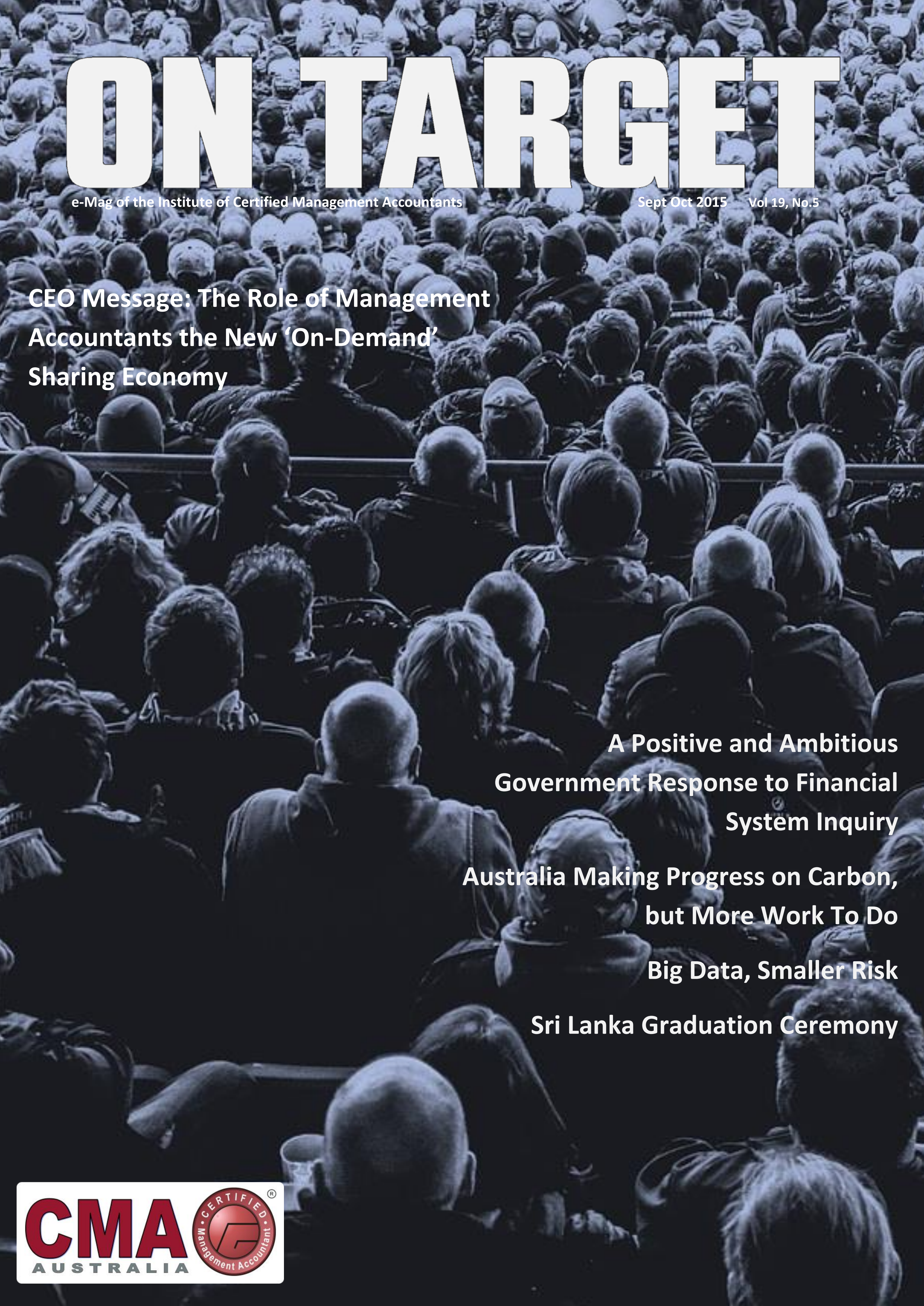

ON TARGET

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CEO Message: The Role of Management Accountants the New 'On-Demand' Sharing Economy

Professor Janek Ratnatunga, CMA, CGMA

CEO, ICMA Australia

Australian Taxi Drivers are up-in-arms and protesting in front of State Parliaments. They are not protesting about the safety of taxi drivers or about the amount of taxi licenses issued by State Governments. Instead they are protesting about the *Uber*, a five-year-old company which gets ordinary people worldwide to operate as cabdrivers using their own vehicles. Uber is valued at $41.2 billion, making it one of the 150 biggest companies in the world–larger than Qantas, FedEx or Viacom. Taxi Drivers are claiming that Uber drivers do not have the costs incurred by them such as purchasing taxi licenses; doing police checks on drivers etc. State Governments are trying to collect registration fees from Uber drivers; the Australian Tax Office is trying to get them to collect GST on collections etc. But people are voting with their feet and using Uber's services in large numbers.

The key to this shift was the discovery that while we totally distrust strangers, we totally trust people recommended to us by platforms such as Uber; and we trust them significantly more than we trust corporations or governments. Further, Uber drivers also have to have the confidence that an individual who is rated highly by Uber will not attack them after they get a ride in their car. Uber gets a rating on both the driver and passenger after the ride, usually with one to five stars. That has eliminated the few bad apples who made everyone too nervous to deal with strangers. Also, no money exchanges hands. It's all collected and paid by Uber based on the trip distance. The traditional way is 'no' - you can't do it unless you get a license. That made sense up until we had data. Now the starting point is 'yes'.

Airbnb is another big player in the sharing economy. The idea that people will rent out their spare rooms to strangers was rejected by almost every venture capitalist it pitched itself to, and even the people who wound up investing in it thought it was unlikely to succeed. Now an average of 425,000 people use it every night worldwide, and the company is valued at $13 billion, almost half the value of 96-year-old Hilton Worldwide, which owns actual real estate.

Joel Stern, in an excellent article in the Time Magazine (Jan. 29, 2015), says that it's unclear if most of this is legal; and that the disrupters are being taken on by governments and the entrenched institutions they are challenging. Uber and Airbnb, which are exorbitantly funded by Silicon Valley, generate most of the controversy, says Stern. But there are thousands of companies–in areas such as food, education and finance–that promise to turn nearly every aspect of our lives into contested ground, poking holes in the social contract if need be. After transforming or destroying publishing, television and music, technology has come after the service economy.

In the interest of eliminating bureaucracy, overhead, middlemen and waste, individuals are turning themselves into *mini-diversified corporations*. Besides being a taxi company, an individual can become a rental-car company by giving a stranger to use his/her car; a restaurant by cooking a meal for a stranger and a hotel by renting out a spare room in the home. There are at least 10,000 companies in the sharing economy. Individuals are finding that it's a lot of fun being a part of the sharing economy, at least until something goes wrong. The change in cost structures between the traditional and sharing economy organisations is significant, and management accountants must be aware of this.

