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# In this issue:

Welcome to the latest edition of Looking Back Going Forward.

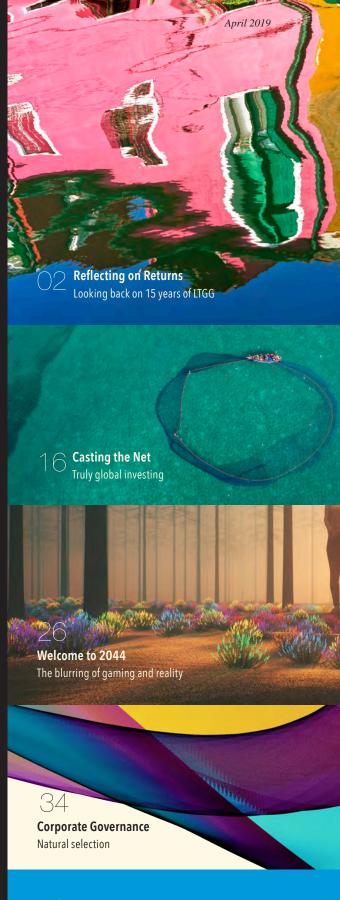
In our lead article John MacDougall looks back over the 15 years of Long Term Global Growth's history, reflecting on some of the strongest performing holdings, and their varied paths in terms of share price returns.

In 'Casting the Net' we focus on our 'first G' – namely the global nature of our investing. We investigate not only the increasingly international revenue base of our holdings, but also some exciting new ideas from Indonesia, Africa, and Brazil.

In 'Welcome to 2044' we offer a glimpse into the future, to understand how the growth of gaming might increasingly impact our daily lives. Back in the here and now, we also examine incidences where this has already happened – whether we have noticed it or not!

Our semi-annual update on Corporate Governance explores the steps that several of our holdings are taking to improve their organisational diversity; this not only makes them reflective of the modern world but is increasingly important to their business models. Finally, we close with a summary of recent investment discussions in 'Epiphonemas'.

We hope that you enjoy the magazine and, as ever, would welcome any feedback. If you'd like to hear more from the Long Term Global Growth team please visit ltgg.bailliegifford.com





#### **Epiphonemas**

What we have been thinking about...

# REFLECTING ON RETURNS

#### BY JOHN MACDOUGALL

As someone who reaches an apparently symbolic age this year, I can unequivocally state I am not a big one for celebrating annual milestones! Anniversaries always seem such arbitrary lines in the sand; artificial waypoints along a much longer journey. But beyond celebration they can provide a useful opportunity to pause and reflect on what has gone before, and on what we have learned. As we stand on the cusp of the second 15 years of the Long Term Global Growth strategy we can look to harness those lessons in our never-ending quest for unique companies with vast opportunities ahead of them.





#### WITH US FROM THE BEGINNING

One hopefully interesting, if slightly contrived, way to look at the portfolio is to segment it into cohorts depending on how long we have owned each company. As of the start of 2019 there are four stocks that we have owned for 15 years. They have all done well over that period, but the share price trajectories over shorter time frames have been quite different. It is fascinating to observe some of the common traits of these portfolio veterans. Strong leadership teams with an ardent focus on the long term is one clear shared characteristic. Another would be a demonstrable ability to adapt to the changing world, harnessing some of the biggest societal shifts that our world is witnessing.

At the time of our original 10 Question (10Q) research report Amazon was forecast to generate just under \$7 billion of revenues, with a market capitalisation hovering just under \$20 billion. In his report James Anderson identified the potential for a very attractive business model with lucrative financial characteristics to develop. While the ambition to eventually sell and deliver anything, to anyone, anywhere and at any time was definitely present, Amazon in 2004 was still trying to expand from its core of books and DVD retailing. But Bezos was convinced that by delivering higher customer service levels than ever achieved before the company would be able to differentiate itself.

As of the start of 2019 there are four stocks that we have owned for 15 years.

Intriguingly nearly two years into our holding period, the Amazon share price was still 25% below the initial purchase level as the market, in its infinite wisdom, had decided that the decision to offer Prime membership was a poor evolution in strategy. We fortunately held our nerve but even five years into our ownership, it was still unclear that Amazon was going to be the tremendous outlier in terms of its share price return that it is today. The company at that stage was just starting to prove itself as the winner in the battle for supremacy with eBay.

Fast forward to today and the company obviously looks like a totally different beast. As I write this Amazon is capitalised at over \$800 billion and revenues smashed through \$200 billion last year. There are now over 100 million Prime Members ("it'll never work" they said!), over 70,000 skills have been written for Alexa, and Amazon Web Services is now annualising sales at \$20 billion. With Bezos' continued ownership and alignment, we can be sure that the company will look very different again in another 15 years.

The three other names to highlight from the 15-year cohort are European companies; quiet performers that have steadily compounded away over the years. All three are over 100 years old and have had continued family ownership that has allowed management to focus on making good decisions for the long term. All have been relatively modest positions in the 'engine room' of the portfolio but through consistent performance they have risen-up the long-term performance attribution listings.

Annual Past Performance to 31 March Each Year

	2016	2017	2018	2019	2020
Long Term Global Growth Composite Net (%)	0.7	19.1	40.7	8.4	10.7

Source: Baillie Gifford & Co. US Dollars.

Past performance is not a guide to future results. Changes in the investment strategies, contributions or withdrawals may materially alter the performance and results of the portfolio. All investment strategies have the potential for profit and loss.







Both LVMH and Hermès were considered as candidates for inclusion in the portfolio, but Hermès was preferred on the grounds that it had been less reliant on mergers and acquisitions to grow, and the complete focus on a single brand was an attractive feature.

With the descendants of founder Thierry Hermès continuing to hold more than 70% of the shares outstanding, management has always been able to make tough decisions that are the right long-term moves. The classic historic example of adaptability was the shift away from saddle manufacturing as automobiles became more popular. More recent is the wonderful example of the board congratulating management on their decision to stop selling a hugely popular canvas bag for fear it might tarnish the brand's long-term cache.

Similar to Atlas Copco, Hermès has been able to cope with some swings in geographic sources of demand. Even as Chinese outbound tourist numbers have leapt (from 20 million per year 15 years ago, to 145 million in 2017), Asia ex Japan has risen as a proportion of sales – from 16% to 35%. In one of our early inquisitive research notes entitled "The Curious World of Designer Handbags", Claire Bell discovered, from chatting to sales assistants globally and fashion website owners, just how important Asian customers were becoming.

Lastly L'Oréal has been among the steadiest growers in the portfolio; its products have struck a chord with the selfie generation who seem if anything even more image obsessed than their predecessors. L'Oréal management was very quick to realise they needed a different way to connect with new consumers and they have been about the most active company in building closer, more valuable, relationships with consumers over all the various social media channels. Digital already accounts for a third of marketing spend at L'Oréal and this effort has facilitated a big jump in online sales to over €2 billion today.

In the 2004 annual report L'Oréal spoke of the ambition "to put a Maybelline lipstick in the hand of every woman in China", and while having not quite achieved that goal yet, the geographic split has evolved in that direction over the period. The 'rest of world' sales have risen from about 20% of total revenues to 50%, as the company has branched out from its core western markets. But with consumption of cosmetic products in Asia still well below other regions there is plenty more potential for growth in the future.

Interestingly one of our biggest concerns had always been that the company had a lack of focus, with 17 different brands originally. That figure has actually doubled over the 15 years of our ownership, but the company has proved itself to be very adept at solving this management challenge. In many ways L'Oréal was ahead of its time in terms of its focus on corporate governance. The company has been monitoring and improving the sustainability of its entire supply chain since 2013.

...management has always been able to make tough decisions that are the right long-term moves.

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#### A DECADE STRONG

Moving on to the companies that have been in the portfolio for ten years, it is hard to believe we have now held the Chinese internet giants, Tencent and Baidu for a decade. They are both still quite young companies which we have held for most of their listed lives. Again, both still have a founder with a significant shareholding, actively involved in decision-making.

In such a fast-moving country and sector it is unsurprising that both companies have changed substantially over the decade. Both Tencent and Baidu have had bouncy share prices over the years, but both ultimately appear quite high up the long-term attribution lists. We have occasionally used the share price volatility to add to our positions, as we did recently with Tencent.

Tom Slater correctly identified in our initial work that the Chinese internet platforms were completely different beasts to the western ones: "I think the contrast with some of the western players could not be starker. Despite umpteen iterations of the software, MSN messenger has come nowhere close to developing this type of appearance or sense of community."

By 2009 Tencent had already amassed an impressive 523 million active users but it was still in the early days of monetising its customers – revenues were just \$1.8 billion. We were happy to take the initial holding despite signs that some of the original popular content such as QQPet was maturing. We took confidence from the signs that users were rapidly shifting into playing lots of online games, rather

than just feeding virtual pets! The fact that some of Tencent's most popular original offerings are now barely remembered, is testament to just how quickly and significantly the company has evolved over the years.

Our initial hypothesis was that there was potentially something unique about the structure and development of this platform. We also mused about the potential power of digital incumbents. Ten years later Tencent's super-app WeChat alone has garnered over a billion users. Revenues at the group have snowballed to \$45 billion and the market capitalisation has increased by over ten-fold.

...a user could spend almost an entire day going about their daily lives without ever having to leave Tencent applications.

