

BRUNSWICK REVIEW

A JOURNAL OF COMMUNICATIONS AND CORPORATE RELATIONS **ISSUE 18** 2019



The **RESILIENCE** Issue

Matt Damon
& Gary White

Karl Rove

J.P. Morgan's
Daniel Pinto

Jill Abramson

BRUNSWICK

Brunswick is an advisory firm specializing in business critical issues and stakeholder relations

To download and share *Brunswick Review* stories go to
www.brunswickgroup.com/resilience

You can follow us on Twitter
[@BrunswickGroup](https://twitter.com/BrunswickGroup)

Highlights from this and previous issues are
also available on LinkedIn

EDITOR IN CHIEF Kevin Helliker
MANAGING EDITOR Carlton Wilkinson
CREATIVE DIRECTOR Frank Tagariello
SENIOR WRITER, DEPUTY EDITOR Edward Stephens
PROJECT MANAGER Caitlin Koons
EDITORIAL ADVISERS Craig Mullaney, Lauren Nadig
PRINT PRODUCTION MerchantCantos
PRINTED BY CPI Colour
COVER ILLUSTRATION Edmon de Haro
FEEDBACK feedbackreview@brunswickgroup.com



The *Brunswick Review* is printed on Cocoon
Offset 100% recycled, made using post-consumer
waste fibers and manufactured without the use of
any secondary bleaching

Copyright © Brunswick Group LLP 2019

**"NEVER WASTE
A GOOD CRISIS"
IS PART OF
A RESILIENT
MINDSET.
"NEVER
SURRENDER" IS
THE SAME.**

IN THE LAST EDITION OF THE REVIEW WE FOCUSED ON CRISIS. ONE OF OUR core points of view at Brunswick is that we don't believe in the old concept of crisis management. A crisis, by its very nature, is unmanageable and uncontrollable. You can act in certain ways and say certain things that will affect its significance, trajectory and outcome, but you cannot fundamentally control it—by failing to recognize that, you could actually make it worse.

We do believe that you can survive the challenges of rapid or profound change and specific crises and, as the saying goes, what doesn't kill you can make you stronger. The critical questions are what resilience you need and how you build it.

What have you got in place that enables you to make the right decisions under pressure and have you got the reputational capital and capabilities to survive and come out the other side, possibly even positively, from the experience?

In our mind, the practices that create resilience usually work in three parts.

The first is your systems. There is a lot of focus in crisis preparedness on response systems, and this is a cornerstone of what clients seek. We are well practiced in crisis manuals and simulations. What is not always so obvious is the quality of the intelligence systems that allow you to fully understand not just what is going on, but crucially why it is happening. Your intelligence systems that can deliver insights and inform critical decision making under pressure are often overlooked.

The second key element of resilience is the state of your relationships with key stakeholders. In the old days, when stakeholders were still called audiences, communications was more like a 1.0 broadcasting business. In a world transformed by ubiquitous connectivity, relationships are live and ongoing. The quality of these relationships are genuine assets that need to be nurtured and invested in.

Building better relationships is at the heart of what Brunswick does, whether with the financial community, political and regulatory networks, or the internal and consumer communities that drive so many of the challenges companies now face. Much of this engagement is focused on building resilience through increasing trust. Familiarity generally creates favorability but that can be superficial. Real trust is built on a deeper knowledge and the experience of being tested. In this way, as with so many others, business is no different from our personal lives.

The third part of building resilience is perhaps the most difficult. This is the mindset of the leadership team and key internal communities. Confidence is a critical commodity, it keeps buoyancy in rough weather and creativity when there is limited space to maneuver. Confidence generally grows with experience. Captains who have got the team through big game days before are hugely valuable.

Resilience is built on understanding the situation—the how and the why. Many critical situations appear because an organization's activities collide with a larger social conversation. A promise is seen to have been broken. Product quality isn't what it's supposed to be, performance wasn't delivered, data wasn't protected. Understanding how other people see the situation is valuable because you can communicate that you too are committed to creating the best solution possible.

The final critical element of resilience is whether you are able to bounce back. Extreme challenges can be shocking, saddening and frightening—when you are in the eye of the storm it can be hard to see the opportunity to respond effectively in the longer term. Quite often that becomes clear only later.

"Never waste a good crisis" is part of a resilient mindset. "Never surrender" is the same. Most stakeholders know that bad things can happen. If you can communicate your determination to put things right, those relationships will prove resilient as well.

I hope this edition of the Review gives you greater insight and different perspectives on these topics. These are fascinating, fast developing subjects which are very much at the heart of what we care passionately about at Brunswick. ♦



SIR ALAN PARKER

**CHAIRMAN,
BRUNSWICK GROUP**



13 **BRUNSWICK CEO NEAL WOLIN**
Resilience doesn't guarantee success. But it's a key ingredient.

14 **KARL ROVE**
This isn't the first time Americans have called Washington broken, says the ace campaign manager and political historian.

20 **MATT DAMON'S CO-STAR**
The actor teams up with a Kansas City engineer to deliver clean water to the poor via financing rather than pure charity.

26 **FROM DA VINCI TO EINSTEIN**
In his spare time, Walter Isaacson has written best-selling biographies of ancient and modern history's greatest thinkers and innovators.

J.P. MORGAN'S PINTO
As a college student in Argentina, Daniel Pinto started working at a bank—and never left. Now he stands a notch below CEO Jamie Dimon.

CHURCHILL'S RESILIENCE
The author of a new, wildly popular biography notes that the legendary prime minister survived two plane crashes, three car wrecks, imprisonment and five wars.

UNBROKEN: MARK POLLOCK
His gift, he says, is acquiring disabilities. But his triumphs outweigh his afflictions.

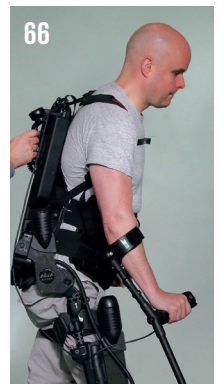
KIDNAPPED
Mo Dewji, Africa's youngest billionaire, on a life-changing ordeal.

38

42

66

73



7

SPOTLIGHT



7 JILL ABRAMSON

The former New York Times Executive Editor looks to the future.

9 ETHIOPIA

A disaster reveals a changed land.

9 CORPORATE LONGEVITY

Business lifespan varies by region.

12 DIGITAL OASIS

Acquirers are following a flood of top tech talent and ideas to the Middle East.

30

CYBERCORNER



30 A TEXTBOOK RESPONSE

Like any company that's been hacked, Under Armour expected the worst. But its handling of the problem impressed pretty much everybody.

34 THE TITANIC REVISITED

Blockchain was supposed to be an unhackable solution. But its complexity is proving its greatest weakness.

49

TRADE



49 WHITHER BREXIT

Sir Jonathan Faull, formerly the UK's top EU official and now head of Brunswick's European Public Affairs team, is scratching his head.

51 FINNISH TRADE MINISTER

The trade official describes the challenges of digital borders for a nation where trade is 76 percent of GDP.

52 THE FADING AGE OF MAGELLAN

Brunswick's Robert Moran and US trade leader Kenneth I. Levinson discuss the rise of digital wares.

53 LONDON TO BRASÍLIA

In São Paulo, the UK Ambassador sees potential for fruitful trade.

55 CHINESE BRANDS

Which are best known in the West, by country, in a Brunswick Insight survey.

56 TECHLASH

Behind some significant trade disputes, a top IBM executive sees a backlash against innovation.

58 A LONG COMEBACK

Only recently did China and Japan lift their decades-old bans on British beef, rewarding the resilience of the UK response to mad cow disease.



30



46



49

QUOTES FROM THE ISSUE

"The industry overall needs to continue rebuilding its reputation after all that happened in the crisis."

—J.P. Morgan Co-President Daniel Pinto

CANCER IN THE WORKPLACE

Do you tell the office about your diagnosis, and if so how?

RANK & FILE

It's time to realize that employee well-being is what drives the performance that leaders seek.

ENGINEERING EVOLUTION

The CEO of Weir Group, a company founded in the 19th century by engineers, on how the industrial giant keeps reinventing itself.

POPE FRANCIS

His visit to the UAE was thrilling, and not just for the 10 percent of that nation's residents who are Catholic.

A NEW BOTTOM LINE

The business case for corporate leadership on social issues is growing.

CLIMATE PRESSURE

The Director of the Church of England Pensions Fund describes the need for investors to weight carbon risk.

MERLIN ENTERTAINMENTS

Battling sensationalism, the attractions company found its voice.

A TALE OF TWO COUNTRIES

Kosmos Energy's CEO tells a story of diplomatic drama offshore Africa.

WIDEANGLE

BIZ SCHOOL THEOLOGIAN 80

A model for "Doonesbury's" Rev. Scot Sloane teaches ethics to MBA students.

BRUNSWICK ARTS: "NATURE" 82

New York's Cooper Hewitt turns creative attention to climate change.

EMIR KAMENICA 86

A teenage refugee from Sarajevo became an acclaimed economist at the University of Chicago's business school, where he researches odd questions.

LATINO VICTORY 88

Melissa Mark-Viverito on why AOC may augur a Latino surge in the US.

CRITICAL MOMENT 90

Fifty years ago, the world held its breath as the first humans landed on the Moon.

WORD POWER

"The poorest people in the world were paying 10 to 15 times what the middle class pays [for water]."

MATT
DAMON

Page 20

"Nobody... could ever aspire to be Einstein. But every one of us can be more like Leonardo da Vinci." **WALTER ISAACSON**, author of biographies on Albert Einstein and da Vinci. 26

"The industry overall needs to continue rebuilding its reputation after all that happened in the crisis." **DANIEL PINTO**, Co-President of JPMorgan Chase. 38

"Even as a student at Harrow, Churchill believed that he was going to save London, save the Empire." **ANDREW ROBERTS**, Churchill biographer. 42

"Any calculation for business success must now involve how employees feel—how comfortable they are being personally represented by the business." **MARIA FIGUEROA KÜPÇÜ**, Brunswick Partner and Lead of the US Business & Society practice. 59

"Technology ... properly used, allows you to get back to the most personal form of campaigning." **KARL ROVE**, US political czar. 14

"Platforms need to accept liability for the content they host." **LIAM BENHAM**, IBM's government affairs director in Europe. 56

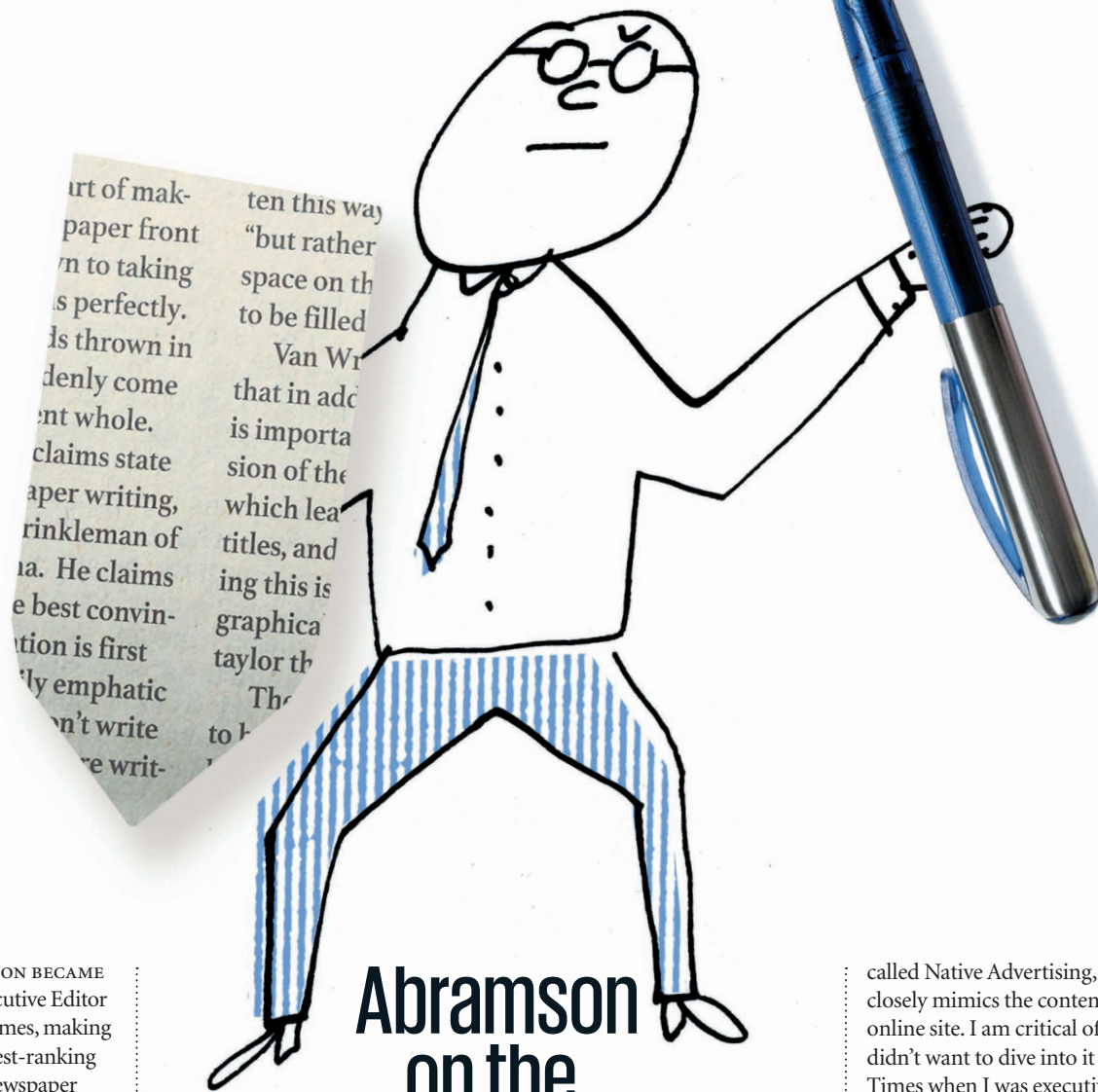
"If that was ever my agenda, it's not now, after the ordeal I had." **MOHAMMED DEWJI**, Tanzanian billionaire, on aiming to be Africa's richest man. 73

"I'm much more about lighting candles than cursing the darkness." **GARY WHITE**, Co-Founder of Water.org. 20

"It would be very funny if, for 2020, I went back to working in a campaign, which isn't completely out of the question." **JILL ABRAMSON**, former Executive Editor, The New York Times. 7

SPOTLIGHT

Observations, insights and analysis from around the world on a medley of topics.



Abramson on the VALUE OF NEWS

IN 2011, JILL ABRAMSON BECAME the first female Executive Editor of The New York Times, making her arguably the highest-ranking female editor in US newspaper history. No woman has ever topped the editors' ranks at America's two other newspaper giants, The Wall Street Journal and The Washington Post. Three years into that job, Ms. Abramson was fired for pushing back against efforts she perceived as blurring the line between news and advertising. She set out then to write a book about upheaval in the news business, focusing on two stalwarts, The New York Times and The Washington Post, and two up-starts, BuzzFeed and Vice. The result is *Merchants of Truth*, published this February. Ms.

Abramson shared her thoughts and insights about the industry with us at Brunswick's New York office.

As you wrote *Merchants of Truth*, the prospects of the organizations you researched shifted significantly. That must have required you to scramble.

The reason I focused on BuzzFeed and Vice is that during my last months at The Times, The Times produced an innovation report that was kind of dripping with envy for those two sites. They were getting so big and they had so much money from ads. They were pioneers in a type of advertising

called Native Advertising, which closely mimics the content of the online site. I am critical of it, and didn't want to dive into it at the Times when I was executive editor, because it isn't always clear to the reader what's advertising and what's news.

After starting out as entertainment sites, BuzzFeed and Vice began building serious newsrooms, and they discovered that it is very expensive to do investigative journalism, watchdog journalism, enterprise journalism, international journalism. That was fine when BuzzFeed and Vice were in go-go growth mode, adding millions of readers and viewers. But then that growth slowed. Digital advertising became competitive, and

Facebook and Google gobble up so much of it that everybody else is left to scramble for new sources of revenue. Now, BuzzFeed is having to turn itself inside out because their original model was all advertising supported. Both BuzzFeed and Vice announced cuts of 250 people each just a few months ago.

Meanwhile, following Trump's election, suddenly it was the old, reliable newspaper companies, which had forced themselves to become "digital first" operations but still had very high-quality news reports, that started to do much better and become stronger, thanks to subscription revenue. And the new all-digital news players were facing life-threatening challenges.

One reviewer of your book asked a scary question: "Is there any hope left for an independent Fourth Estate?"

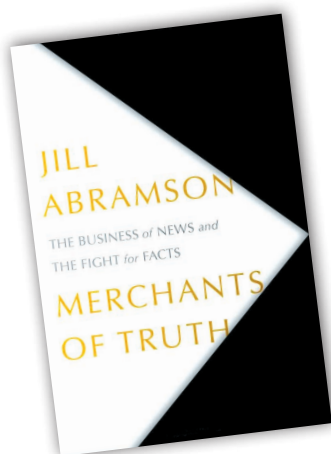
For society it is vital. The New York Times and The Washington Post are going to survive. The Wall Street Journal is going to survive. But to survive, you have to be big—national or global in reach. You have to have coverage that people are not finding anywhere else. When you have that at high quality, readers will pay for it. Now that Trump is president, The New York Times has 4 million subscribers.

But my optimism does not apply to smaller newspapers that have been in a cutting mode or have been acquired by vulture capital funds and stripped down for parts. Their news reports are diminished. They've ceded their watchdog roles. Frankly, a lot of them are not worth paying for. About 500 have been shuttered over the past several years.

But ahead there may loom an existential question even for large news organizations like The Times and The Post, which is now owned of course by Jeff Bezos. Even with a billionaire owner and millions more digital subscriptions, can a newspaper continue to remain independent and not be bought by these voracious platforms like Netflix and Hulu,



"IT WOULD BE FUNNY IF, FOR 2020, I WENT BACK TO WORKING IN A CAMPAIGN, WHICH ISN'T COMPLETELY OUT OF THE QUESTION."



which are so interested in documentary style stories?

Could the newspaper industry have foreseen and better prepared for the disruption caused by the internet?

The tragedy is that a lot of people in the news business did recognize that the digital transition was happening and happening quickly. But because of their internal corporate cultures and the culture of their newsrooms, which were formed according to the rhythms of the printing press once a night, they just didn't act fast enough.

They thought that the newspaper version of their news reports would stay dominant for longer than it did, so that the urgency of becoming digital first, and thinking of publishing online first, took forever. And in that gap a lot of time and money was lost.

Are you concerned about the widespread belief that the news just can't be trusted?

I am so concerned about that. Restoration of trust is vital, and one disappointment I had in my book is that I was not able to come up with new solutions for a lot of the problems that bedevil journalism. I do think that because attacks from Fox News and Sinclair and the Trump administration are so loud, news organizations have to become much louder in defending the importance and integrity of what we do every day. I rather like The Post's slogan, "Democracy dies in darkness."

What we do is no less important than when the founders created the First Amendment, seeing us as critical watchdogs against abuse of over-centralized power. Somehow we've thought it's not our job to carry that message. It is our job—and for trust to be restored that message has to be louder.

Will The New York Times and The Post go the way of traditional British papers by leaning hard in a particular political direction?

Aren't we there? Not to the same extent as in Britain.

But on some days of heavy Trump developments, the news pages, particularly the headlines, bear an unmistakably anti-Trump coloring.

What intensifies that is, because Facebook has disaggregated everybody's news reports, it's made the branding of individual reporters more important. Something like a dozen of the Washington reporters for The Times have cable TV contracts on MSNBC and CNN. They go on these panels with partisans and former prosecutors. And though The Times and Post reporters on these shows may be careful and measured in what they say, it's the lead-in questions and the rest of it that leads viewers to question their objectivity.

Since I started writing a political column for The Guardian, it's gotten harder for me to find Republicans who will even talk to me. I'm trying to present both sides. But they say, "No, I don't think I want to be identified in your column." I guess it suggests treason for them to be talking with Jill Abramson, the former executive editor of the "failing New York Times."

Would you, given the way events have unfolded, have chosen a different career?

Right after college I worked on a couple of campaigns, and toggled between becoming a journalist or full-time political activist.

Now, for the first time since then, I've found myself wondering whether you do more good trying the difficult and impossible task of electing people who are going to make the world better, or doing investigative journalism that opens people's eyes to issues and things they need to know about. I've loved my career in journalism. It's not like I have any regrets. But in the end, which path would have done the most good?

It would be very funny if, for 2020, I went back to working in a campaign, which isn't completely out of the question. ♦

Kevin Helliker is Editor in Chief of the Brunswick Review and a Pulitzer Prize-winning journalist.

No Longer Live Aid **ETHIOPIA**

A terrible plane crash highlights a nation's progress.

ON MARCH 24, 2019, THE WORLD WOKE UP TO THE UNUSUAL SITUATION of hundreds of Africans seeming to agree with Donald Trump. A CNN headline about Ethiopian Airlines caused an explosion of African Twitterati sharing the US President's view that the news broadcaster is "fake news."

The headline? "Ethiopian Airlines was a world-class brand with a great safety record until the flight ET302 crash put its reputation in jeopardy."

The kickback was swift. People saw CNN blaming Ethiopian pilots rather than Boeing, the plane's US manufacturer. One particular pushback received over 10,000 likes. The story itself was, in fact, a reasonably positive piece on the growth of Ethiopian Airlines from a third-tier joint venture with TWA to a significant global airline with 111 planes—for context, Air France's fleet is 201 planes; Emirates' is 268.

Ethiopian Airlines is a budget carrier, yet it has developed a reputation as the best commercially run African airline and increasingly a major regional hub player. Recently, Addis Ababa and Ethiopian Airlines overtook Dubai and Emirates as the premier long-haul transit into Africa.

CNN has invested heavily in producing positive stories about the continent, but had apparently failed to appreciate that people might see lingering bias and a patronizing attitude toward the continent in this particular story. Ethiopia itself is no longer Live Aid Ethiopia, but has had one of the most remarkable political and economic transformations of modern times.

Poverty declined from 45.5 percent in 2000 to 23.5 percent in 2016. GDP per capita has doubled since 2010 while per capita income has increased threefold. It is on track for middle-income status by 2025.

CNN and many other newspapers had been somewhat objective about the potential cause of the crash, especially given that the tragedy pitted the reliability and reputation of one of the world's most powerful companies against a country that 15 years ago was among the five poorest countries in



the world. But it is now not even among the 20 poorest. Ethiopia's extraordinary political and economic trajectory over the past 15 years is a clear success story. Ironically, by bringing attention to the country, the scrutiny over the Ethiopian Airlines crash may have simply drawn more attention to Ethiopia's success.

Ethiopia is facing some headwinds in consolidating its political and economic transformation, but if those prove as resilient as its reputation has become, it may indeed become Africa's powerhouse in the next 20-30 years. Forecasts are that Ethiopia will eradicate poverty by 2029, with less than 3 percent of the population expected to be below the poverty line. ♦

Itumeleng Mahabane is a Brunswick Partner in Johannesburg, South Africa.



CORPORATE **LONGEVITY**

The average lifespan of a business varies by region.

THE QUESTION OF CORPORATE survival has become top of mind as companies grapple with how to move forward in an increasingly challenging business environment. Credit Suisse has shown that the average age of a

company listed on the S&P 500 fell from almost 60 years in the 1950s to less than 20 years today. By another measure, American economist Mark J. Perry found that only 53 companies from the 1955 edition of the Fortune 500 were still on the list in 2018. Across the pond, the FTSE 100 has also experienced significant changes as Schroders revealed that only 28 of the companies from the 1984 edition remained on the index in 2017. According to AJ Bell, only 30 of the original companies still exist in 2019, the 35th anniversary of the FTSE 100.

In Asia, the picture is different. Japanese companies have recorded some of the longest corporate lifespans, and Japan is home to several of the world's oldest businesses, including the family-run Kongo Gumi, a construction company established in 578 AD to build the Shitennō-ji Temple. According to

Nikkei Asian Review, turnover for the Tokyo Stock Exchange stands at approximately 89 years, in contrast with 15 years for the New York Stock Exchange and nine years for the London Stock Exchange. Turnover represents the average number of years that a company is listed on the Tokyo, New York and London Stock Exchanges.

While there is a tradition of endurance among prominent Chinese family businesses, including Tong Ren Tang, the 350 year-old Chinese medicine purveyor established during the Qing dynasty, Chinese media have reported that the average lifespan of SMEs in China today is 3.7 years. According to JPMorgan Chase, roughly a third of new US businesses exit within their first two years, and half exit within their first five years. ♦

Wenchi Wei is an Account Director based in Shanghai.

The Cost of TRANSPARENCY

Regulators have to walk a delicate line to keep markets fair—but also affordable, says Brunswick's Rob Webb.

THE PUBLICLY QUOTED “JOINT STOCK” COMPANY, IN ITS CURRENT form, has been a feature of the open markets of the West for well over a hundred years. It allows individual investors, pension funds and “activists” to share in the profitability, or otherwise, of quoted commercial concerns; they can come and go at will, according to their assessment of the future prospects of the company. They can set a price for its shares that becomes transparent and available to all, Dark Pools notwithstanding.

Modern technology, and the anxiety of today's regulators in the public sector, however, are changing the nature of the relationship between these investors, the owners of the company, and its management and staff. They rarely meet. Their interests may not be aligned. The “investor” may be short in the stock—thus hoping its share price will go down (and sometimes tempted to lure the facts and rumors toward the short position) and even when “long,” investors may be holding the stock only

for a few micro seconds until their algorithm requires them to discard it; the long holder may even be a reluctant holder—it may have to hold shares in companies in a particular FTSE or other index because its own rules make that a requirement. The need of one investor may be for short-term cash or, for the individuals, for the hope of bonus glory for a clever investment at year end; the need of the company may be for long-term money—“for the loser now will be later to win, for the times they are a changin’” as Bob Dylan puts it. What looks right to the micro-second day trader may not look right to the pension fund whose liabilities will crystallize in 40 years' time.

Coupled with this disparity of interest is the desire of politicians to make sure members of the public do not lose money; whenever there is a fire in the backyard, they wish to legislate for all potential fires in all backyards “just in case” a unique or unusual event could happen again, and the blame for it laid at their door. Prevention is an easy tool. But wealth creation, on which we all depend, is more difficult.

If the regulatory boundaries on public companies become even more costly, and if the hunger of detached and remote algorithmic investors becomes even less relevant to the performance or purpose of the company, then open markets will shrink to the benefit of private markets: sovereign wealth funds, family offices, privately owned companies and a



THE END OF RESILIENCE?

Notre-Dame's capacity to endure may surprise everyone.

“IT WAS A SYMBOL NOT JUST OF beauty but resilience. It feels like watching resilience burn down.”

So tweeted a St. Louis-based journalist who, like millions of people around the world, watched live as fire destroyed the roof of the Cathédral Notre-Dame de Paris on the evening of April 15.

The cathedral took more than 200 years to construct—roughly 10 generations of workmen—

from the 12th to 14th centuries. It stands on a small island in the middle of the Seine. At the time of its construction, most of the city of Paris fit on that island. As the town expanded over centuries to the Left Bank and the Right Bank and beyond, Notre-Dame remained its physical and spiritual center, towering and rooted.

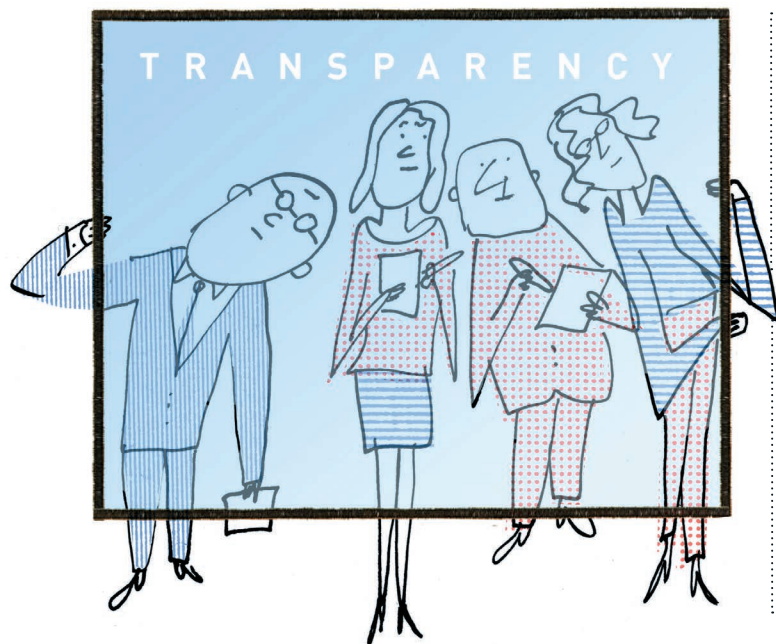
An architectural masterpiece, it became a laboratory for some of

the earliest music in the Western classical tradition. The French Revolution unfolded on its doorstep. Napoleon was crowned Emperor inside its walls. Victor Hugo's great novel *The Hunchback of Notre Dame* not only uses the cathedral as its setting but turns it into a symbol for the endurance of civilization.

Despite the sense of doom spurred by those images of it aflame, the cathedral will endure.

Its stone walls, front towers, famed flying buttresses, even its stained-glass rose windows, all survived. Much of the precious artwork was evacuated. French Premier Emmanuel Macron vows the structure will be restored in five years. It will not be the same, but Notre-Dame still stands, resilient and inspiring, a symbol of hope for civilization. ♦

Carlton Wilkinson is Managing Editor of the Brunswick Review.



myriad of vehicles that can be invested privately—for the long term, for the benefit of the company and, not being owned by the public, free of the regulatory and political howling of the public markets that softens the risk appetite of those who are routinely subjected to it. Thus, it will be that the public will lose some of its access to successful commercial ventures, and price transparency will be reduced.

In a prosperous society, all these models should be able to co-exist profitably, but it is vital that public markets should be able to hold their own; visible price setting and transparency of shareholdings help to create a chance for the public and their pensions to share in the profitability of a venture. These are highly desirable features of an open society, and of a free market open to all. Let us hope they do not become less relevant as the years pass.

Regulatory arbitrage can make the difference between profit and loss. Investor involvement, and comprehension, can make the difference between success and failure. If the cost of trading openly exceeds the cost of trading privately, even by a small amount, over a long period, the public will be deprived of its access to capital. While wealth inequality remains a hot political topic, regulators need to make sure that markets remain fair, for sure, but also that the costs of their regulation do not make them unaffordable. ♦

Rob Webb QC is a Senior Advisor based in Brunswick's London office.

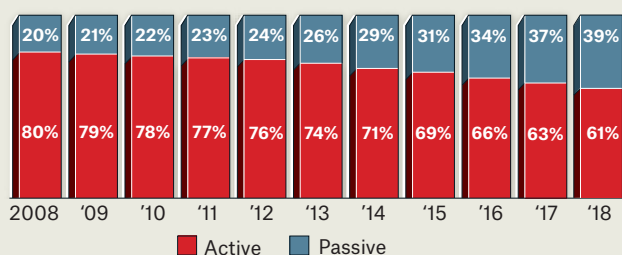
INVESTOR ENGAGEMENT

BETWEEN 2008 AND 2018, THE AMOUNT OF ASSETS IN PASSIVELY managed index funds nearly doubled, and at the current pace there will be more money in passive funds than in active funds by 2024. Accompanying that shift in shareholder registers is one in investor behavior. Passive funds are increasingly using their voices—and their votes—to advance their agendas. Engaged long-only shareholders are now

launching as many campaign demands upon companies as traditional activist hedge funds, focusing on a company's board and its governance. As the makeup and priorities of investors evolve, so does the approach for communicating with them—changing from a quarterly or annual exercise managed by Investor Relations to an ongoing initiative that demands participation from senior management and independent directors. The core tenets of a robust investor engagement program can now be supplemented with innovative digital communications, reaching investors and analysts with greater precision and regularity than ever before. ♦

The INVESTOR LANDSCAPE is undergoing fundamental changes...

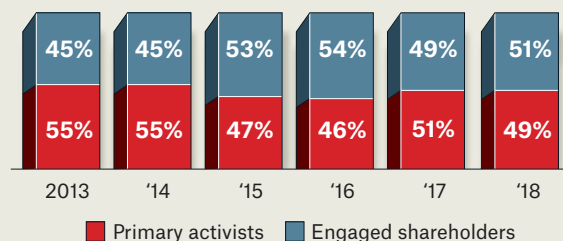
A continued flow of capital into passive funds



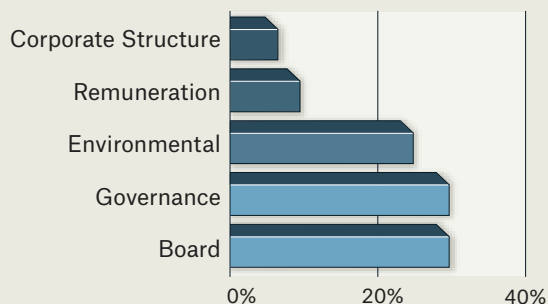
Charts: Activist Insight / Other Data: Brunswick Insight

...Alongside increasingly DIVERSE "ACTIVE" OWNERSHIP strategies

Campaign demands are driven by both activists and "engaged" shareholders



Primary focus on GOVERNANCE and BOARD composition



88
PERCENT
of investors
make decisions
based on
information from
digital sources

88.5
PERCENT
Average holding
period of shares
decreased from 6 years
to 8.3 months
from 1970 through 2016

80
PERCENT
of asset
managers intend
to consume
less research as
a result of MiFID II



DIGITAL OASIS

Top tech talent and ideas have come to the Middle East, yet major investors have been slow to follow. That may be changing.

FOR ITS FIRST EVER ACQUISITION in the Middle East, Uber announced its \$3.1 billion purchase price for Dubai-based ride hailing app Careem, the region's first unicorn (a private company with a valuation in excess of \$1 billion).

The move reinforces a growing trend wherein early-stage tech investors in the Middle East are able to achieve successful exits in the hundreds of millions or even billions of dollars, something not seen in the region's nascent tech ecosystem until only recently.

Home to a growing startup scene, the wider Middle East and

North Africa (MENA) region has a young population (roughly 60 percent is under the age of 30), a smartphone penetration rate of 64 percent, and a need for tech-enabled basic solutions such as transportation and financial services.

The region's startup environment is still young, but in some areas it is already ahead of more established markets. For example, approximately 25 percent of MENA startups are run by women, a figure higher than the US industry average, according to *The Economist*.

But many foreign investors still view the Middle East as a source—rather than a destination—for technology investment.

