

Analytics Trends 2015

A Canadian perspective

deloitte.ca/analyticstrends
#AnalyticsTrendsCA

Deloitte.



8

Analytics trends



Supertrend: Quadruple down on data security



The Analytics of Things



Monetize this?



Bionic brains



The rise of open source



Tax analytics: Striking gold?



Universities step up



Accuracy quest

Supertrend: Quadruple down on data security





Emerging threats

Recently, cyber-attacks have been creating a lot of hype. Using analytics, businesses can begin to proactively identify threats which are more likely to target their organization, enabling timely detection and mitigation of such attacks.

Supertrend: Quadruple down on data security





Protect your crown jewels

In a world where budgets are tight, big data can be leveraged to create a risk-based executive score card to enable informed security investments to protect your crown jewels.



Supertrend: Quadruple down on data security





Hunting for hackers

In an age of threats originating as “unknown unknowns,” analytics proactively recognize and identify anomalies that could represent danger and demand further investigation.

Supertrend: Quadruple down on data security



The Analytics of Things



Ties of the machines

The Internet of Things (IoT) means everything from cars to buildings to heart monitors will be connected to the internet delivering real-time data. Can you handle the upcoming data avalanche?



The Analytics of Things





The three Vs

The IoT means three things for data: more volume, more velocity, and more variety. This can provide tremendous opportunities, but a good strategy, an efficient platform and data science is needed for the most important “V” of them all...

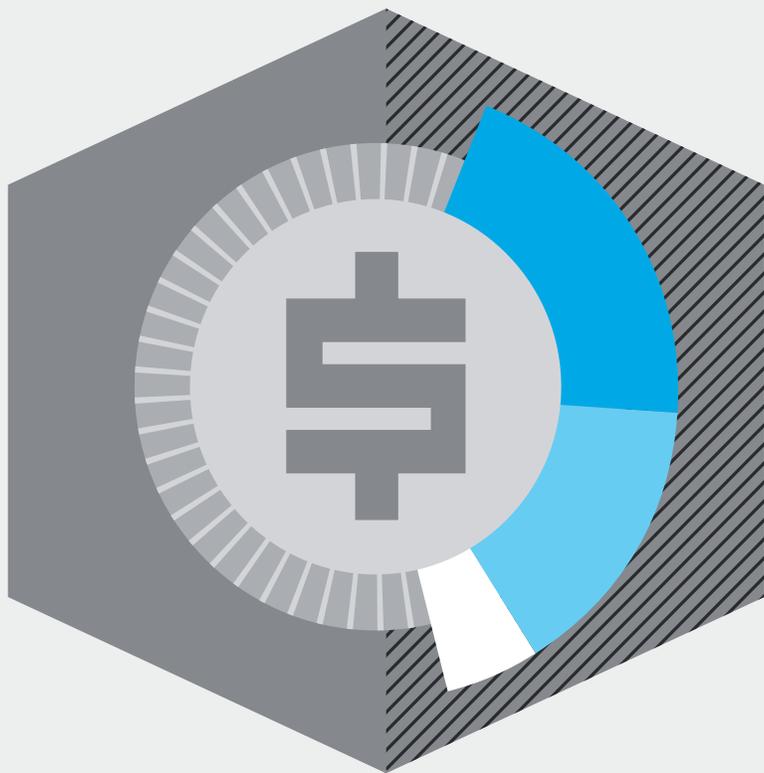


Value capture

Analytics make sense of enormous quantities of data, recognizing patterns and trends to generate insights in close to real time that enhance customer experience, increase productivity, mitigate operational risk and enhance security. What is your plan to capture the IoT opportunity?



Monetize this?





Data is an asset

Data is valuable and everywhere, but capturing that value requires knowing where to start and which risks need to be managed, such as...

Monetize this?



Risks and rewards

Privacy is a serious concern regulated by Federal and Provincial legislation. Incorporating privacy into your analytics initiatives mitigates risk and can be a source of competitive advantage. But how to start?



Monetize this?