As the company celebrates its 20th birthday, the offering has broadened out significantly. Beyond socialising and gaming, users can, among numerous other things, listen to music, watch movies, pay for items digitally, or arrange doctor appointments, all within the Tencent ecosystem. As Linda Lin has eloquently described, a user could spend almost an entire day going about their daily lives without ever having to leave Tencent applications. The company has proved itself to be remarkably able to attract younger and older users. Businesses too can avail of the company's advertising tools or rent cloud computing infrastructure.

Pony Ma, who retains his 8% holding, recently outlined his vision for the company's next twenty years:

"We believe that the first stage of the mobile internet, the consumer internet, is drawing to a close and the second stage, the industrial internet, is kicking off...It became clear to us that if objects and services are not fully digitized, the connection between them and people cannot be improved".

Again, we can observe serious ambition to evolve, and the business will probably look significantly different in another decade's time.

When asked about the biggest risks to Baidu's dominance in 2011, founder Robin Li responded unequivocally that it was the fast-changing nature of the internet and the need for the company to constantly innovate to keep pace with the change. He said all the right things, being open to eight-out-of-ten investments failing because of the skewed paybacks for big winners. While being far from a failure with revenues now sitting at over ¥100 billion, arguably Baidu has not adapted as much as Tencent or Alibaba. The current big push to use its AI capabilities in autonomous driving, smart devices and cloud infrastructure is going to be crucial to future growth.

Our 2013 Devil's Advocate report picked up on a few concerns. Worries over the long-term relevance of search have not come to pass yet, despite WeChat users discovering things in different ways. But the observation that Robin Li struggles to keep a stable management team around him is as pertinent now as it was six years ago. We continue to ponder this frustrating aspect of the story.

Along with Alibaba, close relationships with the management teams at Tencent and Baidu have facilitated introductions to some of the next generation of up-and-coming private growth businesses in China. The future looks very exciting in this area.

...Robin Li struggles to keep a stable management team around him...



Kering, the luxury brand conglomerate, has been a case of rationalisation combined with spectacular growth. In the 2008 figures Gucci accounted for less than 20% of total revenues of €20 billion. Meanwhile Europe continued to dominate at over 60% of sales. The luxury group included a fairly random collection of other businesses including catalogues, automotive, pharma, home furnishings, electronics, retail, and athletic brand Puma.

In the original 10Q James had already identified Gucci and Bottega Veneta as the potential prize assets. He was also very open to the idea of the company simplifying the brand line-up over time. Kering had of course proved itself to be adaptable in the past, having been a lumber business in the 1960s.

By 2017 revenues had actually fallen a little due to rationalisation and the focus on luxury. But operating margins had jumped significantly from 8.5% to 22%, as Gucci snowballed to nearly 60% of total sales. As the business has evolved, Europe has fallen to just over 30% of the total, while Asia Pacific has increased to 35%.

With the business still being 41% owned by the founding family, CEO François-Henri Pinault has been freed up to make bold decisions. The ability to promote an obscure internal candidate in Alessandro Michele to head up Gucci, the company's most prized asset, would probably not have occurred in many listed companies. But it has of course proved to be a masterstroke, as the designer has connected with younger, new luxury consumers.

After it's great run Kering is now a top-ten holding and is firmly at the centre of the Great Western Brands section of our Euler diagram.





#### EARLY DAYS

Finally, really it is still too early to pass judgement on the five-year holdings. Workday and Alibaba have been listed for less than a decade but both have attracted some flak in their early years – the former from no doubt threatened incumbents shackled by old infrastructure, and the latter by western commentators determined to downplay the company's success and question management integrity.

We purchased shares in Workday in 2014, nine years after it was founded. Since then revenues have increased from \$500 million to nearly \$3 billion, and with 84% of sales on a lucrative subscription basis, margins have increased to 70%.

Increasing flexibility for companies' internal systems infrastructure was the founding principle at Workday so one would expect the company to be the embodiment of adaptability. The cofounders spotted how cloud computing could revolutionise the software industry and the sale of their previous business to Oracle provided them the perfect opportunity to start afresh. By embracing this new approach early, the company has forged ahead and reshaped both the software and human resources industry practices.

Several sensible acquisitions have broadened out the offering, allowing Workday to now help finance teams in their transition to the cloud as well. Research and development has been held at consistently high levels with significant investment currently being made in building the company's machine learning abilities to improve the product.

Co-founders Aneel Bhusri and David Duffield still have large personal stakes ensuring a high degree of alignment with long-term shareholders. They obsess about customer's satisfaction, low employee turnover, and prioritising longterm investments over shorter-term profitability. Music to our ears!

When Alibaba first listed and we took our initial holding for LTGG the company's 265 million monthly users were generating an already impressive revenue figure of \$8.5 billion. Since then, the core ecommerce business has accelerated allowing sales to leap to \$39 billion on a userbase of 699 million customers.

Part of the reason behind the acceleration has been Alibaba's shift into adjacent areas that support growth in the core: so, logistics and financial services are now major operations in their own right. The company has leveraged its own systems infrastructure to provide cloud computing services to Chinese businesses. With the addition of various forms of engaging digital content, the Alibaba platform is now about more than just buying items. This is not just conjecture – the figures for time spent on the platform surpass any commerce site in the West.

With founder Jack Ma stepping back over the next year, there could be concerns over whether his longterm ambitions for the business will be fulfilled. However, Alibaba's partnership strikes us as a unique ownership and management structure in the listed company space. It is genuinely multi-generational in its thinking and actions. New CEO Daniel Zhang has been in charge of executing on the company's strategy for some time and as Mark noted after his recent meeting, he is someone "who will guard the culture of Alibaba fiercely over the next decade and beyond".

#### THE NEXT 15 YEARS

So what can we take from this canter through the different generations of holdings within the LTGG portfolio? Well, the diversity of sectors and business approaches is striking – there has been no one blue-print for success over the past 15 years. The quite different share price journeys along the way to eventual strong performance is also notable – we should not let prior strong runs, or even quite prolonged drawbacks overly influence our decision-making if we truly believe in the upside cases. We talk about strong management teams with long-term visions so often there is a danger we could sound a little hackneyed. But there is no doubting that in all these cases having senior management, and in most cases founders, prepared to eschew conventional approaches and ignore short-run stock market reactions has been vital.

Lastly, we may have only explicitly added it into the 10Q process more recently, but adaptability has always been something we have considered when looking into a business' culture. The most conspicuous characteristic to me, is just how much most of these businesses have evolved – in several cases it would have been almost impossible to predict how they look today. This all argues for continuing to avoid spurious shorter-term precision, and ever greater efforts to understand how company management think about, adapt to, and embrace our constantly changing world. To make the best decisions for the next 15 years, we and all our companies more than ever need to heed Jeff Bezos' advice to "live in the future".





# CASTING THE NET

We believe that taking a long-term approach to investing will generate the best returns for our clients, and when we say long term, we really mean it. If you have visited our office in Edinburgh recently, you may have noticed the words "Actual investors think in decades, not quarters" displayed above our entrance. This is part of our recent international advertising campaign and these words echo at the heart of our Long Term Global Growth (LTGG) investment philosophy. It is only over periods of at least a decade that we think the competitive advantages and managerial excellence of companies will become clear; this requires patience.

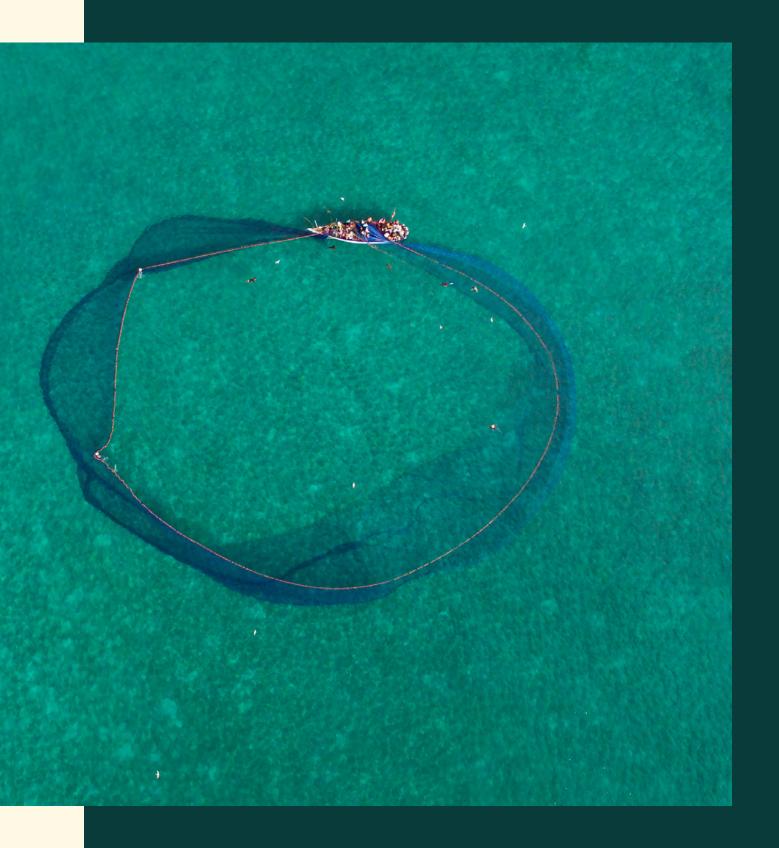
In LTGG our long-run average holding period is more than eight years and roughly 50% of the companies in the portfolio have been held for five years or more. This allows our investors to act as patient stewards in the companies we own on our clients' behalf, rather than 'renting' their shares for the short term.