Middle East funds have invested heavily into tech abroad, including into US companies such as Slack, Uber and WeWork. The most high-profile investor

is the SoftBank Vision Fund, the \$100 billion technology fund that includes Saudi Arabia's Public Investment Fund (PIF) and Abu Dhabi's Mubadala Investment Corp. as major backers.

Governments working to change this dynamic of outbound investment have tried to court entrepreneurs through a wide range of initiatives, the rationale being that tech offers significant investment potential and is also integral to the future of the region.

“THE MOST COMMON CONCERN FOR FOREIGN INVESTORS IS A LACK OF A PATHWAY TO A SUCCESSFUL EXIT.”

Numerous national strategies and economic visions for Middle East governments place technology at the heart of efforts to modernize and diversify the region's economies away from hydrocarbon revenues. In Dubai alone, the government's \$8 billion smart city initiative aims to develop more than 500 tech-driven projects by 2021. Saudi Arabia has gone so far as to begin planning for a \$500 billion smart city of the future, NEOM, which has already added tech heavyweights Masayoshi Son and Marc Andreessen to its advisory board, according to CNN.

However, while talent and ideas have come to the region, major investors have been slow to follow. Of the top 20 global economies for inbound tech investment, none are from the GCC, a group of Arab states that form the economic powerhouse of the Middle East. The most common concern for foreign investors is a lack of a pathway to a successful exit, as typical routes are through an IPO or to position a company as an acquisition target.

As the Middle East's capital markets have been quiet in recent years following the 2014 downturn in oil prices, an IPO may not be investors' preferred route.

That leaves exit by acquisition, a strategy becoming more commonplace, as evident in the Uber deal as well as Amazon's 2017 acquisition of UAE online retailer souq.com. The \$580 million acquisition remains Amazon's most expensive overseas transaction, and was the first time a major Western brand completed a globally significant acquisition of a regional tech player. The Amazon deal also sparked inflows of \$3 billion in tech investments into the region.

Industry stakeholders no doubt hope Uber's doubling down on the Middle East will be a catalyst for investment into its technology sector. However, for the industry to attract more investment into the region, companies and governments will need to clearly articulate the benefits the Middle East offers industry investors. ♦

James Allan is a Director based in Dubai.

FOR A NEW BUSINESS TO SUCCEED, OR AN ESTABLISHED BUSINESS to survive a challenge, it must be resilient. Yet resilience alone offers few, if any, guarantees. • The explorer Mark Pollock may never find a cure for paraplegia. But his pursuit of that goal has won the confidence of a growing number of scientists and investors, not only because of the scientific progress made, but also because of the courage, determination and resilience he has shown as a blind paraplegic (Page 66). • Karl Rove (Page 14) managed dozens of political campaigns, many of them failures, before shepherding George W. Bush into the White House in 2000. When Paddy McGuinness (Page 19), Brunswick Senior Advisor and former UK Deputy National Security Advisor, told colleagues about his cancer diagnosis, he didn't know whether he or those relationships would survive. As it turned out, the support of colleagues helped him endure. • Cases of individual resilience can be inspiring. Andrew Roberts, author of a new Winston Churchill biography, reminds us the legendary British Prime Minister survived two plane crashes, three car wrecks, a stabbing, five wars as a soldier and, during World War II, four bouts of pneumonia (Page 42). At a time when pursuing jobs at multiple companies throughout a career is seen as the smart route to the top, J.P. Morgan's Daniel Pinto recalls (Page 38) how he climbed the ranks for 37 years, starting as

a part-time college student in his native Argentina, to stand now one notch below CEO Jamie Dimon. During the 10 days that Mohammed Dewji, owner of MeTL Group, was held last year by kidnappers, his countrymen rallied in the streets for his release, an experience that deepened his commitment to combatting inequality (Page 73). • There may be no more fundamental building block for individual or community resilience than access to clean water—which remains out of reach for 844 million people worldwide. We hear from the actor Matt Damon and Gary White (Page 20), co-founders of Water.org, about their solution, itself a story of resilience. • This Review also features a section by Brunswick's experts in cybersecurity (Page 30), including a story on how Under Armour's speedy and transparent response to a cyber breach actually enhanced its reputation and stock price. • We also introduce a new recurring section on trade (Page 49) and share interviews with Finland's Minister of Trade, Anne-Mari Virolainen, and UK Ambassador to Brazil, Vijay Rangarajan, as well as an essay on Brexit by Brunswick's Sir Jonathan Faull, former Director-General Financial Stability, Financial Services and Capital Markets Union in the European Commission. • Resilience may not ensure success, but as an ingredient it is essential. In these pages we hope you will find smart strategies and powerful arguments for cultivating it. ♦



FOR FIVE DECADES, KARL ROVE HAS BEEN active in American politics, guiding hundreds of candidates to victory and in the process revolutionizing the art of political campaigning. Mr. Rove rose to national prominence after orchestrating then-Governor George W. Bush's successful presidential election campaign in 2000, and later serving as Senior Advisor and Deputy Chief of Staff in the White House. Vanity Fair called Mr. Rove "one of the most powerful unelected officials in the United States." President Bush referred to him as "The Architect."

Writing for The Wall Street Journal and making regular appearances on TV, Mr. Rove remains an influential commentator on American politics—and through his work with political action committees, he also remains an influential participant.

In a recent conversation with Brunswick's Raul Damas, Mr. Rove shared that he is now at work on his third book, which will look at presidential decision-making. He also discussed what he learned from President Bush's leadership, and explained how history can help temper our tendency to hyperbolize.

You published your memoir, *Courage and Consequence*, in 2010. If you were to write it today, what would you change?

I'd be reluctant to change anything, because what I was trying to do was draw back the curtain and give

The legendary political strategist and campaign architect speaks with Brunswick's **RAUL DAMAS.**

KARL ROVE





people an insight into what we knew [in the White House] and the decisions we made based on the imperfect, limited knowledge available at that time. I'm writing a book on presidential decision-making, and one of the key lessons is that presidents make decisions with much less information than we assume they have.

History always provides more information and insights in retrospect. I'd leave the book as it was.

David McCullough said studying history is "an antidote to a lot of unfortunate human trends like self-importance and self-pity."

Would you agree? Has your own love of history enabled a particular perspective you find helpful in this moment?

David is absolutely right. History is an antidote for either believing that we are bigger and better than we are, or the opposite of that—that we are in worse shape than we are. When I was writing my McKinley volume [*The Triumph of William McKinley*, 2015], I had to understand the Gilded Age. And the more I looked at the Gilded Age, the worse it looked. You have five presidential elections in a row in which nobody gets 50 percent of the vote! You have two years with a Republican president, House and Senate, two years with a Democratic president, House and Senate, and 20 years of divided government in which very little gets done.

Because not only do the two parties have deeply divergent views of what the future of the country ought to look like, but also any attempt at working together is hampered by the fact they're still fighting the Civil War.

In fact, when the Democrats win control of the House in 1874 for the first time in 16 years, it's called "the Victory of the Brigadiers," because so many former Confederate officers are elected in the South by basically wiping out, through violence, the black Republican vote.

So when you look back, you realize there are these moments we've forgotten. That the election of 1800 ended in a tie in the electoral college, and who would be the president was not decided until 15 days before he was to be sworn in. We gloss over the angry American politics of the 1820s and 1830s. We look through the Great Depression and we see the economic suffering, but we forget the strains in our political system.

Often, we look at our politics today and say, "Washington is broken. It doesn't work." And we think this is the first time this has ever happened. It isn't.

**"OFTEN, WE LOOK
AT OUR POLITICS
TODAY AND SAY,
'WASHINGTON
IS BROKEN. IT
DOESN'T WORK.'
AND WE THINK
THIS IS THE FIRST
TIME THIS HAS
EVER HAPPENED.
IT ISN'T."**

There's a saying: "Nothing serves the good old days like poor memory."

Exactly.

Is the answer as simple as people spending more time reading about history?

That helps us to accept it, but it takes leadership to change it. Leadership has changed the course of the country and the nature of our politics for the better; someone will come along and, once again, help turn the country in a positive direction.

We were all wringing our hands in the late 1970s, and along came this B-actor from Hollywood [Ronald Reagan] who gave us a sense of optimism and purpose. And similarly, in 1896 along came the mild-mannered, reform-minded governor of Ohio [William McKinley] and united the country with a campaign that featured extraordinary moments.

There's a great moment on October 9, 1896, when 2,000 Confederate veterans of the same Shenandoah Valley campaign where McKinley fought, men who'd shot at him, came to pay their respects in Canton. And the country had never seen anything like it. Blue and gray mingled together.

And McKinley emerges on the porch and says, "Honor was not surrendered at Appomattox, only sectionalism. If we're ever forced to fight again, and God forbid that we have to, we shall fight as brothers under a common flag."

This was a moment of healing that the country needed, and it led to McKinley's victory, which was the biggest since Grant's reelection in 1872.

This conversation—like most conversations with you—feels like a history class. Is teaching something you enjoy?

I really do. I taught at the University of Texas' Lyndon B. Johnson School of Public Affairs. I was the only Republican on the faculty, proving that God has a sense of humor. I also taught undergraduates for several years in a joint appointment from the Journalism and Government departments at the university.

You're also teaching a campaign strategy class with former Obama political adviser David Axelrod.

David is a really good man, and we became friends over a shared experience. I wrote in *Courage and Consequence* about my mother's suicide. And I got an email from David while he was in the White House and he said, "I enjoyed your book and thought you might want to see this." Attached was



Karl Rove speaks to Ohio delegates at the 2004 National Republican Convention.

a thoughtful, deeply moving tribute he'd written as a young journalist to his father who committed suicide, as well.

Since then, David and I have worked together on suicide prevention programs. We're drawn together by this belief that as a society we need to talk more about the issue, so people feel comfortable asking for help. There's such a stigma attached to these emotions and to depression itself, which causes people, rather than seeking the help they need, to commit the ultimate undoable act. We appear together often and speak frequently to catch up on each other's lives.

You've spoken about how you use history to inform your work as a political analyst, but your work has also been very forward looking, particularly through the use of technology in campaigns. How did that start?

Early in my career, I was deputy chief of staff to Governor Bill Clements. We'd had a brief 100-plus year period during which we had not elected a single Republican governor in Texas.

And Bill said, "Run my reelection campaign, and if I win reelection, I want you to become my chief of staff." That would set the path of my life in a certain fashion, but I said "Governor, when you were my age, you started your own business, and I want to start my own business." So, I started a direct mail company in Austin at the age of 31.

Now, I knew I couldn't compete head-to-head with all the big professionals back East. I had to have an advantage, and that was technology. So, I invested in a Hewlett-Packard computer and a very sophisticated HP printer and began to do customization and personalization for direct mailing. It was simply not being done at that time.

At every step in my political career, I've seen new technology as an advantage in helping win an election. I happened to be in Waco a couple weeks ago, and in 1992 we had developed a computer model that allowed us to project the minimum winning coalition. And we also had taken advantage of the fact that for almost 14 years we'd had seven elections in a row in which we had these gigantic phone bank operations. And I'd been sort

of in charge of collecting all the data from that and then storing it.

Technology, ironically enough, if it's properly used, allows you to get back to the most personal form of campaigning, which is empowering individuals to talk to somebody who looks, thinks and sounds like them—maybe even who's known to them. That's the most powerful kind of campaigning you can do.

How about social media?

It's a revolution. I've been involved in a super PAC, American Crossroads Senate Leadership Fund, and in 2010, when we began, we spent about five percent of our budget on digital. Today it's about 30 percent. Now, there are some limitations, but there are great advantages and of course also serious problems. I'm deeply concerned about the fact that the internet and social media allow for such easy proliferation of false information. If you run a TV or radio ad or send mail, there are ways to find out who was behind it. But with digital communications you're often unable to find out from where or whom it's coming.

Whether in campaigns, at your company or in government, you've been building and leading teams for decades. What are your management principles?

First of all, I consider being an effective leader a continuous learning process. I cringe thinking about my early days starting a business at 31. The key lesson I've learned is that in order to serve a customer or, in the case of politics, gain enough of a person's trust to win their vote, you have to listen. It's sounds easy, but it's hard work.

Second, you have to have vision. Without that vision, nations perish, organizations perish, and campaigns fail. If you have an idea of what it is you want to achieve and can communicate that throughout your organization, the greater the chance of your success. Because people will come forward with great, powerful ideas for how to operate and succeed.

What did you learn about management from George W. Bush?

I learned a lot, first from Governor Bush and then President Bush, about how you have to have a deliberative process to arrive at big decisions. You need a structure in which everybody who has a stake in the outcome has a chance to be heard; find common ground on what constitutes the facts;

**"TECHNOLOGY,
IRONICALLY
ENOUGH, IF IT'S
PROPERLY USED,
ALLOWS YOU
TO GET BACK TO
THE MOST
PERSONAL
FORM OF
CAMPAIGNING."**

find areas of agreement and crystallize the areas of disagreement; and then bring those disagreements forward, working toward a decision in a way that's respectful and honest, but also powerful.

I remember Governor Bush saying that when an argument was made to him in which there was likely to be disagreement, he wanted the arguments to be made respectfully, but he wanted them to be made as powerfully as possible. So, he encouraged us to share our arguments with those who might disagree, so people could properly prepare and hone their own responses. And when it finally came to him, people had built the best possible cases on both sides of the issue. So whatever the decision was, it was likely to be a better decision simply by going through such a tough process.

One thing I learned from him as governor, and driven home in the White House, was how important it was to make certain that people understood you could say uncomfortable things and respectfully disagree with a colleague. Even if you lost the argument, he'd go out of his way to make certain that he congratulated you on doing a good job. Because nobody's right all the time, and he wanted you to come back for the next discussion as deeply informed and as ready to argue as possible. Again, the goal was better decisions.

How about in terms of managing your own time?

I try to get the problems out of the way early in my day. At the top of my to-do list are the calls that I don't want to make, for example.

And I try to be disciplined with my time. That includes making certain that I read. I think readers are higher performers. Every person I know who's got an interesting book on the nightstand is an interesting person, as well.

Reading relaxes me and informs me, and it helps me remain disciplined. It's like when I'm writing a column. I found it was pretty easy to write a column when I started for The Wall Street Journal, but I'd be writing 1,400 or 1,500 words. When I realized I had to turn in 750 words, it required a significant level of discipline. So, I'd agonize every Tuesday and Wednesday, as I wrote my column, sweating over every word, because I only have 750 words and I needed to decide what's the most powerful and economical way to make my point.

That discipline is so important. ♦

RAUL DAMAS is a Partner in Brunswick's New York office, specializing in public affairs and crisis communications. He worked for Mr. Rove while serving as Associate Director of Political Affairs in the White House.

SURVIVING

ONE CONSEQUENCE OF IT BEING KNOWN IN the workplace that you are a long time in remission from cancer is that colleagues who are just confronting the reality of diagnosis—or more accurately the trauma of it—come to talk about what to expect.

I generally give two pieces of advice. First, the main rule for surviving is to stay alive! This isn't as banal as it sounds. When you tell friends and colleagues that you have cancer, many look at you as if you are already dead. You can see fear in their eyes. You have to ignore this and go on living. Also, people just diagnosed are often otherwise healthy and won't understand how vulnerable their bodies will become when they have chemo or radio therapies. I tell them to take precautions from the outset—to husband their strength while they have it—and to aim to endure rather than defeat this particular foe.

Second, I tell them to set aside the popular language about cancer sufferers—battles, fights and courage. This language is a trap. In the midst of brutal treatments or when one's white blood cell count is abnormally low, the most one can hope for is to endure, especially when one's morale is undermined by the treatment itself and despair comes to call.

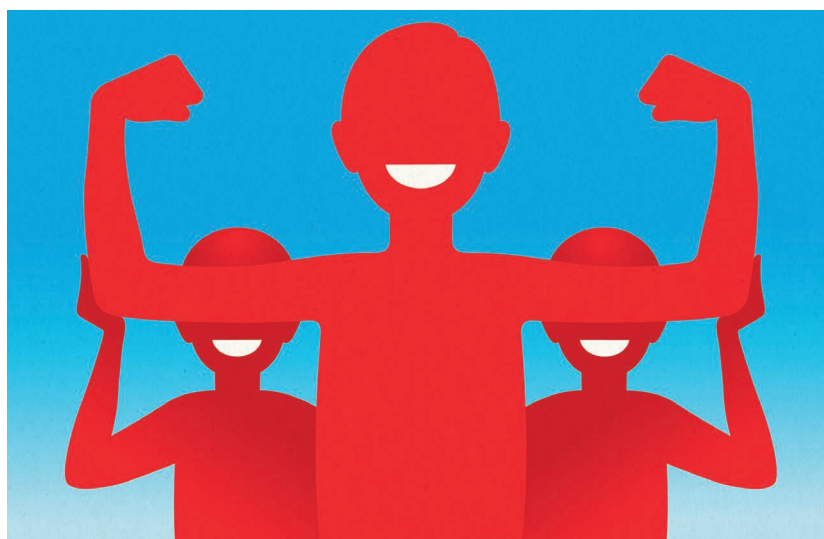
Those studying morbidity in cancer patients look at resilience as a factor in survival and a route to improvement in the patients' quality of life. There is a debate between three broad schools. The first thinks personal resilience comes from existing characteristics that enable an individual to thrive in the face of adversity. The second group sees positive adaptation in response to the stages of the illness and treatment that protects the individual from psychological distress. This may be generated by the individual themselves as they learn, but more often it's coping mechanisms offered by those around the patient with a dispassionate vantage point. Finally, some believe that it is the traumatic stress itself which causes the patient to become resilient (one set of researchers describe this as "Post Traumatic Growth"). Is that Nietzsche or what?

All agree that social support sustains the hope and optimism of patients. It also bolsters their confidence in being able to rationally process what is happening to them, with at least some discernible parameters

**Brunswick's
PADDY
McGUINNESS**
shares a kind of
expertise nobody
wants to gain.

for the outcome. Those with colleagues and friends who stick with them and engage with their progress through diagnosis, treatment, recovery and the long process of remission—or, for some, the acceptance of a curtailed life—endure better. The prospect of returning to normality also keeps people going. At their most ill, they talk of returning to work.

A perhaps less obvious aspect of this very human need for support is the effect of medical professionals. When one has cancer, one meets exceptional specialist doctors, nurses, psychologists and carers, all of whom are as focused as you are on seeing off this illness. They are profoundly on your side even though they say the most challenging things to you about the uncertainty of your continued existence and the difficulty of what you must do to survive. The oncologist's description of the course of the illness and the options for countering it are fascinating and engaging until you realize that the "morbidity" that they are talking about is your potential death.



When it is done, those medics stay with you most. They knew what was coming and took you through it, telling you how hard it would be so that you had the measure of it.

I hesitate to make some clumsy read across to business resilience or to Brunswick's crisis practice other than to say that real crisis, by its nature, overpowers. Most crisis management is about something less. Two things stand out for me about the Big C. First, I don't think not being killed by it makes you stronger. A real existential crisis makes you different—it transforms you, your family, your colleagues, your workplace. Second, we are lucky that, in our privileged cultures, there are heroes who come to your aid, determined that you should be robust when confronted by the realities of frailty and that you should recover. ♦

PADDY MCGUINNESS, former UK Deputy National Security Advisor, is a Senior Advisor to Brunswick in London.

Matt Damon & Gary White

IN 2006,

MATT DAMON

FOUNDED A CHARITY

called H2O Africa to raise awareness about the immensity of human suffering and death for want of clean water and sanitation.

Every two minutes, a child dies from water-related disease. Annually, nearly 1 million people die from water, sanitation and hygiene-related disease. Worldwide, more people have a mobile phone than have a toilet. • But the actor who performs super-human feats on screen realized that he lacked the expertise needed to solve what he has called “the beautiful complexity” of the world’s water-and-sanitation problem. His search for the ideal partner ended when he met Gary White, who from a modest office in Kansas City had earned an international reputation as an authority on water and sanitation. • When the pair first met at the 2008 Clinton Global Initiative, Mr. White was running WaterPartners, a nonprofit he had founded almost 20 years earlier and through which he had pioneered an unconventional but effective model to deliver water and sanitation in low-income countries.

It was an area of human development where organizations from the UN and World Bank to small NGOs had spent billions of dollars over decades, often with disappointing results. As Mr. Damon told the Review, Mr. White’s insight was that market dynamics for water had to be part of any sustainable solution because “people were already paying for water. And often the poorest people in the world were paying 10 to 15 times what the middle class were paying because they weren’t connected to the existing infrastructure.” • Mr. White’s experience had shown that the tool most people needed to access clean water wasn’t a drill rig or a grant, but rather an affordable loan to pay for water in a way that made sense for their circumstances, and for which they felt real ownership. Seen that way, clean water no longer became a gift to bestow upon people living in poverty, but rather a product they needed help purchasing. That shift in thinking had started water flowing to poor communities across the world. • The pair combined their organizations in 2009, and Water.org was born. Today, using a blend of innovative financing techniques and working with partners across the private and public sectors, Water.org is helping thousands of poor communities and millions of people gain access to clean water and decent sanitation. And it is doing so sustainably, bringing benefits year after year to the communities it reaches, and in ways that every CEO and investor can appreciate: with verifiable numbers and results. • People who matter are taking notice. Messrs. White and Damon, in partnership with other organizations, engaged with officials from The Reserve Bank of India, the country’s central bank, to advocate for policies that have encouraged more affordable water and sanitation loans countrywide, while Water.org has built partnerships with large foundations (including the PepsiCo and IKEA foundations), leading businesses (including Bank of America and Anheuser-Busch InBev), and with organizations like the WHO and World Bank. Charity watchdogs invariably rate Water.org as among the most efficient nonprofits. • The organization’s journey began

The **WATER.ORG** founders argue that the way to bring clean water and sanitation to the poor of the world at scale isn’t by drilling wells or installing toilets. Nor is it through charity alone. The solution, they say, is market-based financing.



three decades earlier in a tan-bricked Knights of Columbus banquet hall in Kansas City, Missouri. It was there, in his hometown, that Mr. White held his first fundraising dinner. “I invited about a hundred family and friends to learn about the issue and raise some money. And then we supported a water project in Honduras.”

Mr. White, then in his 20s, received pro-bono help from friends but was his organization’s only full-time employee for about two years. Inspired by the example of Mother Teresa and the Christian Brothers who had taught him in high school, he initially drew no salary, then put himself on the payroll at a starting wage of \$100 per month.

“It really was just brick by brick,” Mr. White says of the foundation’s growth. “This is pre-internet; all fundraising was analog. Nonprofits sent out newsletters and held events. That’s how you raised money as a grassroots organization. Once you got bigger, then you slowly cracked into the foundations and corporate sponsorships. But in the early days, all we had were those fundraising dinners. We were in Columbia, Missouri, for a while, and it was a pretty big leap to get to Kansas City,” Mr. White joked.

Water.org remains headquartered in Kansas City, whose airport offers non-stop international flights only to Mexico, Canada and Iceland. But its programs reach more than 1 million people every quarter across Africa, Asia and Latin America. A partnership between Water.org and Stella Artois saw Mr. Damon star in a 2018 Super Bowl commercial broadcast to an estimated audience of more than 100 million. The organization now employs more than 100 people and has used philanthropy to help create a loan portfolio of more than \$1 billion. It has also launched a standalone organization, WaterEquity, that delivers returns to investors as it brings clean water and sanitation to the poor. It’s a model that taps into sources of funding that traditionally would not or could not go near such investments, deeming them too high-risk and low-return.

You’d expect Mr. White, who boasts more engineering diplomas (three, two of them graduate degrees) than he does tweets (two, including one that reads “test”), to focus on Water.org’s work behind the scenes, and for Mr. Damon, as an international movie star, to show up and discuss that work publicly. But no such division exists. In global development circles, Mr. White is a rock star, and at Water.org Mr. Damon is known for getting his hands dirty. Mr. Damon “is not a spokesman for Water.org,” says Jennifer Tisdell Schorsch, Water.org’s President. “He is a

true co-founder. He’s deeply involved in developing strategy and new ideas.” Mr. Damon also remains the organization’s largest individual donor.

Though Water.org and other organizations are seeing progress—“Over about the last 20 years, more than 2 billion people have gained access to water for the first time,” says Mr. White—the need remains desperate. One out of nine people worldwide lacks access to safe water. One of three lacks access to sanitation as basic as an outhouse.

On a trip to Central America decades ago, Mr. White recalled visiting a village that lacked clean water and being struck by “how many above-ground graves there were, and how small most of them were.” Sadly, those small graves are still erected today: Water-related disease continues to kill more children than AIDS, measles and malaria combined.

Beyond the human tragedy, this water crisis also carries a steep economic price tag. The World Health Organization estimates a lack of basic water and sanitation results in a loss of \$260 billion in global productivity each year. This loss accrues in daily sacrifices borne disproportionately by women: Every day, women and children spend 200 million hours finding and collecting water for drinking, cooking and washing, while women and girls spend even more time—266 million hours—each day searching for somewhere to urinate or defecate. This is time not spent with their families, time not spent learning (and on average, each additional year of primary education increases a woman’s earning power by 15–25 percent), time not spent at a job—time which a simple toilet and/or faucet could reclaim.

The acerbic author and journalist H.L. Mencken wrote that “There is always a well-known solution to every human problem—neat, plausible, and wrong.” The neat, plausible solution for the water and sanitation crisis would seem to be to raise as much money as possible and then use it to drill wells and install toilets. But such a well-intentioned approach is often unsustainable. After wells are drilled, more money is needed to maintain them, beginning the seemingly endless cycle of raise-spend, raise-spend. It also smacks of paternalism for outsiders to build what they believe the poor need.

Such an approach can also prove lethal. If wells aren’t maintained, the water they yield can become contaminated and toxic; toilets that cease working can become a source of disease rather than a tool for better hygiene. One 2009 report by the International Institute for Environment and Development cited \$360 million that had been wasted on water projects in rural Africa and 50,000 “water supply points”



School children enjoy clean running water from a faucet (top), while a simple outhouse and toilet provide basic sanitation—and dignity. Water.org helps people and communities secure financing to build such facilities in 13 countries across Latin America, Africa and Asia, reaching more than 1 million people every quarter.

PHOTOGRAPHS: COURTESY OF WATER.ORG



MATT DAMON on life, water and President BILL CLINTON

The stories you've told about your work are so dramatic, so life-changing and inspiring. Is it ever difficult to switch gears, stop thinking about water and focus on your other responsibilities?

If I'm on a movie I'm working 15 hours a day, but if I'm not I'm with my family or I'm doing this, and it makes for a full and fun life.

The problem's not going to go away if we all don't get in there and mix it up a little bit. More kids are dying from this than from AIDS, measles and malaria combined.

It's the most serious problem out there, and we need to approach it just as seriously.

The issue is complex, as is Water.org's micro-finance driven approach. How do you convey the nuances of both in a landscape when attention spans are shrinking and the interest in soundbites is increasing?

It is our first hurdle because people in the West find it hard to relate. It is not like cancer or AIDS, where most people know someone who is affected. This is where our partners come in.

Our collaboration with Stella Artois provided us access to some of the top professionals in marketing and messaging. Where we struggle to explain the complexity of the issue and our model, their team can go right to the core message that will resonate

with their customers. The same holds true of our partnership with Bank of America. They showed us how to package a blended finance deal that is attractive to investors; create tranches to spread risk and then they showed us how to speak to the interests of potential investors.

What's the best piece of advice you've received from a fellow philanthropist or social investor?

The best advice I ever received on this came from President William Jefferson Clinton. He said, "just keep running those numbers up." And that is what we do. Run the impact numbers up while pushing the costs down.

across the continent that were no longer accessible.

Frustration over flawed projects and disappointing results helps explain why water-related investments and grants are falling far short of what's needed. To reach the UN's goal of providing clean water and sanitation globally by 2030, the World Bank estimates that annual investments and grants would need to jump more than 10-fold, or almost \$90 billion.

Meanwhile, rising temperatures raise the danger of catastrophic drought as expanding populations exacerbate water scarcity. Expecting budget-constrained governments to close the gap seems more hopeful than strategic; making philanthropic dollars stretch further is important but not sufficient. So the spotlight turns toward the private sector, with its unique incentives, its vast resources and its global reach.

This will trigger some understandable skepticism. If past money failed to solve the problem, why would future money fare better? The answer is that more money alone will not; but money handled with the discipline of the market can and will—and is.

"Addressing water and sanitation is, in many respects, about addressing a financing gap," says Mr. White. "People living in poverty are willing to meet us halfway—if they can get access to affordable financing, they can basically become their own solution."

"Imagine a slum in India," says Mr. Damon. "The municipality in India is pumping water right underneath their feet and they're just not connected to it. It's going to the hotel down the street." By no means localized to India, the challenge isn't bringing clean water to people, it's helping them buy access to it.

"Gary took the concepts pioneered by Muhammad Yunus [a Nobel laureate for his work in micro-finance] and applied them to the water sector," says Mr. Damon. "At the time this was a bit of a thought leap for people because it wasn't an income-generating loan; it was an income-enhancing loan. Somebody who was working a job, who was living in this slum and not connected to the infrastructure, they would take time away from their job to go queue up and get water at an appointed time. So Gary said, 'Well, if we could buy them that time back and connect them directly, I bet they could pay this loan off.'"

Water.org helps provide those loans through two main avenues: First, what it calls "catalytic philanthropy," and second, through what it calls "blended financing."

Its catalytic philanthropy runs through its WaterCredit program, which doesn't directly loan to people, but rather helps local institutions do so (the average loan ends up being about \$360) by provid-

ing those institutions with subsidies that range from about \$75,000 to \$200,000 a year. These subsidies cover things like market research, hygiene education and loan product development, and one of the conditions attached to them is that the institutions monitor and report their loans, which Water.org then verifies.

To date, Water.org has used \$29 million in grants to help build a loan portfolio of roughly \$1.7 billion—in other words, every dollar Water.org has granted has catalyzed \$57 in loans toward water and sanitation. And since 99 percent of those loans are repaid, this capital is recycled, funding other loans—loans that measurably improve their recipients' lives, most of whom (88 percent) are women. In India, slightly more than half (53 percent) of WaterCredit borrowers were earning at least \$47 per month before taking out a loan; 97 percent had reached that level after paying the loan back.

Mr. White, perhaps no longer content with the “brick by brick” pace which defined the organization's early days, told the Review he has a strategy in place for Water.org to mobilize an additional \$3.8 billion and reach a total of 60 million people by 2020—all that is lacking are the funds to do so.

“It strikes me how much like working for Howard Schultz it is to work for Gary White,” says the organization's President, Ms. Schorsch, who was a senior executive at Starbucks for more than eight years. “What I mean is Gary is highly impatient to deliver scale and impact. He is constantly looking over the horizon for what's next: How we can innovate, how we can accelerate what we're doing now to build a still greater and more powerful solution to the crisis.”

There is plenty of demand for Mr. White's impatience. The Bill & Melinda Gates Foundation estimates a \$12 billion market for water microfinance; Deloitte estimates the market for toilets in rural India alone to be as large as \$14 billion. The idea to open these underserved markets to return-seeking investors began with a discussion between Messrs. White and Damon in the back seat of a Jeep in India. That conversation eventually crystallized into the now standalone organization WaterEquity.

Whereas Water.org and its WaterCredit solution are philanthropic, WaterEquity raises funds that offer returns. Unique about these funds is their blending of philanthropic capital with institutional investor funding. Since only a portion of the fund's investors are seeking returns, those returns can be higher than they otherwise would be, making them more attractive. This may sound like philanthropic capital simply lining the pockets of the already well-

EVERY DOLLAR
GRANTED BY
WATER.ORG
CATALYZES, ON
AVERAGE,

57

DOLLARS
IN AFFORDABLE
LOANS TOWARD
WATER AND
SANITATION.

88

PERCENT
OF THESE
LOANS GO TO
WOMEN.

By **EDWARD STEPHENS**,
a Senior Writer at
Brunswick based in
New York.

endowed, but it allows WaterEquity to approach some of the world's largest asset managers, which can legally invest only in opportunities that provide certain returns. And it has the potential to attract investors who have long considered low-income markets not worth the risk—all in the name of improving the lives of people living on less than \$5 a day.

In disbursing that money, WaterEquity follows a similar approach to its philanthropic cousin. “We're basically leveraging Water.org's extensive partnership network to find financial institutions globally,” says Tom Light, a former investment banker at UBS who is WaterEquity's Managing Director. “These banks take our \$3 million investment, let's say, and they chop it up into \$280 loans, and they loan it out to thousands of people to build either water connections or toilets for the first time.”

Mr. Light says about 90 percent of WaterEquity's funds are directed toward these local financial institutions, with the remainder invested in small- and medium-sized businesses like local utilities or equipment manufacturers. But again, their role is financing, not building or operating. “Why would you create a business if the ecosystem already had it?” says Mr. Light.

In April 2019, WaterEquity closed a \$50 million fund—nearly double the total amount WaterCredit has granted since its inception—and is in the process of developing a larger fund, suggesting it could bring greater amounts of capital to bear on the issue than mere philanthropy could.

“People shouldn't think differently of us because we're a non-profit investment manager,” says Mr. Light. “We are institutional quality. We do exactly the same thing that I did with my prior firms. Our credit policies, our due diligence process, our regulatory affairs department—everything is exactly the same.”

Cynics of its approach and of impact investing more broadly may be troubled by the idea of providing basic necessities to the poor only on the condition of a financial return. Mr. White responds that what matters is what's best for the poor. “If we can move large amounts of capital towards those living in poverty in a way that actually makes them better off and isn't usurious, then we're going to pursue that,” he says. “It's not philanthropy or nothing.”

“Do you curse the darkness or do you light a candle? Do you say, ‘You banks should give water to everybody for free’? Or do you say, ‘OK, here's a way you can make a modest return’? Or to a high-net-worth individual, ‘Here's a way that it can be win-win’? I'm much more about lighting candles than cursing the darkness.” ♦

Healthy LEADERSHIP

MASSIVE CHANGES TO THE WAY WE LIVE AND work put relentless pressure on all of us. Yet most workplaces still struggle to recognize the effects on employees.

A great deal of stress is imposed by technology innovations. Technology allows us to be vastly more efficient and productive, but also creates expectations about the speed of response and our general availability, blurring the line between time at work and time away from work. Employees are typically left to figure out that balance for themselves.

Meanwhile, jobs themselves are changing. Some people feel liberated by the thought that they will not be in the same job or at the same company for the duration of their career. But others feel overwhelmed by the need to regularly develop new skill sets and grow into shifting areas of expertise. Companies and whole occupations are being redefined—even disappearing—at rates faster than ever before.

Add to these the stress caused by financial worries (such as the rising cost of education or the uncertainty of retirement savings), environmental concerns, or political and societal uncertainties. The impacts felt by the individual employee ultimately affect a company's bottom line if left unaddressed.

