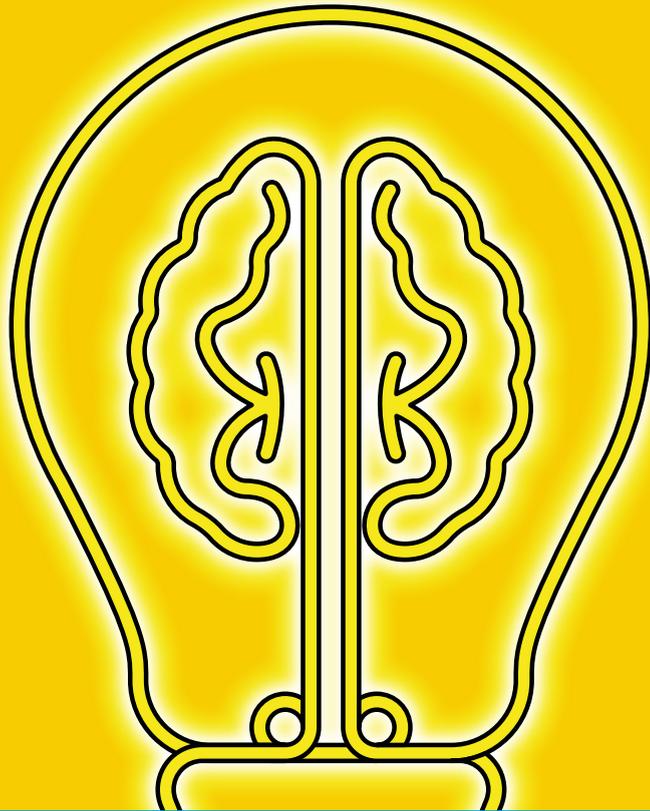


ACTIVE INTELLIGENCE

Summer 2021
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Free it

Take raw data from wherever it is, then continuously deliver it to where it needs to be

Find it

Make governed, trusted data readily available for analysis

Understand it

Explore the data to uncover richer insights easily, collaboratively, and from anywhere

Action it

Embedded analytics deliver context-aware, real-time updates

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Riffing with data

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‘How do you switch from a state of passive to “Active” business intelligence?’



“**D**igital Transformation”, “Data Democratization”, “Data is the new oil” – phrases that have been thrown at us so many times they have made us numb. That said, they do make for a great game of Buzzword Bingo if you’re at a loose end.

As a business leader, you’re acutely aware that competitiveness is tightening, new market entrants are challenging the incumbents – and solving your data challenge is critical to success. No buzzwords required.

As someone who has spent most of his career helping organizations realize the value of their data, what I do know is that data has a pulse. It’s a living entity that is constantly

growing, evolving and creating new connections; and it needs to be treated as such. Yet we continue to accept systems that inform us to a point, but don’t react to data that is alive and can’t compel action in the business moment.

In today’s ‘always-on’, ‘right-now’ mindset, your customers and employees expect that you can make decisions and take action as an event happens. The ultimate position to be in is when you are set up, and have the confidence, to take a different action; it’s that unexpected action that drives transformation and creates the real value. Passive, historical data sets residing in systems that can’t trigger action will not help you meet these expectations and get the rewards.

But how do you get there? How do you switch from a state of passive to “Active” business intelligence?

To better understand the challenges and the

possibilities, we’ve asked a number of world-class business authors, academics and commentators to give their perspective.

The contributors spoke to leaders from companies across the world who have innovated the way they manage their data, and established a culture of informed action in their organizations to support them even in the most disruptive times. From understanding the power of humans and technology making decisions together, to building an intelligent analytics data pipeline that can react in real time, to ensuring the whole workforce can have trust and confidence in every decision they make – this edition unpacks it all.

I hope their articles hit on areas that resonate with you, and provide you with food for thought on new ideas and how you can get more value from your data.

James Fisher,
Chief Product Officer, Qlik

DATA DELUGE

Navigating uncertainty via informed action,
by Vikram Mansharamani



The current business environment is plagued by palpable and overwhelming uncertainty. Just think of the breadth of challenges leaders must face on a regular basis: Is the pandemic going to irreversibly alter the competitive landscape? How might climate change affect our customer base, supply chain, or operational capabilities? Could a poorly funded start-up rapidly leapfrog our offerings by gaining access to cheap capital?

Despite these apparently paralyzing questions, the pace and

dynamism of today's competitive business environment means that decision-makers at all levels of an organization do have to act. Sitting on one's hands is not a viable business strategy. Instead, leaders should embrace a strategy of navigating uncertainty via "informed action", the strategic use of analytics to actively extract insight from data without blindly deferring to it.

Informed action offers an antidote to the poison of information overload and its accompanying ailment of analysis paralysis.

Driven by the promise of optimized action, but accepting our decision-making limitations, we tend to run headlong into the arms of experts and technologies that promise us salvation from our fear of missing out on the ideal choice. Artificial intelligence and machine learning offer hope; we are seduced into outsourcing our thinking to these embedded forms of expertise. But, by blindly relying on technological decision-aides, we may be securing a false sense of comfort.

Focused expertise can help, but context also matters. Informed

action keeps one eye on the big picture.

In many situations, focus is an absolute positive. Who doesn't want to be focused? Isn't that why we engage experts who are focused deeply on a specific domain? But focus is a two-edged sword. While we rarely consider that "focusing deeply" is equivalent to "broadly ignoring", an inappropriately tight focus might lead us to miss insights lurking in the shadows just outside of our spotlight. Sadly, this is exactly what most data analytics engines do – they tunnel our attention to the exact spot of inquiry, clouding potential insights from adjacent information. And when it comes to thinking about making decisions in the face of radical uncertainty, many of us are blinded by focus.