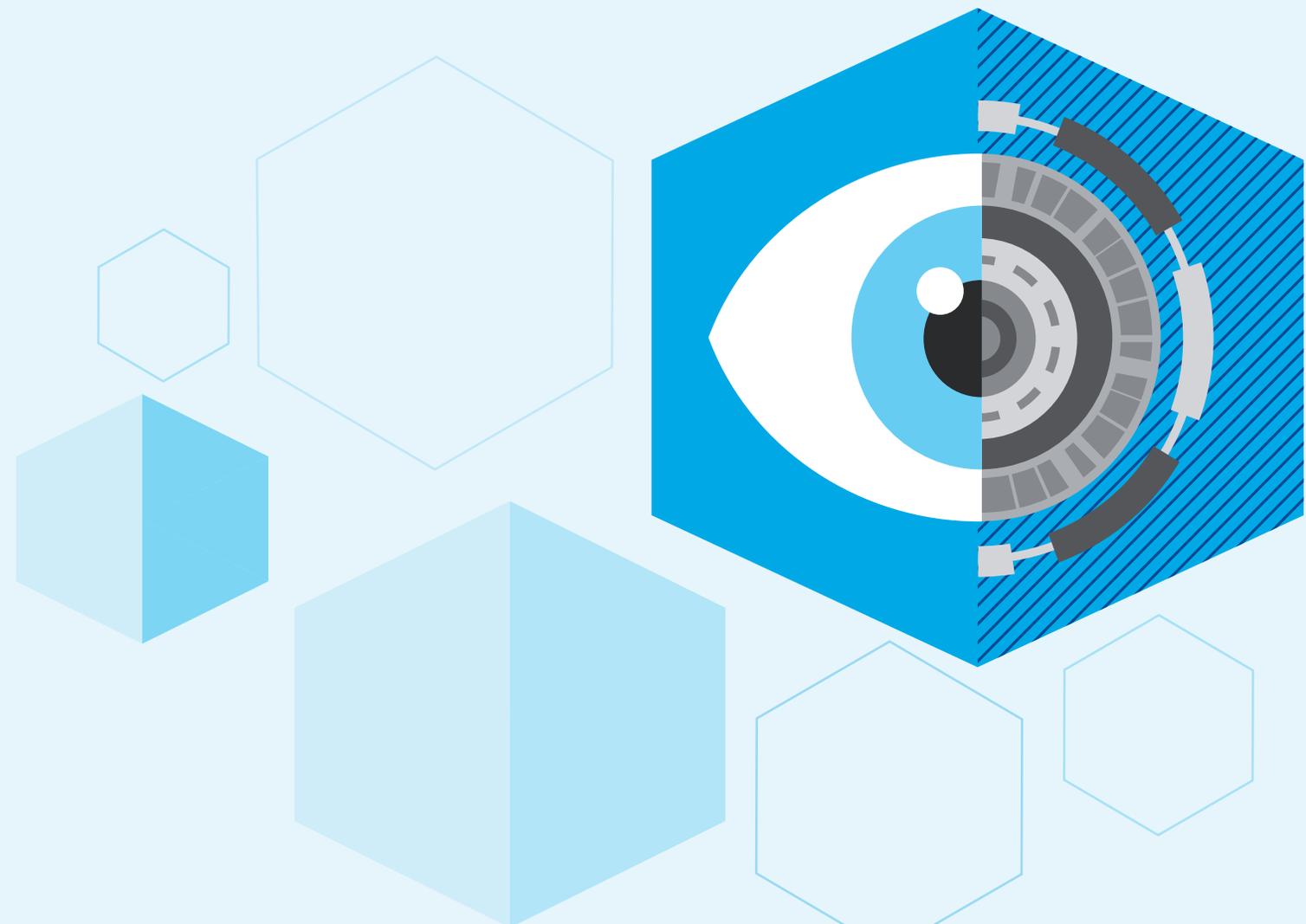
Two paths to monetization

1. Infuse analytics within current business models – Collect and aggregate data to unlock efficiencies.
2. Relentless experimentation – Innovate. Combine internal and external data to disrupt the status quo and create opportunities.

Monetize this?