Joel Stern says that to have today's 'on demand' sharing economy, we needed *eBay, PayPal* and *Amazon*, which made it safe to do business on the web. We needed *Apple* and *Google* to provide GPS and Internet-enabled phones that make us always reachable and findable. We needed *Facebook,* which made people more likely to actually be who they say they are. And we needed the global financial crisis (GFC), with its low-wage, jobless recovery, which made us ask ourselves how many possessions we really need and how much extra we could make on the side. The sharing economy–which isn't about sharing so much as ruthlessly optimizing everything around us and delivering it at the touch of a button–is the culmination of all our connectivity, our wealth, our stuff.

Talking about "stuff", it is a fact that that we all own a lot of stuff that we don't use. This is where *Yerdle* comes in. Yerdle allows people to give away their stuff. Users have given away cars and pianos on the site in exchange for credits. What can they use the credits for? They can use their credits to get other users' unwanted stuff! More than 25,000 items get shipped through Yerdle every month, and companies such as Levi's and Patagonia have used it to distribute unsold merchandise to market their brand instead of sending goods to a landfill. Purchasing goods for credits instead of money is another headache for management accountants.

The economic shift these companies are exploiting isn't just technological; it's also cultural, and management accountants should be aware of this. First of all, it's easier to share now that more people live in cities. (More than half the world's population now lives in urban areas, according to the U.N.; by 2050 it will be 66%.) More important, the homes of rich people and those of the millennial generation are increasingly stark; only poorer people are still piling up stuff in their guest showers and storage units. Material goods have gotten so cheap, they've become burdensome Almost all happiness studies show that experience increases contentment far more than purchases do, and young people intrinsically understand that, thus fuelling an experience economy. Stern says "We've moved from conspicuous consumption to conspicuous experience". So the sharing economy is really the experience economy, and more specifically the experience-it-right-this-second economy. So how do you cost or price an 'experience"? This will be a new role for the management accountant.

it also doesn't hurt that amateur drivers of Uber are surprisingly pleasant. No matter how well trained service employees might be, everyone is nicer when they're dealing with customers directly. Even customers are nicer. Nearly everyone who stays at an Airbnb rental, for instance, hangs up their bathroom towels after they use them. You do not want to ask a hotel manager what guests do with their towels. *The customer is no longer the king.* Everyone is equal in the shared economy. This human element has been crucial in fuelling the growth of sharing-economy companies. When *RelayRides* installed a convenient gadget in renters' cars that allowed them to unlock it without owners having to meet up to hand over the keys, satisfaction went down nearly 40% and complaints shot up fivefold. When they met in person, rentees kept their cars cleaner and renters returned them on time way more often.

Of course the legislative battles will increase, and management accountants need to keep an eye on the fast changing market environment. In December 2014, Uber quit its Spanish operations after a judge ruled that some of its services broke the law, giving it unfair advantages over taxi drivers. It has appealed decisions in France and the Netherlands prohibiting it from operating its lowest-cost service. It watched as South Korea indicted CEO Travis Kalanick for wilfully breaking the law by operating there. It was ordered out of Thailand; and it got banned in New Delhi after a driver raped a passenger.

In New York City, Airbnb's largest market, the battle with regulators has been particularly fierce. In 2010 a law was passed that increased the enforceability of a 1929 regulation prohibiting rentals of less than 30 days. After subpoenaing Airbnb's data, New York State Attorney General issued a report that found that three-quarters of Airbnb's New York City rentals were illegal. Even though Airbnb shut down about 2,000 rooms in what were essentially unlawful hotels that it said it didn't know about until it saw the attorney general's analysis, the law still makes most Airbnb transactions in New York illegal.

It is clear that all developed countries have built up a lot of regulations. In the 1950s, 5% of USA jobs required a license; now it's one-third. Professor Arun Sundararajan of New York University Stern School of Business who has studied the sharing economy says, "one hundred years ago there wasn't a clear line between someone who ran a hotel and someone who let people stay in their homes. In those days we drew clear lines between people who did something for a living and people who did it casually not for money". Airbnb and Uber are blurring these lines.

The ICMA also has launched a platform that uses the sharing economy. It has sponsored Calwest University (www.calwest.org) for its members that links up World-Class professors in universities such as Harvard, MIT and Stanford that provide *Massive Open Online Courses* (MOOCs) with members wishing to undertake MBA and DBA degrees. However, as a university degree is the end result, Calwest has had to abide by the Californian State Government regulations that govern the granting of degrees.

Warm Regards,

Professor Janek Ratnatunga, CMA, CGMA

CEO, ICMA Australia

A Positive and Ambitious Government Response to Financial System Inquiry

PwC partner and financial services leader Julie Coates said the Federal Government's response to the Financial System Inquiry Report was encouraging, with some of these measures expected to be extended over time.

"The financial services sector is closely linked to Australia's growth performance so it's encouraging to see nearly all the recommendations by David Murray and his team adopted," Ms Coates said.

"There's quite a lot to get done in a short period of time – a number of actions are set for completion by the end of 2016.

"We are particularly encouraged by the endorsement of measures around innovation and the need to make Australia a competitive place to do business."

Ms Coates said she was surprised the Government did not adopt one measure prohibiting borrowing by super funds.

"The argument from the Murray group is that the household sector is already heavily leveraged.

"In that context it makes sense not to add to the leverage given the important of retirement income. We are supportive of that. It's still on the table and we suspect in time the change will resurface."

Regarding measures around bank resilience Ms Coates said: "There's no real surprises here - the government is adopting the steps that APRA foreshadowed and the banks are already making moves to respond to this. Adopting these measures gives certainty to banks and the market."

"The broader actions to improve the competitiveness, efficiency and transparency of Superannuation are welcome," Ms Coates said.

"They recognise the significance of superannuation to Australia's economic and social future and the definition of its purpose in law is a critical first step.

"It's also encouraging to see the Prime Minister endorse the inquiry's recommendations in legislating and giving regulators more hands on power to put consumer outcomes first.

"The capping of credit card surcharges, and reforms to advisor professional standards have been foreshadowed for some time."

Australia Making Progress on Carbon, but More Work To Do

Australia will need to nearly double its historic rate of decarbonisation, to 4.4 per cent annually, if it is to meet its goal of a 26 percent decrease in carbon emissions on 2005 levels by 2030, according to a PwC report released today.

PwC's 7th annual Low Carbon Economy Index (LCEI) tracks the rate that G20 countries are decarbonising their economies by measuring decreases in their 'carbon intensity,' or the ratio of carbon emissions relative to GDP growth. Breaking the link between growth and emissions is seen as essential in avoiding the worst impacts of climate change.

