E-BOOK

Futurealist on big data:

It's all about the people

Contents

Key takeaway

The futurist, realist and Futurealist.

- Big data promises to help businesses uncover opportunities they never knew existed, including new products, better services, and entirely different business strategies.
- But the volume of data grows substantially every day, making it hard for businesses to know what data to analyse and what to ignore.
- Businesses that don't embrace big data face extinction. The key lies in knowing what data they have, where it resides, and what questions to ask. Few get it right – less than half of all big data projects produce measurable results.
- Before diving in, business should ensure they have the right skills, systems, and processes in place, and that they have buy-in from everyone in the organisation.
- Stumbling blocks to big data success include disparate data systems, legacy technology, complicated BI tools, internal resistance, and security and legislative considerations.
- For the Futurealist, any BI project is ultimately about empowering teams to better serve customers and is as much about people development as technology enablement.

Big data: It's all about the people

The Coca-Cola Company.

Last year, the Coca-Cola Company found inspiration in an unlikely place: the humble vending machine. Unlike regular vending machines, which have limited choices, the 'Coca-Cola Freestyle Fountain' let consumers mix flavours to create their own concoctions. Turns out a lot of people like to add a dash of cherry to their Sprite, resulting in the company launching a new drink: Sprite Cherry.

The popular drink might not exist today if the company had not collected and analysed data from its Freestyle Fountains, which helped it understand how consumers experiment with its products.Big data promises to help businesses uncover opportunities they never knew existed. Buried in oceans of information are a handful of "ah-ha moments", like Coca-Cola's, that can evolve into new products, better services, and entirely different business strategies.

But, according to the IDC, by 2020, there will be enough data in the world to fill a stack of tablets equivalent to 6.6 times the distance between the Earth and the moon. Try finding a Boeing in that haystack, never mind a needle.

Yes, the future looks exciting through the lens of big data but there's a lot that organisations need to consider before they dive in.

In the first article in the Sage Futurealist Series, we look at big data from three perspectives:

The futurist, who is excited and optimistic about the potential of big data to transform businesses and industries.

The realist, who adopts a more cautious, risk-aware approach to big data, covering all bases to protect the organisation.

The Futurealist, who considers both sides but changes the outcome by taking a well-planned, people-centred, strategic approach.

The futurist's take on big data

When futurists think about big data, they see greater efficiencies, increased productivity, reduced costs and business growth.

For the futurist, any business that does not build its strategy around data is dead in the water. Nearly 80% of enterprise executives in one Accenture study said companies that do not embrace big data will lose their competitive position and could face extinction.

Big data is big business: Forrester predicts that the global big data software market will be worth $31 billion this year, up 14% from 2017. It's the new currency and it overarches everything else.

It's hard not to get excited about the future. Artificial intelligence (AI) and machine learning (ML) promise to transform businesses, reconfigure workforces, optimise infrastructure behaviour, and blend industries through radically improved decision-making and process automation. The IDC expects global spend on AI to reach $57.6 billion by 2021, and 72% of business leaders told PwC that AI will be a 'business advantage' in the future.

Big data gives organisations an opportunity to use analytics to drive digital transformation, redefine the customer experience, and create a new sense of relevance, rather than just providing a product or service.

But, for the realist, it's more complicated than it sounds.

The realist's take on big data

When realists think about big data, they see information overload – and it's growing rapidly.

By 2020, 1.7 megabytes of new information will be generated every second, for every human being. By then, there will be 44 zettabytes of data in the world, up from 4.4 zettabytes in 2015.

But data in and of itself is useless. Organisations need to know what data they have, where it resides, and what questions to ask.

Surprisingly few organisations get it right: While 95% of Fortune 1000 businesses have undertaken a big data project in the last five years, less than half (48.4%) have achieved measurable results. And Gartner reports that only 15% of businesses have deployed their big data projects to production.

There's a lot to get right before an organisation can attempt a big data project, including accessing and preparing the data, finding the right skills and technology, getting buy-in from everyone in the organisation, and most importantly, ensuring the right systems and processes are in place to protect the information.

