

Taming the Tech Titans – Levelling the Digital Playing Field

Introduction

Can I first of all thank you all for being here, and thank CodeNode for hosting us again and for being such a friend to the Liberal Democrats.

It might seem strange to make a speech about taming the tech titans here at a tech hub.

But I would argue the contrary. The building we are in is a centre of innovation; it is a place of start-ups and of ideas...

In setting out some of the challenges the world faces today – through its reliance on a few big data companies –

I do so precisely to promote insurgents in the digital market place. I seek to address how we make this crucial sector a consumers' – not a suppliers' – market.

Not long ago, the spread of the internet was seen in almost entirely positive terms.

Here was a service offering boundless opportunities for consumers to communicate, learn, enjoy, shop and experiment and for entrepreneurs to develop new digital applications.

If there were 'bad guys' around it was the old-fashioned telecom companies who dragged their feet on universal access at high speeds or governments...

...especially in authoritarian countries, trying to stop the spread of this liberating force.

For young people in particular the multitude of apps and the connectivity provided by social media, opened up a playground for positive experiences. Politicians in democracies saw the potential of the new means of communication and embraced it.

The current landscape looks rather different and less wholesome.

Just as when the pioneering, competitive, oil rush over a century ago gave way to Rockefeller's new monopoly in the form of Standard Oil, the Internet's infrastructure is being built around a handful of companies of immense and growing power: Google, Apple, Facebook, and Amazon (GAFA), along with their Chinese equivalents, Tencent, Alibaba and Baidu.

And just as Standard Oil once cornered 85% of the refined oil market, today Google drives 89% of internet search, 95% of young adults on the internet use a Facebook product, Amazon accounts for 75% of E-book sales, while Google and Apple combined provide 99% of mobile operating systems.

The challenge, is fundamentally different from the exercise of power by traditional monopolies or oligopolies – by oil majors, railway barons, electricity generators, diamond miners, steel cartels, auto and aerospace giants, and hardware and software manufacturers.

All of these were able to exercise control over pricing and earn profits beyond what was obtainable in competitive markets. Most obviously these involved finite resources, whereas the supply of data is potentially infinite.

And the new internet giants mostly provide a 'free' service to the public, albeit paid for indirectly by the sale of advertising space and the bundling and sale to commercial clients of 'free' user data. Whatever these companies do, they are not price 'gouging' – since their headline price is always 'zero'. It is the forces underlying this apparently 'free' bounty that politicians must address.

The internet giants have progressed from heroes to villains very quickly for several overlapping reasons.

The first is that they have been used as a conduit for content which society regards as unacceptable: the promotion of terrorism, depictions of child sex abuse, and hate speech. Google (and YouTube, part of its empire) and Facebook in particular stand accused of complicity or incompetence.

The second reason is that one particular type of content – online news – is no longer simply competing with established news providers but has been used

systematically – by state and non-state actors – to spread false information and to corrupt democratic elections, as in the USA in 2016 and the ‘Brexit’ referendum.

The inability or unwillingness of digital platforms, Facebook in particular, to curb the misuse of the data it collects has led to its being seen as the problem rather than the solution.

Third, the new internet giants operate in a largely borderless world where their main source of profit is intangible intellectual property rather than measurable ‘things’. This is difficult to track and quantify and has turned national tax authorities into largely powerless bystanders.

Fourth, as I’m sure many of you here in the audience today can attest to, there are real concerns that while the tech giants may have begun as innovative upstarts, they have by virtue of their sheer size become a barrier rather than a boon to entrepreneurship.

By acquiring potential challengers before they become a real threat, spending millions lobbying governments to ensure their interests are protected, and tying in users through the sheer scale of features and interaction they offer, the tech giants’ dominant position often leaves entrepreneurs feeling they have no choice but to sell up, or close up.

This is bad for innovation and bad for consumer choice – two things the tech giants once stood for. But an obvious response is that this litany of abuses and negative side effects is hardly new, and the inevitable concomitant of new technology.

Nuclear power has the same underlying technology as nuclear weapons. Many drugs can be life enhancing or lifesaving but fatal at the wrong dosage or if used to feed addiction. Oil is a source of heating, power and transportation but also a pollutant. Insecticides can eliminate malaria but also devastate ecosystems.

Similarly, the internet and digital platforms have often been a force for good, empowering activists and investigative journalists in fighting for democracy and exposing corruption, and amplifying important campaigns like the ‘Me Too’ movement and anti-gun marches in the United States.