Have you considered, for example, that the increased use of agricultural products as transportation fuel (ethanol) might have been a contributor to the high food prices that generated the Arab Spring? Focusing only on the renewable fuels market may have ignored the impact on agricultural prices and fragile regimes with food-vulnerable populations.

One solution to over-zooming is to widen our area of attention. Far too often, we are so focused on the foreground that we may not see strong signals in the background. In fact, paying attention to a wider domain may enable us both to identify risks and to spot opportunities. Breadth, it turns out, can be as profitable as depth. Replacing the telephoto lens with a wide angle one is a key part of making informed actions.

In times of uncertainty, it may be more important to connect the proverbial dots than to generate new ones. Un-focusing to observe the big picture allows us not only to see the context but also to triangulate insights via multiple perspectives. It's very hard to see the trees or the

forest when you're staring at bark. Stepping back can yield surprising and profound insights – like the wastewater surveillance that tested for COVID-19, enabling surges in cases and hospitalizations to be identified before they occurred. Connecting data points from upstream and downstream analysis (literally as well as figuratively) can prove fruitful.

Better outcomes can also be achieved by greater collaboration. Business decisions that might make financial sense but lack strategic rationale could be averted through greater collaboration before the decision is made. For example, consider the task of building a home. You can hire an architect who produces plans, and then retain a contractor to build the actual structure. But what if the architect and contractor collaborate throughout both the designing and building process? Construction complexity can be reduced, costs can be contained, and timelines can be achieved.

It's also important to consider feedback loops because linear thinking can be misleading. Think about the well-intentioned policy of mandating seatbelts. Surely a good thing, right? We know that accidents have higher fatality rates when the driver is not wearing a seatbelt, so this policy seems to be a no-brainer. But do drivers who wear seatbelts drive differently once they are buckled up? Sadly, they do. Some drivers view the additional safety measures as enabling more aggressive driving, offsetting many of the accepted benefits. Another example: do football helmets protect players? The answer is not obvious, as the greater protection encourages harder hitting. This phenomenon, in which people tend to have a set "risk budget" and adjust their behavior accordingly, is known by academics as "risk homeostasis".

Former Harvard Kennedy School Dean and diplomat Joseph Nye, in his book *The Powers to Lead*, explains how contextual intelligence

American baseball legend Yogi Bera once noted 'the future ain't what it used to be'

is critical to good leadership. "Contextual intelligence implies both a capability to discern trends in the face of complexity and adaptability while trying to shape events," he says. Let's focus on his last tidbit – the part about shaping events. That's exactly what informed action tries to do: to act in a way that produces an advantageous outcome.

In today's highly interconnected and dynamic environment, comprehensive, dot-connecting thinking enables informed action – an activity that embraces uncertainty, appreciates dynamics that confound reductionism, and becomes a moment of value-creation. Informed action allows stressed-out leaders to make zoomed-out decisions.

American baseball legend Yogi Bera once noted "the future ain't what it used to be". That shouldn't paralyze leaders. Today's overflowing pools of data have plenty of answers; what we need is a new approach to asking questions. We can – and must – depend on analytical support tools, but we should do so mindfully, with full awareness of the autonomy we are ceding. We must learn to think for ourselves and keep technologies and experts on tap, not on top. Ultimately, I believe the key is to own the question, then let decision-aides provide answers using real-time and hyper-contextual data that drives informed action ■

LAY A DATA PIPELINE

Martin Veitch exposes the gaps in today's business intelligence market

2

The desire to analyze data that will drive insights and competitive differentiation is older than computing itself. Digitization just speeded things up. Richard Miller Devens used the term “business intelligence” as far back as 1865. The LEO computer was calculating optimal inventory deliveries based on shop performance and generating management reports for the Lyons’ tea rooms chain from 1951. And the very first edition of *CIO* magazine, published in 1987, included an editorial on “an increasing cadre of increasingly demanding customers seeking faster access to information”.

Fast-forward to today, and the dreary meme of “data is the new oil” that must be chanted at every tech conference by rule of law. The power of data is better understood than ever, but for many, harnessing data, checking its quality, and applying context to assist decision-making remains challenging. CIOs report fragmentation, slowness and silos, even as digital transformation has been accelerated by the pandemic.

But there is cause for optimism, in the form of broad modern

data pipelines that drive activity and allow what Qlik calls “Active Intelligence” – the ability to act on reliable data with a rich supporting fabric of context and collaboration to support the right decisions and take informed actions in the right moment. By assembling joined-up processes, companies are following the path from uncovering data to delivering it where it needs to go, governing it through data catalogs, understanding it, augmenting it, and putting it to use via context-sensitive alerts and actions taken in close to real time.

The 1990s rise of databases that cleaved to structured query language (SQL) led to a glut of developers and specialists and created a boom in analytics activities. But the dirty secret of SQL is that “it’s great for moving data, but not analytics”, says Mike Potter, Chief Technology Officer at Qlik, so we’ve ended up using the wrong tool for the job.

“For change, you need to capture data and lay the foundations for an analytics supply chain and a pipeline that builds on this to enable Active Intelligence,” Potter explains. “You can’t create value in any business process unless you do something.

“
We need systems that advise, working alongside smart human beings

If you believe analytics is all about driving change, increasing revenues and profits, and enabling digital transformation, none of that can occur unless you take action.”

