

OPPORTUNITIES IN FOCUS

THE FUTURE OF DATA

WHY THE TECH GIANTS WILL SURVIVE REGULATION

At the beginning of this century, it appeared that the internet revolution would empower private citizens at the expense of the state. The assumption was that social networks would create "people power" and it seemed that some political movements like the Arab Spring of 2011 were driven by social media. But the rising band of autocratic nationalist leaders who have emerged in the last decade or so – from Mr Putin to Mr Duterte to Prince Mohammed bin Salman – drew a different lesson. They perceived an opportunity for governments to become the leading mediators of information so as to tighten their political control.

In recent months, one of the key players in the control of cyberspace – Facebook (NASDAQ:FB) – has become embroiled in controversy for breaching its codes on data protection. Some observers have even predicted its demise. The other controlling giant of the internet, Google (Alphabet NASDAQ:GOOGL), has also come under fire. Both companies' share prices dipped but have now largely recovered.

But maybe, at a time when the internet is increasingly coming under the control of nationalist-populist governments, Facebook and Google should be considered for what they are: data machines that facilitate the free flow of information between citizens (albeit with biases). True, Facebook effectively makes data available to third parties while Google does not. A third behemoth, Amazon (NASDAQ:AMZN), collects data and uses it to sell products from its online global store – in unimaginable quantities. The fourth tech giant, Apple (NASDAQ:AAPL), also collects customer data but generally uses that data in benign ways to enhance its products. The last of the "Big 5", Microsoft (NASDAQ:NSFT), powers our computers and, therefore, makes the internet happen.

This month I want to ask how these five data giants will suffer in a regime of tighter regulation of data. It has become fashionable to argue that social media/data companies should be regulated "like utilities" - or so many people argue. But, at the end of the day, who would you trust most to own your most intimate secrets - Facebook CEO Mark Zuckerberg or Russian President Vladimir Putin?



"THE TECH GIANTS, WHO SPEND EYE-WATERING SUMS ON POLITICAL LOBBYING, SEEM TO HAVE RUN OUT OF FRIENDS IN WASHINGTON."

Tech giants accused

This has been a difficult year for the PR gurus working for the tech giants of Silicon Valley and its environs. Facebook is accused of abusing our data and possibly even assisting the Russians to subvert the electoral processes of Western democracies. Apple supposedly doesn't pay its taxes and is turning our children into illiterate smartphone addicts. Amazon is using its market power to destroy the high street/main street. And Google is using its monopoly control of the internet to push its own products. YouTube (owned by Google's parent Alphabet) has even been accused of encouraging terrorism. Facebook and Google combined are supposedly stealing news from ailing media companies in order to sell targeted ad campaigns. Both are invading our privacy. Only tough regulation, so the argument goes, will address these issues.

The tech giants, who spend eye-watering sums on political lobbying, seem to have run out of friends in Washington - not to mention Brussels and London. In Washington, even senior Republican politicians who are normally pro-billionaire and who favour light-touch regulation have taken umbrage, because all the tech giants seem to be inclined towards the Democrats and were openly anti-Trump in the 2016 presidential election. As for the Democrats, despite Mr Zuckerberg's liberal credentials, they now suspect that Facebook swung the election for Mr Trump – just as ardent Remainers in the UK often suggest that it was Facebook which lost them the Brexit referendum.

Diane Feinstein, the Democratic Californian senator, warned recently: "You created these platforms...and now they are being misused. You have to be the ones to do something about it – or we will". This view is widespread in the corridors of power in North America and Europe. But of course no such sen-



Amazon: an illegal monopoly?

President Trump, whose instinct is normally to oppose greater regulation, would like to break-up Amazon – not so much because it misuses customer data but more likely because Jeff Bezos (Amazon's founder, Chairman, President, CEO and major shareholder) is a political opponent. Mr Bezos personally owns the *Washington Post*, which has pursued a virulently anti-Trump agenda since the President's inauguration last year. Mr Trump also believes that the US Postal Service undercharges Amazon for deliveries.

Some liberal commentators in the USA have likened Mr Bezos's Amazon to John D Rockefeller's Standard Oil. That notorious company came

to an end in 1911 when the United States Supreme Court ruled that it was an illegal monopoly under the anti-trust Sherman Act of 1890.