The conclusion must be that there is always a balance to be struck between encouraging innovation and improving regulation. The central issues in the digital economy are that regulation has failed to keep up, and that growing market concentration now risks strangling innovation.

I would like to explore how our response can and should evolve.

My approach is a fundamentally liberal one: to entrench the data rights of individuals, to introduce transparent, practical mechanisms for combatting extreme and fake content, and to level the playing field for small businesses by updating the techniques used to challenge the monopolies of the past.

We must act now to ensure that the internet achieves its early promise as a forum for democracy, a hub for individual creativity and an incubator for entrepreneurship.

Datafication, Digitisation and Platforms

The new oil is data. Data is the raw material which drives these firms and it is control of data which gives them an advantage over competitors.

These companies have acquired their pivotal position by providing a service or platform through which data can be extracted, collected and used. But this trade takes place under rules set almost exclusively by the supplier.

There is a natural tendency to monopoly. Economies of scale reinforce the position of a company which is the first to establish a global network.

There are what economists call 'network externalities': the more who use the network, the more valuable it becomes for both its users and its owners.

We join Facebook because our friends and contacts are already on it and they, in turn, draw in others – all the while increasing its attractiveness to advertisers and software developers.

There are now 1.9 billion Facebook accounts, accounting for a quarter of the world's population. Why would an individual or company opt for an alternative with less reach?

Operating systems – Windows for personal computers; Android for smart phones – tend also to concentration because they provide basic services that others need in order to run.

Innovation remains possible but controlled. Anyone can write an app for an Apple iPhone but it needs to pass Apple tests and Apple keeps a share of the sales.

E-commerce sites like Amazon and eBay are platforms like physical markets where people like to shop; but independent traders outside the market place are squeezed out.

Smaller challengers that show a potential for using large amounts of data are likely to be on the radar screen for purchase by the first-tier platforms.

Facebook, for example, absorbed two major potential competitors – Instagram and WhatsApp. When this approach failed with another competitor, SnapChat, there was an aggressive campaign to copy SnapChat until Snap (the parent company) lost advertising revenue and its share price tumbled.

And the giant companies are best placed to absorb the multiplication of data. The most far reaching aspects of 'datafication' are in the interconnectedness of devices (including household appliances and instruments involved in healthcare for example).

An estimated 5.5m devices a day came online in 2016 and this is expected to quadruple in four years as part of the 'internet of things'. This massive increase in volumes of data has meant (according to IBM) that an estimated 90% of the data in the world has been created in the last two years. The growth of artificial intelligence gives extra momentum to this process. And this data risks being captured by a small number of platforms.

Monopoly and Its Abuses

The major technology companies are big – very big (the market value of Apple is well over twice that of the world's largest private oil company, Exxon). But we have to ask 'is big also bad?' Not necessarily. Economies of scale benefit consumers as well as producers. Temporary monopoly – such as patents– can stimulate innovation which may not happen in highly competitive. And we have already seen in the digital world that sclerotic giants can be overhauled by innovative, insurgent, companies (IBM by Microsoft). So, what is the problem?

Most patently and fundamentally to the whole problem, there is clear evidence of monopoly or "supernormal" profits". Martin Wolf notes that the market capitalisation of Apple is around seven times the book value of its equity capital (or paid up shareholding) which he attributes to expectation of "supernormal" profits, beyond what could be expected in a competitive market.

There is some competition between platforms: giants fighting giants, Godzilla versus King Kong. Amazon and Google are both moving into the Internet of Things. Facebook is moving into online convenience shopping along with Amazon and Google.

It is possible that one or more of the giants will devour or seriously damage one of the others; but this would lead to even further concentration of economic power. Smaller competitors, meanwhile, are acquired before they become a threat.

The nature of competition and monopoly or oligopoly is subtle and rapidly changing. While Amazon, for example, encourages small online merchants (competitors) through its “Marketplace” retail service, it could decide to change its terms if it felt the merchants were a threat...

...And although Facebook offers free internet facilities to consumers in developing countries, this supposed philanthropy is also a way of building up its user base.

Then there is evidence that the platforms are actually destroying not just competitors but competition in the markets in which they operate.

Google and Facebook have been sucking up two thirds of all digital advertising revenue in the US (in 2017), because they can use their data to target advertising at potentially the most lucrative markets. One of the effects of this dominance is to suck revenue from media companies – TV channels; newspapers – which rely on advertising. We are seeing the death of regional newspapers and the erosion of media plurality in general.