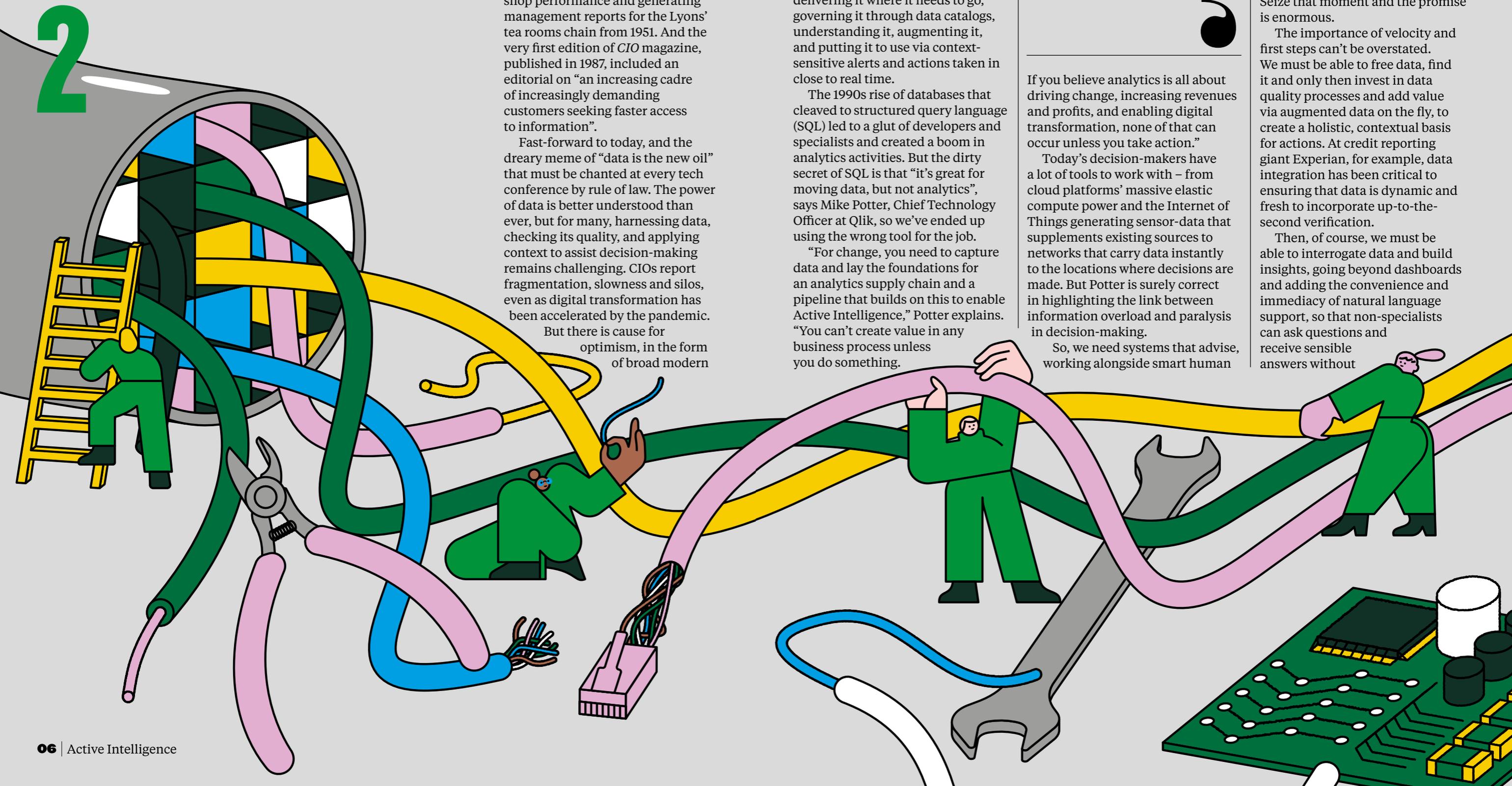
Today’s decision-makers have a lot of tools to work with – from cloud platforms’ massive elastic compute power and the Internet of Things generating sensor-data that supplements existing sources to networks that carry data instantly to the locations where decisions are made. But Potter is surely correct in highlighting the link between information overload and paralysis in decision-making.

So, we need systems that advise, working alongside smart human

beings who understand business domain, context, and risk. Whether these are progressive (“it’s a great time to build a shop that sells finger spinners in New York”) or defensive (“this service level agreement is very close to breaking so we need to address it now”), decisions must be taken quickly before context has changed and the moment is gone. Seize that moment and the promise is enormous.

The importance of velocity and first steps can’t be overstated. We must be able to free data, find it and only then invest in data quality processes and add value via augmented data on the fly, to create a holistic, contextual basis for actions. At credit reporting giant Experian, for example, data integration has been critical to ensuring that data is dynamic and fresh to incorporate up-to-the-second verification.

Then, of course, we must be able to interrogate data and build insights, going beyond dashboards and adding the convenience and immediacy of natural language support, so that non-specialists can ask questions and receive sensible answers without



drowning in jargon. As more data sources are added in, unforeseen connections are traced, leading to “a-ha” moments of serendipitous revelation. To that end, chief data officers are becoming popular appointments, and DataOps teams are becoming mainstream; but there must be buy-in across the company to build a culture for data success.

Assemble that supply chain of elements, and we begin to realize the promise of real-time analytics. In practice, it may not always be truly real-time, but if you can make a better decision, faster than your rival, you are fulfilling IT’s age-old pledge to provide an auditable end-to-end decision-support platform on which great decisions are

wrote in *The Innovator’s Dilemma*, many companies have failed because they stuck to the road that had made them successful when they should have realized they were heading for a dead-end. Analysis paralysis is a silent killer for innovation and strategic change.