What's needed is resilience—the ability to bounce back from repeated stress. Most of us can handle a single event, but repeated stress over a period of time can have significant health impacts and has been linked to major diseases. The fallout costs employers billions of dollars in healthcare, absenteeism, turnover and low employee engagement annually.

Company-sponsored wellness and awareness programs—yoga classes, meditation apps and health savings accounts—are helpful, but they're not enough. Workplace culture has to support well-being. If an employee works for a toxic manager, is expected to wade through 200-plus daily emails in addition to their work, or feels ashamed to tell anyone about their deteriorating mental health, their well-being declines. It becomes harder to bounce back. In that environment, encouraging employee responsibility for well-being is a message that is likely to ring hollow.

Building a culture of employee resilience drives sustainable performance, say Brunswick's **KAROLINA KARR** and well-being expert **KYRA CAVANAUGH**.



KYRA CAVANAUGH is President of 15Be, a learning experiences company that helps employers improve workplace, team and individual well-being through workshops and WELLTEAM leadership certification. **KAROLINA KARR** is Brunswick's Chief People Officer, based in New York.

There's a lot that business leaders can do to dramatically improve the culture in their organizations. Here are five strategies to help develop resilience:

1. Build sensitivity at the top. Traditionally, we've trained leaders to optimize performance. Now they need to manage for well-being as a performance driver. Leaders with consistently high turnover rates and low engagement scores need training and coaching. When all else fails, show them the door. Build well-being leadership practices into development programs. Recognize high-performing leaders who grow a team culture of belonging, respect and well-being.

2. Give your employees autonomy. Command and control is out. Trust and decentralized decision-making are the keys to drive innovation and support growth. Start from a place of trust and give every employee the direction, freedom and decision-making power they need to demonstrate success. Offer flexibility in where and when they do their work. Encourage risk taking and allow room for mistakes.

Institutionalize consistent feedback so that employees and managers always know where they stand.

3. Encourage social connection. Loneliness is at epidemic levels. Social infrastructure and the value placed on personal interaction are on the decline. Build shared spaces where employees bump into each other to share conversation and ideas. Include remote employees and satellite locations in team and company activities. Encourage coffee breaks, lunch away from the desk, and events outside of work. Create device-free interactions. Find ways to casually share ideas and build social capital.

4. Remember the golden rule. Treat others as you would like to be treated. Bring civility back into the workplace. Gratitude, compassion, empathy, authenticity, being fully present and attentive—these are characteristics of the best leaders.

5. Live your values. If you expect constructive behavior, you have to live it. Demonstrated, it can increase the humanness of your workplace and, in turn, employee resilience. Show you're serious.

Since the Great Recession it's been standard procedure to maximize profits by putting performance ahead of well-being. It's time to recognize employee well-being drives that performance we seek. Your employees' health depends on it; your organization's financial health depends on it. Higher employee productivity will result. Resilience drives performance. ♦

IN 1996, WALTER ISAACSON BECAME EDITOR OF Time Magazine. Five years later, he was hired as CEO of CNN, where he oversaw the television network's coverage of 9/11. In 2003, he joined the influential nonprofit Aspen Institute as President and CEO, a position he held until 2018.

Over that same stretch Mr. Isaacson researched and wrote 600-plus-page biographies of Leonardo da Vinci, Steve Jobs, Albert Einstein and Benjamin Franklin—all New York Times best-sellers, with *Leonardo da Vinci* and *Einstein* occupying the No. 1 positions on that list.

He also authored a collection of essays on leadership, a biography of Henry Kissinger, and yet another best-seller, *The Innovators: How a Group of Hackers, Geniuses, and Geeks Created the Digital Revolution*.

Mr. Isaacson, who ranks among America's best-selling and best-known intellectuals today, is currently the University Professor of History at Tulane University in his hometown of New Orleans.

At a restaurant near that campus, over a dinner event hosted by Brunswick, the firm's CEO of the Americas, Nikhil Deogun, spoke with his long-time friend. Mr. Deogun opened the conversation by recalling a discussion the pair had had years ago.

"How do you have time to write as much as you do?" Mr. Deogun asked.

"I don't like golf," Mr. Isaacson said. "I go home and write."

Who wins a poker game between Leonardo da Vinci, Benjamin Franklin, Albert Einstein and Steve Jobs?

Steve Jobs wins because Steve Jobs is the best business mind I ever met. And he was the best business mind because he understood that he was connecting creativity to innovation. In other words, people like Bill Gates seemed smarter, but Bill Gates was making the Zune, which was a music player that, to look at, was anything but a work of art. Steve believed that beauty mattered and he had an absolute passion for it.

Although Steve Jobs wasn't a great engineer, and he didn't know anything about finance, he was the best business leader of our time because he knew that you lead with the product. He revolutionized the music business, the media business, put a thousand songs in our pocket and created the iPhone. Finally, after he resisted it, he allowed the App Store to be on the iPhone, which meant everything from Uber to Airbnb could exist.

While holding leadership positions that would mark the pinnacle of most careers, **WALTER ISAACSON** also found time to write wildly best-selling biographies. He talks with Brunswick's CEO of the Americas, **NIKHIL DEOGUN**.

WALTER ISAACSON

What lessons can otherwise ordinary humans take from the polymath subjects of your biographies?

When I wrote *Leonardo da Vinci*, what particularly struck me was that he wasn't the smartest dude around. He was uneducated. He was illegitimate, left-handed, homosexual, never went to school, never went to college, never knew Latin, never learned algebra—a total outsider.

And yet, he is the most accomplished creative genius probably in history. And he did not have the



mental process of an Einstein. There's nobody in this world who could ever aspire to be Einstein. But every one of us can be more like Leonardo da Vinci. He just willed himself every morning to walk down the street and see how light was hitting a leaf, or whether the wings of a bird flapped up faster or down faster—which, by the way, depends on the bird. He was just more curious and more observant.

Every week in his notebooks—and we have 7,200 pages of his notebooks left—he'd make a list of all the things he was curious about. They were simple

**"WHETHER IT
WAS BOTANY OR
HOW TO BALANCE
POWERS IN
A CONSTITUTION,
BEN FRANKLIN
WAS GREAT AT IT."**

things: "Why is the sky blue?" All of us go outside, we see a blue sky. We don't pause to be curious. My favorite from his notebooks is: "Describe the tongue of a woodpecker." He's 29 years old and he writes that. I mean, who wakes up one morning and thinks that? What would you do to even find that out?

But that was Leonardo, every day: being curious about different things. Most of us won't have the mental processing power of a genius. But all of us can connect beauty to how things work and just be curious, relentlessly curious.

Has that affected you?

Absolutely. I now try to pause seven or eight times a day and be slightly curious about something. I'll say, "Hold on a second: Let me try to figure out what that was, let me research it." And I like that about both Steve Jobs and Leonardo da Vinci. Steve wasn't as smart as Bill Gates; Leonardo da Vinci wasn't as smart as Luca Pacioli—but you never heard of Luca Pacioli. He was a great mathematician; he was Leonardo's best friend. But you have heard about Leonardo because he was creative.

Starbucks didn't invent the coffee shop and you didn't write the first biography of da Vinci or Einstein or Franklin or Jobs. Where do you find the courage and insight to mine topics that had been regarded as mined out?

First of all, scientists have sort of become a high priesthood. They don't believe everyday ordinary people can understand things. And likewise, historians have become—especially academic historians—a high priesthood and they write only for themselves. I try to write a narrative.

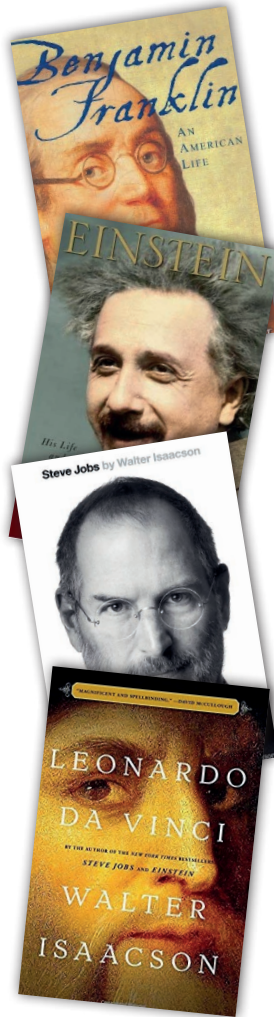
Walker Percy [the late New Orleans novelist] once said, "There were two types of people who come out of Louisiana, preachers and storytellers." And he said, "For heaven's sake, be a storyteller. The world's got far too many preachers." And what I try to do is just make it a narrative story.

I'm never going to come up with a theory of special relativity. But I can make it a narrative story of a kid who couldn't get a job teaching. Einstein's a third-class patent clerk—they won't even give him his doctorate because they can't even understand his doctoral dissertation—and he's got the task of looking at patent applications of synchronized clocks.

And all he does is start experimenting. He imagines, he visualizes: If you're going really fast toward one clock, will it look synchronized, will it be different than if you're going really fast to the other clock? I'm cutting out a few steps here, but he comes up with the notion, "Oh, I get it, the speed of light is relative depending on your state of motion." The speed of light is constant otherwise, but as you move, time gets to be relative for you. And that's a weird little concept. But he's just a patent clerk who's able to picture things. It's a great story.

What's your next book?

It's unlikely to be as popular, but it's about the race to do CRISPR, the gene-editing technology. It somewhat has to do with how women have been marginalized in science, although it didn't start this way.



Four of Walter Isaacson's best-known biographies: *Leonardo da Vinci* (2017), *Steve Jobs* (2011), *Einstein* (2007), and *Benjamin Franklin: An American Life* (2003).

In 1998 or 1999, all the leading men in biochemistry and biotech were on the gene-sequencing project, the Human Genome Project. The women get cut out of there. So Jennifer Doudna, now at Berkeley, and Emmanuelle Charpentier at the Planck Institute in Germany, they decide they're going to focus on RNA. And they discover a technology to use RNA, to take something called CRISPR, which is repeated sequences in a gene, and they're able to cut your gene and edit it, like you do on a Microsoft Word document. They invented this technology.

I wrote about Einstein because physics was a defining technology of the first half of the 20th century. Einstein writes four papers in 1905—quantum theory, relativity theory, $E = mc^2$ and the theory of electrons—that culminate in the atom bomb, the GPS, etc. You start then, right in the 1950s, then you've got the internet, the computer, the microchip, transistor—you have information technology.

The next 50 years, I'm convinced will be the biotech half-century. We're trying to cram it into our kids that they should all learn coding. Forget about it. Machines are going to code better than we are. But having this creativity and understanding of the humanity that we connect with it, and understanding basic biological concepts, that's going to be the next important thing.

You mentioned the focus on coding and computers. With your historical perspective, should humans be excited or worried about artificial intelligence and machine learning?

I wrote a book called *The Innovators* that starts with Ada Lovelace, who was Lord Byron's daughter. When she was growing up, her mom didn't particularly like Lord Byron—that makes sense if you know anything about Lord Byron.

So Ada's mom has her tutored only in math, thinking that'll keep her from being a romantic poet. But Ada loves the notion of what she calls poetic science, connecting the humanities and science. And she comes up with a notion that the punch cards, which all have a beautiful pattern, can make a general-purpose computer, make music, words, whatever. This was in the earlyish 1800s, by the way.

But she has what's called "Ada Lovelace's Objection": Machines will be able to do everything except be creative. Only the humans will be creative. A hundred years to the day after she writes that, in 1937, Alan Turing does this famous paper called "Can Machines Think?" And he invents the field of artificial intelligence and essentially says, "Machines will be able to replace us. They're going to wipe us out."

Ever since then, it's been a question of the Ada Lovelace school, which is the connection of human creativity to machine in a "synergistic way," as she called it, versus a Turing way, which is trying to create machines that will get rid of our jobs. Every single data point we have is that the connection of humans with machines will always be more creative than machines alone or humans alone.

And if you look toward the future, never, including right now, have machines decreased the total number of jobs. If technology were going to decrease the total number of jobs, we'd all be unemployed now. We have the lowest unemployment rate in 50 years. So I'm a strong believer that what actually Ada called the "man-machine symbiosis" will always triumph.

Which means, as I teach my students at Tulane, what you've got to learn is not how to make machines that are smarter than humans, but how to make machines that can interrelate with humans, so machines and humans can work together better. And I'm convinced at least for the next 100 years, that's the way it'll be.

Will machines finally replace us? I guess it's possible. But I'm only a historian. I'm not a futurist. But every time we have a quantum leap—and I'll call quantum computing a quantum leap—in technology, it makes a quantum leap in productivity. That's what technology is, an increase in productivity. You add productivity, you have more demand for product. So I'm convinced that in the next century humans won't become irrelevant.

You grew up in New Orleans, you worked here as a young man, you came back here late in life. Are you going to write a book about the city?

I once tried and I may do it still. This is something I don't normally confess, but I spent two years doing a biography of Louis Armstrong. He grew up in my neighborhood, Perdido Street in New Orleans. I actually heard Louis Armstrong play when I was a little kid, when he'd come to town.

Louis Armstrong is filled with the complexity of race in New Orleans. He played in blackface in 1949 and was criticized then. He went through all of these things and he helped create jazz—he's the one who brings the ragtime and the syncopated beats.

I spent two years researching and knew everything you could possibly know about Louis Armstrong, except for who he was. I couldn't figure out whether he was happy, couldn't figure out his views on race. He was a very difficult subject. Someday I would love to write about New Orleans by doing that book on

**"THERE'S
NOBODY IN THIS
WORLD WHO
COULD EVER
ASPIRE TO BE
EINSTEIN. BUT
EVERY ONE OF US
CAN BE MORE
LIKE LEONARDO
DA VINCI."**

Walter Isaacson discussing Leonardo da Vinci's famed "Vitruvian Man" drawing on "The Late Show with Stephen Colbert" in 2017.



Louis Armstrong. It would be my way as a biographer of getting into jazz. But I would do it probably with Wynton Marsalis or Jon Batiste, somebody who could help me figure out how to get beyond the mask.

Of all the people you've written about who you've never met, whom would you invite to dinner?

Ben Franklin. He was the most sociable guy you'd ever meet. Like Leonardo, he had the No. 1 virtue of the people you want to have dinner with: He was interested in knowing everything you could possibly know about every subject. Whether it was botany or how to balance powers in a constitution, Ben Franklin was great at it.

He also loved great wine and great beer. He has a wonderful bagatelle he wrote to his two mistresses in Paris: One was called Wine, one was called Beer, and how they're both God's way of telling us that the good Lord loves us.

Franklin even formed something called the Leather Apron Club. It was a dinner every Friday night where people got together and answered questions like, "Why does it take one day less to get to Europe than coming back?" And to answer that they'd do something like discover and map the Gulf Stream.

At one of these Leather Apron dinners, the question was, "Does immigration add to the economy in Philadelphia or detract from it?" At another they asked about an estate tax—is it a better way of doing it than an income tax? They were having the same debates we are today. But unlike us, they were doing it by saying, "Let's get together and figure out the evidence and see what's going to work the best." ♦

NIKHIL DEOGUN is Brunswick's CEO of the Americas and US Senior Partner. He was Editor in Chief and Senior Vice President, Business News, at CNBC.

IN LATE MARCH LAST YEAR, UNDER ARMOUR learned that its MyFitnessPal app, which tracks diet and exercise, had a data breach that affected 150 million users. It's not uncommon for companies to take several weeks—or even months—to publicly announce a cyber attack of that scale.

Under Armour did so in four days.

Observers praised the speed of Under Armour's response and the concern it showed for users, whom the company also refers to as athletes. A Forbes arti-

Then on Sunday, an undisclosed but trusted source said they had a file for us. After four hours of trying to download this file—it wasn't timing out, it was still downloading—I realized we had a problem. When we were able to start accessing that file, we realized very quickly what the situation was. That was about 8 on Sunday night. As leads for the incident response team—one of my many roles as Deputy General Counsel—our information security officer and I called it a breach that night.

UNDER ARMOUR'S response to a cyber attack achieved the seemingly impossible: Rather than fueling outrage, it actually drew praise. Brunswick's **SIOBHAN GORMAN** reports.

DATA BREACH

cle published one day after the company announced the attack said, "Kudos to Under Armour for its response so far." Roughly a month after the announcement, Under Armour's share price was up more than 9 percent; after announcing a data breach that affected 143 million consumers, Equifax's share price had sunk by more than 11 percent a month later.

Brunswick's Siobhan Gorman, who advised Under Armour, revisits the event with the three women who led the company's response:

C.M. Tokë Vandervoort, Senior Vice President at Under Armour and Deputy General Counsel at the time of the breach.

Kelley McCormick, Senior Vice President at Under Armour, Corporate Communications.

Lisa Sotto, Chair of Hunton Andrews Kurth's global privacy and cybersecurity practice, and Managing Partner of the law firm's New York office, who was brought in as outside legal counsel.

In their re-telling, the team was able to act with such speed because they had built a level of trust seldom found in a large, global company. And the strategy was dictated by something almost every company has but often loses sight of during a crisis: core values.

TOKË VANDERVOORT: March 23rd was a Friday, and that night and the following afternoon we received two separate tips. One of our guys heard through a back-channel whisper on LinkedIn, "I've got some information that might be interesting to you." It was just a sample of dated data—not enough to do anything with. The next day we got word that it looked like there was more, but we didn't have more information than that.

DEBRIEF

My first call on Monday [March 26th] morning was to John Stanton, [EVP and General Counsel at Under Armour]. I remember it vividly because his question was, "Why are you calling me before 8 on a Monday? It can't be good." And I said, "It's not."

Then I called Lisa as outside legal counsel. The relationship with Lisa was one that was already established by Under Armour, but I also knew her well as the go-to professional in this space.

We notified key people, like Paul Fipps, our Chief Digital Officer, and soon after we created a war-room: papered the windows, opened up a phone line, started keeping notes on a white board in terms of a timeline, people, contacts, contractors, things like that. Records on the wall were literally being made in real time.

Our team was also working with outside forensics teams to make sure nothing else was going on. We were trying to ascertain the problem, fix the problem and find any other breakages along the way—all at the same time.

And then the news went to the executive leadership team that morning.

KELLEY MCCORMICK: I'd only been with the brand for about three months, and that was my second ex-



ecutive leadership team meeting. I was learning a lot about the ethos of the company and how the brand was built. I was still figuring out functions of teams.

After finding out, it wasn't who to call, it was what part of the company was I calling? I had the luxury of having people—both our team in-house and outside advisers—to help us think through the process. And I was literally learning about the company and discovering our amazing capabilities in the process.

TV: I remember Kelley being in John's office and saying very humbly, "This is where my job gets easy because I do what legal tells me." I knew your job wasn't going to be easy at all, but it was funny.

KM: There are times when communications can challenge legal to relax or be more aggressive. But given the nature of this situation, I felt the default had to go to legal. I wanted to diminish that debate.

TV: After he had processed the news, Paul Fipps, our Chief Digital Officer, pulled the team together. His first inclination was essentially: "We recently relaunched our core values and those will inform how we do this." Guided by those values, he wanted us to go public with the information before markets

"We recently relaunched our core values and those will inform how we do this."

The direction **PAUL FIPPS**, Under Armour's Chief Digital Officer, gave to his team.

closed on Thursday. Because Friday was Good Friday, a market holiday. And then you have the weekend. Nobody wants to go out on a Friday. It's considered crummy. The holiday sort of threw us into that aggressive push to get it out by Thursday.

But, of course, the last thing you want is to go out twice. You look incompetent, right? So it not only had to be very fast, it had to be right. I remember a conversation where we were asked, "Can you do it by Thursday?" And I said, "We're going to try." And the response was: "That wasn't my question."

KM: We didn't want our athletes to wake up the following Monday and have them say, "You knew about this for eight days and didn't say anything?" We wanted to make sure they had the information so that they could decide what they were going to do about it.

With those values as a kind of compass, a number of decisions were strangely easy to make. The guardrails were really: What was the right thing for athletes, what were our values? Almost everybody's got a value statement these days. It was cool when you put it in context of a digital event, not just shirts and shoes.

TV: From a legal perspective, the average timeframe from knowing to disclosing is somewhere around 30

days, give or take. We could have done that. This information wasn't passport numbers and Social Security numbers. It was their name, their user name, their email address and a couple of other data points that would be unlikely to lead to financial fraud. But the idea of that information being used for phishing, to trick people and make them feel vulnerable, was very real. The notion of how much time you have under a reasonableness test is one thing, but coming out ahead of time so that people can protect themselves quickly is important.

We had one huge file, and it was the entire file. We knew there wasn't anything else because our system doesn't store credit card information. Even though we take credit card information for a premium subscription, it was, by design, a completely separate data stream. That information was never stored in that file—it wasn't even stored in our systems and we assured ourselves that no connection could have been made between our event and those third-party credit card processors.

LISA SOTTO: We were able to gain confidence about containment of the breach quickly thanks to the technical folks who were working on this incident. It was clear early on that we knew what had happened and based on that clear knowledge, there was no need to wait.

Now, is there the possibility that we might have discovered other files? In some sense you're taking that risk. But we had a high degree of confidence because of the way the systems were designed and the nature of the incident.

We worked around the clock to get the communications in order for both affected users and also to relevant regulators. We also readied talking points for a call to regulators so that everything would be consistent.

It's important to note that this was not an incident that would trigger notification in a number of jurisdictions, including the United States. There were some notification obligations that were triggered overseas, but not in the United States. Many companies would have avoided global notification in favor of a pinpointed approach. But Under Armour did not look to parse jurisdictions and legal requirements.

So we wanted to make sure that all users got the same message regardless of what the actual legal requirements were. Under Armour went far above and beyond its legal obligations.

My firm represents a lot of Fortune 500 companies; these are very compliance-oriented busi-

"Almost everybody's got a value statement these days. It was cool when you put it in context of a digital event, not just shirts and shoes."

KELLEY McCORMICK
Under Armour's Senior
Vice President, Corporate
Communications.

"You know it's going to make headlines. The number's too big not to. Doing the right thing was more important than doing the required thing."

TOKÉ VANDERVOORT
Senior Vice President at
Under Armour.

nesses, deeply protective of their reputations and their brands. So it's not uncommon for them, in a response to a crisis situation, to put the user or the customer first. But what is uncommon is an absolutely explicit focus, the mandate by senior leadership, to require that every action be taken through that lens of core values and what's best for the user.

TV: I don't know that it ever even legitimately occurred to us to parse the communications; we knew we had a huge number of users globally and that a lack of consistency in the messaging would have just gotten us completely shredded.

Creating something that was sort of all things to all people, under all paradigms, was an interesting drafting exercise, to be sure. But again, the combination of our values and the risk of not taking that approach reputationally I don't recall ever even being a serious alternative.

It's one of those things where you know it's going to make headlines. The number's too big not to. Doing the right thing was more important than doing the required thing. In a perfect world, those would be the same, but they're not. The highest common denominator was the right approach.

So you fast-forward to Tuesday afternoon, and there was a growing consensus that Kevin [Plank, founder, CEO and Chairman of Under Armour] needed to be brought in and informed. We agreed that John Stanton, the most even-keeled general counsel on the planet, should tell him.

As John tells it, he delivered the news to Kevin. I asked how Kevin had taken the news, and John said, "Well, when the color came back to his face, he had some great questions and asked for a full briefing tomorrow."

The pace continued from there. There wasn't much sleep.

The next day, we gave Kevin the nuts-and-bolts briefing. He had a lot of questions; some we had the answers to, some we were still in flight with.

KM: Our communications to users—we prepared to blanket them. We created email communications to go out to all of those email addresses. We readied in-app notifications, banner notifications, and push notifications. On the website as well. We even prepared something on the UA.com homepage so people could be redirected to that.

There were also communications prepared for our major sponsored athletes, in case they received any questions about the attack, so that they knew where to refer those questions.

WHAT MADE THE DIFFERENCE

As told by Tokë Vandervoort

LS: This involved an enormous number of users who needed to be contacted. All of the different paths toward communication were so critical, and with each, we needed to take a global approach. We had to be both legally and culturally sensitive, using a highest common denominator global approach—for each message. That was the crazy part. I remember drafting each message that would go out globally, spending time on the nuances of each, so that we were always consistent. It was a lot of work, a lot of coordination.

TV: We had to translate materials. We had an internal leadership communication and an internal teammate communication that were going to go out just before the public communication as well—Under Armour has 14,000 people globally. It was an astonishing array; the checklist of communications was really quite breathtaking and comprehensive.

And there were obviously detailed FAQs that were being prepared, while key concepts were being programmed into our AI system used by “Customer Happiness”—Under Armour’s team of amazing customer support professionals who answer questions about our apps and handle customer care.

That team was an ace up our sleeve because not everybody has that in-house capability. Customer Happiness helped inform our response and keep it user-focused—they were given a direct line into that war room. They were just amazing in handling all of the questions that came in. We were piping in food and water to them, sending them massage therapists for weeks afterwards, because they would deal with an unbelievable volume of inquiries over the next several weeks.

But before that all went live, one of the things that Kelley and I had to do on Thursday afternoon was brief Kevin on those internal and external communications. He was traveling to New York so Kelley and I rode with him in a car. Kevin’s up front and Kelley’s reading the statements and as questions come up, we’re fielding them.

The car stops and a helicopter’s waiting in the distance. Kevin gets out of the truck and slings his backpack over his shoulder and puts his sunglasses on. Then he gives us a thumbs-up and says, “Go,” before turning around and getting on a helicopter.

And Kelley and I are standing there, thunder-struck by what just happened. We look at each other, and we’re just watching the helicopter take off, and I said, “I think we’re a go.”

And at 4:31 that afternoon, we went. ♦

“We wanted to make sure that all users got the same message regardless of what the actual legal requirements were. Under Armour went far above and beyond its legal obligations.”

LISA SOTTO

Chair of Hunton Andrews Kurth’s global privacy and cybersecurity practice.

1. RELATIONSHIPS

External relationships are how we found out about the breach, and they’re how we knew which advisers and expertise to bring on board right away. We had those in place and had put a lot of effort into maintaining them and keeping them up to date. Internally, the trust we’d built allowed us to move as quickly as we did. Both paid huge dividends.

2. PREPAREDNESS

I don’t know anybody whose incident response team meets every other week, but ours does. Sometimes we’re just shooting the breeze, but other times we’re asking: “What’s going on in the business? What are you hearing? What’s happening?” We enjoy a great relationship with the product team, the engineering team, the IT security team, the IT team ... It’s not just sharing information, but also getting to know one another, which ties back to the importance of relationships—knowing what’s going on and who to call.

3. PRACTICE

We do a table top every year for a data incident. I’ve heard people say table tops are too expensive—we make up our own. Security and privacy get together and create a two- or three-hour game. One year it’ll be a supply chain issue, another year it’ll be a data event.

We invite decision-makers from across the organization so that people then have a sense of what it feels like to make decisions without full information and to have to do so under a lot of pressure.

People appreciate not just how hard these decisions are, but they know who the other people are, and the issues that they’re confronted with. The companies that have the most confident response are the ones where everybody knows their roles—not some giant team of people who have never worked together. When you have complete clarity of purpose, focus and leadership, you can get anything done.



SIOBHAN GORMAN is a Partner in Brunswick’s Washington, DC office. A specialist in crisis and cybersecurity, she advised Under Armour on its response.

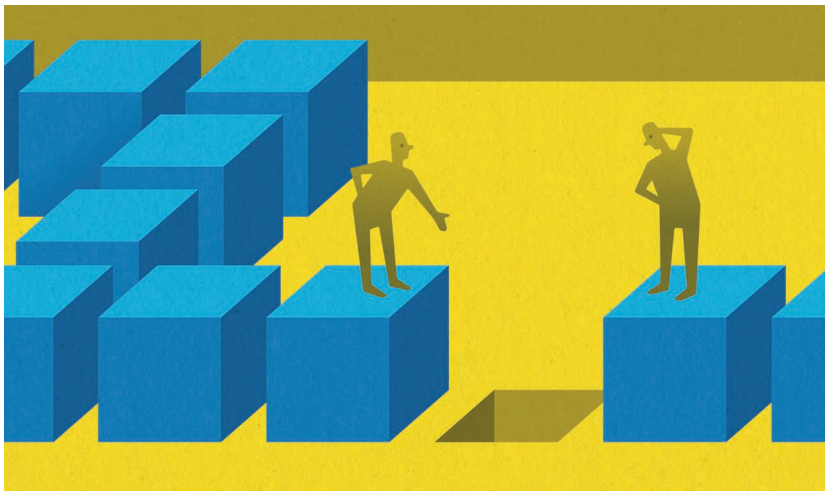
ONLY HUMAN

THE TITANIC WAS “UNSINKABLE”—UNTIL IT sank. Now, blockchain, long touted as “un-hackable,” has been hacked. But while the Titanic sank only once, blockchain is destined to hit its iceberg over and over again.

Blockchain is widely seen as a potential foundation for all transactions—money, medical records, personal identities, elections, you name it. Brunswick Review first noted the technology’s potential in 2016 when, as the vehicle of pioneer cryptocurrency Bitcoin, it was only beginning to spark. Today, it has exploded.

“Blockchain developer” was No. 1 on LinkedIn’s list of emerging careers in 2018, topping new high-

Blockchain’s flaws are being discovered the hard way, says Brunswick’s **CARLTON WILKINSON.**



growth job titles such as “Machine Learning Engineer” and “Application Sales Executive.” In addition to startups, interested companies include stalwarts like IBM, Fidelity Investments and Intercontinental Exchange, owners of the New York Stock Exchange.

Social media giants such as Facebook have hinted that they’re working on their own blockchain-based cryptocurrencies. Even central banks are reported to be looking into the technology. Soon, many common transactions could be linked to a blockchain.

All that makes any vulnerability worrisome. Since the start of 2017, a total of nearly \$2 billion worth of cryptocurrency has been publicly reported as stolen, according to research by MIT Technology Review.

Originally described as a “distributed ledger,” blockchain makes forging a transaction difficult by employing a decentralized network of many users, or

CARLTON WILKINSON is the Managing Editor of the Brunswick Review and a Director with the firm, based in New York.

nodes, where each node stores an up-to-date copy of every transaction on the network. Protocols set the rules for how those transactions are verified. Each approved transaction is time-stamped, marked with a unique “hash”—a solved, complex equation—and locked into the chain; it’s theoretically impossible to change one block of data without affecting all the others, which would be rejected by the network.

However, the very complexity that makes blockchain successful also opens new paths for error and abuse. Flawed protocols have occasionally been uncovered that permit approval of illegal transactions or allow them to occur without being recorded.

In other cases, bad actors have managed to gain control of at least 51 percent of the processing power of a blockchain network—this allows them to create a parallel version, a fork in the blockchain, and eventually convince the network to accept the false chain as authentic. Typically, the thieves will spend some cryptocurrency and then introduce a duplicate chain of transactions that skip that expenditure, allowing them to spend it again.

Such a “double spend” attack reported by Coinbase in January involved \$1.1 million worth of the currency. Coinbase says no money was actually stolen from its accounts. Gaining 51 percent of the processing power of a network isn’t easy—it’s expensive, making large networks naturally less vulnerable. Yet instances of this type of attack are growing.

Another area of weakness involves “smart contracts,” programs that run on a blockchain network for a variety of uses, including legal contracts and voting records. A bug in such a smart contract in the Ethereum blockchain allowed repeated requests for funds to go unrecorded—for a \$60 million theft.

Because transactions in a blockchain cannot be undone, fixing such a bug can be a huge problem. To circumvent the Ethereum bug, the development community created a second blockchain, a fork based on a version of the old one that predated the flawed smart contract, and advised users to join that one. (Some still use the original, however, which is now called Ethereum Classic.) It’s estimated that tens of thousands of smart contracts may contain some type of vulnerability.

The stakes for ever more sophisticated cyber security measures couldn’t be higher. As society becomes more dependent on blockchain networks, these vulnerabilities—and others yet to be discovered—are certain to be exploited, fueled in part by the expanding number of eager, blockchain-fluent cyber engineers and the small percentage of them that stray to the dark side. ♦

IT WAS A SIMPLE IMPROVEMENT, BUT ONE THAT eventually changed the steamship industry. In 1881, brothers and Scottish engineers George and James Weir, who 10 years earlier had founded their own company, G. & J. Weir Ltd., patented a high-pressure pump that pushed water into a ship's engine boiler to cool it down. The device marked a step-level increase in the efficiency of steamships and had a global impact: Glasgow, Scotland, where the firm was based, built more ships at that time than any other location in the world.

Today, Weir Group still carries the founders' name, as well as their engineering ethos and familial culture. Over the years however, the company has reinvented itself multiple times, building some of the first commercial desalination plants, developing prototypes for the first helicopter engines and becoming a publicly traded company in 1946.

Weir is focused on three divisions: Minerals; ESCO, the global leader in ground-engaging tools for mining; and Oil & Gas. The business is global, with operations spanning more than 70 countries and a workforce of approximately 15,000. Jon Stanton, the company's CEO, has been at the helm since October 2016 and has driven an agenda that empowers employees, focuses on customers, invests heavily in technology and emphasizes performance. His vision is anchored in the company's history.

"We have lots of examples of Weir coming up



Engineers of REINVENTION

with innovations that revolutionized a particular industry," Mr. Stanton says. "We have to continue doing that. We can't stand still."

In an interview, Mr. Stanton talks about what has helped Weir keep a successful focus for almost 150 years and his plans for maintaining it in the face of modern challenges.

Weir has a long legacy of engineering solutions. Yet, the business has also grown through acquisition, and M&A can sometimes dilute founding values. How has Weir managed to maintain its sense of identity?

There are multiple levels to it. First of all, we have a strong familial culture. We think about our people as a global family. Over the years, Weir has reinvented itself, innovated and changed. But part of the culture incorporates that change, innovation and evo-

Weir CEO JON STANTON tells Brunswick's **CAROLE CABLE** and **MATHEUS FIERRO** the secrets of keeping a fast-growing, 150-year-old corporation focused on core values.

lution. As we've grown, more often than not, we acquired family-owned businesses that have similar characteristics. So they actually fit in. That was the case recently with ESCO; it was the case with SPM [a fracking equipment provider acquired in 2007]; with Warman [a pump maker acquired in 1999]. The culture is similar to ours, and they've blended in very well.

Does being a public company put pressure on that familial approach?

No, I don't think so. We are who we are. The Weir culture is one of our distinguishing features: It's strong and it's consistent around the world. Our people speak a common language and there's a real connection with the company.

That connection came through strongly in our recent global engagement survey: People feel they

don't have to compromise, and that the Weir culture aligns with their personal value set and ethics. That's a very powerful part of who we are. In many ways, it's what drives the success of the company.

More laterally, as investors think more and more about the ESG agenda, they're starting to understand in a much better way the importance of people and culture, what the company stands for, and how that drives value creation—alongside the harder edges of performance and management.