The fact that the Murdoch family has decided to sell 20th Century Fox to Disney reflects a recognition that it cannot compete in the long run with digital platform companies, leading to greater consolidation in the media and entertainment business. In another sector, prescription drugs, a pharmacy chain merged with a big insurance company to be able to confront Amazon in e-commerce.

Here in the UK, Amazon has aggressively exploited its dominant position and has used its far better margins to invest in acquiring significant amounts of customers and their data.

Figures from the Retail Week online footfall index suggests that internet shopping drove 88% of the growth in shopper visits from September to December 2017.

Amazon's desire for customers to transact through it is demonstrated further by the move into grocery and clothing. Currently there is no regulatory framework that can ensure that it does not end up as the world's biggest marketplace outside of China (where Alibaba is tussling to achieve the same status).

Meanwhile, the unchallenged power of these giants is even be exercised in relation to national governments.

Companies find themselves able to *choose* to pay less tax in societies where they have a lot of users or employees by allocating their profits to low-tax jurisdictions.

This issue is not unique to digital platforms but it is uniquely easy for tech companies to avoid tax. Their assets are overwhelmingly intangible, intellectual property and brand value, and it is easy to assign and reassign accounting values in such a way as to minimise tax liabilities.

While taxation remains stubbornly national, the tech companies' business is inexorably global.

Since that business is largely concerned with the dissemination of information, even long-held conventional concerns about the arrogance of monopoly do not get to the heart of the growing worries about the data giants.

They have the capacity to filter the information we receive as consumers, turning the taps on and off to their own advantage. And they sell information about us to clients with not just business but political agendas. They can influence not just the goods and services we consume but how we vote and, indeed, what we think. Their algorithms can be used to disseminate information – true or false – to selected groups of people.

The power this gives Facebook, for example, over its two billion users is immense. And even if today's owners of such platforms are benign and well-intentioned individuals, the systems they have created and now monopolise may threaten democracy as we know it.

AI may prove to have great benefits in bucking this trend, or it could exacerbate it. So Governments and politicians of all political complexions need to be thinking now about to harness that developing technology for human good.

Mark Zuckerberg has invoked AI as a potential means to provide a mechanism for screening out 'fake news' or dangerous disinformation....

But since the profit motive alone will not bring this screening about, it must be a matter of concern that the priorities and direction of AI will likely be heavily influenced by the same handful of data giants. Governments, too, must examine their capacity to be influencers in the field.

Solutions

Optimists can take the view that innovative insurgents will do the work for them, in due course, eroding monopoly power. They would say that government intervention is potentially more damaging than letting markets and technology find their own solutions. They could cite the example of Microsoft which no longer has the world's dominant operating system because it failed to make the jump from PCs to mobiles. And for billions of customers and millions of small and medium sized companies the digital platforms continue to offer abundant opportunities for recreation and business.

But the immense power and reach of a small number of companies does raise the issue of how to regulate them in the public interest to prevent abuse.

There is much to be gained by all of us from the digital world, yet we stand at a cross roads.

One way leads to monopoly and abuse. The other way will continue the road to empowerment and liberation.

Confidence in data use and security; confidence in the integrity of information; confidence in online identities are at the heart of this.

If the Digital giants don't show resolve in these areas it is time for Government in the UK, in Europe and globally to act and to act decisively. The question is how.

I am assuming that this audience would discount Chinese-style nationalisation – and control over the Internet. I do too. But the Chinese will argue that their model is superior to the Wild West System in our non-Communist world. Unless that Wild West is tamed the authoritarian model will grow in appeal.

Anti-Trust Policy

The most prominent alternative approach is the traditional, Western anti-trust model which has been employed most vigorously by the European commission on behalf of EU governments. Each of the main technology companies has been or is being investigated. Apple was recently fined €13bn for tax avoidance. And Google was fined €2.4bn for market abuse involving competition between its search engine and price comparison sites.

The problem with the Google case, in particular, is that it was initiated seven years ago when conditions were very different from today. In other words, the process is very slow.

The think tank Respublica argues that the sluggish response of the European Commission is but one example of the failure of the competition authorities to understand the problem they are dealing. To give just one example, competition

authorities have failed to spot the significance of dominant firms acquiring smaller businesses: Google for example has acquired 167 companies since its EU Commission inquiry commenced and Facebook 69 over the same period.

