BRUNSWICK REVIEW

THE DATA ISSUE

Pearson's **JOHN FALLON** *puts metrics to the test*

A VALUABLE ASSET
Earn the data premium

NANDAN NILEKANI, *the man with a billion names*

DATA NATIONALISM
The walls are going up

RYDER CUP
PAUL McGINLEY'S
statistical stroke of genius

BOOZ ALLEN
What do data scientists do all day, anyway?

❧

CORPORATE JOURNALISM
Storytellers from the media frontier

Plus **STAR STRUCK: MICHELIN MAN ALAIN DUCASSE**

SINGAPORE'S IMAGE MAKEOVER AT 50

FOR MOST OF THE LEADERSHIP TEAMS WE SERVE at Brunswick, Big Data is moving rapidly up the list of critical considerations, under the heading, "great opportunities, great problems." It promises huge rewards and massive advances in nearly every human activity – but for business, it also raises dramatic concerns.

The culture of sharing personal information has raced ahead, creating enormous potential to understand customers individually and *en masse*, while at the same time increasing awareness of the responsibility to protect and manage that data. Technology companies are at the forefront of the privacy debate, but all organizations are custodians of this resource in one form or another, and have to take on new responsibilities as a result.

The world has undergone some profound changes and business leaders are faced with a whole new set of challenges. Many were unimaginable a decade ago but they have one thing in common: they test whether you realize how much change has taken place, and require you to show how you are part of the solution and not part of the problem. Big Data is absolutely one of those issues where you are likely to be called to account.

At Brunswick, we have a basic belief that while breaches grab headlines, corporate data remains a very valuable asset. A company's ability to demonstrate its effective use and responsible stewardship of data is increasingly central to its reputation with all stakeholders – from consumers right through to investors and regulators. These audiences are already placing a premium on businesses that have a clear point of view on the value of their data and how they are unlocking it.

We have assembled a world-class team of corporate data specialists to help our clients address this multifaceted and business critical communications challenge. We hear from a number of those voices in this edition, on topics that include cybersecurity, data privacy, data nationalism and regulation. Other articles examine broader implications of Big Data, including the trend toward everything and everyone being rated, "glance" journalism and the thorny issue of measurement.

We are very lucky to have a range of star contributors from outside Brunswick. I will never forget someone telling me that asking the right questions is what defines the cleverest person in the room. Josh Sullivan of Booz Allen Hamilton proves that observation and makes the case that the real gift of Big Data is in the promise of analytics. CEO John Fallon describes how he is bringing the power of data to drive the whole mission of Pearson as an education business – not an easy road, but the prize is clearly enormous.

In other stories, we look at the heroic achievements of Infosys co-founder Nandan Nilekani, who tackled a mind-boggling logistical challenge in India; Vestas CMO Morten Albæk explains his efforts to bring new energy sources to underserved populations; and Paul McGinley, who led Team Europe to victory in golf's 2014 Ryder Cup, discusses his winning combination of statistical analysis, thoughtful leadership and effective communication.

As these articles show, an appreciation of the role of information isn't enough. Leadership must have a deep level of fluency in all aspects of data. It has to fit into a broader value system that demonstrates the respect you believe all of your stakeholders deserve.

We always aim to deliver a broad range of perspectives on communications and leadership. In this edition, we hear from GE and ANZ Bank about how they take their corporate narrative directly to readers. Michelin-starred chef Alain Ducasse embodies a mixture of passion and devotion to detail that we at Brunswick seek to emulate. His words are truly inspirational. We also feature timely articles on corporate governance in China and Singapore's international reputation as it celebrates its 50th anniversary.

I would like to thank all our contributors for giving so generously of their time and insight. I hope you enjoy reading this issue of the *Brunswick Review* as much as we enjoyed creating it, and I look forward to your feedback.

SIR ALAN PARKER – *Chairman, Brunswick Group*

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PORTRAITS: PETER FIELD

THE DATA ISSUE

SECOND SECTION

D ata is the building block of all knowledge. Yet while the modern world is awash with data, true insight remains elusive. In the end, data isn't valuable without experience and intuition to interpret it and act on it. Harnessing the abundance of data and turning it into insight and knowledge is a core challenge in the 21st century.

The potential rewards are significant. Businesses gain efficiency, expand customer relationships, identify new markets and boost value for investors. Customers benefit from tailored products and better services. Society will benefit as innovations revolutionize healthcare, transportation, manufacturing, media and a host of other businesses.

Optimizing data comes with challenges. The privacy debate colors every aspect of the data conversation. Regulatory tensions between government and business are growing. Threats to cybersecurity increase. With data both ubiquitous and permanent, unprecedented transparency is virtually guaranteed. Businesses need strategies, not only to seize the opportunities data presents but to prepare for any crises that may emerge. Leaders need to be data savvy to operate in this new world.

Behind many of these concerns is an apparent contradiction: data is both valuable and cheap. The right data at the right time has incalculable worth. And yet, bits and bytes can be stored, copied and transmitted for almost nothing.

This issue of the *Brunswick Review* looks at the impact of data, and communications in a complex, data-filled world.

SUSAN GILCHRIST — *CEO, Brunswick Group*

The DATA ISSUE

The data explosion has powerful implications for all aspects of business and society

BRUNSWICK DATA PORTRAIT

The cover of this issue of the Brunswick Review features a "data portrait" of the website URL, *www.brunswickgroup.com.*

The image represents the site's core links and was created with a program that retrieves the elements that constitute the site. The data is mapped using a graph that shows each piece of information or "asset" as a node, and the links between them as lines. Like many other such portraits, the resulting shape for Brunswick's site is a central diamond with radiating branches. The diamond indicates the very highly connected web assets – scripts that are shared across every page of content on the site – while the radials include other hyperlinks and images. More detailed segments of the portrait are pictured above.

The image was created by **MARTYN DADE-ROBERTSON**, Senior Lecturer in Architecture at Newcastle University in the northeast of England. He has a PhD in Information Architecture from Cambridge University and has published widely, including the book *The Architecture of Information. martyn.dade-robertson@newcastle.ac.uk*

Detailed segments (above) from the data portrait for *www.brunswickgroup.com* reveal the data and connections that comprise the website; the complete portrait is seen on the cover. The portrait shape (left) for *www.google.com* reflects its place at the heart of the World Wide Web

HOW TO EARN THE DATA PREMIUM

As breaches grab headlines, many companies see data as a liability. But investors value businesses that have a clear strategy to manage data. Report by Brunswick's MARK SEIFERT, SPARKY ZIVIN and JAMAAL MOBLEY

Corporate data is increasingly the currency by which businesses are valued in the 21st century. The cloud has become an arena where both companies and nation-states face competitors, just as they do in the physical spaces of land, sea and air. As the amount of data and the sophistication of analytical tools increase, so do their value to stakeholders, increasing pressure on all sectors to develop a coherent, compelling and transparent corporate data strategy. In addition to demonstrating value, how a company treats, protects and uses its data is central to its reputation.

To be sure, data also poses its own set of risks. Breaches of a company's network or information security, including hacks

and leaks of sensitive data, present major problems for corporations, dominate headlines and can drive significant stock price declines. Regaining pre-breach valuations remains a serious challenge even six months after the event, as Brunswick's analysis, shown in the chart below, demonstrates.

Reacting to the possibility of such a scenario, some companies see corporate data as a public relations liability. They are hesitant to communicate the value of the troves of data that they amass, fearing a public backlash driven by privacy and security concerns. Yet from an investor standpoint, that hesitation is misguided.

Far from recoiling from the complexities of corporate data, investors strongly value the opportunity to monetize the data that companies hold, as shown in a Brunswick survey of more than 200 professional investors across the US, Europe and Asia (see graphic on the next page). The research shows that

companies should not wait to create a comprehensive data strategy – the right time is now. The number of investors weighing data opportunities against risks when making investment decisions is growing dramatically and involves businesses in all industries, not only Silicon Valley companies. Investors who believe the current focus on corporate data is a passing fad are a dwindling minority. More than three-quarters of polled investors say that over the past two years, a company's ability to monetize data has become increasingly important.

BRUNSWICK RESEARCH identifies significant opportunities to increase value by including a data narrative in investor communications. This is especially true where sensitive consumer data is involved. Consumers are becoming more sophisticated in their attitude toward their own personal data and see this information as an investment

in exchange for benefits and services. Companies must prove to customers that the exchange is beneficial to them. Consumers also want to be confident that the information they decide to share will not be misused or stolen.

Building trust with consumers and investors is an absolute necessity in order to monetize data effectively. To prove they are responsible stewards of data, companies must explain how they collect and use it as part of their public communications. Simply preparing for a data security incident or even reacting responsibly when one occurs is not enough. Nor is it enough to merely list privacy practices for customers. A deeper, more fundamental engagement with all stakeholders is required, with data woven into the ongoing corporate narrative. Companies must develop and share their data stories.

Given the attention to this issue from investors, it is only a matter of time before we expect to see disclosure of corporate data usage with quarterly earnings announcements, as well as annual corporate data reports that highlight how data is being used to increase profitability through better customer products and services that improve efficiency, safety and security. Most importantly, investors will want to know how data is being used to identify new business opportunities.

Investment decisions are complex, and analysts and investors base decisions on disparate information across the business, assembling a mosaic that guides their choices. Companies should seize the opportunity to paint a compelling picture of their relationship with data. In addition to providing clarity, such a detailed view can help to distinguish a company from its competitors. →

IMPACT OF A DATA BREACH ON VALUATION

Drop in investor confidence lasts for months

BREACH NEWS BREAKS

AVERAGE DAILY CLOSING PRICE*

CORRESPONDING DOW AVERAGE

LONG-TERM DOWNWARD TREND

VALUATION

MONTHS AFTER BREACH ANNOUNCEMENT
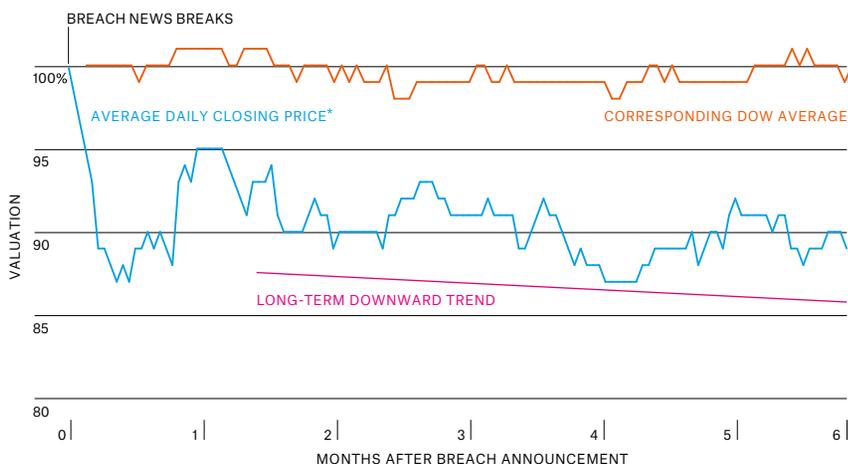
*AVERAGE SHARE PRICE FOR SURVEYED COMPANIES FOLLOWING BREACHES SUFFERED IN 2009-2013
SOURCE: BRUNSWICK INSIGHT

DATA: A VALUABLE ASSET

A company's ability to monetize its data has become a key factor for investors, according to our global survey of the financial community

1. DRIVING INVESTMENT DECISIONS

1 in 3 investments in companies are driven by their ability to monetize data

1 in 3

19% BELIEVE IT'S **JUST A TECH SECTOR** ISSUE

80% BELIEVE IT'S AN **ALL SECTOR** ISSUE

2. ACROSS ALL SECTORS

Data monetization isn't a sector-specific issue, it affects investment decisions across all sectors

3. COMPETITIVE ADVANTAGE

BELIEVE DATA MONETIZATION GIVES A **COMPETITIVE ADVANTAGE** AND HELPS **INCREASE VALUATION**

74%

24% BELIEVE DATA MONETIZATION WILL **EXPOSE RISKS** AND GENERALLY HURT **VALUATION**

4. INCREASING IMPORTANCE

BELIEVE DATA MONETIZATION WILL BECOME AN **INCREASINGLY IMPORTANT FACTOR** FOR INVESTORS

BELIEVE THIS IS JUST **FLAVOR OF THE MONTH**

66% CORE

32% FAD
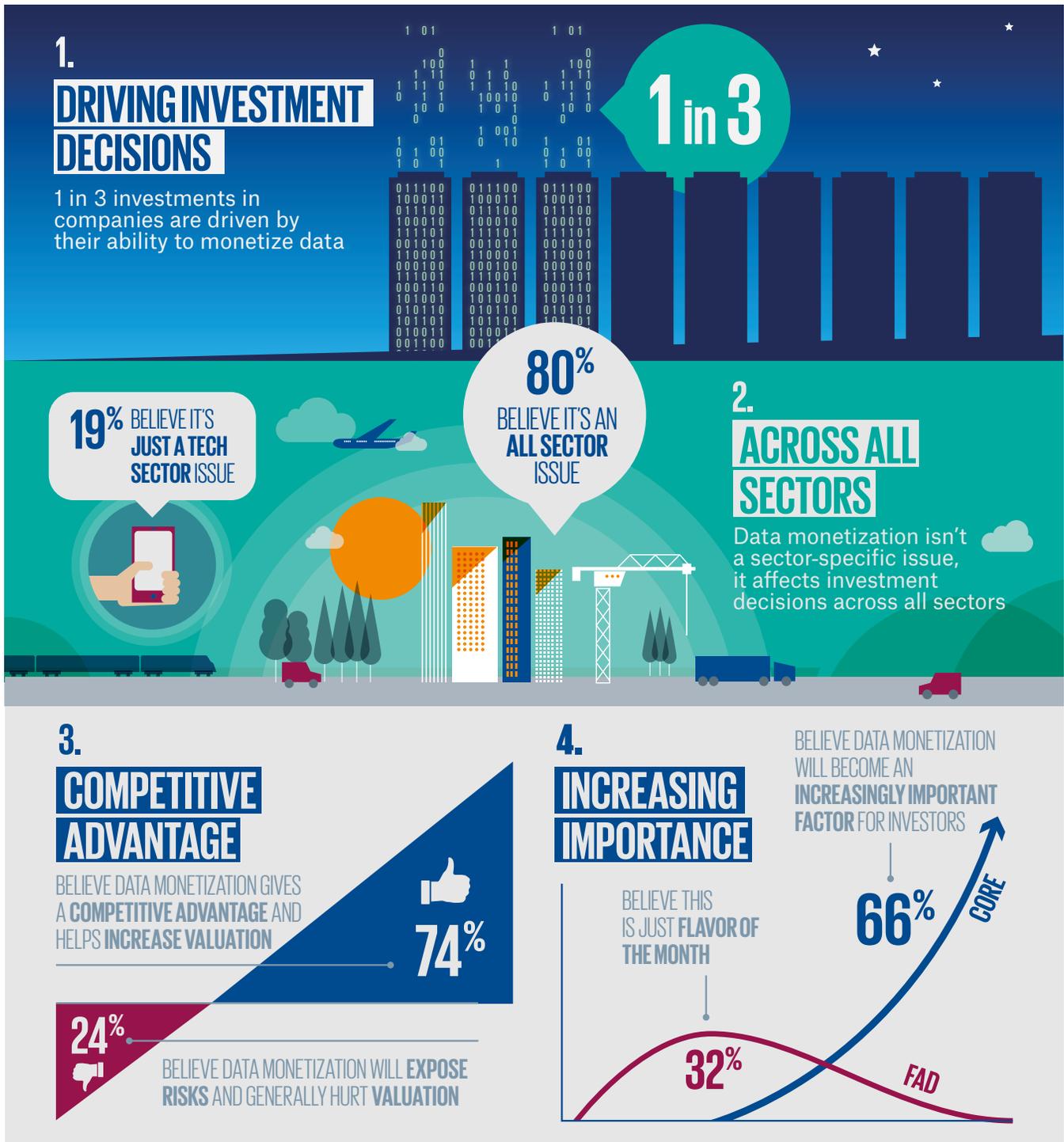
When building a data narrative, the best approach is a calibrated, smart engagement plan that starts slowly and builds a foundation for future conversations. This creates good will and establishes credibility around a company's data story, especially if companies can begin interacting with stakeholders far in advance of a data breach or other serious security concern.

To begin this data conversation, businesses should focus internally on improving cybersecurity awareness among employees and develop a thoughtful and practical approach to handling data security. After that, the next step should be to talk with customers and partners about how the company uses data to make a difference for the customer and for the bottom line.

In response to the active public conversation about the use of data, companies will be wise to show

Companies will have to demonstrate that their use of data is not only good for their customers and businesses, but also provides a broader benefit to society

their strategy is not only good for their customers and businesses, but also provides a broader benefit to society. Think of this conversation as strengthening the company's "license to operate" when it comes to using data, especially consumer data. By demonstrating this wider value to society, a company can add nuance

and balance to a public conversation that otherwise might be trending toward unnecessarily restricting the corporate use of such data.

If a company tells its data story correctly, investors will award value, customers will better understand how they personally benefit, and the public will have a stronger and more sophisticated understanding of the business. Don't get mired in a debate solely about potential risks. In the end, it is far more important to show responsible handling and use of collected data. This will help win the trust of stakeholders and grow the bottom line.

MARK SEIFERT, Brunswick Partner and **JAMAAL MOBLEY**, Associate, advise on corporate data, privacy and cybersecurity. **SPARKY ZIVIN** is a Director at Brunswick Insight, the firm's research and consulting arm. All three are based in Brunswick's Washington, DC office.

RULES OF ENGAGEMENT

How to create and communicate an effective data management strategy

KEEP IT SAFE

As with any asset, you should be able to demonstrate that you are protecting your data appropriately. Your cybersecurity protection efforts are an integral part of your story. But avoid saying too much or appearing overconfident. As many companies have discovered, boasting about your cyberdefenses is akin to waving a red flag in front of the hacker community.

KEEP IT FLOWING

Data is acquired through trust. If consumers or employees agree to share their data for one purpose, they may lose trust if they later discover it is being used for another. That can have a direct impact on the bottom line. Many consumers in particular will share their data with a company in exchange for some benefit or value. If your narrative depends on a rich flow of customer data, be open about how you use it. Happy, loyal consumers mean higher value.

TREAD CAREFULLY

The more sensitive the data, the higher the stakes, both in terms of revenue and scrutiny. Opportunities, such as using healthcare data to discover new treatments or using student data to create new education models, are profitable to companies and beneficial to the public. Inevitably, they will result in greater public scrutiny. Expectations around privacy will also change from one country to another. In each case, an awareness of the sensitivity of the data will help keep you in good stead with stakeholders.

MIND THE CONTEXT

While the monetization of data is exciting, different stakeholders within the same sector may have different concerns. Companies in the critical infrastructure sector, for example, use data to increase efficiency and improve operations, significantly affecting the bottom line. However, since infrastructure is often under threat of attack, governments may not appreciate it if you are seen as openly touting data-driven improvements to their strategically important services.
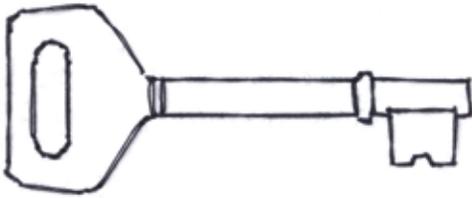
[MYTHS]
AND [FACTS]
ABOUT DATA SECURITY

Companies need to tell their data stories, but misconceptions are holding them back, say Brunswick's GEORGE LITTLE and SIOBHAN GORMAN

Cybersecurity is a pressing and poorly understood issue across all sectors. With big names such as Target, JP Morgan Chase, Sony Pictures Entertainment and health insurance giant Anthem in the digital crosshairs, CEOs and boards are zeroing in on cybersecurity threats as a growing risk to their businesses.

While security is the central concern, it is increasingly important that companies get ahead of the communications curve to develop and defend not just data, but their own narrative. A company's data story should explain to both the public and employees how the company is benefiting from the collection and analysis of data – a critical issue for many investors – and how they are acting responsibly to protect it.

Unfortunately, misunderstandings about data security and hacking are hampering efforts to develop and communicate effective strategies. With anxiety high as a result of headlines and public outcry around high-profile breaches, these false impressions are keeping corporations on the defensive. Here are some myths that have emerged around corporate data security – and why they're wrong.

[MYTH]
YOUR COMPUTER NETWORK IS SAFE IF YOU HAVE A STRONG ENOUGH SECURITY "FENCE"

[FACT]
There is a "new normal." Every fence has holes. Hackers will find a way into your system, so you need to plan for that eventuality by enhancing the internal protection of your most critical data. You should also think ahead about how you will explain a hacking episode publicly. What story do you want to be able to tell when – not if – your company has a breach?

[MYTH]
ALL SECURITY INCIDENTS ARE CREATED EQUAL

[FACT]
Hackers have different methods and objectives when accessing corporate systems. Like robbers rattling doorknobs to find an unlocked house, hackers test security systems all the time. Some merely probe networks, while others seek to steal, manipulate or destroy data. The information they target varies with the intent, from customer credit card data that they can steal to sensitive internal communications, research and development projects, or full customer profiles that can be used to expose or embarrass the parties involved.

[MYTH]
THE GOVERNMENT WILL HELP WITH A BREACH

[FACT]
You're mostly on your own. In many countries, companies learn they had a security incident from a government agency, but often the assistance ends there. For major events where officials are interested in information about how a hack was executed, the government might offer investigative or forensic help from law enforcement and intelligence officials. But governments are sometimes wary – for legal or political reasons – of helping companies fix their computer systems or of retaliating against the believed perpetrator of a hack on behalf of a company or group of companies. Governments have their hands full protecting their own networks.

[MYTH]
BREACH INVESTIGATIONS WILL QUICKLY TELL YOU WHAT HAPPENED

[FACT]
Companies usually discover breaches long after they occur, and forensic investigations often take weeks or months to produce data. Even when complete, those investigations sometimes can't pinpoint who was responsible for the hack. It's important to manage expectations within a company during an investigation about how much information will likely be gleaned about the hack.

[MYTH]
COMPUTER SYSTEMS SECURITY IS JUST AN INFORMATION TECHNOLOGY PROBLEM
[FACT]

People, not software, tend to be the weakest link in data protection. A study by computer security firm Trend Micro found that 91 percent of cyberinfiltrations began with "phishing," where malicious links are embedded in emails sent to unsuspecting employees or customers. Recipients unknowingly grant the hacker access to their computers when they click on the link.

[MYTH]
COMMUNICATING ABOUT A CORPORATE BREACH MUST BE REACTIVE
[FACT]

Plotting out a communications strategy in advance for different types of data security problems will help a company understand the risks and plan for them. It's also worth thinking about what data the company has that could be damaging to it – or others – if released.

[MYTH]
ALL HACKING IS A CYBERATTACK
[FACT]

There are many flavors of hacking, and the most common types are not attacks but network infiltrations to steal corporate secrets. Cyberattacks that manipulate or destroy data or computer systems are still relatively rare. However, these attacks have been on the rise, as seen recently with the breach at Sony Pictures that both destroyed data and exposed embarrassing company communications.

[MYTH]
BREACHES MUST FIRST BE HANDLED BY TECHNICAL AND LEGAL EXPERTS AND ONLY LATER SHARED WITH OTHER KEY PEOPLE IN A COMPANY
[FACT]

Given the reputational risk a breach generates, an organization's communications team should be involved in early discussions about the event to provide guidance on how to ensure the company maintains the trust of the public. The team should also be well versed in cybersecurity basics before a hacking incident, so it can quickly get up to speed when one occurs.

[MYTH]
WITH A BREACH, THE BIGGEST PROBLEMS ARE SECURITY AND LEGAL ISSUES
[FACT]

The greatest threat a breach poses is ultimately to corporate reputation. While the need to fix security problems and address legal issues is clear, companies may not realize that how they discuss the event publicly at the outset will often determine whether they can recover the confidence of the public – and investors – once it is over. Companies that change their story over time risk a more severe loss of that trust.

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GEORGE LITTLE is a Partner in Brunswick's Washington, DC office. A former Pentagon Press Secretary and chief CIA spokesman, he advises on cybersecurity, privacy and data security, and crisis communications.
SIOBHAN GORMAN is a Director in Brunswick's Washington, DC office. Formerly a reporter for *The Wall Street Journal* on national security, she advises on public affairs and crisis handling with a focus on privacy and data.

READY OR NOT

A clear strategy for handling a data breach can spare companies a lot of pain, says Brunswick's GEORGE LITTLE

Companies that have clear plans in place to handle data security breaches fare better than those that don't. Some of the largest breaches ever reported, including those suffered by five Fortune 500 companies, are analyzed in the chart below. Those that were better prepared responded more effectively, according to an analysis by AllClear ID, which specializes in data breach preparation and response.

The letters A through H reflect the combination of preparedness and effective response to a breach – each combination may be common to more than one company. Preparedness was measured by factors such as the level of detail in a response plan; the establishment, in advance, of a "war room" of personnel to handle a crisis; and at what point outside experts were brought in to assist. Response effectiveness was measured by factors including media coverage, expenses and how well the communications team managed.

Execution proves to be a critical factor. In scenarios B and C, companies' responses scored highly, in spite of above average but less than perfect preparation. Meanwhile in D, companies scored lower for response effectiveness, despite their preparation, due to poor decision-making during the response.

FAILURE TO PLAN IS A PLAN TO FAIL

Preparation and outcome

A Had a detailed incident response plan in place prior to the breach, and a smooth response
B Took timely advice from experts, allowing a better response
C Had experience in breach response, strong operational capabilities and executive support
D Waited too long to release information, which resulted in damage from outside speculation
E Disorganized response led to delays and communications problems
F Lack of executive support and poor decision-making increased expenses
G Lack of a centralized decision-maker led to confusion, delays and disruption
H Lack of preparation led to communications missteps, poor decisions and poor customer support

SOURCE: ALLCLEAR ID

When the Berlin Wall fell in 1989, the well-respected forecasting firm Global Business Network was asked to develop scenarios for the emerging world order. GBN offered three. The first was Change Without Progress, a kind of high-tech gangster capitalism familiar to some oligarchs today. Second, New Empires outlined a nationalist or regional neo-mercantilism. The third, Market World, anticipated a fast-paced, globally integrated finance capitalism.

History has unfolded according to the third option. We are living in a global marketplace where investments and information flow more or less freely across national borders. The globalization of data along with open internet access has increasingly provided a common highway for this Market World. But national interests and the defense of citizens' privacy are now pushing hard to roll back that scenario toward something closer to the New Empires by curbing the free flow of information across borders. Again, as in 1989, the world is changing – only this time, walls are going up.

SINCE THE REVELATORY US government leaks by Edward Snowden, countries including Brazil, Germany and India have publicly discussed their desire for greater data protection and national, protected internets. The idea of the global internet devolving into a constellation of national networks has been called the "splinternet."