We play with that at our peril. It's such an important part of who we are and our success.

With the upcoming launch in May of your all-employee share plan, Weir ShareBuilder, every member of staff will gain a stake in the business. Does that culture of ownership feel like going back to the future?

We've got to nurture and continue to develop our culture. We've done a number of things along the way to drive that, around engagement, a listening strategy, crowd-sourcing innovation. Moving on to share ownership is a natural progression.

I want people who come to work for Weir to do so because they feel that it's a place they can do the best work of their lives. I'd like them to be inspired, to go out there and take a risk, do things they might not at other organizations. Giving them a stake in the future of the company underpins that. It has been a very complex thing to do. If you can imagine all of the different legislative requirements there are around the world—that's put quite a strain on the legal team to put that in place. But, you know, we took the view that if we are going to do it, then we are going to try our damndest to do it for absolutely every single employee.

I've also had several shareholders say to me: "We understand the cost of the plan. But you're doing absolutely the right thing for the long-term health of the business." And recent town halls I've done with employees where I've talked about it, the first question has been, "Thank you for the free shares. How can we buy more?"

How do you think about attracting and retaining the next generation of employees when graduates don't necessarily want to work for extractive industries?

The culture—what we stand for, the entrepreneurial nature of our business, the decentralized nature of it—is a very powerful proposition. Everyone has the space to make a difference at Weir, individually and in teams.

**"WE'RE SOLVING
MODERN
PROBLEMS,
TAKING THIS
MECHANICAL,
ENGINEERING
BUSINESS TO BE
SOMETHING
THAT'S DIFFERENT
IN THE FUTURE."**

But also, we're at the start of a journey. Disruptive technologies will be brought to bear in our markets, whether mining or oil and gas. Our customers are facing great sustainability challenges and, rather than be part of a historic legacy, we're pushing Weir to be part of the answer. Our customers are going to have to use less energy, less water, reduce emissions and think deeply about their impact on the societies and communities they operate in. That's going to require innovative engineering and Weir is part of the solution.

We're engineers. We solve problems. A lot of what we have done historically has been around mechanical, hydraulic and material science-type technologies. Now, we have to go through digitization to improve performance, extend product life and drive predictive maintenance. For that, we have to embrace big data, artificial intelligence, the internet of things. That's a one-way street.

It's a massive opportunity. But it's also a threat to our business that we have to manage well. If we don't, we're at the risk of being disintermediated by others who will try to get in between ourselves and the customers, which will ultimately dilute value. That means we need to attract people with capabilities that we don't necessarily have today, such as software engineers, data scientists and electronic engineers.

I've actually been delighted with the way we've attracted some of this new talent into the organization. People at our competitors look at Weir and say, "That's a place I'd like to work in the future." When I speak to Geetha [Dabir], our Chief Technology Officer, she tells me that we're competing against Apple and Amazon for this talent and people are coming to Weir because what we're doing is cool. We're solving modern problems, taking this mechanical engineering business to be something that's different in the future.

On technology, how are you helping miners address those challenges?

Historically, what we've done is incrementally improve our products so that they become more efficient, increasing wear life and so on. That's important because we have a global customer base, so even a small improvement can result in significant savings. But we're also now trying to balance that incremental development with the transformational or disruptive ideas. We're balancing our technology spend between those two areas—incremental developments, bigger-picture challenges.

In Minerals, for example, we've been working hard on high-pressure grinding rollers, or HPGRs. It's a technology that can replace traditional grinding mills in many applications. Compared to legacy processes like SAG [semi-autogenous grinding] mills, HPGRs can reduce energy consumption by something like 25 percent. That's a huge step change, especially if you think that around 4 percent of the world's electricity is used to crush and grind rocks.

In Oil & Gas, North American shale is at an important moment. We're re-imagining what the frack site of the future will look like, with fewer pumps, a lower footprint, different drive systems. With electrification, for example, drillers will be able to significantly reduce their emissions to execute the same job without having to truck in thousands of liters of diesel.

The waste material known as tailings and the environmental threat it poses have long been a concern around the mining industry. Is that something you're addressing?

We've been working on it for a few years. We have a technology center in Melbourne focused on dewatering and how to create solid rather than fluid tailings. It's our Terraflow® solution. Dry tailings systems are much safer. Our equipment gets it down to 90 percent solid paste, and then pumps that so it

"I WANT PEOPLE WHO COME TO WORK FOR WEIR TO DO SO BECAUSE THEY FEEL THAT IT'S A PLACE THEY CAN DO THE BEST WORK OF THEIR LIVES."

can be stacked onto hills, or used in underground mines to fill tunnels. We also have ways to help customers repurpose tailings, turning it into concrete and shotcrete, and using it to build roads and line or fill tunnels.

The third piece we're working on is recycling tailings, either reclaiming materials that have not been mined or detoxifying them. For example, we're working with a customer in Latin America where tailings dams go back 100 years, ever since the mine began operating. There's more valuable mineral in the tailings than there is coming out of the mine today because ore grades have dropped so much. We're helping that customer turn the tailings back into a slurry and pump it back into the mill circuit so it can be reprocessed to extract that metal.

Has that close relationship with customers played a major role in Weir's resilience?

It absolutely has. Our investment and our technology get us a seat at the table. What really distinguishes Weir is our focus on customers and our people's ability to put themselves in the customer's shoes to help them make processes more efficient, improve their profitability. That's all part of the culture of the company. We like to be number one at what we do.

What do you think are the opportunities for Weir in the next 150 years?

Who knows where we'll be in 150 years? [Laughter.] By then we could be looking at opportunities in outer space, for instance, maybe asteroid mining. We're not banded in the way we think about the future.

On a more immediate note, if you could advise young engineers starting out on their career today, what would you tell them?

One of my big learnings, and I say this to my children, is that when you're thinking about what you want to do in your career, focus on something you're passionate about and you'll enjoy doing. After all, this is something you'll likely be doing for the majority of your working life.

When you end up in that space, work hard, because if you can get a team together with an outstanding work ethic and that is going to go the extra mile, special things can happen. ♦

CAROLE CABLE is a Partner and the co-head of Brunswick's Energy and Resources practice. **MATHEUS FIERRO** is an Associate with the firm. Both are based in Brunswick's London office.

G. & J. WEIR, Holm Foundry, Cathcart, Glasgow.

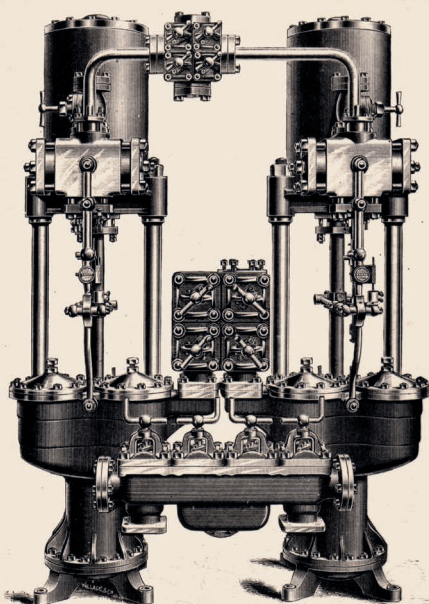


Fig. IV.

WEIRS' DIRECT-ACTING FEED PUMPS.
ARRANGEMENT "A."

The Weir brothers launched their company in 1871 amid a flurry of early patents. At left is an example of the feed pumps that helped the company become successful by improving efficiency for steamships. Glasgow, where the firm was based, was an international port and an important center for steamship builders, allowing their design to quickly spread and become a new standard.



J.P. Morgan's Daniel

JPMORGAN CHASE CEO JAMIE DIMON ISN'T RETIRING ANYTIME SOON. BUT LAST year, noting the importance of a succession plan, he promoted two executives to Co-President and Co-Chief Operating Officer, including Daniel Pinto, whose tenure at the bank and its predecessor companies dates back to the age of 19. • That 37-year run started in Mr. Pinto's native Argentina, where he worked as a financial analyst and foreign exchange trader, eventually becoming head of sales in Argentina, Uruguay and Paraguay. In Mexico he served as Head Trader and Treasurer and, following a move to London, he oversaw local markets stretching from Eastern Europe and Africa to Asia. He became Global Head of Emerging Markets and Co-Head of Global Fixed Income for the Investment Bank. As Co-President and Co-Chief Operating Officer, Mr. Pinto also remains CEO of the Corporate and Investment Bank. • From his office on the 41st floor of J.P. Morgan's headquarters in New York, Mr. Pinto offers the Brunswick Review his thoughts on the economy, on the challenges and opportunities of new technology, and the steady ascent of his career.

PINTO

Is it true that you commute to New York from London?

When Jamie first talked to me about running the CIB, he said, "I assume you are moving here." I said, "Actually, I'd like to keep living in London but spend a lot of time here. Let's see how it works." I am in New York about 60 percent of working days and Jamie's perfectly fine with it. Given travel schedules, I don't think I'm here any less than many of my partners. I just live in a different country.

When you think about this company, obviously the retail bank is a US business. But everything else is roughly 50 percent US and 50 percent the rest of the world. Of that rest of the world, the bulk of it is in Europe and at this moment, with all the European issues, to have someone in leadership in Europe is good for the company.

I have no issue with New York. I love New York, but I love living in London with my family. I've been living there for 23 years. London is the second biggest financial center in the world and it is an amazing city—the culture, the quality of restaurants, the quality of life.

At age 19, to help pay his way through college, he took a job at a bank—and never left. Now he's Co-President and Co-Chief Operating Officer.

Does Brexit make it even more advantageous that you're in London?

I believe so. Being there and understanding the day-to-day process gives me a unique vantage point as we oversee preparations for Brexit. Here in New York they know that I'm in touch with the UK regulators, and am following developments very closely.

As a student, did you have any sense that your career would take you so far from Argentina?

I would have never guessed that I would be sitting here today in my current role, but it is an indication of the opportunities you can have at J.P. Morgan. In Argentina when you were 18 and had finished secondary school, you did military service. While I was doing that, the war with the UK happened, the Falklands War, and I was a soldier in that war for six or seven months. When I finished, I was already studying at university, so I needed a job. It was common for people with modest standards of living to have to work while studying. I studied at night and worked during the day. The job I got when I was 19 years old was at Manufacturers Hanover. Clearly, at that time, I didn't imagine that job was going to lead me here.

When you arrived in the UK, was it a pretty big culture shock?

After deciding that I wanted an international career, I went to Mexico in the early '90s, before moving to London. Going from a small office to a big office in a different country with a different language and culture—that was a shock. On Fridays, when I first arrived in London, I was so tired from speaking English all week, doing the work and getting to know people that I would go back to the apartment where I was living at the time (my family was still in Mexico), and I would just rest. I was totally exhausted. It was really, really tough. But after adapting, I loved it.

Do your early experiences in banking influence you as Co-President of America's largest bank?

My trading background has really helped me. In trading you make constant decisions, with the information you have at the time. My decision-making process is quite fast. When someone comes to me and wants a decision on X, Y or Z, I will decide based on the information available, knowing that decision may have to be tweaked when more information comes about. That's what you do in trading.

There is no perfect information on anything. There are some people who always want one more piece of information to make a decision. They never end up deciding on anything. They create a culture

"THERE IS NO PERFECT INFORMATION ON ANYTHING. SOME PEOPLE ALWAYS WANT ONE MORE PIECE OF INFORMATION TO MAKE A DECISION. THEY NEVER END UP DECIDING ON ANYTHING."

that moves very slowly. Clearly, the opposite is equally bad if you make random decisions too quickly.

A current example of making decisions and then tweaking them is Brexit. As we move some of our operations outside of the UK, our planning has evolved with the twists and turns of the negotiations. Our center of gravity is going to be a mix of France and Germany with transaction banking in Luxembourg and Ireland—that's not exactly where we started. In France, the government has made Paris more attractive than it was at the beginning. We will now have a substantial presence there. The objective all along has been to avoid the interruption of service to clients while minimizing disruption for our employees. But how we got there has evolved along the way.

The other thing that trading teaches you: When you make a bad decision, take the loss. We all make bad decisions. Recognize that you didn't get it right and don't allow that bad decision to age over time.

I've also benefited from my experience as an emerging markets trader, which trains you to work in markets that typically have a bit more volatility and economic instability. All that has been very, very helpful in the process of making decisions in the later stages of my career.

If you hadn't gone into banking, what other career would have interested you?

I would have been an architect. I've always been enamored with it. I love designing and building things. [Mr. Pinto points out his window to a construction site below.] We're knocking down that building and rebuilding our new global headquarters. Along with other executives, I've been involved in choosing the architect and the design. I've found it very appealing.

J.P. Morgan came through the financial crisis in very good shape. Looking back, what did you learn from that experience?

It was an amazing experience to see Jamie in action during the crisis. He was calm, disciplined and focused. He brought his people together and made clear what was going on and what decisions needed to be made to keep the company thriving. He made it clear that our mission was to continue serving our clients while protecting shareholders and the company. He's one of the most successful CEOs in the world, and to watch him lead during that crisis was incredible.

A major reason that J.P. Morgan ended up better than most was discipline. Before the crisis, we were not really that obsessed with what everyone else was doing. We were more disciplined. That's not to say we didn't make mistakes; in the leveraged lending

space, for example, we were a bit too aggressive, and that hurt us.

The other important decision we made was not to cut our way to profitability in the years during and after the crisis. We actually invested in the business during that time. We thought about what the client needed, what they were going to need and what services we were going to provide, taking into account the effect of new regulation. While some banks were retrenching, we remained committed to offering a complete set of products to our clients globally.

As regulation started to take shape, we knew early on that scale was going to become increasingly important. So we invested in areas and geographies that increased our scale. You've seen the results over time as we gained market share in equities and fixed income, in investment banking, in payments, pretty much everywhere.

During the financial crisis, Mr. Pinto says JPMorgan Chase CEO Jamie Dimon (below) "was amazing ... He was calm, disciplined and focused."



How can a business as regulated and as diverse and as large as J.P. Morgan keep pace with technological change?

We have no choice but to seriously invest in technology. If you don't, you will be priced out. Things are moving so fast that unless you are really at the forefront, you end up not being able to compete in the financial services industry. And then you are out of the game.

Hopefully, as technology evolves, regulation will continue to evolve alongside it. For instance, in the trading business, we are creating smarter and smarter algorithms for trade execution. As markets become more and more electronic, regulators are focused on regulating them without killing the innovation.

Finding that balance is important because if regulation doesn't progress with technology, then there will be an issue. From what I see, regulators are being thoughtful about how to get there.

KEVIN HELLIKER, a Pulitzer Prize-winning journalist who is Editor of the Brunswick Review, conducted the interview with Mr. Pinto.

Do you think Wall Street is prepared for the next downturn in the market?

For the last 10 years, the market has been going in one direction, with some corrections along the way. At some point a slowdown will happen, and that is healthy. We believe that changing monetary policy will delay it for a period of time. Current thinking is that we are talking about 2021 for a slowdown.

But a slowdown is a slowdown, it's not a crisis. It's just the normal end of the economic cycle. The components of the previous crisis, they are not there anymore. There aren't big imbalances in any sector in the economy. The banks are very well capitalized, with lots of liquidity, very controlled and risk is well managed. At the moment I don't see any big components that are going to create a crisis.

As for the markets, a large number of issues—the rate of inflation in the US, the business cycle in the US, the level of interest rates, changes in Fed policy, the growth in China, Brexit, the European economies—are all going to drive what markets do or don't do in the months to come.

What's the biggest challenge facing J.P. Morgan in particular and Wall Street in general?

I think the industry overall needs to continue rebuilding its reputation after all that happened in the crisis. All the companies, in my view, have done a relatively good job at improving their culture. We are all becoming better at spotting issues of conduct. We are very focused on that.

For J.P. Morgan, we also need to avoid complacency and continue improving areas of our business. Overall the company looks very good. But we must continue to be honest and humble in our own assessments. We must dig down to a very granular level and really focus on improving in some of those areas where we aren't the best. It's also important for us to continue recruiting and retaining the best possible talent, because that's the only way you're going to win. Finally, we must continue to stay client-focused and provide them with great services. That's in our DNA, but we can never lose sight of that.

If you had the opportunity to succeed Jamie Dimon as CEO of JPMorgan Chase, would that require moving to New York?

I love my job and I love living in London. Jamie is an amazing leader and the good news is, he's not going anywhere any time soon. ♦

WALKING WITH DESTINY

THERE WERE 1,009 BIOGRAPHIES OF WINSTON CHURCHILL

before Andrew Roberts published the 1,010th in October last year: *Churchill: Walking with Destiny*. One of Britain's best-known and best-selling historians, Mr. Roberts had already written four books with Churchill's name in the title and his latest work features more pages (1,110) than its predecessors. Was there really that much more to be said? • The New York Times titled its review of Mr. Roberts' book "Is This the Best One-Volume Biography of Churchill Yet Written?" (the Times' answer: yes). The Sunday Times, Daily Telegraph and The Wall Street Journal gave verbatim assessments in their reviews. The Economist called it one of the best books of 2018.

• The Brunswick Review spoke with Mr. Roberts on the US leg of his global book tour, which had featured discussions moderated by political heavyweights—including Karl Rove and Michael Gove—alongside the occasionally bizarre conversation. "A lady in Miami earnestly informed me that she was the reincarnation of Winston Churchill," Mr. Roberts said. "I inquired a little bit more about this, because obviously I've been waiting all my life to meet Winston Churchill. I've met him a couple of times in dreams, but then I haven't actually been able to sort of interview him consciously. Unfortunately, I think

BEHIND THE IMAGE

The iconic photograph of Churchill, which serves as the cover image of Mr. Roberts' book, was taken by Armenian-Canadian photographer Yousuf Karsh in 1941. After delivering a speech in Ottawa, Churchill was surprised to find Mr. Karsh waiting to take his picture, but agreed to have one taken. "I offered him an ash-tray for his cigar, but he pointedly ignored it, his eyes boring into mine," Mr. Karsh recounted. With his camera equipment set up, Mr. Karsh removed the cigar from Churchill's mouth without asking. "His jaw tightened in belligerence; his eyes blazed. I clicked the shutter." Mr. Roberts wrote it is "the greatest of all the thousands of images of Churchill, capturing his resolution, defiance and solidity ... and his capacity for belligerence." The scar on Churchill's forehead came from an accident while crossing Fifth Avenue in New York City in 1931—he was hit by a car. The scar was said to glow red when Churchill raged during wartime meetings.



Historian and best-selling author **ANDREW ROBERTS** discusses Winston Churchill's tortuous political path—and his surprising physical resilience:
one house fire • two plane crashes • three car crashes • four bouts of pneumonia during World War II • five wars as a soldier ... and a prison break in South Africa.

she was Churchill's reincarnation from the last years of his life when, sadly, his mind was wandering a bit, because she didn't seem to know very much about Winston Churchill when I asked her some questions about him. She did buy three books though, which now that I think about it, might make her self-absorbed."

Walking with Destiny features a wealth of new information, including passages from the diaries of King George VI, who held private weekly meetings with Churchill throughout World War II. At these meetings, Churchill aired frustrations—with his American and Russian allies, with British military leaders—which he understandably never voiced in public, giving Mr. Roberts an unfiltered look at Churchill's thinking and opinions throughout the war. Permission to use those diaries was granted by Queen Elizabeth II, marking the first time a Churchill biographer had been given access to them.

For a character who has generated a small library's worth of books—Churchill himself authored more than 6 million words, surpassing Shakespeare's and Dickens' combined output—Mr. Roberts' book feels surprisingly fresh thanks to all its new material. And for a biography that describes a leader who died more than 50 years ago, it also feels strangely timely.

Amid the ongoing drama of Brexit, *Walking with Destiny* highlights Churchill's views on what relationship the UK should aim to have with a united Europe. In 1952, he told the House of Commons: "...nor do we intend to be merged in a Federal European system. We feel we have a special relationship [to the rest of Europe]. This can be expressed by prepositions, by the preposition 'with' but not 'of'—we are with them, but not of them."

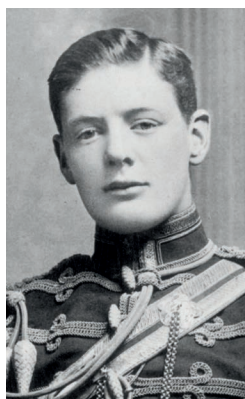
However, Mr. Roberts points out that guessing what Churchill's views on Brexit would be, or what Churchill would have thought of US President Donald Trump's leadership style, are questions "impossible for anyone short of a necromancer to know." Though Mr. Roberts added: "I do believe Churchill would have been wonderful on Twitter."

Walking with Destiny was also published a few months before the UK's Shadow Chancellor, John McDonnell, called Churchill a "villain" in an interview, a remark that sparked widespread debate about Churchill's legacy.

Mr. Roberts' view of the matter is clear; the book's final words are "the battles he [Churchill] won saved Liberty." However, Churchill's detractors point to his backward stances on Indian independence and female suffrage, and hold him responsible for a 1943 famine in India that saw more than 1 million people

**"NEVER GIVE IN—
NEVER, NEVER,
NEVER, NEVER, IN
NOTHING GREAT
OR SMALL, LARGE
OR PETTY, NEVER
GIVE IN EXCEPT
TO CONVICTIONS
OF HONOR AND
GOOD SENSE."**

WINSTON CHURCHILL'S
legendary advice to
Harrow students in 1941.



A young Winston Churchill in uniform of the Fourth Queen's Own Hussars. Over the course of his military career, Churchill fought in five wars. In an 1898 cavalry charge in Sudan, he killed four men with a 10-shot Mauser automatic pistol.

starve. Mr. McDonnell based his "villain" assessment on Churchill's decision as Home Secretary to send troops to control a miners' strike in 1910; one man was killed. Each charge is addressed—and countered or contextualized—in *Walking with Destiny*.

Mr. Roberts, who has spent 30 years studying Churchill, wrote the book in 100 days. He did so in his study, a room decorated with cases and frames displaying Churchill memorabilia, including Churchill's bow tie and hairbrush, as well as an ink drawing of a pig that the amateur painter Churchill created with his eyes shut.

Had the time studying Churchill and being surrounded by his memorabilia inspired Mr. Roberts to adopt any Churchillian habits himself? "I take a nap every afternoon, and I'm a historian who writes for money, but that's about it. A friend of mine tried to follow Churchill's drinking regimen, but after three days his wife complained vociferously. And quite right. I haven't gone down that route yet, thankfully."

The portrait of Churchill that emerges in Mr. Roberts' work is one that defies simplistic stereotypes and embraces Churchill's endless contradictions, a man who is both a grand strategist yet an at-times infuriating micromanager, loyal but prone to selfishness, demonstrating legendary foresight yet also making decisions that left him on the wrong side of history. This is a treatment of which Churchill himself would have approved. "To do justice to a great man, discriminating criticism is necessary," Churchill once wrote. "Gush, however quenching, is always insipid."

Walking with Destiny also seeks to dispel a number of popular conceptions, arguing that Churchill was neither an alcoholic—"alcohol was always his servant, never his master," says Mr. Roberts—nor a depressive, two diagnoses often made about Churchill. Mr. Roberts contends Churchill was simply a man with "an ox-like constitution" who drank frequently but functionally—he was noticeably drunk only once during World War II—and a leader who endured dark moments "when any sentient being would be depressed, like after the fall of Singapore or after the Dardanelles catastrophe—but he always bounced back." Extensive research by Mr. Roberts also reveals no evidence that Churchill knew in advance, and then callously chose to keep silent, about the bombings of Coventry and later Pearl Harbor—two of the many internet-driven conspiracy theories which have been leveled so frequently that they warranted the historian's rebuttal.

There are few contradictions or misconceptions when it comes to Churchill's resilience. It was the

theme of his greatest speeches, the backbone of his unofficial wartime strategy—“keep bugging on”—and the hallmark of his political career. “If you’re looking for a modern-day equivalent for a business leader, here’s a man whose share price has plummeted and skyrocketed, then plummeted and skyrocketed again and again and again, and he hasn’t let it affect him because he was tremendously resilient.”

Churchill, a war-hero and best-selling author by age 23, lost his first election for MP at the age of 24. He would become Home Secretary, a cabinet-level position, at age 35, and a little over a year later was appointed First Lord of the Admiralty, which ran the navy. While there he oversaw a catastrophic World War I campaign in the Dardanelles, which led to more than 110,000 troops from the British Empire being killed or wounded. He resigned the post in 1915 and went to fight in the war. Even there, he remained undaunted: “My conviction that the greatest of my work is still to be done is strong within me: and I ride reposefully along the gale,” he wrote to his wife Clementine from the trenches.

Churchill lost three elections in two years, but by 1924, had returned as a political force and was named Chancellor of the Exchequer, where he served a five-year term largely defined by a single mistake: returning Britain to the gold standard. By 1929, Churchill had isolated himself from his party and was politically sidelined for most of the 1930s, subsequently enduring what are often called “the wilderness years,” where he vocally opposed German appeasement and advocated for British rearmament—pleas that were fatefully ignored. He occupied no ministerial roles until 1939, when he returned to the post he had resigned 24 years earlier: First Lord of the Admiralty.

In May 1940, at age 65, Churchill became the country’s Prime Minister and inspired Great Britain to victory in World War II—only for his Conservative party to lose nationwide elections in 1945. He would serve as Prime Minister once more from 1951–1955.

Nor was Churchill’s resilience limited to his political career. The most popular images of Churchill find him overweight and cane-hobbled, yet his life was marked by uncommon physical courage and endurance. He was stabbed in the stomach with a penknife while a student; he survived one house fire, two plane crashes and three car crashes; he nearly drowned in a lake; he partook in the last cavalry charge in British military history—the famed Omdurman charge, in modern-day Sudan; he escaped from prison in South Africa during the Boer War; and he commanded



**“CHURCHILL’S
SENSE OF
DESTINY IS KEY
TO HIS RESILIENCE
... EVEN AS A
STUDENT AT
HARROW,
HE BELIEVED HE
WAS GOING TO
SAVE LONDON,
SAVE THE EMPIRE.”**

ANDREW ROBERTS,
one of Britain’s best-
known and best-selling
historians, and author
of *Walking with Destiny*.

Andrew Roberts spoke
with **EDWARD STEPHENS,**
Senior Writer at Brunswick
based in New York.

the 6th Battalion from the trenches during World War I. Even when Churchill had become the physically unhealthy figure history largely remembers him as, he worked 120 hours a week throughout World War II and traveled more than 110,000 miles, many of them in a de-pressurized, freezing airplane cabin. Churchill’s private secretary during the war was 41 years younger than him, but remarked how physically exhausting it was to keep up with the PM.

What kept Churchill going? “He was born in a palace, the grandson of a duke, at the apex of Victorian society when the Victorians ruled over one-fifth of the world’s land surface, and this gave him tremendous self-confidence—what we’d call a massive sense of entitlement, which obviously helped,” Mr. Roberts said. “But his sense of destiny is key to his resilience.”

It was a sense of life purpose that bordered on the fanatical. “Even as a student at Harrow, Churchill believed that he was going to save London, save the empire, save England. When he was 16 years old, he told a friend of his [Murland Evans] that he would save Britain from a foreign invasion—and he did truly believe this. Every near-death experience he had throughout his life, and he had quite a few, only reinforced that sense of destiny.”

Which makes it all the more surprising to read of how emotional a leader Churchill was; Mr. Roberts tallied more than 50 recorded instances of Churchill crying during World War II. “Imagine if Theresa May started crying in the House of Commons,” Mr. Roberts said.

Asked if he had become similarly emotional at any points while researching or writing the book, Mr. Roberts pointed to two moments.

“The first came with a letter that Clementine wrote to Lord Asquith [Prime Minister from 1908 to 1916], trying to persuade him not to sack Churchill, or not to force Churchill to resign over the Dardanelles catastrophe. I just thought how incredibly lucky Churchill was to have a wife like that. And I recognized that I, too, actually have a wife like that in Susan [Gilchrist, Brunswick’s Chair of Global Clients] whom I can very easily see doing exactly the same thing: writing this passionate letter to the Prime Minister telling them they’re wrong.

“Then there was another moment at the end of the book, when I was writing about Churchill’s funeral and his interment where I got a sort of huge frog in my throat. I became very emotional writing about the moment they took him down the Thames, the cranes bowing their heads. It was like a punch in a solar plexus, really.” ♦

HIS HOLINESS POPE FRANCIS IS USED TO a big occasion. But when he celebrated a Papal Mass for more than 180,000 people in Abu Dhabi in February, the event was groundbreaking by even his standards. What set it apart was not the size of the congregation but the setting.

It was the first time a Head of the Catholic Church had visited the Arabian peninsula.

This was a remarkable moment for the UAE, both domestically and internationally. It's a country long associated with superlatives, but this "first" was not about setting or breaking records; it was a reflection of the nation's ambitions to be a leader within the international community.

The UAE, home to more than 200 nationalities, has long spoken of itself as a multicultural, tolerant and open society. With the Papal visit, which included the signing of a "Human Fraternity Declaration" by the Pope and His Eminence Dr. Ahmad el-Tayeb, Grand Imam of Al Azhar Al Sharif, talk turned to action.

Nasif Kayed, an Inter-Cultural Consultant and Middle Eastern Cultural Expert in Dubai, said: "I believe the UAE is globally positioning itself as an iconic contributor and peace builder; uniting humanity regardless of differences, globally establishing what it has stood for and long exemplified in its society and residents."

An estimated one million Catholics in the UAE represent about 10 percent of the country's population. To help people reach the Mass, the government rolled out 1,000 free buses nationwide, strengthening the UAE's reputation as a country where religious and cultural tolerance is thriving.

The visit of Pope Francis came just weeks into the UAE's self-declared Year of Tolerance, which aims to deepen the values of co-existence among cultures and peoples. Particular emphasis will be placed on teaching youth the values of tolerance. Not that this represents any major shift. Tolerance is a value that is rooted in UAE culture. The country even has a Minister of Tolerance, His Excellency Sheikh Nahayan Mubarak Al Nahayan.

And it wasn't just the big, high-profile moments that displayed tolerance. Paul Griffiths, CEO of Dubai Airports, had a special role in the proceedings after being chosen to play the organ at the Mass, even though he is Anglican. Mr. Griffiths, in charge of the world's busiest airport for international passengers, is used to special occasions, having played at Westminster Abbey in London. However, he was still astounded by the size and scale of the Mass.

Brunswick's
**SIMON
PLUCKROSE** on
the historic
visit of Pope
Francis to
the Arabian
Peninsula.

**UAE
WELCOMES**

POPE





Pope Francis, center, is welcomed at the presidential palace by HH Sheikh Mohammed bin Rashid Al Maktoum, UAE Prime Minister and Vice President and Ruler of Dubai, left, and HH Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, right.

FRANCIS

"It had such an incredible air of quality and majesty about it," he said. "I cannot begin to say what an emotionally charged event it was."

Nothing about the event was simple or easy. The symphonic organ had to be airlifted in from the UK. But every detail seemed worthwhile to Mr. Griffiths, who described the Mass as a "PR masterstroke for the UAE."

"This has done the UAE the power of good in terms of its image and standing in the world," he said. "It was such a significant demonstration of how in the UAE you are welcome to practice your religion in a tolerant way."

Pope Francis' visit also received a significant amount of coverage online and across social media. Data gathered by Brunswick Digital revealed that the Papal visit received some 23,000 mentions on Twitter alone. On February 4th and 5th, dates when a private meeting took place between the Pope and members of the Muslim council of elders, and when the Pope celebrated the Holy Mass, the volume of online mentions peaked, including more than 900

**"IT WAS SUCH
A SIGNIFICANT
DEMONSTRATION
OF HOW IN THE
UAE YOU ARE
WELCOME TO
PRACTICE YOUR
RELIGION."**

PAUL GRIFFITHS,
CEO, Dubai Airports



Christian worshippers, top, gathered in Abu Dhabi's Sheikh Zayed Stadium to hear Pope Francis celebrate Mass.

Paul Griffiths, CEO of Dubai Airports, doubles as an accomplished organist, having once performed at Westminster Abbey. Appropriate for a Catholic Mass celebrating tolerance, Mr. Griffiths, an Anglican, played organ at the Papal Mass.

mentions across online news outlets.

Nasif, former managing director of the The Sheikh Mohammed Centre for Cultural Understanding, said: "Rarely do we see media focus on the positive aspects of religious and cultural tolerance that exist in the UAE. Putting a spotlight on this through initiatives like the UAE Year of Tolerance and welcoming of the Pope for a Papal visit to his congregants living here have shown the world that the UAE is serious about setting an example of religious tolerance and is sincere in its desire to be a beacon of peace in the region."

The Mass was celebrated at Sheikh Zayed Stadium in Abu Dhabi. It drew participants from all over the UAE and overseas. Nasif said, "Arabs are happy to see such an initiative as it reinforces the truth of how we accept one another and respect each other's faith, rather than the contrary which is propagated largely in the press. Muslims believe in all prophets and all previous revelation to Islam, so you will see that Catholics have always been treated as brothers and given full respect and rights to worship."

Among those attending the event were a number of Brunswick Gulf team members, including Cecille Marie Asis, a Research Executive in Dubai, who said, "The beauty of the Papal visit was not just in Pope Francis officiating the Mass, but in the culmination of people from diverse backgrounds celebrating the Eucharist in a Muslim-dominated country."

"This historic event signifies the UAE's generosity in welcoming religious and cultural diversity, and a pivotal move in upholding its commitment to tolerance in the country."

She was joined at the Mass by Senior Executive Assistant Rosanna Conde, who works in the Abu Dhabi office. "The Pope's visit meant a lot for me as a Catholic who has lived in the UAE for more than 10 years," she said. "It never crossed my mind that this would ever happen, but I think it is to be expected as the UAE is one of the most open Arab countries. The UAE allows Catholics to practice their religion and for that I am grateful."

In the words of Pope Francis, "The Christian and Islamic world appreciate and protect common values: life, family, religious sense, honor for the elderly, the education of young people, and still other things." The visit, Pope Francis said, "wrote a new page in the history of dialogue between Christianity and Islam." Not bad for two days' work. ♦

SIMON PLUCKROSE is a Director in Dubai. Additional reporting by **JAN JAMIL**, an Associate with Brunswick Digital in Dubai, and **ACHWEK SOUISSI**, an Executive with Brunswick Insight in Dubai.



THREE INTERRELATED THEMES DOMINATE EU politics so far this year: the European Parliament elections in May and subsequent appointment and confirmation of senior EU leaders, Brexit, and the future direction of competition (antitrust) policy.

Not long ago we would have said with some confidence that 2019 will be an interesting year, but no more than that. Certainly, there will be European elections and appointments of new leaders in the European institutions. The Brexit negotiations will be finalized and the UK will leave the EU but remain closely tied to the European single market. The European Commission's DG Comp will continue to be the pre-eminent competition authority in Europe, secure in its role at the center of a mature system of law and policy, buttressed by a stable body of case law.