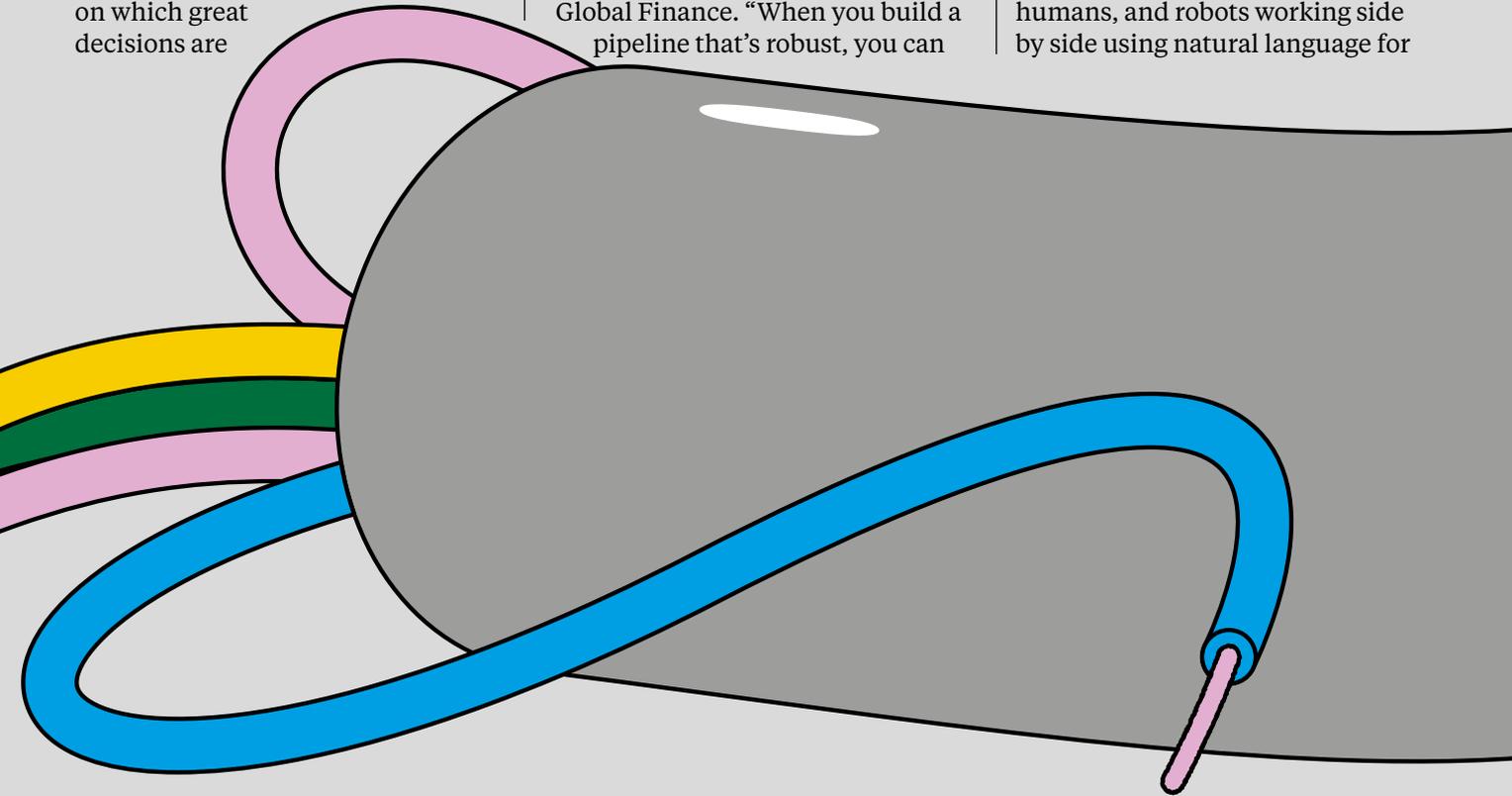
For dynamic companies, however, the rewards are large. For example, Schneider Electric’s finance department is able to predict some quarterly financial performance to within one per cent using analytics.

“Data is the thing that determines how bright the signal is in the fog of uncertainty,” says Clint Clark, the company’s Vice President, Finance Performance Systems and Data, Global Finance. “When you build a pipeline that’s robust, you can

What can get neglected? Clark advises not to underplay the importance of data governance to avoid the “garbage in, garbage out” effect. Also, he says, watch out for the potential “tragedy of the commons”, where people act in individualistic, self-interested ways or use data to back up their prejudices.

By synthesizing all the assets we have to hand, we can create a new wave of data-empowered companies that make the right decisions at the right time.

Elif Tutuk, Vice President, Innovation and Design at Qlik, believes we can advance enormously if we combine the best of tools, humans, and robots working side by side using natural language for



made in a business moment.

For too long, we’ve struggled to connect the dots between what’s needed for a holistic approach to data and analytics, but today

there’s no excuse as all the technology components are available. Now, it’s incumbent on leaders to lead. As Clayton Christensen

illuminate those signals clearer and with better timing, and people can make better decisions quicker.

“You need to build a culture of trust and show that data has value through repeated demonstrations,” he adds. “You have to find a way to put data at the center of your decision-making process and be honest about what you’re doing, including understanding your own hidden assumptions and biases.”

interactions. “There’s a need to select a business moment to match the data. Active Intelligence enables the right action at the right moment ... and gives users superpowers,” she says.