American Ambassador Michael Froman, head of the Office of the US Trade Representative, describes this trend as "an accelerated rise of 'data nationalism' and a digital world that begins to erect barriers rather than transcend them." German Chancellor Angela Merkel recently promised, "We'll talk about European providers that offer security for our citizens, so that one shouldn't have to send emails and other information across the Atlantic." The EU and Brazil have already announced their intention to install a $185 million
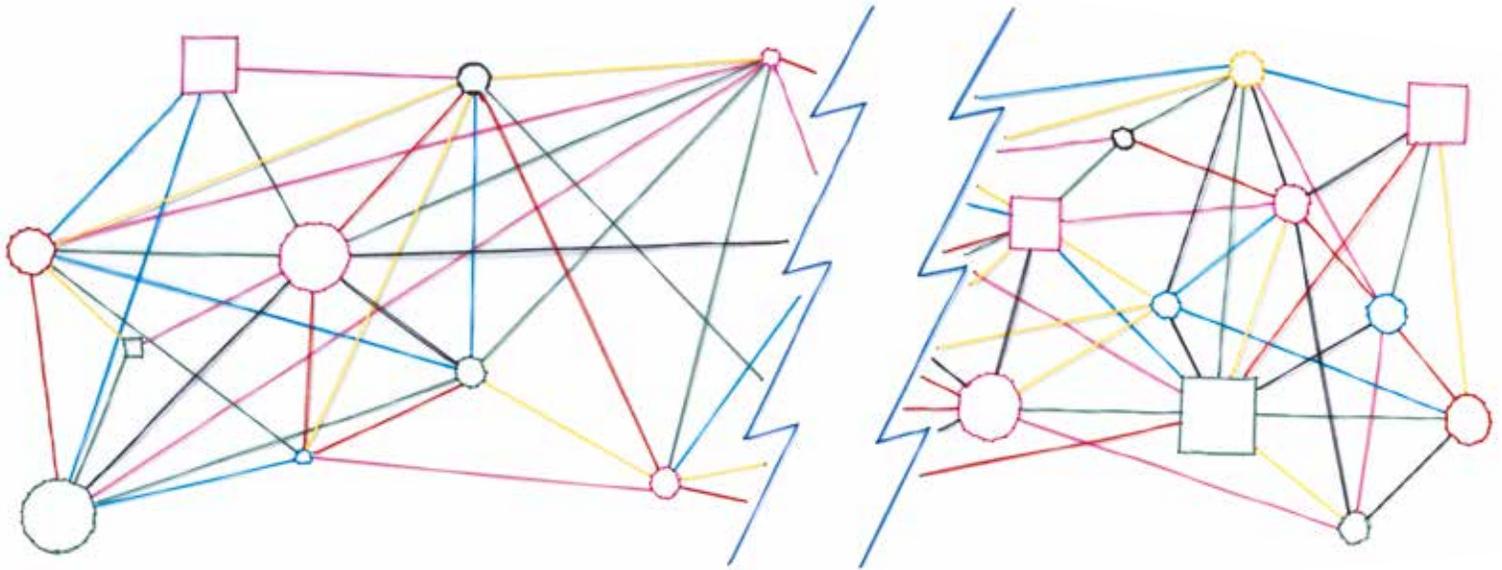
DATA NATIONALISM

THE RISE OF THE "SPLINTERNET"

The backlash from privacy breaches could change the internet as we know it, says Brunswick's ROBERT MORAN

underwater fiber-optic cable that bypasses the US. Splinternet 1.0 may have arrived.

How any of this could work in practice is anyone's guess, given the unstoppable, exponential increase in data from internet-connected devices, products and services. But the splintering trend is likely to grow, complicating the international business landscape.

Data is a hot commodity. To the individual, consumer data is either a resource or a part of their person, a kind of third skin, after the dermis and clothing. An Ipsos Global Trends survey of 20 countries found that 60 percent of people are concerned about how their data is being used. Reflecting that concern, governments are examining how the privacy rights of their citizens can be better protected.

However, data can also be viewed as a natural resource, like oil. For nations, this means data collection and analytics, servers and transmission lines are as integral to economic interests as offshore

wells, refineries and tankers. Sir Walter Raleigh famously asserted, "Whosoever commands the sea commands the trade; whosoever commands the trade of the world commands the riches of the world and consequently the world itself." The control of data delivery systems is the modern equivalent.

Andrew Marshall, the influential 93-year-old military futurist often referred to as "Yoda" in American defense circles, espouses a theory known as Revolution in Military Affairs, the modern corollary

For nations … data collection and analytics, servers and transmission lines are as integral to economic interests as offshore wells, refineries and tankers

to Sir Walter Raleigh's view. The theory holds that each weaponized technology leads to a new kind of warfare. The first to master the technology gains the upper hand. Chariots, iron, gunpowder, steam power, rifling, air power, atomic weapons, precision munitions and robotics each reinforced the dominance of the wielding parties.

If data and information transmission are the next leap, the first-mover advantage would lie in cyberwarfare and computer viruses such as Stuxnet, a software worm said to have severely damaged Iran's nuclear program in 2011. Recognizing this, former National Security Agency and CIA director Michael Hayden likened America's policy toward the internet to the Roman roads that supported both an explosion of trade in the ancient world and the mobility of the Roman army. Rome built the roads and also patrolled them, making them safe for commerce while expanding the empire's authority. Similarly, the US protects American interests through data channels, prompting Hayden's observation that the US "could be fairly charged with the militarization of the World Wide Web."

DATA NATIONALISM is a natural outgrowth of that thinking and is already coloring relations between countries and regions. In Brunswick's polling among Washington elites, "data privacy" was flagged along with "food safety" as one →

of the top two issues that could be difficult for the US and the EU to reach an agreement over in trade negotiations. Could data nationalism slow growth in the global trade of digital goods and services as well as knowledge exchange? Common sense suggests it could.

The issue of national identity alone could prove an obstacle. Governments will likely favor locally based corporations and form policies that will tilt the playing field to their advantage. But such measures are a double-edged sword, making international competition more complicated. Governments are also more likely to expect special favors from those domestically rooted companies.

As more corporations globalize and virtually every one becomes a data company, they will be navigating a world where data nationalism guides policies, and requires the development of nation-specific strategies. Here are some ways that this new breed of nationalism will impact your business:

- Competing policy views between nations over the rights to use consumer data will force the development of many alternative ways of collecting and handling data.
- Compliance handling will grow much more complex and expensive.
- National affiliations will play a much larger role, for better and worse. Businesses may benefit from the policies of their home governments, but also be expected to support domestic interests.
- Some companies may benefit from the rise of data nationalism, supported by national or regional barriers that put stronger international competitors at a disadvantage.
- Communications will be even more critical, as all stakeholders in all markets will want to know a corporation's data strategy. Businesses will need to show how their policies are a win for shareholders, customers and governments in each and every country in which they do business.

ROBERT MORAN leads Brunswick Insight, the group's global public opinion research function, and is a Partner in the Washington, DC office.

Business can avoid a fragmented global landscape on data regulation by speaking up, say Brunswick's MARK SEIFERT and KATE TELLIER

The more business remains on the sidelines in the public conversation over the use of data, the more global policymakers will take the lead, tackling ethical questions surrounding data collection, privacy and security.

Political leaders want to see data used for innovation to drive economic gains, support industries and improve social services, but they are also moving to respond to citizens' concerns. "As businesses navigate the digital world, there is no more fundamental issue to address than protecting their customers' privacy," says Nuala O'Connor, CEO of the Center for Democracy and Technology, an international non-profit promoting an open, innovative and free internet. Many businesses are making great efforts to protect their data, but communication about those efforts has been spotty at best.

More importantly, the positive potential of data needs to be emphasized to address growing public anxiety. Ultimately, data collection and analysis could serve to change our nature as a species as fundamentally as the harnessing of fire. If the perception of value is obscured by public concerns, which are growing around the world, that transformation could be snuffed out.

IN THE EUROPEAN UNION, the future of data is being factored into plans for continued economic recovery. While some proposals would make online business easier by simplifying

laws, negotiations around others, such as the Transatlantic Trade and Investment Partnership with the US, have triggered data protectionism based on privacy concerns, with the potential to restrict international data flows. Similarly, in an idea modeled on the Schengen zone – where most of Europe functions as a single country for international travel purposes – data coming in and out of Europe would be restricted, while internal traffic would not.

In the US, the Republican-controlled Congress is set to take a pro-business, decidedly deregulatory approach. That effort could face a strong challenge from Democrats as the Obama administration, now in its final two years, is willing to assert executive power to institute greater regulatory scrutiny. The White House recently appointed its first chief data scientist to ensure that national data is not misused and to investigate ways to help people share information without sacrificing privacy. Headed into the presidential election in 2016, both parties

"Our ethical stance, if my data is blood – if it's going to save lives – is different than if my data is of a sort that can be ethically monetized"

Robert Madelin, EC Director-General of Communications and Technology

will attempt to present a balance between consumers' privacy concerns and the transformative potential of data analytics.

"In this new Congress, I will be focusing on a pro-innovation technology agenda that relies heavily on an open internet," says Republican Senator Orrin Hatch of Utah. "In particular, we must address the complex legal web around data security, including the ways data is used, stored and accessed globally."

Senator Ed Markey, a Democrat for Massachusetts, says, "Consumers, not corporations, should have control over

their personal information in this era of Big Data. Whether it is protecting our children's education records or the sensitive information of American consumers, Congress needs to ensure that our policies are imbued with our time-tested privacy values."

South America is leaning toward an EU-style precautionary approach that favors domestic companies. A provision mandating data localization in Brazil's recently enacted *Marco Civil da Internet*, a civil rights framework, would have been aggressively nationalist, but was removed from the final version.

Most major economic centers in Asia have enacted privacy legislation but enforcement is in its infancy. In addition, regulators in emerging economies are exploring appropriate responses that avoid pitfalls experienced in the EU and the US.

Many of the EU initiatives to restrict the use of data stem from misperceptions about what companies actually do with data and how this contributes to society. →

A clearer narrative from business, including an emphasis on the critical distinction between personal and non-personal information, could help loosen this regulatory knot and raise confidence in the positive impact of data.

"I like to think of data as having value, but it might be oil or it might be blood," says Robert Madelin, Director-General of Communications Networks, Content and Technology for the European Commission. "Our ethical stance, if my data is blood – if it's going to save lives – is different than if my data is of a sort that can be ethically monetized."

SCANNING the global landscape, we appear headed toward a discordant set of rules that could result in the fracturing of the internet, undermining its power as a global, equal-access knowledge base. A heavily pro-business argument that ignores consumer concerns could inadvertently strengthen support for nationalist regulatory tendencies.

So what should companies do, especially multinationals, within this regulatory patchwork? In a word: engage.

Most companies understand the power of data analytics for their business. They should also recognize the threat of regionally based regulation. By getting ahead of consumer and government concerns, companies can move toward a more nuanced conversation about how data is being handled and the power of analytics to change society for the better. Multinational companies are best positioned to make this case, thinking globally and responding locally.

Unleashing the digital revolution in a controlled environment could bring unimaginable benefits. Businesses should start to tell that story, before overly stringent regulation hijacks the narrative.

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KATE TELLIER is a Director in Brunswick's Brussels office and advises on European public affairs related to the digital economy. Additional reporting by MATHILDE BONNEAU, Account Director in Brussels.

EVOLUTION OF PRIVACY

Until recently, the concept simply didn't exist, says Brunswick's MEI YAN

For centuries in China, ruling powers advocated for collectivism and cohesion, and treated individuality with suspicion. Until fairly recently, the concept of privacy, as the West understands it, simply didn't exist.

This absence is most clearly evident in the Chinese language. Until the 20th century, the language lacked a word for "privacy" or even the vocabulary needed to communicate the concept. The compound that eventually emerged, "yinsi"(隐私), has negative connotations of secrecy and conspiracy, as does the phonetically similar word for "hell" – "yinsi" (阴司).

The Mao era reinforced this vice-over-virtue view of privacy with the glorification of collectivism. From the very foundation of a society built on public ownership, to the treatment of individual lives as an open book, lack of privacy was the norm, reinforced by Communist Party monitoring even at the grassroots "neighborhood committee" level (居民委员会). Private thoughts showed selfishness and brought shame, persecution or worse.

The negative framing of privacy was upended by China's "open door" policy. Launched in 1978, it ushered in economic reforms that eventually enabled private and individual ownership. The Party's shift set off a major social evolution, paving the way to greater acceptance of personal privacy.

As a backlash to China's collectivist past, in the post-reform era people have begun to see individual privacy as a right that should be guarded and respected. Yet the concept is still very much in flux, with the internet and the widespread adoption of social media playing important roles.

In China, the internet has sparked a mass invasion of privacy known as "human flesh search engines" – digital witch hunts by netizens nationwide who band together to identify and shame individuals perceived as having violated public morality. While the trend is often seen as a positive force to root out socially unacceptable behavior, it also intrudes deep into private lives.

Early examples of people who had their names, addresses and other private details exposed on the internet include a woman who complained that coverage of the deadly 2008 Wenchuan earthquake was disrupting her TV viewing. Another notable case is that of "Uncle Watch," a government official who was outed by online vigilantes for flaunting multiple luxury watches while attending official duties.

"Yinsi" may no longer be closely associated with "hell," but these incidents highlight how the concept is still evolving. Ultimately, respect for personal privacy in China is destined to become more natural, as people begin to appreciate privacy as a daily necessity rather than a luxury.

MEI YAN is a Senior Partner in Brunswick's Beijing office. She advises major global corporations, with a particular focus on public affairs. As a journalist for ITN and CNN, she was a three-time Emmy winner.
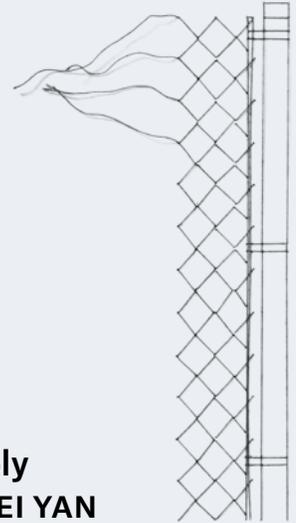
ONE IN A

BILLION

Imagine being asked to set up a biometric ID
for every person in India. **NANDAN NILEKANI** tells Brunswick's
KHOZEM MERCHANT how he rose to that challenge

even hundred and sixty million people have been registered – a billion is on the horizon," says Nandan Nilekani, scarcely flinching at the number of people in India who have been assigned a unique biometric identity. For scale alone, there is nothing to compare anywhere in the world.

Nilekani is not new to scale. He mastered the discipline of mass replication of services based on a core technology at Infosys. He co-founded the company with Narayana Murthy and five others in Bangalore three decades ago and transformed it into a global leader in back-end information systems management for Wall Street banks and industry in developed economies.

Along the way, he earned himself a name and a fortune. The first brought admirers and – after writing a best-seller that imagined ways technology could reboot India – a government invitation to launch a digital identity program for all residents. The second allowed him to join a growing list of billionaires worldwide who are taking on society's challenges of an awesome magnitude of risk and scale.

India's identity program, known as *Aadhaar*, has surprised both well-wishers and critics with the swiftness of its adoption since it was launched in 2010. The project addresses India's lack of a universal, portable ID. Aadhaar assigns a 12-digit ID to any resident, giving them access to government services across India's 29 states. Regulations can differ state to state, making the administrative case alone for a universal, validated ID compelling. But the task is enormous and granular in a nation where most citizens lack any formal identification, such as a passport.

ID for the ID-less quickly ran up to about 600 million registrations by March 2014, when Nilekani quit as chairman of Aadhaar's governing authority to run for office in India's general election from his home city of Bangalore. He lost, and in the government change Aadhaar, a punching-bag for the pugilist opposition BJP, looked like a loser too.

But the ID program survived. Not only was it already embedded in the labyrinth of public services, but it complemented the new administration's deepening reliance on technology-based governance.

Our display font, *Painter Kafeel,* is named for the Indian street artist who created it. The project HandpaintedType preserves and digitizes the dying art of roadside sign typography and supports the artists involved
www.handpaintedtype.com

Nilekani understands the need for persuasive communications. "We had to keep the messaging simple and minimal," he says

Prime Minister Narendra Modi's new government supported Aadhaar, allocating more funds as well as grudging political capital to the initiative.

Aadhaar itself is built on two big ideas, best understood by one statistic: 600 million of the 1.2 billion population live close to or below the official poverty line in India. First, digital ID widens social and economic inclusion, letting in those left out by giving them access to government payments, food handouts and other services. Second, it curtails the siphoning of billions of rupees, stolen using ghost names or lost by other egregious leakages, amounting to an estimated 10 percent to 40 percent of total welfare outflows. This waste has distorted a burgeoning pyramid of welfare payments, and federal finances.

Inevitably, Aadhaar has drawn fire. Besides the partisan critics, the blogosphere has lampooned it for registrations of Indian gods and rare flowers. Even so, the new system will erase millions of fictitious names, from heaven or earth, and channel welfare payments more securely to those with proven needs – and proven identities. "I was brought in to put energy behind these ideas," says Nilekani. That energy stands to contribute to a transformation in public services.

AS A TECHNOLOGIST, though, Nilekani – who remains an informal ambassador for Aadhaar – wants the system to do more. Aadhaar, which means "foundation" in Hindi, is an open platform for which apps can be designed offering different services such as banking, education and health. An early innovation, welcomed by millions frustrated by red tape and its associated sloth, is an app that tracks bureaucrats' attendance at work. The inventor was a bureaucrat, Ram Sewak Sharma, who would go on to play a central role in the creation of Aadhaar itself.

In this way, Aadhaar can grow organically and quickly as need demands, like the internet or GPS, both of which ballooned as private industry took

advantage of the open-platform technology shared by US national defense industries.

Aadhaar is equally transformational for Indian financial services. Direct cash transfer to Aadhaar-registered bank accounts is a huge benefit, as it encourages banking in a country where about 40 percent of Indian households are unbanked – around a half billion people, according to the Indian central bank. Linking the unbanked to the formal economy will enable them to save securely, and banks will cheer because Aadhaar will help them know their customers. The hope is that this will also ease banks' historical aversion toward lending to the rural poor.

With Aadhaar's political future assured, India's restless start-up community is also stirring around the project, nudging it closer to Nilekani's concept of the database as a "platform of innovation." In January, hundreds of techies descended on Bangalore for a mass hackathon to develop apps for Aadhaar, organized by Silicon Valley technology investor Vinod Khosla, with $1 million thrown in by a Seattle-based venture fund.

adhaar's hurdles run beyond technology. The big one involves how to sell Aadhaar to a public skeptical of grandiose promises by a government still struggling to, say, manage the fallout from heavy rains. Aadhaar is also criticized for its accumulation of personal data, though this means more to metropolitan civil activists than to the rural poor.

A big asset in tackling these issues was Nilekani himself, a technology aristocrat but representing a community of self-made businessmen, revered and trusted by most Indians for succeeding without government help. Nilekani insists data privacy is not being compromised because Aadhaar obtains only basic information such as date of birth. The disclosure of data to a third party, such as the developer of an education app that bolts on to the database, is the prerogative of the individual citizen.

"This is not big brother," he says. "Aadhaar is just an ID system that stores identities – any data beyond that sits in the application of the app service provider – that's why we call it a federated structure."

Marketing Aadhaar required a communications approach to match the best in India. Advertising gurus such as Santosh Desai, leader of one of India's top retail brands, came on board. Nilekani understands the need for persuasive communications. "We had to keep the messaging simple and minimal," he says. A self-evident truth, you might say, until you consider that India has 22 official languages, dozens of dialects, an entrenched caste system and multiple faiths. It is the most heterogeneous of societies and has defeated the marketing campaigns of some of the biggest consumer goods companies in the world. Any approach had to be especially nuanced.

As if that were not enough, Aadhaar has had to target multiple stakeholders – government agencies, NGOs because of their proximity to local communities, and a long chain of functionaries and officials. Mimicking a private company product roll-out risked appearing too eager to appeal to consumers and eroding political support. Too official, and the project risked being seen as just another government program. With a billion registrations in sight, Aadhaar may just have struck the right balance.

भारत सरकार
GOVERNMENT OF INDIA
Nandan Nilekani
आधार — आम आदमी का अधिकार

NANDAN NILEKANI

In 2014, Nandan Nilekani won *The Economist* Social and Economic Innovation Award for his leadership of *Aadhaar*. Prior to the project, Nilekani was Co-Chairman of the Board of Directors of Infosys, which he co-founded in 1981. He also co-founded India's National Association of Software and Service Companies and is President of the governing body of India's leading independent economic research group, the National Council of Applied Economic Research. In 2006, he received the *Padma Bhushan,* one of India's highest civilian honors, and was named Businessman of the Year by *Forbes Asia*. *Time* magazine listed him as one of the 100 most influential people in the world in 2006 and 2009.

KHOZEM MERCHANT, formerly President of Pearson India and previously *Financial Times* correspondent in Mumbai, is a Brunswick Partner, leading the firm's India practice.

GIVE ME YOUR DATA

DAVID YANOFSKY creates stories
out of company data for *Quartz*.
He thinks you should help him

ILLUSTRATION: DENIS CARRIER / SYNERGY ART

YOU HAVE THE DATA THAT I WANT. I don't care what your industry is or who your customers are or how much revenue you have. I promise you, there is a story to be told in your data, and my readers want to know what it is.

They want to explore its nuances and see the quantitative evidence presented in interesting ways. They want to learn something new, and helping them has never been easier. Far too often, however, companies are unwilling to let this type of collaboration occur.

You see your data as sensitive and proprietary. Perhaps your data is your competitive advantage. If you're a closely held company, your data could reveal business metrics that you want to protect as they would affect your valuation. If you're a publicly traded company, sharing certain data could be regulated by disclosure laws.

None of these concerns are insurmountable because, let's get one thing straight, the data that you want and need to protect and the data that I want you to share are typically different things.

I'm not asking for direct access to your databases or to read your CEO's emails. I don't even care for your internal financial statements. I want the data that is about the data that is about your business, not the data about your business.

For instance, *The New York Times* worked with Netflix to show the most popular rentals by ZIP code in 12 major US cities. I've worked with SeatGeek to talk about the pricing of Major League Baseball tickets on the resale market over the course of a season. Both of these were extremely compelling to readers.

The *Times* piece gave definitive confirmation to regional stereotypes and neighborhood rivalries. *Paul Blart: Mall Cop* was easily shown to be popular in the suburbs and shunned in the city centers. *Mad Men: Season 1* was shown to be just the opposite. Does this information deteriorate Netflix's competitive advantage? No.

Do these rentals sound dated? They should. The article was published in January 2010. Last I checked, Netflix was still in business – and it still remains a market leader.

My SeatGeek story was able to show the cheapest days of the week and cheapest times of the year to get into the ballpark: avoid opening day and weekends, and wait until the end of the season. We were even able to show the visiting team's effect on ticket prices. It was everything a prospective buyer needed to know, ready for the first day of the season. Did SeatGeek – which acts as a search engine for the secondary ticket
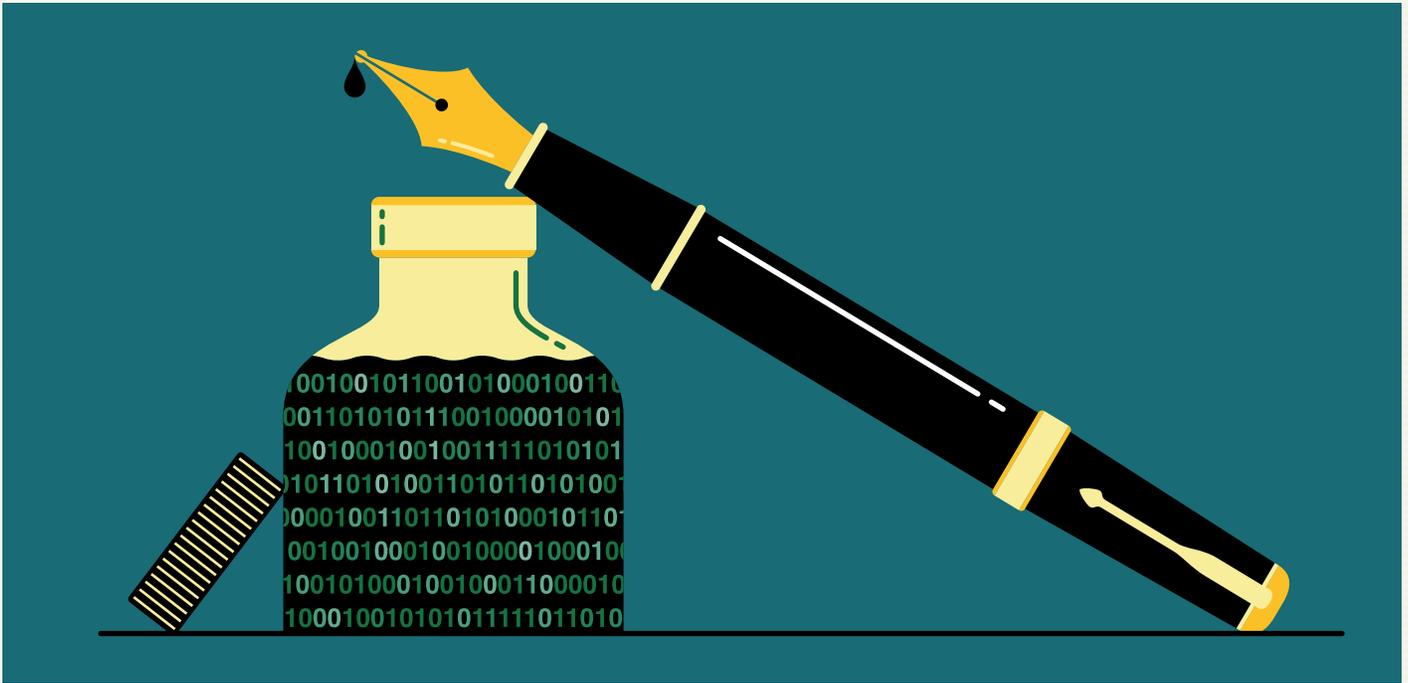
market – risk any competitiveness by sharing the data with us? Absolutely not.

This type of data is only marginally useful to competitors. It's the kind of thing that ends up in the corner of a slide in PowerPoint, not the executive summary of a business plan.

Some companies have realized this and have become so comfortable in sharing certain cuts of their data that they've launched self-service portals to access it (aware that in most cases, competitors are collecting nearly identical information on their own).

Google gives away what was once thought to be some of their most important data: the popularity of search terms at any point in time. Simple tools are even provided to analyze the results.

Governments and NGOs have shared this kind of information for decades. But those organizations are typically lumbering and update their data slowly. Business can beat government by giving insights about the current state of the world faster. The information collected from smartphones can now tell us more about migration, connectivity, spending and mobility than we ever knew before. We used to have to rely on government or research papers to learn about those things. You have the data to prove the conventional wisdom or, better yet, disprove it.

Sharing your data is not without risks. In April 2014, PornHub was taken to task by statisticians and journalists for its sloppy analysis in the report "Who Watches More Porn: Republicans or Democrats?" Uber – already in the midst of a public

> ## "Let's get one thing straight, the data that you want and need to protect and the data that I want you to share are typically different things"

relations crisis – saw one of its blog posts from years ago resurface, in which the company gleefully chronicled its ability to track the sex lives of users.

Of course you are the experts on your data. As such, I can't do anything with it unless you also offer your insights and expertise. But you're also very close to the information, perhaps even too close to see its limitations. Most definitely, you're too close to realize it's not as precious as you think, and you have more to gain by sharing it than letting it waste away in some database never to be looked at again.

DAVID YANOFSKY

David Yanofsky is a reporter focused on data-driven journalism and visual storytelling for *Quartz*. A self-taught computer programmer, he previously worked for Bloomberg, creating interactive stories for its websites, television stations, radio broadcasts and magazines. Prior to Bloomberg he was a freelance graphic designer, screen printer and book maker.

QUARTZ
Founded in 2012, *Quartz* is a digital-only news outlet, tailoring global business articles for mobile devices, email and web browsers. The staff features veterans of some of the world's most well-respected news organizations. Its main offices are in New York City. *qz.com*

DATA
PORT

The "Internet of Things" has long been a daily reality for logistics giant DP World. Chief Information Officer YOUSIF ALMUTAWA tells Brunswick's HASSAN FATTAH how the power of data transforms his business

A view from above hints at the complexity of data handling for the world's 17 million-plus shipping containers. This image is one in a series, *Aerial Views*, by German photographer Bernhard Lang
www.bernhardlang.de

xecutives at DP World chuckle at the use of buzzwords such as "Big Data," the "Internet of Things" and "The Cloud." As the world's fourth-largest ports operator, DP World got there long before most companies began hoovering data from their customers and operations.

On the docks run by this Dubai success story, Big Data is a way of life, guiding everything from workmen who oversee the ships to robots that run the intricate stacking and arrangement of shipping containers.

DP World manages more than 65 marine terminals across six continents, including the port of Jebel Ali, the largest between Asia and Rotterdam. Founded in 1972 as an ambitious effort to attract shippers to Dubai, DP World quickly became a global juggernaut with operations from Australia to England and all points in between. DP World aims to have the capacity for 100 million "20-foot equivalent units," or TEUs, of containers carrying goods through its yards by 2020 – depending on market demand – making it a central cog in the wheels of the world economy.