Amazon's current valuation may seem astronomical – as I write it is trading on a P/E ratio of 254! But, as I wrote recently, it is now piling into consumer staples with own-label brands of household goods at a time when the power of established branded goods is on the wane. If it could come to dominate the consumer products market with its own label products, it could generate huge additional sales and profits. While there are lots of people out to get Amazon (and Mr Bezos), its customers are still voting for the company by the billion with their clicks. Amazon will get much bigger before its enemies confound it.

timent is expressed in China, a country already protected from cyber-barbarians by *The Great Firewall*.

Gillian Tett in the Financial Times – one of the few commentators to have foreseen the Financial Crisis of 2008

- recently wrote a piece entitled *Face-book or Google -which should worry us more?* I found this depressing because it seems to me that these two behemoths, obnoxiously powerful as they are, are in fact all that stand between us and the Iranian Mullahs, Chinese



Communist Party apparatchiks, Russian cyber-bots and the rest. Not to mention the government of the USA.

And we should not be surprised that they harvest our data. If the product is free, then you are the product. Most of us avail ourselves of the extraordinary potency of Facebook's and Google's product for nothing: in the case of Facebook - the ability to keep in touch with friends and colleagues and exchange news and information between interest groups that command our attention; and, in the case of Google, the ability to track down, quite literally, all the information in the world. As we reveal things about ourselves on Facebook, and as we search for things on Google and its other manifestations (YouTube and so on), so we leave a trail of clues as to our likes, dislikes, political affiliations, shopping habits, fears and concerns...and much, much more.

Ms Tett concluded that Google, though superficially more benign because it does not share data with third parties, has a much more potentially pernicious influence. This is because search engines have the power to manipulate people's searches from the very first character that they type by means of the *autocomplete* (prediction) feature. This can nudge people in a particular direction whether they intended to go there or not. This tends to lure users into digital echo chambers where their opinions are validated by other likeminded users.

YouTube in retreat

YouTube, which was acquired by Google in 2006, has experienced a fall in advertising revenues as advertisers have taken fright at the prospect of being associated with unsavoury and inflammatory videos. In January, YouTube announced that it would no longer allow advertising channels that fail to generate less than 4,000 viewing hours in a year. That is a bar below which thousands of smaller users will fall. YouTube was based on the concept that independent (and amateur) film makers could supplement their production costs by generating advertising revenue. That is now more difficult.

In any case, Google probably has much more data about us than Facebook has. Most smartphones are now powered by Android - a Google operating system which is connected to the search engine and Gmail (email platform) plumbing. But not even Google knows as much about us as does Amazon, which sometimes gives one the impression that Mr Bezos can read our minds...

The "data" we give Facebook or Google or Amazon is freely given. What is more concerning is how governments, particularly autocratic ones, might



mine that data for their own sinister purposes – if only they could get their hands on it. And don't underestimate governments in "democratic" countries either. Five years ago Edward Snowden revealed to the world via WikiLeaks the extent to which the US National Security Agency (NSA) (and the UK's MI6) was using data analysis to keep tabs on its own citizens. This is the new normal.

The spat between Mr Zuckerberg and Mr Cook

In mid-March, it was revealed that Cambridge Analytica, a British data analytics company which was engaged by Mr Trump's US presidential campaign team, had accessed the data of a now estimated 80 million plus Facebook users' data. Facebook's corporate reputation took a pounding and Mr Zuckerberg endured weeks of acrimony. He was hauled before Congress where he was given a two-day grilling during the week of 9th April. One of his lieutenants, Mike Schroepfer, Facebook's Chief Technology Officer, also appeared before a public session of the UK parliament's Digital, Culture, Media and Sport Committee on 26th April. Then Mr Zuckerberg was then questioned (rather passively, I thought) by a committee of the European Parliament on 22nd May. Each appearance was accompanied by contrition and apologies.

Facebook was asked what he would do if he were in Mr Zuckerberg's shoes. Mr Cook drew a distinction between Facebook's and Apple's business models, saying "I wouldn't be in this situation". He said that Apple, the manufacturer of the iPhone, refused to use data harvested from customers in order to target ads at them. "We care about the user experience and we're not going to traffic in your personal life".

Mr Zuckerberg hit back in an interview with the Vox website, describing Mr Cook's comments as "extremely with the view with

Mr Zuckerberg hit back in an interview with the <u>Vox website</u>, describing Mr Cook's comments as "extremely glib" and "not at all aligned with the truth". He said that in order to build a platform that connects everyone in the world, regardless of their means, a revenue model based on advertising was the only way. He acknowledged that Facebook's ambition of connecting the world had changed further to the "global rise of isolationism and nationalism" – a dig at the Trump administration.

