitching together back- and front-end data, using an ODI single data model, they were able to understand data patterns in order to deliver personalised marketing, while at the same time reducing food and plastics waste.

The potential of AI

In the 2019 Gartner CIO Agenda Survey, AI was ranked as the most disruptive technology, ahead of data and analytics in second place.

AI is increasingly powering data democratisation, enabling employees not skilled in data science to develop and apply analytics models for business analyses, using templates and dashboards.

While analytical tools summarise and report the specific questions asked, AI and machine learning can pre-empt insights not yet considered. These insights can empower a range of non-technical employees. It is why, according to a 2017 study by MIT Sloan Management Review and The Boston Consulting Group, 85% of executives believe AI will enable their companies to obtain or sustain a competitive advantage.

AI can assist with the collection, cleansing and processing of data. This eliminates the majority of basic tasks formerly carried out by data scientists, such as data preparation, feature engineering and selection, and algorithm selection and evaluation.

That's not to say large enterprise companies don't need skilled data scientists. To build and run successful big data teams and projects, data scientists remain an integral part of the team. But technology can now liberate this scarce breed from more mundane tasks, allowing them to apply their skills to those that require human intervention, such as building new predictive models.

By democratising data, data scientists can make a greater impact on the wider business.

AI also enables software engineers, data engineers and business analysts to collaborate more closely with data scientists, effectively democratising the role of the data scientist too.

As Deloitte reported in an article in December 2018: "Some companies have started effectively expanding their data science efforts by providing data science automation tools to a mix of professionals including data scientists, data engineers, statisticians, and business users. Others find that breaking down the data science role into a collection of more specialised roles with overlapping skills makes it easier to get the mix of skills required to staff projects."

Adobe Sensei makes Adobe Analytics more powerful with AI and machine learning that help companies surface "unknown unknowns", i.e. hidden opportunities or risks that the software uncovers through its Virtual Analyst. Among other benefits, it can help to detect data anomalies and analyse touchpoint contributions to conversions.

According to the Forrester Wave Customer Analytics Solutions Q2 2018 report: "Like most vendors in this space, Adobe has jumped on the artificial intelligence bandwagon, but most of the Sensei capabilities in Adobe Analytics existed long before being rebranded as AI. Still, Adobe's vision of using AI to automate insight discovery will continue to resonate with data-driven marketers."

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Data scientists: the change-makers

Data fuels today's businesses, across every industry. Organisations that undergo the necessary technological and cultural transformation will be well positioned to unlock the latent power of their enterprise data to thrive in today's experience economy. Customer relationships, after all, are more critical than ever, and building and nurturing these relationships relies on data.

To do this, they must be armed with resources that will increase their value and overall impact – namely, the right analytics tools, and a wider workforce that is able to access and utilise data in their everyday work.

With best-in-class technology, companies are able to streamline and automate previously manual and labour-intensive processes such as generation of customer insights, personalisation, lead scoring, anomaly detection and marketing performance management.

While better analytics technology is democratising the availability of insights within the organisation by empowering those without analytics expertise, enterprise companies are increasingly employing data scientists to help frame their approach to data-driven customer experience strategies.

"You need to think of data scientists as not just experts in using algorithms or providing insights, but in terms of how can they be change-makers in their organisation," says Kamath.

As far back as 2012 the Harvard Business Review called the data scientist "the sexiest job of the 21st century" and the cachet associated with this job title is still very much apparent today. But as volumes of data continue to grow, so the acute shortage of data scientists becomes more evident.

Additionally, a 2017 report, The Quant Crunch, carried out by Burning Glass Technologies, Business-Higher Education Forum and IBM predicted that demand for data science jobs would rise 28% by 2020. In addition, the 2019 State of the CIO report revealed that 42% of respondents cite data science and analytics roles as the most difficult to fill.

It is not a problem that can be addressed overnight, and although this is not a role that will imminently be replaced by technology, the good news is that data democratisation is making companies less reliant on data scientists.

In summary, companies must ensure that they get the right technology in place so that data and insights are accessible to all those that can benefit across the organisation. They must also strive to get the right talent in place to make sure they are asking the right questions of the data and extracting the most valuable insights. Truly leveraging data and creating competitive advantage can't be achieved with a piecemeal approach. Organisations must rebuild themselves, with data at the heart.

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About London Research

London Research, set up by former Econsultancy research director Linus Gregoriadis, is focused on producing research-based content for B2B audiences. We are based in London, but our approach and outlook are very much international. We work predominantly, but not exclusively, with marketing technology (martech) vendors and agencies seeking to tell a compelling story based on robust research and insightful data points.

As part of Communitize Ltd, we work closely with our sister companies Digital Doughnut (a global community of more than 1.5 million marketers) and Demand Exchange (a lead generation platform), both to syndicate our research and generate high-quality leads.

For more information, visit **https://londonresearch.com**

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About Adobe Analytics

Customer experience is driving the next wave of competitive advantage. To deliver standout experiences, you need clear, fast and actionable insights. This means moving beyond simple data collection and web analytics to true customer intelligence. With Adobe Analytics, driven by artificial intelligence and machine learning, anyone in the enterprise has the ability to understand and optimise how customers interact with their brand across all channels simply, instantaneously, and at massive scale. Adobe is the only company that unites content creation with data insights, blending art and science, to help brands activate compelling and consistent experiences across every device and customer touchpoint to help organisations become experience businesses.

For more information, please visit
https://www.adobe.com/uk/analytics/adobe-analytics.html