

FUTURE GAZERS

The next 30 years in business

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INTRODUCTION

We're living in a time of incredible change, and that can feel both exciting and unnerving at the same time. Digitisation and the internet have unleashed a wave of new technologies: the internet of things, cloud computing, augmented reality, and automation in the form of artificial intelligence, machine learning, drones and other robots.

Together, they are sparking a Fourth Industrial Revolution. This technological swarm has already crashed into a number of industries. It is set to overturn more. As with all revolutions, there will be winners and losers.

The internet has made life far easier for all businesses — increasing channels to market, reducing costs and barriers to entry. By one calculation, setting up a business today costs 0.1% as much as it did in 2000¹. So from a certain point of view, life has become much easier for small businesses.

But on the other hand, the internet seems to have created winner-takes-all markets. Big companies rise quite suddenly, and almost magically — like a beanstalk in a fairy tale — and then bestride the world like a giant, wielding their monopoly power and crushing small businesses.

Think what Google and Facebook have meant for media companies, as they dominate online advertising spend². What Amazon has meant for booksellers. And what Uber has done to your local cab company.

In many ways, we are lucky to be witnessing the “creative destructive” of capitalism that economist Joseph Schumpeter wrote about. It is an invigorating, bracing time to be a businessperson. No industry is safe from the merciless law of the commercial jungle: adapt or die.

Even Britain's best loved printed business directory has recently bowed to the changing winds of time. After helping people find local tradespeople since 1966, Yell recently announced that, after five decades, it will stop printing its Yellow Pages directory in 2019, in favour of fully digitising its business.

With the Yell announcement, it seems a good time to think about what the next decades will mean for business, especially for the businesses that the people at Yell serve: the 5.5m SMEs, the “FT 5.5 million” you could say, that form the backbone of British business.

Our aim with our research for this report, was to reach out to business experts — at *The Times*, the business schools at Oxford and Cambridge, the British Chamber of Commerce, the Federation of Small Business, and more — to conduct our own research, and then to apply our robust methodology to formulate a vision for what the future holds.

The results of that research are the seven key business trends in this report that we believe will impact all businesses — especially small businesses. There are also suggestions for what small businesses should do to prepare for, and profit from, these changes.

There is very little about Brexit or General Data Protection Regulation (GDPR) in this report. In fact, this is the only mention of them. There is a simple reason for this: we believe that others have written – and will write – plenty about them, that they are short-term blips, and that there are other more meaningful long-term trends for British business. It will take more than a few geopolitical or data hurdles like these to prevent British businesses from thriving.

With reference to the EU, we'd direct you to the section on the “Hollywood way” of running your business. And to something business expert and founder of Enterprise Nation, Emma Jones MBE, told us:

“Undeterred by Brexit, entrepreneurs will look ever more overseas for new sales and opportunities. Supported by their peers and advisers, small businesses will board planes, join trade missions, and do deals in new territories.”

We look forward to hearing your comments on the report, and to playing a role in the future of British business. And we wish you and your business the best of success in the exciting decades to come.



James Wallman, futurist & founder, *The Future Is Here*

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EXECUTIVE SUMMARY

This report opens with an explanation of the method The Future Is Here uses to forecast the future. We observe what is happening today to make robust forecasts about the future. We begin by describing the main macro-environmental factors — often called “macro trends” or “megatrends”. We then look for innovations, consider them in terms of the macro-environmental factors, and decide the most likely trends.

The key macro-environmental factors include:

- The rise of the robots — artificial intelligence (AI), machine learning (ML), drones, and the Fourth Industrial Revolution
- The GAAFA (Google, Amazon, Alibaba, Facebook, Apple) giants — today’s behemoths are extending their reaches into almost every moment and area of our lives. They know when and where we wake up, what we buy, where we go, and what we say to our loved ones — and still they want to know more
- The evolution of capitalism, including exciting three new models: the asset-light platform businesses such as Uber and Treatwell; the sharing economy; and mass customisation
- Connected social world — smartphones, Facebook, and a future when people start communicating through implants
- Smart era — the internet of things (IoT) is creating vast amounts of data; couple that with AI-driven analytics and you have smart phones, smart homes and smart cities
- Augmented futures — augmented reality (AR) & virtual reality (VR)
- Post-materialist times — we are suffering from “stuffocation”, choosing access over ownership, and becoming experientialists
- Environment — if we’re to keep beneath 2 degrees centigrade rise by 2100, by 2070, human culture must become a carbon sink; so the arrival of electric vehicles (EVs) is positive news
- Pace of change — faster than ever, and only set to get faster
- Still human — even as the first cyborgs appear, we’re still apes



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1. Easy Money

Thanks to game-changing regulation change, far better user experience (UX), and clever algorithms that turn “should-we-lend?” uncertainty into risk you can put a price on, it will be easier to access capital, accept payments, and calculate cash flow and taxes. Money will become, if not easy, at least far easier to get hold of and manage.



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2. The Cobot Revolution

Instead of worrying about robots, we should be excited about “cobots” — robots that are colleagues, designed to work collaboratively alongside humans³. They will make us more productive and happier at work.



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3. The Hollywood Way

More firms will work as they do in Hollywood. Groups of people, who may or may not have worked together before, will form temporary teams to deliver projects. Then, their distributors will use as many channels as possible to deliver their goods and services around the world. The result will be a new business paradigm — the small, global firm — and a new generation of micro-multinational businesses working the Hollywood way.



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4. The 4-Hour Work Day

The current work day was set up to squeeze as much as possible out of workers when they performed routine tasks in factories and offices. As robots and cobots perform more of the routine tasks, humans will move up the value chain and become more creative. And the best way to be creative is to work around four hours per day.



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5. Small Firm, Big Data

Till now, finding meaning in the depths of Big Data has only been possible for large firms with deep pockets. But thanks to cloud computing and the “software as a service” (SaaS) model, you no longer have to be a big firm to profit from Big Data. In the future, all firms will be data firms. Even yours.



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6. The Reputation Game

In an era of transparency, and heightened concerns about ethics and the environment, businesses are moving from a single-minded concern for profits, to a broader interest. You have to not only care about profits, but also people, planet, purpose, and your performance. Your reputation — what you’re able to do and how you do it — will be ever more important in the future.



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7. The Experience Economy

It is now clear that people are becoming determined experientialists — looking for happiness, identity and status in experiences — and that the experience economy is taking off. In the future, the most successful companies will be those who provide their customers with meaningful, memorable experiences.

This report closes with our view of what each of these seven trends mean for small businesses, and a series of questions designed to spark innovation and better ways of working.

METHODOLOGY

The method *The Future Is Here* uses to understand the future is inspired by something the futurist William Gibson once said: “The future is already here. It just isn’t very evenly distributed.”

We identify future trends by looking for signs in the present, and applying a way of reading cultural change called the “diffusion of innovations”⁴. This considers the twin aspects of any innovation: the innovation itself and the macro-environmental factors it exists in. The macro-environmental factors we consider are an updated version of the original PEST analysis — political, economic, social, and technological factors. Our model includes nine areas which reads DAS STEEPLE⁵:

D is for Demographics

Including longer lives, aging populations, more people and urbanisation.

A is for Aesthetics

Our changing perception of what is/isn’t beautiful, useful and pleasant to use. This ranges from colour, to shape, to user interfaces (e.g. voice), and user experience (UX).

S is for Science

As discoveries change, so do our attitudes and behaviours. Think of what happened when science showed that jogging is good for you and that smoking is harmful — or the more recent revelations about the dangers of sugar and red meat.

S is for Socio-cultural

Our attitudes, aspirations, dreams and behaviours.

T is for Technological

With the mobile internet, VR (virtual reality), AR (augmented or mixed reality), the internet of things (IoT) and automation (including AI, ML, robots, and chatbots), technology is arguably the most important driver of change in the 21st century.

E is for Economic

For example, the rising wealth of middle income countries, and the rising wealth of millennial consumers.

E is for Environment

The time bomb in any conversation about human behaviour in the 21st century.

P is for Political

How we act as groups and get along with others.

L is for Legal

Laws can dramatically speed up or slow down change.

E for Ethics

People’s moral concerns have a major impact on the decisions they make.

Once we have a view on the macro-environmental factors of the world we are living in, and are going to be living in, we consider the innovations being launched. We do this by using the five key questions also described in *The Diffusion of Innovations*. The five questions are BECOS:

B is for Better

Is it actually better, compared with what came before and its alternatives?

E is for Easy

Is the innovation easy to try out and easily available?

C is for Compatible

Is it compatible with how we live today? Is it easy to use the innovation in everyday life?

O is for Observability

If one person tries it, will other people notice?

S is for Simplicity

Is the innovation easy to understand?

If the answer to each of these is a resounding “yes”, the innovation is more likely to spread.

KEY MACRO TRENDS

These are the key macro-environmental factors that we believe will affect the world and impact business in the next decades.



The rise of the robots

Homo sapiens have always used technology to become more efficient: to get more done in a shorter amount of time. Many of the great revolutions of our shared history happened thanks to our ancestors' discovery of smarter, easier ways to do things. Consider the domestication of animals, for instance, or, fast-forwarding several thousand years, the steam engines, electricity and factories of the Industrial Revolution.