Being a global, unrestricted strategy means we can invest in companies all over the world – though on the face of it, the portfolio may not appear very global with over 50% of the portfolio in the United States and over 20% in China. However, these headline figures fail to represent the truly global nature of the

companies in which we invest. Take Illumina, one of our largest holdings, as an example: it is incorporated in the United States, but derives revenues from all over the world, including Europe, Africa and the Middle East. So, remember, things are not always as they appear to be.

We're living in an era that has experienced dramatic change, and will no-doubt continue to do so. From floppy disks to the cloud, from VHS tapes to streaming, and the familiar response of "there's an app for that", it's no surprise to learn that companies are adapting and growing rapidly, driven by a combination of globalisation and technological change. In LTGG, we are obsessed by growth and are constantly searching to find companies that can grow to many multiples of their current size. This may seem to come at a price, though we're prepared to pay high multiples of immediate earnings based on the exceptional future growth and returns these companies could deliver for our clients. After all, the biggest risk could be failing to invest in an extraordinary company.

We believe that LTGG does exactly what it says on the tin and would like to take you on a trip around the world with us, as we discover some new opportunities we have been exploring in Indonesia, Africa and Brazil.





First on our itinerary is Indonesia, the 17,000-island archipelago. Indonesia has the largest economy in Southeast Asia and is still relatively young as an independent country. This youthfulness is mirrored in the fourth largest (and still expanding) population on the planet, with a median age of just 28.

John MacDougall, an investor from the LTGG team, has recently returned from a research trip to Indonesia and when describing what took him there he said:

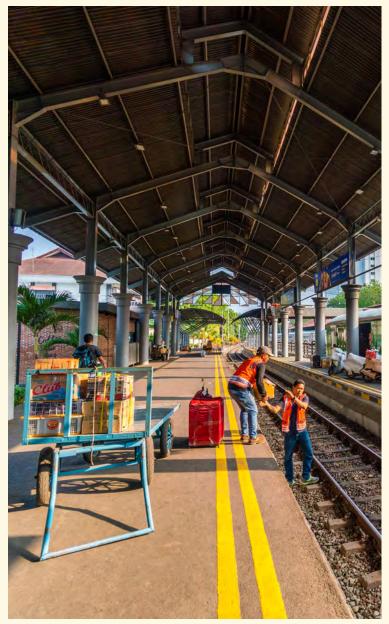
"I was attracted to visit Jakarta late last year to try to understand how real and accessible the opportunity was going to be, as young, smartphone savvy Indonesians came online rapidly. More broadly how might technology, as it is widely deployed, unlock remote consumers long starved of choice and affordability? Also, how might technology overhaul ingrained business practices, or perhaps even dislodge the existing post-colonial power structures that have historically put the brakes on meaningful change?"

In 2016, a joint study by Google and Temasek reported that Southeast Asia's internet economy is expected to exceed \$200 billion by 2025, driven by online travel, ecommerce and media. Two years on this figure has been revised to \$240 billion as more and more consumers are using their smartphones to go online. These consumers are also proving to be the most engaged in the world, spending more than four hours per day using mobile internet – more than double the average American or Briton. There are various reasons behind this shift, but it is largely down to a vastly improved internet service and the falling costs of mobile data: an average of three million Southeast Asians have been coming online for the first time every month since 2015 and there are now 350 million online consumers. Within this large expanding opportunity Indonesia is the largest and fastest growing area, with 150 million online consumers, making it the most attractive single country market.

For those of you who have visited one of Indonesia's many islands, it will come as no surprise to learn that public transport can be very limited, cities are congested, and the road infrastructure is poor. Therefore, amongst locals, car ownership is not hugely desirable, unless for status reasons. This has presented an attractive opportunity for ride hailing services in Indonesia to try and solve this problem. Two ambitious 'unicorns' that John met on his travels, are Grab



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and GO-JEK. Together they are competing to become the next super-app, offering not only taxi rides, but services such as food delivery, payment solutions and even personal stylists who come to your home - to name but a few! Both have many similarities to China's 'app for everything', Meituan Dianping, which is a recent new holding in the portfolio. The potential growth opportunity for these companies is enormous when taking into consideration the power of network effects and user stickiness that results from having an app embedded into our everyday routine, meaning many of life's conveniences are only a tap away.

Ecommerce is another market that has exploded in Indonesia. Growing faster than the broader internet economy, it has quadrupled in size since 2015. Disappointing retail experiences due to a lack of retailer variety and limited product offerings are becoming a thing of the past, as companies such as Lazada and Tokopedia provide Indonesians with access to a huge range of products from their mobile phones. For a country that has historically been a target for online fraud, trust in ecommerce is rising, and Lazada is helping build this trust by offering a cash-on-delivery model to help alleviate concerns. Deliveries can be a logistical nightmare across Indonesia: in remote areas houses may not have formal addresses and roads can be nameless. Some companies are taking it upon themselves to provide delivery solutions and local start-ups are emerging, notably Ninja Van, which has been able to offer same-day delivery in metro areas, unlocking new timecritical categories such as groceries. We will be keeping a watchful eye on developments.

Deliveries can be a logistical nightmare across Indonesia: in remote areas houses may not have formal addresses and roads can be nameless.

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Moving westwards, our next stop is Africa, the world's second largest continent. With a population of 1.3 billion people, of which 60% are under the age of 25, it is showing no signs of a slowdown. The United Nations predicts Africa will double in size by 2050, adding further strain to what is currently the world's poorest and most underdeveloped continent. A number of African healthcare systems suffer from under-investment. Gemma Barkhuizen, an analyst on the LTGG team recently travelled to Rwanda where she met with Zipline, a private company which is at the forefront of a technology-driven healthcare revolution.

Zipline is a medical delivery business, using autonomous drones to deliver medical supplies such as blood and vaccines across Africa. Born out of Rwanda, where many hospitals are hours away from the nearest supplies of blood by car, Zipline has an average journey time of just 30 minutes. When Gemma describes her journey to the Zipline facilities she visited, it is easy to understand the significant impact a company like this is having on people's lives.

"The terrain is unrelentingly hilly, and the road infrastructure is very poor. I took handwritten notes in the car after my tour and found them nearly impossible to read afterwards, given how bumpy the journey was. This terrain means the delivery of perishable medical supplies by car is time intensive and therefore expensive, wasteful, and – in the case of urgent blood transfusions – life threatening".

Apart from the obvious life-saving potential of this greater transport efficiency, by reducing what can be a three-hour car journey to a 30-minute drone delivery, it also means the costs to customers of a Zipline blood delivery are significantly cheaper. With support from the Rwandan government, Zipline is expanding into countries such as Tanzania, the Ivory Coast and Senegal, which are similarly beleaguered by infrastructure difficulties and are much larger countries. Already estimated to have saved 1,100 lives in Rwanda alone, Zipline is a company that could make a real difference to the world.



"This terrain means the delivery of perishable medical supplies by car is time intensive and therefore expensive, wasteful, and – in the case of urgent blood transfusions – life threatening".

It is easy to draw out similarities between countries in Africa and Indonesia, with both having accelerating populations and poor infrastructure, creating a ripe base for ecommerce disruption. However, in Africa, ecommerce penetration remains very low, at 0.6% of total retail sales at the beginning of 2018. Despite there being more than 450 million internet users in Africa, already more than there are in the United States, overall internet penetration is still only around 40%. Reasons for low penetration are typically due to problems accessing the internet, logistics, payment difficulties and consumer distrust. With a youthful and fast-growing population, the consumption potential is enormous, though current brick and mortar retailers are obstructing growth, and going shopping can be an inefficient and sometimes unpleasant experience.

This is where a company such as Jumia could transform the pan-African retail experience. Another company that Gemma has been researching, Jumia is rapidly growing an 'ecosystem' marketplace, supported by a logistics and payments platform across Africa. It is effectively a matchmaker between businesses and consumers, helping businesses reach more customers and helping customers purchase goods and services they have difficultly accessing otherwise. Arguably, the ecommerce proposition in Africa is much stronger than where it was born: in the United States and much of Europe people shop online because it is more convenient than the alternative, but not because the alternative is especially inconvenient. By providing this solution to previously neglected customers and stifled merchants, Jumia is laying the foundations to develop a robust brand name.

Our final destination on this trip is Brazil, a country that is rich in history but is also renowned for its colourful past. Brazil was run by the Portuguese for over 300 years, before becoming an independent state led by a military regime until 1985, when it then became democratic. Brazil is not entirely new ground for LTGG, having previously invested in companies such as Petrobras, the oil and gas company more than likely known for its involvement in "Operation Car Wash", and America Latina Logistica, the railway logistics company.