At the heart of its growth is the ability to control, measure and improve movement and placement of every box, crane and truck. For example, when each 10,000 TEU-sized vessel docks, it may unload and then load some 2,000 boxes. Sensors monitor the operation through a staggering total of 246,000 steps, letting operators manage and optimize traffic at every point. Some of the sensors supply continuous data, others only at stages. Inventories of the steel containers are tracked, together with repeated checks for damage, placement within available spaces on the ships, efficient pooling and travel time for trucks on shore, and a host of other variables. Intelligently parsing that data can shave seconds – and costs – from each operation. Even minor changes are measured for impact. And still, all that vessel-handling activity represents only about a third of the data collected and analyzed from DP World's total operations.

In addition, since DP World's principal port-managing operations strongly benefit from emerging technology, the company is seeding its own future by running an incubator for startup tech companies. This investment branches out into areas seemingly far removed from port concerns, such as retail, 3-D printing, educational robotics and virtual reality interfaces.

In the following interview, Yousif Almutawa, Chief Information Officer at DP World, explains how the company has used Big Data to grow its operations, bringing clients ever deeper into its business while maintaining its role as the world's most cutting-edge ports operator. Being prepared for the future, →

Almutawa says, means not just having the right tools, but learning to ask the right questions.

What does Big Data mean to you and your business?

There has always been a lot of data to deal with and questions about how to leverage that data. And the flood of information will continue to grow. The real challenge is not even the technical part anymore; it's not about how to get data, it's about what you have to ask – what are you trying to find out?

You have your benchmarks – you know your market, your competitors and your customers. But to move forward, to grow, innovate and transform yourself for the future, you have to know the right questions to ask that will get you there. I basically know what I need to ask today. It's what I need to ask tomorrow that I'm worried about. The questions change every week and every day. You have to do more homework, be more pragmatic and look at the streams of data coming in from so many sources to see what it's telling you and what it's not telling you.

Answers are out there for any question – the issue is, what is the question to be asking? That is the real challenge of Big Data.

How do you harness all this data?

We developed a system in-house that analyzes and integrates with all the others in our ports around the world and presents dashboards linking into our key performance indicators, and the performance indicators and agreements of the shipping lines and our customers. That visibility gives us a lot of insight into areas that in the past were simply taken for granted.

What else does Big Data offer?

It allows you to reach people who are part of the trade who are not necessarily your customers – manufacturers, the retailers, the banks, insurance companies. Once you have the data, it ultimately opens up revenue streams you may never have known were possible before.

Give an example of how Big Data works for you?

Just by measuring waste, we were able to save more than $50 million on activities that previously we were not even aware were a waste. Using data, we were able to calculate the most efficient way to complete a job – rather than rely on previous best practice. As a result we were able to save tens of millions in costs.

You can see it from the performance of Jebel Ali, for example, not just in terms of rising volumes, but also in terms of bottom-line performance. That was all about reducing waste. For example, we were able to make big savings by identifying heavily

YOUSIF ALMUTAWA

Yousif Almutawa is the Chief Information Officer of DP World, responsible for information systems and technology. Previously Vice President of *du*, the UAE telecommunications service, he holds a degree in electronic engineering.

DP WORLD
The fourth-largest port operator in the world with 65 terminals in 31 countries on six continents, DP World serves 66,000 ships each year. The company handles 150,000 containers daily and it estimates its annual container capacity could hold nearly 6 billion washing machines. The company is based in Dubai, United Arab Emirates, where its flagship port, Jebel Ali, is located.
web.dpworld.com

used equipment that had low productivity yield. We then reconfigured the operational process allowing for higher productivity, better efficiency and smarter use of our resources.

How do you measure efficiency?

For us, things go beyond improvements benchmarked against our past. We try to understand our customers better, their points of pain and the solutions expected from us as an operator, as well as our customers' strategies for improving their own efficiency. So it's not just about efficiency within our ports, but also how we can leverage all the data we hold to help our customers.

What are your interests beyond your core business?

We are doing things that people may not see as directly related to our ports, such as our engagement and active support of the startup ecosystem. Take Turn8, our startup seed accelerator. The ideas and teams that we invest in may have nothing to do with ports – in fact, many are not related to our ports at all. But we pursue these investments because this innovation will have an indirect impact on ports and on global trade itself. We see ourselves as a global trade player, a small piece of the global trade chain.

Or take 3-D printing, another example. It's a potential threat to many businesses, including our industry, but we want to embrace it as an opportunity. And we have to start thinking right now, how will this impact our business model?

What does the future look like?

We have a lot of ports, some small and in developing markets, and some – like Jebel Ali – which are very sophisticated and modern. We pick various new technologies and try working with them in different ports and choose ports that have the ability to use them.

In the future, there will basically be no people on the dock. It will mainly be robots and automated cranes, guided vehicles and a terminal operating system that will be the brains behind everything. It will be safer, because you won't have humans moving around and it will be more accurate. But you don't necessarily get higher productivity just because you have new technology. We use technology and add automation, but incrementally and pragmatically, to make sure that we get the best out of it.

HASSAN M. FATTAH is a Partner in Brunswick's Abu Dhabi office and advises on public affairs and the diversification economy, away from oil, in the Gulf region. Formerly a journalist, he helped found and led *The National* newspaper in Abu Dhabi.

BIG STORY
tiny space

> **Small is going to be huge, writes Brunswick's ROBERT MORAN**

○ ● ● ●

The Apple Watch offers "glances" – the latest step in the miniaturization of journalism. Smaller than a tweet, glances deliver content specific to the wearer's needs at that moment. The trend will grow beyond Apple and transform the way we consume information, with eyewear, auto windshields and other personal, frequently viewed surfaces becoming screens for "small" data.

At the end of World War II, computers were room-sized things that you could walk into. Since then they have shrunk through the office appliance stage to the home desktop, then to the portable laptop, then to a device that would fit in your pocket. Now they are becoming something you wear. At each stage, computers have become physically closer to the user.

Meanwhile, data has grown at an exponential rate. Where early computers measured information in bytes, each representing a single character of text, data is now routinely measured in terabytes, each more than a trillion bytes. But our brainpower hasn't increased. Concerns about limits for fossil fuels have led to predictions of a "peak oil" point, but in the end, no strategic resource is more valuable than our focused brainpower. Barring some dramatic enhancement to human cognition, we are faced with more information than our brains can process, beyond "peak attention."

At first blush, glance journalism seems to make the challenges of "post-peak attention" more acute by further splintering our focus. Highly localized, personal alerts might have the opposite effect, by pointing out the most relevant information. Glances could well complement, rather than subvert, longer-form articles, building greater demand for more relevant news.

These mini-stories could also facilitate a change to an image-driven, post-text society by employing small icons and photos, building on the way we now use emoji. Our brains process images faster and retain them longer than text, experts say, making them the perfect choice for a medium where every pixel counts.

Automation will play a huge role in making glance journalism happen in a timely, relevant way. Ken Schwencke, a journalist and programmer for the *Los Angeles Times*, is famous for writing a program that pulls relevant data from US Geological Survey earthquake alerts. Called Quakebot, his program "wrote" Schwencke's breaking coverage in March 2014 of a 4.7 magnitude earthquake with an epicenter six miles from Beverly Hills. Automated coverage of weather, traffic, crime, business and sport is a natural fit for artificial intelligence.

For businesses, messages flashing on tiny screens could prove a distraction, but could also aid informed decision-making with more rapid updates on relevant topics. For external communications, it means both good and bad news will travel farther and faster. It also means consumers will be closer to their favorite brands with just-in-time, just-in-place content and offers. Watch this space.

Robert Moran
@robertpmoran

Insight-driven strategist & Partner @ Brunswick Group. Market/opinion research expert. My views only

BR   Editor **@BrunswickReview**

@robertpmoran get to the point, what are the main trends?

Robert Moran **@robertpmoran**

@BrunswickReview ok – wearable computing, twitter-like content, personalized and tailored to location

SAYING IT WITH A GLANCE

> **Be your own publisher, driving short-form news to stakeholders**
> **Use more images and infographics, tailored for small screens**
> **Format corporate data for automation**

BACK
TO BASICS
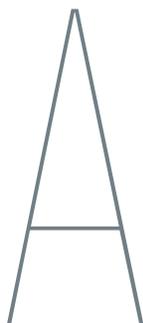
A schism is growing between intentions and results in education that is fast becoming one of the most important social issues of our time, says Pearson CEO John Fallon.

In the US, more than half the students who start a university degree still haven't graduated five years later. "Edtech" is a buzzword that often translates into more machines, but not necessarily better skills. Putting more young children into school programs in sub-Saharan Africa doesn't necessarily improve the literacy rate. In classrooms around the world, programs and policies are put in place with no clear plan to measure effectiveness.

"There is a huge risk now that poverty is destiny for many young people," Fallon says, speaking not just of developing nations, but also of the US and his native Britain. "For whatever reason, we're not getting through to them and their educational opportunities are not there. The escalator of social progress is in danger of stalling."

The key to restarting that escalator, Fallon says, is to put Pearson in the examination seat. He has vowed to undertake a data-driven assessment and to report on the measurable efficacy of each major Pearson product by 2018. →

Pearson CEO JOHN FALLON is testing the global education company's own products in an effort to improve learning around the world. Interview by Brunswick's JULIE ANDREEFF JENSEN

JOHN FALLON

John Fallon joined Pearson in 1997 as Director of Communications and was named head of its education businesses outside North America in 2008. He took over as Pearson CEO at the start of 2013. Previously, he held senior public policy and communications positions in UK local government before moving to Powergen, the UK energy company – now part of E.ON – where he was Director of Corporate Affairs.

INTO FOCUS

Described by *Bloomberg* as once "a haphazard collection of businesses," Pearson has more recently focused on education and away from a colorful and occasionally eccentric history

This ambitious commitment makes the company the first mover in its sector toward greater accountability at a time when public trust in the traditional education industry is under threat. Fallon believes that in the same way corporate responsibility statements are now routinely delivered alongside annual reports, so the measurement and public reporting of efficacy will be adopted by other companies. Launching metrics to gauge the impact of its products carries considerable risk for the publicly traded corporation, but could ultimately help improve teaching routines in the industry as a whole.

"As an education company, we felt we had to think about what our responsibility was," Fallon says. "It was time to think not about measuring progress by enrollments or teacher/pupil ratios or even spending on education as a percentage of GDP, but to measure in terms of whether students actually gained the literacy skills, the numeracy – and the wider skills – that they are going to need to prosper in the world in which they live."

Traditional measurements of effectiveness in education are flawed, he says. Rising enrollment for a reading course, for instance, may be a false indicator of progress if, at the end, students still can't read. The number of teachers or computers per classroom can increase dramatically and still leave learning at a standstill. "Too much of education is driven by good intentions," Fallon says.

Not everyone has faith in Pearson's intentions. Its large presence in education sometimes works against the company, raising public suspicions. It supplies textbooks, writes and scores standardized tests, markets its own brands of interactive learning technology, helps school districts, and runs its own for-profit schools. In the US, the company is closely associated with the nation's controversial Common Core program, curriculum standards designed to give children a foundation in core subjects. Many people bridle at the idea of a for-profit

company helping shape national education policy. "Everybody Hates Pearson" is the headline on a recent article in *Fortune* magazine outlining such concerns. It quotes a member of Stop Common Core Florida, "We feel like Pearson is an alien enemy …" In response, Fallon points to Pearson's mission of reforming education. Quoted in the *Fortune* article, he says, "the more people engage with Pearson, the more they tend to say, 'You're not who we thought you were.'"

PEARSON WAS ESTABLISHED in 1844 as an engineering business, making its way into publishing in the 20th century with the acquisition of a string of newspapers, including the *Financial Times* in 1957, and book publishers. Pearson's publishing operations have continued uninterrupted into the age of online courses and e-books. For many years, the company was heavily diversified, but has since sold most of those businesses to focus on education. It has retained the *FT* and a 50 percent stake in *The Economist*, both of which the company sees as complementing its business-learning portfolio.

Fallon took over as CEO on January 1 2013 from American-born Dame Marjorie Scardino, who had held the post since 1997 and who led Pearson through big acquisitions that supported its drive into education, including the school data management operations of National Computer Systems and the educational publishing arm of Simon & Schuster.

Scardino's changes positioned Pearson as the dominant player in the 21st century global for-profit education market. The company estimates that market at $450 billion, with total education spending at $5 trillion. When Scardino stepped down as CEO, Fallon, who had once been the company's communications chief and was the director of Pearson's international education business, was the natural choice to take her place.

S. PEARSON & SON

Founded in 1844 as an engineering and construction company. Among other projects, Pearson worked on the Blackwall Tunnel under the Thames in London, railroads in China, the Sennar Dam in Egypt and a railroad tunnel under the Hudson River in New York

LONGMAN

The world's oldest commercial publisher, founded in 1724 by Thomas Longman (left) in London, Longman originally created grammar and history texts for young students. It was acquired by Pearson in 1968. Some Pearson English language schools in China still carry the Longman brand

ROYAL DOULTON

In 1972, Pearson purchased historic British china maker Royal Doulton, makers of table services for royalty and the House of Lords, merging it with pottery brands Royal Crown Derby and Royal Albert. The combined company was spun off in 1993


LAZARD BROTHERS

Pearson purchased 45 percent of Lazard Brothers in 1919. Its stake in the British unit of international merchant banking business Lazard Frères was increased to 80 percent in 1932 during the Great Depression and remained at 50 percent or more until it was sold in 1999

PEARSON

Employees: 40,000 in 80 countries

REVENUE

By region

By division

2014

NORTH AMERICA
£2.974bn
CORE*
£1.154bn
GROWTH*
£746m

15% · 61% · 24%

SCHOOL
£2.027bn
HIGHER EDUCATION
£1.695bn
PROFESSIONAL*
£1.152bn

23% · 42% · 35%

2013

NORTH AMERICA
£3.073bn
CORE
£1.258bn
GROWTH
£738m

15% · 60% · 25%

SCHOOL
£2.303bn
HIGHER EDUCATION
£1.664bn
PROFESSIONAL
£1.102bn

21% · 46% · 33%
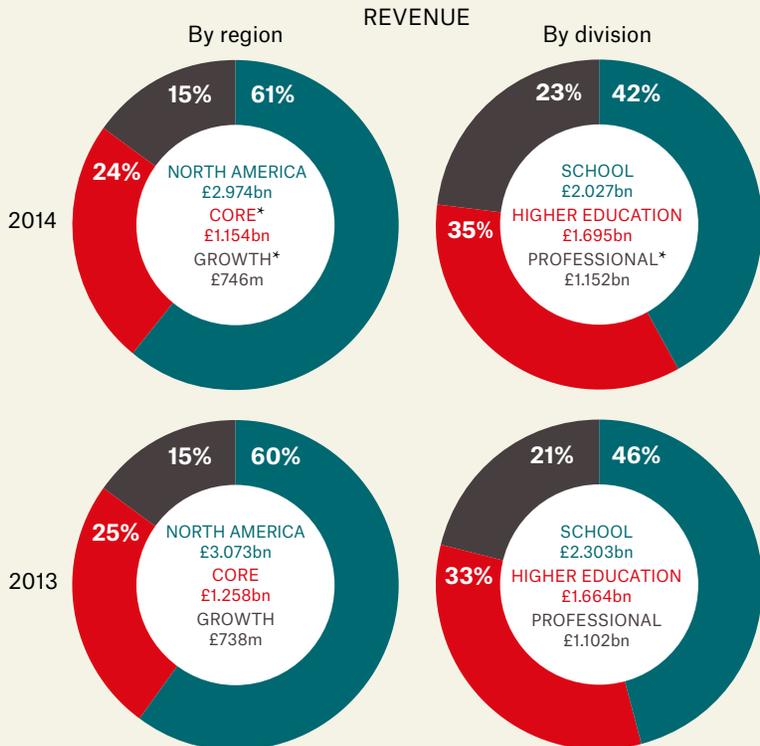
REVENUE EXCLUDES PENGUIN AND MERGERMARKET
*CORE INCLUDES UK, ITALY AND AUSTRALIA. *GROWTH INCLUDES BRAZIL, INDIA, CHINA AND SOUTH AFRICA
*PROFESSIONAL INCLUDES THE *FINANCIAL TIMES*, *THE ECONOMIST* & BUSINESS TRAINING AND TOOLS
SOURCE: PEARSON

Fallon has a casual, common-man air, evident in his fondness for Bruce Springsteen and Manchester City soccer club. In 2009, he was diagnosed with throat cancer, but responded successfully to treatment. As unnerving as the cancer episode was, it only seems to have added to an overall air of humility and quiet resolve. That profile contrasts sharply with the outspoken Scardino, who, as the first female CEO of a Fortune 100 company, is regarded internationally as something of a celebrity.

As CEO, Fallon began a further two-year restructuring, building out Pearson's international education business. It purchased Brazil's Grupo Multi and expanded Wall Street English, both English language training companies. That reorganization, so soon after Fallon took over, raised investor eyebrows. Shares tumbled early in 2014 as Pearson's earnings began to show the effects of declining enrollments on the back of an improving economy. While Fallon acknowledges the past two years have been tough, "It feels like we're now through a lot of that hard grind."

Pearson's ability to weather the storm can be attributed in part to Fallon's communications background, says Pearson's current communications chief Kate James. Fallon is the first former communications director to go on to lead a FTSE 100 company. "Increasingly, communications skills are an essential part of the mix for any successful business leader, but clearly John's experience in particular is hugely valuable," James says. Describing having an ex-comms chief as her boss as "a welcome challenge," she says "it means we're constantly expected to raise our game."

Fallon characteristically downplays his role as a pioneer for communications professionals, but agrees the experience continues to play an important role in his work as CEO. "Good communications people are always thinking strategically and always start from, 'What is the business benefit in doing this?' I think that's important in any job you do," he says.

IN 2013, in the midst of restructuring, Fallon made his public promise to measure the efficacy of each Pearson product with more than $1 million in sales. The word "efficacy" is borrowed from the pharmaceutical industry where data-driven proof is standard practice: no customer is expected to buy a drug that can't be statistically shown to be effective. →

Likewise, Fallon says, the effectiveness of learning programs should be known in advance, with field results to back up those claims. In Fallon's vision, the efficacy report should not only justify the work Pearson does, but also lay out a set of rigorous metrics by which educational programs in general can be more reliably monitored and improved.

The company has crafted an "efficacy framework," a preliminary step in the development of its products to establish guidelines by which efficacy can be measured. The framework poses questions around four themes: the product's goals, its suitability, implementation strategies and the capacity to deliver on the goals. Significantly, both institutional customers and the students themselves are consulted and the guidelines are broad enough that they can then be applied in other situations.

The efficacy framework is still being developed, but the company has already shared its research, setting up an online "efficacy toolkit" for educators and outside developers that echoes its internal procedures. Those external conversations have provided important feedback, Fallon says. "Working with our customers, we've started to define what learning outcomes actually look like and really built momentum for the project."

In the field, monitoring is structured around four simple ideas: access, completion, achievement and progression to the next desired level. In some cases, Pearson already has the data necessary to begin monitoring. For instance, its popular MyLabs computer-based products for various subjects can supply immediate feedback for teachers, students and program developers. Likewise, schools that the company operates serve as proving grounds for the collection and sifting of data under the efficacy guidelines. Eventually the company hopes to gather the information necessary for the review of all its offerings. "It's all about continuous improvement, continuous feedback. That is what the best teachers have always

done and the way that education at its best has always worked. What we're doing is making the process more efficient and more scalable," says Fallon. "Is this improving access? Is it improving completion rates? Is it enabling achievement and competency, and is it delivering progression?"

Applying the efficacy review to its South Africa universities, Pearson found room for improvement in its work placement program. In a review of iLit, a program for struggling readers in the US, Pearson found a wide range of completion and competency rates, a result of uneven teacher training. This prompted an overhaul. Reviews at Wall Street English schools in China yielded metrics to identify students in trouble with 80 percent accuracy, allowing teachers to develop individualized assistance and boost completion rates.

IMPORTANTLY, efficacy reviews have to be tailored to specific circumstances, with input coming from each teacher and student. "We're not trying to say *this* has to be the measure,'" Fallon says. "We're saying, for everything we do, let's just make sure there *is* a measure." Ultimately, the goal is to give teachers the tools to do their jobs better. That makes engagement with the education community, teachers especially, critical to Pearson's efficacy regime. "My dad was a teacher most of his working life and he would never talk about personalized learning or data analytics," Fallon says. "But he did ask how, in a class of 30 or more kids, do you reach each one on their own terms and in their own way?"

Good teachers use their observations as data sets for each student, Fallon says. "What I think we're talking about in applying data to education is helping to scale good teaching far more effectively because you can share the benefits of it."

The warm regard Fallon has for educators isn't always reciprocated, with some teachers expressing

"In general, I think we need fewer tests – and better tests"

skepticism or outright opposition to Pearson products. Conversations in the larger public school districts in the US in particular can be "incredibly difficult," Fallon says, "partly because some of the economic and social issues they are dealing with can seem so hopeless. Teachers there feel beaten up, and that this is yet another thing that they are being attacked with. There is a lack of faith that things could ever be different or better. And I think people are rightly or wrongly suspicious of for-profit education companies as well."

North America is by far Pearson's biggest market, accounting for about 60 percent of its revenue. A large part of that comes from its role in a growing number of mandatory, standardized tests – a favorite target for critics. Some believe the tests aren't a fair evaluation of students' abilities, while others criticize the time the tests take from other teaching. Mistakes in scoring have made headlines and helped fuel critics' arguments. Fallon says the company takes responsibility and has moved to quickly correct errors where they have occurred, and while any error is regrettable, especially for the student affected, these account for a small fraction of the billions of multiple choice tests and more than 111 million essays Pearson develops and scores each year. He adds that in other respects Pearson's role is often misunderstood. Education policy – curriculum requirements and the number and frequency of tests – is set by elected officials, while Pearson is relied upon to write and score the tests, build digital platforms and other products, and supply a range of consulting services.

While testing is the key to establishing accountability and education reform, Fallon admits the charge of over-reliance on testing has some merit. "Most people would agree we do need some reassurance, some means of being confident that our children are on track to progress and do well in their studies and careers," Fallon says. "In general, I think we need fewer tests – and better tests."

> "What I think we're talking about in applying data to education is helping to scale good teaching far more effectively because you can share the benefits of it"

BOTH FALLON and his predecessor Scardino have emphasized that Pearson's education business is supported by profits, but not defined by them. "I believe that the private sector has a valuable role to play as a partner with public institutions, tackling together the challenges faced by education, and echoing successful private-public relationships in other sectors," he says.

Coming from a family of teachers, Fallon says his passion for the business lies in his understanding of education's power to transform lives. "My grandad was born in the poorhouse in Roscommon [in Ireland] and brought up in an orphanage in Rochdale [in the northwest of England]," he told *The Times*. "It was very important to him that my dad passed the 11-plus and got a grammar school education. Education was my dad's route out of poverty and into the middle class."

His own background leaves Fallon worried about the future of education as a vehicle of social mobility. The income divide is pushing a quality education beyond reach for more and more people, he says. "It's a personal thing for me. But I imagine it's personal for pretty much everyone. The rise in wealth in China has probably lifted more people out of poverty in the past 20 years than ever before. What are people spending their money on? Food, housing, education. It's the third-biggest item of household spending for the growing middle class. Because they understand the ladder of progress."

Using data to boost the efficacy of education can help "get that social progression moving again," Fallon says. "I think it's a big opportunity for us to make a difference."
www.pearson.com

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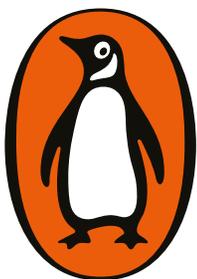
PENGUIN

Launched in 1935, Penguin sold 3 million inexpensive paperback books in its first year. In 1960, the company was charged with obscenity in the UK for publishing the unabridged version of D.H. Lawrence's *Lady Chatterley's Lover*. Penguin was acquired by Pearson in 1970 and was spun off into a joint venture with Bertelsmann's Random House in 2013

CHATEAU LATOUR

Pearson bought a majority stake in French wine estate Château Latour in 1963 and, under their ownership, its operations were modernized. The 190-acre vineyards date to the 14th century. Pearson sold its stake in 1989

BYTE SIZE

To infinity and beyond: MERCHANTCANTOS gets the measure of data

Words such as gigabyte, terabyte and even the exotic-sounding yottabyte are tossed around by corporations and the media, usually without any explanation of how they relate to the real world. To put them in perspective, this infographic shows the units numbered from small to large, with an explanation of each.

The data capacity to store one character, the letter **A**, for instance, is **one byte**. With each prefix, the number of bytes grows by a factor of 1,024, chosen because it is a power of two and a round number in the binary system computers use. While a yottabyte is the largest unit we currently need, brontobytes – 1,024 yottabytes – are standing by, with geopbytes waiting in the wings.

MEGABYTE 2

A megabyte can hold roughly one short novel – *Catch-22* by Joseph Heller, for instance

TERABYTE 4

A terabyte can hold all the X-rays on file in a large modern hospital

GIGABYTE 3

A gigabyte was the maximum capacity of the first iPod Shuffle. Released in 2005, the device held 240 four-minute songs

KILOBYTE 1

A kilobyte, or 1,024 bytes, holds about a quarter of a page of plain text

EXABYTE 6

One exabyte equals the amount of data added to the internet every 10 hours

ZETTABYTE 7

If a gigabyte were a single cup of water, one zettabyte could fill more than 100,000 Olympic-sized pools
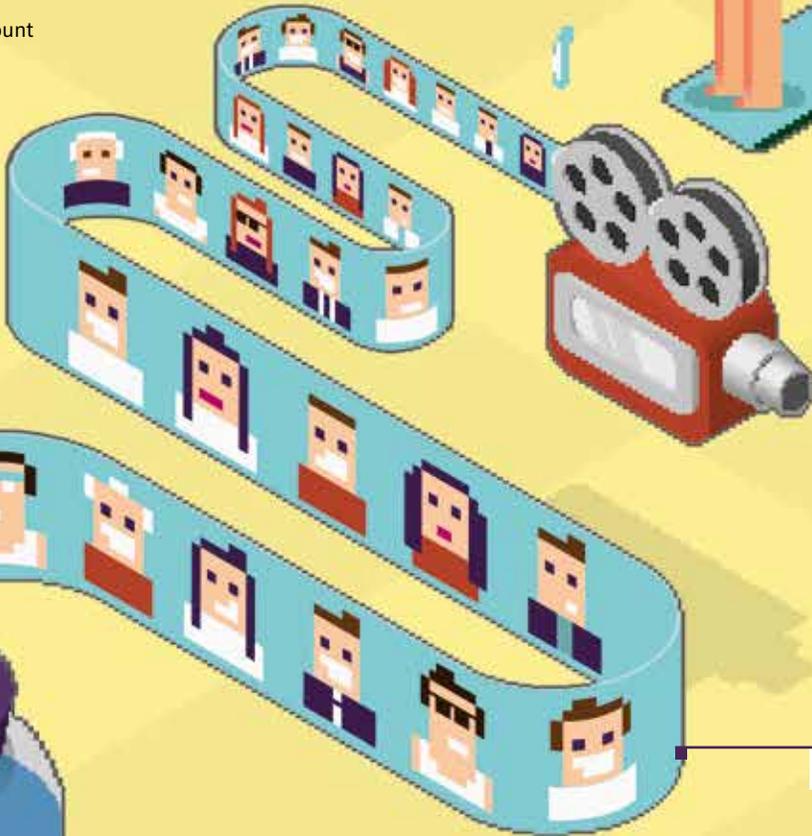
YOTTABYTE 8

109 yottabytes could store a video of the complete life of every person who has ever lived
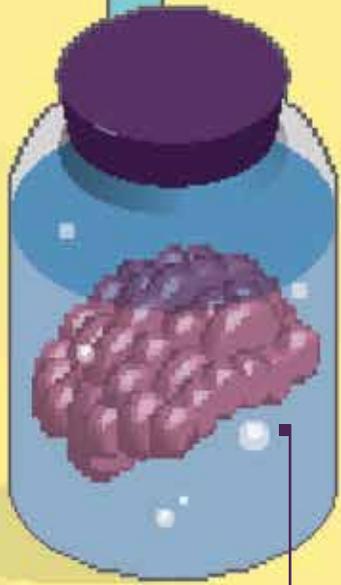
PETABYTE 5

The human brain holds about 2.5 petabytes of information

SHINING A LIGHT THROUGH THE DATA

In the Big Data marketplace, too much can obscure more than it reveals.
IAN POWELL, Chairman of PwC UK, **explains the art of transparency**

IN EARLY NOVEMBER 2014 at PwC UK we published figures on the "gender pay gap" between our male and female employees, one of a handful of UK businesses to do so. We took this step because we believe better transparency on gender pay helps everyone assess progress toward equality and see for themselves where further action is needed.