In early April, Tim Cook, CEO of Apple,

Mr Zuckerberg raised the prospect that disputes about content on the social media platform – what is acceptable and what is not – might in the future be subject to rulings by an independent third party. This comes at a time when regulators on both sides of the Atlantic are exploring tighter restrictions on social networks. Brussels even described the Cambridge Analytica revelations as a threat to subvert our democratic systems.

Apple: more than iPhones

Janus Henderson believes that Apple is transitioning to a multi-platform technology company rather than one that focuses on a single product – the iPhone. While the replacement cycle for new iPhones appears to be lengthening (despite the built-in obsolescence issue – apparently older iPhones are designed to slow down), Apple is continuing to invest in the Apple Pay payment platform, media content, Apple Music and the app store in order to further monetise the 1.3 billion active accounts on the Apple iOS platform.

Apple Inc. has lavished cash on shareholders in the first three months of this year and it intends to continue to do so. Apple's shareholders are major beneficiaries from last year's cut in US corporate taxes from 35 to 21 percent. With a mountain of cash in overseas bank accounts suddenly repatriated, Apple bought back \$23.5 billion of its own stock in Q1 2018, a record amount for any US company, according to S&P, and it added \$100 billion to its target for future repurchases. It also paid out another \$3.2 billion in dividends, which it plans to hike by 16 per cent going forwardiii.

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Facebook in the dock

There is absolutely no hard proof that either the Brexit referendum or the 2016 US presidential election were swung by foreign interference. Yet, it now seems likely that foreign-sponsored advertisements promoting political parties may be banned from social media by the UK government under proposals currently under consideration in Whitehallⁱⁱ. The UK government under Mrs May also wants social media platforms to take a more pro-active role in policing political interference from abroad.

In April, the *Sunday Times* ran a story that the Russians had tried to influence the 2017 UK general election in favour of Mr Corbyn. The accusation is that parties coordinated by the

"DISPUTES ABOUT CONTENT ON THE SOCIAL MEDIA PLATFORM – WHAT IS ACCEPTABLE AND WHAT IS NOT – MIGHT IN THE FUTURE BE SUBJECT TO RULINGS BY AN INDEPENDENT THIRD PARTY."

Fake news is old news!

The way people talk about the prevalence of fake news - encouraged by Mr Trump's constant parroting of that phrase - one might think that this idea came out of social media. Actually, it has been with us throughout recorded human history. I recently described the Bayeux Tapestry - which President Macron is generously lending to the UK (even though it rightfully belongs to us) as a piece of 11th century fake news. Most of Shakespeare's history plays are attempts to legitimise the accession to power of the Tudor dynasty - fake news. In the 20th century, fake news was called propaganda. Nazi Germany and Soviet Russia even had ministries of propaganda. Now, anyone with a grievance can go online and set up their own ministry of propaganda.

Russian state re-tweeted Mr Corbyn's pronouncements, using automated **Twitter (NASDAQ:TWTR)** accounts or "bots".

In early May, Facebook was exercised to ban foreign ads targeting Irish voters in the Republic's 25th May referendum on its abortion laws. It continued to run ads from Irish customers. American groups had been exposed as using pro-life ads to influence the vote. Google went further and banned all advertising in respect of the Irish referendum. Twitter imposed a ban on ads relating to the Irish referendum from the outset. Given that one Catholic user group wrongly suggested that abortion caused breast cancer, the Irish government has said it will propose new laws to regulate online political campaigning.

Then, in Washington, the House Intelligence Committee issued a list of 3,500



Facebook and Instagram ads that had been used to sow discord in US politics. They were supposedly linked to a Russian "troll factory" called the Internet Research Agency. The US midterm elections in November will be a litmus test, as these will be the first US elections since the allegations about improper Russian intervention in the 2016 elections. Expect accusations of nefarious interference.

Facebook's US\$19 billion takeover of WhatsApp in 2014 would be a much more controversial acquisition today. And the adverse attention created by recent reputational damage has diverted attention away from some of the company's grand designs – such as its proposal to offer free internet to remote parts of the world using high altitude helium balloons.

Social media: changing demographics

Last year, it became apparent that teens and twentysomethings were abandoning Facebook in favour of two platforms which are more driven by exclusively image-based content: Instagram (owned by Facebook) and Snapchat (owned by Snap Inc. (NYSE:SNAP)).