We can no longer be sure of any of that. Brexit has turned into a nasty, protracted drama and no one can say today with any degree of certainty what will happen.

Meanwhile, the decision to prohibit the Siemens-Alstom merger has sparked great controversy and added fuel to the fires already burning in contempo-

No less than the future of competition law is at stake in a confused and shifting political terrain, says Brunswick's **SIR JONATHAN FAULL.**

rary European politics about Chinese competition, growing protectionism in the US and loss of faith in markets, globalization and multilateral institutions.

We are not talking here just about a threat to the established order posed by populist upstarts. The French and German governments are calling for a new European industrial policy and fundamental reform of European competition law. Unsurprisingly, they reach for their own national models, the German *Ministererlaubnis* political override and the French *politique industrielle volontariste*. Is price the main criterion for judging competition or is in-

Questions for EUROPE

novation, particularly in digital services, just as or more important?

This crystallizes a debate that has been waxing and waning for decades and in which British influence played a major part: What is the purpose of competition law and by what criteria should it judge corporate behavior and mergers? The negotiation of the EU's merger regulation in the late 1980s saw all of these issues aired extensively. The regulation as enacted in 1989 bears some traces of the arguments that raged at the time.

Nevertheless, the final text of the regulation and the way it has been applied ever since are rightly seen as predominantly competition-based to the exclusion of other policy concerns. Many in Europe viewed that outcome as an espousal of British views and a victory for the competition Commissioner at the time, the late Sir Leon, later Lord Brittan. More broadly I think it is fair to say that the influence of British lawyers, academics, officials and politicians on the development of EU merger law over the last three decades has been considerable.

That era is about to come to an end. What we have taken for granted is open to debate and up for grabs. European elections will take place in May. A new President of the Commission will be designated and the Parliament will question him or her about many things. Competition policy is bound to be one of them. A competition Commissioner will also be designated and face questions in Parliament. You can imagine the scene and some of the questions. "Will you undertake to propose amendments to the merger regulation? If so, what will they say? Do you agree with this or that Government's position? Do you think Siemens-Alstom was rightly decided? Should there be an overriding public interest test to assess mergers? What will you do to promote and defend European champions? Do you think you have the right law and policy to put Europe in the forefront of the digital economy?"

Remember, there will probably be no Brits in sight, and there will be many honorable (I hope) members from new parties or ones outside the traditional European framework of Christian Democrats, Social Democrats, Conservatives, Liberals and Greens.

So the challenges of 2019 are enormous—including nothing less than to determine the future direction of EU competition law. Will the Commission's DG Comp remain the main enforcer and guiding spirit it is today? Will it be hived off and become an independent agency? Which bits of it? Only mergers? All antitrust? What about state aid?

SO THE
CHALLENGES OF
2019 ARE
ENORMOUS—
INCLUDING
NOTHING
LESS THAN TO
DETERMINE
THE FUTURE
DIRECTION OF EU
COMPETITION
LAW.

SIR JONATHAN FAULL

is Chair of Brunswick's European Public Affairs team and is based in Brussels. He was a senior official of the European Commission.

Will the Council be given powers to overrule Commission decisions? Or will all this blow over as the New Hanseatic League (a bloc that includes Denmark, Estonia, Finland, Ireland, Latvia, Lithuania, the Netherlands and Sweden) replaces the UK as the bastion of competition and free trade, while the Franco-German machine stalls again?

The Commission without DG Comp would be a much diminished institution, with far less impact on the European economy than it has today. This diminution could take place in a wider context in which the Commission is downgraded to a less political, more technocratic body, as some member states want.

There are contradictory arguments swirling around. Some say the Commission has to choose between being political and enforcing the law; it can't be both. The stability and growth pact in support of the euro has been a fertile terrain for this debate: Is saying "France is France" to explain breaches of the pact sensible politics or failure to uphold the rules? We live today in a world where the Commission broadly holds the ring between big and small member states, the pure letter of the law and practical politics, east and west, north and south.

It's not textbook stuff, but would any textbook writer invent the European Commission as it is today? And what would Europe look like without it? We should think carefully about where changes might lead before embarking on them.

The Brexit saga illustrates this convincingly. The current settlement of affairs in Europe, however hard to describe using the traditional categories of political science, may be better than plausible alternatives and is certainly a marked improvement over previous European dispensations.

Meanwhile, look at the uncertainties in the UK revealed by the Brexit debate and then think about the future direction of British competition law. What will Britain do and how will it interact with EU law in cross-border situations? From the unilateral throwing open of borders advocated by some within the Conservative Party, to the much more regimented economy favored by Jeremy Corbyn and his allies in the Labour Party, there are many policy options open to the UK.

Further afield, will US antitrust law be caught up in the Trump administration's way of dealing with the rest of the world? Many of these issues have been aired before, only for passions to subside as the difficulties of fashioning alternatives proved insuperable. No one can be sure where we will end up, but we should all be prepared for a mighty debate. ♦

ANNE-MARI VIROLAINEN, Finland's Minister for Foreign Trade, talks to Brunswick's **ROBERT MORAN** about "the spaghetti bowl" of trade rules.

"Slowbalization"

AS RECENTLY AS 2017, FINLAND'S ECONOMY WAS described as "sickly" and "shrinking"—stubbornly smaller than before the Great Recession nearly a decade earlier. Today, as the country wrestles with domestic challenges including welfare reform and healthcare, the economy is slowly growing. Anne-Mari Virolainen, the country's Minister for Foreign Trade and Development since 2018, speaks about the role trade plays, as it accounts for about 76 percent of Finland's GDP.

Trade is increasingly non-material—the so-called "three Ds" of data, design and digital entertainment. How will trade policy adjust?

In Finland, we've seen the importance of trade in services grow, one reason being the growth of cross-border trade in IT services. From the trade policy perspective, trade rules are flexible and technologically neutral. There is no need for major legal changes due to the emergence of 3D printing. From a practical point of view, however, goods would be replaced by services due to 3D printing.

This means rules concerning trade in services would become even more relevant. There are a few issues concerning the rules of trade in services we should keep in mind, like data flows: 3D printing relies on data. If we expect 3D printing to become increasingly important in cross-border trade, ambitious rules on data flows in trade agreements become crucial. The EU is currently negotiating on digital trade (including data flows) with Australia and New Zealand, for example. This spring, 76 WTO members are preparing to start WTO e-commerce negotiations.

When you look at the rise of economic nationalism and populism, what future scenarios do you see today?

The Economist wrote a while ago about "slowbalization," that is, globalization advancing slower than before and in a more restrained way. A study commissioned by one of our business associations found that value chains were becoming more regional, and digitalization will accentuate that evolution. This

fragmentation will come at a price, though. Creating semi-identical supply chains in different parts of the world will add to cost of production. It will raise barriers, create additional layers of bureaucracy, and add to the spaghetti bowl of trade rules. It will shut countries and people out. And it will not help in resolving problems that we need to address globally, such as climate change or tax avoidance. Globalization has brought immense benefits to the world. It has not been without flaws. These need to be addressed. The right response is not "slowbalization."

Finland was the first EU country to form an official strategy on artificial intelligence in 2017. How do you think others will approach AI trade policy?
It's worth remembering that, despite all the hype



FINLAND SNAPSHOT

POPULATION: 5.5 million

GDP: \$251 billion

At its peak, Nokia represented 4 percent of the country's GDP.

Its much-lauded education system features no standardized testing, and children start when they are 7 years old.

Along with New Zealand and Iceland, it has the lowest level of air pollutants of any country.

around AI, from the trade rules perspective it is ultimately just like any other technology. Again, trade rules are, in principle, technologically neutral. Many concerns regarding trade policy and AI are similar to the ones that concern more or less all digital services.

One of the key concerns relates to data—data is, after all, a fundamental ingredient of AI. Therefore, trade agreements should tackle unjustified restrictions on data flows, such as requirements to locate, use or store data in some particular country. But there are other important elements to consider. Trade rules should, for example, ensure that governments do not mandate access to proprietary information (such as source code) or require forced transfers of technology as a condition of market access. Overall, cybersecurity issues should not be regulated in trade agreements. ♦

21ST CENTURY TRADE: Digital, Printed

AUGUST 2019 WILL MARK THE 500TH ANNIVERSARY of Ferdinand Magellan setting sail from Seville, a three-year voyage that would circumnavigate the earth and cost the explorer his life.

Fast-forward to today and this sentence could circle the globe in less time than it took you to read Magellan's name.

Five hundred years after Magellan's journey, most people continue to think of international trade in nautical terms. For them, international trade is moving atoms over oceans. But the old nautical frames for trade no longer hold. The digitization of goods means that we are increasingly shifting from moving atoms over oceans to moving data under the seas—moving information and digital commerce over transoceanic data cables.

In fact, the volume and velocity of trade in digital products is dramatically outpacing growth in physical products. This highlights one of two inter-related technological developments that will significantly alter international trade—digitization and additive manufacturing, also called 3D printing.

Let's use your child's athletic shoes as an example. The labels on most running shoes probably say they are "made in" China or Vietnam, but in reality they come from many different countries. From the soles (synthetics, made from oils from Saudi Arabia), to the rubber (Indonesia), to the leather uppers (Argentina) to the insoles (South Korea), the components of a simple sneaker come from across the globe. Those components move on container ships across vast oceans through even more countries for processing and assembly, until they are boxed and put on another container ship that moves across the Pacific, through the Panama Canal, to the port of Houston, and then on trains and trucks across the US to distribution centers, and finally to stores and customers.

That's the standard story of one sneaker that may have traveled more than 7,000 miles before you purchased it. That one simple sneaker, and its many duplicates in multiple sizes, probably employed hundreds of workers creating and assembling

While nations quarrel over sneakers and steel, trade policy is beginning to look beyond shipments of goods, say Washington International Trade Association's **KENNETH I. LEVINSON** and Brunswick's **ROBERT MORAN**.

numerous components; supported by a wide array of service providers, such as customs brokers, truck drivers, container ship pilots, supply chain managers, lawyers and designers.

But that story is changing, making the trade routes Magellan would have understood obsolete. Today, a nearly identical sneaker can be created in a matter of minutes by one or two people either at a point of sale or at a nearby fabrication facility. How? By moving ones and zeros across fiber optic lines from a designer to an additive manufacturing device.

Companies such as Nike, Reebok, New Balance, Under Armour and Adidas are already using 3D-printing technologies—also called additive manufacturing—to create cutting-edge shoe designs that are available to consumers *today*. We are quickly moving from manufacturing and assembling a product in many places and shipping it around the globe, to designing a product in one place and printing it in many places.

In a "design once and print many" future, the economic value is embedded in the product designs. Design and printing technology, especially programmed controls on the number of copies to be printed, are absolutely critical.

Additive manufacturing technology is just one that is radically reshaping the way products are



ILLUSTRATION: DAVID PLUNKERT

made, manufactured, distributed and sold. Artificial intelligence, robotics, blockchain, autonomous vehicles and many other technological advancements are reinventing trade—with the potential to disrupt supply chains around the world.

The good news is that trade policy (as opposed to trade politics) is beginning to take notice. The new trade agreement between the US, Mexico and Canada (“NAFTA 2.0”), as well as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership between 11 Pacific Rim countries, both have significant chapters dedicated to e-commerce and digital trade. In January of this year, over 70 nations decided to start negotiations that will establish new global trade rules on electronic commerce, under the auspices of the World Trade Organization.

While the trade debate between the US and China appears to be about things like soybeans, steel and shoes, it’s actually about the next economy. Intellectual property is at the heart of the dispute, specifically Chinese efforts to use technology developed in the US and elsewhere to power their own technological leaps in areas critical to the new economy, such as artificial intelligence, batteries and robotics. Policymakers in the US fear that intellectual property theft could force investors to transfer technologies to their Chinese partners, not only fueling Chinese economic and technological dominance, but undermining US national security now and into the future.

Trade politics in America and around the world have focused for years on the plight of workers and farmers in the American heartland who are displaced by changes in trade, be it in steel, textiles, autos or agriculture. But the new economy is powered by services that are enabled by technological advances that are radically changing how things are made and where they are made.

What should governments and businesses in the US and around the world be doing to equip workers for these changes? The challenge is not only to transition older workers displaced by technology and changing supply chains, but to prepare a global workforce for a future where fiber optics, not shipping lanes, are the thread that knits the world together ♦

KENNETH I. LEVINSON is Executive Director of the Washington International Trade Association, Washington’s largest nonprofit, non-partisan organization dedicated to providing a neutral forum in the US capital for the open discussion of trade policy and economic issues. He previously served as Senior Director for Global Government Affairs for AstraZeneca.



Nations & Partners

The UK Ambassador to Brazil tells Brunswick’s **ROBERT MORAN** he is optimistic about future relations between the two countries.

UNTIL 2016, VIJAY RANGARAJAN WAS EUROPE Director in the UK Foreign & Commonwealth Office, responsible for work on the UK-EU referendum, associated negotiations, and wider EU positions, such as on energy, social security and foreign policy. In 2017, he was named Ambassador to Brazil, a country with over 200 million people and the world’s ninth largest economy.

Brazil is poised for dramatic changes. The victory last year of presidential candidate Jair Bolsonaro presents new challenges and opportunities for Brazil’s relationships with other nations, particularly with regard to the issues of trade. From the British Embassy offices in Brasília, the ambassador gives us his view on the outlook between the two countries and the implications for the rest of the world.

How is the Brazilian economy evolving?

After experiencing the worst recession on record, with an accumulated GDP contraction of 7.2 percent in 2015-16, Brazil resumed a 1 percent growth in 2017 and 2018. Agriculture was the main source of growth between 2016 and 2017. Last year, however, services was the main sector.

The previous government made important reforms to improve the business environment and fiscal situation. These included relaxing the 1930s labor legislation (aimed at reducing rising unem-

ployment), establishing stricter governance rules for state-owned firms, reducing directed credit and local content rules, and introducing a cap to government spending (limiting growth in real terms for 10 years, to be revised thereafter). We are optimistic about the Brazilian economy, and the clear direction to open up, and reform, which President Bolsonaro and Paulo Guedes have set. For 2019, analysts estimate a GDP growth between 2 percent and 2.4 percent.

When we last met in São Paulo, you were hosting a large conference that included many young Brazilian business leaders. What was your takeaway from that?

Optimism. The human potential of Brazil is enormous and a large, diverse, educated, young democracy is a great place to work, and a great place for the UK to work with. Business is keen to seize the opportunities of opening up the Brazilian economy that the new government has set.

As the UK Ambassador to Brazil, what are your top priorities?

Four key ones: We want to work with Brazil on the transition we all face to a lower carbon economy—from technology (e.g., biofuels or offshore wind) to investments (e.g., green finance). We are also working to strengthen our partnerships with Brazil on innovation and science (underpinned by the Newton fund and fantastic joint research). We work on security and foreign policy (e.g., supporting the Lima group on Venezuela, or work on cybersecurity), and in multilateral fora like the UN. And a lot of our effort goes on the important task of boosting our trade and investment, including supporting Brazil to join the OECD.

What are your thoughts on UK-Brazil trade?

We believe the two economies are very complementary. Nowadays, I would pinpoint the following sectors as our trade priorities: Energy (including Oil & Gas, Renewables and Marine), Life Sciences, Education and Financial Services. We hope to increase investments of the UK in Brazil, and vice versa.

What can UK-Brazil trade tell us about evolving global trade patterns?

The UK and Brazil are both services-based economies (around 70 percent of both countries' GDP are services), but the bulk of trade between the countries is in the form of goods. The flow of services from the UK to Brazil has been increasing over recent years, which is reflective of global trade patterns. Services

**"THE HUMAN
POTENTIAL
OF BRAZIL IS
ENORMOUS AND A
LARGE, DIVERSE,
EDUCATED, YOUNG
DEMOCRACY
IS A GREAT PLACE
TO WORK, AND
A GREAT PLACE
FOR THE UK
TO WORK WITH."**

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

are becoming increasingly important. In that context, quotas and tariffs become less of an issue and regulations and standards become more important. We are working with Brazil to improve the regulatory environment and we cooperate in a number of sectors on best practices. Additionally, the WTO is starting new negotiations on issues such as e-commerce. Joining the OECD is a very important step.

What are the alternative scenarios for global trade and trade policy further out in the future?

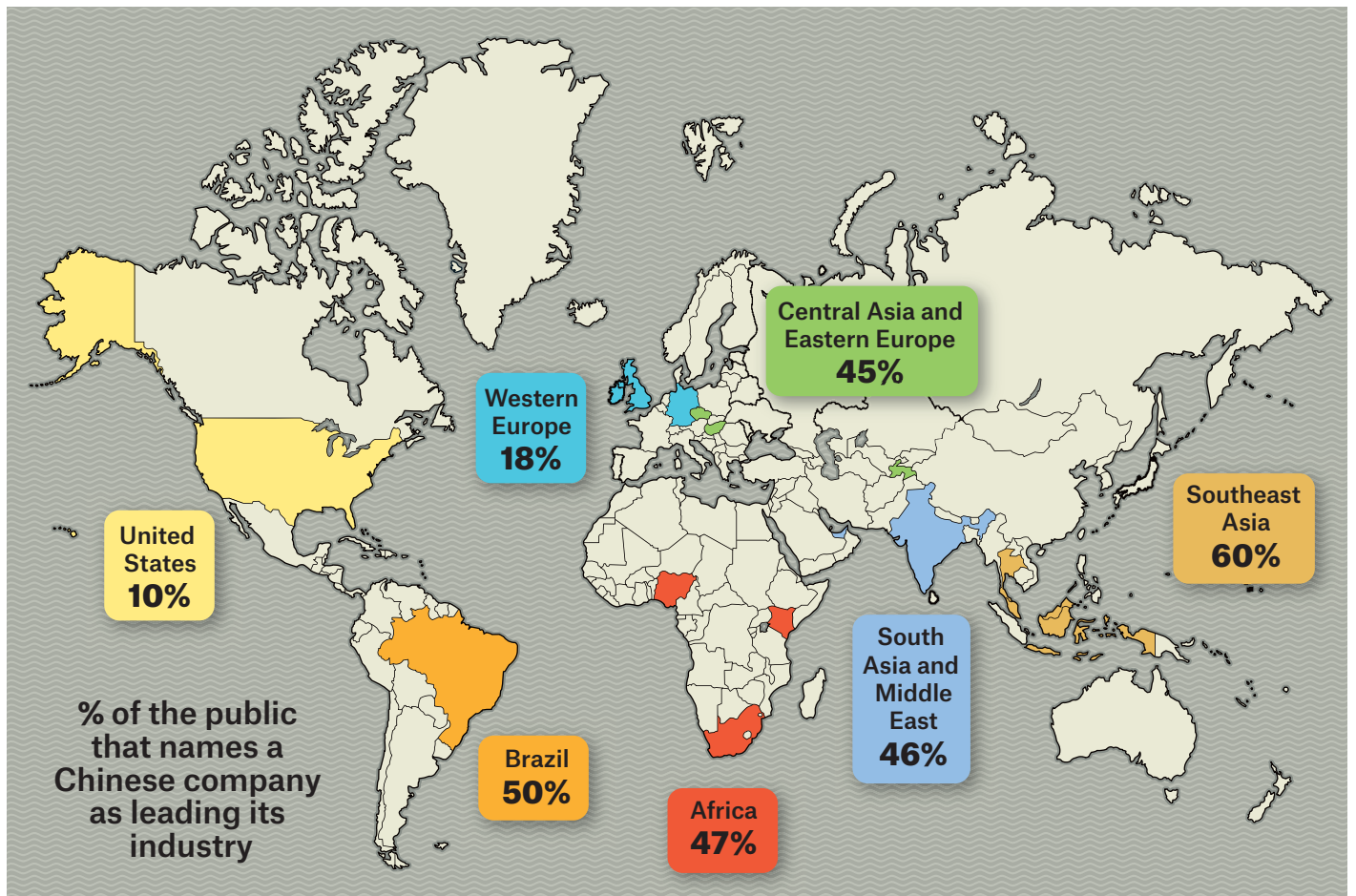
Future trade will move away from goods-based trade to services, investment and more innovative areas. The rules-based international economic system will shape the global economy—and it is important to get the rules and institutions right. That is the reason why the reform of the WTO matters, and Brazil's application to join the OECD too. The UK is in favor of free trade supported by the right rules and regulations. And obviously much of this will be digital: a very fruitful area for UK-Brazil joint work.

Can you tell us about partnerships that already exist between UK and Brazil?

The recent partnership that has been very active is our Infrastructure and Capital Markets Task Force. Through meetings and workshops, we are bringing together the private sector and government, both Brazilian and British, to discuss ways in which we can share best practice and highlight opportunities for cooperation and investment in both our markets. A session of the Task Force focused on capital market investments was held in Brasília last week.

Do you have any examples of the results of these partnerships?

A good example is the engagement we have been doing through Prosperity Fund. Two core areas of this work are Green Finance and Future Cities. In Recife, an important city in northeast Brazil, we have signed an agreement with the local sanitation company to study and implement alternatives for water loss management in the water supply systems of Recife's metropolitan area. In São Paulo, we are working on a project to improve traffic flows, improving the quality of life for poor communities, and reducing negative impacts on Brazil's economic development in the city of São Paulo. Both projects will have the Prosperity Fund as funder and the World Bank as an implementer. But these partnerships span so many areas: from tax cooperation to intellectual property, cooperation to increase the efficiency of ports, to sharing expertise on energy challenges. ♦



CHINA'S GLOBAL AMBITIONS

Through the World's Eyes

IN OCTOBER-NOVEMBER OF 2018, BRUNSWICK INSIGHT surveyed 7,500 members of the public across 18 countries where Chinese businesses have significant investments and ambitions, with an eye toward public views of Chinese leadership. Globally, nearly half, 44 percent, named a Chinese company as a leader in its industry. Technology companies led the pack, especially Alibaba, Huawei and Xiaomi.

We also surveyed 300 business leaders at Chinese companies with either a presence or aspirations abroad. Nearly all of them, 94 percent, say that inter-

Brunswick Insight's
PETER ZYSK
and **RACHAEL LAYFIELD** on
China's growing
influence.

national acquisition has become a more important focus for their business over the past year and, while they see opportunity growing in the China market, nearly half, 49 percent, report exports and sales outside of China have become much more important.

Read the complete "New Perceptions on China Going Global Report" online, including the survey results and Brunswick's analysis. ♦

PETER ZYSK is co-lead of Brunswick Insight's Asia practice. Both he and **RACHAEL LAYFIELD** are Directors in the firm's Beijing office.

TECHNOLOGY SECTOR

Companies in the tech sector, such as Alibaba, Huawei and Xiaomi, are most frequently cited as industry leaders.

44

% OF THE PUBLIC

Almost half of the those surveyed named a Chinese company as leading its industry.

EMERGING MARKETS

Recognition of industry leadership is the highest in emerging markets, especially Southeast Asia.

AS THE INTERNET TURNS 30, CRITICISM IS mounting of how it is being exploited by some technology companies. Concerns of abuse of market power, privacy, fake news and tax avoidance seem to have engulfed the technology sector in what appears to be a perfect reputational and increasingly regulatory storm.

Brunswick Insight's online consumer polling shows a majority of European and US informed consumers view the contribution of technology companies to society as positive. They do however have a much more negative view of social media companies. Conversely, while their social media use is increasing, they do want platforms to be liable for content that they host and be more transparent about how their personal data is used.

In the absence of a unified response from tech, these concerns draw the attention of regulators—of particular concern for companies whose business is spread over many regulatory jurisdictions. In a white paper published in April, for instance, the UK's Department for Digital, Culture, Media & Sport and Home Office, backed by Prime Minister Theresa May, proposed significant penalties against companies that ignore the spread of harm-



TECHLASH

ful content as they focus on growth.

In its 100-plus-year history, IBM has seen more than a few technological waves—and has led many of them. Leading government affairs activities for IBM in Europe, Liam Benham is at the center of the tech regulation debate and ideally placed to comment on the challenges that the sector faces. In our interview, Mr. Benham shares his view on trends and attitudes in tech and regulation and how IBM is responding.

Are the informed consumer views we're hearing in our polls a problem for social media alone or for the entire technology sector?

Your consumer polling reflects exactly what we are seeing. Technology—whether blockchain, quantum, internet of things or artificial intelligence—can transform all sectors of society for the better.

A new partnership is being proposed between technology, public policy and society.

LIAM BENHAM,
IBM's Vice President for Government and Regulatory Affairs in Europe, maps the future for Brunswick's
NICK BLOW.

Yet this digitization comes with responsibility. We've had the situation for some time now where playing fast and loose with people's trust, as some in the tech sector have done, is having an impact across the industry.

We would agree with the consumers in your poll: Platforms need to accept liability for the content they host. And they need to treat data more responsibly while being transparent about how they do it. Companies need to step up and take action to strengthen consumer trust. Your polling shows that use of social media is increasing—but will that be sustained if companies don't make meaningful changes to their behavior?

Our polling points to the fact that consumers don't want to give up their technology, but they do want to be protected from its excesses. Consumers continue to place data and privacy as their top concerns and want technology companies to be more transparent. What's your view?

Companies need to face a new reality. It is no longer enough to repeat "sorry" or say the issue is too complicated when there is yet another abuse of customer data. Principles and practices need

to be put in place up front to demonstrate good data handling.

IBM has publicly declared principles on trust and transparency that we translate into the development and delivery of our offerings across our business. As a business-to-business company we have always believed that our clients' data is their own. We believe the unique insights derived from clients' data are their competitive advantage, and we will not share them without their agreement. We make clear when and why AI is being applied, where the data comes from, and which methods were used to train algorithms. These training methods must not only be transparent, they must be explainable.

Pressure from politicians for action on platform liability is growing. Indeed 76 percent of the consumers we polled in Europe agreed that technology companies should actively edit content, and remove fake news and hate speech from their platforms. Is existing regulation enough? Is significant change required?

Liability and transparency are at the core of this debate. Collectively, dominant online platforms have more power to shape public opinion than newspapers or the television ever had, yet they face very little regulation or liability. They are no longer startups that need to be shielded from liability in order to find their footing.

Some sort of regulation on consumer-facing technology companies is coming. But exactly what is less clear. Businesses have leverage when they negotiate for someone to use their data. Consumers don't, and that's where government may need to step in.

Regulators are also very wary of impeding innovation and competitiveness. Where is the balance between business freedom and excessive regulation?

To avoid excessive regulation, the onus is on companies to demonstrate that it is not necessary. For example, at IBM we are setting out our vision for a new partnership between technology, public policy and society. This is particularly timely as the European Union, under new leadership, will move to the next phase of the Digital Single Market.

We believe that for the DSM to be successful globally, it must focus on a digital future that is responsible, open and inclusive. This cannot be achieved only through regulation, but through companies themselves committed to changing their mindset, and focusing on actions that build trust.

**"BY USING A
REGULATORY
SCALPEL, NOT A
SLEDGEHAMMER,
GOVERNMENTS
AND REGULATORS
CAN FOCUS ON
REAL PROBLEMS
WHERE THERE
IS HARMFUL
BEHAVIOR,
WHILE AVOIDING
COLLATERAL
DAMAGE."**

That's not to say that regulation doesn't play a part. There are areas where precision regulation is warranted. Platforms that tolerate the dissemination of illegal content should not be shielded from liability. People also need to know who is behind the political messaging they see in their feeds.

By using a regulatory scalpel, not a sledgehammer, governments and regulators can focus on real problems where there is harmful behavior, while avoiding collateral damage.

Some in the sector say they don't need to change their business model or their lobbying tactics and cite healthy user figures and financials. How should technology companies be engaging with regulators?

First, regulators want companies to walk the talk on good behavior. Moving from theory and promises to tangible actions. I've referred to IBM's principles for trust and transparency, but we have also launched a service that brings greater transparency to AI decision-making—for the first time businesses will be able to "live" monitor AI for bias. We have also published "Everyday Ethics for Artificial Intelligence," a guide for designers and developers to help them embed ethics in their work.

Secondly, companies can work with policymakers to develop alternatives to regulation. IBM and other companies worked with the European Commission for four years to develop the Cloud Code of Conduct. Companies that sign up to the independently governed code are committing to a gold standard of data handling in the cloud. We are also a member of the European Commission's Expert Group that developed recently published guidelines on AI ethics. Investing in being part of the solution pays off.

Thirdly, technology companies should accept that recurring bad behavior needs targeted regulation to root it out.

And finally, like-minded companies should also come together to engage with regulators. For example, IBM is a founder member of the Charter of Trust, a global cross-industry initiative centered around 10 cybersecurity principles designed to strengthen trust in the security of the digital economy. We are engaging with policymakers in Europe, US and Asia to help make high standards of security the norm across all sectors. ♦

NICK BLOW is a Partner in Brunswick's Brussels office, where he specializes in EU and international public policy and government relations.

BETTER than EVER!!!

Roast Beef of Old England

THIS IS NOT A STORY FOR VEGETARIANS. IN 1996, in the United Kingdom, a metaphorical bomb went off in the UK beef farming industry when health and agriculture ministers confirmed the existence of mad cow disease, or bovine spongiform encephalopathy (BSE), in British livestock. Not just that—it was transmissible to humans and could cause a crippling degenerative disease, CJD, that ate away at the human brain and led to a terrible death.

British beef went off the menu worldwide. The industry faced total collapse. The Roast Beef of Old England, that most iconic of dishes, was literally toxic.

You wouldn't know from its current aspirational status that British beef not so long ago went off the menu worldwide, reports Brunswick's **JON MCLEOD.**



1. If your industry faces an existential threat, get to the heart of the problem and root it out whatever the cost.
2. In setting the road ahead, define change early and set up systems for independent verification that the change has taken place.
3. In your recovery planning, target your most vulnerable issues and communicate carefully and patiently about how you are addressing them.
4. Ahead of time, build relationships, especially with political, public affairs and influential stakeholder audiences for the long term.
5. Transform the product—make it aspirational once again.
6. Make your proposition relevant across global boundaries as well as within local markets.

Working with the industry at the time, I remember well the confusion and panic among beef farmers—and the difficult communications with government. I took a delegation into Whitehall to meet Ministers. We sat glumly in the waiting room with our cups of tea. A plate of “happy faces” biscuits stared sardonically back at us. A scrawny political adviser popped his head round the door to say hello. It was George Osborne, who went on to become Chancellor of Exchequer and now Editor of the London Evening Standard.

It was hard to see the road to recovery at that time—we only knew it would be long. And it would require resilience and commitment to get the beef industry back where it belonged. But slowly, progressively, the pieces fell into place. An independent public inquiry under Lord Justice Phillips looked into the circumstances regarding the spread of the disease and its scientific and zoonotic origins, as well as its impact on victims.

The discovery of how it happened hardly exonerated the industry. One culprit turned out to be that the industry was recycling offal—cattle brain and spinal cords—into animal feed, essentially feeding cattle parts to cattle.

Response was swift and intense. Measures were introduced for a controlled slaughter of more than a million cows. Those over 30 months old—the gestation period of the mad cow disease “prion”—were culled and their carcasses destroyed.

Abattoirs were reformed to ensure the careful removal of offal. To assure consumers, the industry tested its beef, ordered up independent audits of those tests and publicized the results. A consumer-facing Quality Standard Mark was launched, carefully outlining the traceability of the product.

Nothing about this approach was temporary. More rigid standards and a robust public-assurance campaign persisted. Only within the last year did two of the global holdouts—China and Japan—lift their BSE-related bans on British beef.

Today, British beef is once again an aspirational product. The 20-year-plus story of its recovery is one of resilience in the face of a catastrophic collapse of confidence. Other sectors and products have faced similar losses of trust. Think retail banking, social media or vaccines. Each bears the responsibility to demonstrate resilience in recovering its position.

Above all, be prepared for the long haul. True resilience is not just about surviving a crisis—it is about the journey back from it. ♦

JON MCLEOD is a Partner and UK Head of Public Affairs in Brunswick's London office.



Bottom Line Engagement

THE BUSINESS CASE FOR CEOs TAKING A STAND on social issues is growing. Whether it's calls for leaders to speak out on racism, guns or gender rights, companies are increasingly expected to have clear positions on matters affecting society as a whole. Even for concerns that don't appear to directly impact operations, and even on social issues that inflame polarized political views, customers and employees today expect that company leadership knows when and how to use its voice to shape public discourse. Corporate leaders are having to get more comfortable speaking up.

Several trends have converged that mark this as a genuine shift for businesses. For one, the rise of social media has inflamed deep divisions, leaving leadership from traditional institutions hamstrung. Government and even religions are often divided against themselves over the handling of social concerns. Society naturally looks to the world of business to help fill that void.

Social issues are business performance issues, says Brunswick's **MARIA FIGUEROA KÜPÇÜ**. Leaders can no longer afford to shy away.

Second, social purpose has become more embedded in all aspects of corporate enterprise—strategy, products, innovation—putting a company's values front and center. The recent surge in companies “refreshing” their corporate values and mission statements is indicative of this. Naturally, that also figures into attracting talent. Younger employees have made it abundantly clear that they prefer to work for companies that are stewards of society.

Third, to boost productivity and employee engagement, companies have spent a good deal of effort to reassure workers that they can “bring their whole selves to work.” But that carries a reciprocal: When the outside world challenges issues of identity—gender, race, sexual orientation, disability and others—employees now expect that their companies will stand up for them.

As a result, social issues today affect the bottom line in ways that would not have been visible even 10 years ago. Certainly leaders are becoming more

aware of how social concerns may be affecting their business. But also, awareness among employees, customers and other stakeholders is creating more direct impacts. Hiring and employee retention, productivity, remaining competitive, relationships with partners, customers and clients—a downturn in any one of these, brought on by a lack of response or poorly considered response to a social problem, can result in reputational harm.

THE NEW EMPLOYEE RELATIONS

In a Spring 2019 survey of 2,048 US employees by Brunswick Insight, two-thirds selected “the values of the company” as the most important issue for a CEO to communicate. As a group, respondents ranked communicating values higher even than company strategy or profitability. Importantly, a majority see the CEO as the face of the organization and its values, with 58 percent selecting “setting the moral tone of the company” as important to the CEO’s job.

Significantly, when asked to select factors they felt were important to consider when deciding to stay in their current job, more than 90 percent of employee respondents chose “having leadership that they recognize and respect.” Further, over 70 percent also chose “having a leadership stance on social issues.”

This visibility on social issues naturally impacts hiring. A majority of respondents identified a leadership stance on social issues as an important consideration when weighing a job change or joining a new employer. Our survey polled two groups: readers of finance publications, and employees at large companies. Of the two, the finance-oriented group felt social issues were *more* important—73 percent versus 61 percent in the general group.