Since 2000, Australia's carbon intensity has fallen by an average rate of 2.4 per cent annually, well below the 4.4 per cent required to reach the target that Australia will take to the United Nations Climate Change Conference in Paris this December.

However, according to Mark Coughlin, PwC Australia's Energy, Utilities, and Mining leader, Australia has made good progress recently in its efforts to reduce carbon intensity.

"Australia's average decarbonisation rate since 2000 actually puts it amongst the top five best performers in the G20. In 2013 and 2014 the decarbonisation rate was 4.5 per cent and 4.7 per cent respectively, so if we can maintain that rate we will hit the Government's 26 per cent target."

Yet for all the positive signs in 2013 and 2014, Coughlin believes the door is open for Australia to do more.

"The fundamental question remains as to whether Australia's targets are ambitious enough, or consistent with what other countries are doing to limit global warming to within 2 degrees of pre-industrial levels. We know that across the G20 we need to achieve an average annual reduction in carbon intensity of 6.3 per cent out to 2030. Based on how Australia has tracked historically, you could argue there's scope to be more ambitious. "

Pointing to examples in the US and Europe, Coughlin said that the changes required to shift carbon intensity could be significant.

"The US shale gas revolution resulted in a 3 per cent per annum reduction in carbonisation as did the restructuring of German industry and energy generation settings after reunification," he said. "We need to acknowledge that keeping our planet's warming to within 2 degrees will take a major intervention. Make no mistake – we cannot escape what is being proposed by the G20 for the Paris meeting in December."

"To address the emissions gap, the Paris agreement will need a process to review progress and a ratchet mechanism to raise ambition in future. These elements in the Paris deal are critical because any delay will mean future reductions will need to be faster, deeper and, as a result, more costly."

What it means for business

According to Coughlin, the implications for Australian industry are far-reaching.

"Companies should anticipate both more ambitious climate policies in the near term and the prospect of physical climate impacts in the longer term," he said.

The report describes three consistent themes that have emerged from the Intended Nationally Determined Contributions (INDCs), that is, the publicly declared country commitments that will be taken to Paris:

- A rapid investment in renewables and their share of the energy mix
- The engagement of the financial services sector in delivering this investment, as well as assessing the sector's exposure to instability as a result of climate change
- A focus on coal-fired power generation in countries' decarbonisation pathways.

"The levels of investment needed for the low carbon transition will require not just the mobilisation of investors, but also the creation and innovation of financial products to finance and insure the projects involved," Coughlin said. "At the same time, financial institutions will need to start assessing their exposure to climate risks."

Time for Australia's energy mix to evolve?

Australia's power and utilities sector accounted for 35 per cent of total emissions in 2013, followed by agriculture, forestry and fishing (18 per cent), manufacturing (13 per cent), and mining (12 per cent).

94 per cent of Australia's energy demands are still met by coal, oil and gas, however the proportion of energy consumed from these sources has shifted significantly in the last five years. Since 2009 energy consumption from coal has slipped 18 per cent, while consumption from oil and gas has increased 6.1 per cent and 15.8 per cent respectively. Energy consumed from renewables rose by 72 per cent over the same period.

According to Coughlin, Australia's energy mix will need to continue to evolve to keep Australia on track to meet its 2030 emissions target.

"There's no doubt that the trend towards a more diverse energy mix will continue - in fact it must if we want to reach the target that the Government is taking to Paris in December," he said.

"Energy producers that rely on coal, gas, and oil will be very much part of the solution. The key for these businesses will be taking a portfolio view, and looking for opportunities to diversify into wind, hydro, solar, and emerging technologies. That will be the best insurance policy against the impact of future regulatory focus and changing customer demand."

Globally, decarbonisation rate doubles

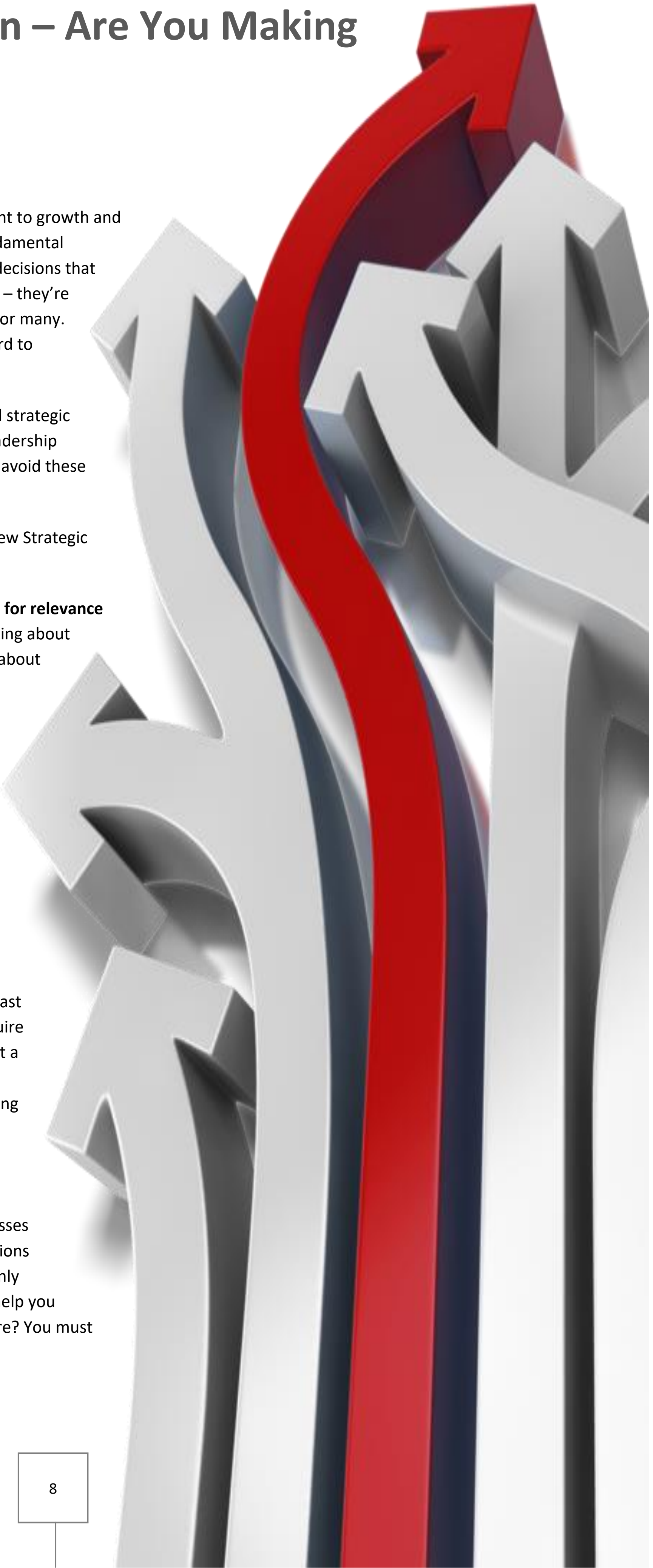
Carbon intensity fell globally by 2.7 per cent in 2014, the steepest decline in seven years of the PwC analysis. Global GDP growth of 3.2 per cent in 2014 was achieved with 0.5 per cent growth in energy related emissions.