Instagram was launched by Kevin Systrom and Mike Krieger in October 2010 and rapidly gained popularity with one million registered users in two months, 10 million in a year, and ultimately 800 million as of September 2017. In April 2012, Facebook acquired the service for approximately \$1 billion in cash and stock. Over 40 billion photos have been uploaded to the platform. About



"MORE TEENS AND TWENTYSOMETHINGS ARE REMAINING 'FACEBOOK-NEVERS' WHO BYPASS FACEBOOK ALTOGETHER."

one quarter of the UK population was using Instagram by the end of last year according to research firm <u>eMarketer</u>.

Those teens that have remained with Facebook tend to be logging on less frequently and spending less time on the platform. More teens and twentysomethings are remaining "Facebook-nevers" who bypass Facebook altogether. This has fostered the trope that Facebook is for oldies - oldies being of course people over 30 years old (like Mr Zuckerberg and myself). Facebook's market penetration is still unrivalled, however, with 2.2 billion user accounts worldwide (29 percent of the world's population) of which about 32.5 million regular users in the UK (about half of the country's population).

A confluence of change: social media and cryptocurrencies

It was only a matter of time before social media platforms developed their own payment systems. Last month it was reported that Facebook is considering the launch of its own cryptocurrency using blockchain technology. This would allow its 2 billion or more users to make electronic payments by means of a digital currency^{iv}.

Reportedly, senior Facebook supremo David Marcus, until now head of the firm's Messenger app, has been put in charge of the project. Mr Marcus was the founder and CEO of Zong, which was acquired in August 2011 by online payments giant PayPal (NASDAQ:PYPL), where he was appointed President. He is said to have been an early backer of Bitcoin. He is on the board of Coinbase, the cryptocurrency exchange. Mr Marcus is credited with the introduction of Messenger's P2P payment platform which was released in the United States in June 2015.

There is an irony in so far as, in March, Facebook banned ads for cryptocurrency investment schemes because of the prevalence of scams in that arena. China's largest tech companies already dominate payment platforms. **Alibaba** (NYSE:BABA) operates *Alipay*, but this seems to have been overtaken of late by *WeChat Messenger*, facilitated by Tencent (HKG:0700).

Digital currency enthusiasts are already calling the putative digital currency *FaceCoin*. We know that digital currencies have not fared well of late – but Facebook could change that. I have predicted that non-sovereign digital currencies will be outlawed soon...But

Snapchat: a poor investment

Snapchat is a multimedia messaging app which was created by Evan Spiegel, Bobby Murphy, and Reggie Brown, former students at Stanford University, and developed by their vehicle Snap Inc. Snap was listed on the stock market in March 2017. Currently, the company's shares are trading at less than half of their initial launch value of \$27.

One of Snapchat's unique selling points is that pictures and messages are only available for a short time before they become inaccessible. The app has evolved from originally focusing on person-to-person photo sharing to presently featuring stories of 24hour chronological content. The Discover function permits ad-supported short-form entertainment. Snapchat has become notable for representing a new direction for social media accessed overwhelmingly by smartphone. It emphasises its users' ability to interact with virtual stickers and augmented reality objects. As of February 2018, Snapchat had 187 million daily active users, of which about 14 million are in the UK.

what if the crypto-currency in question were backed by the US government...?

The Al imperative

The revenue models of both Facebook and Google are based on targeted advertising (driven by data mining); but how they achieved their traffic impels them to create more and more sophisticated computer technology. Just consider how Facebook can recognise pictures of your friends: image recognition (like speech recognition) is a basic form of Al. Last year, South Wales Police became the first UK police force to make an arrest of a wanted man using facial recognition systems attached to a surveillance vehicle.

Al is often described as the development of *machines that think* – though thinking means many things. Software capable of exhibiting (or replicating)

"A SURPRISINGLY LARGE NUMBER OF US ARE ALREADY INTERACTING WITH (BASICALLY) INTELLIGENT MACHINES IN THE FORM OF AMAZON'S ALEXA, APPLE'S SIRI AND GOOGLE'S HOME."

several different kinds of human intelligence is called *general Al.*

In early May, Google unveiled a machine that was capable of making phone calls on people's behalf. The *Duplex* artificial voice software almost perfectly imitated a human at the end of the line and successfully booked a haircut and then a table at a Chinese restaurant – without arousing any suspicion that it was a robot. Duplex can even make human-like thinking noises like *um* and *hmmmn...*All this raises questions about how such technology might be abused by unscrupulous parties in the future if machines can imitate humans

It seems that Google has re-focussed back from robotics to Al. In June 2017, Google's parent company Alphabet sold <u>Boston Dynamics</u>, a world leader in robotic humans and animals, to the Japanese tech giant **SoftBank** (TYO:9984).