Our respondents’ top three choices for social issues company leaders should be working to address were: diversity and inclusion, gender equality and income inequality. Collectively, the group ranked those issues above more traditional business employment concerns, such as job retraining, sexual harassment and healthcare access. Moreover, between half and two-thirds of respondents agreed that it is appropriate to publicly disagree with the company if its position on social issues doesn’t match their own.

Not every issue demands a public response. Employees recognize the social dimensions of their company’s business model and where the company’s resources can best be used. A pharmaceutical company should have a stance on access to healthcare, which means taking a thoughtful position not only on global health issues, but also on healthcare legislation, such as the proposed Medicare for All in the US.

OF FINANCE-NEWS
READERS,
93
PERCENT
SELECTED
“LEADERSHIP YOU
RECOGNIZE
AND RESPECT” AS
AN IMPORTANT
REASON
FOR STAYING
IN THEIR
CURRENT JOB.

They also expect their business’s position to be consistent, extending to employees the same level of concern on issues expressed to customers and those outside the company. No longer is it sufficient to reassure employees internally and say nothing externally. A majority of respondents indicated that internal and external audiences were equally important.

This sometimes means wading boldly into political issues. Where the lines between social and political are blurring—race, immigration, LGBTQ rights, the effects of climate change—it is critical to identify in advance where public comment from your business will be appropriate. As one corporate employee put it in a recent employee engagement project Brunswick worked on, “Every political issue has become a social issue ... What is the difference anymore?”

ANTENNAS UP

Businesses could once afford to wait weeks or even months to vet the right public affairs response to a flare up; they now must be prepared to do so within hours. In social media analysis of recent situations—including the response to North Carolina’s so-called “bathroom bill”—the window for attention in social media has been 48 hours or less. A corporate response that misses the mark can tarnish a company for years. And employees look to those public moments as a yardstick to measure how well their company is led and living by its stated values.

The key to addressing touchy social issues effectively in real time is advance planning. In the wake of the shooting of 12 police officers in Dallas, Texas, in 2016, PwC’s newly installed US Chairman and Senior Partner Tim Ryan responded by scaling up a conversation with partners and staff firmwide to air their concerns. This resulted in a determination to move more CEOs to not only lead similar conversations in their own organizations, but work together to advance issues of diversity across all workplaces. PwC co-facilitated the creation of CEO Action for Diversity & Inclusion™, a network that now includes over 650 companies, non-profits and academic institutions.

Then, in November of last year, 26-year-old Botham Jean, a PwC Senior Associate in Dallas, was shot and killed by an off-duty police officer in his own apartment. Mr. Jean was black and the officer, Amber Guyger, is white. Ms. Guyger says she thought she was in her own apartment and that Mr. Jean was a burglar. “All of a sudden, it was one of our own,” Mr. Ryan told The Wall Street Journal earlier this year.

The national outrage and concern surrounding the case were fueled by a heavy burden of questions, anger and fears. Conversations that had typi-

cally been relegated to homes and communities were encouraged in the PwC workplace. While a work in progress, Mr. Ryan's institutional commitment to openness, building trust and understanding, allowed a more honest airing of these concerns and demonstrated the firm's commitment.

PwC's experience highlights the degree to which companies must be prepared to respond quickly and confidently, with a message of clarity and compassion, on issues that affect not only their relationships with investors and regulators, but also their employees and the community as a whole. As a response to social issues becomes more expected, the need to be proactive has increased. Certainly, when a response to a major issue in current events is perceived as inadequate—whether the Parkland, Florida school shooting or a supply chain labor issue—employee morale, loyalty, retention and recruiting are affected and the business as a whole suffers. “If you're carrying all these concerns when you come to work—whether you're a woman, whether you're black—and you can't share how you feel, the fact that we have you in the seat means nothing,” Mr. Ryan told the Journal. “We want you to be here mind and body.”

BUILDING THE NEW BOTTOM LINE

Corporate leaders should be actively working to gauge approaching social concerns that will demand a response and plan out how they will handle them. In that process, keep three considerations in mind:

Be prepared to deeply listen—first as a fellow human being and second as corporate leader. Make sure this conversation is not a one-time event, but an ongoing process in which leadership spends time

MARIA FIGUEROA KÜPÇÜ is a Partner and the Head of Brunswick's New York office. She leads the firm's US Business and Society practice. Survey research and analysis by **NOAH KRISTULA-GREEN**, an Associate with Brunswick Insight in Washington, DC.

learning the context of employees' lives and gauging how feelings and views about the effectiveness of the company's stance and response may have changed.

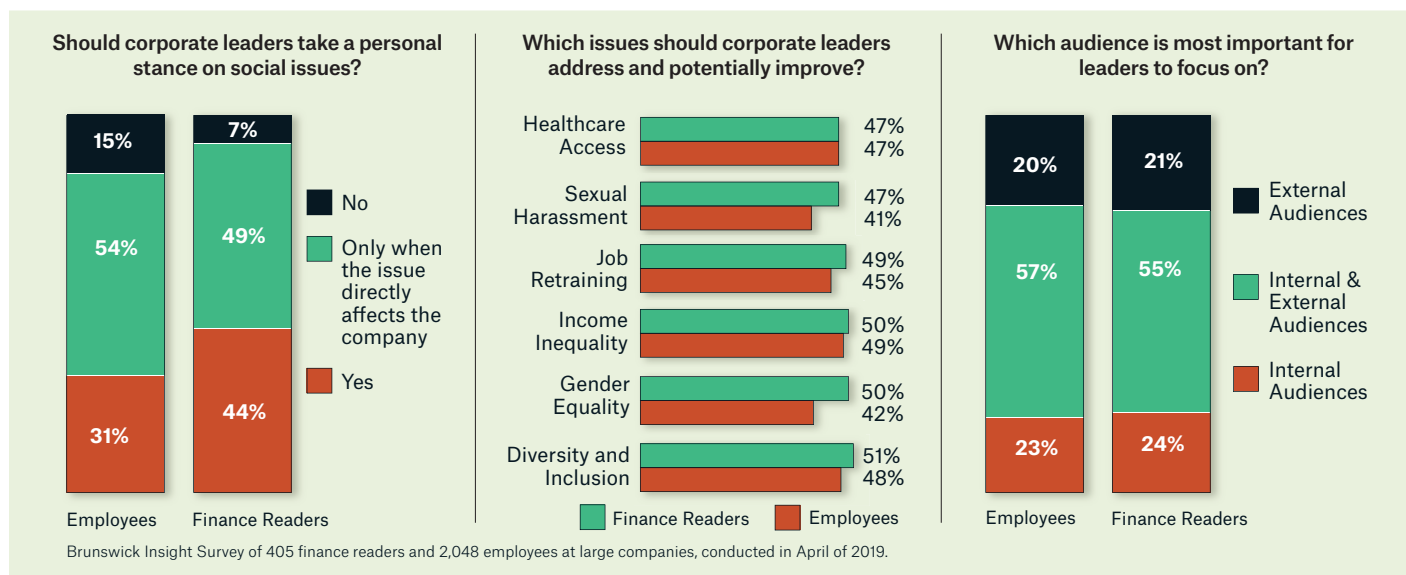
Align your message for all stakeholders—employees, customers, regulators, investors. With social media, what you tell any one of these groups will be received by the others. Your communications still must be tailored to each stakeholder group, but you risk losing the trust of everyone if the message to each is not clearly guided by the same core set of principles.

Take the time to do scenario planning. Any event will carry unknowable variables that will affect a company's response in some way. But you can limit the confusion by deciding now what issues are most important to the company, what an appropriate level of response might be to a particular issue, who will respond to each group of stakeholders, through what channels and, if internal review is warranted, how that will be handled efficiently before it is sent.

What's clear is that any calculation for business success must now involve how employees feel—how they are engaged, how comfortable they are being personally represented by the business. What employees think and say about their business matters.

Leadership is coming to recognize that good business practice now demands understanding and engaging with the social context of their stakeholders' lives. It has to come from the top and be reiterated in actions throughout the organization. There is no substitute for leaders having a deep understanding of the values of the organization, communicating them consistently to the business and to the world, and being prepared to act quickly and effectively to stand by them when events warrant. ♦

THE LEADERSHIP EMPLOYEES EXPECT



AS DIRECTOR OF ETHICS AND ENGAGEMENT for the Church of England Pensions Board and Co-Chair of the Transition Pathway Initiative (TPI), Adam Matthews leads groups of major shareholders in efforts to shift the practices of corporations, fossil fuel extractors and others on the issue of climate change. TPI is supported by investors with over \$13 trillion of assets under management.

“We have a belief that business is a force for good,” Mr. Matthews says. “Done well it can be an extremely positive force in society. And in the context of climate change, business has a responsibility to disclose how they’re going to deal with this very challenging issue. We believe that they can.”

The international Paris Agreement two years ago set a target of keeping global warming “well below” a 2°C increase over pre-industrial levels. Since then, there has been a dramatic increase of pressure on companies to be accountable to investors for their greenhouse gas emissions.

Recently, the Church of England investing bodies co-led successful investor engagement with Shell and Glencore as part of the Climate Action 100+ investor initiative, a group that collectively represents \$33 trillion in assets. As a result, Shell set a binding target for emissions that stem from the use of its oil and gas products, and miner Glencore set a cap in thermal coal production capacity.

A key component of investor discussions surrounds what are called Scope 3 emissions. Under the Greenhouse Gas Protocol, a widely used international accounting tool, emissions are categorized into three groups or “scopes.” Scope 1 and 2 cover

Investors managing a collective \$33 trillion are pushing companies to improve their resilience to climate change. **ADAM MATTHEWS** of The Church of England Pensions Board tells Brunswick’s **PHIL DREW** and **WILLIAM MEDVEI** where this is heading next.

emissions sources from fuel used in company operations or purchased electricity, for instance. Scope 3 covers all other indirect emissions—in the case of oil and gas companies, that’s considerable, as it covers the emissions caused by users of their products.

Investors are also addressing companies’ government lobbying efforts, which can be at odds with their stated climate goals. Corporations are being asked to review relationships with the trade associations and lobbying organizations that work with regulators on their behalf, to ensure consistency with the companies’ public commitments.

In an interview that took place as thousands of young people crowded Parliament Square in London demanding action on climate change, Mr. Matthews described his positive outlook for corporate leadership on climate change, increasing the chance for success in meeting the Paris climate goal.

Norway recently recommended that its sovereign wealth fund partially divest from oil and gas. What is your rationale for engagement versus divestment?

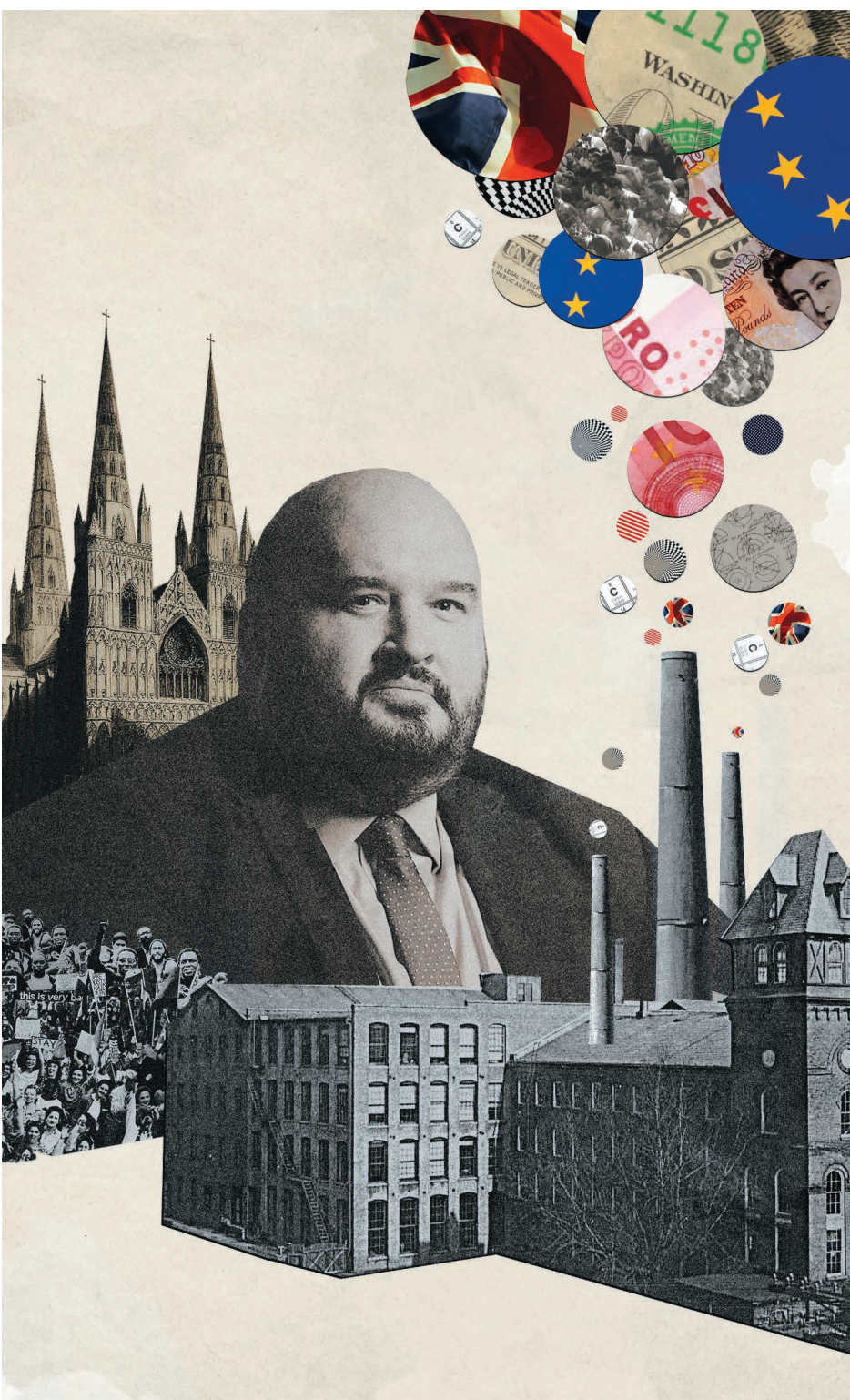
Ultimately, you want the market to properly weight the risk. If the market fully embeds carbon-related risk into investment decisions, then it should be re-allocating capital to companies that have plans consistent with the transition to a low-carbon economy. Then you would see that shift on a company by company and sector by sector basis. That isn’t yet happening, but it is starting to happen with the move away from coal.

Divestment can be a bit of a blunt instrument, but the Church of England recognizes the value of divestment—particularly where companies produce more than 10 percent of their revenue from thermal coal and tar sands. We’ve taken a view that those companies are simply not part of the transition—they are at the wrong end of the spectrum. We don’t believe they will survive in a world consistent with the Paris targets. On the larger question, it is completely legitimate to engage with companies on this, because it allows the owners of companies

INVESTOR

CLIMATE

ILLUSTRATION: LINCOLN AGNEW



ACTION

to really drive positive change. When you divest, you can't do that so effectively from outside.

If done well, engagement has the potential to deliver the change we need, as with the commitments BP, Shell and Glencore have made.

But we're also clear engagement has to have a deadline. For three national investing bodies of the Church of England, 2023 is a key boundary: If you're not aligned with that—if we can't demonstrate that you're on a credible path to below 2°C—then you are a candidate for us to divest. This timeframe is also in step with Climate Action 100+, which is a five-year initiative.

Does the church's moral and ethical code mean it is naturally well placed to make this case?

Our approach is absolutely rooted in our faith and guided by our ethics, but we act in a way to bring other mainstream investors to particular issues. The issues companies and investors are grappling with are immensely complex—the transition to a low-carbon economy, concerns around tailings dams at mining operations, agriculture's impact on deforestation. And there is a lot of gray space in there.

We have focused on trying to understand the connection between the teachings of the church and practical reality. You could take a very easy position of, "OK, the extractive sector, well, we just divest as it's not ethically right." But it's probably more correct for us to be in that messy space with our eyes open.

The moment companies break ground and start to extract oil, metals, resources, that's when the responsibility starts to flow. You have to track responsibility, from the person breaking the ground to the shareholders.

The other big reflection for us is a preferential option for the poor. The poor are very disadvantaged in many circumstances in the extractive sector. But equally, the industry can be a force for development and good.

That implies a tension between reducing emissions and the right to economic development and prosperity. How do you navigate that?

The poorest are at the forefront of our minds. And when you look at who is going to be the most impacted by climate change, it's going to be the poor who are least equipped to manage the transition to a low-carbon economy. So, you need to say, "How can we enable clean energy development so that the

poorest aren't impacted by climate change, whilst respecting their right to development?" So yes, there can be a tension.

But prices on renewables now are much more competitive. In India it's cheaper to go for solar panels than pursue some of the more traditional alternatives. That path is the one that we obviously want to support. There's not yet the follow-through to produce the sorts of international funding commitments required to manage the transition under the Paris Agreement. There needs to be a lot more effort put into enabling countries to pursue low-carbon paths.

Some argue that a low-carbon economy will lower dividends by turning those companies into something resembling utilities. Should investors choose a path that could undermine their returns?

That goes back to that point earlier about the market properly understanding the transition and pricing the risk. This is a multi-decade transition that is deeply complicated.

Two models are beginning to emerge: one where the companies begin to run down reserves and pay out cash to shareholders as they wind themselves down; the other, which is more apparent in the larger integrated oil companies, is where they diversify further into gas, then into renewables and then ultimately into being a variation of an energy utility. Both paths are equally legitimate as long as there's a consistent way of being able to track those processes. The consequences of that I think we're yet to see.

What disclosures would you like to see companies give you to prove greater confidence in their carbon transition model?

This is very clearly laid out in the TPI. We need to be able to look at future carbon performance according to the company's stated strategy. That means we need to understand Scope 3 trajectories. For oil companies, Scope 3 often accounts for 80 percent of emissions. Whatever your plan is, we want to know: How does that correlate to your Scope 3 emissions?

We're working with the diversified miners at the moment to identify a methodology that can track their performance in a similar way to the oil and gas sector. I'm very conscious that in the multi-decade transition you have some coal, some oil and some gas. And somebody to provide those. There's just less of them. The companies that are going to

"WE'RE ESTABLISHING COORDINATED INVESTOR GROUPS FOR EACH SECTOR, TO INCREASE THE KIND OF INTERVENTIONS WE'VE HAD IN THESE OIL AND GAS AND MINING COMPANIES IN AVIATION, UTILITIES, CEMENT."

gain investor confidence are those that can demonstrate to us that they've got a plan and the assets best placed to meet that demand. Plus the transparency to back it up.

How global is this investor movement?

The Climate Action 100+ engagement initiative has membership from all regions of the world. While we have major investors in Japan, the US and Australia, different regions run on slightly different timescales, with Europe initially moving forward a bit faster and seeing some more successes. You'll see other investors join these initiatives. Ultimately this is the shot that the investment community has to demonstrate that engagement works, and that we're able to shift companies into alignment with the 2°C target.

Where is investor engagement on climate change going?

We're only just getting started and more does need to be done. Different approaches are emerging.

With Shell, the framework of continued engagement has five pillars. At the top level, you've got a clear set of emissions targets. And you've got transparency on Scope 1, 2 and 3 emissions.

Second, there is the connection of that to executive pay.

Third, you've got the disclosure of all the metrics that they are using that enable investors to track progress.

The fourth pillar is having built-in points of review. Technology and regulation change; the company has to be able to reassess those developments and reflect on its ambitions.

And then the last pillar, the fifth pillar, is the commitment to ensure lobbying is consistent with Paris. You're going to see increasing focus on that area from investors.

My sense is that that framework can be extrapolated to any other company. We're talking across Climate Action 100+ about how we can replicate that. Climate Action 100+ covers a raft of sectors. The cement industry is one of the worst for disclosure and performance assessment on emissions. We also just produced our first assessment of the aviation sector, which has had limited engagement and focus on climate issues.

We're establishing coordinated investor groups for each sector, to increase the kind of interventions we've had in these oil and gas and mining companies in aviation, utilities, cement—you'll see that roll out in the coming year.

How can companies demonstrate that their lobbying practices are in line with their commitments on meeting the Paris targets?

As investors we're very clear about what we're looking for. One, good governance and oversight by the Board of its lobbying practices; two, annual review of memberships to trade associations or other lobbying groups to test them for alignment with their own positions on issues; and three, in the event of misalignment, identify clear steps to address that—including ending memberships.

The OPEC Secretary General recently described the oil industry as suffering from a "crisis of perception." What do you think oil companies are getting wrong?

Well, if you look at Parliament Square right now, you've got thousands of school children who are probably thinking, "Oil and gas companies are not ethically aligned with my future." There's a massive challenge there for companies. Does an oil and gas company have a role in the low-carbon transition? Yes, it does. All the scenarios that we base our projections on include oil and gas, but to different degrees.

The oil sector is legitimately challenged right now. For the vast majority of companies, there has not been a collective set of disclosures and strategies that align to 2°C pathways. You're now seeing the first begin to do that. When you can get to the point that you've got that line of sight on all of them, then the sector can have a clearer message. That's critical, not just to explaining oil's role but

"WE'VE NOW GOT COMPANIES WITH SCOPE 3 EMISSIONS TARGETS, INTEGRATING THEM INTO EXECUTIVE PAY AND CORPORATE REPORTING. THAT'S IN LESS THAN TWO YEARS."

also to retaining the best talent going into the sector, to enable it to manage that transition well.

Change is hard and this transition is a fundamental change of the business model. These are not easy things to do. It's often the case that the first response is defensive. But being open to the challenge and finding a pathway to address it enables you to have a more robust response. If your company or your sector has only a defensive reaction, it's hard for people to align with that.

What inspires confidence that society is going to get to where it needs to be?

Partly it's all those children in Parliament Square right now. This is intergenerational and it's clear a movement has been united across schools and children will want to see more action. I'm also encouraged by the pace of change that we've got going. Just in the space of a year, look at the commitments from companies, the kind of territory we're now discussing. Two years ago, we weren't talking about targets or oil and gas companies covering Scope 3 emissions. We've now got companies with Scope 3 emissions targets, integrating them into executive pay and corporate reporting. That's in less than two years.

And now we've got to see all of this move quicker. And I think there's a real possibility of that. ♦

PHIL DREW, a Partner in Brunswick's Business & Society practice, advises companies on how to engage with societal issues critical to their future growth.

WILLIAM MEDVEI, a former oil analyst, is a Director specializing in Energy & Resources and Investor Engagement. Both are based in London.

THE LOW CARBON TOOLBOX

INVESTORS ARE LEVERAGING THEIR COLLECTIVE POWER TO DEVELOP NEW TOOLS AND A PLATFORM FROM WHICH TO ACTIVELY ENGAGE COMPANIES, SEEKING BINDING COMMITMENTS THAT WILL ENSURE COMPANIES' ACTIVITIES ARE ALIGNED WITH PARIS 2°C GOALS.

Developing a tracking tool. The Transition Pathway Initiative offers a tracking tool for carbon goals, cutting through different corporate reporting

methodologies in a way that is public, independent, academically rigorous and free. This allows investors across industry sectors to identify if a company is aligned to the Paris Agreement's 2°C. TPI is co-led by the Church of England Pensions Board and supported by investors with over \$13 billion AUM.

Creating a clear set of targets. These targets are essentially the requests investors are making of companies. These requests can be broken into three parts.



First, use metrics that can be compared against the Taskforce on Climate-related Financial Disclosure.

Second, make emissions targets binding and link them to executive remuneration.


Third, ensure that lobby activity intended to influence legislation and regulation is consistent with public commitments and with the Paris Agreement targets. Business's lobbying activities should also be reviewed annually to guarantee continued compliance.

Collaboration among investors. Leverage the collective power of investors across regions to maximize global impact by coordinating under the Climate Action 100+ group.

Engage passive money. Looking to the future, there is an ambition to target passive investing through the creation of an index fund that integrates TPI assessments into its investments and ensures that the fund is weighted toward companies that scored positively on that criteria.

With the help of a trainer and a robotic exoskeleton in development at UCLA, Mark Pollock is gaining control of long-dormant leg muscles and taking small steps toward a release from paralysis.





IN 1998, WHEN I WAS 22, I WAS STUDYING FOR a business studies and economics degree at Trinity College in Dublin, Ireland. I was raised in Northern Ireland, and I wanted to be an investment banker. But really, I went to Dublin to continue my rowing career. I was racing for the University and also for Ireland and starting to break into the senior team at that stage. The things that I did defined my identity.

One morning in the spring of 1998, I was down at the boathouse, opening up the boat bays, and as I swung open the doors and looked out over the river, I noticed blurring around the edge of my vision. It was the same blurring that I had seen as a five-year-old when I lost sight in my right eye. I knew the blurring was another detachment of the retina, this time happening in the left eye. I didn't go rowing that day. I left the boathouse, got a train up to Belfast, to the hospital where I'd had operations previously. They sent me to Manchester, and two weeks later I had an operation from which I didn't recover. From then, in 1998, until now I've been completely blind. Twelve years later, I became paralyzed.

To make sense of these crucible moments, I've come to acknowledge that sometimes we have the luxury of choosing our challenges and sometimes they just choose us. What we decide to do next is what counts. In particular, I have identified three decision themes that we all face when challenges appear. To be a competitor or a spectator? To be an optimist or a realist? To be a collaborator or a soloist?

Amid the uncertainty and sense of loss that followed my blindness, I feared that I was going to have to sit on the sidelines of life as a reluctant spectator. But my desire to compete got me back in a boat, eventually winning silver and bronze medals row-

ing at the Commonwealth Games. I became an adventure athlete on a quest to rebuild my identity as a competitor, racing ultra-marathons in deserts and mountains. I started with six marathons in a week in the Gobi Desert. On the sixth anniversary of my blindness I ran the North Pole Marathon.

I'd completed plenty of endurance races, but I always felt the reason people patted me on the back is that I'd done these things blind. I wanted to do something that was really inspiring to me personally, regardless of the blindness. On the tenth anniversary of losing my sight I committed to compete in a race of three-man teams to the South Pole. To do it we had to race for 43 days in Antarctica. More than 1,000 kilometers of skiing. In temperatures as low as -50°C. Ultimately, we ended up finishing fifth out of six teams, which we were disappointed about. But in truth, the disappointment simply proved to me that we were there to compete and not just make up the numbers.

It took many years and thousands of kilometers to realize I was on a quest to rebuild my identity, to become a competitor again. Competitors are people who understand that in pursuit of success, the risk of failure travels with them. That's where I wanted to be: defined by my willingness to try.

Now, to be a realist or an optimist?

Back in 2010, the year after we reached the South Pole, I fell from a third-story window onto the concrete below. The friends who found me thought I was dead. The doctors in intensive care suspected I was going to die. I had fractured my skull, I had bleeds on my brain, massive internal injuries, and I couldn't feel or move anything from my stomach down. I ended up in the National Spinal Injuries Centre in the UK, a place called Stoke Mandeville. I was sur-

UNBROKEN

His specialty, he jokes, is acquiring disabilities. In fact it is resilience. With each loss—eyesight, mobility—**MARK POLLOCK** has upped his accomplishments. His quest for a cure for paralysis offers broader lessons on the pursuit of the impossible.

rounded by people who were paralyzed, some from the neck down, some from the chest down, some from the stomach down. I was better off than some and worse off than others. But what I couldn't admit in those early days was that I was one of them.

As I lay there I remembered listening to an audio version of Jim Collins' *Good to Great* some months before my accident. What jumped out at me was his conversation with Admiral James Stockdale, whose story is bleak. He was captured and locked up in the Hanoi Hilton at the height of the Vietnam War from 1965 to 1973. He was tortured multiple times and had no idea if he would ever get out. When Collins asked him, "Who didn't survive?" Stockdale said, "The optimists didn't survive because they kept thinking they'd get out by Christmas. And Christmas would come and go and they wouldn't be out. And Easter would come and go and they wouldn't be out. And then it would be Christmas again. Lots of those people became disappointed, demoralized. Many died in their cells."

Collins asked, "What's the difference between your approach and the optimists?" Admiral Stockdale went on to say that he never lost faith in the end of the story, which is surely a hopeful view. But he also confronted the brutal facts of his current real-

**"TO BE A
SPECTATOR OR
A COMPETITOR?
AN OPTIMIST
OR A REALIST?
A SOLOIST OR A
COLLABORATOR?"**

ity. It is this confronting of the brutal facts whilst remaining hopeful that I think defines Admiral Stockdale as a realist.

As I lay there, I wanted to be an optimist because the hopeful future would mean that I would walk out of there. But I risked being disappointed and demoralized if it didn't happen. So the obvious answer was that I should be a realist, hopeful about the future while confronting the brutal facts.

Being a competitor, that is having a willingness to try, and being a realist, having hope whilst confronting the brutal facts, those two things have freed me to tackle something which has never been done, which is to find a cure for paralysis.

This leads to the final choice: To be a soloist or a collaborator?

Over the last number of years, I've come to understand that spinal cord injury strikes at the very heart of what it means to be human. It turns us from upright, running, jumping forms into seated compromises of what we once were. We're not designed to sit down for the rest of our lives but that is the only option for up to 500,000 people per year after spinal cord injury. It's not just the lack of feeling and movement. Paralysis also causes spasms, nerve pain, cardiovascular issues, infections, kidney problems, all these things which stack up to exhaust even the most determined.

Worse, up to this point in history it has proven to be impossible to find a cure for paralysis. Yet history is filled with accounts of the impossible made possible through human endeavor, the kind of human endeavor that took people to the South Pole at the start of the last century. And, the kind of human endeavor that will take people to Mars this century.

Inspired by those stories of exploration, I figured there must be people out there exploring the fringes, seeking to cure paralysis. We didn't find any in Ireland. We had to look further afield. We had to go to America, England, Switzerland and elsewhere.

Specifically we found San Francisco-based engineers at Ekso Bionics who had created a robotic exoskeleton. Initially it allowed me to walk in their workshop back in 2012 and I've done over one and a half million steps since. But the robot was doing all the work for me. We needed something more. Fortunately, in 2013, we started working with a visionary scientist at UCLA—Dr. Reggie Edgerton and his team—who had just had a scientific breakthrough using electrical stimulation of the spinal cord allowing for voluntary movement of paralysed limbs.

We discovered that the engineers at Ekso Bionics and the UCLA scientists knew about each other,

REALISTS DISREGARDING THE IMPOSSIBLE

SIMONE GEORGE was engaged to be married to Mark Pollock when he took the fall that added paralysis to his existing blindness.

Rushing to the hospital, she found him bandaged, immobile and tied to tubes and wires.

"I kissed him the way you kiss a newborn baby, afraid of his fragility," Ms. George said in a 2018 Ted Talk that the pair delivered jointly, and which has garnered nearly 1.5 million views.

Mark advised her to leave. "You need to get yourself as far away from this as possible," he said.

"Are you breaking up with me?" Simone asked.

"You signed up for blindness, not this," Mark told her.

She replied: "What I can't handle right now is a breakup with someone in intensive care."

Nine years later, Simone and Mark remain together. Theirs is a partnership that relies on being realists who disregard the impossible.

Neither is a scientist. But as a blind man, Mark accomplished athletic feats that test the limits of human endurance, and as a human rights lawyer, Simone is



committed to causes that many might dismiss as unsolvable.

They've already overcome a danger that doctors warned about before Mark ever left the hospital: Not to allow themselves to become too hopeful.

"We were told that hoping for a cure had proven to be psychologically damaging," said Mark. "But cancelling hope in favor of acceptance alone runs contrary to everything that I believe in."



of course, but as so often happens when people are busy doing groundbreaking work, they hadn't yet got together. That seemed to be our job, a way we could contribute to the cause.

We created our first collaboration combining those two technologies in 2014. For three months we moved into the UCLA lab. Every morning Reggie's team attached electrodes to my lower back, which pushed electricity into my spinal cord and excited my nervous system as I walked in the Ekso.

For the first time since I had been paralysed, I could feel my legs beneath me. Not the way I used to, but with the stimulator turned on, upright in my robot, they felt substantial; I could feel the meat of my muscles around the bones of my legs. As I walked, the electrical stimulation enabled me to voluntarily move my legs. As I did more, the robot intelligently did less. My heart rate rose to a running level of 140 to 160 beats per minute. My calf muscles, which had wasted to almost nothing, began to come back.

My fiancée, Simone, describes it like the moment when Iron Man plugs the mini arc reactor into his chest and he, and his suit, suddenly become something else altogether.

It was a start, but we're not finished yet. Since then we have been systematically forging connections worldwide to break through silos across disciplines and institutions to accelerate progress towards the cure. In particular, alongside my team, I have devel-

After he was left blind at the age of 22, Mark Pollock became an endurance athlete, running the world's most difficult marathons, once completing six of them in seven days in the Gobi Desert. His crowning achievement was leading a team in a race to the South Pole, above, amid temperatures as low as -50°C.

This story is drawn from a talk **MARK POLLOCK** delivered at a Brunswick conference in London as well as an interview in New York with **KEVIN HELLIKER**, Editor in Chief of the Brunswick Review.

oped research projects valued at over \$5 million involving rehabilitation; robotics; neuro-modulation; neuro-technology; virtual reality; and pharmacology. In addition, I co-created the Druid Collective, an initiative within the World Economic Forum to connect science and technology spin-out companies with relevant expertise and capital. So far, we have facilitated the formation of a \$5 million venture philanthropy fund with a Silicon Valley VC and US philanthropic foundation to help early-stage funding of NeuroRecovery Technologies, a start-up focused on commercializing the spinal stimulators.

It's funny but I've started to consider myself more aligned with the Polar explorers than I ever did while racing to the South Pole. We have been working with incredible pioneers all around the world, who had unfortunately been working in isolation. I say unfortunately because we know that no individual, no single academic institution, is going to crack this particular problem on their own—but together we believe that they will. Despite the hero narrative being so compelling, it's rarely true. The hero is too often a soloist. That isn't how things progress. For the real breakthroughs we need people who are prepared to collaborate. So, I'm on a new expedition, this time to cure paralysis in our lifetime. To do it we are actively exploring the intersection where humans and technology collide and we are catalysing newfound collaborations. ♦

A 2015 accident at one of its theme parks made **MERLIN ENTERTAINMENTS** the subject of sensationalist media stories. Brunswick's **FIONA MICALLEF-EYNAUD** and **AUSTIN RATHE** talk with the company's leadership about their campaign to combat fiction with facts.

POOLE, A SLEEPY SEASIDE TOWN IN DORSET on the south coast of England, is the unlikely birthplace and headquarters of Merlin Entertainments, the second biggest attractions company in the world. The firm's popular brands, which include LEGOLAND and Madame Tussauds, attract 67 million guests annually, and the company has exclusive rights to the intellectual property of world-famous brands such as Peppa Pig, LEGO and celebrity adventurer Bear Grylls.