Michael Pye, a LTGG analyst, has been exploring a newly-listed company called Stone, that we first met with in 2016. Stone offers financial solutions to many mid-sized merchants in Brazil, enabling them to accept credit cards and other payment methods, both in-store or online. This may not sound like ground-breaking technology, but for many entrepreneurs who are trying to set up or run a business in Brazil, it could be significant to their success, having long suffered due to the indolence and poor service of incumbents. Michael describes his motivation for researching Stone:

"I believe the company possesses the adaptability and ambition to expand beyond this bridgehead to challenge the cartelist banking environment and generally woeful financial infrastructure in the wider region; a major barrier to business creation and entrepreneurial dynamism. A higher-level contention might be that in societies combining vast urbanising populations, encumbered by fading oligopolies unable to meet burgeoning expectations, and a mass of younger consumers starting to strain against such frictions (half of Brazil's population is aged under 30) a radical 'fintech' transformation becomes more of a necessity than mere nicety."

Beyond the opportunity afforded by the scale of the problem Stone is trying to solve, it is a company with a strikingly differentiated culture. The focus is on promoting talent early, then rewarding the most impactful individuals early with partner status. In founder Marcel Telles' own words, "giving young people more to bite than they can chew". When Michael met with Stone, he recalls meeting the youngest partner, aged 18, who joined Stone at the age of 13. The company has around 100 partners, roughly 3% of staff, however the ethos of 'behave like an owner' applies at all levels of the organisation. With a very young, fiercely competitive workforce, who are angry at the current state of banking in Brazil, they're empowered to make a difference to society.

Whilst the emphasis of our discussions is on considering the potential upside and what could go right, we're mindful that the future is impossible to predict and in a country such as Brazil, there are added complications. We're considering how government impact on a company like Stone may change now it is a listed on public markets, and we're conscious of the turbulent political backdrop, with newly appointed president, Jair Bolsonaro. All of this gives us plenty food for thought.









the world offers joyous opportunities to hear views, perspectives and visions that are barely noticed by the markets...

Having provided some colour to our recent work in Indonesia, Africa and Brazil, we can see they are very different places, with vastly diverse cultures and traditions. Though, perhaps in terms of investment opportunities, they are not worlds apart. All are emerging markets, with fast growing young populations and lots of potential for societal change, providing a ripe breeding ground for innovative companies to offer solutions through technological change, exploiting current inefficiencies. Many of the companies we have discussed are private and often it's at this stage when we will start to build relationships with companies and their management teams. In our experience the drivers of growth are amenable to the same analysis whether a company is private or not. We think that the world offers joyous opportunities to hear views, perspectives and visions that are barely noticed by the markets, and therefore every member of the team is given a free remit to explore their enthusiasms. The world is changing every day and we remain open minded as to where the next generation of world-class companies will emerge.

#### LOOKING BEYOND LISTING LOCATION

For diversification purposes, LTGG's investment guidelines ensure that at least six countries are represented in the portfolio. Beyond that, we pay little heed to where a company is headquartered and listed, because this says nothing about how it operates and its future potential. This map instead shows the LTGG portfolio companies' exposures to different geographies by revenues earned, not by headquarters or listings. This tells us much more about companies' key markets and opportunities.

### Did you know?

Facebook derives the majority of its revenues from North America and Europe, but only two countries from these regions (the US and the UK) now feature in Facebook's top 10 countries by numbers of users.

Silicon Valley's NVIDIA derives over four times more sales from Asia (notably China and Taiwan) than it does from North America.

Australia's Atlassian and Sweden's Spotify derive far more in revenues from the US than they do from their home markets. 39%

# Did you know?

The LTGG portfolio previously held Brazilian mining company Vale from 2004 to 2013. China, not Brazil, was by far Vale's key market at time of sale.

We are currently researching Brazilian fintech company, Stone.

# Did you know?

Europe remains by far Inditex's largest market in terms of revenues.

In contrast, Dutch company ASML derives the majority of its revenues from Asia – notably South Korea and Taiwan

15%

43%

## Did you know?

We are researching and discussing the African ecommerce platform Jumia and financial services company Discovery.

We also have a private holding in medical drone delivery company Zipline.

## Did you know?

Skyscanner – the Edinburgh-based flight search company – now accounts for 10% of total sales of China's online travel agency Ctrip, following its acquisition in 2016.

International sales now account for over 10% of Alibaba's total revenues.

China matters as much to Hermès' total revenues as its home country France.



The world is engrossed in an energy crisis, global warming rages rampant, and millions migrate to the outskirts of their nearest metropolis to flee their dying rural towns. Most people live in 'stacks' – trailer parks stacked on top of one another – held together by metal beams, pipes and makeshift girders. They are a necessity to save space, labour and resources, but as they grow they begin to resemble a favela rather than a humble abode. To escape this reality, people turn to the 'OASIS', a virtual world that acts as an anaesthetic to anything you must endure on Earth. Strap into your haptic suit, slip on your virtual reality goggles and explore the parallel reality without any of the repercussions of death, hunger or social exclusion; feel every sensation as if it is real life.

Is this a real glimpse into the future? We will have to wait and see. For now, it is best known as the world depicted in the Ernest Cline novel Ready Player One. Science-fiction right now, but this future is not out of the question. We have imagined spending time in virtual worlds for decades, whether portrayed in movies like Tron, or more recently, the Emmy award-winning San Junipero episode from the Netflix series Black Mirror. Elon Musk regularly ponders whether our current existence is all just an elaborate simulation, and Oxford Professor Nick Bostrom took this further with his Simulation Hypothesis. Even Alan Turing suggested the possibility of virtual worlds as he developed the modern computer back in the 1930s. He posited that a computer could copy everything we can feel, touch or do. After all, our reality and what we experience every day is merely an array of computations taking place in our brains. Will there become a point

when we can't tell the difference? Could we already be there?

As technology pulls the future towards us at an ever-faster rate, we will continue to see the blurring of our actual and virtual worlds. The catalyst for this future is the continued ascendency of gaming, which has spawned a professional industry named 'esports' over the past few years. Gamers see little difference between the real and virtual worlds already. YouTube's most subscribed account is currently a gamer called PewDiePie with nearly 90 million subscribers - Justin Bieber can barely muster half that following. His audience are clearly hypnotised by his exploits in virtual worlds. Our portfolio has significant exposure to this growing industry through businesses like Tencent, NetEase, Amazon, Baidu, Alibaba, Alphabet and NVIDIA.

Gaming is already prevalent in our daily lives. The UK's Behavioural Insights Team, created within 10 Downing Street, uses gamification and appropriate incentives to 'nudge' society towards more favourable outcomes, such as increased organ donation. Many of us will also be regular users of social network Twitter, or might it better be described as a massively multiplayer online role-playing game (a MMORPG to the avid gamer)? A game where people choose an avatar to act out a persona that is loosely based on their own to gain followers. China is going one step further, with its Social Credit System, rewarding and punishing citizens dependent on their social behaviour. Gaming – or 'gamification' – will become a more significant part of our lives, whether we recognise it as such or not.

Childhoods have also changed. Children used to spend hours running around grassy parks, overflowing youth clubs or another real-world alternative. Parents would send their offspring out into the world each day with perhaps some loose change to keep them company. They likely returned as the sun was setting, sometimes with scraped knees - most definitely with muddy shoes and clothes - but always exhausted from the adventures of the day. Fast forward to today, and some parents look on aghast as their children sit for hours with a game controller glued to their hand; wondering about the potential impact on their child's personal, family and social development, and any detrimental effect on their future education and job prospects.

Although, digging a little deeper, childhoods of this new generation are perhaps no different to what went before; they just increasingly choose an online world for their adventures. Both allow children to do what they desire the most – have freedom of movement, a community of like-minded people around them, areas to explore and organised competition, if desired. Plus, don't forget a place away from the prying eyes of parents. Rick Fox, a retired LA Lakers basketball player, had similar anxieties about gaming. His son didn't display the same passion for basketball as his father, his competitive juices were directed to the arena of esports instead. Fox tried it out – mainly to spend time with his son but quickly got hooked into the virtual gaming world and now owns the Echo Fox esports team. The blurring between the real and virtual worlds has already begun.

Technology has played a big part in driving this change, helping primarily with reducing friction to adoption. In the past, children would either rely on serendipity or carefully plan meetups in advance, hoping an array of diaries and transport arrangements would magically align. Nowadays, a simple push notification to a mobile device is enough to nudge the user into a virtual world. Boredom is carefully parked to the side as the impending social connection becomes impossible to resist, providing a dopamine hit that strengthens habit loops for the next time.



So, why is this happening now? At Baillie Gifford, we seek out different sources of information because we believe it gives us a better picture of the world we inhabit, rather than deferring to the parochial view of an analyst in New York or London. This search takes us far and wide, and more recently we have found the work by Professor Johan Schot from Sussex University on 'Deep Transitions' developed from the work by Professor Carlota Perez – especially compelling. It explains the transformational changes that have occurred in the global economy over the past 250 years, from the industrial revolution towards oil and mass production, all the way up to the information age we are in now. These transitions, made up of 'surges' in the lexicon, build upon each other and were integral to what came later.

A similar pattern can be seen in the past few decades with the information and technology age already passing through several mini-surges: the development of the internet, the rise of personal computing, improved mobile communications, social networking, cloud computing and the proliferation of artificial intelligence, to name a few. These technologies have developed from what came before them and when combined, help to spawn new growth industries – Schumpeter's gale (creative destruction) in practice.