2014 was also the first year that more than one country (UK, France, Germany and Italy as well as the EU as a whole) achieved a decarbonisation rate of 6.3 per cent or above, the rate required globally to limit warming to two degrees. Of these, the UK achieved a record-breaking 10.9 per cent reduction in carbon intensity – the result of a strong economy, lower coal use and a warmer winter.

China, the world's largest emitter, is the best performing non-EU country, with a decarbonisation rate of 6 per cent.

The analysis showed that carbon intensity rose in five countries: South Africa, India, Brazil, Saudi Arabia and Turkey.

Creating a Strategic Vision – Are You Making These 3 Mistakes?



Have you seen the effects of success blindness?

It is a condition where success can be your greatest impediment to growth and succeeding in the future. Success hides many ills. It masks fundamental weaknesses in the business. And can lead to poor decisions – decisions that could end up fatal to your business. We've all heard the adage – they're throwing money at the problem. Well, today money is scarce for many. And simply stated many businesses literally can no longer afford to throw money at the problem to fix it.

We need a better approach, and it starts with creating a sound strategic vision as we work our way out of this recession. While your leadership team works on creating a *new* strategic vision, be careful to avoid these 3 mistakes that most organizations unknowingly make…

3 Top Mistakes Business Leaders Make While Creating Their New Strategic Vision and Direction

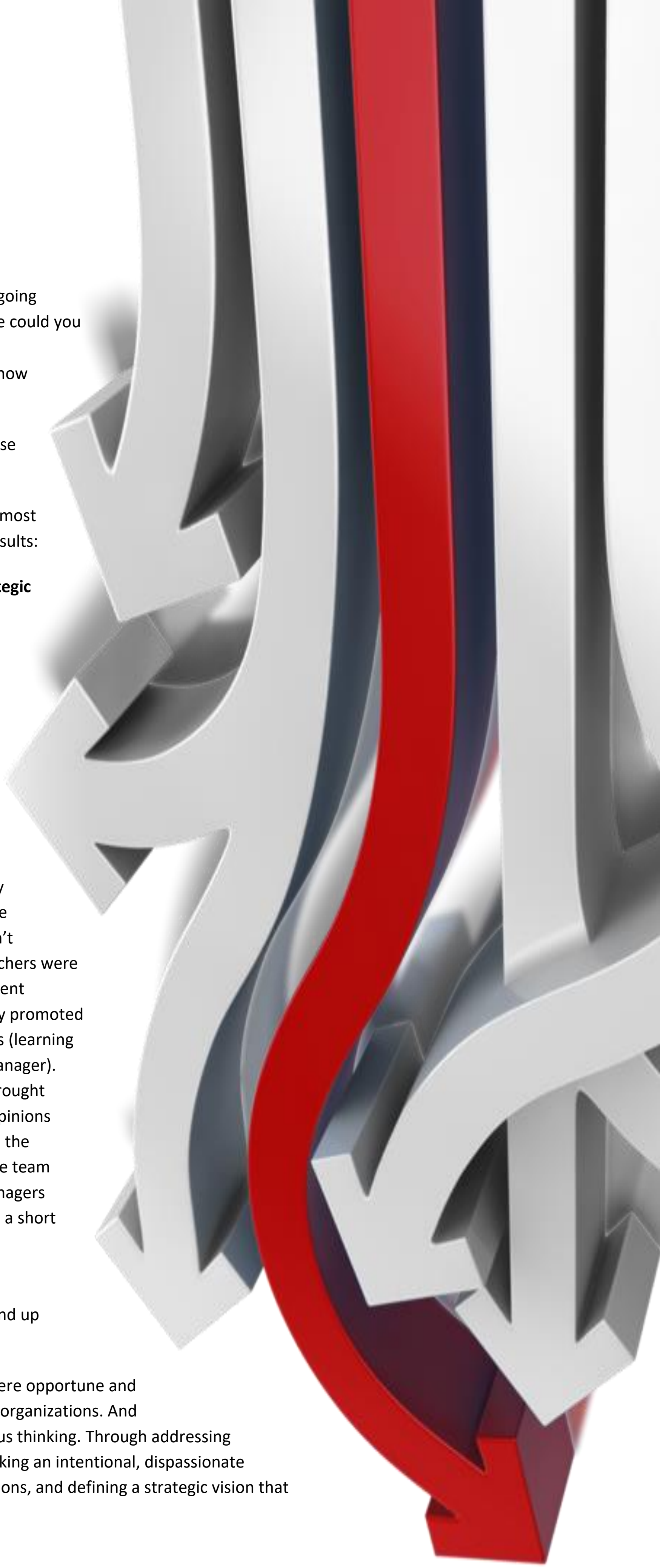
1. Failing to look at the organization's current strategic vision for relevance and how the market has changed. Before you even start thinking about creating a new vision for your organization, you need to think about these two things…

- Is your past/current strategic vision still relevant in today's economy?
- Has your market changed: for the better or for worse?

If you were selling subprime mortgages or providing goods and services to the real estate market then your market has changed for the worse. If on the other hand, you are selling goods or services to Apple, Walmart or Target, then you are likely doing reasonably well.

Strategy is multi-dimensional and what was successful in the past may not be successful in the future. Context and situation require change, at the very least, re-evaluation and validation. Without a current, sound strategic vision there is no direction for your company and forward momentum will become unlikely. Defining a strategic vision is the starting point as business growth resumes.

2. Failing to ask eight fundamental "business health check" questions. You see, far too often, small to medium size businesses fail to take an objective and dispassionate view of their operations when planning for their future. In many cases, they focus on only one component of the business, such as sales. How does this help you determine how to best position your organization for the future? You must ask these 8 questions…



- What's working now and how do you know?
- What's not working and how do you know?
- What do you want to achieve?
- What do you need to avoid?
- What do you need to eliminate ("stop doing")?
- What do you need to safeguard/preserve?
- What could you be doing to better prepare if an ongoing recession, and for the eminent rebound? (What else could you do to prepare for worse/best case scenarios?)
- Then, what are your next best steps to sustain you now and position you for the rebound?

It is critical to ask (and listen to your team's responses to) these questions when creating your new strategic vision.