Now, many commentators believe we are on the cusp of another seminal change. The "Fourth Industrial Revolution" — as World Economic Forum founder Klaus Schwab calls developments such as 3D printing, genetics, robots, and computing, especially Artificial Intelligence (AI) and Machine Learning (ML) powered by Artificial Neural Networks (ANN) — will change and challenge much of human life on earth.

The rise of the robots — the ones you can see and the ones you can't — is causing all sorts of excitement, and concern. "ROBOTS TO STEAL 15M OF YOUR JOBS" was splashed across the *Daily Mail's* front page⁶. "Robots will take over most jobs within 30 years," reported *The Daily Telegraph*⁷.

In our view, this automation anxiety is understandable, as visible, physical robots and invisible software bots are now rising up and taking over all sorts of rote, repetitive tasks that humans used to do.

They're in retail. Amazon now has 45,000 robots in its warehouses, for instance. Lowe's, a home improvement retail chain operating in North America, has a LoweBot to

greet people when they arrive. It's similar to Pepper, the humanoid robot that Japanese telecommunications firm Softbank has piloted.

They're in finance. Sometimes dubbed the "Apple of finance", New York-based firm Betterment uses robo-advisors — smart algorithms based on investment principles — to advise customers where to put their money to optimise their investments.

They're in coffee. At a coffee shop called Cafe X in San Francisco, a robot barista called Gordon now makes lattes, cappuccinos, and flat whites far faster than a human.

They're in construction. New York-based firm Construction Robotics's SAM, which is short for Semi-Automated Mason, can lay 3,000 bricks a day. That's six times as many bricks a day than a human builder.

And robots — specifically, drones — are about to change the delivery industry. There will be 1 billion drones in the skies by 2030, according to futurist Thomas Frey⁸, delivering all sorts of essentials. Companies that have already piloted drones include Amazon, Domino's Pizza, and UPS. Interestingly, UPS's drone took off from an electric van fitted with a recharging station for the battery-powered drone. Automaker Mercedes-Benz has invested €500m in a drone startup called Matternet, and has also unveiled a self-driving van plus drone delivery concept.







The GAAFA giants — Google, Amazon, Alibaba, Facebook, Apple

It now seems clear that the efficiency and network effects of the internet not only lower barriers to entry to create a far more level-playing field, they also end up creating winner-takes-all markets. Hence the vertiginous rise of Google, Amazon, Apple, Facebook and Alibaba.

These behemoths are extending their reaches into almost every moment and every area of our lives. They know when and where we wake up, what we buy, where we go, and what we say to our loved ones. A third of adults in the UK — 19 million people — have an Amazon Prime membership, for instance. Around one in four adults buy something from Amazon each week⁹. And Google is able to listen in to some of our most intimate conversations, as well as our holiday plans, through its Gmail service — used by 1.2 billion people around the world.

These giants have the Big Data, analytical capabilities and deep pockets to disrupt any industry they turn to. For instance, the GAAFA firms are entering financial services. Google's Google Wallet lets users send money to friends by email. Amazon lends money to small businesses via its Marketplace. Facebook offers free friend-to-friend payments in the US. Apple's iOS 11 operating system enables friend-to-friend payments for the first time from Apple Pay.

Besides financial services, the GAAFA giants are likely to enter other markets — like autonomous vehicles. Apple's iCar appears to be closer to reality, as rumours grow about Apple's electric car project, codenamed "Titan". Google has already entered the mobility sector. Its Waymo startup was spun out of the company's "moonshot factory" X — whose "mission is to invent and launch "moonshot" technologies that we hope could someday make the world a radically better place"¹⁰.

The evolution of capitalism

After its success in the 20th century, and a bumpy ride in the early 21st, capitalism is evolving.

Before, the capitalist system was based on mass production and mass consumption. Successful companies leveraged large deployments of capital to take advantage of economies of scale to deliver more products more cheaply. Now, thanks to the internet and digitisation, new business models are emerging. Three of the most exciting are: the platform revolution, the sharing economy, and mass customisation.

The platform model subverts one of the truths of what we might now call "early capitalism" — the early days of the first and second industrial revolutions¹¹. Digitisation and the mobile internet have lowered barriers and enabled firms with virtually no physical capital to grow at incredible pace. Airbnb, for instance, is the world's largest provider of accommodations but owns no real estate. Uber is the world's largest car service, but owns no cars.

The sharing economy now reflects our concerns regarding throwaway consumerism, and takes advantage of technology to create a new type of consumption: you can now gain higher status from sharing and access than from owning. This on-demand, gig-based, sharing economy that counts Airbnb and Zipcar as its leading proponents is growing fast. It will be worth \$335bn by 2025¹².

One of the promises of the digital era is mass customisation. As the hallmark of 20th century consumerism was mass production and mass consumption; as Henry Ford said, "any car as long as it's black" — so at the beginning of the 21st century we are witnessing the birth of mass customisation. California-based Original Stitch mass-customises shirts. Since every shirt is custom-made to fit, there are 1 billion variations¹³.

The smartphone may well be replaced by a variety of devices, including brain computer interfaces that automatically read our thoughts. And many more of us will see implants as natural as wearing a ring.

Connected social world

We have never been as connected as we are today. While there are now 7.6bn people on Earth, and 5.5bn are over 14, there are 5bn mobile phones, 3bn smartphones, 700m iPhones, 1.8bn Google Androids and 500m Chinese Androids — according to Silicon Valley tech analyst Benedict Evans.

And thanks to the addictive design of these devices and the apps installed on them — from instant messaging (IM) to social media to news to email — we are using them almost all of the time: 80% of Britons say they check their phones within 15 minutes of getting up¹⁴. Incredibly, 10% even admit to using their phone during sex¹⁵.

The huge impact of the smartphone on life on planet earth is hard to sum up. We think this observation from *The Economist* comes close: “Smartphones are more than a convenient route online, rather as cars are more than engines on wheels and clocks are not merely a means to count the hours. Much as the car and the clock did in their time, so today the smartphone is poised to enrich lives, reshape entire industries and transform societies.”

Among other things, smartphones connect us to everyone via social media. As Scott Galloway, professor of marketing at NYU Stern, points out: “Facebook has more people than God on this planet... and can reach them on a mobile phone.”

In the future, of course, the way we stay connected will change. Remember that the dominant communication device of today — the iPhone — only appeared in 2007. And the dominant social media network, Facebook, in 2004. Neither of these are guaranteed in the future. The smartphone may well be replaced by a variety of devices, including brain computer interfaces that automatically read our thoughts. And many more of us will view wearing implants as natural as wearing a ring.



Smart times

Just as oil was an immense, untapped valuable asset that created huge, rich, global companies, so firms who grasp the fundamental value of data and learn to extract and use it will be hugely successful. No wonder commentators are lining up to say that data is the new oil¹⁶.

We now produce more data than ever before. There are already more connected things than humans on the planet (8.4 billion in 2017), and there will be more than 20 billion by 2020. This new internet of things (IoT) is creating an era of Big Data and vast possibilities. But the challenge is to make sense of all the data being created. Hence, one of the most important prefixes of today and the future is “smart”.

We now have smartphones, smart homes, smart stores, and, soon, smart cities that know where we are, what we’re doing, and what we’re likely to do next — and that will use that data for good.

Google-owned Nest thermostat, for instance, connects with other devices to make life more comfortable. Your smart alarm clock will automatically tell it what time you’re getting up, so that you wake to a warm home.

The Amazon Go concept store gathers a data user’s smartphone and various sensors in order to recognise customers and what they put in their bags, and then automatically takes the money from their bank accounts.

Connected to your kitchen, via future versions of devices like the Samsung Family Hub Fridge, the internet of things will enable “cognitive commerce”, that crunches data from sensors around your kitchen and behavioural analysis to predict what we’ll want and when.

“With the internet of things and cognitive technology,” says Lucie Greene, worldwide director of trends at JWT Intelligence, the innovation arm of global advertising firm JWT, “more of our gadgets will intuitively know when they need filling up, when things are out of date, when we need deliveries.”

In the future, if your smart world system notices that Netflix is releasing a box set this Saturday, it might check the schedule in your calendar and order your favourite TV-watching foods, such as pizza, popcorn and chocolate.



The markets for VR and AR technology may very well be a trillion-dollar industry by the year 2035...

Augmented futures

In the future, our realities are set to be expanded by technology through virtual reality (VR) and augmented reality (AR). The markets for VR and AR technology may very well be a trillion-dollar industry by the year 2035, according to Citi GPS, the research arm of global bank Citi¹⁷.

As VR immerses people into virtual worlds, it will have major impacts on the medical, military, education, entertainment, construction and advertising industries. Industry experts believe its real-world cousin, AR, will be even more valuable and have an even larger impact on the world. As AR adds a layer of virtual things into users' real worlds it has the potential to make real life easier — and far more interesting.

One AR firm, Magic Leap, is valued at more than \$6bn — yet it hasn't launched a product yet. There have been a few tantalising videos that give glimpses of what its "Mixed Reality Lightfield experience" can do. And the firm expects to release its first product, the Magic Leap One, sometime in the next six months.

"We are creating a new world where digital and physical realities seamlessly blend together to enable amazing new experiences," says Rony Abovitz, Magic Leap's founder and CEO.

Now that Apple and Google have firmly entered the AR arena, it's clear that mass adoption of AR is coming soon. Both firms have now released AR developer kits ARCore and ARKit. And, according to both rumour and patents that the firm has filed, Apple is currently developing a pair of AR-ready smart glasses.