Now we just need men and women to apply that advice. Ready, set... action! ■

HOW IT WORKS

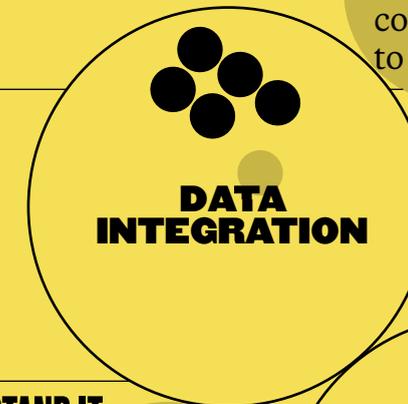
START: RAW DATA

1

FREE IT

Take raw data from wherever it is, then continuously deliver it to where it needs to be

2



FIND IT

Make governed, trusted data readily available for analysis

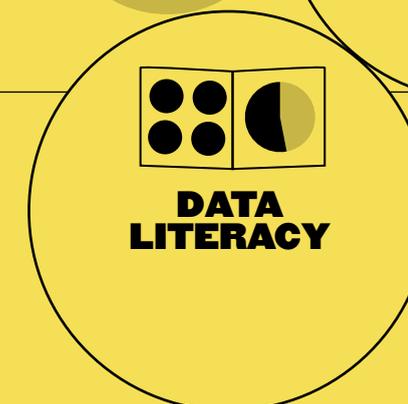
UNDERSTAND IT

Explore the data to uncover richer insights easily, collaboratively, and from anywhere



3

4



ACTION IT

Embedded analytics deliver context-aware, real-time updates

RESULT: INFORMED ACTION

IN NUMBERS

The success of an organization is defined by seizing business moments – the moments that require action, a shift in direction to mitigate risks, stay ahead and make a positive change.

The problem is that these moments are easily missed. They creep up on you and, without

the right information at the right time, too many businesses are left looking back with hindsight on the decisions they wish they had made.

To seize these opportunities, organizations need to arm their people and systems with up-to-date, real-time information and analysis that empowers them to

make informed actions.

However, despite significant investment in increasingly sophisticated analytics solutions over recent years, many organizations are facing cracks in their analytics data pipeline that prevent them from achieving Active Intelligence.

ONE

Unlocking data for analysis

The first step is to take raw data from different sources and continuously deliver it to where it needs to be, reflecting changes in real-time.

96 %

of global enterprises find it challenging to identify data sources for analysis

31 %

of global enterprises report that not having data available for analysis is one of the most common reasons analytics projects fail

TWO

Transforming data for trusted insights

Transforming raw data, while preserving lineage and assuring governance, unlocks opportunities for analysis.

■ The biggest area of investment global enterprises are making in their data pipelines in 2021 is transforming raw data into analytics-ready data

■ Assuring data correctness, refreshing and updating data correctly, and missing and incomplete data are among the greatest challenges organizations face when transforming data into an analytics-ready form

THREE

Uncovering richer intelligence

A deficit of skills, hyper-contextual insights and advanced tooling present the biggest barriers to uncovering richer insights.

The main challenges organizations have executing data analytics include:



■ Ensuring the interpretation of analytics is correct and accurate



- Finding associated data for analysis
- Finding talent and resources
- Having the right technology

FOUR

Taking informed actions

Organizations are still struggling to translate data into business value.

■ Only 39% of organizations are managing data as a business asset

■ Only 29% are achieving transformational business outcomes

But moving towards a culture of informed action enables them to make every moment count

■ Vancouver International Airport cut the time to run queries for minimum connection time from 33 hours to 40 seconds, reducing the minimum connection time to

80 minutes

■ Samsung UK saved area development managers hours every week and increased the efficiency of field visits by 20%

■ Wrightington, Wigan and Leigh NHS Foundation Trust identified bottlenecks to effective patient care that resulted in reducing the wait for MRI scans from 10 to two days

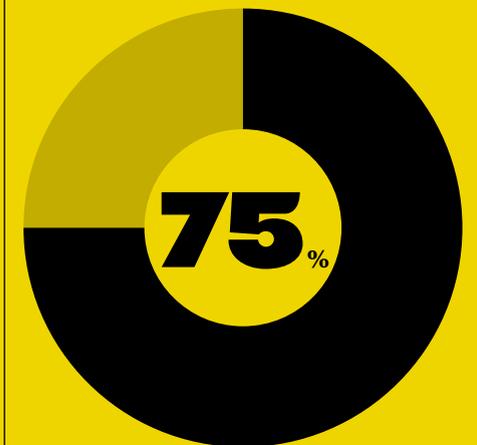
■ Novartis realized savings of over six figures USD through optimized budget and resource allocations

FIVE

Achieving business outcomes

When you implement an intelligent analytics data pipeline, where information flows continuously into everyday processes, you optimize every business moment through informed action and accelerate business value.

■ Three quarters of global enterprises saw an improvement in...



- Revenue
- Customer satisfaction
- Profit
- Operational efficiency
- Employee productivity

Sources "Data is the New Water: The Importance of Investing in Data and Analytics Pipelines", conducted by IDC on behalf of Qlik, February and March 2020 "The Journey to Becoming Data-Driven: A Progress Report in the State of Corporate Data Initiatives", conducted by New Vantage Partners, January 2021



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“Data is enormously powerful, but it needs corralling and handling with care”

SCHNEIDER ELECTRIC: NAVIGATING THE FOG

Optimizing data for analytics is helping Schneider Electric adapt to a world embracing sustainability, says *Martin Veitch*

Schneider Electric is at the epicenter of the global shift to sustainability and digitization, so it's logical that the company has put data at the heart of mapping its next moves, large and small. That suits Clint Clark, Vice President, Finance Performance Systems and Data, Global Finance, who is helping the company to fortify and integrate data pipelines to accelerate smart choices.