CEO and co-founder Nick Varney has led the company since its start in 1998, transforming it from a business that owned a handful of UK attractions to one that now operates more than 120 attractions in 25 countries across four continents. Whether as a private company or a public one (Merlin listed in late 2013), the company's narrative had been overwhelmingly positive—until 2015.

On June 2nd, a crash involving the Smiler rollercoaster at Alton Towers Resort—Merlin's largest UK theme park—left two young women with life-changing injuries. The ride was closed temporarily. Mr. Varney led the company's response with those injured and their families, as well as with the media. The company conducted its own investigation and

supported an official probe by the UK's Health & Safety Executive. In the subsequent court case, Merlin entered a guilty plea and was fined £5 million.

But media fascination with the company didn't end when the court case did. Merlin's theme parks remained targets of negative and often factually inaccurate reporting. Routine operational matters at any Merlin attraction—like safety protocols temporarily halting a ride—became targets for tabloids.

"Alton Towers' notorious Smiler rollercoaster breaks down," was one 2017 headline describing what the company called a "minor technical issue" involving a sensor. Similarly benign events drew headlines such as, "Terror at Alton Towers—AGAIN," as well as "Horror at Alton Towers as thrill seekers trapped 80ft in the air."

The company responded with a safety-first narrative. "Safety is absolutely critical to Merlin," Mr. Varney told Brunswick, which worked with Merlin on its communications response. "We invest a huge amount of time and money on engineering, equipment, technology and procedures to keep guests safe. It's not unusual for a ride to be stopped mid-cycle, perhaps due to passenger actions, and restarted again within minutes. It's a machine designed to stop if required."

ON TRACK

It was clear that responding to media requests with that message alone wasn't enough. "The coverage included our statement as a right to reply, but customers saw the articles as they scrolled through their social media feed, so all they saw was the damning and wildly inaccurate headlines," says Mr. Varney. "We had to find a way to speak to our visitors directly and quickly."

That meant developing a way for on-site teams to move quickly and respond in real-time—to keep up with the headlines, in other words.



Riders enjoy the Stealth rollercoaster at Merlin-owned Thorpe Park in Surrey, England. The rollercoaster boasts the fastest acceleration of any in the UK and reaches a maximum height of 205 feet (62.5 meters). Those with strong stomachs can watch first-person footage of the ride on YouTube.



“Our visitors are major consumers of content on social media,” says James Crampton, Merlin’s Corporate Affairs Director. “That’s where they were seeing the sensationalist headlines and inaccurate reporting; we had to build the capability to fight it on the same turf. Long corporate statements don’t work well on social media and would never engage our audience. We decided the most effective response was a clear, reassuring video from someone on the ground. That way, customers would hear directly that everything was OK, and could see for

**ROUTINE
OPERATIONAL
MATTERS AT
MERLIN-OWNED
ATTRACTIONS
BECAME TARGETS
FOR TABLOIDS.**

themselves the situation at the attraction.”

The PR teams at Merlin’s theme parks took ownership for publishing these responses themselves, in real time, with minimal central support. But before they could do so, Merlin worked with each attraction’s team to develop a step-by-step response plan, including key messages for a variety of situations. Spokespeople were also trained. These plans were designed to be so simple that almost any team member could pick one up, grab their iPhone, and record an incident response.



The firm also made sure that once the response videos were produced, they would be seen by the right audience. They helped the attractions build Facebook audiences based on factors like newspaper readership, demographics and general interests. When responses were published, they could now be promoted to the people who were most likely to have seen the misleading coverage in the first place, or geotargeted to customers who were at the park.

Merlin also knew it needed to inform visitors about areas that wouldn't be promoted through traditional marketing communications and would have been ignored by traditional media: topics like accessibility, animal welfare (Merlin-owned attraction "SEA LIFE," for example, features marine life and penguins), health and safety, or engineering. Safety procedures working as they're supposed to isn't news or riveting marketing material. And even if they were, one-off pieces wouldn't be enough to educate customers about all the work Merlin was doing behind the scenes to keep their parks safe. That called for a sustained campaign through channels Merlin's customers were already using. The result was Merlin Backstage.

The ongoing campaign features two parts. The first is a website that acts as a repository for the content Merlin produces on key themes like safety, creativity and sustainability. The site acts as both a platform from which Merlin can promote content and also makes it easy to find that content through search engines.

Complementing the Backstage website is a Facebook page where the company publishes

One of Merlin Entertainments' best-known brands is Peppa Pig, a wildly popular animated children's show starring a family of pigs. Above, a child enjoys a slide at the recently opened Peppa Pig World of Play in Shanghai.



Merlin Entertainments CEO Nick Varney (above) and the firm's Corporate Affairs Director, James Crampton, played leading roles in helping Merlin counteract fiction with facts.



short-form content, especially videos. These posts range from behind-the-scenes insight into the work that goes into keeping its attractions safe, to showing how Merlin will transport two beluga whales from China to Iceland—a journey of 6,000 miles—where they'll be housed in the world's first ocean sanctuary. In addition to informing customers, this content can also be promoted on social media after any misleading coverage, providing additional context.

These new protocols were tested on July 2017, when the Oblivion rollercoaster at Alton Towers Resort stopped at the top of the lift hill. The ride couldn't be restarted quickly, and guests were evacuated from the ride exactly as safety procedures dictated. An onlooking guest tweeted a photo of the ride "stuck" on the track. Soon a national tabloid newspaper had published a story.

On the first media enquiry, Alton's Head of Operations, Francis Jackson, filmed a succinct, live response on-site explaining what had happened. That 30-second response was promoted on social media less than half an hour after the first coverage was published. Digital tracking tools showed that tens of thousands of people—specifically those who saw the media coverage—saw Alton Towers' video.

And their response was overwhelmingly positive; the most popular comment on Alton's post came from a customer who had been on the ride: "... staff were fantastic. Got us all off as soon as they could. Icy water also provided at the scene." Another comment near the top: "The media needs to get over the fact that stoppages are safety features."

Far from simply correcting the narrative, a more positive one emerged as outlets embedded Alton's videos in their coverage. "Alton Towers reassures customers after ride stoppage," read one headline.

"Building and maintaining the ability to speak to our visitors quickly, authentically and credibly—especially in the era of smartphones, short attention spans, and an increasingly fragmented society—has been hugely important to us," Mr. Varney says.

The ability to transform a setback into a new organizational capability is a response one of Merlin's best-known partners, celebrity adventurer and survivalist Bear Grylls, would likely endorse. "Struggle develops strength," Mr. Grylls once wrote, "and storms make you stronger." ♦

FIONA MICALLEF-EYNAUD, a Director specializing in the consumer industries and private equity sectors, is based in London. **AUSTIN RATHE**, a Director on Brunswick's digital and social media team, is based in New York. Both advised Merlin on its communications campaign.



Pride of Tanzania

DESPITE BEING AFRICA'S YOUNGEST BILLION-
aire, Mohammed Dewji used to move about
Dar es Salaam without security. Then one
morning last October as he arrived at a ho-
tel for a workout in its gym, he was kidnapped by a
group of armed men.

During the 10 days in which his fate was un-
known, an extraordinary thing happened. At a time
of growing global unease over income inequality,
and in a country racked with poverty, throngs of or-
dinary people took to the streets and to social media
to pray for the safe return of Mr. Dewji, Tanzania's
wealthiest man and largest private employer. Ulti-
mately, his captors released him.

"I thank Allah that I have returned home safely,"

**MOHAMMED
DEWJI, who
grew his father's
business into
his nation's largest
private employer,
tells Brunswick's
CRAIG MULLANEY
of his gratitude
toward his
countrymen.**

Mr. Dewji wrote last October on Twitter. "I thank
all my fellow Tanzanians, and everyone around the
world for their prayers. I thank the authorities of
Tanzania, including the Police Force for working my
safe return."

In an interview with the Brunswick Review, Mr.
Dewji tells Brunswick Partner Craig Mullaney that
the experience tempered his ambition for ever-
mounting wealth and strengthened his commitment
to philanthropy, especially in his native land. "The
poorest of the poor stood up for me, they prayed for
me. It was unbelievable. It was the best feeling," said
Mr. Dewji, who is 43.

That reaction reflects the outsized role Mr. Dewji
has played in spurring the economy of Tanzania,

an East African country of 55 million. After joining his father's commodities trading company about 20 years ago, he began purchasing and reviving distressed state-owned companies, in the process creating tens of thousands of Tanzanian jobs. Revenue from the company, called Mohammed Enterprises Tanzania Limited, grew to \$1.5 billion from \$30 million. MeTL operations include the manufacturing of textiles, soaps and other products once available in Tanzania primarily through imports.

As he became a well-known business leader, gracing the cover of *Forbes* magazine in 2013, he remained visible and accessible, taking selfies with anyone who asked, in his trademark tailored suits and fashionable eyeglasses. He became one of the most prominent business influencers on social media, where he connects with more than 2 million followers across Instagram, Facebook and Twitter. In fact, his account on Instagram was the third most engaging among business leaders globally in February, placing him ahead of even Bill Gates. He also served 10 years in Tanzania's Parliament, where among other achievements he dramatically increased his constituency's access to clean water and education. Finally, his investment in a local soccer club has made him something of a local sports hero.

This stature in his homeland isn't what he envisioned during his college days at Georgetown University, where amid the pursuit of a bachelor's degree in international business and finance he got swept up in the romance of Wall Street. "Most of my peers were looking forward to going to Wall Street, and so was I," he tells the Review.

But when his research showed that starting salaries on Wall Street would make for hard-scrabble living in high-priced New York, he called his father for help. "At university the last couple of years, I was living quite a comfortable life. I had my own car, et cetera. So I called my father back in Tanzania and said, 'Can you at least help me so I can live in a nice place and live comfortably in New York?'" His father said no. "He said he believed that there were big opportunities back home. He said, 'Why don't you come back to Dar?'"

Having worked for his father since childhood, Mr. Dewji wasn't opposed to the idea.

"As much as I wanted to work on Wall Street, I thought that I would make a bigger difference if I came back to Tanzania."

He rises at 5 a.m., prays and runs five miles. Arriving at the office at 6:15, he clears out his email inbox before 7:30. Then, meetings. After a weight-training workout around noon, he returns home for lunch

**"OVERALL
THE EXPERIENCE
MADE ME A
BETTER PERSON ...
[AND] BROUGHT
ME MUCH
CLOSER TO GOD."**

with his family, then back to the office for meetings that last well into the evening.

You once joked about becoming the richest man in Africa. Is that really a goal?

If that ever was my agenda, it's not now, after the ordeal I had.

What helped you get through that trial? How did it change you?

I was blindfolded for nine days with both my hands and legs tied. When you can't see anything and you're not sure what's going to happen to you, it is tough. I was doing principally three things.

I was praying, may God save me. When you do that, you think, there's so many people dying in tragedies and accidents. Why would God want to listen to me? I'm just nobody. But even so, you pray, number one.

Besides my major in international business and finance, I'm also a theology minor. So number two, you start thinking how you have sinned in this world. You might have hurt someone, insulted someone. Maybe you didn't fast or pray on time. So I was repenting all the things I could have done better.

Number three, I reflected on what I should do differently. I'd been in the rat race, running all the time, accumulating wealth and trying to build and build and build.

I reflected on my kids. I have a 15-year-old. In three years, she's going off to university. The last 10 years, I hadn't spent an abundance of time with my kids. I've got two young boys. I wasn't spending enough time with them.

Overall, the experience has made me a better person. As a Muslim, when you go through a difficult time, how do you know if God is testing you or punishing you? The answer is that what takes you closer to God is a test. What takes you away from God is a punishment. This experience brought me much closer to God.

My priorities are not just more dollars any more. My priority is not just about building an empire anymore. I spend more time with my children. And I am deeply focused on giving back.

I signed the Giving Pledge [which encourages the world's richest individuals to commit half of their wealth to philanthropy, launched in 2010 by Bill and Melinda Gates and Warren Buffett]. I'm spending more and more time on philanthropy. It's changed me that way. Most importantly, if you followed the Tanzanian media, the Tanzanians, they stood up for me.

This is something that really, really touched me. I am forever going to be indebted and grateful to these people. Political differences often divide people. I'm not an indigenous Tanzanian, and that can divide people. Religion can divide people. In Third World countries, the greatest division is between the haves and have nots.

In a country where poor people are struggling to make ends meet, there isn't much thought for the rich, rich man who encounters a problem. But I'll tell you something: Tanzania came to a standstill when I was kidnapped. I'm forever indebted to my countrymen.

Did it help that you have invested so much time in connecting to people through social media?

For sure. I feel that I need to be connected in the sense that I give hope to people. I'm the largest employer, after the government, in Tanzania. I need to act like a leader to the youngsters of Tanzania.

They need to know that I want to share this wealth I've accumulated. I bought a football club. It brings happiness to millions of people. And I think they know that that club is burning cash. It is burning a lot of cash. But it brings people closer together.

The ruling elite, the wealthiest people in any country, are often seen as remote. They're caught by photographers as they walk from their limousine to their private plane. Has social media given everyone access to you?

Yes. But also, I'm very approachable. People randomly ask me for selfies and I never refuse. If somebody asked for advice, I would never refuse. Respecting people is very important. That is something that my parents taught me from a very, very young age.

Do you now travel with a security person?

Yeah, my life changed. I'm moving around with armed people all the time.

It must be inspiring for people here to see one of their own do as well as you have.

Yes. I think they also see that I am giving back and that opportunity is growing for everyone.

I gather from reading the local media that there's also an appreciation for how well you dress.

It's the only thing I do well. It's something that grew on me when I was in the US. But actually, I think I dress normally for a business person except for my glasses. I have a fetish for glasses. People take note of that.

"OVER THE LAST
10 YEARS WE'VE
BEEN ONE OF THE
10
FASTEST-GROWING
ECONOMIES
IN AFRICA, WITH
AN AVERAGE GDP
GROWTH OF
7 PERCENT."

Do you see a new generation of billionaires emerging from Tanzania?

I think that's true not only in Tanzania, but Africa in general. In the next five to 10 years, there's definitely going to be more billionaires out of Tanzania and Africa.

What would you like the global business community to know about your nation's economic potential?

It's got eight countries neighboring it. It's a corridor of eastern central Africa. From Tanzania you can access Kenya, Uganda, Rwanda, Burundi, the DRC, Malawi and Mozambique. We're probably the fastest growing in terms of population growth in the world. We are rich with resources: gold, diamonds, agricultural products, coffee, sesame seeds. Iron, coal and natural gas. Tourism is huge. We've got Mount Kilimanjaro, the Serengeti, the Ngorongoro. If you look at all the variables, they add up. Over the last 10 years, we've been one of the 10 fastest growing economies in Africa, with an average GDP growth of 7 percent. Inflation is controlled. Tanzania is one of highest recipients of foreign direct investment in the whole of eastern central Africa.

We've got political stability. Every five years, we have elections. We've got a two-term limit for the president. After that, there's a proper stepping down process, a transfer of power. We have no racism. Our people are very, very good people. We don't have any religious tension. Everybody practices their own religion freely.

Who are your heroes or mentors in the global business community?

I've got two heroes. I would not be where I am without my father. People have asked, "Who's smarter, you or your father?" My father didn't have money. My family didn't. He is a self-made man. It is far more difficult to make a million than a billion. It's easier to multiply money than to make money out of nothing. At 70, this man is still very disciplined. He is my hero.

The other is Bill Gates. I'm trying to follow his footsteps. I want eventually to step down and just focus on philanthropy, like Bill has. He came here once, to Tanzania, and we had a chat and we meet other times at the Giving Pledge, and I ask him questions about his transition and how he did it and what he's doing. ♦

.....
CRAIG MULLANEY, a digital media executive, bestselling author and decorated Army combat veteran, is a Partner in Brunswick's Washington, DC office.

KOSMOS ENERGY IS AN INTERNATIONAL oil and gas company that is small by industry standards, employing 380 people worldwide (compared to roughly 70,000 each at Exxon and BP). But Kosmos boasts an outsized ability to find hydrocarbons—the chief components of petroleum and natural gas—in places where other companies have already searched unsuccessfully.

Finding these hydrocarbons is as difficult and complex as you might imagine. Yet developing these hydrocarbons—getting them out of the earth, essentially—might be an even greater challenge. Not because of the engineering, but rather the business diplomacy required. If the companies and countries involved in a project can't agree on the economics and particulars, then the hydrocarbons remain untapped.

Diplomacy, in other words, often acts as the crucial bridge between the discovery of hydrocarbons and their valuable development—and in 2015, Kosmos Energy had to build that bridge between Mauritania and Senegal, two countries that had fought a border war less than 30 years before.

In 2011 Kosmos' geologists and geophysicists looked at the results of more than 50 unsuccessful wells that had been drilled offshore Mauritania. Previous exploration efforts focused on shallow water relatively close to the coastline and in on-shore areas, but Kosmos hypothesized the wells had been drilled in the wrong place: Pre-historic river systems had pushed hydrocarbon-rich reservoir sands further offshore.

Kosmos acquired several blocks offshore Mauritania, where 2D and 3D seismic surveys later showed a large, promising geological structure—the kind capable of supporting hydrocarbon reservoirs. This structure appeared to extend across the maritime boundary from Mauritania into Senegal, where Kosmos acquired further exploration blocks. Drilling its first exploration well offshore Mauritania in early 2015, Kosmos found the largest natural gas field offshore West Africa in history.

Over the following 18 months, it drilled five additional exploration and appraisal wells, including two in Senegal. All were successful.

The largest known deposit, Greater Tortue Ahmeyim, “contains at least 15 trillion cubic feet of gas, enough to generate billions of dollars of export revenue and is of a scale that would meet the UK's total natural gas demand for roughly five years,” says Kosmos Energy Chairman and CEO Andrew Inglis. In addition to its size, there was another re-

KOSMOS ENERGY

discovered a massive natural gas field off the coast of West Africa. There was one significant obstacle: It sat on the maritime boundary of two countries that had once fought a border war. CEO

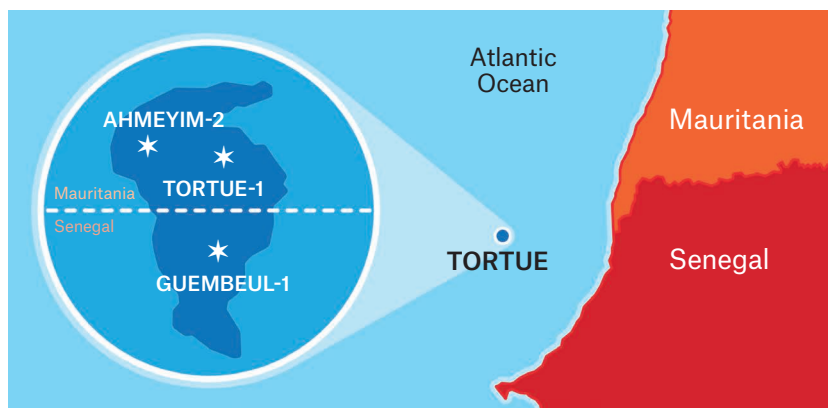
ANDREW INGLIS tells the story to Brunswick's **STUART DONNELLY** and **ANDREW VON KERENS**.



RESERVOIR of GOODWILL

markable feature about Tortue: It was split with almost geometric precision between the maritime boundaries of the two countries.

Despite the discovery, there was no guarantee Kosmos would recoup the \$675 million it had invested to explore and appraise the fields—let alone realize a return on the investment. The gas belonged to the respective countries. Since the largest deposits were distributed so evenly between them, the only economically viable option was a joint project between Mauritania and Senegal, not separate developments on either side of their maritime



borders. “Everything hinged on cooperation,” says Mr. Inglis, who has spent more than three decades working in the oil and gas industry.

“After the initial discovery in 2015, I traveled to Mauritania to deliver the news to President Abdel Aziz, who was on a campaign stop in Kaedi, a small desert city not far from the Senegalese border. I had to helicopter across this vast expanse of desert from the capital Nouakchott to get there. I met the President in the governor’s mansion as crowds gathered outside, waiting to see him. I expected the President to be ecstatic at the news, but he was actually reserved,

Discovered by Kosmos Energy, the largest natural gas field ever found offshore West Africa is called Tortue, a field almost perfectly split in half by the maritime borders of Mauritania and Senegal. Above is the drillship which made the offshore discoveries.

contemplative. The President asked about developing the gas independently of Senegal, but I explained why that approach would be too costly and take far too long for the benefits to be felt by his country.”

Mr. Inglis recalls a period of silence. Then the President said that Kosmos could continue with the project. “But he stressed transparency was essential,” Mr. Inglis says. “We had to be clear about our intentions. No playing games. Deliver on commitments.”

After news of the initial discovery was public, Mr. Inglis went to Dakar to see the President of Senegal, Macky Sall, at the presidential palace. “He [President Sall] was resplendent in a flowing white *boubou*, surrounded by an entourage of advisors. He’s a geologist by training and former head of the national oil company, so he reveled in the technical details of the discovery and our plans for future exploration. But he was similarly cautious about the prospect of developing the gas jointly.”

From those earliest meetings, Mr. Inglis says it became clear that “if we wavered from the notion of 50/50 benefit from a 50/50 asset, it would have killed any chance of cooperation. Parity would drive the project; imbalance would destroy it.”

Citing the significant upfront costs—it takes several billion dollars to get a project like this going—and the years that it would take before the project generated revenue, Mr. Inglis saw a major part of his role as “being clear on what we could and could not deliver, keeping everyone grounded and focused even as the local media pressured us to make promises about revenues and returns.”

With the support of both President Abdel Aziz and President Sall, Mr. Inglis and his team formed a working group comprised of representatives from the national oil companies, the ministries of energy, and Kosmos—an uncommon move in the industry. “We didn’t want it to seem that a foreign oil company was dictating how the project should proceed,” says Mr. Inglis. “We wanted to be transparent, and we wanted them involved.”

Over a period of three years, the group met monthly, rotating between Nouakchott, Dakar and Paris.

“These were direct talks handled by the primaries. No middlemen to explain how things needed to be done. The early meetings were friendly but formal,” says Mr. Inglis. “The Mauritians and Senegalese didn’t know if they could trust us. We felt the best way to earn that trust was to be transparent. We told them up front what our economic returns needed to be for an investment of this size—we actually gave them our economic model. And we showed them what we were deliberating

on from a technical perspective and asked them to weigh in.”

Soon, Mr. Inglis says, a bond formed among the group—one that would have seemed improbable from the outset. “They asked after each other’s families, showing off photos of newborn sons and daughters. They traded friendly jabs over the results of English Premier League matches. And the Mauritians and Senegalese teased my team mercilessly for their bad attempts at French while simultaneously praising their efforts to learn.”

From these meetings it emerged that neither country would accept the other being chosen as the location and operator of a large onshore gas processing plant. To resolve the problem, the working group agreed to use an innovative development concept that seemed to embody parity: a floating liquefied natural gas facility on the maritime border between the two countries. That near-shore site would be roughly 10 kilometers from the coast, visible at night from both countries—a symbol of their cooperation.

The near-shore development scheme made sense practically as well as politically. “It represented the fastest and most competitive way for the two countries to begin initial LNG exports and deliver gas for power generation, a key economic factor for both countries,” Mr. Inglis says. “This first phase would establish the countries as reliable suppliers, improving the marketability of remaining gas in the basin and making it easier to finance subsequent phases.”

The working group then explored the commercial, legal and technical framework for the joint project, with the goal of eventually signing an intergovernmental cooperation agreement (ICA)—essentially a treaty between the two countries on how to develop a joint gas field. The ICA provided for an initial split 50/50 of resources and revenue, and a mechanism for future equity adjustments based on actual production and other technical data.

It was around this time that Kosmos had to find a partner with the capital and manpower to develop a gas field of this size—which only a limited number of firms possessed. Kosmos selected BP.

“Before BP joined the working group, we agreed on several guiding principles, including ‘countries before company and project,’ and ‘if it can be done locally, do it locally.’ They’ve proved excellent partners,” Mr. Inglis says. “Over the next 18 months,

**“PROGRESS
WAS STEADY
BUT FRAGILE;
ONE MISSTEP,
WE KNEW,
COULD UPSET
EVERYTHING.”**



Representatives from Senegal and Mauritania sign an Intergovernmental Cooperation Agreement outlining the commercial, technical and legal framework of a joint project.

Seated, left to right: Mansour Elimane Kane, Minister of Energy for Senegal and Mohamed Abdel Vetah, Minister of Energy for Mauritania. Standing behind the Ministers are Macky Sall, President of Senegal, left, and Mohamed Ould Abdel Aziz, President of Mauritania.

progress was steady but fragile; one misstep, we knew, could upset everything.”

That stumble seemed to have arrived in January 2018 in the form of a major diplomatic incident: a skirmish between Senegalese fisherman and the Mauritanian navy that resulted in a tragic fatality.

Complex negotiations between Mauritania and Senegal ensued on the thorny subject of fishing rights. At the same time, both Presidents were considering how to progress the project and their views on the ICA. This led to a Presidential summit in Nouakchott a month later, where President Sall and President Abdel Aziz signed the ICA—a move that helped ease tensions enough to allow negotiations on fishing rights to continue.

Kosmos and BP announced a final investment decision just before Christmas last year. “The project will be the world’s fastest LNG development from discovery to first production, which is expected in early 2022,” Mr. Inglis says. “And we’re planning to expand production; Tortue will produce only a fraction of the overall reserves we believe to exist there.”

Unlocking that tremendous potential will require the same commitment to building relationships and maintaining transparency that made the project possible in the first place.

“As we continue to do business in Mauritania and Senegal, we know our success is fully connected to theirs,” Mr. Inglis says. “It may seem like boilerplate language but it’s genuinely mission-critical for us: The project depends upon continuing to work together and align our interests.

“I’m aware of how ‘mutually beneficial’ sounds coming from the head of an oil and gas company. That’s a narrative tied to our industry we’re working to change; Kosmos is a small company but we can still make an impact. We voluntarily publish our contracts with host nations on our website; we publicly report our payments to governments on an annual basis. I believe we’re the only oil and gas company headquartered in the US that does so.

“Done well, these projects can power economic, social and political progress, helping the world meet its growing demand for energy while creating local jobs and opportunities. And it all starts with business diplomacy—bringing people together, from the outset, in a spirit of candor and cooperation. That’s the standard we should expect of these projects going forward. In every sense, it’s good business.” ♦

STUART DONNELLY is a Partner in Brunswick’s London office. **ANDREW VON KERENS** is an Associate based in Dallas. Both specialize in the energy and resources sector.



82

80

BIZ SCHOOL THEOLOGIAN

Attorney, Unitarian Universalist minister and Stanford School of Business Professor Scotty McLennan has made a career of speaking to the soul of the business world. Along the way, he became the model for a longstanding "Doonesbury" character.



80

82

BRUNSWICK ARTS

"Nature," a new exhibit at the Cooper Hewitt, Smithsonian Design Museum, examines "how designers can cooperate with scientists, botanists—all of us, really—to make a better world," says Caroline Baumann, Cooper Hewitt's Director.

WIDE ANGLE

86

EMIR KAMENICA

One of the most-admired economists at one of the world's most-admired business schools wants to know whether losing \$200 in a casino would sting less if for a moment you were up \$800.



88

88

LATINO VICTORY

The surprise election to Congress of a Latina firebrand from New York has all eyes on the Latino vote in 2020. The Review speaks with the leader of Latino Victory, a group leading the effort to recruit Latino candidates and inspire voters.

90

CRITICAL MOMENT

Fifty years ago, Neil Armstrong descended down the ladder of NASA's lunar module to be the first man to set foot on the Moon.



90

IN HIS SERMON ON LEO TOLSTOY'S *THE DEATH of Ivan Ilyich*, the Rev. Scotty McLennan asks a tough question. If the title character is respected as a government official, if he is fair as a prosecutor and dutiful as a husband and father, why as he lies dying at age 43 does he feel like a failure, that his life hasn't been "real"? The congregation pondering that question isn't necessarily seated in pews, for the Rev. McLennan is a theologian not only to the faithful but to students of business. On the faculty at Stanford Business School, he lectures on ethics and spirituality, exploring how to reconcile the pursuits of prosperity and spiritual growth. As evidenced by Tolstoy's 19th century masterpiece, these aren't new questions. Nor is the Rev. McLennan new to examining them in a business-class setting. Back in the 1980s he joined the faculty of Harvard Business School, where he helped develop and teach classes on ethics and spirituality.

The conclusion of the Rev. McLennan's sermon on *Ivan Ilych* offers a hint of what students may hear in his class: "Ivan had lived his whole life without ever truly learning how to love. Finally, at the end he was taught how to do so by his servant Gerasim and by his schoolboy son, Vasya."

As an undergraduate at Yale in the 1960s, the Rev. McLennan had in mind a less-privileged flock, and the underprivileged remain a focus of his ministry. His roommate at Yale, Garry Trudeau, creator of the comic strip "Doonesbury," has said he used the Rev. McLennan as a model for a Doonesbury character named the Rev. Scot Sloane, a streetwise priest.

In an interview with Brunswick Review Editor Kevin Helliker, the Rev. McLennan talks about how and why he teaches business classes on ethics and spirituality.

How did you, as a lawyer and theologian, come to be a lecturer at Harvard Business School?

For 10 years out of law school and divinity school I ran a legal ministry in a low-income neighborhood in Boston. Then I served as the university chaplain at Tufts from 1984 to 2000.

In the late 1980s, Harvard Business School started or rejuvenated its business ethics program. I was invited to help.

In 1988, I began working at the Harvard Business School as a lecturer in a required new module developed for first-year MBAs. That course, which has been renamed over the years, was called "Decision Making and Ethical Values." Then I taught an elective course called "The Business World: Moral and Spiritual Inquiry Through Literature."

In using literature to discuss ethics in business, which authors and works do you study?

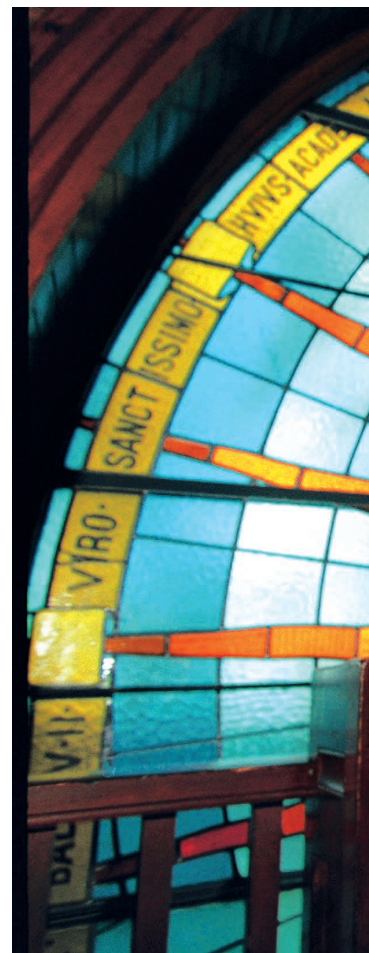
Some American works would include F. Scott Fitzgerald's *The Great Gatsby* and *The Last Tycoon*, Flannery O'Connor's *The Displaced Person* and *A Good Man is Hard to Find*, Arthur Miller's *Death of a Salesman*, Willa Cather's *O Pioneers!*, Saul Bellow's *Seize the Day*, and the Norwegian writer Henrik Ibsen's *An Enemy of the People*.

I also was interested in helping people think about how to do business around the world, in different cultural settings and with different religions than Christianity and Judaism. So, Chinua Achebe's *Things Fall Apart*. A well-known Arabic language novelist, Naguib Mahfouz, wrote a book called *Miramar* about a hotel in Alexandria, Egypt, and business relations there from the owner of the hotel, to employees, to guests, in an Islamic context.

Shusaku Endo's *Deep River* is about Japanese business people on a trip together to India. That book helped us not only understand Japanese business orientation, but also a good bit about India.

I've taught Hermann Hesse's *Siddhartha*, which helps people understand Hinduism and India. *Jasmine* by the Indian American Bharati Mukherjee has a woman immigrating from India to the US.

Mohsin Hamid's *The Reluctant Fundamentalist*, which helps people understand the religion of



BIZ SCHOOL

somebody who worked in an American Wall Street business context, then ended up back in Pakistan.

Why fiction?

I've really come to believe that great novels, plays and short stories give you insights that are much deeper and much longer lasting than a business case study would, or a biography of a great business leader.

What classes do you teach at Stanford Business School?

Since the late '80s, either at Harvard or Stanford, I've been teaching "The Business World: Moral and Spiritual Inquiry Through Literature."

Another course I teach is called, "Finding Spiritual Meaning at Work: Business Exemplars." There we study various business leaders who've been very



THEOLOGIAN

open about that. In many cases, I'm able to bring them into the classroom. The founder of Noah's Bagels, Noah Alper, comes in and talks about Judaism and business. He can describe how he got to where he's gotten in his business life, and how it relates to his spiritual life.

Jeff Weiner, CEO of LinkedIn, comes in and talks about how he grew up Jewish, but really is agnostic in terms of his understanding of whether there's a God or not, but has been very influenced by the Dalai Lama and Buddhism, and tries to run his company on principles of compassionate management.

An evangelical Christian named Ken Eldred comes in and describes how to live as an evangelical Protestant Christian in your work context, and actually goes to the point of saying that it's possible and proper to proselytize within your business con-

SCOTTY MCLENNAN believes great works of literature offer deeper insight than do business case studies or biographies of business leaders.

text. Charles Geschke, who was one of the founders of Adobe, and who is an active practicing Roman Catholic, talks about how to do that in your business life. I use a case study by a now-deceased businessperson from Boston named Samina Qureshi, who was Muslim, and how she saw herself responsible for the spiritual as well as business life of employees of her design and architectural firm.

A third course I teach is called "Global Business, Religion, and National Culture." If you're going to do business in India, it behooves you to know something about Hinduism, and in the UAE, Islam, in Japan, Shinto and Buddhist origins, in China, Confucianism, and in Mexico, Roman Catholic Christianity.

Do you have counterparts at other business schools?

A few. For instance, David Miller runs a program at Princeton on business and spirituality.

Are business leaders today any more or less concerned with ethics than in the past?

It's always been a growth industry. But it also comes in waves. Harvard Business School did quite a good job of it in the '40s and '50s, then slowed down a bit until it developed its newest incarnation of ethics classes in the 1980s. There were a lot of business scandals, and people going up to federal penitentiary in the 1980s.

Actually my MBA students these days are more sensitive than ever to ethical issues and the kinds of cultural issues that I'm describing.

As an ethics lecturer in the heart of Silicon Valley, do you think the tech industry is any more or less concerned with ethics than any other industry?