Before Apple's ARKit and iOS 11 — introduced on 12 September 2017 — it was expensive and technologically hard to create AR. But ARKit has made it easier and faster for developers to build AR into their apps. Big brands are already beating an augmented path to the future. Furniture brands such as IKEA and Wayfair have even released AR-apps so that people can "see" and position their goods in their homes before buying them.

Post-materialist times

The success of capitalism in the 20th century was largely driven by the practice of consumerism and the value system of materialism. Now, though, in an era when we are concerned about waste and the environment, and when we have enough stuff, we are moving beyond materialism.

As the founder of *The Future Is Here*, James Wallman, forecast in his 2013 book *Stuffocation*¹⁸, it's now clear that we are moving away from materialism, and towards "experientialism". Rather than looking for happiness and status in material goods, we are finding them in experiences instead.

More evidence supporting this concept has appeared since the book was published — most recently from Barclaycard, which processes about half of all Britain's credit and debit card transactions. Figures for April 2017 show a 20% increase in spending in pubs compared with the same month the previous year. Spending in restaurants went up 16%, while theatres and cinemas enjoyed a 13% rise. Meanwhile, department stores suffered a 1% drop, vehicle sales were down 11%, and spending on household appliances fell by 2.5%.

This shift in perspective from ownership and exclusivity to access and collaboration is affecting our attitudes to other aspects of our lives. For instance, it is leading to a rise in co-working and co-living spaces. The number of global coworking spaces will balloon from only 14 in 2007 and around 15,000 today to more than 25,000 by 2020; and the number of co-workers will increase from around 1m today to 4m in 2020, according to consulting firm Emergent Research. Coworking giant WeWork, founded in 2010, is now valued at \$20 billion.

Co-living is now taking off too, from WeLive (the co-living business operated by WeWork), Ollie and Common in the US, to London's The Collective. Many more firms are intending to develop purpose-built co-living buildings in the UK's cities in the next years.



Environment

It is now way beyond reasonable doubt that human activity is causing climate change. Scientists now believe that if we are to keep the Earth's temperature increase beneath 2°C above pre-industrial levels by 2100, humans must not only reduce our carbon output, but we have to become a "carbon sink" by 2070.

While it can be hard to imagine what this world will look like, especially when we have a global population set to increase to 9 billion and more than a century of economic dependence on the easy-to-access energy of fossil fuels, many of the world's governments, and many of its leading corporations, are working to make this happen.

Car manufacturers are now racing to make electric vehicles (EVs) the core of their offer. Elon Musk's Tesla is in pole position: when the Model 3 was released, 276,000 units were pre-sold in the first 3 days, equivalent to a value of US\$11.5 billion. Swedish car maker Volvo has announced that all its cars will be electric or hybrid from 2019¹⁹.

Governments are jumping on this idea too. The French and British governments have said they will ban sales of all petrol and diesel cars by 2040.

Of course, if the source of that electricity is burning fossil fuels, while it will improve the local environment near the cars, all those EVs will still harm the environment. Fortunately, sustainable forms of electricity are set to become much cheaper and more effective. Renewables will receive almost three-quarters of the \$10.2tn of global investment in new power-generating technology between now and 2040, according to research by Bloomberg New Energy Finance. During that time, the cost of solar power is expected to fall by a further 66% and onshore wind by 47%, undercutting most existing fossil fuel power stations by 2030.



Pace of change

For most of human history, change was local and linear. It was limited by geography and the speed of communication. Now though, thanks to digitisation, the internet and the emerging technologies of the Fourth Industrial Revolution, change is just as likely to be global and exponential.

Before the emergence of the gramophone, for instance, a singer's audience was limited by how many people you could squeeze into a hall, or how many people could budge up and find space on a hillside. But now in our connected world, your message can reach far more people, far more quickly. After being released in January, "Despacito", a song by Puerto Rican singer Luis Fonsi and rapper Daddy Yankee, soon became the most watched YouTube video of all time. It has been viewed almost four billion times — 3,945,676,901 as of 6 October 2017.

Now that new ideas spread so quickly, and new technologies like AI and robots threaten to radically change our way of living, there's little wonder that, as *The Economist* has noted, "The pace of technological change [is] making heads spin".

This rapid pace of change will only speed up, as futurist Ray Kurzweil has demonstrated with his Law of Accelerating Returns. Kurzweil believes that we are entering a time when "technological change [is] so rapid and profound it represents a rupture in the fabric of human history."

You can see how this increased pace is already affecting business. According to research by Yale University's Richard Foster, corporations live far shorter lives than they used to. The average lifespan of firms in the US's S&P 500 used to be 61 years. They now last about a third of that time. Consider how long it has taken firms like Instagram, Snapchat, Facebook, and Uber to emerge and become "unicorn" firms valued at more than \$1 billion.

...we're still apes with hopes, fears, desires, and behaviours adapted over thousands of years.

Still human

One of the reasons why the pace of change can be discombobulating is simple: while technological change and cultural evolution can happen very quickly, biological evolution is far slower.

Still, it is happening. We're living much longer: 50% of Britons born today will reach the age of 95. And we're slowly shifting towards being transhumanists — human-machine hybrids who are pushing our natural capacities to their limits, with added extra abilities. For instance, high-fat, low-carb keto diets may well extend life. Implants may give us extra powers, such as echolocation: the ability to perceive spaces as a bat or dolphin does. In fact, the first implants are already happening, the first transhuman cyborgs are here. In Sweden, for instance, a startup hub called Epicenter has implanted more than 150 of its workers and startup members with microchips the size of grains of rice that function as swipe cards. Once you're chipped, you can open doors, operate printers, and buy smoothies — just with a wave of your hand.

But despite these changes, as evolutionary psychologists such as Steven Pinker and Geoffrey Miller have pointed out, we're still apes with hopes, fears, desires, and behaviours adapted over thousands of years.

This understanding is key for any business person.

"I very frequently get the question: 'What's going to change in the next 10 years?' And that is a very interesting question; it's a very common one," says Jeff Bezos. "[But] I almost never get the question: 'What's not going to change in the next 10 years?' And I submit to you that that second question is actually the more important of the two — because you can build a business strategy around the things that are stable in time."

In other words, your business plan should be inspired not only by what's going to change, but also by what's going to stay the same.

So as you read on through this report and consider what's going to change and how that will affect your business, remember that your customers — the end-users of your products — will still be human in the future.

THE SEVEN KEY BUSINESS TRENDS





1. EASY MONEY

Thanks to game-changing regulation change, far better UX, and clever algorithms that turn “should-we-lend?” uncertainty into risk you can put a price on, it will be easier to access capital, accept payments, and calculate cash flow and taxes. Money will become, if not easy, at least far easier to get hold of and manage.

banking is about to go through a revolution... in the future, you won't need to manage your money via the big few banks anymore.

Thanks to the UK government's Open Regulation, which comes into place in 2018, and the European Union's PSD2 — meaning payment services directive, and it's the second one — banking is about to go through a revolution. The result will mean that in the future, you won't need to manage your money via the few big banks anymore. The rise of agile, responsive fintech firms will mean easier, more user-friendly banking. Instead of spending hours filling out forms, these new user-friendly systems will gather huge amounts of data and apply machine learning (ML) algorithms to evaluate loan applications in milliseconds.

The ML platform that personal loan firm Avant uses, for instance, considers 10,000 variables and learns how to predict default rates²⁰. In China, startup WeCash mines public mobile data from about 600m mobile internet users to assess a single customer's credit risk.

It will be much quicker to access the funds too. If you apply for a loan from US-based lender Ondeck you can ask to borrow up to \$500,000; there's no paperwork, and you can have the money within 24 hours²¹. 24 hours not fast enough? Another US lender, Kabbage, provides up to \$150,000 almost immediately after filling out a simple application. All an applicant needs is a business checking account or a PayPal account.

Payments will be far simpler as customers move from physical to digital money — including crypto-currencies like BitCoin²² — and payment systems are automated and, often, based on the Internet of things. Now that devices can speak to each other, they are automatically making payments too. You can pay for your Lyft taxi service via Amazon's Alexa. You can buy your groceries directly from Samsung's Family Hub fridge.

As well as easier access to money, in the future it'll be far simpler to manage cash flow and calculate revenue, cost of goods sold, expenses, taxes and profits — as AI systems instantly track and report on all our firm's primary financial data. There are already firms working to make that a reality.

Edinburgh-based Float, for instance, is an online budgeting and forecasting tool that connects to accounting software like Xero and FreeAgent to help small businesses get clearer views of their cash flow. Founded in 2011, more than 400 businesses are now signing up each month.



New small business-focused, Estonia-based, fintech firm Holvi offers the key financial functionality that most small businesses need, including invoicing and bookkeeping. "You'll never have to spend time syncing information between different systems as it's all in one place," the Holvi website claims. "Store money safely, send invoices with just few clicks, start online sales, save and record receipts with a single tap."

Berlin-based Smacc also makes it simple for small and medium-sized enterprises to automate their accounting and financial processes. With receipts, for instance, all you do is upload yours to Smacc and you're done. The system turns them into a machine-readable format, encrypts them and allocates them to the right account. And with invoices, the Smacc system checks against some 64 data points and verifies the invoice, checking, for example, that the maths adds up, and even ensuring that the VAT ID and its issuer are correct. At first you have to show Smacc the ropes, but the idea is that it learns and gets ever better at automatically dealing with your financial data.

