

# Responding to the new economy: an exercise in scalable learning

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## The argument

How policy makers and regulators respond to the new economy depends on the frame within which they approach their task and the nature of the task they think they are being asked to undertake.

Drawing on the work of John Hagel and Mark Moore especially, this paper argues that the task should be defined primarily as “scalable learning” to move the insights, assets and capabilities developed in and across the new economy as quickly and effectively as possible from the edge to the mainstream.

How well that transition occurs will have a big impact on how successfully Australia’s “public production” systems adapt to, and take advantage of, the experiments and innovation which fuel much of the new economy’s work and impact.

## Uber: a route out of the French *banlieues*

A recent article in the *Financial Times*<sup>1</sup> explored the social and economic impact of Uber in the *banlieues* of northern and south eastern Paris, suburbs notorious for their complex conditions of disadvantage and, in recent times, violent unrest.

“Without this job,” the story quotes Baba, a high-school dropout who was sentenced to four months in prison at the age of 17, “maybe I would be in prison.” By 2012, when he had been in prison again, Uber had turned up and a friend had started a minicab business, using the Uber platform. Now 24, Baba has been working 10 to 12 hours every night, six days a week. In 2014, he gained a licence to operate his own chauffeur service. He wants to set up a transport company with his sister in the suburbs of Paris. The story concludes, “the rise of Uber...represents something else: a foothold in the job market for thousands of uneducated youngsters of immigrant descent.”

As the story goes on to make clear, Uber appeals to people without a diploma or work experience. A business school study of Uber drivers in France showed they were overwhelmingly male (98%), younger than established taxi drivers and more have experienced unemployment (25% of them were jobless before turning to Uber, and nearly half of those had been unemployed for more than a year). The author of the study, Professor David Thesmar, noted that “Uber is a social game changer...starting a company is usually the best way for immigrants to integrate. That’s what Uber shows: if you make it easier for those youngsters to set up companies, it’s more efficient than any urban policy or state subsidies.”

You would assume that the policy and regulatory response to these developments would be to do everything possible to facilitate their spread. After all, this particular manifestation of the new economy – the ride-sharing phenomenon made possible by the combination of new “platform economics”, ubiquitous computing and some clever app development – breaks poverty cycles, creates jobs and intrudes a whole new element in one very important public production system,

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<sup>1</sup> <http://www.ft.com/intl/cms/s/0/bf3d0444-e129-11e5-9217-6ae3733a2cd1.html#axzz42j0BiI26>

in this case, the “production” of safe, liveable and productive suburbs where people can find work and avoid poverty and the separate, but related production system focused on employment, skills, growth and opportunity.

But of course there are other interests at play, not the least being those heavily invested in the existing tax business in Paris. Despite a bipartisan commission established by former President Sarkozy finding that opening up the taxi market could create between 35,000 and 45,000 new jobs, the *Financial Times* story reports that, under pressure from the taxi lobby, there are plans to restrict Uber and other ride-hailing platforms.

The regulatory response has been to restrict access to the cheaper, more efficient collective licencing provisions under which Uber drivers were working to vehicles carrying between 2 and 9 people, not just a single passenger. In a single policy swoop, the government has made it illegal for Uber drivers licenced under this method to pick up and drive a single passenger, which is the bulk of their business.

The government claims it is trying to prevent “the excesses of a rapidly expanding industry” including new forms of exploitation. And there are stories of drivers having to work long and potentially risky hours, especially in the wake of a fare reduction by Uber.

The story is emblematic of the new economy dilemma. On the one hand, entrenched lobbies of producers work hard to prevent disruption that threatens their position at the commanding heights of a public production system from which they do well. Claims of safety, quality and other risk factors are harnessed to a concerted effort to maintain the status quo.

On the other hand, and to quote sociologist Thomas Kirszbaum, “Uber’s success in the *banlieues* is a spontaneous response to decades of public policies that have failed to combat discrimination and boost job creation...and now, once again, we’re pondering measures that could have a disproportionate effect on an already vulnerable population.”