The short answer is, no. All industries have concerns about ethics, but don't necessarily do well as they struggle with those issues. The issues do tend to be somewhat industry unique, for example, with the privacy issues that have arisen in Silicon Valley.

But it is sort of episodic. A company that looks like it's doing very well, with ethically related mottos about not doing any evil, can be blindsided by issues they hadn't thought about. Or maybe it hasn't spent enough time really developing an approach that will work ethically.

All industries have their ups and downs, as do individuals. At one moment in time, they can look like great ethical leaders, and at another they get bitten by human failings. ♦

By **KEVIN HELLIKER**, a Pulitzer Prize-winning journalist and Editor in Chief of the Brunswick Review.

FOCUSED ON THE THEME OF “Nature,” the Cooper Hewitt, Smithsonian Design Museum’s Sixth Design Triennial, which opened in May and runs throughout the year, aims for a goal far more ambitious than a walk in the park or stopping to smell the roses.

“You can’t talk about nature today naïvely,” says Director Caroline Baumann. “If you’re talking about nature, you’re talking about climate change.” Her passion for the topic is part and parcel of her vision for the New York City institution: to change the world through design.

Statistics show life for many creatures on Earth is in jeopardy, as carbon emissions rise and push average temperatures above critical limits. Whole species may go extinct, entire ecosystems destroyed. The stress that the sum of those losses will place on humanity can’t be calculated.

Yet Ms. Baumann is confident that these seemingly overwhelming problems are ones that design can help solve, either directly or by inspiring others.

“So we’re talking about nature but we’re talking about the fact that people need to make a difference,” she says. “Nature has been a source of inspiration for designers and artists forever. And that’s part of what excites us so much. This Triennial is really analyzing how designers today are looking anew at how the world is living, and how designers can cooperate with scientists, botanists—all of us, really—to make a better world.”

“The Design Triennial attempts to take the temperature of the design world, so the topic of this edition is

BACK TO

NATURE

An ambitious Design Triennial at New York’s Cooper Hewitt wants to change the conversation around climate change. Brunswick’s **KIM MITCHELL** and **CARLTON WILKINSON** report.

deliberately broad,” says Matilda McQuaid, Deputy Director of Curatorial at Cooper Hewitt. More than 60 projects representing the current state of design’s approach to nature are on display both in New York and simultaneously at a collaborating site, Cube design museum in Kerkrade, The Netherlands. But even with such a big tent, the goals are not impersonal—or modest.

“What we wanted to do was to change people’s idea about what nature is,” Ms. McQuaid says. “As humans, we are a part of nature. And I think sometimes that gets forgotten—it becomes nature versus humans. We wanted to underscore the idea of this collaboration with nature. I feel like there is room for optimism, but there has to be a shift in behavior. By embedding human beings in nature’s web, it can happen.”

We spoke to both women recently at Cooper Hewitt’s sunlit offices, surrounded by evidence of the institution’s devotion to design. Both saw the explosion of interest in addressing environmental concerns through design as reason for hope.

“Right now, there’s a transformation in how many designers are thinking about the relationship with nature,” McQuaid says. “If you talk to either business leaders or the scientists themselves, they are using design methodologies in their own disciplines. We’re featuring work by scientists at Harvard.

“You would have been hard-pressed to find a similar situation 10 or 15 years ago—finding yourself talking to scientists who would consider themselves designers. That shift is becoming much more pervasive, toward absorbing design thinking or design processes into

Jae Rhim Lee's "Infinity Burial Suit" is one of the works featured at the Cooper Hewitt Design Triennial. Containing biodegradable material, the suit offers a sustainable alternative to casket burials and cremation.



different disciplines that have never really been associated with design.”

Located on Museum Mile on the edge of Central Park—itself one of the world’s most loved and lovingly designed urban green spaces—Cooper Hewitt was founded in 1896 as the Cooper Union Museum for the Arts of Decoration. In 1968, it joined the Smithsonian family, the first outside of Washington, DC. Its history tracks the movement of design from a peripheral concern of culture to an essential one.

Cooper Hewitt underwent a renovation in 2014 that turned it into a more participatory, interactive space, attractive to both adults and children. The average age of visitors dropped from 54 before the renovation to 27 after, Ms. Baumann says. Digital displays allow visitors to create their own designs and can be activated with a special digital pen that’s handed out as they enter. As visitors find exhibits of interest to them, they can use the pen to collect and store portfolios of information about them that can be accessed from any external device when they leave the museum. Introduced with the renovation, the technology helped put Cooper Hewitt in the lead for museum interactivity.

“The museum itself has resilience as something that it needs to continually foster,” Ms. Baumann says. “Resilience and relevance. You need to be constantly malleable. You can’t just say, ‘This is who we are.’ You need to really look at what’s going on in the world and listen to that.”

The “Nature” theme for the Triennial emerged out of that listening, says Ms. McQuaid.

“Before we even thought about ‘nature’ for the Triennial, we considered it as a special exhibition,” she says. But the importance of the topic asserted itself. “This is an of-the-moment issue. And so we decided to make it a Triennial, to really focus on contemporary design. But then, we went even further and expanded it to include the whole museum for a year. Even our Selects series will be devoted to nature.”

The Selects is one of the rotating exhibits that will be on display at the same time as the Triennial. The Triennial itself occupies the outdoor garden and two large floors in the mansion that was once the New York home of Andrew Carnegie. In between those floors are samples from the museum’s vast collection of over 210,000 objects—representing 30 centuries of work, from ancient artifacts to 3D-printed objects—in exhibits aligned with the nature theme. In the Selects series, outsiders are invited to curate their own exhibit culled from that vast collection.

The outside curators are a diverse group. “For the first time, we’re having a group of five scientists come

in and choose objects from our collections,” Ms. McQuaid says. “They are from the Wyss Institute for Biologically Inspired Engineering at Harvard, who are also represented in the Triennial.”

The scope of the project is a huge endeavor, spilling into all aspects of the Cooper Hewitt’s operations, including its education initiatives, concert programs and special events. The intention is to drive home the importance of the theme.

“So rather than just have one show, the Triennial, focused on Nature, we are giving the theme over to the entire campus—reverberating on every floor and in the Garden,” Ms. Baumann says. “That’s purposeful—the whole place exuding nature.”

In addition, duplicating most of the Triennial exhibits at Cube design museum will be a huge logistical operation in itself. “Co-operation is crucial in addressing the human-inflicted situation in which nature currently finds itself,” says Cube Director Hans Gubbels in a press release. The project “carries the promise that we can bring human behavior back in line with nature again. Co-operation between design, science and technology thus can turn the tide for our planet.”

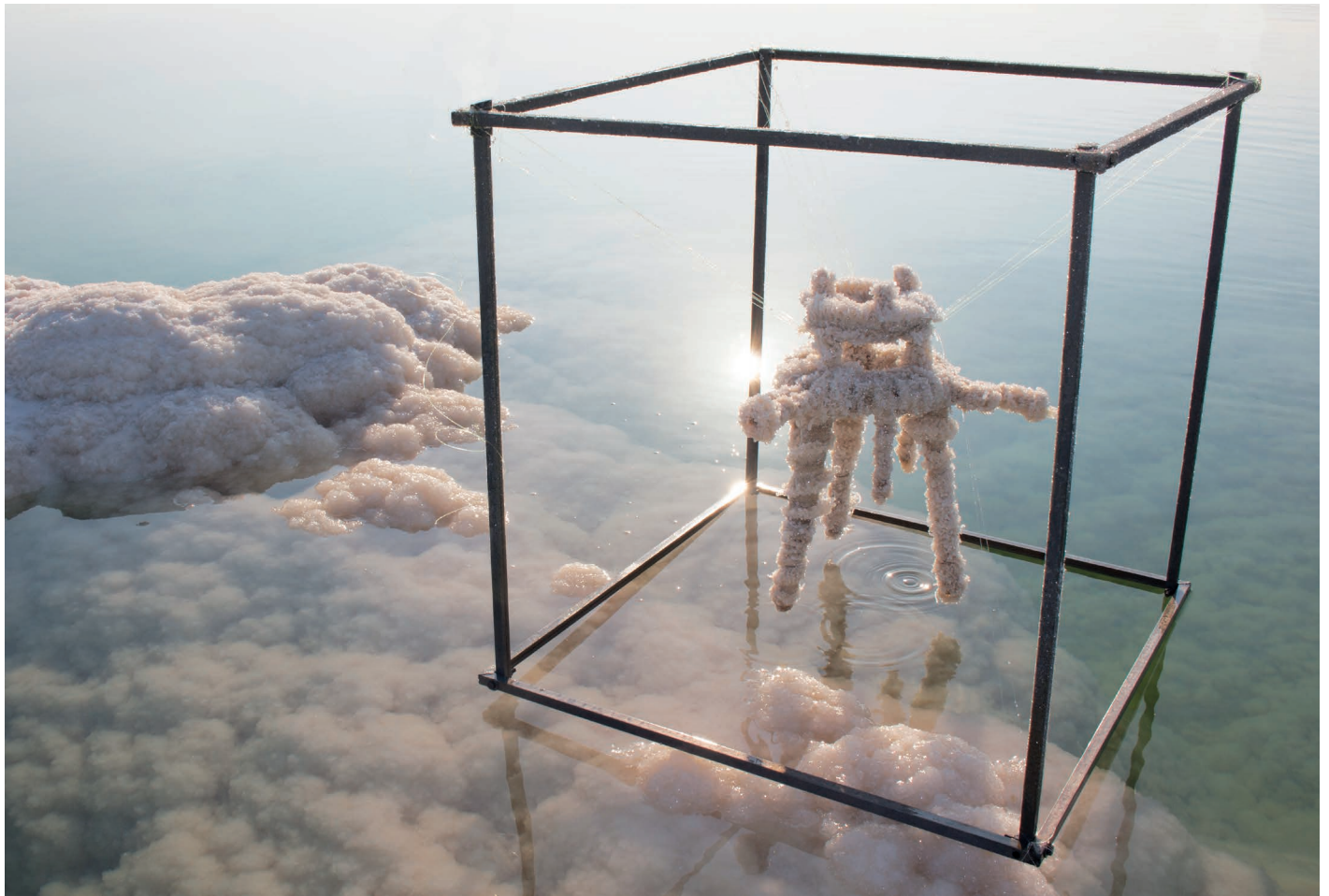
The work in the Triennial is grouped into seven categories, inspired by the designers’ various approaches to nature: Understand, Simulate, Salvage, Facilitate, Augment, Remediate and Nurture.



CAROLINE BAUMANN is Director of Cooper Hewitt, Smithsonian Design Museum in New York City, the only museum in the US devoted exclusively to historic and contemporary design. Ms. Baumann has significantly advanced Cooper Hewitt’s mission to educate, inspire and empower visitors through design. An internationally recognized leader in the field, she gave a talk on accessibility and inclusive design at the 2019 World Economic Forum in Davos.



“In some cases, the designers are advocating for or modeling a change in behavior,” Ms. McQuaid says. “In other ways, they’re inspired by nature, such as the category of Simulate. We didn’t set out with those themes in mind. It really came about by looking at the projects themselves. We’re very much about process as well as finished designs; we really want to understand how designers work. This was a way that we could delve into that a bit more.”



Above, “Bleached (II)” by Erez Nevi Pana, invites meditation on the fate of the marine world. The Israeli designer submerges wooden structures encased in loofah into the Dead Sea where they crystallize like coral formations.

“The Substitute,” left, by Alexandra Daisy Ginsberg, digitally resurrects a recently extinct species of rhinoceros using artificial intelligence and visual effects.

Among works commissioned for the Triennial is “Petrified River,” an outdoor installation inspired by the history and geography of Manhattan, particularly the features of Central Park. Another, the “Monarch Sanctuary,” proposes new urban habitats for monarch butterflies, whose wild populations are being decimated by climate change. Both works are site specific.

“The Substitute” by Alexandra Daisy Ginsberg is also a new project, one designed to provoke discussion. The work is a realistic AI animation (powered by Google’s Deep Mind software) of an extinct rhinoceros species. The designer reveals the paradox of humanity’s desire to create life via technology while simultaneously killing life forms to the point of extinction.

Two works that have appeared elsewhere address how we interact with the environment not when alive, but when we’re dead.

“The Infinity Burial Suit,” by Jae Rhim Lee, replaces a coffin and incorporates material that lets the body biodegrade into the surrounding soil. And a funerary urn design titled “Mourn,” from Studio Nienke Hoogvliet, is made of a bioplastic derived

from wastewater that allows a controlled biodegrading process of human ashes.

“This show will be a massive catalyst for people across the globe to really have an impact and will make people even more aware,” Ms. Baumann says. “The burial examples—for me that really resonates because a lot of people don’t think about it. They just think, ‘Oh, well, when I die, I die.’ But it’s a massive problem. We’ve got to think of the whole process of life, from birth to death, what are we doing to this planet and how are we leaving it better. And we can do that. We can work on that with designers in collaboration with other experts.

“This show really emphasizes our vision to inspire people and make them understand the power of design. We’re looking at nature in our world and what’s gone awry and trying to solve some of these problems. If design isn’t involved in solving this problem, we are in dire straits and it’s not such an optimistic story, frankly.” ♦

KIM MITCHELL is a Partner with Brunswick Arts. **CARLTON WILKINSON** is Brunswick Review’s Managing Editor. Additional reporting by **LIZA ELIANO**, Account Director for Brunswick Arts. All are based in New York.

AS A STAR AT THE UNIVERSITY OF CHICAGO Booth School of Business, Emir Kamenica doesn't stand out in the usual way: He isn't one of Booth's nine Nobel Laureates. Nor will he theorize about the likelihood of a global recession. He's a micro-economist, interested in particular in human behavior.

His own story is one of resilience, and the fruit of that resilience is research relevant to business executives on and off the job. How might pay-level affect your marriage? In any narrative, business or Hollywood, what's the formula for suspense? How to make the loss of money more entertaining for consumers?

Born in Sarajevo, the son of two economists, Dr. Kamenica had a happy childhood until war broke out. He, his mother and sister escaped, landing as refugees in the US. A fan of the show "90210," Emir had a view of America based on images of Beverly Hills privilege. Placed with his family in a run-down Atlanta apartment complex, and enrolled in a public school where gunfire broke out in the halls, he suddenly inhabited the grimmer side of America. Back in Sarajevo, meanwhile, his father was murdered.

Assigned to write an essay for class, and barely able to speak English, Emir plagiarized a passage from his favorite novel, certain he wouldn't be caught because the book was written in Bosnian. A substitute teacher, amazed at the work, helped Emir win an interview at Paideia, an elite private school in Atlanta.

In a 2013 National Public Radio interview with financial writer Michael Lewis (*Liar's Poker*, *The Big*

A survivor of
the Bosnian
War, University
of Chicago
Economist
EMIR KAMENICA
now studies
the science of
suspense.

THE

Short), Dr. Kamenica confessed to the plagiarism. But when Mr. Lewis and NPR tracked down that substitute teacher, she recalled being impressed by the young student's overall performance, rather than any single essay.

Even more remarkable than that confession is Dr. Kamenica's recollection, in the NPR interview, of how he comported himself as an applicant in his interview at Paideia—with humility and dogged earnestness.

"I'm a Bosnian refugee. My school is really bad. Can I please go here?" he asked the admissions woman interviewing him.

After learning that tuition was beyond his reach and that the aid-application deadline had passed, Emir said again, "I'm a Bosnian refugee. My school is really, really bad. Can I please, please go here?"

The school admitted him. From Paideia he earned a scholarship to Harvard, where he obtained a PhD in economics in 2006. The Booth School hired him the same year. His subsequent work has shown why.

One paper Dr. Kamenica co-authored showed that wives who earn more than their husbands experience greater unhappiness and a 50 percent higher rate of divorce. Which gender typically initiated those breakups—the lower-earning husband or higher-earning wife? In an interview with the *Brunswick Review*, Dr. Kamenica shrugged, saying it didn't matter. "It's nearly impossible to be happier than your spouse," he said.

Perhaps his most publicized work purported to identify the mathematical equation for suspense. In a

REFUGEE



New York Times article on that paper, Dr. Kamenica and his co-authors wrote that in their analysis, “The question of how to maximize entertainment—that is, how to generate the most suspense or the most surprise—becomes a mathematical problem that can be tackled on a whiteboard.” The equation they devised: $\text{Suspense}_t = \sqrt{E_t[(\hat{\mu}_{t+1} - \mu_t)^2]}$.

One takeaway from that paper is that the ideal number of plot twists is three. Also, maintaining suspense requires a bit of boredom. “In a number of settings—watching basketball games, reading mystery novels, gambling in a casino—people are invested in learning the outcome, but they do not wish to learn the outcome too quickly,” Dr. Kamenica and his fellow authors wrote in the Times. “In all of these settings, a key aspect of entertainment is the revelation of information over time.”

Dr. Kamenica works collaboratively, believing that outcomes benefit from argument and discussion, usually aimed toward identifying the perfect question. “We’re taught that there’s no such thing

After arriving in the US as a teenaged refugee, Emir Kamenica (above, during his Harvard days) won a faculty position at Chicago’s prestigious business school. His story gained national attention partly because of his belief that his success hinged on a high school paper that he plagiarized.

KEVIN HELLIKER, a Pulitzer Prize-winning journalist, is Editor in Chief of the Brunswick Review. He is based in New York.

as a stupid question. But there are stupid questions. That doesn’t mean they shouldn’t be asked, but until you understand that the first question you asked was a stupid question, you won’t gain a better understanding of the world. In economics, your contribution often isn’t an answer, it’s a question.”

One line of questioning that intrigues Dr. Kamenica: “Is a dramatic way of losing \$100 more entertaining than a boring way of winning \$50? What if we had a benchmark for the monetary value of drama?”

Dr. Kamenica believes he could illuminate that topic with data from casinos, but so far no luck. “I’ve had phone calls with people at various levels of various [gaming] companies about the data needed for such research, but in the end I never got my hands on it.”

The research, he says, would examine this scenario: “Two people walk into a casino. One has wild swings of fortune—down \$1,000, up \$800—before ending up with a \$200 loss. The other has a slow tick down to a \$200 loss. What would be the difference in likelihood of these two returning to a casino?” ♦

WILL ALEXANDRIA OCASIO-CORTEZ INSPIRE Latino candidates across America? That's a burning question ahead of the 2020 US elections. Since upsetting a long-term incumbent to win a seat in Congress in 2018, the 29-year-old New York City progressive—popularly known as AOC—has become one of America's most visible politicians.

Determined to make the most of her triumph is Latino Victory, a national organization that identifies potential Latino candidates, encourages them to seek office and supports their candidacies. The interim president of Latino Victory is Melissa Mark-Viverito, a Puerto Rico native who made history in 2014 when she was the first Latina elected to serve as Speaker of the New York City Council.

Ms. Mark-Viverito, who left the New York City Council after reaching her term limit, visited Brunswick's New York offices recently to talk about her efforts in New York and across the nation to increase diversity among elected officials.

What is the "21 in '21 Initiative?"

Before I left the New York City Council, I founded that initiative with two of my female colleagues in the council. Our goal is to raise awareness of the drop in women in the city council. We have a city that is led by men. We have a city council where we've seen the number of women drop to 11 women out of 51 members. When I came into the council, it was 18 out of 51. You can't make policies and pass budgets in a fair and equitable way if you're missing the point of view and perspective of a large percentage of the population.

To get that number to 21 in 2021, we created this initiative, which is basically a networking opportunity, to encourage women to "step up to the plate" and run for public office. We create networking sessions where they can get training on what it is to run a campaign, as well as help them to understand New York City's campaign finance law, which can be complicated—and make sure that they're prepared with the proper training.

Like Alexandria Ocasio-Cortez, for example?

It's a similar concept, but she was recruited. A lot of times people say that women have to be asked to run for office. I want us to get to a point where that's not the case, where any woman can just step up and say, "This is a possibility. I want to make sure government is being responsive to the needs that I have as a woman and that my community has."

As interim president of Latino Victory, what are your hopes?

The goal of Latino Victory is to build Latino political power. And the concept that government needs to be reflective of those it serves. We must see ourselves reflected in government. The idea is that we need to encourage and create a pipeline to encourage Latinos to run and to help raise money and support for those candidacies to be viable.

In Texas right now there's a push to have a Latino Democrat run to challenge the Republican Senator Cornyn. Texas is tough. But our idea is that in a state with such a large Latino population, there should be a qualified Latino candidate. Latino Victory did this

LATINO CAMPAIGN

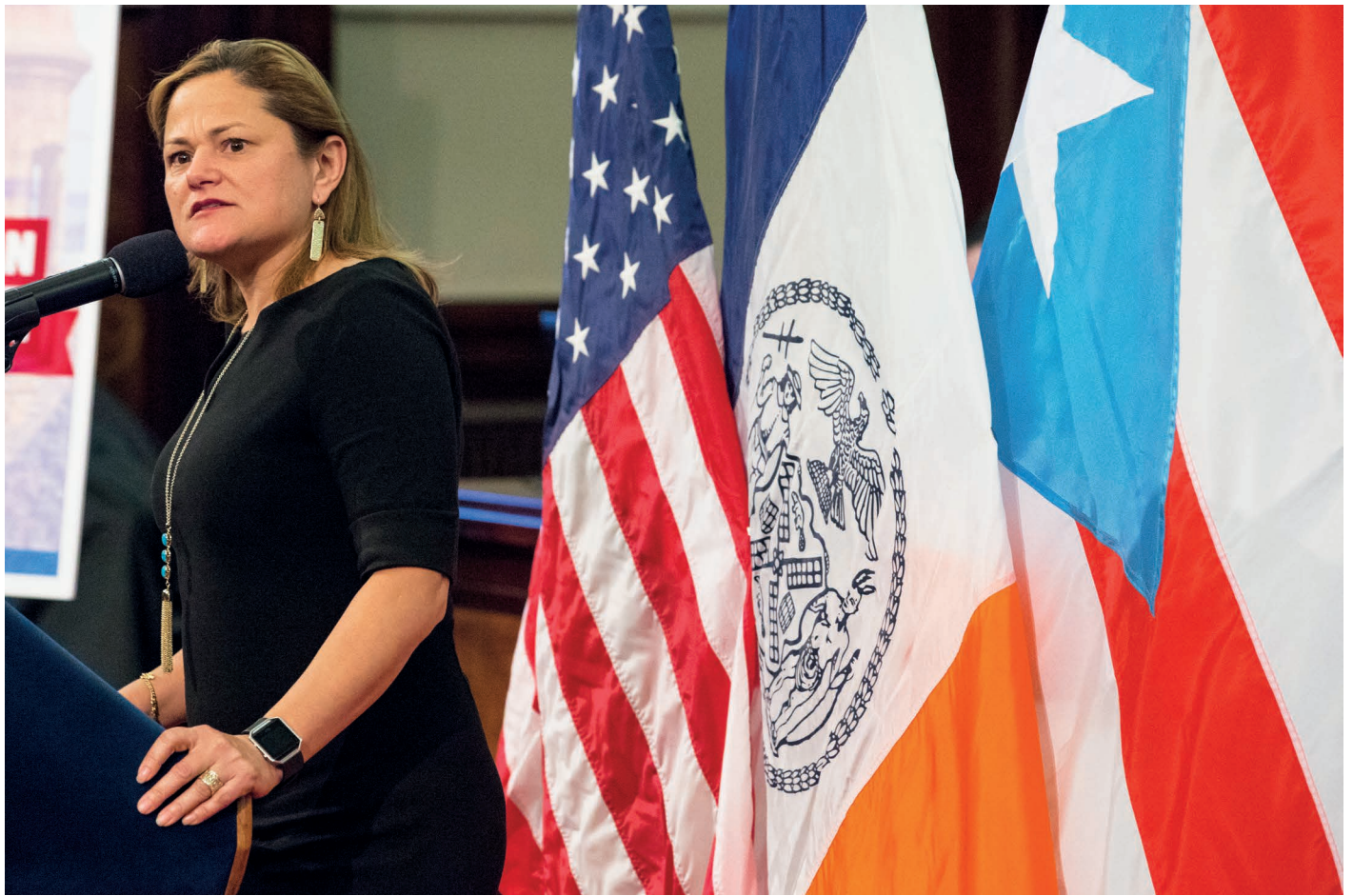
whole digital recruitment for Congressman Joaquin Castro to run for senator against Cornyn. It's called "Run, Joaquin, Run." We did something similar with New Mexico, where the senator there, Tom Udall, has just announced he's not going to run in 2020, creating an open spot. Even though New Mexico is the state with the largest percentage of Latinos, they haven't had a Latino elected statewide there in over 40 years so Latino Victory did a recruitment campaign for Congressman Ben Ray Lujan to run for Senate.

When there are viable Latino candidates, it's a great opportunity to energize the Latino base and to encourage people to register to vote. Because now they're seeing someone that looks like them and that understands their issues. We want to make sure that our community, the Latino community, is relevant in that race and in deciding the future of this country.

Is there any pushback among Democrats?

There is a wave of millennials—particularly the Bernie Sanders crowd—that shun what they call identity politics. And I really reject that idea. I am a Latina. I was born and raised in Puerto Rico. I am bilingual. I am bicultural. And my experience, having grown up

Former Speaker of the New York City Council **MELISSA MARK-VIVERITO** tells Brunswick's **GABRIELLE OUAKNINE** about her work to create a new generation of Latino politicians.



in Puerto Rico, is unique. And that perspective is important to have at a decision-making table. It's very hard for someone who has not lived that experience to really be empathetic about it. They don't feel it or understand it in the same way. If you're in Congress and you're making decisions that affect Puerto Rico and you don't have the voice of people that understand that reality and the nuances, then you're likely to make ineffective policies that are out of touch. That's why I think lived experiences of whomever, whether it is the LGBTQ community, immigrants, those who are foreign-born, Puerto Ricans, all these experiences matter.

We live in a country and a society that's built on racism. And if you don't understand that reality, then you're not going to be able to change it.

Is Latino Victory advocating on behalf of recovery funds for Puerto Rico?

Latino Victory recently wrote an open letter to all the 2020 presidential candidates about Puerto Rico. We don't want to hear any more platitudes. We want to know what is going to be each candidate's platform, as President of the United States, with regards to Puerto Rico. We want the candidates to genuinely



Latina candidates, such as the now first-year Congresswoman Alexandria Ocasio-Cortez, above, need an environment that gives them the opportunity and resources to run, says Melissa Mark-Viverito, shown at top speaking at New York's City Hall in 2017.

understand that the recovery in Puerto Rico is still ongoing. What is your action plan for Puerto Rico? We want to hear concretely what you're going to do.

How do you withstand the name-calling in politics, especially in the age of social media?

My politics have consistently been progressive. I was always considered ultra-lefty or a communist. Now with this new wave of liberals, I'm not progressive enough. You can't let that criticism distract you. You have to keep moving forward when they are trying to silence you. You must build coalitions because you can't do any work alone. You must figure out how to bring others who are like-minded into the fold, and just continue to keep pushing ahead.

I'm a very goal-oriented person. For me it has always been about trying to build a more just and equitable society. I want to build a better world than the one that I came into. Any position I've held, whether in office or out of office, has always been about fighting against injustice and being very vocal. You can't be silent when you see oppression and injustice. ♦

GABRIELLE OUAKNINE is a Brunswick Office Assistant in New York and a writer for Brunswick Review.

Criticalmoment



JULY 20, 1969
"One giant leap for mankind."

THE MOST DISTANT LEG OF NASA'S APOLLO 11 mission saw the lunar module, or LEM, detach from the orbiting space capsule and head to the Moon's surface. Astronaut Neil Armstrong could see the landing target, in a vast area named the Sea of Tranquility, was strewn with boulders. Taking control manually, he glided over the surface in search of smoother terrain, with fuel perilously low. Too far and he and his partner Buzz Aldrin would have to abort the mission. But a rocky landing that damaged the LEM could have left them to die on the surface.

The pair also carried the hopes and fortunes of an entire planet. For a moment, suspended over the surface of that distant world, the two men represented the entire species. Earth held its breath.

A gentle touchdown, with less than 30 seconds of fuel remaining, left the LEM safe in a flat plain. Seven hours later, an estimated 600 million watched on TV as Mr. Armstrong stepped onto the surface with the instantly famous pronouncement, "That was one

Neil Armstrong, the first person to set foot on the Moon, is reflected in the visor of the second, Buzz Aldrin, as he snapped this photo. The two spent a total of 22 hours on the Moon while the third astronaut on the US NASA mission, Michael Collins, waited for them in the Apollo 11 Command Module in lunar orbit.

CARLTON WILKINSON
is Managing Editor of
the Brunswick Review.

small step for a man, one giant leap for mankind." Along with NASA's breathtaking photos of the Earth, the event permanently altered our view of our planet, our species and our place in the universe.

Today, 50 years later, only 12 men, all NASA astronauts, have walked on the Moon. No manned lunar mission has been launched since 1972. But that pause appears to be coming to an end. The US, Japan, India, Russia, Germany and the UK have all sent probes to the Moon. China recently made history by putting a rover on the far side of the Moon—a major milestone. Both the US and China have expressed interest in restarting manned missions.

And this time, humanity isn't waiting. Israeli non-profit SpaceIL this year became the first private business to send its own unmanned probe, which made it to the Moon, though it crashed on the surface. Elon Musk's SpaceX and Jeff Bezos' Blue Origin are both eyeing lunar tourism in the next decade. The next person to walk on the Moon could be anyone. ♦

Brunswick Group OFFICES**ABU DHABI**

Office 506
Park Rotana Office Complex
TwoFour54
PO Box 77800
Abu Dhabi
United Arab Emirates
T: +971 2 234 4600
F: +971 2 245 1401
uaeoffice@brunswickgroup.com

BEIJING

2605 Twin Towers (East)
B12 Jianguomenwai Avenue
Beijing, 100022
People's Republic of China
T: +86 10 5960 8600
beijingoffice@brunswickgroup.com

BERLIN

Taubenstraße 20-22
10117 Berlin
Germany
T: +49 30 2067 3360
F: +49 30 2067 3366
berlinoffice@brunswickgroup.com

BRUSSELS

Avenue des Arts 27
1040 Brussels
Belgium
T: +32 2 235 6510
F: +32 2 235 6522
brusselsoffice@brunswickgroup.com

CHICAGO

300 North LaSalle Street
Suite 2260
Chicago, IL 60654
USA
T: +1 312 800 8120
chicagooffice@brunswickgroup.com

DALLAS

200 Crescent Court
Suite 1850
Dallas, TX 75201
USA
T: +1 214 254 3790
F: +1 214 254 3791
dallasoffice@brunswickgroup.com

DUBAI

Level 5
Gate Village Building 10
PO Box 506691
Dubai International
Financial Centre
Dubai
United Arab Emirates
T: +971 4 446 6270
F: +971 4 560 9601
uaeoffice@brunswickgroup.com

FRANKFURT

Thurn-und-Taxis-Platz 6
60313 Frankfurt am Main
Germany
T: +49 69 2400 5510
F: +49 69 2400 5555
frankfurtoffice@brunswickgroup.com

HONG KONG

12/F Dina House
11 Duddell Street, Central
Hong Kong SAR
T: +852 3512 5000
F: +852 2259 9008
hongkongoffice@brunswickgroup.com

JOHANNESBURG

Rosebank Link
173 Oxford Road
6th Floor
Rosebank
Johannesburg
South Africa
T: +27 11 502 7300
F: +27 11 268 5747
johannesburgoffice@brunswickgroup.co.za

LONDON

16 Lincoln's Inn Fields
London WC2A 3ED
United Kingdom
T: +44 20 7404 5959
F: +44 20 7831 2823
londonoffice@brunswickgroup.com

MILAN

Via Solferino, 7
20121 Milan
Italy
T: +39 02 9288 6200
F: +39 02 9288 6214
milanoffice@brunswickgroup.com

MUMBAI

The Capital
814, 8th Floor
C-70, G Block, Bandra Kurla Complex
Bandra East
Mumbai 400 051
India
T: +91 22 61358500
mumbaioffice@brunswickgroup.com

MUNICH

Widenmayerstraße 16
80538 Munich
Germany
T: +49 89 809 90 250
F: +49 89 809 90 2555
munichoffice@brunswickgroup.com

NEW YORK

245 Park Avenue
14th Floor
New York, NY 10167
USA
T: +1 212 333 3810
F: +1 212 333 3811
newyorkoffice@brunswickgroup.com

PARIS

69 Boulevard Haussmann
75008 Paris
France
T: +33 1 53 96 83 83
F: +33 1 53 96 83 96
parisoffice@brunswickgroup.com

SAN FRANCISCO

One Bush Street
Suite 1400
San Francisco, CA 94104
USA
T: +1 415 671 7676
F: +1 415 671 7677
sanfranciscooffice@brunswickgroup.com

SÃO PAULO

Avenida Dr. Cardoso de Melo
1.340 - Sala 101
Vila Olímpia
São Paulo SP
Brasil 04548-004
T: +55 11 3076 7620
saopaulooffice@brunswickgroup.com

SHANGHAI

Room 2907
United Plaza
1468 Nan Jing Road West
Jing'an District
Shanghai 200040
People's Republic of China
T: +86 21 6039 6388
shanghaioffice@brunswickgroup.com

SINGAPORE

6 Battery Road
#16-06 Singapore 049909
T: +65 6426 8188
F: +65 6426 8199
singaporeoffice@brunswickgroup.com

STOCKHOLM

Fourth Floor
Birger Jarlsgatan 15
111 45 Stockholm
Sweden
T: +46 8 410 32 180
F: +46 8 611 00 56
stockholmoffice@brunswickgroup.com

VIENNA

Schottenring 14
1010 Vienna
Austria
T: +43 1 907 65 10
F: +43 1 907 65 10 40
viennaoffice@brunswickgroup.com

WASHINGTON, DC

600 Massachusetts Avenue, NW
Suite 350
Washington, DC 20001
USA
T: +1 202 393 7337
F: +1 202 898 1588
washingtonoffice@brunswickgroup.com

Brunswick Group COMPANIES**BRUNSWICK ARTS**

16 Lincoln's Inn Fields
London WC2A 3ED
United Kingdom
T: +44 20 7404 5959
brunswickarts@brunswickgroup.com
www.brunswickarts.com

MERCHANTCANTOS

16 Lincoln's Inn Fields
London WC2A 3ED
United Kingdom
T: +44 20 7242 1336
F: +44 20 7936 7788
office@merchantcantos.com
www.merchantcantos.com

THE LINCOLN CENTRE

18 Lincoln's Inn Fields
London WC2A 3ED
United Kingdom
T: +44 20 7936 1300
F: +44 20 7396 3535
info@thelincolncentre.co.uk
www.thelincolncentre.co.uk

BRUNSWICK GROUP LLP

www.brunswickgroup.com/resilience