... one in five spend more than eight hours a week managing their banking, four in ten (42%) say dealing with finances is the most stressful aspect of running a company, and 17% say the stress has made them unwell²³.

Today, managing the financial side of a small business causes millions of people serious headaches. After all, who goes into business to handle admin and accounting? Whether you're a hairdresser, a plumber or an engineer with a degree in computer science founding a startup, the chances are you don't want to spend a significant amount of your time calculating cash flow and whether the top and bottom lines are growing as you said in your business plan. And yet, one in five new business owners spend more than eight hours a week managing their banking; four in ten (42%) say dealing with finances is the most stressful aspect of running a company and 17% say the stress has made them unwell²³.

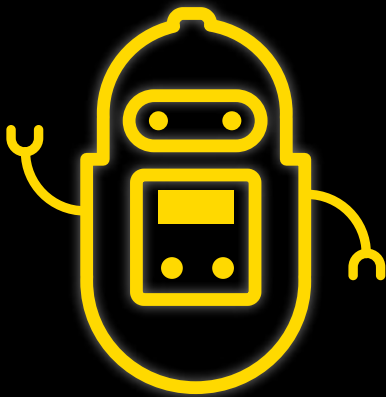
No wonder all that admin puts people off running their business: 53% of business owners say financial worries are a source of stress and a drain on their motivation, and 35% of company owners say that, at least once a year, stress causes them to completely lose motivation to continue running their business²⁴.

But don't fret: we bring good news. By the late 2020s, these headaches will be gone for most small firms. They'll be using the services like Float, and London-based mobile-first banking service, Tide.

"It's often far too late that businesses realise they are going to run out of cash, or there is a constant anxiety about it as they are without a detailed cashflow report," says Float's founder and CEO Colin Hewitt. "We help business owners sleep better at night."

Tide, which only launched in January 2017, is already helping many business owners sleep better at night. "We're now opening around 7% of all new business current accounts in the UK," says Kiki Loizou, who left her role as Sunday Times small business editor to become Tide's head of communications. "Our plan is to serve 50m small businesses globally by 2026."

Deregulation will open the door. Then the robots — that is, automation from AI and ML delivered — will rise up and change the finance function of business from a bore to a breeze. By the late 2020s, small business owners in the UK will be sleeping better at night. They'll be more able to focus on what they do best, the business they started the business for. They'll be an enjoying an era of much easier money.



2. THE COBOT REVOLUTION

It's clear that millions of jobs will be taken by robots. But while some worry that robots will simply take our jobs and create mass unemployment, we believe that the effect of automation will be more nuanced. On the one hand, as it destroys jobs it will also create new, yet-to-be-discovered jobs — just as automation has done before²⁵. And in most industries, rather than take our jobs, robots will take on our tasks²⁶.

... instead of worrying about robots, we should be excited about “cobots” — robots that are colleagues, designed to work collaboratively alongside humans²⁷.

Researchers... have found that when robots work alongside humans they are 85% more productive than just humans alone or robots alone.

Machines will conduct more of the repetitive, routine tasks — from chopping and fetching to searching through libraries of information and making complex calculations. This will mean that we humans will move further up the value chain. We will do the tasks that machines don't do so well, the sort of tasks that require creativity, empathy and, simply, the human touch.

So, instead of worrying about robots, we should be excited about “cobots” — robots that are colleagues, designed to work collaboratively alongside humans²⁷.

Till recently, cobots made up only 5% of the 240,000 robots sold worldwide²⁸. But this sector is set to grow, and very quickly: from a value of just over \$100m last year to \$3bn by 2020 and \$12 billion by 2025, according to James Stettler, an analyst at investment bank Barclays Capital. That translates to about 150,000 cobots produced and sold in 2020, and 700,000 in 2025²⁹.

These cobots will make all businesses far more efficient. The first cobots are already helping humans be more productive. At a company called SEW-Eurodrive in Germany, for instance, cobots make it much easier for humans to build the sort of electronic drives that move your luggage around an airport and cars around the factory they're built in. Robotic workbenches make sure everything the worker needs is to hand. Robotic arms help workers load machines or pick components out of bins.

Cobots are likely to have an exponential impact on productivity. Researchers at MIT have found that when robots work alongside humans they are 85% more productive than just humans alone or robots alone.

Cobots are also poised to make us happier — and, as Andrew Oswald at Warwick Business School has found, happier workers are 12% more productive. The workers at SEW-Eurodrive, for instance, really like their cobots.

“Everything is just where I need it. I don't have to lift up the heavy parts,” one factory worker, Jürgen Heidemann, told the Financial Times. “This is more satisfying because I am making the whole system. I only did one part of the process in the old line.”³⁰

As well as manufacturing, cobots are set to revolutionise many industries, including retail, healthcare, hospitality, and food service: more than 70% of tasks performed by workers in the food service and hospitality sector could be carried out by machines³¹. There are many food and drink-preparing bots now coming out of the labs and dipping a toe in the commercial world.



It takes Sally about 60 seconds to build a salad.



Flippy is a robotic kitchen assistant that uses machine learning and computer vision to cook

There's Sally, from California-based startup Chowbotics. She occupies about the same amount of space as a big fridge, and uses 21 different ingredients — like kale, Parmesan, walnuts, cherry tomatoes, and Kalamata olives — to craft more than a thousand types of salad. It takes Sally about 60 seconds to build a salad.

There's Flippy, from Miso Robotics, another California-based robot startup. Flippy is a robotic kitchen assistant that uses machine learning and computer vision to cook, flip patties and then places them on a bun.

There's quite a kitchen automation industry starting. Sally and Flippy's robotic friends include Zume Pizza, Cafe X, Makr Shkr and Frobot which help produce pizzas, cappuccinos, cocktails and frozen yogurt. They're cheaper than humans, complain less and offer faster service. Cafe X, for instance, can prepare 120 drinks an hour. And, thanks to no fuss, one-tap ordering and cashless payments, this can reduce waiting time to about 10 seconds.

In time, as well as handling the routine tasks that your staff take on, cobots will make the sort of decisions that managers and owners make today. You can see the early signs of this in FutureAdvisor, a US-based online investment robo-adviser service that automatically reviews and manages a person's investments to optimise asset allocation, limit hidden fees, and improve tax efficiency. It also immediately and automatically invests any newly added cash. In the future, some of the hard business decisions will be decided by our cobot colleagues.

They might even be fun to hang out with, too. Researchers at the University of California, Los Angeles are working on making it easier for humans and robots to work together — they're teaching a robot called Baxter when and how to shake hands and give a high-five³². While this could sound slightly silly, there's an important point here. If robots are going to graduate to co-operative colleagues — that is, cobots — who are part of the team, it'll need to feel like they belong to that team.

No matter what task these cobots will take on, two things are for sure: they won't take tea breaks or weekends off, and they'll cost significantly less than humans. Given how human decision-making is affected by mood, tiredness, or even just a hangover, our cobot colleagues may well make better business decisions too.

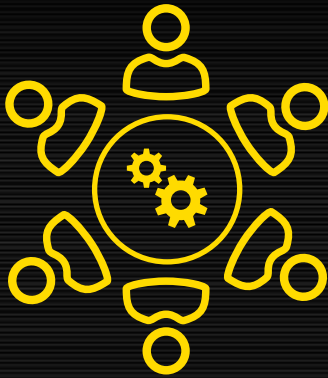
Now that the cost of cobots is coming down — to around £18,000 — they're becoming affordable for small businesses. We believe that as the technology gets better and the cost comes down, more small businesses will "employ" cobots to make their humans more productive.

In fact, a number of factors make us believe that most small businesses will have a cobot by around 2040. What makes us say that? Consider technologies like the mobile phone and wireless internet — remember car phones and dial up connections? — and how the price came down and the quality improved, and how they spread³³. Now, consider the opinions that a number of experts expressed in an article in science journal *Nature* called "A world where everyone has a robot: why 2040 could blow your mind"³⁴.

By then, according to Daniela Rus, head of the Computer Science and Artificial Intelligence Laboratory at the Massachusetts Institute of Technology, we'll live in world where "robots are as common as cars or phones, a world where everybody can have a robot, and robots are pervasively integrated in the fabric of life."

Fei-Fei Li, head of the Stanford Artificial Intelligence Lab, agrees. "In the next couple of generations," she says, "we will see the first phase of true personal, assistive robots in the home and other human environments."

We believe that cobots will be ubiquitous in small businesses sometime before that — that by the late 2030s most small businesses will "employ" cobots.



3. THE HOLLYWOOD WAY — AND THE RISE OF THE MICRO-MULTINATIONAL

Producing a movie, if you think about it, is just like any other project. A group of people, who may or may not have worked together, come together to produce a piece of work. Once the work is complete, they go their separate ways, and their distributors use as many channels as possible to sell the movie.

...research shows that companies that use the “startup stack” of technologies...reduce operating costs by 45%, and increase productivity by 45% too³⁵.

More firms will follow this project-based Hollywood model in the future. This modus operandi will impact two key elements of a business: operations and distribution.

Let’s consider operations first. In previous times, work was far more fixed. We went to a specific location and worked a clearly defined set of days and hours, with a stable number of colleagues, using a steady set of resources. Modern business is far more flexible: it’s far easier to adjust the assets, staff, office space, and sales channels we need.