And, **mistake #3** which is highly interdependent with #2, and most critical to execution- that is, operationalizing your vision to results:

3. Failing to *align* your leadership team with the new strategic vision of where you are headed. If only you or a few of the executives address the questions above in framing out and defining your strategic direction, it results in a gap – a lack of knowing by the very staff that will be making it happen (AKA: EXECUTING). Not knowing organizational priorities results in disarray due to individual agendas and priorities. (Think of individual employees as arrows pointing in different directions, verses focus and energies in a clear and common direction.)

For example, one of our leadership consulting clients was running a successful research business in the medical industry with a strong client base. The work product was good, as were sales. And for the most part clients were satisfied. What wasn't working well was the leadership team. Why? Talented researchers were promoted to leadership positions with little (or no) management experience. This created a "learning curve" both for the newly promoted manager (learning how to be a manager) and their employees (learning how to cope with the new manager's learning how to be a manager). The new managers that were thrown into a leadership role brought their baggage with them. That is the politics, behaviors and opinions they had as subordinates. No time was spent working to align the leadership team with the organizational vision and to align the team with itself. As a result, frustration grew – in both the new managers and the employees – and employee turnover became high. In a short time, clients felt the impact.

Lack of a commonly understood strategic direction leads to misaligned efforts and frankly poor decisions – and this can end up fatal to your business.

The recession has changed many businesses forever. What were opportune and successful strategies in the past will no longer work for many organizations. And believing you will soon return to business as usual is dangerous thinking. Through addressing these 3 mistakes, you can re-surface from the recession by taking an intentional, dispassionate look at your current market situation, asking the tough questions, and defining a strategic vision that is desired and doable by you and your staff.

Anti-Bribery and Corruption Rules Pose Challenge to Australian Companies

Australian companies doing business overseas are facing greater challenges on anti-bribery and corruption (ABC) compliance than ever before, according to a new survey report by KPMG International. Anti-Bribery and corruption: Rising to the challenge in the age of globalisation.

Gary Gill, Head of Forensic, KPMG Australia, said: "The report shows that a growing number of governments around the world are tightening ABC regulations or introducing new ones. For Australia, of most relevance is the fact that the Chinese authorities are making significant efforts to crack down on corruption. China is already our biggest trading partner and if the FTA goes ahead, as we hope it does, levels of trade will only increase and Australian businesses need to be aware of the risks and how to manage them."

He added: "As Australian companies do increasing business overseas they rely more heavily on third parties, often in areas where there is a high risk of corruption, and Asia is not immune from that. It is third parties who are often conduits for bribes and they are difficult to detect, so management of third parties is a real challenge when it comes to ABC compliance".

The main findings of the global survey, which included 15 Australian companies, were:

- As companies continue to globalise, their management of third parties pose the greatest challenge in managing ABC programs, ranking first in terms of auditing third parties for compliance and third in conducting due diligence over them.
- Despite the difficulty of monitoring their business dealings with third parties, nearly half the respondents do not identify high-risk third parties. More than half of those respondents with right-to-audit clauses over third parties have not exercised these rights.
- Nearly two thirds of companies indicated that M&A is part of their growth strategy, but many admit they are unaware of the consequences of failing to identify ABC risks during the acquisition phase.
- Respondents complain they lack the resources to manage ABC risk, ranking fourth overall among the top challenges facing the survey's respondents.
- Data analytics is an increasingly important and cost-effective tool to assess ABC controls. Yet only a quarter of respondents use data analysis to identify violations and of those that do so, less than half continuously monitor data to spot potential violations. A similar proportion of respondents (26 percent) could not say either way.

Gary Gill said: "The findings and issues revealed by our global survey have resonance in Australia, where bribery and corruption cases are on the increase and have the potential to seriously damage an organisation's reputation. The AFP is making renewed efforts to crack down on bribery and corruption in Australia, but as a nation we don't always prosecute allegations with the same vigour of other countries, and findings of corruption do not always result in criminal prosecutions. This does not persuade companies to make the investment necessary to manage bribery and corruption risk effectively, despite the obvious advantages of doing so from a reputational perspective."

About the survey

The survey targeted 659 respondents covering 64 countries, with 140 respondents based in Central & Eastern Europe (including Russia), 113 in Western European countries (excluding the UK), 105 from the Asia– Pacific region, 66 respondents in the U.S., 64 from the South American continent, 61 in South Africa, 41 in the UK, and 31 in Mexico. Industries were widely represented: banking comprised 20 percent, life sciences 12 percent, manufacturing 10 percent and energy & natural resources 8 percent.

Big Data, Smaller Risk

Companies are delving into vast amounts of data to spot previously hidden perils and manage risk better.

"Think back to eighth grade, when we had to diagram sentences on the chalk board," Brian Murrow says, reaching into his past for an analogy to explain how a field of computer science can detect whether call-center employees are bullying customers. Technology used in that field, called "natural language processing," enables a computer to read millions of documents. As it reads transcripts of phone calls, for example, a computer can "diagram" sentences and phrases in mathematical terms, thus revealing through word order the tone of telemarketers as they attempt to sell a particular product.

"Once you diagram [phrases and sentences], you know what your subject is and what your predicate is, what your objects are, your prepositional phrases. You can start to figure out who's saying what, with what intention, to whom," notes Murrow, a KPMG Big Data expert focusing on banks.

That, in turn, enables a bank's risk managers to gauge the probability that its call-center workers are engaging in predatory lending practices, like selling a loan to a customer who can't pay it back. Knowing that, the bank can avoid a visit from regulators by either firing the predatory workers or training them to mend their ways.

Murrow provides the example to indicate a trend: After years of treating Big Data almost exclusively as a way to aid marketers and drive revenue, companies are starting to explore its risk management capabilities. Increasingly, they're looking for patterns in their internal emails and audio files and on social media to spot and avert a plethora of potential risks.

"We're at a pivot point where we are seeing the capabilities move from marketing into risk management," the consultant said.

"The analytics aren't necessarily new, and how we deal with the data isn't necessarily new. But what is new is the evolution of computing power to be able to handle the level of computations it takes to apply these analytics to Big Data."

A Bevy of Breaches

It's likely that the recent barrage of high-profile data thievery has also helped shift some of the corporate focus from benefits to risks. Massive thefts of big data (names, credit card numbers, email addresses, passwords, etc.) have been getting widespread attention, beginning with the hacks of Target and Adobe Systems in 2013 and extending right through the attack reported in July on Ashley Madison, a purportedly anonymous website encouraging extramarital affairs.

Regardless of the reason, corporations have begun to focus on the risky side of Big Data in two ways: both as a source of risk itself and as a means to manage it. One example of assessing the former, called "data-flow analysis," involves tracing the location of data at different times during a business process, according to Jim Adler, chief privacy officer at Metanautix, a Big Data analytics firm specializing in supply chains.