Arguably, we could have been even more "transparent." We could have published *all* employee data – names, grades, salaries – so people could work out anything they liked, including our gender gap. This might have been completely transparent but might also have been the opposite of helpful. The right data in the wrong hands can be a dangerous thing.

In an era when business needs to rebuild public trust, there's an assumption that organizations can do this by providing more information. However if we had simply published a mass of employee data, in addition to being foolhardy, it would have done nothing to clarify what was really happening in our workforce.

Data alone doesn't build understanding or trust. Today, everyone in business is bombarded with more information than we know what to do with. And while this may initially have promised a new world of total transparency, the real effect can be less insight rather than more, and ultimately less trust. When it comes to closing the trust deficit, the numbers are not enough: we need to provide an understanding of what the numbers really mean.

Consider the UK Office for National Statistics data on the inflation rate. If just raw data on prices was published each month without indicating what products they applied to, it would not be very helpful in understanding the inflation rate in the economy as a whole. To be effective, data needs to be well organized, contain all relevant information and conform to consistent, widely agreed standards.

Today's explosion in data is far outpacing people's ability to interpret and absorb it. And professional services firms need to be able to translate the data, and to create an environment where people can understand which parts are important and reliable. This requires people as well as technology. Automation has brought us new tools, more numbers, higher speed – but in translating data to build trust, the professional judgment and skepticism of qualified, experienced people is vital.

What do we do to improve understanding and trust in numbers? First of all, source the data: you need to know what you're looking for and where to find it. Second, make it usable by organizing it into a standard format or "common data model,"
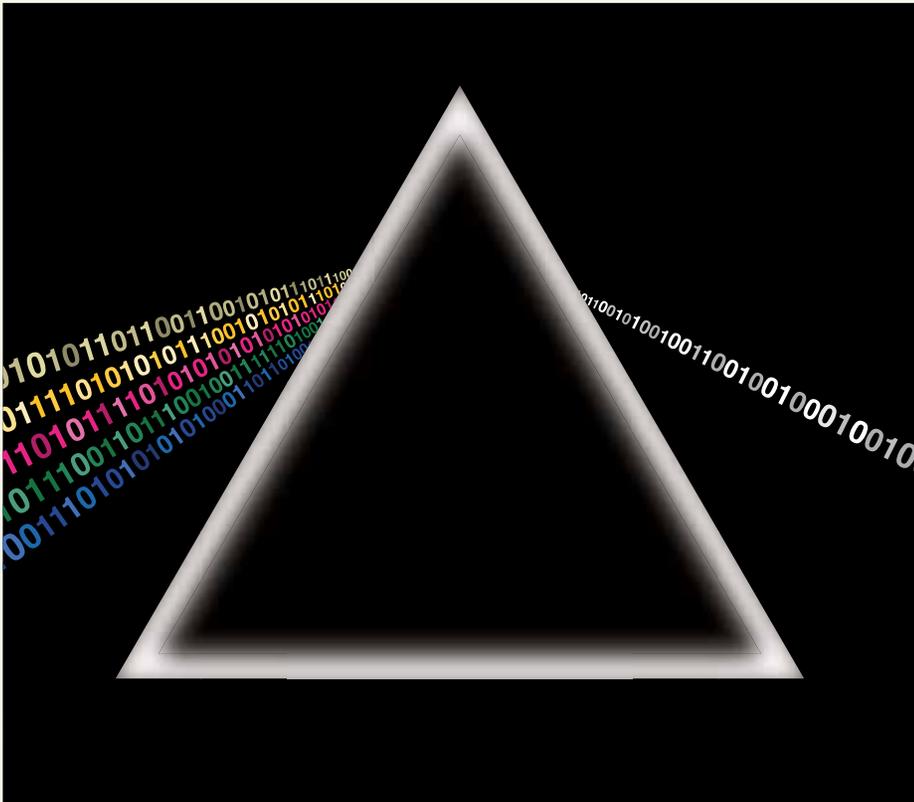
so you can test it, benchmark it and display it all in a consistent way.

Having done that, prepare a test of the information's reliability. In step three, you establish a hypothesis to validate against your expectation of what constitutes accurate information. Then step four is to test the information to see what conforms to the hypothesis, and identify patterns where things aren't as they should be. Fifth and finally, you visualize and display the outcomes in ways people can understand – helping to create insight and, hopefully, trust.

Whatever information we're seeking to assure, we've found these steps are the best way of validating its trustworthiness. One day, we think all corporate data will be tested in this way.

IAN POWELL

Chairman and Senior Partner of PwC in the UK since 2008, Ian Powell was re-elected to a second term in 2012. He is a member of the team leading the international network of PwC firms and himself leads Central and Eastern Europe, Europe, Middle East, Africa, India and Russia. A graduate in economics, he has an honorary doctorate from Wolverhampton University in England's Midlands. Powell is a qualified Chartered Accountant and joined PwC as a trainee in 1977.

PwC

One of the largest professional services firms in the world, PwC is also one of the top four auditors. A network of firms in 157 countries, it employs nearly 200,000 people.

"When it comes to closing the trust deficit, the numbers are not enough: we need to provide an understanding of what the numbers really mean"

TIPS FOR TRANSPARENCY

PwC Director of Corporate Reporting MARK O'SULLIVAN gives some guidelines for communicating with clarity

1. **Relevance** Strip out immaterial disclosures, restrict repetition and consolidate content to focus on what is really relevant to users. Consider a target to reduce page count.

2. **Linkage** Align these critical elements in your reporting: business model, strategy, risks, key performance indicators and remuneration. Gaps may indicate flaws in internal thinking, operations or information.

3. **Communication** The narrative on strategic progress should be year-round, not a one-off compliance exercise. Update users on earlier announcements, make the most of existing content and tell a consistent story.

4. **Accessibility and conciseness** Experiment with the presentation of the annual report. Avoid lengthy, impenetrable documents that shareholders won't read. Consider the function of the report, and whether the strategic report can stand alone.

5. **Longer term** Focus on longer-term prospects rather than the current/next quarter's performance.

6. **Risk management** Focus integrated risk disclosures on what has changed in the year and align with insight into risk management, processes and controls. Relate to an overall risk appetite and the organization's culture, day-to-day management and governance processes.

7. **Impact** Show the outcome and impact on critical resources and relationships. Risk assessment and strategic planning should look beyond direct operations.

pwc.blogs.com/corporatereporting

WORLD

THE DOCTOR WILL SEE YOU NOW

DR CHRISTOPHER MURRAY's mission to provide genuinely comparative health data has been a catalyst for improving global well-being, reports Brunswick's DAVID SELDIN

Dr Christopher Murray started young in global healthcare, traveling from Minnesota to Africa with his parents to set up rural medical clinics where, at 10, he was in charge of the pharmacy. That experience set him on a path to becoming one of the world's leading experts in high-tech healthcare data analysis.

Today, Murray is Director of the privately funded Institute for Health Metrics and Evaluation at the University of Washington. He leads a worldwide consortium to develop the annual Global Burden of Disease report, the definitive account of the causes and impact of 206 diseases and injuries, covering 20 age groups in 188 countries. Each report requires the parsing of hundreds of millions of data points and the development of dynamic visualizations to make the information useful to leaders and organizations trying to solve the world's health problems at local, national and international levels.

One of Murray's innovations, a metric called Disability Adjusted Life Year, or DALY, allows more accurate comparisons of community health and is now the standard used by the World Health Organization and other researchers. In the following interview, Murray describes the challenges involved in sorting out the world's health data and making it accessible so that resources go where they can do the most good.

"What is different about our data is that we put a tremendous effort … into trying to make meaningful comparisons"

How did your childhood experience in Africa lead you into sophisticated data analysis?
It's a longish journey. I started off wanting to know the answer to a basic question: why was it that some communities I saw with my parents in Africa had all sorts of seemingly straightforward health problems – pneumonia, diarrhea deaths, malaria – while others did not? I thought it would be a really easy question to answer, but I started to find out that we really didn't know that much in any sort of quantitative, rigorous way, about the level of health in different populations. We have a rough idea that people in the US or Western Europe are healthy and in many low-income countries they're not. But beyond that there are pretty huge gaps in what we know about the state of health, let alone the drivers and the determinants of it.

Once you start trying to find an answer, it's a long process of having to deal with incomplete and conflicting data, all the biases and politics that affect how people talk about these problems, and what works as well as what doesn't.

Reports on health are coming out all the time. How do you persuade people that what you're doing is definitive?
There's a lot of tremendous expertise and research on specific diseases or topics, but very few people have the time or the inclination to step back and look at the big picture and ask what are the biggest problems? Which are getting worse and which are getting better? What are the most important challenges?

What is different about our data is that we put a tremendous effort that really nobody else does into trying to make meaningful comparisons. Data becomes useful when you can make comparisons over time and across place. That's how you can start to benchmark. Until you have data that's comparable, a lot of comparisons are not very helpful.

To take a simple example, diabetes is a serious disease that is a growing problem in many parts of the world, but there are 21 different definitions of diabetes being used by the various groups that report

GEOGRAPHY IMPACTS LONGEVITY
WOMEN

Where do women live the longest?

North Dakota
64%

Mississippi
0%

In North Dakota, **64%** of counties had a female life expectancy that was above the U.S. average – among the highest nationwide – versus **0%** of the counties in Mississippi.

How do lifespans compare within states?
Women in Fairfax, Virginia, have some of the best life expectancies in the world at **84.1 years**, while women in Greensville and Sussex have some of the worst at **75.9 years.**

84.1

75.9

661

166

Who is falling behind?
661 counties have seen life expectancy either stop dead or go backwards for women since 1999, versus **166** for men.

GEOGRAPHY IMPACTS LONGEVITY
MEN

Where do men live the longest?

Iowa
68%

Oklahoma
0%

In Iowa, **68%** of counties had a male life expectancy that was above the U.S. average – among the highest nationwide – versus **0%** of the counties in Oklahoma.

-10 years

How big is the gender gap?
A boy born in Baker County, Florida, is likely to die **10 years sooner** than a girl, one of the widest gaps in the country.

Who is making the most progress?

1   2   3   4   5   6   7
Change in life span (in years)

Over the previous two decades, life expectancy for black American men improved more than for white men, especially in large urban areas. (By **7.4 years** for black men and **4.2 years** for white men.)

The Institute for Health Metrics and Evaluation website, *www.healthdata.org*, uses visualizations to illustrate its data sets. Here, an infographic shows comparative life expectancies for women and men in different places in the US

on diabetes. Tables are published that compare countries using radically different definitions of the disease – a pointless, meaningless exercise.

We try to take all the data that's out there and map it to some common set of definitions. That's why the curating of the data that we do is so labor intensive, just trying to make it comparable.

Is that where the development of your metric, Disability Adjusted Life Year (DALY) comes in?
To ask the right questions, you need to have a metric that allows for meaningful comparisons across the massive array of things that cause health problems, whether it's hip arthritis or tuberculosis or pancreatic cancer right through to Alzheimer's. That means you need to make comparisons over a life span, and between things that cause functional limitation or disability versus things that could kill you. We needed a way to measure how disease affects you, whether it's because you die too early or you're alive but you're not enjoying the quality of health that you could. That led to the birth of the idea around the DALY, which is basically the sum of time lost to both premature death and disability.

We can figure out what conditions people have in different places, and how that varies by age and gender. It's not just about single diseases, we're now trying to capture the experience of individuals with co-morbidities – the simultaneous presence of two or more chronic diseases or conditions. Having that common metric becomes absolutely essential for making any sort of sensible comparison.

How is your work having an impact?
We turned a corner about three or four years ago when we started dynamic data visualization. Curation, analytic methods and statistics have improved over the past 20 years, but there was a quantum leap in our ability to make our data useful when we started using visualizations.

In the scientific community for global health, lots of people now use our visualizations – in fact I rarely come across someone who has not. The media also uses them quite a lot now. And we hear stories all the time from people in ministries of health telling us they regularly use the data about their country on our website to get a sense of the big picture.

In 2014, we introduced something called the Roux Prize, a $100,000 award for someone who has turned our research into meaningful action. The winner was Dr Rodrigo Guerrero, a Harvard-trained epidemiologist who is the mayor of Cali, Colombia. He used DALY-based analysis to understand patterns of violence in →
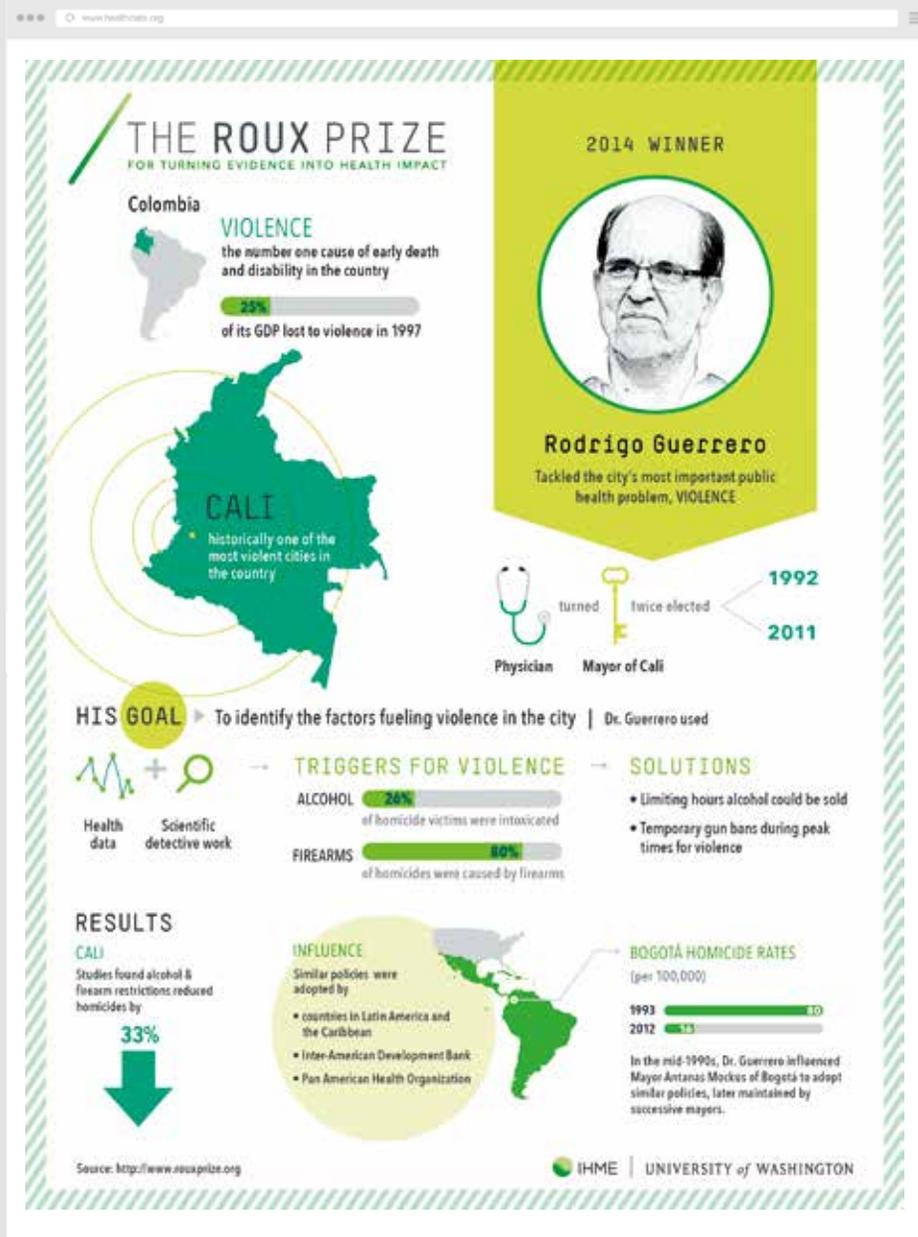
This IHME infographic shows how physician-turned-Mayor Rodrigo Guerrero, of Cali, Colombia, used the organization's data to lower local homicide rates

his city, and put in place policies that led to a 33 percent reduction in the homicide rate.

When the Global Burden of Disease 2010 results were published, the Minister of Health in Rwanda saw the data about indoor air pollution and the number of childhood pneumonia deaths related to that in her country. She then initiated a big push toward cleaner burning stoves in homes to decrease indoor air pollution.

In another example, the President of Botswana raised alcohol taxes to cut consumption as a result of our work on the impact of alcohol. There's a long list of these examples, where local analytics specific to a particular country have helped empower decision makers to move an agenda along.

Interestingly, the UK has been a big user of our analyses. The Chief Executive of Public Health England, which oversees the health service, has said their agenda is driven by this analysis of risk factors. We are working with them to develop a more fine-grained analysis so that they can tailor their public health messages to each community.

We have a very confident strategy of engaging people in different governments and constituencies to develop our analyses and we now have active collaborators in about 106 countries. That builds local ownership for the project. Now, when we publish in scientific journals, we have hundreds and hundreds of authors from around the world, so it's no longer something limited to analysts in the US. It's a truly global undertaking with a representative set of collaborators.

Why do you think individuals respond better to some types of data than others?
People often don't change, even if they are well aware of the statistics telling them that some types of behavior are unhealthy.

We had an experiment running with the Dartmouth Institute, the US healthcare research group. It used a risk calculator, where people entered personal risk factors, including behaviors and physical conditions, to see the probability of them dying over a given period of time. The Institute showed the results to people, but they just didn't want to know. They do want to know what's modifiable about changing their risk, but they don't really want to know the numbers.

We have since changed the interface. Instead of showing you a number, it now shows you a green smiley face or a red frowning face. That works better. It's scary to know the facts.

CHRISTOPHER MURRAY

Professor of Global Health at the University of Washington and Director of the Institute for Health Metrics and Evaluation, Dr Christopher Murray has worked for the World Health Organization and served as Director of the Harvard Initiative for Global Health. He holds degrees from Harvard University, Harvard Medical School and Oxford University.

IHME
The Institute for Health Metrics and Evaluation at the University of Washington was founded in 2007 and provides comparative data on global health trends for policymakers, researchers and funders. *www.healthdata.org*

DAVID SELDIN, a Partner in Brunswick's Washington, DC office, advises companies in the healthcare sector.

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RATEOCRACY
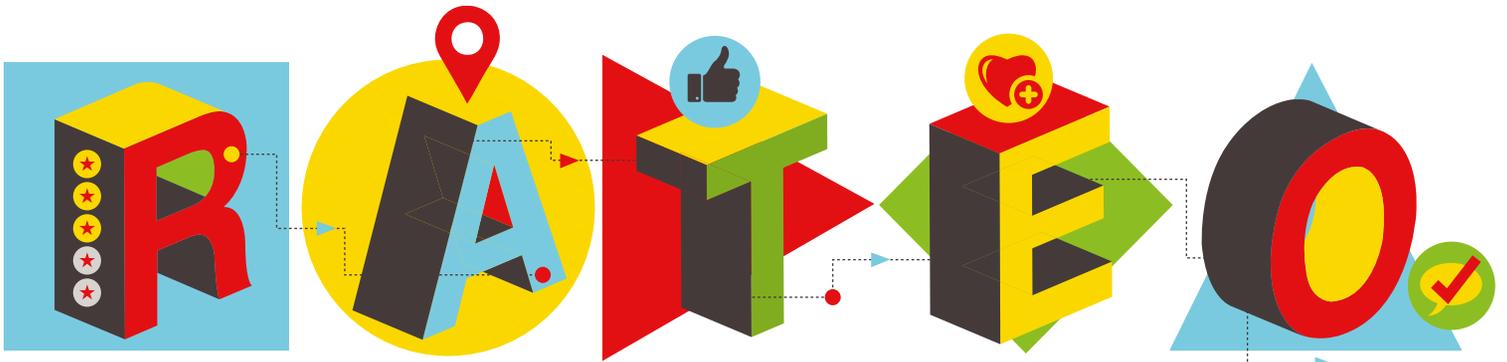
The rise of ratings means everyone will be both watcher and watched, bringing huge changes for business, individuals and society, says Brunswick's ROBERT MORAN

We are moving toward a world where the actions of companies, professionals, politicians and even private individuals will be judged and influenced by popular opinion exercised through ratings systems.

We will all live in a rateocracy, whether we choose to engage in it or not.

By the end of the next decade virtually every person, place and thing will have a real-time, searchable and trackable rating available to anyone with a smartphone or the device that replaces it. Businesses will be forced to respond to real-time reputation ratings that reflect customer and stakeholder sentiment. Over time these ratings will be reported alongside share price and other metrics.

If this sounds farfetched, consider that today consumers rate restaurants on Yelp, home remodeling companies on Angie's List, sellers on eBay and content on Facebook. College students rate their instructors at *ratemyprofessors.com* and employees rate their companies and CEOs on Glassdoor.

Ubiquitous smartphones, coupled with image recognition programs for faces, products and places, cheap computing power and widespread, easy connectivity, will ensure that rateocracy is technologically possible. The social desire for more checks on business and government will supply the pressure to make it probable.

For the individual, rateocracy will mark a shift from the anonymity of urban life back to the intimacy of the small town. Rateocracy will feel like a combination of the "digital village" and an ongoing 360-degree review.

GRADE PENDING
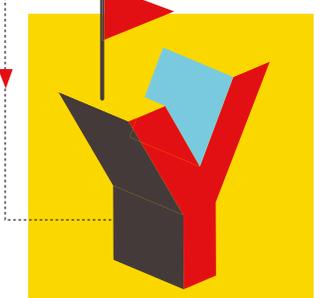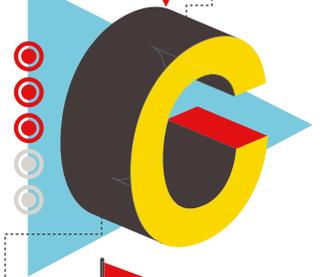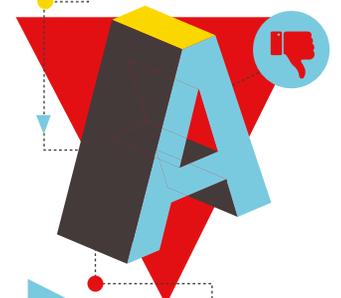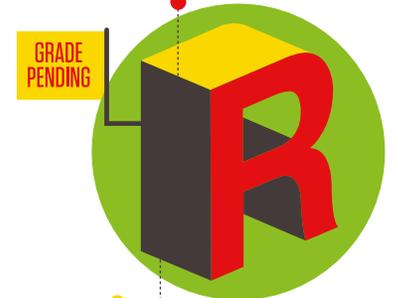
Most technologists and social commentators have focused on technology-enabled surveillance – how institutions monitor the individual, like Big Brother in George Orwell's *1984*. They will be surprised when the real story isn't surveillance, but "coveillance" (peer-to-peer monitoring) and "sousveillance" (the public monitoring the powerful from below). The so-called "human flesh search engine" in China, a movement toward holding government officials and misbehaving citizens accountable through distributed, crowd-based research and tracking, is just one early example. The trend will grow, replacing the old paradigm of the "panopticon," in which there is a central watcher and many watched, with an organic system in which everyone is simultaneously watcher and watched.

Rateocracy will evolve in at least one of three possible ways. The first, already evident, is that the rateocracy grows niche by niche with customized rating systems in each field of human endeavor and for different types of professionals, products and places. In the second case, a "middleware" function will tie all of these disparate rate streams into one, searchable, coherent whole. The third is the creation of one, universally acknowledged ratings platform. This has been explored in great detail by novelists Cory Doctorow (*Down and Out in the Magic Kingdom*) and Gary Shteyngart (*Super Sad True Love Story*). In both cases, the authors anticipate ratings systems leading to forms of reputational currency. Startup lab Milk created such an app in 2011. It only lasted five months, but more attempts are sure to follow. (Milk was acquired by Google in 2012.)

As companies manage their employees according to rankings, one possible downside could be the damping of creative talent. Creative personalities often find it more difficult to win the approval of the majority, and thus it could be harder for them to earn a high ranking. Rateocracy might subtly favor the "company man" over the visionary with a few rough edges, inoffensive conformity over creative disruption.

Corporate transparency is already a buzzword in business, and the rise of the rateocracy will dramatically accelerate that trend, for better or worse, giving businesses looking to protect and maintain their reputations no alternative other than openness and accountability.

ROBERT MORAN leads Brunswick Insight, the group's global public opinion research function, and is a Partner in the firm's Washington, DC office.

HOW TO SCORE HIGHLY IN A RATEOCRACY

Businesses will find it impossible to ignore the growing rateocracy. A study by Michael Luca at Harvard Business School found a one-star increase in ratings on Yelp translates to an increase of between 5 and 9 percent in revenue. To be competitive, corporations, leaders, managers and employees must find a way to embrace extreme transparency.

POWER SHIFT
Rateocracy will shift power from corporations to customers, suppliers and employees. Corporations will control less of their reputation and will need more consistent engagement with their stakeholders, especially their customers.

OPEN LEADERSHIP
CEOs in the era of rateocracy will have nowhere to hide. It will become increasingly difficult to avoid questions about sagging customer service or a questionable supply chain. In this era of extreme transparency the CEO must provide strong leadership around the company's values and be comfortable addressing persistent issues.

REPUTATION MANAGEMENT
By necessity, corporations will build advanced listening and response functions to protect their reputations and correct factual errors. These functions will focus on identifying lower-than-expected ratings and working to limit the damage.

LEARNING ORGANIZATION
As we enter the era of rateocracy, we will receive more feedback than ever on the day-to-day perceptions of corporate performance. Those companies able to direct this data into the tightest possible feedback loop will outperform their peers, learning faster from corporate and employee ratings and using that knowledge to build greater success. Beware overreacting, and maintain a big-picture perspective.

EMPLOYEE WINDOW
Glassdoor is a first taste of the importance of employee ratings in this new era. Everyone, customers and even analysts, will have access to ratings of companies by employees. These ratings will operate as a public proxy, a measure of the health of a business.

ITALY
BY NUMBERS

ERMETE REALACCI and **DOMENICO STURABOTTI** of the Symbola Foundation use data to paint a picture of a surprising growth story, driven by creativity. Brunswick's **MANUELA RAFAIANI** reports

Tired of being a poster child for Europe's slow growth and recession, Italy is using deep dives into hard data coupled with attractive presentations to tell a surprising growth story.

The Symbola Foundation, set up in 2005 to promote Italian quality, says the country is unjustly lumped in with the poorest performers in the European Union. Symbola Director Domenico Sturabotti says a media focus on bad news in Europe has made Italy a scapegoat, and overlooks the country's regional competitiveness in the face of incursions by China and the other BRIC countries.

"The picture being painted is of a country that can't make it," Sturabotti says. "I think of the 2005 cover of *Time* with Michelangelo's statue of David competing with the statue of one of the Chinese terracotta warriors. It was a metaphor of our weakness, a declaration of the lack of confidence in us. Instead, 10 years later, Italy is still here and, objectively, is doing better than before."

Since 1999, Italy has retained 71 percent of its export market, far better than most other industrialized countries in the region, including France, which managed to hold onto 61 percent, and the UK, which kept 55 percent.