The US competition authorities have a history of 'trust busting' which should, in theory, make the internet giants nervous. The break-up of Standard Oil and, later, of Bell and AT&T showed what aggressive action against nascent monopoly could accomplish without undermining innovation.

Yet in practice the US authorities have shown little inclination to move against the tech giants. In practice they have come down harder on companies seeking to combine to confront competition from the platforms than on the platforms themselves.

Above all we need a change in the way competition authorities deal with mergers, getting away from the traditional concern with short term consumer welfare (measured through prices). Mergers should instead be challenged where they may reduce innovation, following the principle "competition is the mother of invention". The type and total amount of data a combined company would control should also come into consideration, as has been recently argued by Japan's Fair Trade Commission and the European Commission

Enforcement also needs to be sped up greatly to reflect the speed of technical change. It may also be desirable to steer companies towards partnership agreements as opposed to downright acquisition, and we should ensure that startups and scale-ups have the access to funding that would enable them to withstand pressure from their larger rivals.

But there may also need to be some aggressive 'trust busting' as Barry Lyon of the Open Markets Institute has argued (he was dismissed from another post allegedly because Google objected to his views).

National government and, even more so, supranational bodies like the EU can and should look to break up enterprises where size is detrimental to the economic wellbeing of the country, its citizens and its capacity for innovation.

There is a case for splitting Amazon into three separate businesses – one offering cloud computing, one acting as a general retailer and one offering a third-party marketplace. Other examples would be Facebook being forced to divest itself of Instagram and WhatsApp as a condition for operating in the EU, creating two new social media networks. Divesting Google of YouTube would be another.

What is striking that the most effective competition authority in the capitalist world – the European Commission – is probably the only body with the clout to take these decisions. The UK could quite obviously never do it alone.

As the world grows closer together, Britain commits an act of serious self-harm by doggedly setting itself apart from the power of shared sovereignty with our neighbours.

When it comes to regulating the growth industry of this century – data – Brexit will be like giving up shared influence over where, when and whether it rains, in return for absolute power over a tiny umbrella.”

Regulating content

In addition to addressing the primary problem of monopoly, there are three other issues to consider. The right balance between ‘free speech’ and responsible publication; the transparency of digital advertising algorithms; and the rights of individuals to own their data.

I believe there is a case for setting up an independent standards body to act as watchdog for the digital platforms in moderating content. Platforms above a certain size would be compelled to join.

This body would uphold common policies governing the identification, monitoring and deletion of content which offended an ‘offline criminality test’. That is where statements made *online* would breach incitement or harassment laws if made *offline*, the companies should act. The body could be funded by Government

directly or by the tech platforms themselves through a compulsory levy, as in the case of the Pension Protection Fund.

A shared set of standards enforced by an external body would go a long way in restoring trust in social media platforms, and put an end to the current unsatisfactory approach of Government telling individual companies off when they step out of line.

It would also be a far more liberal solution than the draconian system recently put in place in Germany, heavily criticised by Human Rights Watch among others.

Making companies solely responsible for extreme content published on their platforms, has led to excessive self-censorship, and monstrous backlog of court cases and appeals. The German system also risks reinforcing monopoly power, given only the largest platforms can pay for the armies of administrators needed to effectively police content.

A further general principle should be one of transparency. In practice this means that the algorithms used by the data companies should be available for close inspection by regulators acting for democratically elected governments, along with access for regulators to the programmers responsible for designing and operating them

Privacy

In that vein, another set of reforms with a liberal spirit is to strengthen data ownership and privacy rights for individuals. There is already a variety of initiatives in this area, above all the EU's the General Data Protection Regulation, which comes into effect imminently and which establishes citizens' control over their data. The new rules require any use of individual data to be accompanied by explicit permission – opting in rather than opting out – requested through a written statement in clear language.

Another key feature of GDPR is data portability, enabling a consumer to move their information – and with it their value as a customer – to alternative platforms. The limited use made in the UK of portability rights for bank accounts and energy supplies suggests that the hassle factor will limit its use; but, at the margin, it can change behaviour.

The strength of the GDPR lies first and foremost in its formidable sanctions: data breaches must be notified to the data protection authority within 72 hours and there are fines of €20m or 4% of annual revenue (of the company at fault), whichever is the greatest. There are doubts as to how effective enforcement will be in a world where the technology is evolving rapidly. But the right principles have belatedly been established.