Just think of the economic implications. It is estimated that in the United Kingdom alone nearly one million people work in call centres. The figure must be very much greater in India. And on the day of Google's presentation, shares in **Booking Holdings (NASDAQ:BKNG)** (owner of restaurant reservations giant OpenTable) plunged by 6 percent, wiping over \$5 billion off its market value.

A surprisingly large number of us are already interacting with (basically) intelligent machines in the form of Amazon's *Alexa*, Apple's *Siri* and Google's *Home*. I recently managed to confuse Alexa by asking her whether Aquinas' *ontological truth*^v was correct. She thought about it and then answered that she was not able to assist in this regard. At least we know that computers are not truly intelligent yet. But they are going to get intelligent – really intelligent – very soon.

Amazon's *Echo* is already recording and analysing our speech within the home. What are they going to do with all this data? And, supposing an unfriendly government were to hack into all this data and use it for their own ends? We deserve reassurance – but little is forthcoming.

Last year, it was even reported that Facebook is developing technology that would enable users to communicate with one another using only the power of thought – telepathy, in short. The experimental technologies division which occupies Building 8 at Facebook's headquarters in Menlo Park, California, has been working on optical neuro-imaging systems that would allow people to type words just by thinking about them at speeds of up to 100 words per minute.



The team is headed by Regina Dugan who, like many others, joined Facebook from Google. She previously led the Defence Advanced Research Projects Agency (DARPA), an agency of the United States Department of Defence. Ms Dugan told Facebook's annual developer conference that such a technology might enable people to share thoughts directly, regardless of language. Thus, Douglas Adams' extraordinarily useful Babel Fish, which

featured in the *Hitchhiker's Guide to the Galaxy*, might not be so outlandish after all!

I have written previously in Master Investor about Google's project to realise quantum computing (QC). Suffice to say here that if any quantum computer, the theoretical science of which is understood, could be created, it would provide an almost unimaginable increase in computer processing capacity and speed and could be used to provide solutions to mathematical problems which are currently beyond our grasp. When we combine quantum computing with AI, we enter the realm of science fiction where all kinds of extraordinary things become possible though not without substantial risks to us poor feeble humans.

Of course, there are many questions about AI – most of them as yet unanswered. How could machines make intelligent, considered decisions without ethics? If they need to be ethically intelligent as well rationally intelligent, whose ethics should they adopt? What happens when intelligent robots get involved in warfare? Should thinking robots be accorded rights?

Significantly, Britain is emerging as a hub in Al research. On 22nd May, **Samsung (KRX: 005930)** announced its intention to locate its Al research centre in the UK. The company is following in the footsteps of Google and Microsoft, which have done the same.

Outlook for the tech giants

One way to think about the tech giants such as Facebook, Google, Apple, Amazon and Microsoft is that they are meta-corporations: post-modern states located in cyberspace. They are truly global, and they reach deep into their users' and clients' psyches regardless of national, linguistic, cultural or religious affiliations.

Unlike states, they exist in order to make money – not least for their shareholders. As such, it is unlikely in my view that they wish to harm or disadvantage their users. When Mr Zuckerberg talks about *communities*, I really believe he means well. Similarly, Google's house motto of *Do no evil* is equally well intended (which is not to say that it is incapable of evil).

Modern states, on the other hand, which have weaponised the internet, are out to use our data against us - if they can. One of the main issues that Facebook and Google must face up to is how hostile intelligence agencies have infiltrated them to influence opinion. So far, their response has been inadequate - but at least they are now aware of the problem.

At the end of the day, of whom should we be more scared: social media platforms or autocratic states? Mr Zuckerberg or Mr Putin? Or indeed Mr Trump - since the USA is most certainly more advanced than Russia in the realm of cyber-warfare? At least Facebook operates within the glare of public scrutiny while certain states are actively conducting hacking attacks and gathering data - actions for which they are not called to account. How actively involved the US intelligence agencies are in cyber-warfare is a subject I shall return to soon.

So, will more regulation bring an end to the alleged abuses of the five tech giants? Commentators like Irwin Stelzer foresee that there will be fines aplenty for perceived bad behaviour. There will be programmes to oblige them to raise awareness of the dangers of addiction to smartphones and social media. There will be new regulatory bodies set-up to curb fake news and to adjudicate on appropriate content - staffed no doubt mostly by representatives of minority groups.