Recent examples from portfolio holdings Spotify and Netflix illustrate this. The Netflix thriller 'Bird Box' was watched by more than 80 million subscribers in its first four weeks of release, more than all the tickets sold for Marvel's Black Panther – the number one grossing film of 2018. However, business models like these





2018 League of Legends World Championships – Finals © Getty Images AsiaPac.



were only viable once network speeds and device hardware could achieve seamless streaming of content from cloud providers. The ascendency of gaming, and more specifically esports, is a similar story, having developed from a sweet spot of improving computer power and faster network speeds, twinned with the rise of social networks. Esports is unlikely to be a fad. It is the natural product of many irreversible technology trends that have been bubbling away for decades.

Matthew "Nadeshot" Haag, CEO of esports team 100 Thieves would tend to agree: "Gaming is pop culture now, gaming is not someone in their basement eating Cheetos all day long, it is mainstream". The most recent gaming release from Rockstar Games – Red Dead Redemption 2 – beat opening weekend sales for the latest Avengers and Star Wars releases, and the fifth instalment in its Grand Theft Auto franchise is the most financially successful media title of all time. Over 100 million people play esports favourite League of Legends every month and its 2018 World Championship had over 200 million concurrent viewers – larger than any other major sporting event outside the football World Cup. Stan Kroenke, best known as the owner of 2019 Super Bowl finalists the LA Rams and Premier League's Arsenal, also owns the Overwatch esports team the Los Angeles Gladiators, paying \$20 million for the privilege.

Gaming now commands larger audiences than traditional television channels or even the television disruptor Netflix – something CEO Reed Hastings knows too well, noting in a recent call that "we compete with (and lose to) Fortnite more than HBO". Epic Games' Fortnite has rocketed to the centre of pop culture in the past year, with children and parents alike 'flossing' in (perhaps unbeknown) reference to the game. The game is a microcosm of what children look for in a place to spend their time, with the social connection the icing on the cake – other forms of media simply struggle to compete.

Esports is unlikely to be a fad. It is the natural product of many irreversible technology trends that have been bubbling away for decades.

The rise of China has played a significant part in our investment narrative over the past decade or so, and it is an important market for gaming and esports. In 2018, teams from China won every major esports tournament for League of Legends, the world's most played video game. China has more than half of the world's esports fans, more than a dozen professional teams and boasts more than 600 million gamers. Businesses are waking up to the industry's potential. Team OMG, one of China's leading esports organisations has sponsorship deals with Mercedes-Benz, Red Bull and Bright Food, one of China's largest consumer companies. There has been some uncertainty in the industry in the past year as the Chinese government has slowed gaming approvals. To alleviate this, developers are modifying the content within their games to better align with government ideals.

Our holding in Tencent gives you the most direct exposure to these trends as it commands the largest market share in mobile gaming in the country. It acquired Riot Games, which developed League of Legends and has a majority stake in Epic Games, the brains behind Fortnite. NetEase, China's second largest gaming company after Tencent, was purchased for the portfolio in 2017. We are excited by the long-term opportunities for game developers and publishers. NetEase's internally-developed franchises, along with partnerships with publishers such as Activision Blizzard, position them as a potential leader in virtual reality, live streaming and esports. Baidu and Alibaba also have increasing aspirations in these areas.

Although the viewing figures for gaming and esports are stark, industry revenues have not yet caught up. At the end of 2018, esports was less than a billion-dollar industry; tiny for something with such compelling viewing figures. China generates less than 20% of total revenues in the industry despite being the world's largest gaming market – as such there is scope for revenues to grow considerably. As audiences swell, nascent markets such as sponsorship, advertising, merchandising and media rights are likely to expand, supporting broader industry growth. That there are rumblings of a union for esports gamers points to the industry's ongoing development and formalisation. In the Long Term Global Growth team, a question we ask in our 10 Question framework is 'why the market doesn't

understand this?'. We think the market is still waking up to the potential of esports and Amazon-owned gaming videoplatform Twitch is a prescient example.

When Facebook acquired the zero-revenue start-up Instagram for \$1 billion in 2012, the market reacted in united anguish at the supposed hefty price tag. Conversely, when Amazon purchased Twitch in 2014 for the same price, the market shrugged in boredom. In the five years plus since it was bought, analysts have only asked about Twitch a handful of times in their quarterly questions to management – the analyst community seems to remain underwhelmed. More than 15 million people visit Twitch every day, spending an average of 95 minutes a day watching live gaming. Last year the site accumulated over nine billion viewer-hours on its platform, up more than 50% compared to 2017. To put that in perspective, the NFL lags at around 6 billion viewer-hours per year but commands around \$5 billion per year for the rights to the games.

The market clearly struggles to understand Twitch, just as was the case with Amazon's cloud business AWS in its early years – a longer time horizon allows us to see the potential in both. The Instagram investment has shown its worth to Facebook many times over. The platform is a prized asset in its ecosystem, has over a billion users, and is a powerful channel for businesses or 'influencers' to engage with their audiences. Twitch adopts a similar model, with game players being the ultimate influencers, as their stature in their respective games gives them a movie-star-like band of followers. Whereas an Instagram influencer can now comfortably live off the plethora of brand advertising opportunities afforded by their status, Twitch streamers charge subscriptions to their channels, with brands keen to pay for valuable advertising screen time during streaming breaks. Gamers see this as an attractive profession. A professional will regularly train six hours per day with their league teammates, followed by another six hours streaming on Twitch, helping build and monetise their social brand. The next generation of influencers is increasingly coming from the gaming sphere. The market clearly struggles to understand Twitch, just as was the case with Amazon's cloud business AWS in its early years – a longer time horizon allows us to see the potential in both.

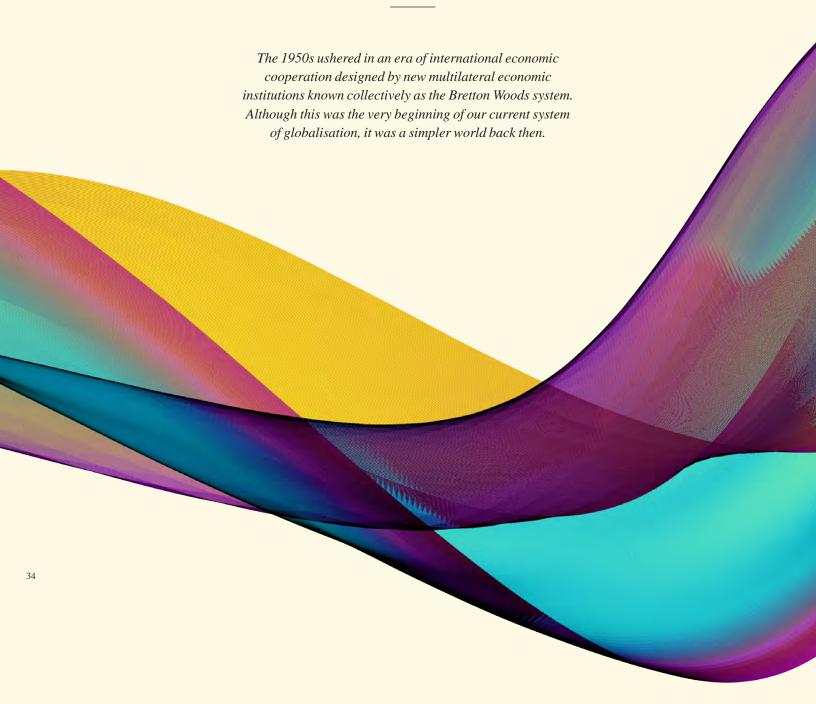


As long-term investors it is our role to envisage what our future world could look like, aligning our clients' capital to companies that could play a significant part in crafting that future. The transformational changes occurring in industries such as healthcare, energy, banking, retail and media will continue apace, with gaming and esports likely playing a more prominent role than ever. We can't predict the future, though following great management teams and understanding the repercussions of exciting innovations, allow us to be optimistic about the future. Who knows, if the gaming industry continues a similar trajectory, our OASIS may just be around the corner.



## CORPORATE GOVERNANCE

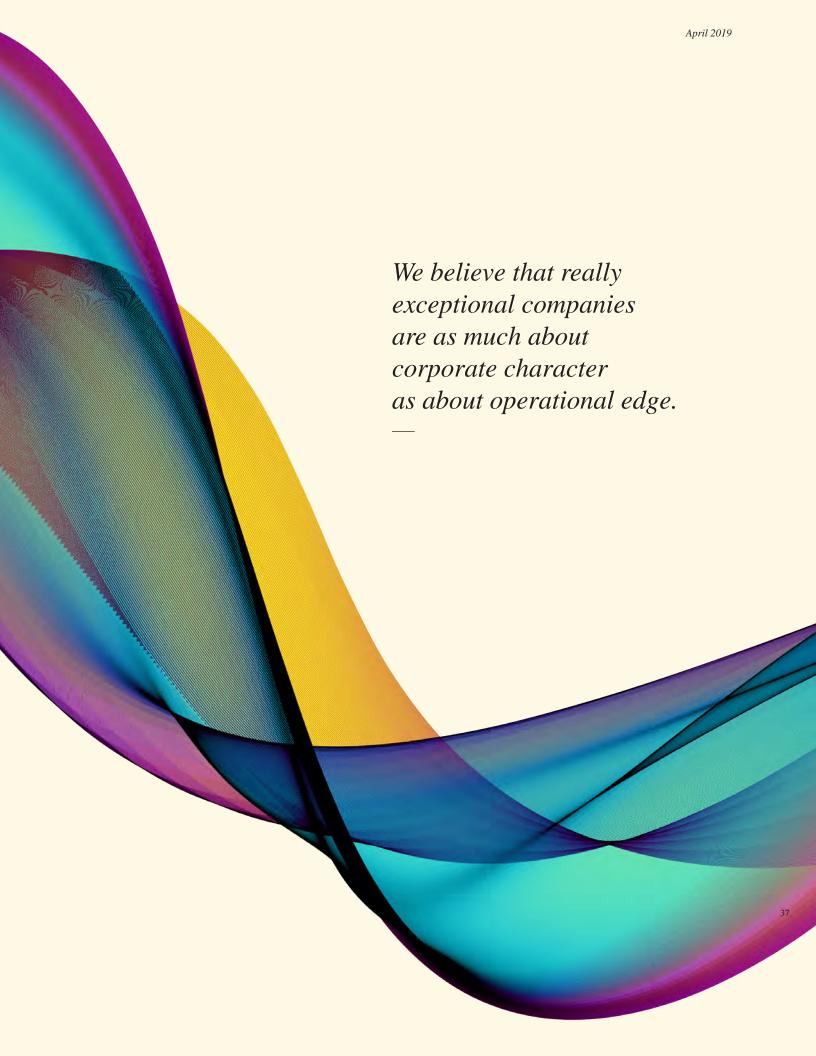
# NATURAL SELECTION







changing environments are, to our mind, signals of their desire for success.