Bionic brains





Man vs. machine learning

Artificial intelligence (AI) is improving exponentially and doubling in power approximately every 18 months. People have long wondered when computers will out-smart humans, but are we already there for some functions?



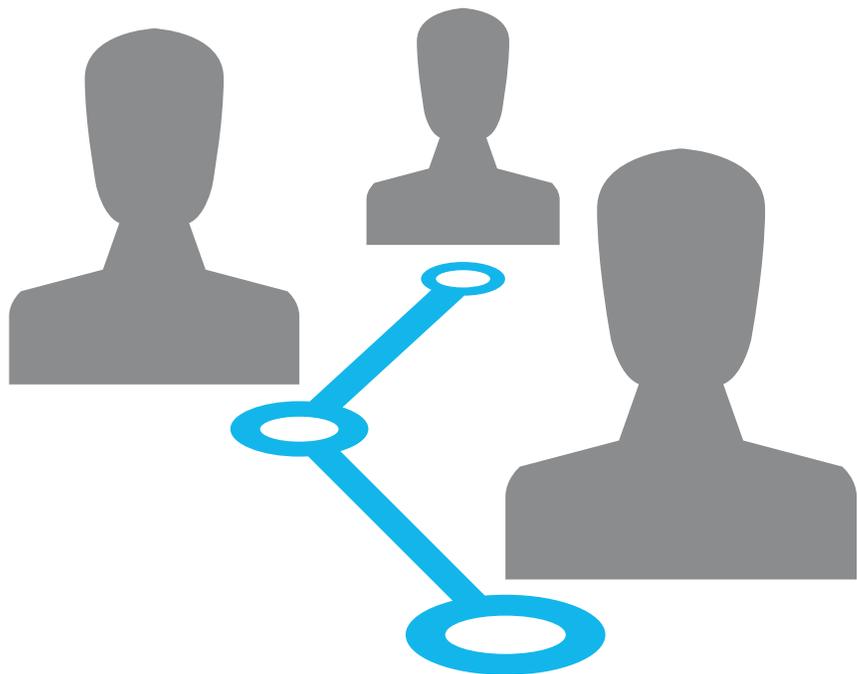
Are you smarter than a computer?

AI already outperforms humans on some tasks, like playing chess or recognizing street signs. They rapidly process more data, with a lower error rate. And it is changing everything...fast.



Predict the future

While comprehensive AI that can perform human tasks is still some years off, predictive analytics today uses patterns in data to create models and insights that businesses can take advantage of.