That resilience owes a lot to the worldwide respect commanded by the "Made in Italy" brand, which implies not only quality but a strong emphasis on stylish design. Ferrari, Vespa maker Piaggio, Olivetti, Versace and Fila are just a few of the influential exported brands exhibiting the classic Italian blend of form with function.

Beginning with Italy's reconstruction after World War II, observers have repeatedly applauded the country's small, locally rooted manufacturers of fashionable products imbued with high-quality functionality and workmanship. In 1997, US economist John Kenneth Galbraith called those manufacturing values Italy's "major advantage" against rising globalization.

PAOLO GENTILONI, Italy's Minister of Foreign Affairs, says it is an advantage that continues to the present day, and underlies the strength in exports documented by Symbola.

"It is no coincidence that within a moment of globalization and economic crisis, Italy remains one of the main exporter countries globally," Gentiloni says, "thanks to quality, innovation and a rich artistic and cultural heritage."

In addition to big names such as Ferrari, some say Italy's smaller brands are a source of untapped potential.

"I see Italy and its manufacturers making amazing products that sell largely in their home market but would find a place on shelves across the world," says columnist Tyler Brûlé in a recent *Financial Times* article. A list of the best niche manufacturers, he says, would include "slippers from South Tyrol, chopping boards from Piedmont, door handles from Veneto and paper products from Florence."

It is precisely the combination of tradition and innovation, designed form and elegant function, local roots and an international market, that is at the heart of Symbola's mission, says foundation President Ermete Realacci, also a member of the Italian Parliament.

"Italy holds an enormous place in the world because it folds economic needs in with a more human dimension, expressed through quality and beauty," Realacci says. "It knows how to focus on design even in traditional crafts and has learned to connect our know-how with new technologies.

"I have a thousand examples in mind, among them the extraordinary experience of Angelo Inglese, a tailor from Ginosa in Puglia who, with the help of the World Wide Web, exports his G. Inglese brand of traditional tailored products all over the world. Among his customers are Prince William and Japanese prime ministers."

Realacci is quick to point out, however, that the past is not a recipe for the future. A reputation for quality and design alone won't help the country's economy shake off its post-recession doldrums. "We can't emerge from this crisis as the same country that entered," he says. "It's impossible to put this perfect storm behind us if we do not change direction."

As part of that change, the country has made a major commitment to businesses focused on the environment. "More and more companies are seeing green investment as a way out of the crisis," says Realacci. "And they do it not because they have had an epiphany about environmental sensitivity, but because it is worthwhile to bet on the green economy, and cross innovation with the traditional quality and beauty of Made in Italy." →

EXPORT QUALITY
Italy ranks in the top three for more than 900 products, measured by trade surplus. Popular items include leather handbags, sunglasses and wine

Fifty-six percent of small-to-midsize businesses in Italy have at least one "green employee" whose role benefits the environment, compared to 36 percent of similar businesses in the UK and 30 percent in France, according to a European Commission report.

While economic challenges remain, *GreenItaly 2014*, a joint report from Symbola and the Italian Chamber of Commerce, offers a string of positive statistics showing how the country's push for innovation and investment in green technology is beginning to drive economic growth. Since 2008, more than 340,000 companies – nearly 22 percent of all Italian businesses – have invested in the environment, adding €101 billion ($108 billion) to the national economy, which had a $2.129 trillion GDP in 2014. Nearly two-thirds of new jobs in 2014 were tied to environmental investments.

PART OF SYMBOLA'S mission is to encourage the old and new aspects of the Italian economy to see one another as allies and to show the world the close relationship between the best aspects of the country's culture – its "qualities," they like to say – and its land and people.

"Ferrari could not have been created anywhere but Maranello," Realacci says. "From there, its story has conquered the world with its mythical narrative. As [author] Paul Auster said, 'Stories happen only to those who are able to tell them.'"

Symbola tells Italy's story with official statistics augmented by data from Italian

ERMETE REALACCI

Ermete Realacci is the President of Symbola. He is also President of the VIII Environmental Commission of the Italian Chamber of Deputies, and has been a Member of Parliament since 2001.

DOMENICO STURABOTTI

A landscape architect by training, Domenico Sturabotti was named Director of Symbola in 2007.

SYMBOLA
The Symbola Foundation promotes the Made in Italy brand. The word comes from ancient Greek and refers to two parts, often of a medallion, that join together into a whole. The foundation aims to combine the values of tradition with innovation, of regional roots with global competition, and to reconcile development with concerns for the environment.

companies and international sources, which they interpret and frame with infographics and engaging design. The integrity of the data is critical to the success of the foundation's message.

"It is essential to be able to compare our data against reliable, international standards," Sturabotti says, "and often, official sources lack the data necessary for a deep evaluation of a particular area. So when, for example, we want to know how much creativity is exported from Italy, we can turn to Gucci, Armani and other companies."

First, Symbola set out to change the conversation within the business community and spread the word about Italy's strengths, particularly in the creative industries. Next, they addressed national political and public forums and created what the foundation refers to as "a lobby for quality, and a network of expertise, relationships and exchanges" that could help build on the past and create success in the future.

Sturabotti says that while the foundation's initial target audience was fellow Italians, telling them the story of their country's success and mapping its roads to recovery, "Now, we want to tell the world about that Italy."

MANUELA RAFAIANI, a Partner in Brunswick's Rome office, advises on public affairs. She has a background in journalism, politics and law. Additional reporting by NATASHA ALEKSANDROV, an Account Director in the Milan office.

Statistics: *www.symbola.net*

ENVIRONMENT
One of most eco-efficient EU countries, Italy emits 104 metric tonnes of carbon dioxide for every million euros of GDP, less than Germany's 143 tonnes and the UK's 130 tonnes

BRAND POWER
Ferrari was named the world's most powerful brand in 2015 by research company Brand Finance, topping Apple and Google. It was one of only 11 brands to earn an AAA+ rating

EXPORT STRENGTH
With a trade surplus of $122 billion in 2013, Italy ranks in the top five of the world's nations, below Germany and China, but above the UK, France and US

CAN DATA BE BRAVE?

Instinct and visionary leadership will never be replaced by technology, says Brunswick's DAVID YELLAND

ILLUSTRATION: DENIS CARRIER / SYNERGY ART

BY 2020, WE'RE TOLD, there will be more than 30 billion devices connected wirelessly to everyday objects, greatly expanding the "Internet of Things." Eventually every aspect of life will be available to be measured, compared and slotted into the Big Data storage facilities dotted around the world.

A rational parsing of this information has such enormous potential that it would seem sufficient to turn any business that commands it into a success.

Yet data alone is just not enough. Human qualities remain prized. Leadership – political, military, artistic and business leadership – has always been the province of garlanded human beings who are unerringly described as having "great instinct" or "vision."

Could such instinct ever be replaced by digital certainty? Alain de Botton, philosopher, writer and co-founder of The School of Life learning center, doesn't think so.

"You could have had Big Data around all the artistic activity in Florence and Siena in 1200, and not have seen Botticelli coming," de Botton says. Sandro Botticelli's 15th century paintings were the work of an inspired, individual genius, breaking the mold of his predecessors.

Tim Steiner, co-founder and CEO of Ocado, who marshaled the technology that built the world's largest dedicated online grocery retailer, agrees with de Botton.

"You can have all the Big Data in the world but you will only monetize it if you make people's lives better," says Steiner. For that, leaders need a more personal approach than statistics alone can provide. Nothing, Steiner says, can replace the experience of being a shopkeeper who knows his customers. "Use the data to assist you, not the other way around."

As chairman of Penguin Random House and the UK's National Theatre, John Makinson is a powerful investor in ideas. He says the data-driven and creative sides are learning to work together.

"I do think Silicon Valley is getting smarter about this," Makinson says. "Apple has always understood the importance of curated content and the Netflix success with *House of Cards* has shown that technology-driven organizations can succeed if they give creative people a budget and some freedom."

Even supposing that data and computers can point leaders to unexpected outcomes, machines still lack an essential ingredient: courage. Defining courage is hard, but its chief characteristic is that it usually involves a big risk, reaching into the darkness.

"One of the problems with predictive software in publishing is it tells the company what customers might want to buy, but not what they might want to read," Makinson says. "After all, so many books are bought as gifts … so when we publish a book it has to be based on something more than the data."

De Botton says it is human nature to believe we can predict the future. We crave surety, so we read the tea leaves and try to assure ourselves we are completely prepared for the next disruption, the next Botticelli. He even calls Big Data "Big Daddy" – a paternalistic comforter we would like to believe can solve everything.

"Our lives are so out of our control," de Botton says. "We want Big Data/Big Daddy to assure us we know the answer. Well, we don't. And we must suffer the anxiety of existence as a result."

Courage in business means accepting this anxiety, moving outside the comfort zone in defiance of the majority view. The definition of a visionary leader remains what it has always been: someone who successfully defies accepted perception.

Will future innovators be brave enough to defy Big Data? The better question might be, will we be brave enough to follow them?

DAVID YELLAND is a former Deputy Editor of the *New York Post* and Editor of *The Sun*, the biggest selling newspaper in the UK. He is now a Partner in Brunswick's London office.

VITAL
STATS

Established in 1927 as a contest between the US and Great Britain, the **Ryder Cup** has been a match between the US and Europe since 1979. Held every other year, the US leads 25 to 13, with two ties; since 1985, Europe has won 10 out of 14, with one tie

Triumphant Ryder Cup Captain **PAUL McGINLEY** explains how data helped his team to a famous victory in the Ryder Cup golf tournament. Interview by Brunswick's **SIMON SPORBORG** and **MAX McGAHAN**

How did data analysis inform your player selections for the Ryder Cup?

Before we did anything else, I had a statistical analysis done on what I considered to be the examination paper for success in the tournament – the Gleneagles course. We trawled through the previous 10 years of Johnnie Walker Championships there and looked for trends in terms of the guys who had played well. What did they do particularly well? Were they big hitters or short hitters? Did they make a lot of birdies? Did they kill the par fives, did they kill the par threes? That statistical analysis helped form my opinion of the kind of players I needed.

I gathered information on players for two years leading up to the Ryder Cup, right from when I was appointed captain. Our dedicated data analytics team followed every single player who might have ended up in the team – but without anyone knowing about it. I didn't want the players to know they were being tracked, but I needed the information. The more data I had, the more educated decisions I could make.

As we got closer to the tournament, I had stats on all the players, but this wasn't going to be about simply picking the best 12 players around. It was about choosing the three wild cards who would join the nine players who had qualified automatically and who together would be the best qualified team to sit the exam at Gleneagles.

How much of your strategy was data-driven and how much based on your gut feel?

It's a balance. You need all the data but you have to overlay that with your experience and judgment. For example, Victor Dubuisson was going to be a rookie at Gleneagles so I wanted to pair him with an experienced guy. The stats team was telling me that Victor and Graeme McDowell would be a good combination, but I wanted to see them interact and make sure there were no issues. I had control over the draws in the first two rounds of the European Tour for the two years leading up to the Ryder Cup, →

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Team Europe hoists Captain Paul McGinley aloft and celebrates its Ryder Cup victory at Gleneagles in September 2014. "The key thing I said to the players on the very first day was that we are going to win this Ryder Cup with 12 players," says McGinley. "Not eight, not three or four, not because we have Rory McIlroy on our team. We are going to win it with 12 – that is our strength"

so every time Graeme came over to play in Europe and Victor was playing in the same tournament, I would pair them together in the first two rounds. I didn't explain. I just put them together, making sure their caddies got to know each other, making sure the players were comfortable spending four or five hours on the course together for two days in a row and in a competitive arena. It allowed me to confirm what the stats were telling us. It paid off: in the Ryder Cup they won both of their matches against two strong American pairings.

Was your strategy set in stone by the time you arrived at Gleneagles, or did you make adjustments as you went along?
I had a plan and I would say I stuck to that 85 percent. But there's always bobbing and weaving in a Ryder Cup. It happens at breakneck speed and you have to be ready to react.

The person I really learned from in that regard was Nigel Mansell, the Formula One and IndyCar champion, who I know quite well. When he was driving, he would have a plan in place to get to that first corner, but of course he didn't know what the other drivers were going to do. So the night before the race, he would visualize how he would react to the other drivers making all the different moves they might attempt. That meant that whatever actually happened, he was able to glide into the appropriate strategy without a whole lot of conscious thought.

That's very much the approach I tried to have for the Ryder Cup. I had a master plan but I had to be flexible depending on how we were doing, what the score was and how the team was playing.

How did you adjust your strategy under pressure?
Being informed is critical to making good decisions, especially in the heat of battle. That's one of the reasons why I had five vice-captains, guys I trusted implicitly, who I knew could read the game correctly and give

me accurate feedback, so I could make the right decisions.

One of the things you need to be prepared for in the Ryder Cup is making decisions for the afternoon session while the morning matches are still on the course. I saw my job not as being a cheerleader, but concentrating on the next move. But I still needed people on the front line and chose them very, very, very carefully – lieutenants I respected and trusted, and who I knew would give me information without an agenda. While the morning session was under way, I was plotting the afternoon. All my vice-captains knew my original plan each day, but I would use their feedback to either confirm or slightly adjust those plans.

Many athletes talk about the need to have a clear mind when competing. Wasn't there a risk that all the statistics might hinder your players' performance, rather than optimize it?
You have to know how much information each player needs to perform at their best. Some need a lot of data in order to feel good – Justin Rose, for example. He is a very structured, organized guy. The more information you give Justin and the bigger picture you show him of what you're trying to do, the more he's able to focus. But with some players, that doesn't work.

You just tell them, "You're going out there, you're going to do A, B and C, and that's all you need to know." It all comes down to knowing your players.

Europe has dominated the Ryder Cup in recent years. Did you feel you had permission to do things your way?
One of the things I said at my first press conference after being appointed captain was that I was inheriting a team that had won seven of the last nine Ryder Cups – I was inheriting a successful template. And I'm a great believer in, "If it ain't broke, don't fix it." But even if you have a winning formula, it can't stay static, it needs to evolve. That was my policy.

A lot of what I did wasn't groundbreaking, it wasn't left-field, but it was the evolution of a template that had worked. For example, Team Europe had always used statistics, but only in a very simple way, taking information off the internet. What I did as captain was employ a full-time data analytics team, which had never been done before.

Golf is usually an individual sport. How did you create a team for those three days of competition?
For 103 weeks of the 104-week two-year cycle, these guys play very much as individuals. Then for one week every two years, they come together for the Ryder Cup. The team is only formalized three-and-a-half weeks before the event, so you're not going to have any training weekends or dinners together. They all arrive on your doorstep on the Monday morning at the tournament venue, and you have to mold them into a team in a very short space of time. That's what makes the Ryder Cup captaincy so challenging. I was clear that I wanted the players to remain individuals and didn't worry too much about shaping them into a team. I thought they would retain a lot of their strengths if I treated them as individuals and didn't necessarily

Captain Paul McGinley grabs Jamie Donaldson after Donaldson's stunning second shot on the 15th green secures the Ryder Cup for Team Europe

burden them too much with trying to be teammates with each other. The ironic thing is that the more I let them be individuals – the more I took those shackles off and didn't burden them with that expectation and structure – the more they actually bonded with each other.

Team Europe arrived at Gleneagles as favorites. How did you guard against complacency – and help the players to handle the pressure?

It's well known that Sir Alex Ferguson, the legendary Manchester United soccer manager, was very much involved in the campaign, certainly during the last 12 months. In 95 percent of matches that Manchester United played under Sir Alex, they were favorites to win. I knew that we were going to have a similar challenge going into the Ryder Cup. We had Rory McIlroy, the number one player in the world, on our team and four of the top six players in the world rankings. There were big expectations on our shoulders. A lot of people suffocate under that kind of pressure. I knew that Sir Alex could help to guide me through that challenge. Over the final 12 months he was the guy that I communicated with most and he came and spoke to the team on the Tuesday night before the competition kicked off.

One of the things I consulted him about was how he created that trademark relentlessness, that wave after wave of attack, because there is nothing tougher to face as an opponent. I told my players that we were going to keep hammering at that door, we were going to beat them down with wave after wave after wave of attack.

The Ryder Cup is a such a high-profile tournament. How did you make sure the players weren't overwhelmed?

It was up to me to create a positive environment and let them play freely. I didn't impose too much structure on them or create a tense – or intense – environment.

Something I really encouraged was that we see the challenge as fun. If we didn't – if they weren't invigorated by playing in front of 55,000 people – then there was no point in playing. When you enjoy something, the chances are you're going to be successful. So I made sure that we created a fun environment. I wanted the players to be stood over a putt thinking, "Man, if I hole this putt from eight feet, this crowd is going to go absolutely ballistic." So, rather than be fearful, it was fun.

That was how I felt as a player. I couldn't wait to hit the putt, because I couldn't wait to hear the crowd's reaction. That's what I tried to encourage, and the vice-captains and Alex Ferguson too. Yes, this is one of the biggest sporting events in the world, and yes there is pressure and expectation, but it's also a huge amount of fun.

Obviously as we got closer to the event the players got more nervous and the intensity inevitably ramped up. I was aware that my body language was also very important, to be comfortable and relaxed. At no stage did I get either too high or too low; I was very calm throughout the whole week, and that was a conscious decision.

Rory McIlroy: team player

How did you assert your leadership?

It helps that I've been playing on tour now for 23 years, so I know most of the guys very well. Those I didn't know – Victor Dubuisson, for example – I made my business to get to know. I spent a week with Victor in Malaysia and had dinner with him every night. I traveled to Monaco when he was down there and had dinner and a bottle of wine with him. I just got to know him socially.

We very rarely talked about golf, but I need to have my own psychological analysis of each player. The statistics guys will tell me the distance he hits the ball, how many greens he hits, *how* he hits the ball – I know all that. It's the personal stuff I need to establish. What makes him tick as an individual. How much information can I feed to him.

When it came to the event itself, I was very clear that my vice-captains were to speak on message. It was important that we all agreed what was going to be said to the players. In team meetings, it was very much my voice. The vice-captains were there observing, and if they had something to say they would say it to me after the meetings. I didn't want the players hearing too many voices or ideas at the same time. Simplicity and clarity of purpose were very important.

The key thing I said to the players on the very first day was that we are going to win this Ryder Cup with 12 players. Not eight, not three or four, not because we have Rory McIlroy on our team. We are going to win it with 12 – that is our strength. We didn't necessarily have to put our best eight players out on the first morning – we were going to win it with 12 players.

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PAUL MᶜGINLEY

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Paul McGinley captained Team Europe to victory over the US in the 40th Ryder Cup at Gleneagles, Scotland in September 2014. He played in three consecutive successful Ryder Cup Teams from 2002, the year he holed the winning putt, and was vice-captain for Europe's 2012 and 2010 victories.

After a broken kneecap ended his dream of a career in Gaelic football, McGinley qualified as a golf professional in 1991. He won four European Tour titles as well as the World Cup, and captained Great Britain and Ireland to victory over Continental Europe in the Vivendi Seve Trophy in 2009 and 2011.

McGinley continues to help shape the PGA European Tour as a member of the Tournament Committee and speaks to senior business leaders about leadership, motivation and teamwork.
paulmcginley.com

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SIMON SPORBORG is Brunswick's UK Managing Partner. He advises companies in the leisure and sports sector. He plays golf irregularly and erratically.

MAX MCGAHAN is a Director in Brunswick's London office. He is a keen golfer and all-round sports fanatic.
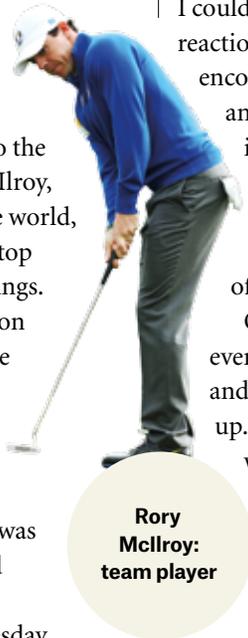
WHAT WE MEAN WHEN WE TALK ABOUT BIG DATA

JOSH SULLIVAN works to enable the discovery of knowledge. The Senior Vice President and Chief Data Scientist for management technology and consulting firm Booz Allen Hamilton tells Brunswick about analytics at the speed of business

BIG DATA IS THE BUZZWORD of our age, but if you asked 10 people to define it, you'd probably get as many different answers. The meaning of the term is elastic, partly because the field of data science is so new that even those of us who specialize in it lack clear language to describe its power and potential.

On its face, the term Big Data merely means masses of data, quantities so large that they require new tools for handling and interpretation. It is important to note, however, that the value of all data increases from such analysis – the better the tools, the more useful the data becomes. The real gift of Big Data is in fostering the development of analytics, lifting it to a new degree of sophistication with great promise for the future.

The central premise of data science is that the value of data is unknown until you ask a question of it, test that question, and then deduce an even better, more relevant question. The same pool of data can yield a variety of insights. The goal then, the Holy Grail, isn't just an answer to a specific question, but the process itself, a cycle of experimentation that constantly reexamines data in search of new ways to extract its intrinsic value.

I like to think about this process of data analytics as occupying three areas: *descriptive*, *predictive* and *prescriptive*.

DESCRIPTIVE analytics has been around for a long time. It refers to historical, backward-looking information that companies mine in order to identify past patterns. Historically these have been used to infer insight for the future, such as how to reduce inventory costs or increase asset reliability. People try to guess what's coming by making gut decisions based on what *has already happened* – how much fuel did we use in the fourth quarter last year, and the year before and the year before that? What does that suggest about how much we'll consume this year?

That's a fairly crude approach. The promising area that's developing now is *predictive*, which enables us do much more complex and nuanced forecasting. This is where, in my mind, the "big" in Big Data starts to come into play.

PREDICTIVE analytics takes the respected, decades-old practice of operations research, a type of forecasting with roots in World War II military planning, and vastly improves on it. Today's scientists are interacting constantly with data, experimenting with different questions and building models to predict what *could happen*. These days, there are ways to run 100 different forecasts every hour, every day.
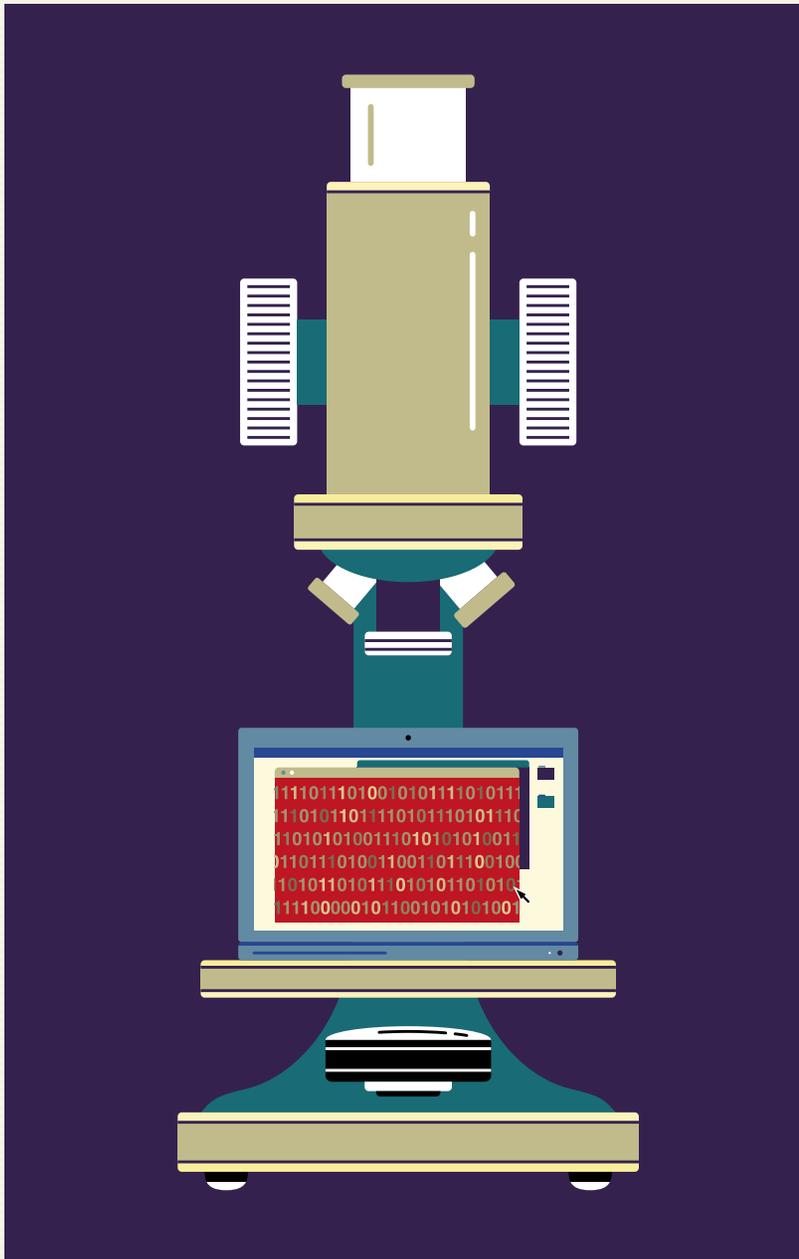
"The central premise of data science is that the value of data is unknown until you ask a question of it, test that question, and then deduce an even better, more relevant question"

You can ask a new question tomorrow and build a model around it, whether you're trying to predict cyberintrusions, anticipate failures or forecast the demand for facility space, to give just a few examples. This is analytics at the speed of business.

PRESCRIPTIVE analytics, the third area, is where the value of Big Data gets even, well, bigger.

This entails bringing analytical models and predictions into the real world to help us figure out what *should happen* – the best course of action. While we're only in the very early stages of prescriptive analytics, it's where the science of Big Data is headed, and it's really exciting. I firmly believe that prescriptive analytics will help move us away from gut instincts, enabling companies to make decisions, optimize resources and examine trade-off scenarios in ways that weren't possible before. In the future, we'll see data sets on company balance sheets as an asset, as valuable as capital and labor. Predictive and prescriptive analytics are as close to a crystal ball as we're going to get.

That isn't meant to imply that the future will be about the rise of the machines. Humans have always had a role and they always will. Machines do analytics, but humans do the analysis and judge what questions should be asked of the crystal ball. Algorithms can scan a text and say what it's about, but analysis requires cognition, imagination, reasoning, inference and creativity – which is why my data science team includes people with backgrounds that range from math to music to forestry. (Yes, I have a colleague who can literally see the forest for the trees.)

The guiding principle for us is that we want to enable the discovery of knowledge. Insights are no longer as interesting as they once were. Big Data in action starts with the creation of a fact base to experiment with; ultimately, the goal is to be able to test hypotheses in real time, at the speed of real businesses. It's not about knowing the right questions from the outset, but rather the process of finding your way to them.

That's what I mean when I talk about Big Data.

JOSHUA SULLIVAN

Josh Sullivan is Senior Vice President of Strategic Innovation for Booz Allen Hamilton. Before that, he worked on government projects for private firms and was a US government engineer. He has a Master of Science degree in IT from Johns Hopkins University and a Ph.D. in Applied Computer Science from Northcentral University.

BOOZ ALLEN HAMILTON

Fortune 500 company Booz Allen Hamilton is one of the oldest management consulting firms in the world. It is also a provider of technology and engineering services to the US government in defense, intelligence and civil markets, and to corporations and not-for-profit organizations. The company focuses on improving efficiency, cybersecurity, healthcare and IT and delivers strategic innovation in areas such as analytics and data science. *www.boozallen.com*

Josh Sullivan spoke to **SARAH LUBMAN**, a Partner in Brunswick's New York office.

GETTING THE MEASURE OF YOUR

MESSAGE

Brunswick's ANTONIO ORTOLANI comes to grips with gauging the effectiveness of communications

Communications professionals have long acknowledged the difficulty of measuring campaign effectiveness. In 2014, *PR Week* pointed to the rise of digital media and said, "Traditional measurement methods no longer work … [the] industry finds itself groping the dark when it comes to identifying the outcomes of PR and corporate communication …"

The problem is that measurement of communications effectiveness is too often focused on counting simple outputs, such as volume or impressions, and has few links to positive business change and real decision-making. Even where communicators attempt to apply better measurement, they often wait until a campaign has ended, leaving little if any opportunity to improve content and strategy.