“Data is the power that determines how bright the signal is in the fog of uncertainty,” he says when we talk by video call. “When you build a pipeline that's robust and has a strong current that's real-

time, you can illuminate those signals and people can make better decisions quicker. It allows us to be much more responsive to the 'as is' state and the changing currents.”

In finance, data can be used to deliver “truth-telling facts to help have uncomfortable conversations or to support and defend strategic initiatives”, explains Clark. But having an optimal data handling culture isn't easy.

One challenge he identifies is the “tragedy of the commons”, a term popular with economists to describe a situation where individuals' actions aren't coordinated and don't

Clint Clark on ...

managing by hunch

“System 1 (intuitive) thought processes add value and teach you how to take heuristic shortcuts but when you have changes in your underlying assumption, the only way you're going to see the groundswell is through the data.”

listening

“The gap between customer expectations and where you measure yourselves can lead you down the wrong road. Sometimes it's about poking around the data and asking yourself 'what if' to see if your fundamental underpinnings still hold true.”

structure

“A data mesh of domain-empowered teams coupled with DataOps where the data pipeline and analytical solution is embedded inside functional teams to empower them is the best practice I've seen.”

data literacy

“To say that everybody is going to be a data scientist and understands how to tune hyperparameters is not a scenario we will ever live in. People will have different maturity levels.”

analysis paralysis

“The downside [of modern data volumes] is that people can be paralyzed by the amount of information and understanding which of these are important signals and which are just noise.”

Clint Clark is Vice President of Schneider Electric

create a common good. There exists “the moral hazard of people accepting data when it helps to highlight their point or trying to dismiss the data when it does not support their view of the world”.

Data is enormously powerful, but it needs corralling and handling with care. Logging activities and data governance are constant challenges. It can also be easy to use data to show you're hitting targets, but do those targets tally with what customers want?

And then there's the question of how reliable the core data being analyzed is. Decision-makers need to understand what to do with bad data or when something goes wrong in the process, Clark says. Building a robust data catalog is important for discovery, but needs to work in tandem with

being transparent about the status and quality of the data.

Another ‘gotcha’ is bias. “You have to be willing to try to understand your hidden assumptions and hidden biases when they might pop up inside of the data,” Clark explains. But when data repeatedly illustrates you have an accurate view of the world and feeds great decisions, it becomes part of the fabric of a company.

And, after all the hard work of cleaning, integrating, analyzing and making decisions based on data, the prizes are large. Clark provides an example: in its North American finance operation, Schneider has created a toolkit that, for several years, has delivered forecasts that proved to be correct to within one percent. “When you can demonstrate that sort of

predictability, and people know you're going to deliver what you've said you're going to deliver, that builds a lot of trust,” he says.

Clark believes that today's data leaders enjoy powerful new opportunities produced by cloud computing, the Internet of Things, graph databases and other new tools. As an example, he says: “Qlik's change data capture allows us to pull data from our source systems at a lower cost than historical solutions with greater consistency, and we get the benefits of streaming at the same time. It's just the best of all worlds.”

Clark has also benefited from Schneider's encouragement to be entrepreneurial and to try new things. “A lot of times, that meant the first thing fails,” he says. “The

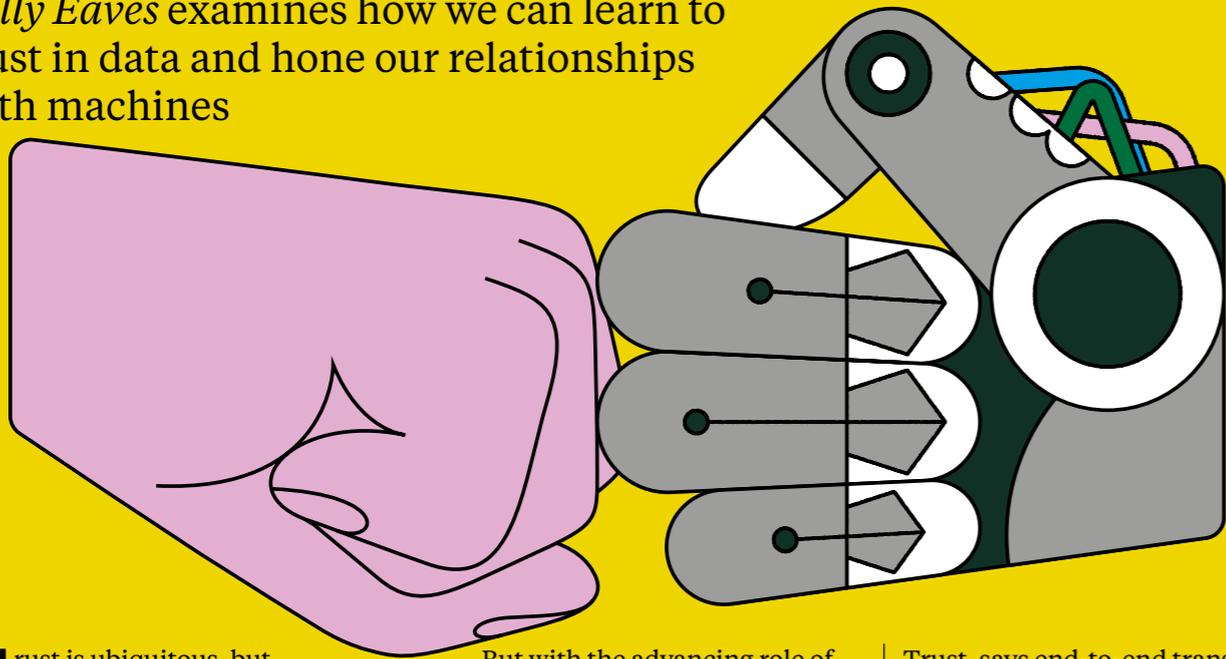
guidance I give to my team is ‘I expect you to fail; failure is your best lesson... just don't fail at the same things for the same reasons repeatedly.’”