Facebook, in particular, will probably face a ruling at some point that it is not just a platform but indeed a publisher: as a result of which it will be held ultimately responsible for all the content it facilitates. There is already a move to force Facebook to dispose of Instagram.

Google, which has already been found guilty under EU law of using its dominant search engine to promote its other products, may face a similar ruling in the USA. Both may become subject to explicit consent agreements before they can mine users' input data. Amazon is likely to find that proposed acquisitions of smaller competitors will be subjected to much closer scrutiny.

But none of this adds up to the demise of the tech behemoths. I believe that calls to regulate social media are poorly reasoned. Tax them effectively - yes: that is something that President Macron has moved up the agenda for Europe as a whole. But, the more governments set out to control social media and data management, the less free citizens will be to collect, analyse and exchange information - something which is absolutely at the core of a free, democratic society.

Gillian Tett has been persuaded by a psychologist that Search engines can sway our minds in powerful and largely unnoticed ways. In which case, we should be spending more energy teaching people how not to be framed in the psychological sense of that term - using thinking skills. Personally, I call it critical thinking. Behavioural economists such as Daniel Kahnemann have written reams of books on this and it would be well within the competence of big data to configure programmes that inform people exactly how and why they are being manipulated (if they are not doing this already).

But, I am much more worried by autocratic governments (plus America and, potentially, the EU) that can sway our minds in powerful and largely unnoticed ways - and there is abundant evidence that this is already happening. Just consider how Google has been constrained in China. Or compare the powerful but endearingly gauche Mr Zuckerberg with the former Malaysian Prime Minister, Dr Razak, who made it a criminal offence to disseminate fake news. (Though, of course, he was the arbiter of what was fake news.)

One thing we learnt from the congressional grilling of Mr Zuckerberg was that the senators and representatives on Capitol Hill, the leaders of the most tech-savvy nation in the world, have very little understanding of the issues. One venerable senator even asked Mr Zuckerberg how Facebook generates revenue. Members of the European Parliament in Brussels were not much more sophisticated.

You may think that that is not a problem because the business of regulation is carried out by state agencies which are staffed by "experts". I am not so sure. Bureaucracies, even when they recruit high calibre people, are inherently stupid.

In Homo Deus, Yuval Noah Harari explains how, in the modern mindset, the concept of data has become the key to our understanding of the world. That the world is made of data is something that resonates with both scientists and political thinkers alike. The politicians have now become alarmed that they were behind the curve - as most of us already knew. Harari points out that nobody voted for the internet, yet decisions made by technology companies far from public view have created:

"A lawless zone that erodes state sovereignty, erodes borders, abolishes privacy, and poses perhaps the most formidable global security risk...But it is much harder to change an existing system than to intervene at its inception..."

If the internet had been invented by a committee of the great and the good, it



might be less open to abuse. As it is, it reflects both human brilliance and human frailty. We had better forget about the notion of personal privacy that we had before the internet age - it is not possible to return to the pre-internet world. It is no good blaming Facebook or Google or Amazon – it is the venality of the human race that we should most regret.

Regulation will have all kinds of negative unforeseen consequences - including a likely curtailment of freedom of speech. But then, arguably, the 19th-century notion of representative democracy is in decline anyway. Before we rush to regulate these tech giants, we should reflect that they are a bulwark against intrusive, autocratic governments in the age of the new nationalism and cyber-warfare.

Action

While technology companies stand to lose out from the regulation of social media, they are much more than just internet portals. They are Al hubs. Now is not the moment to get out of technology - despite the

prospect of more onerous regulation. Investors cannot afford not to be exposed to the big technology stocks and their suppliers. One fund which has consistently allocated to the tech giants discussed in this article is the Janus Henderson Technology Fund (ISIN:GB0007698847), which returned 13.51 percent to its shareholders in the 12 months to the end of March

About Victor

Victor is a financial economist, consultant, trainer and writer, with extensive experience in commercial and investment banking and fund management. His career includes stints at JP Morgan, Argyll Investment Management and World Bank IFC.

- See Zuckerberg hits back at 'glib' Cook, by Matthew Garrahan, Financial Times, 03 April 2018.
- See: Social media may be banned from taking overseas cash for political ads, Insight, The Sunday Times, 13 May 2018.
- See: http://business.financialpost.com/investing/rpt-apple-plows-u-s-tax-cuts-into-record-share-buy-
- See: Facebook plot to launch own currency, by Danny Fortson The Sunday Times, 13 may 2018, page 3.
- God is perfect. Non-existence is an imperfection. Therefore God exists.



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