To be most useful, measurement should be an ongoing process tied to real business change, with implementation in four distinct stages: changing communications, changing conversations, changing

minds and changing business. A handful of entrenched misconceptions prevents organizations from implementing measurement rigorous enough to move through all four stages. The good news is that there are agreed principles that foster a growing awareness of the challenges of measurement and give a clear direction for assessing effective campaigns.

At the *changing communications* stage, start by defining what success will look like, using numbers that will clearly communicate your goals in the boardroom. Have a map instead of a hunch, benchmarking where you currently stand and how you'll get to your intended destination. Overall, keep it focused and manageable – don't try to measure everything. Framework in hand, identify the key metrics that reflect the change your strategy is targeting at each subsequent stage.

As the campaign gets under way, the focus will be on *changing conversations*. You will deploy messages to communications outlets such as specialized content publishers, media briefings, training,

and organized events, so you will be keeping an eye on how those are received. Impact can be measured through key message pickup, increased positive sentiment and audience reach.

For the next stage, *changing minds*, you will want to show how your campaign influenced attitudes and behaviors. At this stage, consider measuring awareness, third-party advocacy, social media engagement and increased requests for information.

The final stage of a successful campaign, *changing business*, can be assessed through measurement of traditional business goals – market share, sales, donations, employee retention, endorsements or the passing or blocking of legislation, as a few examples.

THE BARCELONA PRINCIPLES

The push to improve metrics took a step forward in 2010 when communications professionals, researchers and academics from around the world gathered at a summit convened by the International Association for Measurement and Evaluation of Communications in Barcelona and adopted seven principles. The "Barcelona Principles" go beyond often-criticized metrics such as "advertising value equivalency" rates, or AVEs:

- Goal setting and measurement are essential to effective communications strategies.
- Measurement should focus on the effect on outcomes rather than the quantity of outputs.
- The campaign's effect on sales and other business results can and should be measured where possible.
- The quality of media coverage is as important as quantity, including the coverage tone and credibility.
- AVEs measure the cost of media space and are not an appropriate measure to value public relations.
- Social media can and should be measured and carries special considerations.
- Transparency and replicability are paramount to sound measurement.

Since 2010, the industry has been working to implement these principles, bringing them to life for communicators – and helping spread the word that the industry has moved beyond AVEs.

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ANTONIO ORTOLANI is a Director at Brunswick Insight in New York. He advises global clients on media analytics and campaign measurement. Additional reporting by **PHIL RIGGINS**, a Brunswick Insight Partner in London.

Measurement is still one of the most cost-effective ways of improving your communications success

FIVE MEASUREMENT MYTHS

Misconceptions prevent the use of rigorous metrics in communications

1. It's too expensive Is spending a small percentage of your budget expensive if it reveals that the campaign isn't working? Measurement is still one of the most cost-effective ways to improve your communications success. There's a measurement approach to fit every budget.

2. It's too complicated Measuring the effectiveness of a campaign doesn't have to be an all-or-nothing proposition. As Warren Buffett said: "It's better to be approximately right than precisely wrong." Start small and scale up, and gain a strong foundation in the basics of measurement along the way.

3. It takes too long This will definitely be true if you leave all the research and assessment until the end of the campaign. Meanwhile you will have lost the opportunity to correct any weakness. Take advantage of the breadth and declining cost of real-time monitoring and faster opinion research options available, and you can make measurement an ongoing process, from initial benchmarking to overall evaluation.

4. Quantity matters more than quality Communicators may be envious of the big, sexy numbers thrown around by their colleagues in marketing and advertising, but quantitative consumer data sets are not very useful to measure the impact of corporate communications. Instead, qualitative metrics such as sentiment, messaging, attribution and differentiation are necessary to evaluate specific audiences and hard-to-reach stakeholders.

5. You need a big knockout number Communicators should ask if pursuit of the "über metric" is the best objective. Metrics are important, but are just one way of demonstrating value. A more important goal may be simply to sharpen communications. The same research tools used to show how a campaign has "moved the needle" are ideal to inform strategy, provide insights and help craft messages that influence views and behavior.

Rise of the machines

A computer program has joined the board of a venture capital firm, reports Brunswick's ROBERT MORAN

WE HAVE LEARNED TO LIVE with labor jobs being taken over by robots. But are we ready to work alongside "bots" in the executive suite?

Deep Knowledge Ventures, a Hong Kong-based venture capital fund, put an algorithm on its board in 2014. The program, Validating Investment Tool for Advancing Life Sciences, or Vital, is a Big Data screener to help take emotion out of investment decisions. Publicity stunt? Possibly. But, as a voting member, Vital is an early sign of a bot-filled future.

In 1950, computing pioneer Alan Turing suggested artificial intelligence would one day make it impossible to tell whether we were interacting with a human or a machine. Some say we have already passed that milestone. But it turns out such supreme sophistication may not be necessary for computers to act as colleagues or even superiors. IBM's Watson was a machine and that was enough to win on *Jeopardy* – no humanity was required.

Oxford University has estimated that 47 percent of the US workforce is at risk of being replaced by a robot or algorithm. In the document review phase of legal discovery, battalions of young lawyers have already been relieved by e-discovery software. In journalism, companies such as Narrative Science have automated sports coverage and the *Associated Press* said in 2014 it was automating quarterly earnings reports. The bots are here to stay.

Will the boss ever be a bot? In the Hong Kong transit system it already is. Every week, 10,000 employees complete 2,600 repair and maintenance projects. Virtually all of this is tasked by a program created by Hong Kong's City University. Technologists foresee the creation of so-called "distributed autonomous corporations," organizations run by AI programming.

For now, executives and managers are learning to work *with* AI and use it to improve their decision making. As a model, consider "freestyle" chess tournaments in which human teams can consult computer software, or *The New York Times*' 4th Down Bot, where an algorithm offers a live analysis of a football team's choice to punt or go for the first down. Bots won't replace football coaches anytime soon, but on-field decisions could be improved by AI, unaffected by testosterone and emotional baggage.

The bots are coming. But thankfully, for many of us they'll be a tool and not a competitor.

ROBERT MORAN is a Partner in Brunswick's Washington, DC office and not a computer program.

EXISTENTIAL CRISIS

Welcome to the world of data permanence, where digital information will live forever, says Brunswick's PHIL RIGGINS

"No man's correspondence is safe. No man's confidence can be deemed secure; the secrets of no family, of no individual, can be guaranteed from reaching the ear of a Cabinet Minister."

You could be forgiven for thinking this quote was ripped from the pages of last week's *Financial Times* or *The Economist*. Secrecy and government surveillance of digital communication are currently hot topics. But in fact, the quote appeared in *The Times* in 1844, related to what was then described as the "Post Office scandal," when *The Times* railed against the British government's eavesdropping on the correspondence of Italian republican and unification activist, Giuseppe Mazzini. At the request of its Austrian allies, the British government did what many allies might do if asked today: it opened Mazzini's mail and shared it with the Austrians. The more things change, the more they stay the same.

Before the internet and smartphones, all you needed was a match to burn that incriminating letter or note – gone in a puff of smoke. Forever. Or skip the note and share secrets in meetings on a park bench or lonely beach. The technology was simple, even romantic.

Today, most of us have no idea how our communications devices and their networks really work when handling our data. Send and delete email, empty deleted email folder – job done. Only recently has awareness grown of "data permanence," the concept that all of our emails, text messages, tweets, Facebook posts, data sitting in the cloud – you name it, all of our digital information and communication basically lives forever, always discoverable in some fashion. If it ever emerges in a government data trawl →

ENTER
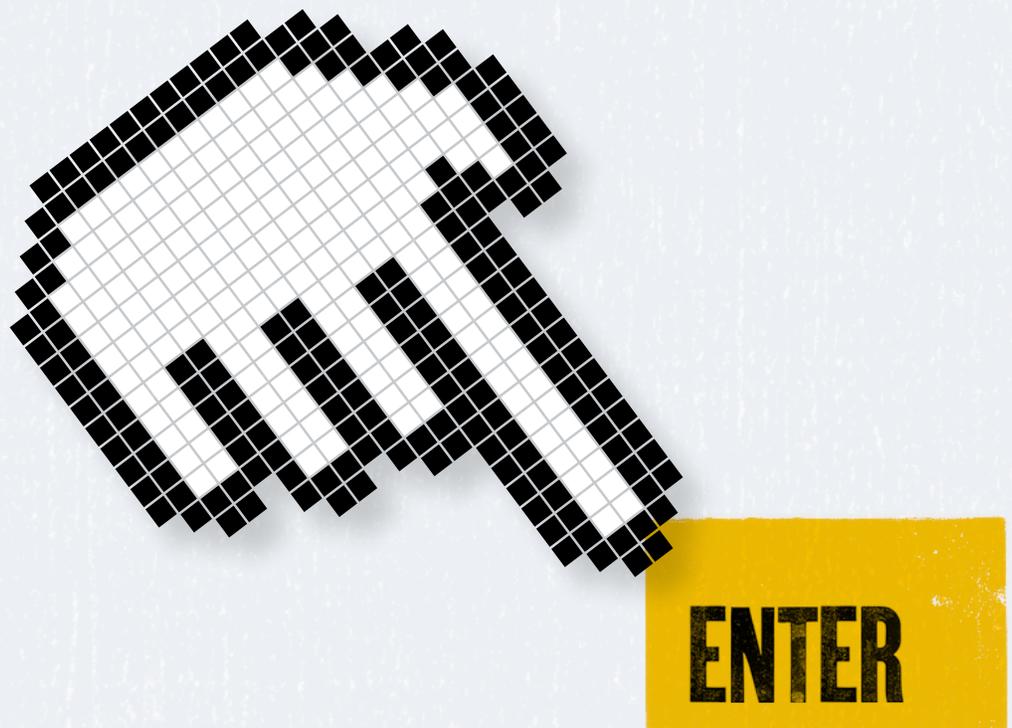
or hacker break-in, such information can potentially destroy a career, damage a business's reputation or lead to very large government fines.

The Sony data hack in late 2014 opened a trove of embarrassing personal emails to global media exposure, scuttled the world premiere of Sony's Christmas movie *The Interview*, and prompted the US and North Korea to consider cyberwar plans. And that's just one recent example of the impact data permanence can have.

Do a Google search for "Libor rate rigging" and you will see how easy it was for government investigators to discover, years after the fact, cringe-worthy and incriminating banter between bank employees across several major institutions entrusted to set key interest rates for the world's financial markets through the interbank lending rate, or Libor. Chat-room conversations and emails became evidence that brokers rigged the system for their own profit. The scandal has cost several financial institutions around $10 billion in fines and sullied corporate reputations. All an investigator needs are forensic data tools and a bit of time to explore the internet or a company's server, and the hunt is on.

The new reality for communicators is that anything stored digitally may somehow, someday, become part of a public conversation. Digital is forever, and private data can become very public. This has profound implications for all of us. Not only do we have to accept the possibility of total transparency, we also have to understand that once we hit "send," the information lives on.

Yes, we can delete that ill-advised drunken tweet immediately after our blood runs cold with the realization of what we've done. But it may have already been retweeted or screen-grabbed. Just ask Congressman Anthony Weiner, whose political career was self-torpedoed when he accidentally tweeted to his many followers what was meant to be a direct message containing intimate photos of himself to one woman (not his wife).

To make matters worse, it doesn't even have to be our own email that brings our world crashing down. US four-star General David Petraeus, the former CIA Director and military legend who was once thought of as a possible US presidential candidate, had his career derailed indirectly by his biographer/mistress Paula Broadwell's
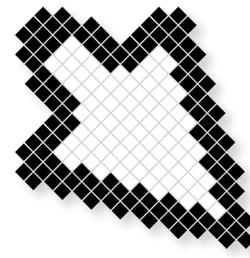
Data permanence just is. It exists – and we have to learn to live with it

emails to another woman threatening her and telling her to stay away from the General. The subsequent FBI investigation into the harassing emails proved personally uncomfortable and professionally destructive.

But isn't there an app for that? A technological patch like the ones that calmed our fears about "Y2K"? Isn't someone out there working on a software program of such military strength that it will allow us to override this vulnerability and return to a comfortable world where private data is private?

Yes, people are working on it. There are books, consultancy specialists and products such as "digital shredders" that obliterate unwanted information. But while there is plenty of innovative thinking, such efforts will probably never be enough to allow us to retreat into blissful ignorance. Data permanence is no Y2K.

No matter what solution is put in place, it will necessarily involve human beings and therefore be prone to failure. The human brain may be the most complex computer ever devised, but historically our ability to control what we say or do is very poor.

The digital age demands a different type of corporate culture from any we have known, a culture that understands how reputations can easily be destroyed by disconnects between public personae and "private" communications, between what a company claims to be and what its communications actually demonstrate.

Is data permanence a good or a bad thing? The answer, of course, is both. Good, in that it should help keep companies and people honest. Bad, in that it leads to self-censorship and less appetite for reasonable business risks. But such a question also misses the point. Like an old MySpace page that won't die, data permanence just is. It exists – and we have to learn to live with it.

PHIL RIGGINS is a Partner in Brunswick's London office and co-leads Brunswick Insight, the firm's research and consulting arm.

KEEP YOUR HOUSE IN ORDER

Your digital past could come back to haunt you. Be ready by following these steps:

1. Upgrade your culture
Assume total transparency and remember that no technological fix is ever foolproof. Understand that every byte of information within your business and under the control of your employees could be made public. This should influence your entire company's behavior.

2. Be clear about the risks
Any sensitive email could wind up in a story on *The Daily Beast*. A bit of self-awareness and honesty can help avoid disasters. That isn't to say you should lead a boring life, just keep your eyes wide open to the risks.

3. Prepare for the worst
Have a contingency plan and be prepared to use it.

4. Upgrade your systems
Protect against intruders who want to steal your confidential and valuable information by ensuring data protection systems are robust and up to date.

SEARCH – AND DESTROY

Legislation offering a "right to be forgotten" means that while data lives forever, the ability to find it may not, says PHIL RIGGINS

In May 2014, the Court of Justice of the European Union ruled that the 1995 Data Protection Directive meant EU citizens can petition to have outdated, inaccurate or irrelevant information "removed" from search engine results – a so-called "right to be forgotten." The information would stay online but would not turn up in a search for a name on Google, Yahoo! or Bing. That's as close as you can get to sending something to oblivion, a virtual version of Harry Potter's invisibility cloak.

The ruling has stoked a lively debate among internet leading lights, such as World Wide Web inventor Tim Berners-Lee. While supportive of individual rights, he believes the ruling is "draconian," erasing important historical information from our collective data banks. While Google and the other big search engines grumbled initially, they have since gotten down to the business of putting in place both the technology needed to comply (easy) and the processes needed to adjudicate each request (not so easy).

So far, Google, which handles about 90 percent of all online searches, has processed approximately 200,000 requests affecting more than 600,000 links, and complied with 60 percent of them. The number of requests is only expected to increase as more people realize they have a chance to redact their own digital history – and as the EU seeks to expand its guidance.

Who benefits from the ruling? People who want to scrub their online trail and ensure their young errant ways don't derail their career prospects? Convicted felons who have done their time and would like to move on with their lives? What about politicians and celebrities who want to have their online profile shine as brightly as their smile?

The fear is that information in the public interest will be hidden from view, making it more difficult to hold prominent people accountable for their behavior. Each request is being assessed on a case-by-case basis, balancing the need for privacy and public interest. Only time will tell if Google and the other search engines get it right. Meanwhile, we are already seeing questions raised – including by Google itself for example – about the appropriateness of having a search engine act as the arbiter of what stays and what goes in information searches.

What's next? The European Parliament has proposed a rule, currently winding its way through the regulatory process, to clarify and extend aspects of the right to be forgotten. Among other things, the amendment would require that companies doing business in the EU comply with the directive, no matter where they are domiciled. Search engines would be required to apply the rule even to searches that originate in non-EU countries.

One concern for companies is that as the EU leads on this issue, so the rest of the world will follow. Will we soon see 50 countries with 50 different rules? Jennifer Granick, Director of Civil Liberties at the Stanford Center for Internet and Society, worries what such a change may signify. "It marks the beginning of the end of the global internet where everyone has access to the same information," she says in a recent story in *The New Yorker*, "and the beginning of an internet where there are national networks, where decisions by governments dictate which information people get access to."

When considering whether to take advantage of the new legislation, it is worth remembering that approved or not, a request itself can sometimes make a bad situation much worse. The case that sparked the EU ruling won the removal of an obscure 36-word article, but resulted in hundreds of headlines highlighting the same information.

Given the publicity surrounding several other requests, *Reuters* says, "The incidents suggest that requesting removal of a link may actually bring the issue back into the public spotlight, rather than obscure it." As *The Guardian* reports, the individual involved in the original case, "won his fight for a right to be forgotten, or at least to disappear. Unfortunately for him, the fight was pretty damn memorable."

> Google ... has processed approximately 200,000 [right to be forgotten] requests ... and complied with 60 percent of them

DELETE
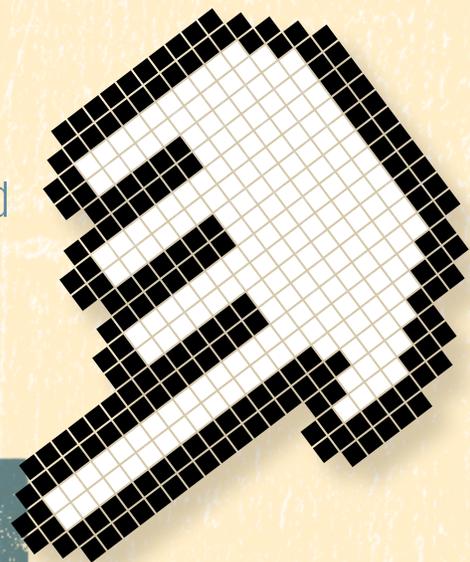
Sub-Saharan Africa has made great strides in child health, yet in 2009, one in every eight babies still died before the age of 5, double the average for the world's developing regions. That problem, outlined in a 2011 UN report, caught the attention of Morten Albæk, Chief Marketing Officer for Denmark-based Vestas, leading provider of wind turbines.

"I asked myself, could wind power play any role in combating child mortality?" Albæk says. At Vestas, he had access not only to the wind turbines themselves, but also to a supercomputer and a trove of global wind data. "What if we connected two data sets: a mapping of areas with an abundance of untapped wind resources, and a map of areas with the highest level of child mortality on the planet?"

That simple idea produced an early target – bring wind energy to more than 1 million people by 2017 – and a new company, Wind for Prosperity, an example of how Big Data can be tapped to aid humanity, create a viable business model on commercial terms, and offer an ethical investment opportunity.

Matching Vestas' wind data with International Energy Agency statistics on rural communities that lack power, Wind for Prosperity estimates it can potentially change the lives of 100 million people in rural communities in 80 countries by creating reliable electricity to help improve education, healthcare, irrigation, water quality and communications infrastructure, among other social benefits.

WITH VESTAS' SUPPORT and aided by the company's proven technology, Wind for Prosperity was launched in 2013. Vestas itself has installed turbines in more than 70 countries, delivering clean energy and addressing climate change and pollution as part of its daily business. Chief among its assets is Firestorm, a supercomputer programmed to predict meteorological conditions worldwide down to areas as small as 10 square meters. With that information, Vestas can gauge where and how the wind will blow →

THE ANSWER IS BLOWING IN THE WIND

Wind for Prosperity uses Big Data to deploy wind turbines, improving lives and creating an ethical investment opportunity, MORTEN ALBÆK tells Brunswick's BIRGITTA HENRIKSSON

In a building without electricity, schoolchildren in North Horr, near Lake Turkana in the Chalbi Desert of northern Kenya, use flashlights for evening classwork. North Horr is one of the communities targeted by Wind for Prosperity as a potential wind turbine site

for the next 20 years, allowing it to create highly efficient wind parks.

Wind for Prosperity takes that technology where it is most needed. Using recycled wind turbines, the plan is to launch a pilot in 2015 in four Kenyan communities, giving more than 100,000 people access to electricity at about a third of the current cost per household of diesel generation. Reducing the use of generators will also lower diesel fuel use by more than 2,000 tons per year. In time, the project intends to create both on- and off-grid wind farms globally, using refurbished and new turbines.

As well as Vestas, partners include Masdar, Abu Dhabi's renewable energy company. Clean energy groups, UN representatives and public figures such as Sir Richard Branson have also climbed on board, drawn by the project's unusual emphasis on creating a profitable business model rather than a charity.

"Wind for Prosperity will have to become 100 percent commercially viable over time, in order to be truly scalable to a level that is needed to fight child poverty," Albæk says. "We had to design the project as a business case with social benefits."

"WIND FOR PROSPERITY is a fascinating initiative," says Michael Liebreich, former CEO of the Bloomberg analyst group New Energy Finance and one of Wind for Prosperity's backers. "As the European wind market matures, large numbers of older turbines are going to be replaced with newer, larger models. These older turbines are perfect for isolated rural communities, with simple, reliable, proven designs. It makes perfect sense to ship them out, refurbish them and give them another lease of life. They can play a big role helping to bring modern energy services to communities that have been waiting far too long. It's a great model, and I only hope it scales quickly."

It wasn't easy to convince all parties to get behind the for-profit, humanitarian model. One of the project's larger challenges was the development of a technical and communications strategy that could convince stakeholders and

navigate local government bureaucracy. But at the end of the day, it was simple, mechanical logistics that proved the most daunting challenge. "To transport a 65 meter tower, 20 tons of heavy wind turbine, through the Chalbi Desert in the north of Kenya near Ethiopia is probably more difficult than it is to put a man on the moon nowadays," says Albæk.

For Vestas, Wind for Prosperity serves as a communications vehicle for all its projects that help combat the challenges of energy poverty, water scarcity and climate change. In other words, the new company will be a "strategic and benign 'Trojan Horse,'" Albæk says, attracting business for Vestas by building strong relationships with local communities.

"Vestas' recent order in Lake Turkana, Kenya, for the largest African wind farm comprised of 365 wind turbines, comes as a result of working closely with Kenyan society to combat child poverty," Albæk says. It demonstrates "commitment to the local society, paving the way for other commercial projects. The fact that this

initiative is born out of the core of Vestas' technology leadership in wind power makes it possible to build a communications strategy that will actually be credible and thus effective as a tool to strengthen the brand." *windforprosperity.com*

MORTEN ALBÆK

Morten Albæk is CMO and Group Senior Vice President for Marketing, Communication and Corporate Relations at Vestas Wind Systems, the Danish company that is the world's leading producer of wind turbine technology. He has an academic background and is an Honorary Professor in Philosophy and Education at Aalborg University in Denmark.

BIRGITTA HENRIKSSON is a Partner in Brunswick's Stockholm office and advises management and boards on strategic communications.

FORCE OF NATURE

- The map shows wind speeds in Kenya, measured in meters per second (m/s)
- Utility-scale turbines require minimum average wind speeds of 6 m/s (13 mph)
- **21% OF KENYA HAS WIND SPEEDS OF MORE THAN 7 M/S (2013)***

The first Wind for Prosperity projects in Kenya will focus on four communities and 100,000 people. These will supply electricity at least 30 percent cheaper than the current cost of diesel-generated power, and will cut diesel fuel use by more than 2,000 tons a year

	11m/s
	10m/s
	9m/s
	8m/s
	*7m/s
	6m/s
	5m/s
	4m/s
	3m/s

KENYA POPULATION (2010)	RURAL POPULATION (2010)	RURAL POPULATION WITHOUT ELECTRICITY	INFANT MORTALITY PER 1,000 LIVE BIRTHS (2013)
40.91 million	31.27 million	29.77 million	48[†]

SOURCE: VESTAS, WORLD BANK, INTERNATIONAL ENERGY AGENCY / [†]DENMARK 3, US 6, CHINA 11, SIERRA LEONE 107

A GREAT WALL OF NUMBERS

China's impressive statistics can mystify more than clarify, say Brunswick's TIM PAYNE and GINNY WILMERDING

SOMEDAY, THE REST of the world will develop a mature view of China, its people and its sense of identity – one that does not simply default to numbers and statistics. We're not there yet. Instead, most analyses of China offer a diet of data, not insight; percentages without perspective. Most non-Chinese are still encountering modern China for the first time, and it may take another generation for foreigners to develop a nuanced version of the country's national identity, particularly when the country is changing so rapidly. Of course, there are those who complain that statistics in China are unreliable anyway. Regardless, their interpretation is surely problematic.

It is true that almost everything in China needs to be considered through the lens of its 1.4 billion people, including politics, healthcare, food security, education and business. It is also true that China's economy has surpassed Japan's. In 2014, it even passed the US, on a purchasing-power basis, thanks to years of an annual GDP growth rate of 7.7 percent or better.

But – so what? Declaratory shocking numbers and the forecasting of extremes unfortunately leave very little room for nuance and understanding.

Perhaps one reason we default to numbers when grappling to understand China is that its politics are hard to read. China is a one-party system, but quite different, economically and culturally, from the idea of a communist state that many foreigners learned about growing up. In the US, for example, "national identity"

and the perception of the democratic system are closely associated with freedom and individuality. Westerners have a hard time understanding the complexity of a "communist" nation where market forces and individuality are thriving but freedom is more economic than political. Finding ourselves overreaching to understand the culture, we go back to the numbers.

This deprives us of important insights. Here are two examples of big numbers that don't tell the whole story.

85 MILLION COMMUNIST PARTY MEMBERS

This statistic makes the Communist Party in China the largest political party in the world. What does this mean? Do we know what ordinary members get out of membership? In an article suggesting that local governments need to be more selective when recruiting members, *The Wall Street Journal* rightly points out that young people have long seen membership as a ticket to success, whether in finding a job or getting promoted. This rather capitalist-sounding rationale is totally different from the reasons for belonging to, say, the Republican or Democratic parties in the US. As a result, a layperson could easily misinterpret the "85 million members" number, giving it a significance it may not actually warrant.

$103 BILLION INVESTED OVERSEAS

The value of China's outbound investments topped $100 billion for the first time in 2014. Impressive. But what does it mean? What is driving the investment decisions? Common wisdom is that China is securing natural resources and commodities that will fuel its continued growth. That's not wrong. However, *The Wall Street Journal* noted that overseas buying by private companies, as opposed to state-owned enterprises (SOEs), surged to almost half of overseas acquisitions by mainland companies in 2013. So what's the deal? Are SOEs doing less, due to falling resource prices and a crackdown on overspending? Or is it that private companies in consumer and technology industries are doing more, ramping up high-profile acquisitions on the global stage? Neither of these explanations is wrong. And that's where the nuance is.

We need to move beyond merely accepting and repeating statistics, however compelling they may be. To truly understand China, we must look past the surface data to the relevant, underlying behaviors and the conditions that created the numbers in the first place.

TIM PAYNE is a Senior Partner in Hong Kong and Head of Brunswick's Asian business.
GINNY WILMERDING, a Partner in Hong Kong, advises on corporate reputation and investor relations. Both have lived and worked in Hong Kong and China for more than a decade.
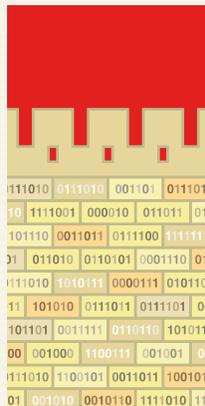
PHYSICIAN, REVEAL THYSELF

Advancements in healthcare are hampered by the industry's concerns about collected data, says Brunswick's RICHARD MEREDITH

The data collected by doctors, hospitals and healthcare companies can help save lives, heal the sick, improve medical research and lower costs. Yet, like a patient who refuses to take his medicine, the industry is allowing concerns over public perceptions of data privacy to keep that potential bottled up, sitting on a shelf.

The hesitancy is as understandable as it is unhealthy. A deep public mistrust hinders data collection in general, partly as a result of high-profile breaches. In the recent case of leading US healthcare insurer Anthem, hackers were able to gain access to as many as 80 million records that included Social Security numbers, addresses and other personal information. Anthem operates several major insurance brands, including Empire Blue Cross and Blue Shield, and though the company says medical information was not accessed in the break-in, public trust was undoubtedly damaged.