Ultimately, Clark says, data is “the lighthouse in the fog: you can make it to shore without it, but you may have to wait until the fog has lifted or it's daylight”. He adds: “I love that that it changes so quickly and that it keeps me up at night learning. I'm always seeing new things and saying ‘ha, that's interesting’... and two, three months down the road you say ‘a-ha, that might be the solution’.” ■

A MATTER OF TRUST

4

Sally Eaves examines how we can learn to trust in data and hone our relationships with machines



Trust is ubiquitous, but the understanding, building, and retaining of trust has become a key challenge of our time, with the trust narrative evolving across a dynamic duality. On one hand, concerns around data privacy, security, and the ethical development of artificial intelligence (AI) abound; on the other, the “art of the possible” has been demonstrated through the positive purposes to which data and technology have been applied.

Another dynamic has also evolved recently: data literacy. Over the last year, our everyday lives have been dominated by data, heightening levels of awareness, and helping move beyond data ubiquity to make analytics more ubiquitous too. But as people understand more about how organizations are using their data, they are increasingly concerned, bringing trust center stage.

What is trust? Definitions vary but coalesce around being interpersonal and affording the “willingness to be vulnerable to the actions of others”.

But with the advancing role of AI, is this trust relationship poised to change in relation to machines? The answer is “Yes” with respect to the human-machine interface evolving from information system to automation to autonomous agent (to varying degrees). In other words, a move from master-servant to teammates or partners bringing together complementary strengths. But it is “No” with respect to the question of intent. I would argue that, in its current state, AI is not close to having its own intentions or mental states.

There are three main domains of AI “trustworthiness”: the technology, the system it is in, and the people behind/interacting with it. Within these domains, five key pillars have emerged: the capacity for AI development and decision-making to be human-led, trainable, transparent, explainable and reversible.

Rob O’Neill, Head of Information at the University Hospitals of Morecambe Bay NHS Foundation

Trust, says end-to-end transparency is central. Giving the example of a predictive analytics project to identify patients with high hypertension risk, he explains that, in practice, AI trustworthiness is established through openness, visibility and built-in bias checks. “I am an advocate of open machine learning techniques – not black box approaches,” he says. “When it comes to data quality, we need to show there’s a clear line of sight from the board down to the ward.”

Within the data landscape, the four Vs of data – volume, velocity, variability, and volatility – are accelerating, and a recent study by Forrester Consulting for Dell Technologies indicated that this acceleration has exacerbated data paradox barriers for organizations. The study found that data overload and the inability to extract data insights is the third highest barrier to digital transformation. This makes investment and the optimal application of business intelligence (BI) analytics and automation –

supported by culture, talent and skills – an imperative if data is to enable democratization, help develop new services and foster organizational proactive agility to change.

Improving the data pipeline, enhancing integration, and ensuring insights are informed by trusted data is critical. For Richard Speigal, Senior Business Intelligence Manager at Nationwide Building Society, this meant his organization had to move away from a traditional project-based structure, where the data and analytics community was split into different functions, creating data and people siloes. His evolution was to bring in a product-based framework that is value stream-focused and highly multidisciplinary, with “domain-driven pots of data” governed at source and available for business self-service. Senior leadership take-up helps to cascade adoption, supported by investment in data literacy skills. “We want to federate the business to use BI tools to build their own solutions,” Speigal explains. “It’s no good just giving people tools; you’ve got to get them data literate.”

Data governance and trust provides another example of duality. On one hand we have increased regulatory pressure to govern, with complex geographical differences including General Data Protection Regulation (GDPR), California Consumer Privacy Act (CCPA), Payment Card Industry

Trust is ubiquitous, but the understanding, building, and retaining of trust has become a key challenge of our time

Sources “Unwilling Data Challenges Afflicting Businesses Around The World”, conducted by Forrester Consulting on behalf of Dell Technologies, January 2021

Three data dilemmas

1 Businesses believe they are data-driven but they don’t prioritize the use of data across the organisations

64%
of businesses see themselves as a data-driven organization, yet only ...

23%
are treating data as capital and prioritizing its use across the business

2 Businesses need more data, but they have more data than they can handle right now

71%
are gathering data faster than they can use it

63%
have too much data to meet security and compliance requirements

3 Many businesses believe in the ‘as a Service’ benefits, but only a few have made the transition to such a model

20%
have transitioned the majority of their infrastructure and apps to an as a Service model

65%
believe it would enable firms to be more agile

Data Security Standard (PCI DSS) and Health Insurance Portability and Accountability Act (HIPAA) compliance. Compliance data is typically owned by data stewards, especially the closer you get to consumption-in-action, where governance must be more stringent. This is Governance with a capital G.

On the other, we have the business and trust impact of good governance. This is governance shared across all key stakeholders, from consumer to engineering team to data stewards. It is governance with a small g, but is equally vital. As discussed with Dan Potter, Vice President, Product Marketing at Qlik, there should be governance at every step, from when a piece of data is created to when it is used to take action, and also around analytics. “Trust comes from transparency and consistency,” he says. “We also have the ‘protect me from myself’ component – don’t to allow me to get myself into problems.”