The method can prove especially useful in detecting attacks on retail point-of-sale devices that copy debit or credit card data to an internal server. Working at night, hackers might steal the credit card numbers that the devices had collected throughout the day on the server, Adler said, noting that criminals have accumulated "millions of [personal information] numbers" under the noses of data-security personnel.

If company risk managers deploy data-flow analysis, however, they can detect an abnormally large number of queries being made on a specific aspect of a store's database during the last week, for instance, and compare that number with trends over the last year or longer.

Security people don't even need to know what kind of data are being requested, Adler said. Just observing an unusual number of queries might be enough to trigger a response from the company.

Another common Big Data modeling technique, used by credit card companies to sniff out fraudsters, is called "outlier analysis," according to Rob Hellewell, a vice president in data analytics at Xerox Litigation Services. For instance, "if I'm a credit card holder, you can look at my transactions over the last two or three years and see that 95% of them take place within the Washington, D.C., metro area," he says.

"If I buy a hamburger at Five Guys on Friday there and if on Saturday I try to buy a $10,000 plasma TV in St. Petersburg [Florida], outlier analysis says, 'Hey, this doesn't fit,'" and data security personnel can take a look at the person and possibly nip the fraud in the bud, Hellewell adds.

But credit card transactions and other forms of "structured" Big Data—the pre-defined data residing in spreadsheets or formal database records—are not the only source of data for assessing risks. Much more of a company's data are "unstructured," like the human speech used in natural language processing or chatrooms and email. That data are where risk managers are finding new ways to uncover perils.

The Explosion of Data in the Enterprise

Tremendous amounts of data—both structured and unstructured—are being generated by organizations and individuals.

in zettabytes*

	Size of Total Data	Enterprise Managed Data	Enterprise Created Data
2009	0.79	0.00	0.00
2010	1.27	0.96	0.36
2015†	7.90	6.32	2.37
2020†	35.00	28.00	10.50

*A zettabyte is a unit of computer storage equal to 1×10^{21} bytes.
†Projections
Source: Computer Sciences Corp.

A particular advantage of unstructured Big Data touted by its collectors and analyzers is that it provides finance and risk executives with the ability to act almost immediately to avert hazards. One technology that offers such speed is image-recognition software, which, for example, enables consumer goods sales reps to use their smartphones to snap photos of supermarket shelves. The software provides an instant visual analysis of the photo, which the rep can then use to see that errors are corrected.

A digital image shown on the website of Trax Technology Solutions, a Singapore-based provider of image-recognition software, reveals how the tool works. The photo shows a misplaced product on a retail shelf circled in yellow, presumably enabling the rep who sees the image to walk over to a supermarket employee and request that the error be corrected. Manufacturers can use the tool to manage the risk of in-store violations of its brand, according to the firm.

Ironically, unstructured data can apparently be used to limit the risks posed by the collection of more structured information—the items in the handwritten inventory lists traditionally employed by retailers, for instance. After analyzing the unstructured data stemming from a shelf photo, for instance, Trax has been able "to intervene in certain cases before questionable data is collected, and while processes can still be adjusted or reversed, thus improving the overall quality of data collection," Nina Tan, the firm's CFO, contends.

Where Risk Resides

Amid the vast array of sources of unstructured data that can be used to manage corporate risk, email is getting special attention. "If you're taking a look at where risks sit in your enterprise, email is probably the most vulnerable part," says Xerox Litigation's Hellewell. "And within a corporation, it certainly qualifies as Big Data because there's a lot of it."

In the context of the risk of lawsuits and regulatory investigations, he adds, "it's the primary target of what people are asking for and sifting through."

While Hellewell focuses a great deal on searching through the unstructured text of thousands of emails in helping his clients avert lawsuits, he also expends a lot of effort in investigating the patterns in the metadata of employees' email communications. "We discovered that the great thing about unstructured data was that it has this very rich layer of metadata, and metadata can also be very, very revealing about risk," he says. "In some cases as much as the text."

By metadata, he means the information in an email's header: the subject, the addresser, and the addressee; the date and time; whether and to whom the email is forwarded; whether it's high or low priority; and who's copied and blind-copied. Bcc's, in fact, are a subject of special focus. "If somebody is going to the trouble of bcc'ing somebody on an email, it usually indicates an intention to hide something," Hellewell says. "Why did you choose a bcc over cc? Because you didn't want someone to know that you were forwarding that email."

Another potential risk indicator is the time of day an email is sent. "Emails sent after

hours have a higher likelihood of containing concerning information than ones that are sent during business hours," says Hellewell, noting that metadata helps his firm build models to guide the searches of unstructured text.

Insider Threats

At Deloitte**,** email monitoring forms an important part of the Big Four firm's efforts to prevent the release of restricted information to the public either accidentally or on purpose, says Chuck Saia, its chief reputation, risk, and regulatory affairs officer.

As a big federal contractor, the firm is subject to the rules of the government's Insider Threat Program established in response to huge data leaks, especially the diplomatic cables leaked by Chelsea Manning, the U.S. army soldier convicted of espionage in 2013.

Set up in 2011 by an executive order issued by President Barack Obama, the program aims "to promote the development of effective insider threat programs within departments and agencies to deter, detect, and mitigate actions by employees who may represent a threat to national security."

The threats include political spying and threats against the nation like the release of some of "the vast amounts of classified data available on interconnected United States Government computer networks and systems."

Besides poring over data contained in Deloitte's human resource systems for ethical and compliance violations by its employees, a group within the firm monitors the incoming and outgoing email traffic of particular groups or individuals. The purpose is "to understand if we have a high-risk area that we need to look into," Saia says, noting that the firm is building out its insider threat program for use in firm-wide monitoring.

Similarly, Dun & Bradstreet CFO Richard Veldran has expanded the use of federal government compliance data culled by the credit-risk analysis firm to broader risk management purposes. Since 1962, D&B has maintained D-U-N-S Numbers—Veldran calls the identifier "a Social Security number for a business"—and assigned them to more than 100 million businesses worldwide.

In 1994, the federal government adopted the nine-digit number, which identifies businesses by location, as the standard business identifier for electronic commerce. In 1998, the number was approved as the federal government's contractor identification code for all procurement-related activities.

In short, the number, which can be obtained for free, is a must-have for small companies wanting to do business with the U.S. government and many foreign ones. To qualify for it, businesses hand over to D&B a rich lode of data, including the business's name, physical and mailing addresses, financial information, and links to members of corporate family trees worldwide.