Instead of making significant upfront commitments — to key resources like office space, capital and people — we can now operate our businesses in the cloud.

In the future, more businesses will choose remote and co-working, and operate as “cloud businesses”. Instead of high-cost, high-risk outlay, they’ll operate in the cloud — and use the best combination of off-the-shelf technologies to facilitate their business. Recent research shows that companies that use the “startup stack” of technologies, like payments processors Stripe or Paypal, reduce operating costs by 45%, and increase productivity by 45% too³⁵. This also helps a company focus on doing what it does best.

“We’ve grown 20-fold in the last two years,” says Aron Gelbard, CEO of through-the-letterbox flower delivery firm Bloom & Wild, “and we’ve relied on a huge number of technology tools to accelerate that growth: from RJMetrics for data and analysis, to Xero for accounting, Shutl for delivery, and Stripe for payments... to build the best possible experience for our customers, we need every element to be the highest quality. Why build that yourself when there are experts with ready-made solutions to all of these challenges out there?”

Besides the computing cloud, Hollywood model firms will access the “human cloud” for staffing solutions. They will hire a virtual assistant or designer via sites like Upwork, Amazon’s Mechanical Turk or Sevendays. Or, they might access real people from an on-demand staffing company like Catapult.

Now, let’s consider what the Hollywood way means for distribution. There used to be two simple ways to think about business size and reach. A firm was either big and global, or small and local. Thanks to cloud computing and globalisation — as provided, for instance, by SendOwl, a platform with sellers in 86 countries and buyers in more than 180 that makes it easy for entrepreneurs to directly sell their digital products — there is now a new paradigm: small and global.



Bedmaker at A.H Beard

86% of tech startups today aim to serve a global audience

You can already see the rise of micro-multinationals in ambition: 86% of tech startups today aim to serve a global audience, according to McKinsey Global Institute. Besides changing attitudes, you can also see this shift in hard statistics. It used to take British firms 41 months to become international. It now takes 22 months³⁶.

But this isn't only about tech startups. Consider Blue Parrot Language, the American-Jamaican firm that produced the world's first and only Jamaican thesaurus, the *Jamaicasaurus*. In times gone by, this would simply have been a passion project with local reach. Now, the meaning of local has been changed by digital, and Blue Parrot Language sells the *Jamaicasaurus* around the world. There's also Australian bedmaker A.H. Beard. Family owned and operating since 1899, the firm broke into the Chinese market in 2013. Since then, it has opened 34 branded shops there, and doubled its revenue every financial year. The business is expecting to have 100 Chinese stores by 2023.

While the internal side of A.H. Beard's business is clearly traditional — the company has factories and a workforce within each of them that handmade its beds — its external side is following the Hollywood way. Its distributors are riding the wave that is globalisation to increase sales and distribute its finished goods internationally.

At present, only a relative few firms are operating the Hollywood way, that is, distributing globally and operating in a lean, project-based way. According to government estimates, only 9% of small and micro businesses (0-49 employees) and 33% of medium (50-249 employees) British firms export their goods and services³⁷.



AI will make project management far easier. As a result it will be easier for companies to unbundle, outsource functions to others, crowdsource R&D, and exchange employees for contractors.

And till now, companies with a relatively fixed workforce make sense. As the English economist Ronald Coase showed, in the work that won him a Nobel Prize in economics, firms are currently essential in our capitalist system because of the “transaction costs” of doing business.

“There are negotiations to be undertaken, contracts have to be drawn up, inspections have to be made, arrangements have to be made to settle disputes, and so on,” Coase said in his acceptance speech in 1991.

The firm, Coase worked out, is the most efficient way of handling all these details. But in the future, technology will reduce the friction and shrinks those costs: AI will make project management far easier, for instance. As a result, it will be easier for companies to unbundle, outsource functions to others, crowdsource R&D, and exchange employees for contractors.

We think a far larger proportion of firms will be running their operations in what we call the Hollywood way within 10 to 15 years, as does professional services firm PWC. In its recent report, “Workforce of the future: The competing forces shaping 2030”, the company forecast that in 2030: “Projects quickly flourish, evolve and resolve and specialists move rapidly from one to the next... Near-zero employee organisations are the norm... Organisations are typically stripped-down and nimble, supplemented by talent attracted by the next promising opportunity”.

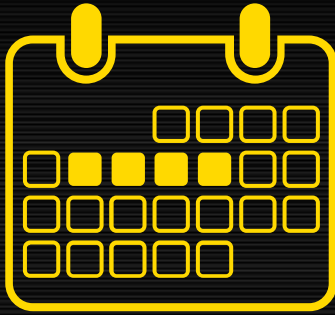
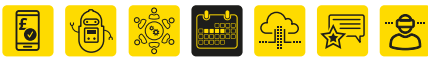
So, by 2030, many firms will be not only be using all the pay-per-use services in the technology cloud, but also employing people via pay-per-project in the human cloud. This sector is already growing at pace. In 2015, this human cloud market generated between \$25.6 billion and \$28.6 billion globally. In 2016, those figures rose to between \$47 and \$51 billion globally.³⁸

Besides the impact of the technology stack and human clouds on the operations of a firm, more firms will take advantage of seamless, friction-free global distribution platforms, and launch with global ambitions.

The time it takes to become an international company will become ever shorter, according to London-based venture capital firm Atomico. As the firm has noted, “international expansion is happening faster than ever... of the 62% of billion-dollar companies that internationalised, those founded between 2003–2008 took an average of 3.4 years to go do so... those founded after 2009 took an average of only 1.8 years.”

OK, so perhaps your small business’s aim isn’t to become a billion-dollar valued “unicorn”, but the statistics illustrate a simple point: it is becoming, and will become, easier for small firms to grown and become international. We firmly agree with Atomico when they say, “As barriers come down, small and fast can win the race”³⁹.

By 2030, most small business in the UK will be operating the Hollywood way. They will be lean — using cloud-based technologies and the human cloud to deliver solutions for their clients. And they will be micro-multinationals — using as many channels as possible, from Amazon to SendOwl, to distribute their goods as widely as possible.



4. THE 4-HOUR WORK DAY AND THE EXPLOSION OF CREATIVITY WAY

US maverick Tim Ferriss shocked the business world when he launched a manifesto for a smarter way to work back in 2007 – in his New York Times-bestselling book *The 4-Hour Work Week*.

If only. The truth is, of course, there are very few people who work four hours a week. Too many of us — especially small business owners — are not working 40-hour, Monday to Friday, weeks, but far longer hours.

We believe that's set to change, and quite radically, because of the robots, cobots and Hollywood way of working. We may not quite achieve the 15-hour work weeks that economist John Maynard Keynes predicted we'd have by now back in the 1930s. But we will work shorter hours each week and each day.

It's important to understand that the current work day was set up to squeeze as much as possible out of workers when they performed routine tasks in factories and offices (albeit in a humane way: previously, 100-hour weeks had not been uncommon). But since in the future the routine tasks will be performed by machines and humans will climb the value chain, instead of factory or knowledge workers, we will all become high-touch, high-value creative workers and experience creators.

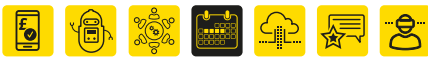
And emerging research strongly suggests that 8-hour days are a suboptimal way to work — and that the optimum is far closer to 4 hours per day. This conclusion comes from a few sources. First, there is the observation which Silicon Valley futurist Alex Soojung-kim Pang makes in his recent book *Rest: Why You Get More Done When You Work Less*, that creative geniuses from the past tended to work four-hours per day. Examples he cites include scientist Charles Darwin, mathematician Henri Poincaré, lawmaker Thomas Jefferson, and writers Alice Munro and John le Carré.

More importantly, there is science backing the idea. When Swedish psychologist Anders Ericsson studied the schedules of violinists, he found the best performers conduct their practice in chunks of four hours or less.

Many worry what would happen if we worked fewer hours — or if it will really be possible.

"The big tension here," says Guardian critic Oliver Burkeman, "is of course that those four hours of deep creative work are usually reliant on a whole lot of other hours of admin work... As the economy changes, and it becomes more important for more of us to focus for a few good hours on deep thought and creativity, there doesn't seem to have been any concomitant decrease in the amount of Other Stuff we have to handle."

...research strongly suggests that 8-hour days are a suboptimal way to work – and that the optimum is far closer to 4 hours per day.



...the Four-Hour Work Day will unleash a wave of human happiness, and productivity and creativity at work.



Futurist Alex Soojung-Kim Pang, author of Why You Get More Done When You Work Less

In today's world, Burkeman has a very good point. But we believe that in the future much more of the Other Stuff will be handled by automated assistants. These will be next generation of services like X.ai, the AI-driven virtual assistant which organises your diary. Of course, instead of "programming" your assistant this via a chatbot style interchange, in the future we'll manage this through a voice user interface. It'll be just like talking to your real-world assistant today.

But if we work fewer hours, won't that mean our company gets left behind and makes less money? Some experiments by a few pioneering firms suggest the opposite. In 2015, entrepreneur Stephan Aarstol moved his whole company to a five-hour workday where everyone works from 8am to 1pm⁴⁰.

"The results," as Aarstol wrote in an article for Fast Company, "have been astounding. We've been named to the Inc. 5000 list of America's fastest growing companies the past two years (we ranked #239 in 2015). This year, our 10-person team will generate \$9 million in revenue."

