

# DATA TAKES A QUANTUM LEAP

By the year 2020, about 1.7 megabytes of new information will be created every second for every human being on the planet. Research suggests there are 40,000 search queries per second on Google or 3.5 billion searches per day and 1.2 trillion searches per year. Meanwhile, it was estimated there would be 6.1 billion smartphone users by 2020 all looking for some sort of data. IT giant Cisco predicts that over 50 billion smart devices will be connected all developed to collect, analyse and share data.

**I**f there is one thing in the world that is too big to ignore, it is the rise of data use and how that has influenced analytics and technology to make data collection so much easier.

Which brings us to Quantum.

Quantum was established in Australia in 2002 as a data analytics firm, helping businesses make better decisions.

Today Quantum is a globally recognised partner to businesses with the ambition to lead their industries.

What does this mean?

It means by using Quantum's technology, its clients can navigate the complex world of data, analytics and technologies to deliver powerful insights with clear business applications.

Just look at how retail uses data to target its customers and offer bespoke or unique differences to their shopping experience.

That is the power of data and why it has become an every day part of the lexicon and business conversation.

Quantum CEO and co-founder Adam Driussi, a former actuary and former Deloitte partner, says he and his partners co-founded Quantum 14 years ago to "see if we could build a business around applying analytics in a wide range of industries."

Of course in 2002 the data an-

alytics conversation was a muted one. It was limited to big companies in insurance and finance.

"A business like Woolworths didn't even have a customer database; they didn't have a loyalty program back then," Adam says.

Times have changed of course. Many companies now understand what they can achieve by analysing data.

One of the reasons for this is the pervasiveness of technology that captures data.

"This is the digital age. If you think about what your interactions are as a consumer, whether you're doing something online or on your phone, or on Facebook, it's commonplace that when you're interacting with companies you leave a data trail."

The cost of capturing and keeping that data has dramatically reduced, as has the cost of the tools you need to process the data making it easier for companies to adopt data analytics processes.

Yet despite the growth, Adam sees the data analytics industry as being in its infancy.

"I still think we're scratching the surface of where data and analytics can be applied to solve business problems."

Yet he says if we look 10 years down the track, those businesses implementing data technology now

will have a strong data and analytics capability – depending how they do business – in future.

Now is the time for businesses to equip themselves with the tools they need to understand their own potential.

For the moment it is still larger businesses using data analytics in big ways and Quantum has numerous corporate giants on the books.

"We partner with NAB and one of the things we do for NAB is process their customer transaction data.

"From that we can help them provide their SME customers with insight into who their customers are."

This has a trickle down effect to NAB's own business bank clients, so while SMEs may not have the resources to conduct their own data analytics, they are benefitting.

"A bank that can provide insights to their own business bank customers about when they get most of their sales, where their customers come from, what their market share might be, what are the cost of products their customers are buying and selling.

"In that case the SMEs don't engage Quantum, but instead the SMEs would be using insight that we've helped NAB develop."

Quantum has a number of local and global clients for whom they are delivering this type of insight



Quantum CEO and co-founder Adam Driussi

and has opened offices in South Africa and New Zealand with staff operating in India as well.

With global expansion has come global clientele and they don't come much bigger than clients such as Google, Facebook and Coke.

"One of our early clients was a large German industrial gas company (Linde) for whom we supply pricing analytics services. Today our pricing engine and analytics is used by Linde in countries ranging from Brazil to China to Switzerland.

"Up to now we've serviced most of our international clients from Australia, but we're now setting

up offices in overseas countries to expand further in those markets."

Quantum implements a range of tools to best suit its clients' requirements, keeping in mind that every company will use its data in different ways.

"There are a wide range of analytics tools we use and a wide range of data processing tools and we are at the forefront of adopting those tools, particularly in the analytics space."

Quantum has also built its own IP and has in fact influenced Silicon Valley developments including partnering closely with technology companies such as Cisco, MapR

and MicroStrategy.

"Typically that IP might be a way around the analytics approach, answering a certain client question and so on. We have a lot of that IP we use in the business to deliver insights to clients and different industries. When we work with clients, we typically use a combination of our own IP and tools that we've built and best in breed tools from the market."

Adam views Quantum as an applied analytics company. He says Quantum does not apply analytics for analytics sake, but works closely with clients on what they really care about: business applications.

“It’s all about, how can we understand what the client’s question is and how can we help them with the answer? That is often by providing them with tools that assist in them making a decision and developing an ongoing business capability over time. Similarly, it might be in providing them with a report or an algorithm that sits behind their pricing systems, customer targeting or sales forecasts.

An example of such a business application is personalising the customer experience within loyalty schemes.

“Take the Woolworths Rewards program. With 10 million members and over 70,000 potential products to offer each member, the algorithm to determine which 6 product offerings communicate to each individual member in any given week is incredibly complex. But the result for the customer should feel like a highly relevant and personalised communication from Woolworths that ultimately drives higher customer engagement and sales.”

As businesses cottoned on to

what Quantum does, the client base and thus the business has grown.

Quantum now has roughly 500 staff who specialise in data, analytics and technology and has continued to grow by 30% p.a. since inception.

Current growth is rapid and it is due to the range of capabilities that is now available.

“As the industry has increasingly adopted data and analytics and broadened the sorts of questions they try to answer, our business has also broadened to accommodate that,” Adam says.

The whole growth of the sector can be summed up by the fact that 15 years ago, CEOs would almost never have considered or even heard of a data strategy, today their boards are asking the CEO for what their data strategy is.

In the next five years, Adam sees a dramatic expansion of the range of solutions that data and analytics will use to solve business problems, but managers still have to ask the right questions and make the right decisions.

“What I don’t see is analytics or data suddenly replacing the need for strong managers,” Adam says.

“You still need good judgment from your managers but I think you’ll see that those managers will increasingly use data and analytics as a critical part of their business decisions.

So with analytics and technology constantly changing and adoption growing by the day, what role will Quantum play in industries of the future?

We believe that opportunity is unlimited in the age of information technology and change. Our goal is to bring together our data platforms, products and processes to power a world of new opportunities in all sorts of industries and business functions. At the same time, I feel we have a responsibility to help ensure that the industry takes issues such as customer privacy and data security seriously. Our business is designed with those principles at its heart and we need to ensure that everyone else entering the market now also appreciate their importance. **BFM**

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— Alex Shaw, Head of Technology Operations, Quantum

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