The rise of open source





Open to innovation

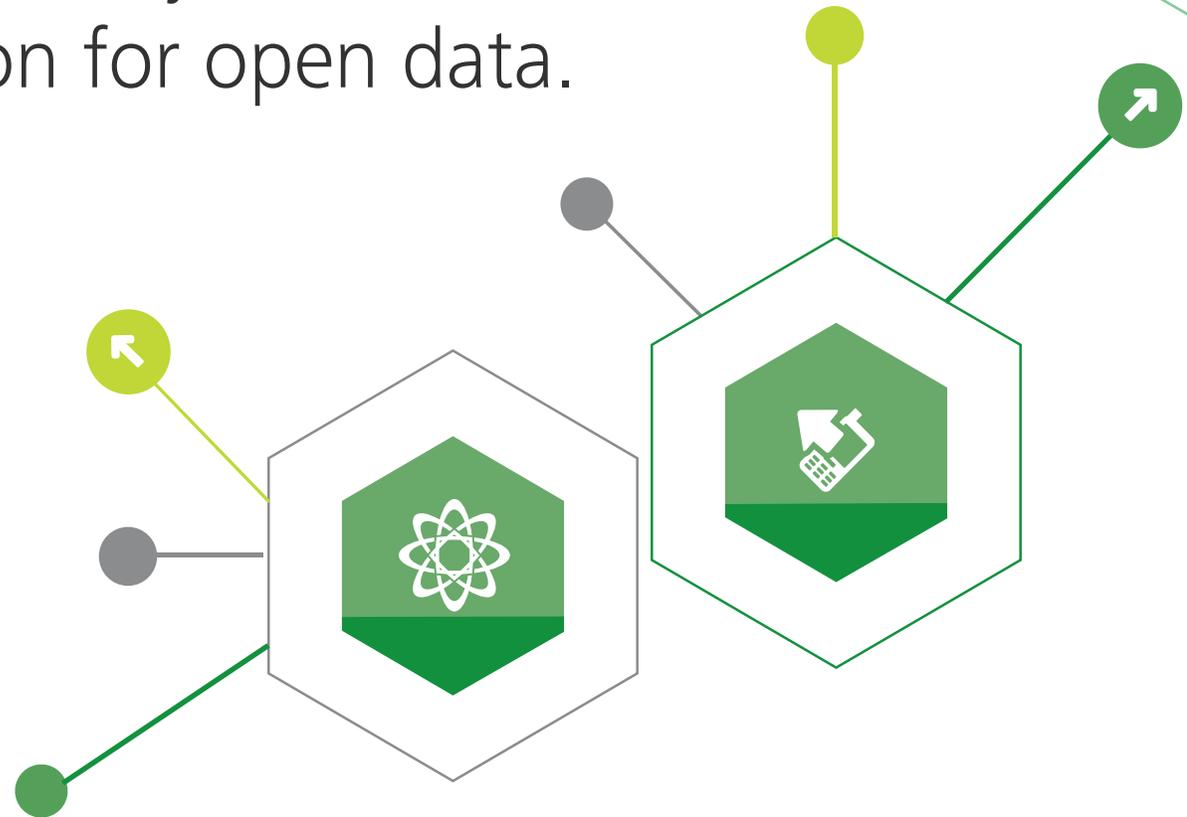
Data can be incredibly valuable, but only if you make use of it. Already governments that have opened their data to the public have opened the doors to some stunning innovations.

The rise of open source



Open for business

Hackathons using government open data have spawned apps that solve problems like connecting youth to employers or enabling farmers to track commodity prices, helping everyone to win. But it's not just open season for open data.



The rise of open source





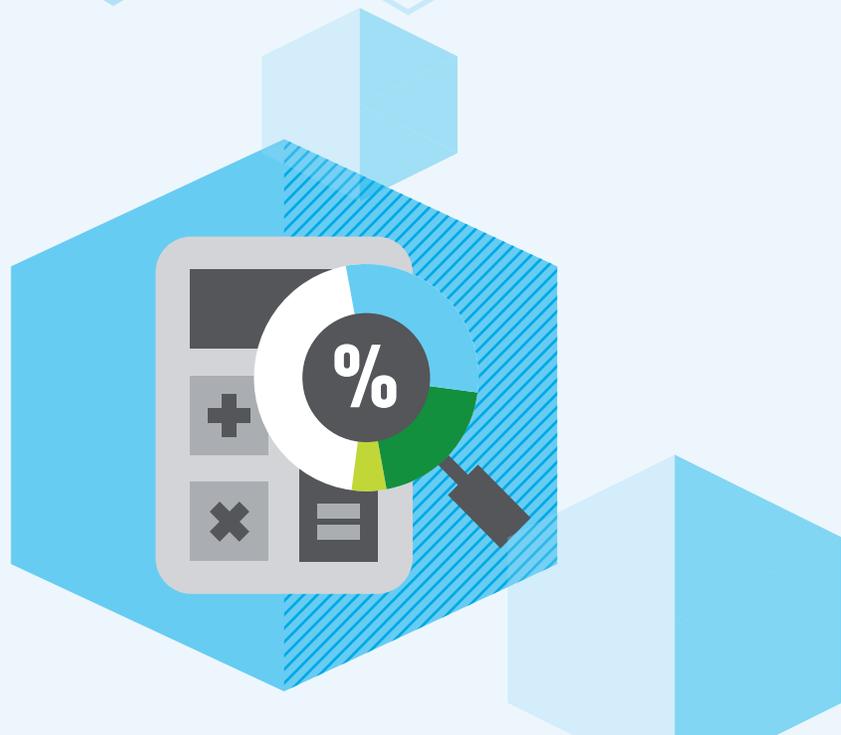
Privacy matters

Privacy is a top concern, especially when dealing with citizens' data. Adopting *privacy-by-design* enhancing technologies will assure the public's trust, which will in turn help you reap the rewards of data analytics.