Alex Soojung-Kim Pang has been continuing his investigations into the best way to work and the length of the workday. After talking with companies from London to New York who work shorter hours — including Swedish game company Filimundus, US media company Skift, and Edinburgh-based software company Administrate — Pang believes that besides the obvious benefits to shorter working hours, "they also offer unexpected or counterintuitive benefits—greater creativity, higher levels of productivity, and more not less time to work on difficult problems."

As cobots take away the drabber aspects of our working lives, and as creativity becomes ever more important, we believe that business will move away from long, drawn-out working hours, and that the Four-Hour Work Day will unleash a wave of human happiness, and productivity and creativity at work.

Cultural change of this magnitude will take decades⁴¹. For now, there are only a handful of innovators around the world working shorter hours. As the data about these companies becomes wider and researchers like Soojung-Kim Pang investigate further — for this report, he gave us access to an unpublished white paper and he is working on a book about the idea — the idea will catch on and more firms will try this.

Our estimate, based on our reading of the diffusion of innovations and the relevant macro-environmental factors (such as the introduction of AI and cobots to do the basic repetitive tasks), and on money becoming easier to manage, is that this will move from the innovators to a few early adopters in the mid to late 2020s, and it will hit an early tipping point as work changes in the early to mid 2030s. As it becomes clearer that humans need to be creative to be valuable, they will work fewer, but more productive hours. By the early 2040s, most businesses will be working far shorter hours.

So, instead of working long and late, small businesses will work shorter days, and finish earlier. We may well still check messages while on holiday, but we'll do this in a time-managed way, so that we can refresh our minds, and always approach work ready to be creative.



5. SMALL FIRM, BIG DATA

There has been plenty of excitement about Big Data for some years. The challenge, of course, is to find the signal in the noise and turn the data into actionable insights. After all, there's a reason it's called "big": Netflix gathers more than 500 billion pieces of information per day. Fortunately, the emergence of ever more powerful AI and ML means we are more likely to make sense of it all in the future.

Till now, finding meaning in these oceans of data has only been possible for large firms with deep pockets, as they try to mimic the success of companies like Google, Amazon, Facebook and Netflix — who serve you ads, and suggest products and TV shows based on your age, location, what other people like you liked and because you mentioned going to York for the weekend in a status update or email to your friend.

But thanks to cloud computing and the "software as a service" (SaaS) model operated by firms like accounting software company Xero, you no longer have to be a big firm to profit from Big Data. In the future, all firms will be data firms: even yours.



The Café Grind, New York City

The Café Grind, a coffee shop in New York city, is a good example of a small firm using big data to be more effective. They use the café's point-of-sale system to track customer visits and how long it takes to serve each customer, and to monitor which items are selling. The owners say this saves them five to ten hours per week in managing logistics.

Another is a zoo in Washington state in the US called Point Defiance Zoo⁴². When the zoo compared years of data about visitor numbers with the local weather, they discovered new insights that helped them work out, with eerie precision, how many visitors would come on any one day⁴³. The system's predictions are accurate enough that the zoo can work out how many employees they need — to the hour. This has led to significant savings.

Drilling further down into the data, the zoo discovered who their most regular guests were and used that data to increase memberships by 13%. They also noticed when people were buying tickets online, started targeting them with time-sensitive ads and increased online tickets sales by 771% over two years.

In the future, more small firms will get more out of Big Data as more SaaS platforms emerge. Here's three examples of the sort of SaaS platforms that we think all small firms will be using.

Seattle-based Smartsheet is a collaboration tool used by companies big and small — from Netflix with its 3,500 employees to a six-person communications company called Mash PR in London. It helps teams stay on top of projects through real-time reports, actionable task lists, and at-a-glance overviews of what's actually going on.

In the future, more small firms will get more out of Big Data as more SaaS platforms emerge.



Rather than keeping customer data on pieces of paper, in a little black book or on a spreadsheet, San Francisco-based Insightly offers a simple, scalable, web-based way to more effectively manage your customer relationships. Plans start from free for up to two users to £9 per month for the basic account.

You can access computing giant IBM's Watson Analytics in a similar way. The first trial plan is free, the next is around £22 per month. Once you've uploaded your business data, the system will help you present it in a way that's meaningful to you and then actively look for patterns, correlations and insights. Armed with your data, Watson Analytics can then answer the sort of simple questions you might ask a colleague, like "What are our high-value customers responding to?" and "What's impacting our profitability the most?".

As SaaS services become more user friendly, and as more firms discover the magic of Big Data-analysis, it'll make working the old way — using paper and notepads, having reams of data doing nothing but sitting, unconnected and meaningless in A4 folders in cabinets — seem as antiquated as riding a penny-farthing would seem today.

At present, 77% of firms do not have a Big Data strategy, according to IBM⁴⁴ — yet 63% of firms get a return on investment within a year⁴⁵. Because of the clear analytical

By 2030... All firms, including small ones, will become Big Data-driven, customer-centric, smart firms

opportunities offered by Big Data, more SaaS businesses will appear in the 2020s that help small firms manage the unstructured data that they and their customers generate, so that they too can profit from the sort of up- and cross-sell opportunities that firms like Amazon, Google and Netflix do today.

By 2030, management platforms will make it easy for small firms to make use of unstructured data so they can say the sort of things to their customers that the GAAFA companies do today: "because you bought this, you might also like...", "people who bought that also bought...", and "people like you also bought...".

Crucially, you'll be able to do this with confidence based on data rather than hope, improving the relevance of your offer for your customer, improving conversion and increasing sales for you.

By 2030, Big Data won't only be for big companies. All firms, including small ones, will become Big Data-driven, customer-centric, smart firms who leverage their own and their customers' data to be more relevant and make more money.



6. THE REPUTATION GAME

The focus of business has almost always been to maximise profits. Apart from a few socially-minded firms – such as confectioner Cadbury’s, whose founders created the Bournville model village – business people’s sole aim was to increase profits and maximise return to owners and shareholders.

...business is moving from single-minded concern for profits, to a broader interest in three more Ps: people, planet, and purpose.

But now, in an era of ethical consumerism, transparency, and heightened concern about the environment, business is moving from single-minded concern for profits, to a broader interest in three more Ps: people, planet and purpose.

It is now key for a business to have a purpose beyond simply making money, as communications specialists Michael Hayman and Nick Giles explored in their book *Mission*. You can see this in the rise of the B Corps certification, Richard Branson’s B Team and Marks & Spencer’s Plan A. It’s clear in the success of purpose-led businesses like Patagonia and TOMS shoes⁴⁶.

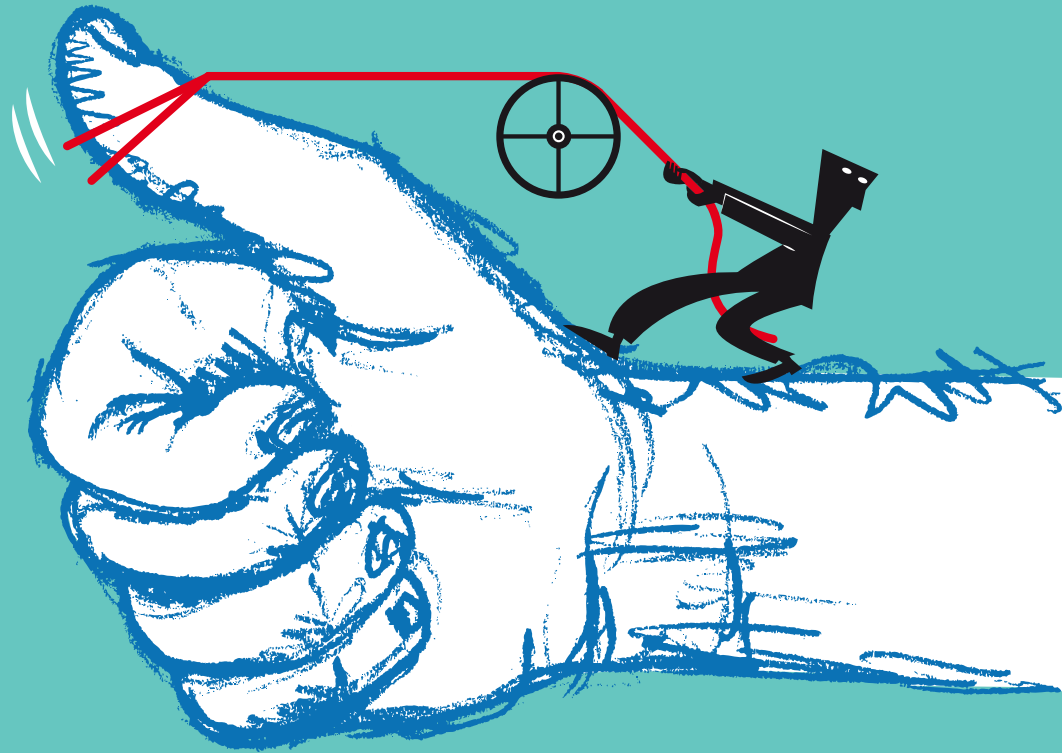
Besides the evolution of the purpose of business, something else has changed. There was a time when a business could get away with saying that it had a meaningful purpose but stick to business as usual behind the facade. That time is over. The rise of digitisation, the internet, social media, citizen journalism means a transparent world where it is increasingly difficult to conduct “green washing” and similar campaigns. Witness the recent collapse of PR company Bell Pottinger: the 32-year-old communications company filed for bankruptcy after it was caught stirring up racial tensions on South Africa.

