CBR
Computer Business Review

NEWSIGNATURE

IOT & Advanced Analytics

Unlocking the Enterprise Superpower with IoT & Analytics

Superheroes always have similar attributes - speed, agility, intuition, x-ray vision, and, of course, a cape. Many of the same attributes can also be found in the enterprise and whilst we are more familiar with the 'data is the new oil' analogy, data is a superpower any business can wield.

However, unlocking it requires the right set of tools, one which allows companies to identify, correlate, and manage multiple sources of data. One which provides the capability to build advanced analytics models based on that data for predicting and optimising business models and outcomes. One which transforms your organisation to place where data and models yield better, faster decisions.

The right set of tools is all the more important with the proliferation of IoT, bringing to life everything from products to the supply chain and allowing, for the first time, businesses to have a data-driven voice. To unlock the power of data, a fast, scalable IoT and analytics solution should be the first port of call for any business looking to tap into its superpowers.

Where to start?
Data is everywhere, hidden in every corner of the enterprise – and it is only set to get bigger. Gartner forecasts that there will be a huge 20.4 billion connected things by 2020, with total spending on endpoints and services hitting £2 trillion in 2017 alone.

Despite this huge surge in spending, businesses are failing to shine a light on the data hidden in the enterprise shadows. Businesses are spending vast sums on technologies yet are lacking any foresight for the long-term and failing to see how those technologies will come together to create an end-to-end solution. Businesses are also facing increasing challenges in putting the right data into the right hands, missing the mark when it comes to enabling data-driven decisions from all areas of the

organisation.

"IoT services are central to the rise in IoT devices," said Denise Rueb, research director at Gartner. "Services are dominated by the professional IoT-operational technology category in which providers assist businesses in designing, implementing and operating IoT systems."

Unlocking The Superpower That Is Data
Every superhero has a tool designed to leverage the best of their abilities – Batman has the tool belt, while Wonder Woman has her shield and cuffs. Data, the enterprise superhero, has the Microsoft Azure IoT Suite.

The set of cloud services helps businesses kick-start IoT projects, connecting people and data and enabling organisations to tap data-driven insights and make forward-looking decisions. Drawing out and utilising the hidden data in your enterprise, the Microsoft Azure IoT Suite securely connects, captures and stores machine-generated data from your business assets.

The suite's powerful BI capabilities allows organisations to easily mine and analyse different types of corporate data to create new insights, as well as making use of data trends to find patterns and correlations that help you better understand your business and make it more agile and cost-efficient.

With low upfront investment, businesses can achieve fast results with the Azure IoT suite, thanks to a number of pre-configured solutions, as well as

serverless technology and familiar tools and languages for software management. Organisations are able to rapidly connect a broad range of existing assets, new devices and common operating systems.

The Microsoft Azure IoT Suite also enables businesses to shift from a reactive to a predictive strategy, with advanced analytics and machine learning capabilities enabling the capture of new insights from core data. Data is a valuable asset to any company, which is why the Microsoft Azure IoT Suite has enhanced security with encryption, audit, authorisation and rich access controls in addition to industry-leading compliance.

Ultimately, IoT has become more individually relevant to each business and there are clear pathways for businesses to get started with initial pilots. The Microsoft Azure IoT suite can put your business ahead of the curve, to deliver competitive advantage with deeper business understanding and enables you to provide better service to your customers. Businesses can now leverage the power of data to provide competitive differentiation and create new opportunities.

However, businesses could still be challenged with how to shift to Microsoft Azure IoT Suite and realise the full benefits of predictive intelligence and legacy integrations. New Signature can help you create a fast, scalable, and extensible IoT and analytics solution and take your first steps towards becoming a connected, predictive data-inspired enterprise.

Adopting IoT

Winter Park Construction was one company which New Signature helped to realise the many benefits of a connected IoT and Analytics solution. New Signature helped the company become a 'Connected Enterprise' and find a solution to the problem of unauthorised site visitors and safety regulations. New Signature built a prototype RFID reader and connected data streams to the Azure IoT Suite. Once the data was streamed into the cloud, Azure translated that data into action by generating alerts and notifications on the Power BI dashboard in real-time. The data revealed who was onsite by location, date or project, and if there were any safety violations related to those sites or individuals. And the results were transformational.