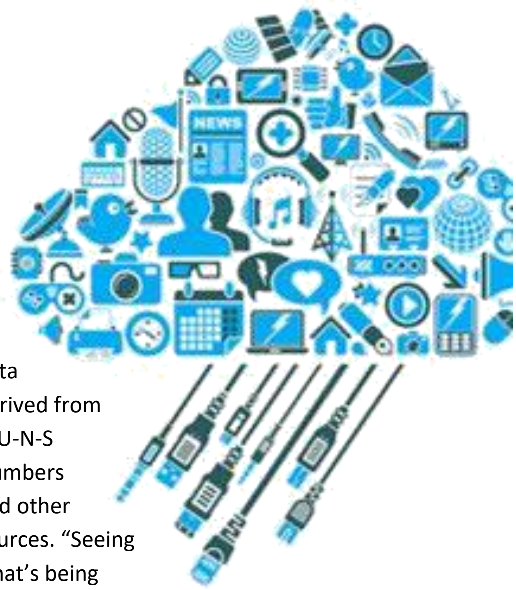
Besides seeing the data as a source of his company's revenue, Veldran uses it to fuel his assessment of D&B's own risks. As the company's clients do, he analyzes it to determine the basics of whether and when customers can be expected to pay their bills. In "a more advanced way," however, he analyzes it to determine "where a [customer] is headed."

Further, the finance chief uses the D-U-N-S data to ferret out weak links in D&B's customers' supply chains. For example, he looks at whether suppliers are shipping more or fewer goods than their competitors. "Is the company likely to go out of business?" he asks. "Is it a subsidiary of a troubled parent?"

Panoply of Patter

Like many other organizations, D&B and Deloitte make use of information gleaned from the panoply of websites and applications, chatrooms, blogs, and video-sharing systems collectively known as social media.

For his part, Veldran uses social media to round out the assessments of supply-chain risks he gains from analyzing the structured



data derived from D-U-N-S Numbers and other sources. "Seeing what's being tweeted about a particular company provides a more holistic view," he says.

Deloitte's Saia notes that his firm has "invested heavily" in what it dubs its "reputational re-sensing capability." The effort to detect external threats to the firm's reputation deploys an in-house team that provides round-the-clock monitoring of social media via software provided by Sprinklr, a social media management firm.

The software tool enables the team to pick up "anything being said about us via publicly available, open-sourced information," the risk officer says, as well as chatter about Deloitte's industry sector, its competitors, and its stakeholders.

Acting on what it hears and sees by means of analyzing Big Data, the firm may strike back in defense of its reputation. "If we see a trend coming from a particular stakeholder group, we simply might reach out to that stakeholder group to tell our side of the story," Saia says.

"In addition, it may trigger a response by us in the media outlets where we try to get our story out ahead of any negative story," he adds.

Indeed, as the messages on social media proliferate, more and more organizations will likely be engaged in such skirmishes. The story of Big Data in Corporate America may have become as much about averting the negative as it is about accentuating the positive.

CFO Barometer: Significant Obstacles to Gender Parity in C-Suite Level Roles

Women continue to dramatically lag behind their male counterparts in managerial roles. Data gathered from 2847 financial leaders and CFO's based in over 70 countries show significant disparities in salaries, compensation and benefits between women financial leaders and their male counterparts. According to Page Executive's latest CFO Barometer, male financial leaders get a take-home pay 16% higher compared to their female counterparts and a bonus higher by 22% compared to women financial leaders.

Despite evidence regarding the importance of women's economic integration, country-level data show us clearly that there are still discrepancies between the job opportunities and wages available to women and those of their male counterparts. But an underlying question remains. In the corporate sector, women occupying C-level jobs tops out at 15 percent: So why aren't they rising to the top?

First, we are very good at capturing women of talent at entry-level. But as staff level rises, the percentage of female financial leaders shrinks. And because women make up only 25% of middle management, companies have a limited pipeline to feed their senior-level roles. The problem is typically that in this mid-career space, companies need to find solutions to retain them. Thanks to its global approach, the CFO Barometer allows us to benchmark the positions of leading companies on the policies promoting gender equality. The debate has been going on for a while now. Companies talk about this a lot: maternity leave policies, parental leave, longer-term leave, flextime, mentoring and programs companies should have to train and retain women.

So how do we solve the fact women tend to be scarce among the more senior positions? Imposing a gender quota in listed companies or quotas for female board members have long been the subject of debates. Views range from those who believe that such policies could prove counterproductive for the advancement of women to those who advocate that the most efficient way to reach a fair balance is through stringent measures. What we at least notice via our Page Executive mandates is that most companies are implementing some form of affirmative policies. But not all companies do track salary gaps between women and men and the numbers vary greatly from one country to another, from one company to another and from one industry to another.

Barriers to leadership & role models

Being provided flexible work hours is very important but flexible working conditions do not always lead to increased numbers and retention of women in top jobs. During her now famous 2010 TED talk, "Why we have too few women leaders", Facebook's COO Sheryl Sandberg clearly states the problem is women are dropping out. In their mid-career space, women are leaving companies to start families, and companies need to find solutions to keep the pipeline strong. If Sandberg's generation is not going to change the numbers at the top, she at least succeeded to inspire a generation of women. Today there are definitely more female role models as leaders than a decade ago and they're a precious help to get rid of that glass ceiling.

Applying Analytics to Real Estate Assets

Are your company's real estate decisions benefiting or hurting productivity, profitability, and risk management?

For most companies, one of the biggest commitments they will make — both in regards to cost and flexibility — is in the form of corporate real estate. The purchase or lease of office space can represent not only a significant expense but also an ongoing legal and operational liability. As the global business environment becomes increasingly analytical across all industries, many firms have adopted alternative financial modeling methods and metrics, finding creative ways to analyze corporate real estate holdings to justify decisions.

Historically, most decisions about the purchase or lease of office space have come down to standard financial analysis regarding a project's direct impact on "bottom line" figures like net operating income or EBITDA. Recently, a shift has been occurring. Companies increasingly see the benefit to analyzing their real estate decisions through the lenses of operations and quantitative finance. Top analysts are taking a more nuanced approach to understanding how corporate real estate decisions can serve as indirect drivers for productivity, profitability, and risk management.

It may surprise some to learn that it has been the industrial and retail firms that have been on the cutting edge of real estate analysis for more than a decade. Those sectors seem to share little with traditional office-space occupiers. However, the applied analysis and quantitative modeling associated with industrial and retail leases is now gaining merit in the corporate real estate realm.

Industrial and retail firms look at real estate costs to better understand the effects on shipping costs, foot traffic, transit times, and myriad other variables, equating each to a real dollar value. Office space may not be able to utilize all of the same variables, but it has its own unique traits which can and should be converted into dollar metrics. Firms are realizing that the geography, sustainability, IT infrastructure, lease optionality, and cost structure intrinsic to an office asset all can be quantified as drivers of profitability and growth.