We should also look carefully at the fundamental economic issue of whether any company which uses data from individuals to make money should pay the owner of that data for its use. A group of economists from Microsoft and the Universities of Columbia and Stanford have convincingly argued that data should be seen as a form of labour, and more specifically, regarded solely as the property of those that generate it, unless they agree to sell it.

Looked at in another way, it is astounding that people have been so happy to give up something so valuable without charge. If individuals were paid every time their data is used anywhere in the world, in a mirror of the worldwide copyright structure, there would be a mechanism for redistributing the profits of those with most to *gain* from technological advances, into the pockets of those who are most likely, in the short term at least, to lose.

By putting data in people's hands and empowering them to choose who to sell it to, personal data would no longer be monopolised by the tech giants, and innovative insurgents could buy the data they needed instead of letting themselves be bought up to access the giants' data pools.

Conclusions

The internet and the giant data-based companies have been a major liberating force and that is in danger of being forgotten with the current focus on monopolistic abuses, the misuse of personal data and the dissemination through social media of hateful, misleading and extreme content.

It is still true that billions of people now use the same medium, free of charge, to become better informed and better connected; to consume and enjoy higher quality and cheaper goods and services; and to carry out hitherto laborious tasks quickly, easily and simply.

I want the Lib Dems to be at the forefront of identifying and supporting new digital technologies.

For example, I want Britain to be a leader in Fintech, and – indeed – I helped to launch the peer to peer lending market through the new British Business Bank. A group of Lib Dems, led by Baroness Kramer is working with the Fintech industry to aid its growth.

I am separately launching a study into how Med Tech can be used to make the NHS a more effective service.

Working with our impressive Business and Entrepreneurs Network, I want to ensure that the technology sector remains a thriving hub of innovation and entrepreneurship, not an oligopoly dominated by a few entrenched giants.

As liberals we must show that to be radical in this field is not to be statist. We do not accept a Hobson's Choice between the entrenched private monopolies which are developing in the status quo, or direct state control over the internet, as is being developed in China.

In trying to provide a balanced approach, policy needs to develop in four main ways.

The first is to update competition policy to revive the trust-busting spirit used to counter concentrations of economic power in earlier generations, adopting it to business models where products are (on the surface) free. Competition authorities

should be primarily concerned with takeovers which stifle innovation or involve the acquisition of large quantities of valuable data and, although far more difficult, breaking up companies where competition is clearly being stifled. And we must make sure that companies pay their fair share of tax by designing international rules that can accurately determine where value is being created. In the meantime, there is a role for a tax based on turnover of the kind France and Germany are developing. I was pleased that when I raised this idea with the Chancellor Monday, he was supportive of it.

Second, the internet companies should be held accountable for extreme content posted on their platforms through the establishment of a new independent standards body governing the handling of such content. This would put an end to the current "Wild-West approach of self-regulation and haphazard government responses to tech company failures,

Third, the concerns over the manipulation of data can be met in part through greater transparency, requiring search algorithms to be made available to the authorities and by requiring commercially used databases to be available for a variety of uses. Such principles become even more important as the data giants develop the use of AI where there is even greater potential for monopoly abuse.

And, fourth, there has to be greater clarity and certainty around privacy and the idea that individuals own their own data and it cannot be used without their authorisation. The EU's new General Data Protection Regulation is a big step forward in this direction, but it clearly needs to be tested in practice. It is the beginning not the end of the story. We should seriously consider the possibility of compensating people – or society more broadly – financially for the data they currently hand over for nothing.

All four initiatives will require Britain to be a truly global player, leading these debates rather than following on the coattails of others. I suspect that most of us are agreed in this room that the most effective stage on which to play that leadership role is the European Union. Indeed one of my last actions as Secretary of State was pursuing in Brussels a digital single market, something Britain is now walking away from.

So in this crucial year, as we campaign for a public vote on the Government's Brexit deal, we should be unapologetic in recognising that the challenges inherent in taming the tech titans also bolster our case for an 'Exit from Brexit'.

Since data and the global business of developing technologies is the issue which will define this century every bit as much as the industrial revolution did the nineteenth century, it is impossible to deal with a party's approach to it at a single moment in a single speech.

As part of my effort to ensure the Liberal Democrats lead this agenda, I am asking my Deputy, Jo Swinson, to help me take it forward.

We shall in due course assemble an expert commission and we will work with our party's members and our conference to keep us at the forefront of this challenge.

And I know that very many of you, here, will be crucial to that effort.