The rise of open source

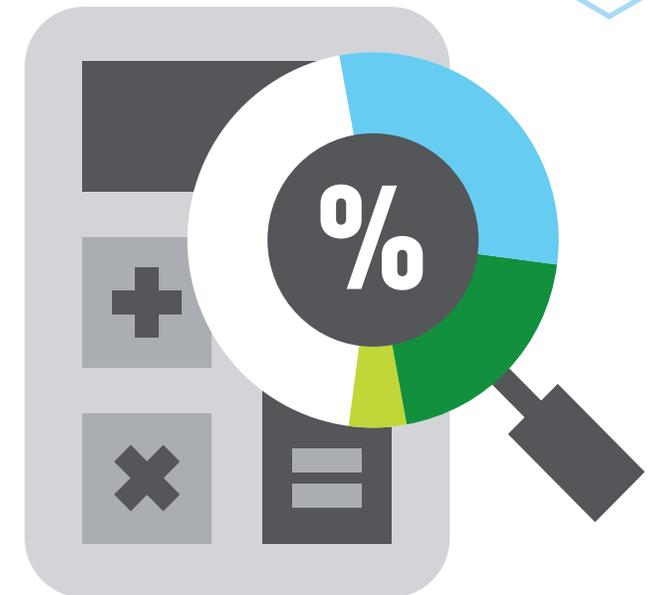


Tax analytics: Striking gold?



Taxing situation

Tax authorities are demanding more electronic submissions, including access to businesses' ERP data. Does your organization have the resources and expertise to effectively manage complex requests from taxing authorities?



Tax analytics: Striking gold?





Proactive protection

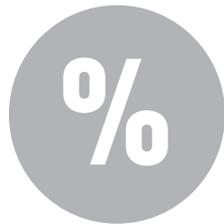
Providing the CRA data allows them to analyze data sets in powerful ways. Analytics can help tell you what the government might uncover – so that you can be prepared. And that's just one way analytics can protect you.





Knowledge is power

A 360 insight into your tax data combined with the knowledge of Tax subject matter experts ensures you pay the right amount of tax, explains variations in tax rates and provides visibility into complex international transactions, all for your organization's benefit.