Businesses are naturally reluctant to invite negative attention from the public, media, politicians and regulators by discussing their data policies. Yet the size and usefulness of healthcare data of all types is growing exponentially. Also, Brunswick research (see Page 10) shows investors want to see a clear data strategy covering both security and monetization.

BY 2011, IN THE US ALONE, healthcare data had reached 150 exabytes, according to the journal *Health Information Science and Systems*. To put that in perspective, a gigabyte can hold 1,000 400-page books; each exabyte holds more than a billion gigabytes. "After decades as a technological laggard, medicine has entered its data age," says Nanette Byrnes in a 2014 article in the *MIT Technology Review*. "The sum of this information could transform medicine."

In addition to helping create better treatments, data is also making inroads in aftercare. "Doctors can now know 12 months in advance, with an accuracy rate of 98 percent, which of their patients may fail to take their medicine," Byrnes says.

Organizations also want to boost the effectiveness of preventative care by predicting health issues. "One in four cancer cases is diagnosed in an accident and emergency department," says Eve Roodhouse, Director of the UK's newly established care.data program. Such patients have poorer survival rates than those diagnosed in routine checkups. Collected patient information makes it possible to ensure that patients in all regions have access to such checkups. "Better data on the outcomes of these patients and understanding geographic variations in patterns of diagnosis is key to improving life expectancy," she says.

The care.data project expedites improvements in care and research by collecting data from various sources, including hospitals and general practitioners. However the initial roll-out of the UK program in 2014 was suspended for six months on concerns the public had not been properly informed of their options regarding the use of their data. Some doctors fear patients will be less forthcoming about the details of their lives if they think that data may be shared elsewhere. Public opposition remains strong, and care.data has redoubled efforts to establish trust.

"It is important to set out the benefits as well as the risks and how they are mitigated, so that members of the public can make informed choices," Roodhouse says. In Scotland, the sharing of National Health Service data on diabetes patients has resulted in a 40 percent drop in amputation rates, according to a recent article in *The Economist*. NHS officials hope to reduce hospital costs associated with diabetes that currently total £300 million ($450 million) a year.

THE HEALTHCARE SECTOR as a whole, however, has been slow to realize

ILLUSTRATION: KOTRYNA ZUKAUSKAITE

> "This goes way beyond analytics. This data will allow us to create interventions of a kind that have never before been possible, where the digital is the drug"

Peter Hames,
Co-Founder and CEO, Big Health

the potential of sharing patient data, hampering progress, says Peter Hames, Co-Founder and CEO of behavioral medicine company Big Health. "Much of the old healthcare system is highly risk averse," says Hames. However products aimed at individual consumers are

helping patients see the value in sharing their health data, he says. "This goes way beyond analytics. This data will allow us to create interventions of a kind that have never before been possible, where the digital is the drug."

Tech companies are creating products using Apple's HealthKit, which allows developers to access user health data collected by Apple's Health program. Others are asking for volunteers to share medical histories, circumventing privacy regulations while establishing databases and baselines against which they can test products. This could spark a broader trend, with the public becoming more accustomed to sharing their medical records. "In essence it will create a market for data," says Hames.

All parties are increasing pressure on companies to tell their data story as part of the overall corporate narrative, says Martin Richards, Professor Emeritus at Cambridge and Chair of the Nuffield Council on Bioethics, a UK advisory panel. "There is a real need for healthcare organizations to communicate who is using data, for what purposes and how it is stored," Richards says. "They should be clear about the benefits of data use, both in terms of treatment and broader service efficiency, and also the risks of both using and not using data."

In the US, the industry faces restrictive healthcare privacy laws that limit the use of patient data in research. Companies that aggregate data from physicians' offices need explicit authorization from each of those offices every time a piece of data is used in a study. The commercial healthcare industry can help loosen those restrictions by addressing the public concerns that are at the heart of those laws.

"My personal view is that the positive aspects of data use in healthcare clearly outweigh privacy considerations," says Ulrike Deetjen, a specialist in healthcare data collection at the Oxford Internet Institute. Individuals value privacy, she says, but they also see how their data is valuable in medical research and improving efficiency. "They are often quite happy for their data to be used."

The application of data analytics is changing healthcare, and the world, for the better. The use of data remains controversial in the minds of the public and politicians, but investors want to see the industry take the bull by the horns and patients are eager for innovations that will make their lives easier.

Companies stand to gain, and to benefit society as a whole, by being more open about the information they have while making the strongest argument they can for the methods and benefits of its use.

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RICHARD MEREDITH is a former British diplomat and a Partner in Brunswick's London office, helping lead the Corporate Data and Crisis Advisory groups.
Additional reporting by **CHRIS BUSCOMBE**, an Associate in London.

THE USE **AND ABUSE** OF NUMBERS

Numbers can clarify or they can confuse. The rise of Big Data means communicators need to understand the risks, say Brunswick's JON MILLER and ALASTAIR MORTON
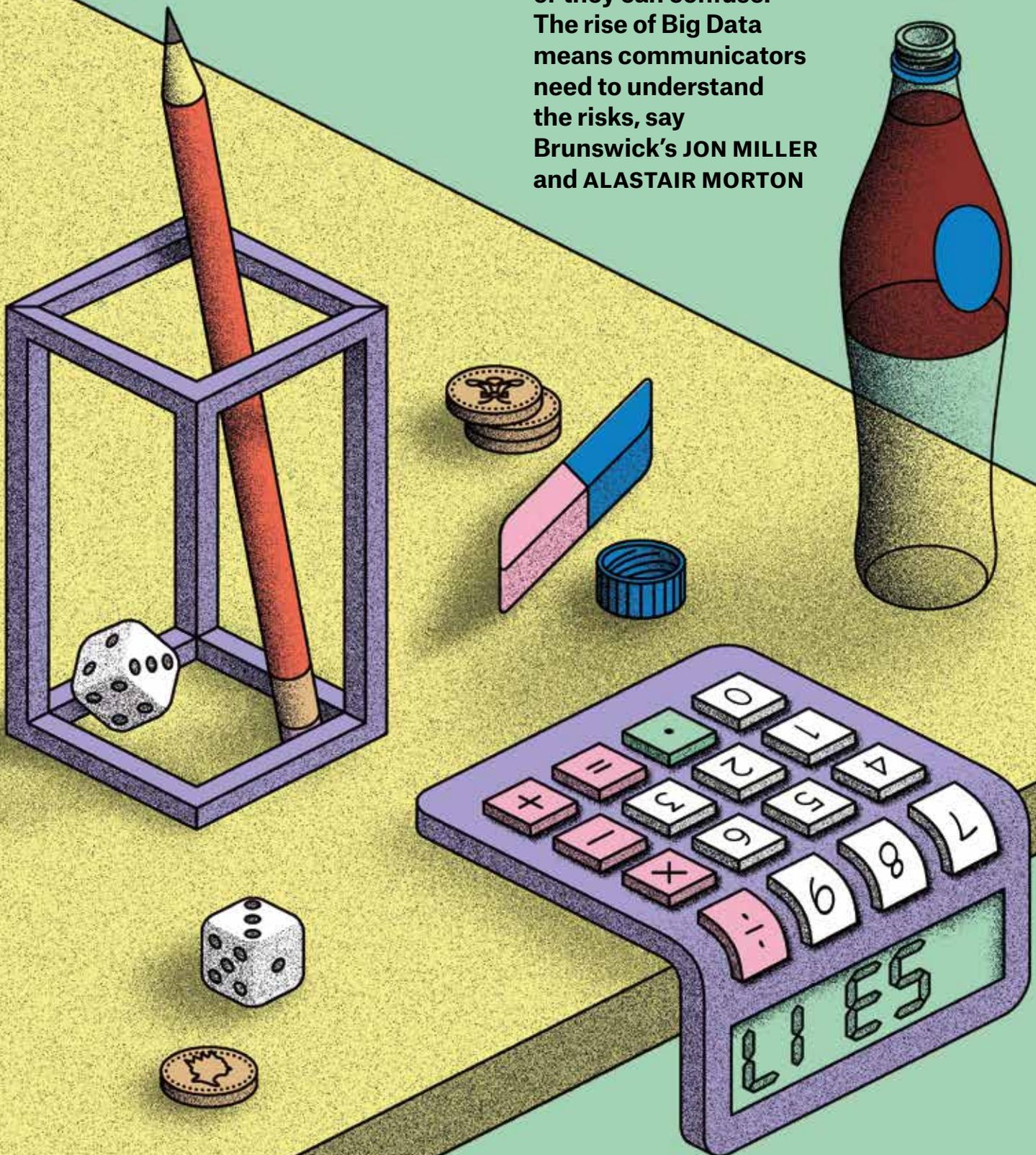
A FEW YEARS AGO, University of California researchers spotted a curious phenomenon: companies tend to underperform after a CEO wins a prominent accolade in the business media – from *Forbes*, say, or *Bloomberg Businessweek*. Superstar CEOs, the researchers suggested, were likely to spend more time writing books and sitting on outside boards than their peers, thus neglecting their own businesses. It makes a great story. *The New York Times* went so far as to call the phenomenon "the curse of the business press."

However, a better explanation may be a simple case of REVERSION TO THE MEAN. From a high peak in performance, the most likely road is down. Above-average earnings reports tend to be followed by lower results. The so-called "curse" may be, in fact, just mathematics.

Numbers are a valuable tool in professional storytelling. Nothing drives a point home like a big, juicy statistic. But numbers also hold many traps and pitfalls that can create misrepresentations of the truth. Working at speed in a high-pressure environment, it is easy for those involved in corporate communications to let a number tell us what we want it to – a case of CONFIRMATION BIAS, interpreting information in a way that confirms our view of the world.

The use of PERCENTAGES is another area rife with misuse and abuse. A headline may read, "Profits up 25 percent." A big jump? Perhaps, or it could mean a steady increase in profitability from 4 percent to 5 percent. You could say that profits have increased by 25 percent, or that profitability has risen by a single point; both are correct. Clarity demands more explanation.

Of course, if the intention is to muddle or mislead, percentages are particularly useful. Customers seeing "50 percent extra free" on a bottle of cola will think half of it is free, but of course only a third (33 percent) of the bottle is free. If you hear that a specific risk has risen 100 percent, that may just mean the risk has increased from one in a million to two in a million.

One area of numbers, PROBABILITY, notoriously causes humans more grief than others because of the way we are cognitively wired. Imagine a coin that has been tossed and comes up heads several times in a row: most people would imagine it's more likely to come up tails on the next flip. But the coin has no idea how many times it has come up heads already. For each flip, the odds remain the same – 50 percent. This is known as the GAMBLER'S FALLACY, and our thinking about probability is riddled with similar misconceptions.

Our tendency to intuitively identify causes is responsible for another error, one that is commonly found in the mainstream media: the BASE RATE FALLACY. Consider the news story of a teenage male who has gone on a high-school shooting spree. Subsequent media coverage highlights the fact that he spent the preceding hours playing violent computer games, and soon there are outraged voices calling for the banning of these games. Of course, this ignores the base rate data that shows most teenage males play those same computer games and do not exhibit sociopathic behavior. Our hearts tell us there should be a connection. But hearts can't do math. If such a connection exists, it is likely to be far more complicated than simple cause and effect, and research has yet to prove it.

This tendency to jump to conclusions has been known for centuries, and is behind the oldest adage in data analysis: *cum hoc ergo propter hoc* (literally, "with this therefore because of this"), the principle that CORRELATION DOES NOT IMPLY CAUSATION. One satirical writer, for example, was able to show that global warming is being caused by the decline in the number of pirates, charting the statistical correlation as proof. It may sound ridiculous, but this kind of fallacious thinking frequently finds its way into the media: a study in 2012 found that internet users who suffer from depression check email more often and watch more video. That made the headlines because it seemed to show that heavy internet use is bad for your mental health. Without further study, the correlation itself proves no such thing.

Large numbers are another common source of confusion. Communications are peppered with millions and billions and even trillions, but many of us lack an intuitive grasp of SCALE – a sense of how big these numbers really are. Imagine counting the seconds as they pass: it would take about 11½ days to get →

SIMPSON'S PARADOX

As much as they can provide clarity, numbers also can easily obscure deeper truths, as noted by mathematician Edward Simpson in a widely cited 1951 paper. Simpson, a colleague of computing pioneer Alan Turing, showed how lumping data together can produce a false conclusion. A clear example of what is now known as **SIMPSON'S PARADOX** occurred in 1973 when the University of California, Berkeley was sued for sexual discrimination based on data showing only 35 percent of female applicants were admitted, compared with 44 percent of men. A closer look revealed women were applying to more competitive programs with lower rates of admission than men. Examined separately, individual departments actually had a small bias *in favor* of women. Simpson's Paradox highlights the danger of relying on numbers to tell the story without context.

to a million – which sounds like a lot of counting until you realize that it would take almost 32 years to get to a billion. A trillion is more mind-bending magnitudes bigger: rewind a trillion seconds into the past, and our ancestors were about to invent the bow and arrow.

Numbers don't, in fact, speak for themselves. Knowing that this year's margin is 2 percent doesn't tell you anything, unless you know that last year the company made a loss. Customer satisfaction scores of 80 percent may sound high until you learn that competitors score 95 percent. Simply stating a statistic without benchmarks or comparators is an example of *ipse dixit* ("he, himself, said it"), otherwise known as **THE BARE ASSERTION FALLACY**. Behavioral economists show us that whether ordering a bottle of wine, buying a house or negotiating a salary, we need relative numbers to weigh what's on offer.

"Numbers are the masters of the weak, but the slaves of the strong," wrote Charles Babbage, whose steam-age Analytical Engine was the forerunner of the modern computer. "Whenever a man can get hold of numbers, they are invaluable: if correct, they assist in informing his own mind, but they are still more useful in deluding the minds of others." As **BIG DATA** grows more present in our daily lives, it's increasingly important to understand how numbers may be used and abused. Today's children are growing up in a world shaped and configured by data; if they are not data literate, they will be passive consumers, unable to fully engage with society. As early 20th century science fiction writer H.G. Wells foretold: "If we want to have an educated citizenship in a modern technological society, we need to teach them three things: reading, writing, and statistical thinking."

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The authors are no strangers to numbers; **JON MILLER** holds a Master's Degree in Artificial Intelligence, while **ALASTAIR MORTON** has a Doctorate in Pure Mathematics. Both are Partners in Brunswick's London office.

"A good decision is based on knowledge and not on numbers"

Plato, in *Laches*, 380 B.C.
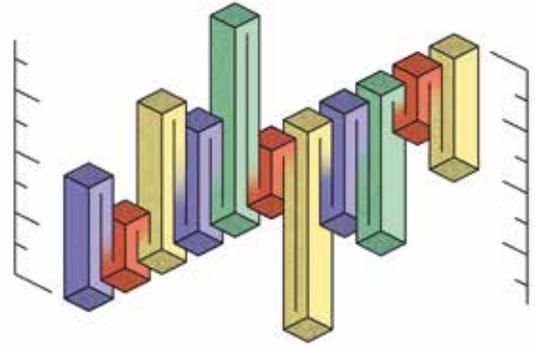
DOs AND DON'Ts

Numbers can buoy or sink any argument. This list can help keep your story on the right track

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DO
TAKE CARE WHEN USING THE PAST TO PREDICT THE FUTURE
Guard against common errors when talking about probabilities, such as the *gambler's fallacy*

DON'T
JUMP TO CONCLUSIONS
Slow down. Does this number really show what you hope it shows, or is it your own *confirmation bias*?

DO
LOOK AT THE CONTEXT
Without looking at the background data and underlying trends, it's easy to wind up guilty of the *base rate fallacy*

DON'T
CONFUSE CAUSE WITH CORRELATION
Make sure you can explain how two numbers are connected, rather than just presenting data. Let the adage *cum hoc ergo propter hoc* serve as a reminder

DO
USE BOTH RELATIVE AND ABSOLUTE NUMBERS
Avoid the *bare assertion fallacy*, where numbers are baldly stated without any sense of scale. Answer the question, how big is this number?

DON'T
JUST FOCUS ON THE BIG NUMBERS
Chunking up can be misleading. As *Simpson's Paradox* shows, aggregated data distorts the real picture

DO
GET DATA LITERATE
Develop your statistical thinking to make sure that numbers are your servants and not your masters

BRUNSWICK REVIEW

SECOND SECTION

TALES FROM THE MEDIA FRONTIER

GE and ANZ Bank take their stories directly to readers. Report by Brunswick's DARREN McDERMOTT and LOUISE WARD

IN 2005, VETERAN TECH JOURNALIST Tom Foremski heralded a massive change in media and corporate communications with the declaration "every company is a media company."

Businesses publishing their own stories isn't new. John Deere launched a magazine for farmers in 1895. GE hired Kurt Vonnegut in 1947 and tasked him to "hunt for stories" and "keep a steady drumbeat of good news issuing from the plant." But those efforts reached relatively few people, mostly employees and customers. Companies now have access to the same distribution channels as mainstream media, from Facebook, Twitter and LinkedIn to Reddit and Snapchat.

Anyone with a story to tell has the means to tell it – and to have it heard. That change has "profound implications for the way businesses communicate with the public," according to a recent *Financial Times* article that highlights the blurred line between corporate and traditional journalism.

Brunswick spoke with two corporate journalism pioneers: TOMAS KELLNER, Managing Editor of GE REPORTS, a seven-year-old site dedicated to news about the venerable industrial giant, and PAUL EDWARDS, Communications Head at Australia's ANZ Bank, which recently launched BLUENOTES, a forum for insights about the economy, banking and society. Both see the enormous potential for companies to contribute to the narrative around their business.

Following are excerpts of interviews that were conducted separately.

Why did you start publishing?
TOMAS KELLNER of *GE Reports*: We started as a reactive tool in 2008 during the financial crisis. The company wanted to contribute the GE Capital perspective to the conversation – but there weren't enough writers around to be picking up stories from every company that wanted to be heard. So we originally built this platform to tell our side of the story, reactively. But now it's really a proactive tool – where we tell all the stories we think are worth telling.

PAUL EDWARDS of ANZ's *BlueNotes*: Our CEO took a trip with our board to visit Silicon Valley companies in 2013 and had a "light bulb" moment. He came back and challenged me to redefine how the bank communicates – internally and externally. Early on, we identified the need for content – really good content – that we could use to engage on these new channels. From there, *BlueNotes* was born.

What's your goal?
TK: To tell stories that connect with our readers and get them excited about GE. We want to show our readers that we make really amazing things and that we can solve really difficult problems – from a jet engine to an MRI scanner or new ways to generate power or solve the fresh water crisis in Africa. These are big discussions outside GE, but to which we have something to contribute. You can't share those stories via a bunch of jargon in a press release. You have to have a good narrator – a protagonist.

PE: We want to be a part of the conversations happening outside our bank. To do that, we have to bring something to the table. With *BlueNotes*, we use our expertise and relationships for the benefit and interest of our readers – for example, using proprietary data to do a story on the trajectory of the New Zealand craft beer industry.

Do you focus on your own organization, or the world around you?
TK: We focus on the things about our company – what we make, what we do – that impact a bigger discussion about the world around us. We think we have many stories that are worth telling but there are just not enough journalists to report on them.

When we do use *GE Reports* for more "hard news" about ourselves, we always

gereports.com draws in readers with arresting visuals, as with this recent article on indoor farming using GE's LED technology

maintain our storytelling angle. For example, in summer 2014 when we were seeking to acquire Alstom, we wrote a story to explain the mutual history of the companies dating back to 1892 and how they fit together.

PE: There is a limited audience out there for a daily diet of ANZ-focused material. Right now, about 80 percent of our content is about the world outside our walls and 20 percent about ourselves. All our content is formed around large-topic pillars: the "Asian century," the economy, management and leadership, diversity, sustainability –

they're all relevant conversations for us to participate in. And the reason that we preserve the opportunity to use *BlueNotes* for our own stuff is that traditional media is shrinking, particularly here in Australia. There simply aren't enough journalists to cover all the topics we want to cover from our business point of view.

Companies have been involved in telling their own stories for years. *The Hershey Press* launched in 1909. What's different now?

TK: Everyone has access to the same distribution channels as the legacy media. Back when Kurt Vonnegut was writing for GE's publications, they weren't available on newsstands. You could only get hold of them if you worked for GE or had a friend or family member who worked there. The material was out of sight for most people. Now any company can come into your living room and tell you a story.

PE: The opportunity is supercharged since

technology has made it so easy to produce and distribute content, but the need is also supercharged. Traditional media is fragmented. Attempts to grow readership are fumbling. The number of people writing about ANZ is shrinking and the resources they have to do research on our industry are shrinking. At the same time, people are glued to their various digital screens 24/7, and expect to hear from us.

Did you have to present a business case for your publications, or show return on investment?

TK: ROI all depends on your goal. Do you want to sell products? Do you want to inspire? To change the perception of your company? Our goal is to show the world what we do – to build awareness of the value we provide to society. Obviously, we look at the usual performance metrics such as page views, the "bounce" rate (when readers leave the site), and the number of unique visitors. But we also measure the →

pickup of our stories by other media, total time spent reading, and the number of new email subscribers – a bellwether metric since it indicates that people like what we do and want more of it coming straight into their inbox.

PE: We took a leap into the unknown with *BlueNotes*. We couldn't say, "This is exactly how it's going to work and what our metrics of success will be." Now that we've launched, we have monthly reports on things such as page views and the quality of our subscriber base. But the biggest benefit that our executives are paying attention to is the flexibility we now have to communicate, for example at results time, or on issues we want to engage around, such as the new capital requirements for banks in Australia. We can occupy that space.

Does your company's culture allow you editorial freedom?

TK: It has always been in GE's DNA to explore new things – to take things for a spin and see how they work. You could say it goes all the way back to Edison. It's one of the reasons I took this job – they let me in and they let me loose. I can run around the company as an in-house reporter and most of the doors I knock on open.

PE: There's an understanding here that we have to take some risks as we rebuild our communications function for the social media age. We need to be able to experiment. Having our CEO understand that and give us his blessing to test things out has been critical.

How do you make sure that your stories find an audience?

TK: We are under the same pressure as any traditional journalist. You don't want to sit in your cubicle and publish stories that nobody but yourself reads. The storytelling business is really a transaction, where the reader pays you with their time and

"Person-to-person social media conversations will always be more robust than corporate-to-person. We want to activate that"

Paul Edwards
Communications Head, ANZ

Asia financing Asia
The US and Europe will receive a smaller share of Asian capital in the future, with capital flows increasingly remaining within the region

NOW
FUTURE

"The Asian Century," with stories focusing on the growth and impact of China and Asia, is a topic area on ***bluenotes.anz.com***

you pay them back with information. You need to tell them something interesting that they don't know, or something that will make them smarter, or they'll feel cheated and they'll never come back.

PE: We know that *BlueNotes* will only be successful if we loosen the boundaries that previously existed for corporate communications. One of our most powerful assets is our Managing Editor, Andrew Cornell, who we hired from the

Australian Financial Review. As well as overseeing all our content he writes his own column in the same style that won him awards at the *AFR*.

What is your distribution strategy?

TK: Our distribution channels range from email – 17,000 subscribers get an email from us every day – to Twitter to Gizmodo. Our strategy is to write stories that are so compelling that people want to share and comment on social media, and media outlets want to run with them because they know they will interest their readership. As far as our strategy for fueling that social pickup, we do spend a lot of time constructing enticing gateways to the story – the headline, the opening paragraph, an infographic or the GIF – a short animated film. We'll take a 10-minute video that someone shot for GE years ago and find a five-second segment that's really GIF-able and put that out on our channels with a link to the full text.

PE: A lot of it has to do with the social networks of our contributors themselves. We work with them to make sure that once their story is published, they have a social profile in place to participate in the resulting conversation. Person-to-person social media conversations will always be more robust than corporate-to-person. We want to activate that. One of the ways we help our contributors to do that is through training programs, including one for executives that's designed to make them more comfortable writing for *BlueNotes* and participating in the conversation on social media.

Do you pay to promote your content?

TK: We don't usually use paid promotion but occasionally, if a story is doing really well on *GE Reports* and is already getting a ton of traffic, then we might put some paid

promotion behind it to push it a little further. But we really just bet on winners – stories where we have proof that the social web is interested. *GE Reports* itself is not involved in any sponsored content mechanisms, but our marketing team does take some of our material for a partnership with *The Economist* called *GE Look Ahead*, which is great because there's an obvious overlap between the audiences. *GE Reports* gets a lot of traffic through that partnership.

PE: So far, we are working on building an organic audience for *BlueNotes*. In fact, a lot of our promotional tactics have been quite old-fashioned – such as leaving leaflets at conferences, believe it or not. My hope is to have *BlueNotes* host its own roundtable debate events three or four times a year. We've had a lot of success with translating relationships that we build offline into online advocacy.

What's your take on the debate over whether corporations publishing content is "journalism?"

TK: I really don't like the splitting of hairs with this debate. What we are doing is a form of journalism. My friend Shane Snow at Contently (which matches freelance writers with corporate clients to create content) makes the distinction between "Journalism with a capital J and journalism with a lower-case j." "Journalism" is comprised of deep, investigative pieces and "journalism" is simply the sharing

of information. We do the latter. We are sharing information that's not being offered elsewhere.

PE: I think the debate about that has disappeared a bit. When we first launched *BlueNotes*, a number of people from the traditional media had very strong views about it, but now there is a recognition that there will be many forms of journalism. There is an appetite online for a smorgasbord of content – people aren't subscribing and dedicating themselves to only one outlet. Even if they tried, they would still be inundated with links on their social networks and in their inboxes. The online user has become source agnostic.

What has surprised you most?

TK: Probably the power of organic sharing. You can have a story that gets hundreds of thousands of views and positive comments based on the quality of the story alone – no paid promotion. We had a story about

a Japanese farmer who built an indoor vegetable farm (see photograph on Page 71). The story was about him, really, with GE supplying custom-built LED lights for him to use. That post got on to the top spot on *reddit.com*, the "front page of the internet." It really showed me the power of this tool – if you do it right, people will respond to it. They'll share it with their friends. They'll talk about it.

PE: For us, one consequence of *BlueNotes* is that it allows us to think more clearly about the role of our employees in social media. After watching how they interact with content on the site, we've built a really useful model that organizes them into "listeners," "sharers" and "experts," and we've been able to use that model in our other social media programs.

Are there emerging platforms that you're exploring?

TK: One of the beauties of this space is that things come out of the woodwork, pretty →

A *GE Reports* story features astronaut Buzz Aldrin, wearing limited-edition GE sneakers, inspired by the boots he wore on his 1969 moonwalk, also made by the company

"We are under the same pressure as any traditional journalist. You don't want to sit in your cubicle and publish stories that nobody but yourself reads"

Tomas Kellner, Managing Editor, *GE Reports*
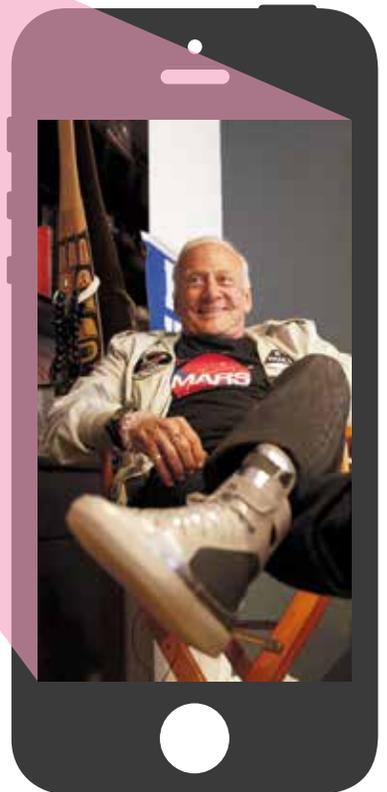
much every year, maybe every six months, and so we are looking at different platforms all the time. The marketing team is looking at Snapchat. We are on Vine. We try to do microcontent with Yo, the "pinging" app. We are open to new things. If something allows us to tell a better story, we might go there. That's basically the motto.