### **ILLUMINA**

Illumina, one of the largest holdings in the portfolio, has a stated mission to improve human health by unlocking the power of the genome. The genomics revolution promises to change how diseases are diagnosed, prevented, and treated.

Currently, despite differences in race, gender, background, diet and a multitude of other factors, treatments for diseases are similar for all patients. This is because, for most diseases, treatments are based on 'standard care', which means applying the same treatments to all. However, this approach doesn't work, leading to a significant waste of time, money and effort. In the US, healthcare spending accounts for around 18% of GDP and is estimated to rise by around \$3.5 trillion every year.

Genomics is different. It is not about finding the standard but about understanding the difference. Genomics is about understanding diversity. It is about analysing an individual's genome and using this information for personalised diagnosis, disease management and treatment. To realise the full impact of genomic medicine we must be sensitive to differences and transcend geographic boundaries. Extremely large and diverse data sets are needed to provide context for the interpretation of genetic sequences. No single country or institution can achieve the necessary scale and diversity alone.

Illumina has realised that success in genomics requires a nimble organisation willing to move beyond its borders. Jay Flatley, the then CEO, recognised the need for cultural changes and brought in Francis deSouza. His background was an advantage, a computer scientist from Silicon Valley, of Greek and Ethiopian heritage; he grew up in the Middle East then relocated to America to study.

deSouza needed to develop an organisation that would embrace the mission and be sensitive to the plurality of global dynamics. He believed that to improve human health a diverse team of professionals was needed. He started making changes by adding more women, ethnic minorities and individuals from non-medical business backgrounds to the executive team and the Board. His hope was to create a broad team with many different perspectives.

To reach a broader consumer base not only required a fresh perspective at the executive level but operationally as well. Illumina broadened its geographic reach by employing staff of different nationalities in offices across the globe; careful to be sensitive to local operating environments and not impose a US approach in local markets. China, for example, represents the largest market



### Genomics is about understanding diversity.

in the world for next-generation sequencing. To maximise success Illumina needed to build a strong local presence, supporting the needs of China. Illumina immersed itself in the country by hiring staff with an understanding of regional dynamics and partnering with local organisations – tremendous strides for an organisation that in 2013 questioned their commitment to the Chinese market.

To ensure that such sensitivities became part of the DNA of the company, Illumina hired a Chief People Officer with a wealth of experience outside biotechnology. The company has also recently created a new position – Director of Global Diversity and Inclusion – to help focus and formalise efforts in diversity within the organisation.

The company's understanding of the importance and impact of diversity doesn't stop at the office doors. Illumina has become active in clinical consortium research programmes such as iHope and All of Us to provide sequencing to, and gather data from, groups that have historically been underserved and underrepresented due to background or diagnosis. By doing so, the public wealth of knowledge will continue to grow and provide benefits to many more patients who depend on the precision of genomic medicine.

Illumina is also working to make sure the next generation of geneticists will come from a variety of backgrounds. Illumina seeks to inspire youth to pursue careers in science, technology, engineering and medicine and is working with schools globally to encourage the pursuit of careers in these fields.

To date just over one million people have had their whole genome sequenced, with nearly 20 million having undergone some level of DNA analysis. Illumina's pursuit of diversity is to ensure that they will be at the forefront of sequencing for the next millions but with the keen understanding that genomics is not only for the one percent. Its success in this pursuit thus far increases our confidence in the probability that the company will succeed in its mission.



### **NETFLIX**

In 2016, a company with under 5,000 employees located in a small sleepy town in America launched its product in 130 countries simultaneously. A remarkable achievement, truly remarkable for a company that only six years prior was confined to their domestic market. Netflix had gone global overnight.

Netflix is a company of serial reinvention, first moving from DVD rental to streaming to content producer, and now from a domestic player to a global one; amassing circa 140 million subscribers, of which only 58 million are in the US.

We can credit Netflix's awesome growth with changing media habits and faster internet but more importantly a culture focused on delivering "TV shows and movies to the billions of people with whom we share the planet". Netflix believes that to be a truly global company then, by definition, you need to reach a diverse audience and that the content produced needs to reflect that diversity.

"From today onwards, we will listen, and we will learn, gradually adding more languages, more content and more ways for people to engage with Netflix. We're looking forward to bringing great stories from all over the world to people all over the world."

— CEO Reed Hastings

Netflix is one of the first companies to assume that not all programming is watched in the same way around the world. The company believes that to tell stories from around the world, employees need to reflect the world with a wide range of perspectives and backgrounds. To do this Netflix is ensuring that its projects are inclusive, both on screen and behind the scenes. However, what stands them apart is understanding that this effort is not about box ticking but one of creativity.

In the last few years, we've seen Netflix invest heavily in storytellers that reflect the diversity of its audiences, producing over 100 projects in 16 countries and in 16 different languages - nearly doubling the number of shows produced and dollar investment since 2017. Netflix has turned to those with unique perspectives not seen on television before. Perspectives like Jenji Kohan's multiple awardwinning Orange is the New Black, an adaption of memoirs of a former female inmate of a minimum-security prison. Also, Lebanese director Mir-Jean Bou Chaaya's Jinn, the first Arabic-language original series and a supernatural thriller based on Islamic mythology; and Dee Rees, the first Black woman nominated for an Oscar for Best Adapted Screenplay, and her Mudbound - the tale of the struggles of two young men, one black and one white, who return from the war to work the land in the American South. These stories and their creators demonstrate that provisions and clauses are not the only means to necessitate diversity and plurality of expression.



## Popular on Netflix







# **Recently Watched**





















Netflix's
determined
reinvention, first
operationally and
now culturally,
is clearly a
differentiator
amongst
global content
providers...

Netflix believes diversity of thought, culture, background, and perspective is the only way to create a truly global entertainment network. This is in contrast to mainstream Hollywood which continues to struggle with a diversity problem. The Time's Up and #MeToo movements have shed light on the mistreatment of women in Hollywood and continued dominance of straight white men behind and in front of the camera — with men occupying more than twice as many roles in films as women. This is not to suggest that the journey has been straightforward nor is it complete. Netflix fired its Chief Communications Officer for racial insensitivity. Since then, the company has hired a VP of Inclusion Strategy to help devise and implement strategies that integrate cultural diversity, inclusion and equality into all aspects of Netflix's operations worldwide.

Netflix has taken on the incumbents and continued to adapt by putting together a portfolio of programming that appeals to customers worldwide. Netflix's determined reinvention, first operationally and now culturally, is clearly a differentiator amongst global content providers and thus deserving of its top 10 position within the LTGG portfolio.

### **ATLASSIAN**

Atlassian is an Australian enterprise software company which develops products for software developers, project managers and content management. Its mission is to unleash the potential of every team through open work. Atlassian is trying to change the way we work; believing that organisations thrive when teams work openly. The company contends that most work is done in a closed way, often unwittingly. Information is hidden or lost, bonds between teams and teammates are weak, and perspectives are withheld. Knowledge is wasted and potentially frittered away. To work openly requires employees to feel they belong; necessitating an organisation that appeals to and respects a diverse set of perspectives and constituents.

Atlassian has seen that the highest performing teams are comprised of people with diverse perspectives and, points to numerous studies which show diversity both inherent (race, gender) and acquired (experience, cultural background) is correlated with business success. However, success, in terms of diversity, within Atlassian and in technology companies generally has so far been marginal. With so much at stake, why aren't these companies making more headway?

It shouldn't be surprising that most diversity programmes aren't increasing diversity. Despite a few new bells and whistles, courtesy of big data, companies are basically doubling down on the same approaches they've used since the 1960s – which often make things worse, not better. Diversity initiatives are often targeted at those in narrowly-defined categories of "diverse" candidates. Efforts are compartmentalised into projects, committees, training days or initiatives. This force feeding can activate bias rather than stamp it out.



For Atlassian increasing diversity in every sense is not a fad but a non-negotiable key to progress. However, the company has found that serious long-term commitment to diversity requires more than check-the-box initiatives and is incredibly challenging for an organisation. To move forward, Atlassian is focusing on three areas: team-level progress, process and policy and, importantly, accountability.