The capacity to move faster with data is poised to accelerate, with increasing convergence of information technology (IT) and operational technology (OT) systems necessitating the bringing together of different levels of data structure, time sensitivity and volume, with varying latency and stream processing needs. We are also seeing specific sectors addressing data change – especially healthcare, where pandemic dynamics have demanded more open, predictive models with the capacity to retrain expeditiously.

In combination, this brings the need for Active Intelligence center stage. Passive business intelligence solutions, which rely on preconfigured, curated, and historical data sets, are not designed to holistically embed governance and support or compel real-time decisioning and action making. Active Intelligence affords exactly this, establishing an intelligent analytics data pipeline with dynamic business content and logic, triggering immediate actions, and ensuring business moments are not missed.

Similarly, when it comes to governance, having an automated system is not enough; we need to move to a position that could be described as self-correcting, or self-healing.

Finally, as highlighted by Elif Tutuk, Vice President, Innovation and Design at Qlik, while continuous intelligence has been talked about for some time, this typically focuses on continual data flow and triggering an action. Active Intelligence goes further, bringing together additional components with people very much in the loop. “We need to get human trust into analytics and data and provide good collaboration between data producer and consumer,” she says.

As we look to the future, this people component becomes core, with enhancing collaboration the next critical step in enhancing trust in data, and trust in data analytics. ■



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iA AMERICAN: RIFFING WITH DATA

iA American Warranty Group is using Active Intelligence to bring greater value to the business, as *Thomas H Davenport* explains

The worlds of information access, analytics, and reporting are changing dramatically. They may have been stable for decades, but a revolution in technology, roles, and organizational structures for generating insights and taking better informed actions is underway. An emerging term for this new environment is “Active Intelligence” which – as it suggests – involves both more action and more intelligence.

Some of the greatest potential for action derives from who is now doing the work. Business intelligence was historically managed

by intermediaries between decision-makers and the data and insights they needed. Now, decision-makers can access and analyze their data themselves; the field has moved rapidly to self-service. And, when decision-makers access and analyze data themselves, they have greater motivation to use the results in decisions and actions. If intermediaries are involved, they can now be less focused on report generation and more focused on working closely with business users and decision-makers.

Greater intelligence is driven in part by new

A success story

Reduced data readiness project span

10×

Increased developer productivity

5×

Delivered transformative insights within

3 months

Achieved analytics adoption rate of (3 month span)

80%

technology. Emerging tools for data and analytics involve greater degrees of predictive analytics, artificial intelligence and decision automation. They promise a future in which insights will be presented in context using real-time data streams, and many decisions will be automated. “Accelerators” will facilitate development of these types of capabilities for specific use cases. And, in recognition that teams work together on generating and acting on insights, collaboration is also increasingly possible in the use of these tools.

Together, these technologies, roles, and collaborations are reshaping the pursuit of data-informed decisions and actions and will lead to even more change in the future. To understand some of the early directions for Active Intelligence, I spoke with both a provider and a user of business analytics at iA American Warranty Group.

The company supplies insurance, warranties, and other vehicle protection products to automobile dealers. While iA American is very successful, it wanted to understand better what’s selling and why, in order to accelerate the development of new data-driven products and services, and to spend more time driving new business and less on making sense of disparate data.

iA American has been a long term Qlik customer, and Patrick Straub, Vice President of Business Intelligence at iA American, says his team has a strategy to

provide greater value to the business using new tools and processes.

Self-service tools and overall business trends, he believes, have created an increased appetite for data among business analysts and decision-makers. Instead of manually preparing reports, the team has a new goal: helping to bring additional insights to business users for better, faster decisions and actions. Straub’s internal customers are seeking more data sources, governed and managed with higher quality. “Our overarching precept is not to supply data to the company that could lead to negligent or bad decisions,” he explains, adding that what he wants is “good decisions from good data”.

With time freed up from report generation, Straub’s team can now focus on data curation and integration. Active Intelligence involves not only analysis and action, but also managing the data pipeline leading up to them.

Most of iA American’s data comes from car dealers, and when a customer files a claim, it might come in through 15 different systems, each with its own data format. Straub and his team are harmonizing the data schemas across these systems and incorporating them into a data catalog. They’ve also embarked on a data governance program and named data stewards for key data domains. The data management efforts have reduced the time for a user to prepare and access data tenfold. Developer productivity has been

“Bring additional insights to business users for better, faster decisions and actions”

improved fivefold.

Straub’s team is centralized, but because the technology is so much easier to use, there is a close feedback mechanism between the business side and the technical side. Now that business users understand the value the tools bring, Straub says they can collaboratively “riff with the data” and explore the art of the possible. He adds: “It’s a much more fluid way to meet their needs for additional types of data and analysis – we iterate until we get that ‘a-ha’ moment.”

One of the business users who has a close working relationship with Straub’s group is Karl Nilsen, a Product Manager for iA American. He’s so data-oriented that on LinkedIn he describes himself as a practitioner of “data-informed product development and marketing”. With tools like Qlik, Nilsen says, he not only accesses data quickly, but seeing it in the ways the software displays it helps him and his colleagues ideate faster. “It shows me the questions I should be asking,” he explains. Many of the new products he proposes to the business are driven by his analysis of

data sources.

Nilsen always wanted to be data-driven in his job, but until recently he just didn’t have the tools to do it. He doesn’t code and doesn’t have a technical background, but he’s confident these tools have made him a more valuable employee. He can quickly find out what an individual dealer is doing or how a product is performing and, because he can access the information quickly, it lessens his daily workload substantially.

iA American has many products, most of which are based on services or benefits tied to customers’ vehicles. There is little doubt that Active Intelligence helps the company make smarter, faster decisions and actions that contribute greatly to its commercial success. ■



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