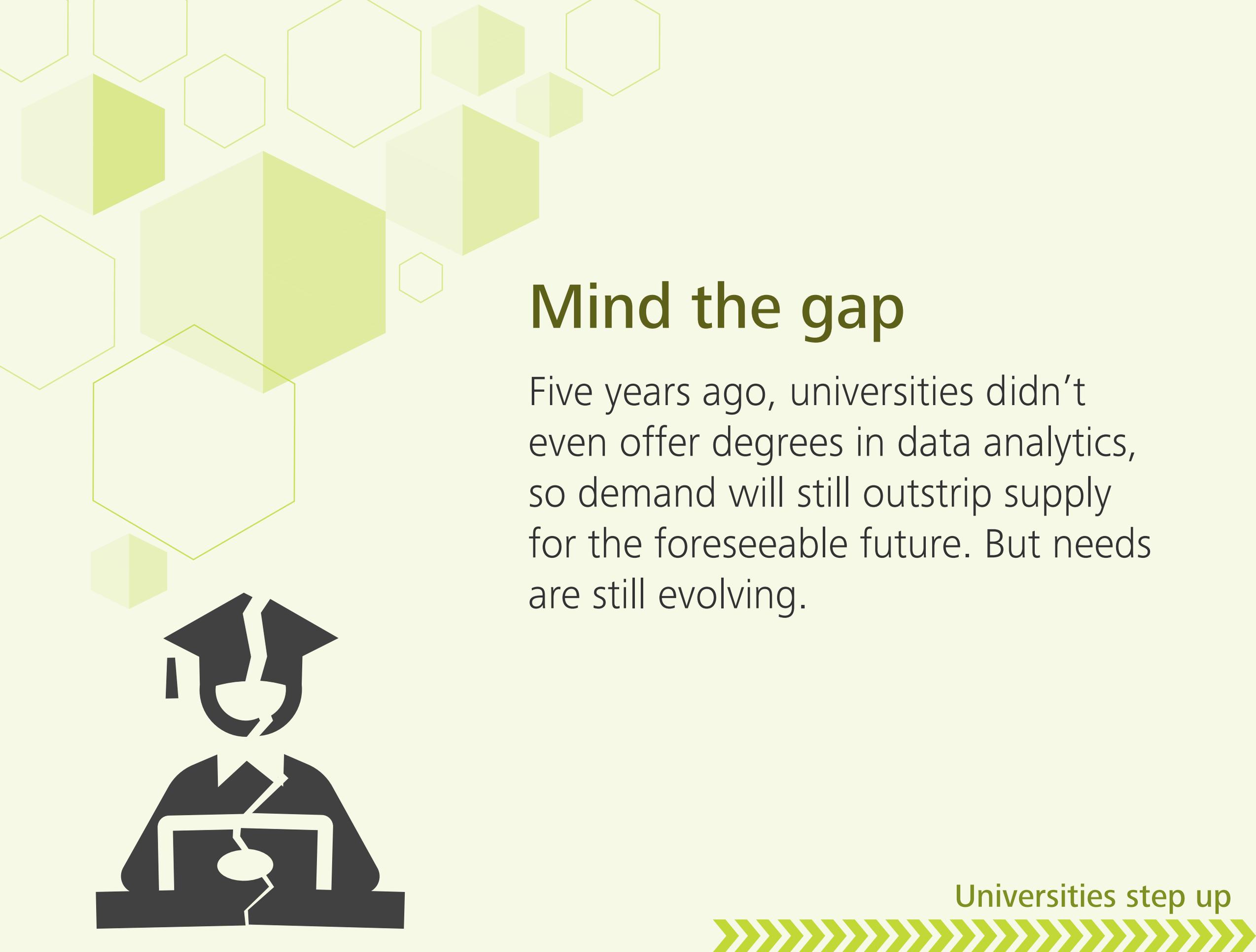


Tax analytics: Striking gold?



Universities step up



The background features a pattern of green hexagons in various shades and sizes, some with 3D effects. In the bottom left corner, there is a black silhouette of a student wearing a graduation cap and sitting at a desk with a laptop. The text is positioned on the right side of the slide.

Mind the gap

Five years ago, universities didn't even offer degrees in data analytics, so demand will still outstrip supply for the foreseeable future. But needs are still evolving.

Universities step up

A decorative horizontal bar at the bottom right consisting of a series of green chevrons pointing to the right.



“Hire” education

Analytical sciences like information design, visualization and management analytics must be matched by “Liberal arts” skills needed to correctly frame questions and problems for the quantitative set to solve.

Universities step up





Faculty first

A shortage of qualified educators means competition for the best teachers. Start small and build areas of expertise, with a feedback loop to ensure the skills being taught actually fill marketplace demands.