In a more connected, transparent world, it’s ever harder to pretend to be something you’re not. In the future, then, it will be essential for businesses to manage their reputations. There are two aspects to reputation, of course: what you’re able to do and how you do what you do.

The success of many of the world’s most thriving modern businesses — from retailers like Amazon and Expedia to platforms like Airbnb, Notonthehighstreet, and Treatwell — rests on ratings that make it easy for potential new customers to evaluate someone’s likelihood of delivering the goods or services they say they provide.

“The connectivity of today’s world makes reputation even more important,” says Rupert Younger, Director of the Oxford University Centre for Corporate Reputation at Oxford Saïd Business School, and co-author of new book *The Reputation Game*. “Business is much more transparent than it has ever been, and with that comes heightened expectation around the character of businesses. This is here to stay, and will grow exponentially.”

Critically, your reputation — your ability to deliver, and the manner and ethics of your delivery — isn’t what you say it is, it’s what the internet and others say it is. So, it’s no use simply thinking you’re projecting an image.



“You can’t cultivate your reputation,” says David Waller, ex-*Financial Times* journalist and co-author, with Younger, of *The Reputation Game*. “You have to be and do the right thing in the right way.”

Having a purpose will be equally important for all businesses. Some believe smaller businesses are likely to focus on more local missions. “It’s about place,” says the British Chamber of Commerce director general Adam Marshall.

But just as micro-multinationals can reach their target customers anywhere on the globe, so we think that the meaning of “local” and “place” are evolving. Our ever flatter and more connected world will enable firms to transcend the boundaries of geography and find missions that connect with their “local” customers wherever they are.

In the future, there will be no place for cowboy operators who promise lots and deliver little. They’ll be too easily caught out and put out of business.

In the future, there will be no place for cowboy operators who promise lots and deliver little. They’ll be too easily caught out and put out of business. There’ll only be room for firms who take their reputation seriously.

According to Yell Business, one of the largest providers of digital marketing solutions for SMBs in the UK:

“The importance of online reputation for small businesses – and managing it effectively – is a key factor to reaching and retaining customers in the modern world. The Reviews feature on Yell.com and other online platforms such as Facebook and Google My Business means that word of mouth has now well and truly moved online, and is a permanent and public record of an individual’s experience with a business, and should be managed effectively and in a timely and appropriate way.”

This development will be very positive for small firms — especially those that follow the transparent route that turns good actions into a reliable reputation.



7. THE EXPERIENCE ECONOMY

The idea of an “experience economy” isn’t new. It was first popularised in the late 1990s by two business consultants called Joe Pine and Jim Gilmore. In an article for the Harvard Business Review, and a book called *The Experience Economy*, they proposed that, after the agrarian, manufacturing, and service economies, the experience economy is the logical evolution of capitalism.

By this, they meant that just as the creation and delivery of food and drink were the hallmarks of the agrarian system, and that the people who owned the means of production were the wealthiest—and just as the creation and delivery of material goods were the pillars of the manufacturing economy, and the people and businesses that owned the factories were the most successful, and so on for the service economy—so the creation and delivery of experiences will be the essential characteristics of the experience economy, and the firms which create and deliver the most exciting, engaging, meaningful and compelling experiences will be the victors in the experience economy.

What’s new now is that, as described in James Wallman’s *Stuffocation* and the Post-materialist times section above, people are becoming determined experientialists and the experience economy is taking off.

In the future, all firms will compete through ever better customer experience (CX) and user experience (UX), and track this through research provided by companies such as Utah-based survey firm Qualtrics.

Many will look to VR and AR to enhance their offer — as Diageo has done recently. In Singapore, whisky drinkers got the chance to (virtually) visit Scotland while they sipped the firm’s Singleton Single Malt Scotch Whisky.

But the experience economy is about far more than fancy technology. The experiences that will help firms stand out will be the sort of high-touch and human-touch offerings that small businesses specialise in. Consider the rise of escape rooms, where a handful of people are locked in a room for an hour and can only get out by solving brain teasers, puzzles and challenges.

In the UK, by late 2014 there were 50 escape rooms; there were 200 by the end of 2015 and there are more than 850 today⁴⁷. Most escape rooms are operated by small groups of enthusiasts — like the bawdy *Lady Chastity’s Reserve*, established by frustrated advertising creative Ben Tucker and run by his small firm, *Handmade Mysteries*.



Handmade Mysteries

You won’t have to lock people up to connect with them in the experience economy of the future. Retailers will create experience stores, where the focus is less “stuff on sale” and more how you can find out about the brand — like Samsung’s 837 in New York’s Meatpacking District. You can’t purchase a single Samsung product anywhere inside the 55,000-square-foot space, which Samsung describes as a “technology playground and cultural destination” and a “physical manifestation” of the company’s brand.



Pike Place Fish Market in Seattle

Other retailers will use in-store entertainment to entice shoppers, borrowing ideas pioneered by Pike Place Fish Market in Seattle, interiors firm Pirch in San Diego and retailers like Burberry and Selfridges — which have both hosted in-store music gigs.

Instead of simply letting shoppers browse its goods, Pirch invites experts and shoppers to use the real, working home vignettes they create. The kitchens always smell of fresh coffee, because it's being made in there. You can take cooking classes in their kitchens. And if you reserve the store's Sanctuary room, you can try out the steam room and sauna, and more than a dozen shower heads⁴⁸.

And Pike Place Fish Market in Seattle? "Pike Place has the best signature moment in the world," says The Experience Economy author Joe Pine. "One person picks up your fish order and throws it across the counter for a fellow worker to catch it and complete the transaction."

At present, many companies charge for food and service and give the experience for free. In the future, that will be reversed: UK-based coffee shop chain Ziferblat Cafes now charges for admission and gives the coffee for free.

At present, small firms are focused on competing through the quality of their products and services — as large firms once did. Inspired by data about the experience economy, and aware of the commoditisation not only of products but increasingly of services as well, many large firms are already shifting their attention to competing via the experiences they provide.

At present, many companies charge for food and service, and give the experience for free. In the future, that will be reversed.



In the early 2020s... small firms will measure and monitor the experience their customers and employees have — and consider it as important as they think of Net Promoter Score now.

Consider the success of Apple. Of course, Apple turns out a lot of hardware. But Apple has a ruthless focus on experience. Think, for a moment, how easy it is to operate an Apple device, and how slim the operating manual is. How different is that to the manual that came with, say, your VHS recorder in the 1980s? Chief design officer Jonathan Ive and his designers at Apple do not only consider the experience of using their product though; they try to make everything pleasant, from the stores in which their products are sold to the very moment you open the box of your new product.

“Not only do the guys at Apple make sure their products are products people love to use,” says Joe Pine. “They even think about the packaging, about the ‘box-opening experience,’ so even that is unique and engaging.”

Another sign that this shift is happening is the success of Qualtrics, the US software firm which bills itself as “the experience management platform”. Launched in 2002, it is now worth around \$2.5 billion, and is used by 8,500 of the world’s leading brands — from Kellogg’s to Mastercard and Microsoft — in order to measure, monitor and improve the experience they provide to their customers and employees.

In the early 2020s, as more signs emerge of the experience economy and it becomes orthodoxy, small firms will measure and monitor the experience their customers and employees have — and consider it as important as they now think of Net Promoter Score.

By the 2030s...the only way left for brands to stand out will be through exceptional experience.

By the 2030s, as globalisation increases, goods and services will feel ever more commoditised. Then, in the experience economy, the only way left for brands to stand out will be through exceptional experience.

The most successful firms will focus on creating experiences that are so meaningful (and memorable) for their customers, they can’t help but become brand promoters, telling their friends about the story of the encounter they had with the firm. They will do this digitally, using AR and VR. They will do this through the physical and the personal and the theatrical. And they will do this through a mix of all of the above.

There was a glimpse of this mix at Comic Con in San Diego in July 2017, when fans visited the world of TV show Mr Robot. On arrival, visitors sat on a seat in the hero’s flat and put on a VR headset. The first scene they saw? The hero’s flat — brilliantly syncing the real and virtual worlds. There will be a glimpse of the future in the UK in the first quarter of 2018, as a startup — that’s still in stealth so we are not able to mention the name — will launch an entertainment concept that fuses technology with theatrical with physical entertainment. Besides the cutting-edge VR, AR, MR, and AI, visitors will be wowed by magical sets, meet interactors, and be stimulated by touch, taste and temperature.

By the early 2030s, as Joe Pine and Jim Gilmore predicted in their seminal book, all work will be theatre and your business a stage — an opportunity to deliver a compelling experience.

WHAT THESE 7 MEAN FOR SMALL BUSINESSES

Stop managing your money. Or, at least, stop managing it the way you do now, the way you've always done it.

What the future of Easy Money means for your small business

Stop managing your money. Or, at least, stop managing it the way you do now, the way you've always done it. First, get a Monzo account for your personal finances, so you can get a feeling for how simple "step one" automated financial management feels.

Next, work out how much time you spend a month on managing your business finances. Think about what you could do with that time if you had it back. (That could be speaking to more customers, or it could be playing squash more often, or reading a book with your child.)