Data and project sprawl

In most organisations, data resides in a number of different systems. These silos make it difficult to know what data a business has, what state it's in, and how to scrub and prepare it for use in analytics projects.

Data preparation is arguably the most important consideration because inaccurate data produces inaccurate insights, which could harm the business or its customers.

It's also common to find multiple departments within an organisation running their own business intelligence (BI) projects. This is understandable since the marketing team wants something different from the data than the finance team. But this disjointed approach to BI does not produce the kind of insights that transform businesses.

Only when systems are integrated, and all company data can be accessed in one place, by everyone who needs it, will real opportunities emerge. But legacy technology is often a major stumbling block to achieving this.

Technology, tools and culture

Many businesses run on legacy systems that are not powerful enough to process data on the scale needed today. But they've invested a lot of money in their infrastructure and ripping and replacing it will be an expensive, disruptive, and unrealistic exercise.

Then there's the BI tools, many of which can only be understood by data scientists – and there aren't enough scientists to go around. While more proprietary and open source tools are coming onto the market that are geared towards the business user, another challenge businesses face is getting buy-in from everyone in the organisation as they shift towards data-driven cultures.

But changing a company culture is not a quick or easy process – and many people are resistant to change. Failure to secure everyone's buy-in could quickly derail big data projects, resulting in lost time, money and resources

Security

An even bigger consideration for a data-driven organisation is security. As the new currency, data is extremely valuable to cybercriminals and rogue employees who will find any opportunity to steal intellectual property and other sensitive information for their own financial gain.

This comes at a time when authorities are clamping down on businesses that don't adequately collect, process, store and discard personally identifiable information. The Protection of Personal Information Act and the EU's General Data Protection Regulation propose massive fines for those businesses that are careless with their data.

But despite these challenges, Futurealists are still optimistic.

The Futurealist's take on big data

Futurealists are aware of the challenges and opportunities presented by big data.

They know that any BI project is ultimately about empowering teams to better serve customers. As a result, they focus as much on people development as on technology enablement.

For the Futurealist, there's no point gathering data if the business has no clear use case for it. Because of the sheer volume of information available, organisations need to know what data to collect and what to disregard. It's simply not possible – or necessary – to collect everything.

People

Success for the Futurealist depends on a solid data governance framework that should ideally be overseen by a chief data officer (CDO). The CDO is responsible for all data in the organisation, including how it's prepared and stored, who has access to it, how it's secured, and what it's used for. Gartner predicts that, by 2021, the CDO role will be as mission-critical as the IT, business operations, finance and HR functions in 75% of large enterprises.

But the CDO function is just one of many roles that come together to make big data projects possible. Futurealists know that the data skills shortage won't go away anytime soon and that the answer, for most organisations, lies in their own people. Businesses can offset the skills shortage by tapping into the growing pool of citizen data scientists – defined by Gartner as someone who generates predictive analytics models but whose job function lies outside the field of analytics. That's right – someone sitting in your HR department might have an idea that could shake up the entire company.

As more business functions are automated, organisations will need well-rounded individuals with a blend of business and technology skills. People who know what to look for in the data and can trust their intuition to either follow a hunch or leave room for the unexpected to emerge.

Technology for humans

As data becomes more entrenched in our lives and businesses, the tools we use to explore it will become increasingly user-friendly.

Futurealists know that data is no longer the playground of scientists alone and that organisations should aim to make data exploration possible for everyone in the business. The advantage of this is that different people will ask different questions, producing varied and often unexpected insights.

Big data projects will fail unless they have the support of everyone in the organisation, starting with savvy leadership who can align all teams around a common goal. Ideally, that goal should have something to do with serving customers better or solving a challenge they're experiencing.

It's a change from how businesses are used to operating, which is to offer the best product at the fairest price. But now that consumers are more informed than ever and choose to buy from businesses that share their values, organisations should do everything they can to understand who their customers are and what makes them tick. They already have this information. They now need to think about the best way to access it, analyse it, and use it give customers what they want.

For Coca-Cola, it was the cherry on the top.

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