"Partnering with New Signature was undoubtedly the right choice for us. They have helped us connect to our employees and equipment in a way that has never been possible," said Winter Park Construction.

"We can track who is on each job site, guarantee safety gear is in place, and maintain control over equipment location. The innovation that New Signature implemented has changed the way we work and serve our clients every day."

But don't be fooled into thinking IoT only holds relevance or gains for industries like construction or Manufacturing; it's starting to take real hold in sectors like Financial Services, Government, Retail and Professional Services too. Anywhere a business has endpoints in its operating models, there's a wealth of potential insight just waiting to be unlocked.

"IoT is definitely an innovative space for businesses to look at right now. Businesses should be thinking about where that data may lie and what they can do with that. That might be a Facilities Management business with building management systems, lifts or fire extinguishers or even a food and beverage outlet where they can gather real-time atmospheric information and correlate that back to sales statistics. That uncovered data can shift operations from reactive to predictive which holds

potential in any industry," says Sean Morris, Head of Consultancy at New Signature UK.

Monetising Your Superpower

Generating, mining and analysing data is only half the battle when it comes to the IoT. Being able to monetise that data is a potentially new benefit to the connected enterprise. Every business should be asking how they can leverage their rich data sources to unlock and mobilise new IoT-enabled revenue streams.

The cloud is a perfect residence for the IoT, providing a rich and flexible environment for the monetisation of data. An enterprise-grade IOT solution demands scalability, flexibility, security and real-time insights, all of which can be provided in the Azure cloud. It enables businesses to innovate, allowing the easy creation of apps and portals to launch new capabilities and services to customers.

Advanced analytics is also essential to the success of IoT. What use is connected data if you can't wield it as your superhero tool to drive powerful, proactive decisions?

Take insurance as an example - an industry slow to adopt technology; the rise of the connected car is opening up a plethora of new opportunities. Sensors in cars have given rise to telematics, offering insurance based on driving behaviour and potentially reducing the number of claims and increasing the accuracy of quotes. However, that is just the first step an insurer can take in the monetisation of data. What about selling the data to an oil company, informing them of the petrol stations with the highest footfall from generated location data? Or analysing the demographics of the drivers to offer them pensions or life insurance?

To monetise data, a collaborative strategy must be deployed across an organisation – connecting the right people with the right data at the right time and turning all types of data into actionable business insights. Taking it a step further, advanced analytics can drive AI andcognitive machine learning opportunities – such as smart contracts in insurance.

"The key factor in any IoT transformation project is being able to monetise the data that's uncovered and drive tangible business value from it. That's where analytics turns insight into advantage. You take that data, analyse it, and the find trends or correlations that enable you to create new ways to market or drive sales, opening up new market opportunities and incremental revenue streams," says Sean Morris of New Signature.

Long-Term Benefits

Embracing IoT and advanced analytics through the power of cloud is a gift which will keep on giving, delivering multi-faceted benefits to organisations which will simply gain cumulative effect over time. Having the ability to tap into information that was previously invisible improves business operations, customer experience and strategy. The monetisation of data will add significantly to the top line and signal an organisation out as an early adopter, giving a completive edge over rivals. There is also an indefinite number of possibilities of what apps and services can be spun out from IoT services, all enabled via the cloud, to unlock new revenue streams.

For Winter Park, working with New Signature gave them not only device connectivity, but also data which provides resource optimisation and project management efficiency. As real-time data continues to gather from current work sites and RFID tags, it can then be compared to Winter Park's project plans and timeline when developing upcoming construction jobs.

Sean Morris at New Signature concludes "Many businesses are still grappling with how to get started with IoT and make it relevant. Our guidance is to think big and start small. Look for ways to introduce IoT and Analytics technology into your existing enterprise IT without reimagining the entire infrastructure. Align IoT back to your core business and look for ways to unearth data from your endpoints that you might not have considered previously. Get started with one scenario, create a pilot, test, review and build out from there."

About New Signature
New Signature is a cloud-first, full-service Microsoft solution provider focused on delivering great customer experiences through transformative business solutions. The New Signature team delivers full lifecycle solutions - from project inception and planning, through deployment to ongoing support, management and maintenance.

To find out more, email hello@newsignature.com, visit www.newsignature.com or check out @newsignatureuk.