Universities step up



Accuracy quest





Trust issues

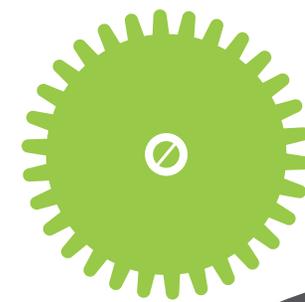
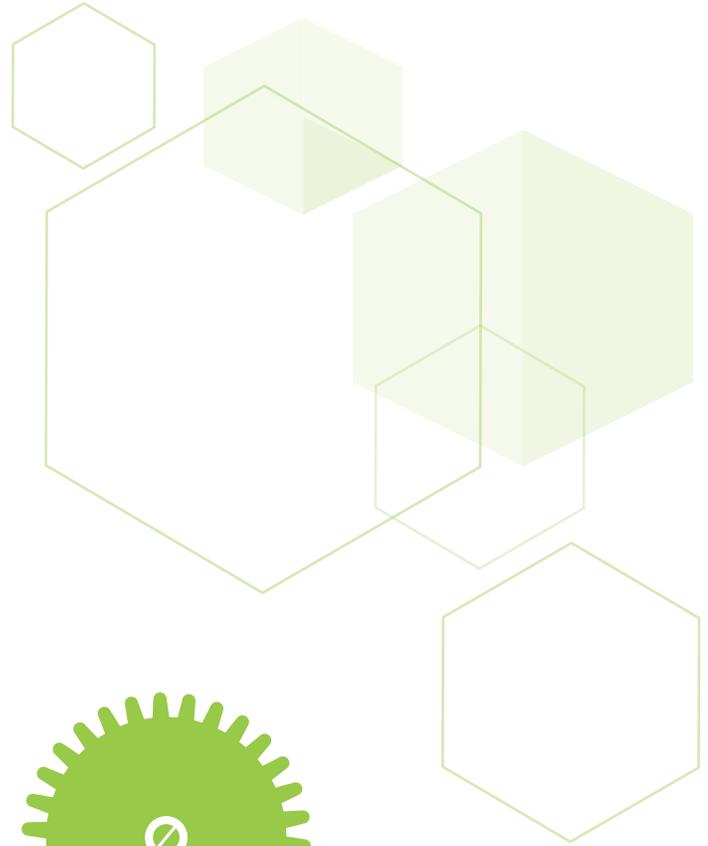
Businesses invest heavily in their data, but often without disciplined verification of its accuracy, leading to enormous cost and effort massaging data. Could bad data be leading you astray? Could there be more efficient and effective approaches for managing data?

Accuracy quest



All the fixin's

Solving potential problems is only half the battle. A foundational data quality program provides leverage to fix and sustain data quality. Many companies apply data quality initiatives as part of their analytics program.



Accuracy quest





Changing how you do business

Accuracy is not a one-time project, but an ongoing process that builds data quality into day-to-day procedures. This provides more time for business insights and decisions that save time and money while growing the bottom line.



Contacts

Supertrend: Quadruple down on data security

Dina Kamal

Partner, Enterprise Risk Services
416-775-7414
dkamal@deloitte.ca

Mark Fernandes

Partner, Enterprise Risk Services
416-601-6473
markfernandes@deloitte.ca

The Analytics of Things

Anthony Viel

Partner, Financial Advisory Services
416-874-3304
anviel@deloitte.ca

Marc Smith

Senior Lead, Consulting
416-775-7361
marcsmith@deloitte.ca

Monetize this?

Jeff Bowman

Partner, Consulting
416-874-3429
jefbowman@deloitte.ca

David Stewart

Partner, Financial Advisory Services
416-775-7484
davstewart@deloitte.ca

Bionic brains

Ian Chan

Partner, Consulting
416-775-7245
iachan@deloitte.ca

Ian Scott

Senior Manager,
Financial Advisory Services
416-775-7180
iscott@deloitte.ca

The rise of open source

Andy Potter

Partner, Consulting
416-643-8938
andpotter@deloitte.ca

Sylvia Kingsmill

Senior Manager,
Enterprise Risk Services
416-643-8238
skingsmill@deloitte.ca

Tax analytics: Striking gold?

Jennifer Carew

Senior Manager, Tax
416-601-5831
jcarew@deloitte.ca

Douglas Myrden

Partner, Tax
416-601-6197
dmyrden@deloitte.ca

Universities step up

Raymond Pineda

Partner, Consulting
416-643-8945
rpineda@deloitte.ca

Accuracy quest

Gordon Shields

Partner, Consulting
416-874-3339
gshields@deloitte.ca

Gord Kilarski

Director, Enterprise Risk Services
416-601-5677
gkilarski@deloitte.ca

Deloitte.

deloitte.ca/analyticstrends
#AnalyticsTrendsCA

Deloitte, one of Canada's leading professional services firms, provides audit, tax, consulting, and financial advisory services. Deloitte LLP, an Ontario limited liability partnership, is the Canadian member firm of Deloitte Touche Tohmatsu Limited.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.

© Deloitte LLP and affiliated entities.