Then, look into accounting cloud software solutions — like Holvi, Smacc and Xero and new business banking service Tide — and think about what baby steps you could take to try them out. It only takes five minutes to sign up for Tide, for instance.

Commit to trialling at least one of these properly for a month. And then work out what impact it's having.

What the Cobot Revolution means for your small business

In case you've been spooked by all those scary headlines about robots taking your job, now's the time to make a cup of tea and relax.

They're not coming to get you, they're coming to help you.

Are you about to invest in a robot or a cobot? That depends on your business and size. But at the least, divide your work into tasks that require a high level of skill and creativity, and those that are simple and often repeated. An easy way to do this is by writing down the story of your typical day or week, or breaking your time into chunks of an hour and noting what you did during each hour.

Once you've done that, apply three steps: simplify, standardise, automate. First, what you can simplify? Where can you remove complications that have somehow become part of the process? Next, can you standardise? The fewer individual choices you need to make per task, the quicker you'll be. And third, can you automate this? If it's a software task, is there a cloud-based service that can take on the task for you? If it's a physical task, is there already a robot that's affordable, compared to a human's wages? Perhaps not, but if you've followed the three steps as far as your business will allow, at least you'll know you're being as efficient as possible — and when the right cobot comes along, you'll be ready to shift from standardise to automate.

In case you've been spooked by all those scary headlines about robots taking your job, now's the time to make a cup of tea and relax.

What the Hollywood Way means for your small business

The Hollywood Way is a very liberating and exciting approach to business that will have a vital impact on your operations and ambition.

Operations first: following the Hollywood way can instantly reduce the fixed and committed cost profile of your business. Your aim is now to approach business from an asset- and commitment-light point of view; so you can still commit, but only for short-term tests — whether that's IT or premises or people. Instead of buying hardware, laying down big deposits for premises or making big, risky hires, you'll be using IT services in the cloud, co-working space, and taking people on and paying them by the hour or project via the "human cloud". Find out about the "startup stack"⁴⁹ and which of the services could help your business.

If those things work out, continue. If not, you can move on.

The other aspect to the Hollywood way is ambition. Since local no longer has to mean small, you can cast the net of your ambitions far wider. Think outside of the obvious and limited local box: who else could benefit from your offer? Who is geographically far from you, but has similar problems to your existing customers?

Since local no longer has to mean small, you can cast the net of your ambitions far wider.

What Small Firm, Big Data means for your small business

Casting your ambitions wider the Hollywood Way doesn't mean a scatter gun approach. It means using data to discover more about who your customer is and then finding more customers who fit that profile.

The starting point is realising how much data your business generates and thinking about how you can digitise, collect, and organise that. And then upload that to cloud computing services to parse and analyse the data so that your business is more efficient in all ways.

With better, more granular customer data, and with meaningful analysis, you can improve your customer relationships and sales. You should be able to identify opportunities to sell to your customers more often, and uncover ways you might cross-sell other services.

Those services might not always be your own. With better data on your customers, you may well create a wider view that helps you see where you fit into their world and you may spot opportunities for collaborators. By doing this, you could well proactively describe and build an ecosystem whose starting point is the problem your customers have.

As well as using data to build an external view of your business — that is, of your customers, your company and the ecosystem you're all a part of — use data to build an internal view of your operations. Then analyse that using systems like Watson Analytics to see if you can reduce costs.

With better, more granular customer data, and with meaningful analysis, you can improve your customer relationships and sales.

What the 4-Hour Work Day means for your small business

Few hear about the 4-Hour Work Day without instantly think a few obvious thoughts, usually in this order:

1. Ah, I'd love to work only four hours a day.
2. But it would never happen at my firm!
3. Because it's not relevant for my industry.

Truth be told, we know how you feel. But follow some simple rules and you should be able to try it out and reap some of the surprising benefits that Alex Soojungkim-Pang has observed.

First, don't make it permanent. Try it out. Set a three-month time limit. Call them "Winter Hours" and run it from 1 December till 1 March. And then stop and check to see if those benefits happen.

Next, apply the rules that Stephan Aarstol applied at his firm. Use Pareto's 80-20 rule to identify the 20% of things you do that create 80% of outcomes. Then, seek to dramatically reduce the 80%. Shift from an input to an output mindset. Forget how many hours you put in. Focus on how much you get done. Try to standardise and automate all inefficient processes.

"To allow our warehouse and customer service employees to work 30% less... we had to creatively figure out how to serve the same number of customers in less time," says Aarstol. "The obvious solution was automation. In the warehouse, we reduced our packing and shipping time using software. In customer service, we overhauled our FAQ page and created video tutorials to help customers help themselves.

Finally, relax about the new rules. If a delivery is really important, work a longer day. It's still work and you still have customers to keep happy.

What the Reputation Game means for your small business

"SME digital businesses should be the titans of this new age," says Oxford University's Younger.

And we concur — though as the example of Australian bedmaker AH Beard shows, you don't have to be a new digital business to thrive in today's connected world. Building a business based on what you can genuinely deliver, with a mission to leave the world better than you found it, and treat people with respect, will leave you well prepared to succeed in the reputation game of the future.

How to do that? The first step is to think about what you care about your personal brand, and your firm's mission. A useful book here — as recommended by Chris Coleridge, programme director at the Cambridge Judge Business School's Entrepreneurship Centre — is Carol Pearson and Margaret Mark's *The hero and the outlaw: Building extraordinary brands through the power of archetypes*⁵⁰. Here, you can find out if you're an explorer or an outlaw, or any of the other archetypes Pearson and Mark discuss.

Then, you can use these insights to orientate your business and your brand from the inside out. With that in place, you're on track to create and maintain a positive, true reputation that will resonate with your customers.

First... Try it out. Set a three-month time limit... And then stop and check to see if those benefits happen.

Building a business based on what you can genuinely deliver, with a mission to leave the world better than you found it, and treat people with respect, will leave you well prepared to succeed

What the Experience Economy means for your small business

All businesses, including yours, are not only in the stuff or services game anymore. You're in the experience sector. If that sounds daunting, don't worry. This is good news for small businesses — as Joe Pine explains.

"Once companies get big, they tend to start thinking more about scale, efficiencies, mass marketing, and so forth," says Pine. "The experience they create for customers sometimes then falls by the wayside, or gets routinized and thereby diminished. So small companies can outflank them by truly embracing the Experience Economy, focusing relentlessly on engaging your customers — the guests of your experience — to create that memory within them that is the hallmark of the experience."

decide how you want people to feel before, during and after your customers spend time and money with you, and work out how you can create a memorable experience

Instead of simply delivering your goods or services, think of your business as a stage, and your staff as actors, and every interaction with your customers as not only a moment of theatre, but a chance to be memorable. Remember what US poet and civil rights activist Maya Angelou said, that "people will forget what you said, people will forget what you did, but people will never forget how you made them feel."

So, decide how you want people to feel before, during and after your customers spend time and money with you, and work out how you can create a memorable experience that delivers that.

SPRINGBOARDS

Rather than a traditional conclusion, we believe it is more useful to use springboards to inspire and foster innovation. Each of these questions is phrased as "How might we...?" Researchers at the business schools of Stanford University and Harvard University have found that HMWs — as these "How might we?" questions are called — are the best way to encourage open thinking and more creative answers⁵¹.

With reference to each of the key business trends, here's a list of HMWs to kickstart your thinking. You will notice that there is repetition in the themes and the questions, because of course there is overlap in terms of what the trends will mean for your business.

The intention of these questions is to unlock ideas in you and opportunities in your business. And so, we have kept this repetition because we think you may find that one trend is more relevant for your business, and we would like to maximise the likelihood that we will inspire smarter thinking and a more successful business.



Easy Money

- How might we make our financial function simpler now?
- How might we trial some new cloud-based financial tools?
- How might we reduce the time we spend on the financial function of our business?



The Hollywood Way

- How might we work the Hollywood Way?
- How might we operate an asset-light model focused on delivering projects?
- How might we be a micro-multinational?
- How might we find new customers who are not geographically local to us?



The Cobot Revolution

- How might we simplify our operations (and other business functions)?
- How might we standardise our operations?
- How might we automate our operations?
- How might we use robots and bots to free us up to do more of what we're best at?
- How might we use robots and bots to free us up to spend time more servicing our best customers, understanding their needs more, and selling more to them?



The 4-Hour Work Day

- How might we discover the 20% of what we do that produces 80% of the output?
- How might we trial working four-hour days?
- How might we be more efficient so that we can get more work done in less time?
- How might we be happier in our work?
- How might we automate the support functions of our business so that we do less of the boring, low value work, and more of the things that make us money?



Small Firm, Big Data

- How might we gather, digitise, and make sense of the data our business generates?
- How might we try out some of the online tools to find the opportunities to improve our customer relations and sales?
- How might we use analytics software to reduce our costs?



The Reputation Game

- How might we work out what our values are?
- How might we decide on the reputation we'd like to have?
- How might we communicate our reputation to our current customers?
- How might we find out what our current customers think of our reputation — and if that aligns with what we'd like them to think?



The Experience Economy

- How might we shift our offer to experiences?
- How might we charge for experiences?
- How might we make the way our customers interact with us more memorable?
- How might we work out what we want our customers to feel when they deal with us?
- How might we design our customer interactions so that our customers feel what we want them to feel?

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