Atlassian has realised that to make progress, the company must move beyond traditionally defined categories of diversity and that initiatives must be integrated into strategy. Woven into the fabric and the vision of the organisation, not only through culture, values and belief systems, but every aspect of the employee

experience from recruitment and performance objectives to leadership and development. Importantly, like all operations within the business, diversity needs to be measured to determine progress and, as part of the learning process, any appropriate adjustments made.

Most diversity and inclusion conversations currently focus on the company as a whole. Atlassian has come to realise that success is about balancing perspectives within every team at all levels of the organisation. For example, if women and people of colour are found only in select departments or at the lower levels, the organisation will not profit from diversity. To meet these objectives, Atlassian has implemented the "diverse slate approach" for executive

and board positions and is rolling that out across other levels of the organisation. This approach to hiring sets the expectation that candidates from underrepresented groups should be considered and represented at interview stage.

Atlassian is updating policies and processes and implementing programmes that address representation and retention issues. For example, they are taking a different approach to hiring, implementing what Atlassian calls "values fit." This involves standardising all interviews around a specific set of questions that highlight behaviours that are successful at Atlassian, not a preconceived notion of cultural fit. Additionally, Atlassian is intentionally providing



opportunities to people from underrepresented groups to grow and develop. Launching a senior technical mentorship initiative, a programme for emerging female leaders, and a pilot apprenticeship programme for Black, Latina, and Indigenous women.

Most importantly there is a focus on learning and accountability: each year Atlassian releases its demographic breakdown for the company's workforce which includes team level data. The idea is to evaluate how diverse Atlassian's teams are within each job function. Atlassian contends that being precise and data-driven about the impact you intend to have will make it easier to adjust or scrap ineffective projects altogether. Otherwise, efforts to increase diversity

and inclusion can become vague and untenable. Experience has shown there's no forward momentum without milestones or measurement.

Results show that Atlassian has seen an increase in women in technical and leadership roles, underrepresented minorities, and employees over 40 years old. In addition to quantitative improvements, the company has also seen qualitative improvements, evidenced by dialogue and discussion around gender identity, autism, mental health, parental status and personality differences, like introversion and extroversion. Atlassian has found that more diversity and inclusion has led to happier employees, greater engagement, greater employee

retention and more innovative ideas. All this combined has meant institutional knowledge stays within the organisation.

Atlassian acknowledges it has made only incremental gains and that the journey is far from done. However, since Atlassian entered the portfolio in mid-2016 we have seen tangible progress. In 2017 Atlassian commissioned a report to understand the state of diversity in the technology sector and this was followed in 2018 by the second such report. Learnings from these reports are being put into action and Atlassian is shifting the focus from diversity and inclusion to balance and belonging; we look forward to following their progress.



### ALIBABA

We have just looked at several of the western portfolio holdings. However, what are we seeing in Asia, where the majority of the world's population resides?

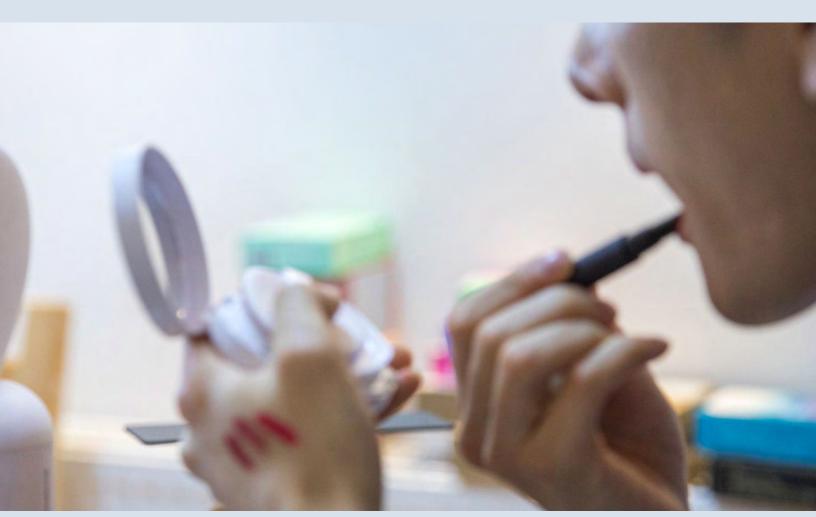
Alibaba's mission is to 'make it easy to do business anywhere', with a vision of serving two billion consumers globally by 2036. As with the western companies looking to expand eastwards, Alibaba is expanding outside of China, and such vision requires a wide lens. Alibaba is keen not to ignore global norms when it comes to Governance and Sustainability – that's what its global stakeholders will expect. We were surprised and delighted that in 2018 Alibaba looked to Baillie Gifford for input and advice as it compiled its first ESG report. Alibaba not only recognises the need to be cognisant of best practice but also to implement the appropriate governance and human capital management structures to promote continued corporate success to the benefit of all stakeholders.

In China entrepreneurs have grown successful companies by using technology as a tool not only to leapfrog the west but to help narrow the disparity between those who have, and those who have not.

Further, Alibaba's digital economy has increased economic inclusion for underrepresented groups by making access to its sites and applications cheap and easy - costs are low and technical knowledge is not required. There are 10 million small businesses and start-ups on Alibaba's Taobao platform and half of these are owned and or operated by women. In addition, roughly 160,000 of the online shops are operated by persons with disabilities; last year generating \$1.8 billion in sales. The company's digital economy has allowed more women entrepreneurs as well as those with physical disabilities to be included and in turn benefit from China's economic growth.



There are 10 million small businesses and start-ups on Alibaba's Taobao platform and half of these are owned and or operated by women.



© Imagine China/REX/Shutterstock.



Jack Ma (Alibaba)
© Bloomberg/Getty Images.

Alibaba's workforce is representative of its customer base. The workforce has an almost fifty-fifty, male female split, although it has been higher in the past; watered down by recent overseas mergers and acquisitions activity. Female representation is significant throughout all levels of the organisation. Of the 36 partners one-third are women, along with six of the 15 strong leadership team and onethird of all managers. According to Ma, the reason is simple: "Men focus on products, while women focus on customers. Most of Alibaba's buyers are women – and many of the sellers too. And few companies succeed by ignoring their customer base."

Whilst gender diversity is deeply rooted in the Alibaba culture, the organisation understands that diversity goes beyond gender and is fundamental to its continued global success. In support of their business moving from the domestic market, the Alibaba Global Talent Development programme has been introduced. Each year the company recruits roughly 30 individuals from around the globe to participate in a two-year training programme at corporate headquarters in Hangzhou. On completion these candidates may take up a position in any one of Alibaba's offices globally, having benefited from their submersion in the corporate culture.

Much like the new Chinese business models leapfrogging those from the encumbered West we are not short of examples which suggest that the shape of these Chinese companies are, in some cases, well ahead of their western counterparts. Alibaba's steady operational performance can certainly in part be attributed to the governance of the business and we have been encouraged by their increased disclosure in this regard. No surprise therefore that we have increased the holding over the recent past.

We have seen through these four businesses the potential impact of an inclusive organisation. Not only is it the right thing to do, it's also how businesses will survive in an increasingly globalised and diverse world. Research shows diverse teams produce better outcomes. However, crafting a truly effective diversity and inclusion strategy is no small effort, and requires strong, sustained and inclusive leadership. This also

"... Most of Alibaba's buyers are women – and many of the sellers too. And few companies succeed by ignoring their customer base."

JACK MA

illustrates why the bar for inclusion into the LTGG portfolio is demanding – answering Questions 4 and 5 is not easy: truly great organisations are continually trying to improve and adapt.

For us and the portfolio companies it is not about being perfect but about progression. We know that diversity matters. Our discussions with companies about diversity have increased significantly over the last 12 months and it is now a standing agenda item in many governance meetings. The world is much more diverse and highly connected, and it is those organisations and institutions that embrace greater diversity that are achieving better performance. We all have more work to do to take full advantage of the opportunities presented by a more diverse workforce. But with the rewards of diversity set to increase, investing now is essential as the leaders will pull further ahead.

# EPIPHONEMAS (n)

From Latin epiphonema,
from Ancient Greek
ἐπιφώνημα (epiphōnēma).
A reflection which
sums up a discourse.



# Ways to Woo

Swipe left or swipe right? The dating industry is feeling the love. There has been an explosion of apps for every taste – from cuddling partners (CuddleUp), matches curated through DNA (SingldOut), to partners based on mutual dislikes (Hater). While the medium may have changed, remarkably this is an industry which has stood the test of time: before the internet, there were personal ads, and before that, lonely shepherds etched images on bark to communicate their longing for human contact.

IAC, the majority owner of Match Group (a 24-year-old US company), is one of the leading companies in online dating. It owns four out of the five most popular dating products in the US, with its products including Match.com, Hinge, PlentyOfFish, and Tinder. The latter is an app which, having launched in 2012, has now made

over 20 billion matches. Match Group's simple premise – to apply technology to a inefficient market – has global appeal: the company has grown worldwide with almost no marketing, and its dating services are offered in 42 languages in more than 190 countries.