PE: You know, my 13-year-old is almost exclusively engaged on Instagram. No interest in Facebook. But Twitter is still quite live. We've got to keep watching the platforms that people are engaged in and work out how we participate in those and the platforms of tomorrow, because I don't think they'll be the same group as they are today, and each is quite different.

What's next?

TK: Right now, we have 15 *GE Reports* sister sites around the world, and we are looking to grow that number. We want to be able to tell the same story to readers around the world on the same day, at the same time. If you think about it, that's an immensely powerful tool for any company to be able to scale communications in that way. That was not possible 15 years ago.

PE: We really want to focus on investing in our existing people throughout the bank – empowering our people as social media storytellers. We also want to push the boundaries on formats, and produce consistent visual storytelling, including video, photography and graphics.

Any advice for those wrestling with the relevance of this for their organization?

TK: You have to grab the initiative and show the various gatekeepers – and there are many inside GE – that this is a good approach, that it works. That you will do no harm, and that this is actually a benefit.

PE: The world of corporate communications is changing faster now than at any time in the past 25 or 30 years that I've worked in the business. In the past two years, the number of people accessing the web via mobiles increased by 60 percent. That trend is just going to continue and corporate communications is going to have to adapt to keep up.

TOMAS KELLNER

Managing Editor of *GE Reports* since 2011, Tomas Kellner is a former *Forbes* staff writer in business and technology. He was also a Senior Director of Global Business Intelligence at corporate investigations consultant Kroll. A Fulbright scholar, Kellner holds a graduate degree from Columbia School of Journalism as well as a degree in engineering and materials science.
gereports.com

GE
GE is the world's largest infrastructure company with a specialty finance business. Its industrial operations span water, energy, aviation, transport, lighting and software.

PAUL EDWARDS

A senior communications adviser at ANZ since 1996, Paul Edwards is currently Group General Manager of Corporate Communications. He holds an economics degree and previously worked in corporate and consulting roles in Australia and the UK.
bluenotes.anz.com

ANZ
Australia and New Zealand Banking Group, or ANZ, is the third-largest bank in Australia by market capitalization and among the top 50 banks in the world.

DARREN McDERMOTT, a former journalist at *The Wall Street Journal*, is a Director in Brunswick's New York office, where he works on digital content and media relations. **LOUISE WARD** is an Associate in New York, where she focuses on corporate publishing.

EVERY COMPANY IS A MEDIA COMPANY

Your business can tell its own story better, following these steps

- Build your publishing game plan to support your communications goals. If you don't have a communications plan clearly outlining your goals, start there.

- Develop an authentic editorial voice. People engage with stories and with good narrators. Not with press releases.

- Align the enterprise around the new strategy. Make sure your various business units and regions understand the vision and their role in contributing content.

- Don't forget distribution. Whether it's additional owned channels, traditional media or paid media, if you aren't thinking about distribution strategy, you're not giving your content a fair chance to rise above the clutter and chatter.

- Make sure you're tracking how and where your content is consumed. But don't stress about fancy metrics reports.

- Experimentation is key. Don't be afraid to try out a new channel, test engagement with your content – but then close it if it's not working.

- Map existing editorial talent throughout the organization before making new hires. You might already have a video producer on your team and not know it.

- It's fine to start small.

- Your success is ultimately tied to the quality of your content – there's no way around it.

Chinese dialogue

Reforms are going hand in hand with a fresh look at corporate values, M&A expert LI QIANG tells the *Brunswick Review*

For multinational corporations, the road to success in China is fraught with cultural and structural complications. Li Qiang, Managing Partner of law firm O'Melveny & Myers' Shanghai office and a member of its mergers and acquisitions practice, says the environment is beginning to change for the better under a reform-minded government. Chinese businesses are even starting to look to Western corporate values as a model. The Shanghai Free Trade Zone is the key, and could eventually influence national corporate governance, becoming the "Delaware of China," he says.

How is the business climate in China changing for foreign companies?
The investment environment is, in general, improving in China. But people also need to be aware that China is basically in transition. The new government is quite serious about transforming a top-down, investment-driven economy to a more bottom-up, consumption-driven economy. They haven't found the solution yet, but the determination is quite impressive.

Foreign companies have faced harsh treatment on compliance issues from the National Development and Reform Commission, the top economic planning agency. Is that over now?
We have been getting conflicting signals from regulators. A reshuffling in the administration means some offices will probably lose some power. The NDRC's heavy-handed approach with some multinational companies may reflect →

a sense of insecurity amid the reforms because its role will probably be diminished. Unfortunately, multinational companies will have to continue to deal with that.

How do Chinese companies view compliance?
A couple of years ago, if you were to make an investment in a Chinese company and tried to do your due diligence or include anti-corruption provisions in the contract, you would encounter a lot of resistance. Chinese companies would say, "Ugh, you guys, imposing US business values, that's very arrogant and imperialist." But nowadays, we hardly get that kind of resistance at all.

We have multinational clients with very robust compliance programs. They have high corporate governance standards and don't compromise their values when they come to China. The Chinese are starting to look at that as something that carries prestige and tangible value. They are actually putting a price tag on it.

Traditionally, corporate governance has not been seen as a priority for companies in China. Is that changing?
There is a growing consciousness. Chinese companies are subject to a backward-looking body of corporate governance rules. They have very arcane mechanisms. The mindset is that without set values, you have to rely on the guy in the company who can control the "chop," its official legal stamp – "That guy, we need his signature."

What would you emphasize to multinationals coming in?
Understand the corporate governance rules and how they differ from what you're used to. Don't assume things like fiduciary responsibility apply here.

Companies doing business in China need to resort to suitable controls, such as holding the chop, escrow mechanisms to safeguard funds, keeping board seats or having veto rights over certain things. Sometimes people

> "We have multinational clients with very robust compliance programs ... The Chinese are starting to look at that as something that carries prestige and tangible value"

cede those control mechanisms too easily, assuming the people they deal with are the same kind of directors and managers as in their home countries. But they may be very different. They probably don't look at things the same way you do.

You mentioned a sense of insecurity in some government departments. Is the reform effort poking some dragons?
Well remember that, historically, Chinese people hate reformers. Shang Yang, a reformer who lived 2,400 years ago, was executed.

But seriously, there is motivation for reform?
A big driver for the reform of corporate governance is the Social Security Fund.

It's losing money because it has no place to invest in China. The capital markets are in shambles. The motivation for financial reform in China has to come from within, and I think one place where that might start is with the Social Security Fund. The Chinese populace, the vast majority, really relies on social security.

How do you see the next two years unfolding for multinationals?
I think the environment will steadily improve. Partly because, as corporate governance improves, the people who foreign companies deal with are going to be more reliable, more legitimate business partners, in the government and business.

And that's changing already?
It's changing quite rapidly, even in private Chinese companies, although they still have a long way to go. When a company is dominated by a small number of principals, or just one, it creates a climate where lower level people don't feel they have much of a stake. They may then do deals that benefit them personally because there's no incentive to serve the business. That's due to poor governance. And that lack of a stake leads to high turnover and the loss of institutional knowledge – over and over. But incentive structures are a growing priority now.

What kind of incentives do Chinese employees really value?
I would say mentoring. Not only do companies enjoy the benefits of employees who are engaged with the business, it is also very important that when those employees leave, they do so on good terms. And it happens a lot in this economy – people are moving around. With mentoring, you're helping to grow stability and build the next generation of business leaders. Even if they don't stay, they might be your future business partners or supporters in your ecosystem.

Should foreign companies communicate their values?
Yes. Having a strong corporate culture – that sells in China. Take mentoring.

What Chinese company has it? Even some multinationals don't have mentoring. But it really is valued by the younger generation of Chinese. And as I say, the Chinese are changing their thinking about values. China has a long history of prizing virtue. But corporate values are more of a Western concept. So there's a translation problem. But now that concept of corporate values as a virtue is starting to take hold.

Who should foreign companies approach when entering the Chinese market?

Think local. In that sense, China is pretty much like the rest of the world. In the US, you would go to the mayors, because a mayor really wants to develop local business. In China, don't go to the center, to Beijing. Going local in China means going to places such as the Shanghai Free Trade Zone. The government wants foreign companies there. Officials will assemble all the right folks, a relevant mix of people with a lot of interest in what you're doing, and bring them to a meeting. They'll say, "What can we do to help you, to make you comfortable setting up here?" These investor-friendly events occur at the local level, not national.

Are there already big advantages for multinationals in the Shanghai FTZ?

No, it's still early days, but the intent is there. I think the sea change will come if the Shanghai FTZ can become like Delaware in the US, successful because it's so business friendly. And it's not just Shanghai – there will be others. We are probably going to see these free trade zones develop into "mini Hong Kongs" or "mini Dubais." They will be shining examples for the rest of China.

The mythological *fenghuang* bird first appeared on Chinese artifacts more than 7,000 years ago. Sometimes called the Chinese phoenix, it is an auspicious symbol that represents virtue, grace and justice. Originally two birds, *feng*, male, and *huang*, female, the combined symbol balances the two, in the manner of *yin* and *yang*

Pick a few places and concentrate on modern governance, make sure they succeed, and the rest of China will follow suit. If it catches on, it could become an avalanche.

Does having a presence in the FTZ make sense for a business coming into China, but not necessarily to Shanghai?

It does. In terms of foreign exchange, FTZ-based companies have more flexibility in deploying their offshore renminbi or US dollars in other parts of China, so the rules are clearly beneficial. But to me, that's still a technical liberalization. If corporate governance can be promoted in Shanghai, a lot of companies will want to register in the FTZ anyway as a platform for investments in other parts of China.

Meanwhile, what's the best advice for dealing with the Chinese government?

The government is ubiquitous. How do you strike a balance in your dealings with them? How do you make sure that you're seen to create value for them? It needs to be a win-win relationship.

One mistake that foreign companies often make is that they feel they always have to say "yes." Say "no" sometimes, and explain why. Push back. You can even sue the government. Don't assume the government will be completely impossible. You can have a dialogue. Be part of the solution.

Finally, don't forget your values. Translate that into virtue. This is the perfect time for that. We are seeing an era of recontracting between multinationals and the Chinese government. The experience shouldn't be about kowtowing to officials and then feeling beat up. I'm hopeful that's changing. It is becoming a much more even-handed relationship.

LI QIANG

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DOING BUSINESS IN CHINA

GOVERNANCE
Understand local rules and keep veto rights, escrow mechanisms, board seats and other controls

MENTORING
Young Chinese workers increasingly see the value in a strong corporate culture

WIN-WIN
Show government leaders how your company can be valuable to them

DIALOGUE
Seek a dialogue with the government and don't be afraid to say "no"

VALUES
Don't sacrifice your corporate values – they can be an important selling point

SINGAPORE SOUL SEARCHING

At 50, the thriving city-state is ready for a new national identity. Artists and the younger generation appear set to lead the way, says Brunswick's JENNY YEO

Artist **KOH HONG TENG**'s illustration, featuring young Singaporeans in various professions, represents a float that might be seen in the Chingay Parade, an annual multicultural procession held in Singapore during Chinese New Year celebrations

Everyone knows the stereotype. My country has been labeled a "nanny state," a pseudo-democracy, culturally starved, artificial, a country that bans chewing gum and a nation with a reputation for punishing graffiti and caning felons. Singaporeans have been taught to smile, be kind and courteous, not to litter, the proper way to ride in trains and to speak the Queen's English and standard Mandarin. They were told not to have more than two children, but later, when the population started to decline, to have as many as possible.

Singapore's highly efficient infrastructure and public transportation system, productive workforce, strong rule of law, ease of doing business, and low corruption and crime rates are the envy of the region and the country is ranked as one of the most livable cities in the world, not just Asia. Yet, the question remains: "Does Singapore have a soul?"

According to Singaporean writer Sudhir Vadaketh, "We are living through an existential crisis of sorts, with many people unsure of what the Singaporean identity really is about." As it celebrates its 50th birthday, the city-state is busy rebranding itself, a symbolic coming of age. One of the ways it may help shed its authoritarian image is to provide ordinary people, artists and non-government organizations with more space to flourish.

Younger Singaporeans are well placed to help drive this change. A recent article in *The Guardian* quotes local young entrepreneur Samantha de Silva, "Social media … changed everything. Kids now see things differently; they don't have the fear of the older generations. They are used to expressing themselves … have a real passion for creative things."

The city buzzes with activity around the arts, culture, sports, fashion, music, film, cuisine and volunteering. It almost feels as though Singapore has a checklist of things to make the city cool, and actively pursues them. But government checklists of cool are unlikely to fundamentally change the country's culture. "The government can only do so much to manufacture 'excitement' and 'creativity,'" says Vadaketh.

Citizens themselves seem to have realized this. There is a whiff of energy, a tinge of challenge against the status quo, particularly among the young. This generation sees itself as worldlier than its forefathers, more exposed to the adventures of the technology-anchored world, and less subjected to the naggings of the initial nation-forming years.

The government already laid the foundations for this transformation. According to celebrated Singaporean playwright and film director Glen Goei, "Our art scene has been flourishing since the 1990s when the government, in an attempt to make Singapore a global city by 2010, invested heavily in the hardware – art schools, museums, world class concert halls, and funding to arts and cultural organizations.

"In the initial years, heavy government involvement was necessary to provide that push for the arts. But the arts and cultural scene need to grow organically to truly flourish, and that will only come if artists are given the freedom to find their voices, express their views, and produce cutting-edge experimental works."

SOME SINGAPOREANS feel that although change is coming, it can't be rushed. Tan Boon Huat, former Chief Executive Director of the People's Association, which promotes racial harmony and social cohesion says, "Singapore is not perfect – we are evolving. We are gradually loosening up, but we are not doing everything haphazardly at once, because there will be chaos. We are focusing on arts, sports, culture and the succeeding generations. We do what is right for us at our own pace, not in reaction to what people outside Singapore think of us, or to soften our international image."

Singapore was shoved to independence in 1965 when Malaysia decided the city had no valuable resources to offer. With nothing going for it other than a deep water harbor, necessity forced the potpourri of almost 2 million Chinese, Malays, Indians and others to create their own nation. Led by the iron will of its founding statesman, the late Lee Kuan Yew, Singapore grew into a prosperous city-state, now ranked among the top 10 globally by GDP per capita.

The founding fathers mobilized the various ethnicities, cultures and languages by focusing on unity for survival and the creation of a national identity – "one people, one nation, one Singapore," said the mantra. "It was all about ensuring the various ethnicities unite behind the common objectives of survival and long-term prosperity," says Tan Boon Huat.

Most Singaporeans seem to acknowledge that the "Faustian pact" between government and citizens – where some personal liberty and freedom of expression were traded for stability and the promise of a better future – was necessary in the past. But many young people are beginning to question whether an authoritarian regime is either necessary or desirable.

Despite its reputation for a heavy hand, the government acknowledges that it cannot dictate the country's cultural direction. Lawrence Wong, Minister of Culture, Community and Youth and Second Minister of Communications and Information says, "It is for all Singaporeans to decide the true spirit of SG50 [the country's 50th birthday] and what it means to be a Singaporean in this important phase of our nation's journey … it has never been for the government to define a Singaporean culture, or a Singaporean way of life."

As the then Minister of Law E.W. Barker said in 1969: "The evolution of a common culture is not the monopoly of the government … culture must evolve spontaneously."

> There is a whiff of energy, a tinge of challenge against the status quo, particularly among the young

JENNY YEO is a Director in Brunswick's Singapore office. She advises on capital market communications, corporate reputation and crisis communications in Southeast Asia.

Michelin man

ALAIN DUCASSE gives Brunswick's **OLIVIER JAY** a lesson in the language of food and an insight into the fraternity of fine cuisine

"*My role? I am an art director. I provide the vision of where we are and where we want to go. And I work to make that vision happen*"

"My principal characteristic? Impatience"

"*My major character flaw? I am greedy and curious – two faults I intend to keep*"

ALAIN DUCASSE

Alain Ducasse has been dubbed "the godfather of French cuisine" by *The New York Times.* **In 2005 he became the first chef ever to be awarded three Michelin stars for three restaurants in one year – in Paris, Monaco and New York. His best-known establishments include Plaza Athénée and Le Meurice (Paris), Le Louis XV (Monaco), Alain Ducasse at The Dorchester (London) and Beige (Tokyo). At 27, he was the sole survivor of a light aircraft crash, was seriously injured and spent a year in hospital. He later told the** *Harvard Business Review* **that this was a defining moment. "It really improved my ability to delegate, and I understood that I was able to lead without being physically present." Alain Ducasse Entreprise includes restaurants, inns, cooking schools, publishing and consulting. He defines his business as "culinary pleasures and the art of hospitality."**

OLIVIER JAY is a Partner in Brunswick's Paris office. Previously, he held senior media positions, including Editor of *Le Journal du Dimanche.* He belongs to Les Amis des Bistros, a Paris dining club.

"The heart of *haute cuisine* is a bit like *haute couture*: it's for a few thousand people in the world. But there are also tens of thousands of people whose hobby is to treat themselves to a great restaurant. And there are around 100 of us chefs around the world who can trade in this fraternal business"

"Upmarket? We have always been upmarket. But it should last. The one-shot effect is easy, but you must endure, hang on"

STAR SYSTEM

In 1900, the Michelin tire company launched its first guidebook, and in 1926 started sending anonymous "inspectors" to review restaurants and award stars. The company remains highly secretive about its inspectors, who often visit the same restaurant several times, but it does publish its judging criteria (below).

An inspector told *The Daily Telegraph*, "People do get very confused. They think it's about the surroundings, service, number of staff, but it's about the food." Michelin says it judges "only what's on the plate: the quality of products, mastering of flavors, mastering of cooking, personality of the cuisine, value for money and consistency."

The elusive and coveted stars can bring fame, respect – and customers. It has been estimated that a single star can boost receipts by 20 percent. The loss of a star can be an emotional wrench; British chef Gordon Ramsay says he cried when he lost two stars in 2013.

Alain Ducasse holds 19 Michelin stars for his restaurants around the world, having received his first three-star rating for Le Louis XV in Monaco, when he was 33.

THE POWER OF THREE

❀ A very good restaurant in its category, offering cuisine prepared to a consistently high standard. A good place to stop on your journey.

❀❀ Excellent cuisine, skillfully and carefully crafted dishes of outstanding quality. Worth a detour.

❀❀❀ Exceptional cuisine where diners eat extremely well, often superbly. Distinctive dishes are precisely executed, using superlative ingredients. Worth a special journey.

"What distinguishes French cooking is the attention that is paid. Elsewhere, it is not taken to the same obsessive level"

"At Plaza Athénée in Paris I decided to offer vegetables, grains, fish. It's the end of haute cuisine as we know it. It will be more raw, more radical, more essential – and more minimalistic. It just needs to fall into place [*tomber juste*]. It should be simple but not simplistic. Simplicity is dangerous"

"We are in the hospitality business. We are here to host, not to serve. Hospitality is not a form of servitude"

"The table is a place for civilization to share. Around the table, everyone is civilized"

"Cooking is the interpretation of the generosity of nature, of what one has understood of it"

"In my organization, I don't take personal responsibility for much. I take on as few obligations as possible, so that I am permanently available. I have many *collaborateurs*. I delegate"

"We have designed food for astronauts. It took us three years to be certified by NASA. We gained nothing. But astronauts who have to eat 370,000 kms from the Earth told us, 'You have changed our lives'"

"Fusion? Tastes haven't changed. After a period of fusion, we are once again in a period of cooking with precise identities. In the global village, there is a need to re-identify, to look to the past – one's roots – and create from there. Fusion was confusion"

My favorite dish

"A Mediterranean red mullet (from Esterel, southeast France, where they are redder), between 80 and 120 grams, caught that morning, not scaled, not gutted, unseasoned. It needs a fisherman who knows how to fish and someone who can really cook"

"The archetype of excellence is a fisherman who has respected the fish he has caught"

"Excellence can be found anywhere; in a hamburger restaurant I tried in London, where everything was right: the product, the graphics, the atmosphere – or an amazing restaurant in Kyoto, a 12 m² garage with four tables, where a monk-cook made us his speciality: vegetable roots with tofu on top"

"*The quality I most admire in others is loyalty. At the Plaza, the director has been with me for 20 years and at Le Meurice, the Chef Christophe for 18 years – since he was 18. My managers don't know where they will be in six months' time. One morning, I asked seven people to move – to Osaka, New York and Paris. They all gave me a positive answer within the same day*"

DUCASSE GROUP VALUES

Just love ... and the rest will follow

To delight our guest is our mission each day

Every day, to learn a little more

Act in harmony to deliver a flawless ballet

Be the first one ... the sky's the limit

Reach perfection with rigorous practice

Always keep our eyes open to the world around us

The melting pot of cultures is a treasure

Strive for excellence through the slightest detail

Respect your peers ... you'll never walk alone

Do not fear to undertake anything

Remember your roots

A DISH FOR BRUNSWICK
"A variation of Coquilles Saint Jacques, with truffles with bitter herbs – a dish that is modern and traditional, sophisticated and refined. Served with a great Meursault. It falls right [*ça tombe juste*]"

Ducasse has published several books, including *Nature,* **subtitled:** *Simple, Healthy and Good [Simple, Sain et Bon],* **one of his maxims** *www.alain-ducasse.com*

David Hume would have been a better company spokesperson than René Descartes, says Brunswick's JEREMY ZELINGER

The Enlightenment, a groundswell of scientific and philosophical thought in the 17th and 18th centuries, propelled Europe out of the Middle Ages and heralded an era of progress and innovation that arguably continues today. But what we often think of as a unified movement was in reality splintered between ideological and geographic camps. The differences between two of those camps shed light on why data-driven businesses often struggle to communicate.

The Enlightenment sought to clear away the superstition surrounding much Medieval thought and shine the light of reason and evidence on human understanding. Nowhere was this lesson more thoroughly absorbed than in France, where René Descartes instilled a ruthless emphasis on reason, logic and evidence in later thinkers Jean-Jacques Rousseau and Voltaire.

Across the Channel, Scottish intellectual David Hume and Irish-born, London-based statesman and philosopher Edmund Burke were more interested in human sentiment, emotions and relationships – aspects of human nature that are impossible to quantify. Where the French saw human organizations as machines that could be taken apart and put back together, the British saw them as impossibly complex networks of human relationships – living organisms that couldn't be completely predictable or easily understood from their individual parts.

In the 21st century, most businesses operate in the tradition of those French Enlightenment philosophers, breaking complex phenomena down to quantifiable bits, working toward a rational explanation for every action. Indeed, any modern CFO might echo Descartes' statement "all things in nature occur mathematically."

The rise of Big Data reaffirms this devotion to numbers. Business leaders rely heavily on insights gleaned from the growing mountains of statistics on customers, operations and products. Voltaire, who was an important contributor to a groundbreaking 1751 encyclopedia, would be overjoyed. Descartes valued reason as the only thing that separates humans from beasts. Were he around today,

In communications, human relationships, sentiment and opinions matter as much as data, equations and systems

Descartes would likely see Big Data as a modern tool for keeping humans human.

And yet, research in a growing number of fields indicates people don't think or behave as the French *philosophes* suggested. Geneticists, neuroscientists, psychologists, sociologists, economists and others have painted a different picture of human behavior, as David Brooks says in his 2011 best-seller *The Social Animal*. The priorities of the British Enlightenment – sentiment, emotions and relationships – describe human behavior as we understand it today better than the French philosophers' reason, equations and data. Imagining these opposing views as armies in a war of reason against emotion, Brooks says, "The French Enlightenment, which emphasized reason, loses; the British Enlightenment, which emphasized sentiment, wins."

To be sure, the British camp acknowledged the power of reason. But they believed that reason is inadequate to explain our behavior. "Reason is and ought only to be the slave of the passions, and can never pretend to any other office than to serve and obey them," Hume wrote.

Likewise, Burke believed "untaught feelings" governed behavior. In 1757, he wrote that emotional responses "captivate the soul before the understanding is ready either to join with them or to oppose them." Hume thought internal notions of certainty and identity are actually masks for a far more complex set of dynamics. All of us, he wrote, "are nothing but a bundle or collection of different perceptions, which succeed each other with an inconceivable rapidity, and are in a perpetual flux and movement."

But if human nature is fickle, empathy is constant. The British philosophers recognized this and saw the importance of effective communications in shaping self-identity and purpose.

"No quality of human nature is more remarkable, both in itself and in its consequences, than that propensity we have to sympathize with others, and to receive by communication their inclinations and sentiments," Hume wrote. The British felt communications inspire our emotions; emotions, in turn, inspire individual and collective action.

The leaders of the French Enlightenment, meanwhile, afforded little value to human interaction or sentiment. Even Rousseau, who cared deeply about the role of sentiment, said, "Why should we build our happiness on the opinions of others, when we can find it in our own hearts?"

The British thinkers saw what the French did not: the influence of empathy in shaping not only individual identity and complex networks of relationships, but collective actions, and ultimately society as whole.

THE DATA REVOLUTION is making businesses faster and smarter, but it has not changed human nature. As our reliance on data grows, we risk veering too far down the path of the French Enlightenment. Certain situations, especially those where communications are of paramount importance, require an approach more akin to the British Enlightenment. During crises and major transitions, businesses need to be viewed not only as machines, as the French camp would have it, but also as living organisms, as Hume and Burke believed. In communications, human relationships, sentiment and opinions matter as much as data, equations and systems.

The French Enlightenment paved the way for innovations in science and technology. But when it comes to critical communications, the British Enlightenment had better instincts. David Hume would have made a much better company spokesperson than René Descartes.

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CRITICAL MOMENT

SNAPSHOT OF A COMMUNICATIONS TURNING POINT

AUGUST 6 1991

This computer may not look like much, but there was a time in the early 1990s when turning it off would have shut down the World Wide Web.

A tattered, scribbled label warned: "This machine is a server. DO NOT POWER IT DOWN!!" The note was stuck on the computer of British software scientist Tim Berners-Lee at CERN, the European Organization for Nuclear Research in Geneva. It worked. Nobody switched off the device that was the original web server, and on a summer's day in 1991 Berners-Lee launched his invention, the World Wide Web.

The first web page described the project's mission: "To give universal access to a large universe of documents." CERN contact details for team members were included for anyone who might be interested, though at least one entry said, "no email yet."

Berners-Lee had joined CERN in 1984 as a software engineer but was frustrated by how tortuous it was to navigate and share the research being done on incompatible computers by the lab's 5,000 scientists.

In March 1989 he wrote a paper that proposed using a hypertext system to link and share documents. His boss thought the idea "vague but exciting" and signed off on the purchase of a NeXT cube computer. Berners-Lee used it to create the HTML language and, ultimately, a global medium of information exchange.

No one had tasked Berners-Lee with finding a way of improving how his colleagues shared their work. He just thought it would be helpful. It was. "It's hard to overstate the impact of the global system he created. It's almost Gutenbergian," was *Time* magazine's assessment.

Today, the machine on which the original vision of freely shared information was conceived is on loan from CERN to London's Science Museum. Along with a very important sticker.
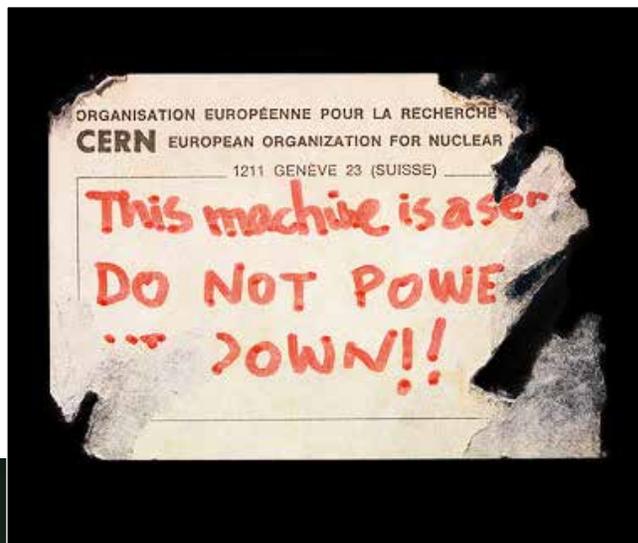
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