One example which has seen an explosion of popularity in recent years is the detailed consideration of commutation to and from offices — both for employees and clients alike. Using new mapping software and statistical models, many companies are now seeing the validity in placing offices where they know they will lose the least number of employee work hours to traffic or mass-transit interruptions. That translates directly into productivity and adds real dollars to the bottom line.

Firms are also creating yield metrics for their office real estate based on unit productivity (clients served, goods sold, or hours billed). These metrics create a meaningful determinant for required output to cover fixed real estate costs. I've already run several more granular analyses for a number of legal and professional services firms who not only recognize the validity of this type of model but come to fanatically embrace the new metrics. They also have gone further to proactively seek ways to make it a more and more useful bellwether for business decisions.

Creative risk management is perhaps the most exciting frontier of future savings and flexibility. Analysts are constantly developing new models and formulas, using advanced mathematics and quantitative analysis to value real estate strategy and optionality. Incorporating and adapting models which have been honed on Wall Street and in the insurance industry, analysts are providing a new level of predictive analytics on financial impacts which had only been dreamed of in the past.

The result of all these new analytics is an increasing number of executives who, once left to make "gut decisions" about their office assets, now can make these same decisions in a rational, informed, and justifiable manner. The ability to execute a lease which you can feel comfortable with three, five, even ten years down the road is now becoming reality by "quantifying uncertainty" through creative financial analysis. Sensitizing a wide range of quantitative variables is allowing firms to leverage office space as a real strategic advantage in a highly competitive business environment.

Nathan Brzozowski is managing director of consulting services at Savills Studley, where he develops and pitches client real estate strategies and executes large transactions. He previously was lead financial consultant at Cushman & Wakefield's New York-area consulting practice where he consulted on more than three million square feet of office/industrial leases and capital market transactions.

Sri Lanka Graduation Ceremony

A lavish ICMA graduation ceremony was held at the BMICH, in Colombo, Sri Lanka on September 29, 2015. Over 150 CMAs, AMAs and GMAs graduated, with a packed hall of well-wishes attending. The Chief Guest, Guest of Honour, accompanied by the Chair, Academics and VIPs were escorted with the sound of Kandyan drums. The Lighting of the Traditional Oil Lamp and the National Anthem followed.

After the ceremony was declared open by the Chair, Dr. Nalaka Godahewa, Hon. Chairman, ICMA Sri Lanka Branch had a word of welcome. This was followed by the address by the Chair, Prof Janek Ratnatunga, the Chief Executive Officer, ICMA (Australia). Next, Murali Prakash, the Hon. President of the ICMA Sri Lanka Branch, introduced the Chief Guest, Mr. Eran Wickramaratne, Honourable Deputy Minister, National Enterprise Development. His speech touched many important points such as the importance of detail and the recognition of differences in perspective. The key point he made as a Minister was that professional such as CMAs should resist political pressure.

After the conferment of the awards, the Guest of Honour Mr. Tim Huggins, Deputy High Commissioner at the Australian High Commission in Colombo gave his speech. A high point was how there now was a 'reverse' Colombo-plan, with Australian architectural students coming to Sri Lanka to study tropical architecture.

Shown below are some pictures from the graduation ceremony.

Figure 1 Kandyan Drummers

There was an 8-page supplement in the Daily News on the morning of the graduation. The ICMA office bearers and Regional Directors sent the following messages to CMA Sri Lanka, that were published in the paper.

Figure 2 Lighting the Traditional Oil Lamp

Figure 4 The VIPS

Figure 3 Professor Janek Ratnatunga, CEO of ICMA Australia surrounded by Academy of Finance Staff

Vietnam Branch Activities

On 16 August 2015 the CMA Intensive Program in Hanoi commenced. The program was organised by AFA Research and Education, Vietnam. Classes were conducted with a blend of English and Vietnamese. In the picture is the Regional Director of ICMA in Vietnam, Mr Long Phan, CMA conducting the introductory lecture.

APMAA 2015 ICMA Co-Sponsored Conference

The APMAA 2015, its 11th Annual Conference, will be held on October 26-29, 2015. The venue will be on Udayana and Warmadewa University, in Bali, Indonesia. The theme of the APMAA 2015 is ***"Management Accounting For Sustainable Development".*** Paper submissions in any areas of accounting are welcomed.

The deadline for full paper submissions is July 15, 2015. To submit a paper, go to the CMT conference submission site at **https://cmt.research.microsoft.com/APMAA2015/**

KEYNOTE SPEAKERS

Prof. M. Nasir, Ph.D, CA, Ak

Ministry of Research, Technolgy and Higher Education of the Republic of Indonesia.

Dr. (H.C.) drg. Chairul Tanjung, MBA

Chairman and founder of CT Corp., along with the founder of Sony, Akio Morita.

Prof. Janek Ratnatunga, Ph.D, FCA, CMA, CPA.

CEO of Institute of Certified Management Accountant, Australia **2nd ANNOUNCEMENT**

Dr. Juniati Gunawan

Director Trisakti University Sustainability Center,

What's On in the World of the CMA?

- September 29, 2015: ICMA Graduation Convocation, Colombo, Sri Lanka.
- October 17-24, 2015: CMA Preparatory Program, Wisdom Institute, Dubai, UAE.
- October 26-29. Asia Pacific Management Accounting Association (APMAA) seminar in Bali, Indonesia. Co-sponsored by ICMA and JAMAR. Keynote speaker, Prof Janek Ratnatunga.
- November 2015: CMA Intensive Program (Ho Chi Minh City), AFA Research and Education, Vietnam (in Vietnamese).
- November 9, 2015: ICMA Annual General meeting held at CMA House, 5/20 Duerdin Street, Clayton, Victoria 3168, AUSTRALIA.
- February 20-22 & 25-28, 2016: CMA Preparatory Program, Academy of Finance, Colombo, Sri Lanka.
- May 9-15, 2016: CMA Preparatory Program, IPMI, Jakarta, Indonesia.
- May 2016: CMA Preparatory Program, Global Professional Advancement, Malaysia.

Private Providers

Navitas Workforce Solutions, Australia

Wharton Institute of Technology and Science (WITS), Australia

Academy of Professional Education, India

Academy of Finance, Sri Lanka

IPMI (Indonesian Institute for Management Development), Indonesia

Multimedia College (MMC), Malaysia

Business Sense, Inc. Philippines

HBS for Certification and Training, Lebanon

Wisdom Group of Institutions (UAE)

Institute of Professional and Executive Management, Hong Kong

AFA Research and Education, Vietnam

Institute of Finance and Management PNG

Global Professional Advancement, Malaysia

Segal Training Institute, Iran

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