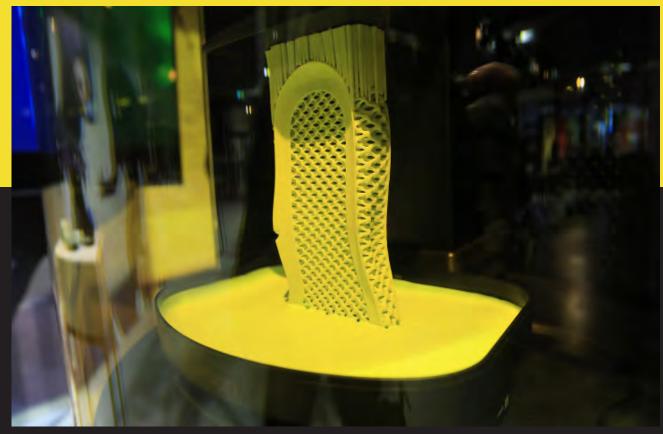
Naturally, others want a slice of this growing pie. Along with a proliferation of niche apps, and private companies such as Badoo and Bumble, Facebook announced last year its intention to enter the dating industry; benefiting from both global distribution and a trove of personal data. But with an estimated one-in-three relationships globally now originating on a dating site – and this figure anticipated to increase as the next generation starts dating – there's still plenty of room for growth. Love is, after all, universal.

# **Printing Progress?**

As a firm, we have had exposure to 3D printing for some time; an umbrella term for additive manufacturing techniques in which three-dimensional objects are built from sequential layers of material. Long Term Global Growth's investment in Stratasys in 2014 reflected 3D printing's nascent potential to disrupt the \$12 trillion manufacturing industry. However, as with other disruptive innovations, 3D printing experienced a period of premature hype: our subsequent sale of Stratasys in 2016 reflected this slower-than-expected adoption of the new technology - along with additional cultural concerns following acquisitions and mergers.

More recently we have been looking at Carbon, an unlisted 3D printing company based in Silicon Valley. Could things be different this time? Carbon's proprietary technology, pioneered by chemist and founder Dr. Joseph DeSimone, is an entirely novel approach to 3D printing. Legacy technologies have three key limitations: speed, quality, and material choice. 3D printing takes a long time, rendering it uneconomical; the layered process of 3D printing means printed parts are mechanically weak, with uneven surface finish; and there are limited choices of materials.

By using both light and oxygen, Carbon can print parts far faster and in a continuous process. Crucially, this eliminates the layered structure of legacy technologies, ensuring parts are mechanically superior. And by applying polymer chemical science to 3D printing technology for the first time, Carbon has the potential to create polymer parts with an almost infinite range of properties. The technology is already being applied to myriad industries - with noticeably greater customer interest. While Adidas, with whom Carbon manufactures 3D-printed soles, was its first major partner, demand for Carbon's technology spans dentistry and ophthalmology to consumer electronics. We will continue to closely follow the fastgrowing demand for Carbon's 3D manufacturing with interest.



 $A \, 3D \, printed \, sole \, for \, an \, Adidas \, AG \, Future craft \, 4D \, trainer \, is \, produced \, by \, a \, 3D \, printing \, machine, \, manufactured \, by \, Carbon \, 3D \, Inc.$ 

### Private Access

Baillie Gifford has been investing in late-stage unlisted companies for several years. Today, our private investments span over fifty highgrowth businesses, with over US\$2 billion of our clients' capital deployed. Importantly, we believe such investing is of benefit to all our clients and makes us better public market investors. Not only do we learn about potential threats to, and opportunities for, our public investments, but we also get to know the next generation of public businesses earlier, developing meaningful relationships with management.

Unlike in public markets, private companies choose their investors. As long-term and thoughtful holders of exceptional growth companies around the world, (to our gratification) we have rapidly gained early access to the future generation of great public growth companies.

Three recent new investments for Long Term Global Growth – Spotify, Meituan and NIO – were all previously held privately by Baillie Gifford. These companies demonstrate both the diversity of sources of ideas, and the value of the relationships created by investing in these late-stage private companies.



Long Term Global Growth portfolio manager Mark Urquhart tries out a NIO ES8.

For instance, in 2015 we were introduced to Meituan, China's leading platform for services, through our public investment in Tencent, which owns 20% of the company. Similarly, we were introduced to the founder of NIO, a company at the forefront of China's electric vehicle revolution, by Baidu's founder CEO Robin Li - and were subsequently given the largest allocation for a public investor in NIO's IPO. With Spotify we had many accumulated years of company knowledge and building relationships with management, from our first meeting in 2013 and subsequent investment in 2015, before the company went public in 2018.

Our reputation in public markets has granted us access to exceptional private companies. In turn, holding such companies privately has led to much deeper analysis of our public holdings. We believe this is a virtuous circle, of benefit to all our clients.

...we have rapidly gained early access to the future generation of great public growth companies.

# **Subliminal Selling**

It is no longer sufficient for brands to rely solely on traditional marketing methods to capture the attention of the millennial consumer. Media trends such the move to online streaming, and the shift to mobile have rendered traditional "top of the funnel" advertising strategies such as TV ads and magazines far less effective. This is particularly true for a generation ever more wary of broadbased advertising, far removed from hyper-personalised content driven by recommendations.

As such, we increasingly see brands adopting social media marketing strategies, with influencers – personalities who amass a following on social media platforms – a critical component.

Facebook (particularly Instagram), YouTube (owned by Alphabet), and Snap have been key beneficiaries of this rising influencer marketing trend; today, the fastest-growing online method for customer acquisition. Content-driven marketing campaigns created by personalities with significant followers are far more influential to consumer purchasing behaviour than generalised billboards extolling the virtues of a non-descript brand.

China's equivalent to the western influencer is the KOL – Key Opinion Leader. In 2018, Alibaba invested in Shanghai-based Xiaohongshu (Little Red Book) – a Chinese ecommerce company where KOLs are critical to attracting user traffic. Founded in 2013 to create a community where users could find recommendations about foreign fashion and cosmetics, Xiaohongshu can be thought of as a supercharged mix of Instagram and Pinterest. By attracting KOLs to generate content on its platform, Xiaohongshu has quickly created a trusted social community beloved by an engaged, largely female, millennial demographic.

While influencer marketing is nothing new – celebrities have long graced the pages of fashion magazines – it is the rise of the internet, the democratisation of social media, and the distrust of large brands, which have all helped render today's influencers and KOLs so powerful.

...Xiaohongshu can be thought of as a supercharged mix of Instagram and Pinterest.



# **Shopping** with Friends

Social commerce, or social shopping, is a nascent subset of ecommerce. It incorporates a broad array of purchasing patterns including group buying, retailers adding social features within mobile apps, and purchases integrated into social media. While the west has seen a lukewarm (albeit slowly growing) reception to social commerce – the 'buy button' within Twitter, for example, never really took off – in China, it's a different story.

China's huge online retail market – surpassing \$1 trillion in 2017, and twice the size of the US – has long been dominated by ecommerce behemoths Alibaba and JD.com. However, with the introduction of social commerce by Pinduoduo, this dynamic is changing.

Launched in 2015, Pinduoduo, a shopping platform for value-for-money products, has quickly become the fastest-growing ecommerce company globally. In just three years it has achieved 330 million annual active users, processed 4.3 billion orders, and signed up 1 million merchants. Importantly it has also expanded ecommerce's reach to lower income and older demographic groups.

Pinduoduo introduces the concept of a 'team purchase'. It eschews the traditional ecommerce model whereby consumers plug in a keyword and then pick out an item after sorting through the options. Instead, shoppers are encouraged to browse, then message friends and family – predominantly through Tencent's WeChat - to achieve group-buying discounts, discuss the purchase, post videos and share reviews. The experience, which incorporates gaming and social media, is more akin to shopping with friends at a mall than buying alone from a faceless website.

How long will the west need to wait until social networks fully integrate the shopping experience and we have our 'Facebook for products'?



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# **Scooting Ahead**

What does the rapid spread of shared cars, dockless bikes, and electric scooters say about the future of urban transportation? Over the past few years, starting with China and expanding into the US and other densely-populated western cities, we have seen an explosion of so-called micro-mobility solutions; emerging

modes of transport which aim to solve the transport logistics that arise from a journey's first and last mile. Why is this the case?

Cars are under a lot of pressure. The best mode of transport is always the most convenient. Cars used to fulfil this role, parked nearby at home or at work – but with growing urban density, congestion, and environmental legislation, they are increasingly less accessible. Then consider the falling cost of batteries and energy storage in contrast to the stalling costs associated with internal combustion engines. This has catalysed the astonishing rise of electric transport alternatives. In the US, a car is used just 4% of the time, but is the biggest household expense.

So, with roughly 60% of trips in the US under six miles in length, shared transportation often is both the most convenient and affordable option.

This trend has not gone unnoticed by ride-hailing platforms such as Uber and Lyft. Increasingly they recognise that future transportation needs to be multi-modal, and are investing accordingly – moving from pure ride-sharing companies to full transportation providers. Electric bike and scooter companies such as Bird, Lime, and Jump are leading this micro-mobility revolution – and reaching ever-increasing private market valuations.

But there are still clear growing pains: with the recent explosion of dockless systems, not only is there the added complexity of maintaining and charging fleets of vehicles, but also the associated legislative and cultural push backs. Will vandalised bikes littering streets become the new normal as bemused city-dwellers react with both indignation and delight?

In the US, a car is used just 4% of the time, but is the biggest household expense.

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# CURIOUS ABOUT THE WORLD