At its most (potentially) dramatic, this is a story about the way the new economy, if it is allowed to flourish, does more than offer people jobs. And Uber can offer something beyond economics and access to jobs. It can improve social cohesion at a time when France is badly divided over how to engage its Muslim population.

## Public production system

The idea of a social or public production system is taken from a recent ANZSOG workshop with Harvard Professor Mark Moore in which he suggested the best way to think about the shifting relationship between government and the non-government sector – the ostensible focus of the discussion – was to understand it as part of a larger story of the evolving political economic of social or public production systems.

These are systems, with their own complex supply or value chains of people, assets, financing, policy and so on, designed to debate, agree, confirm and then execute against the public outcomes we want to achieve in different public industry sectors for example, a better deal for people with disability (NDIS), affordable housing, reduced congestion and improved mobility in cities, improved health and social care or whatever the focus might be.

The thinking builds on his earlier work on public value and provides a useful frame within which to have the discussion about the best regulatory and policy response to the new economy.

The question ought not to be simply “how should we regulate the new economy?”, but rather “how should we regulate the new economy, given its role in the new political economy of the public production systems that determine the social and economic outcomes we want to achieve”?

A minicab business owner with 140 drivers makes observation at the end of the story:

“It’s two worlds meeting at last...you’ve got young people from the suburbs transporting Parisian lawyers...artists, people coming from China or Australia. All of a sudden, social barriers and prejudices vanish. They talk. They have a better understanding of each other.”

## Introduction

This paper was prepared as a contribution to a discussion, convened by the Institute of Public Administration (IPAA), Western Australia, about the policy and regulatory implications of the new economy.

Interest in and concern about, the new economy and its implications has been rising not just in Western Australia, but across Australia and indeed in many countries around the world. Often anchored by contentious debates about how to regulate new economy businesses like Uber and AirBnB, the interest in these relatively new economic and social manifestations of largely digitally-driven innovation has prompted some fundamental questions about the role of government and about how policy makers and regulators, should be responding.

The emergence of these new business models in previously relatively stable and tightly regulated markets, including taxis and hotels, has led to a range of reactions, including hard lobbying by existing market actors to resist changes on the one hand and, on the other, enthusiasm amongst new entrants supported by large numbers of customers who are voting with their feet and their wallets to engage these new services.

## What is the new economy?

There are three distinct ways in which the story of the new economy is being told.

One story is the rise of the collaborative or sharing economy (although there are those who argue that these are not synonymous terms and we should focus more on the idea of a “collaborative economy” as the overarching concept, with the sharing economy as a part, and a contested part, of that model).<sup>2</sup>

This is an increasingly familiar story, being told through the experience many of us are now having with services like Uber and AirBnB or with countless other examples in which, broadly speaking, pervasive computing and cheaper and more accessible social technologies meet the emergence of “platform economics” (basically, cloud-based platforms for exchange, transactions and relationships that are relatively easy and cheap to build and support). That combination is creating the opportunity for a whole range of social, civic and commercial services whose business model offers the prospect of higher quality, more responsive and often cheaper services to which customers and citizens are inevitably, and predictably, drawn.

**HireUp** is a great example of what happens when platform economics meets pervasive computing to disrupt often very conservative and occasionally “stuck” institutions, in this case, disability care.<sup>3</sup>

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<sup>2</sup> <http://www.resilience.org/stories/2014-05-05/the-sharing-economy-capitalism-s-last-stand>

<sup>3</sup> This description borrows from the description of the business of the Borondi Group based in California, co-founded by Adrian Brown who is now the CEO of Data61, the new data-driven business that combines CSIRO’s data team with the former National ICT Australia or NICTA. Borondi claim to be “leaders, not followers” in the new economy, which is where they play, and driven by 5 trends – “exponential technology advancement, global confusion about the business impact of pervasive computing, redefinition of corporate structures, lower capital needs to form and prove new ventures and larger reserves of non-traditional capital” <http://borondigroup.com/>

Hireup likes to describe itself as a cross between eHarmony and PayPal, creating essentially a simple and easily accessible cloud-based platform on which several important functions can be undertaken.<sup>4</sup>

People with disabilities can match their needs and circumstances much more directly and easily with people who can offer support and care, often in relatively small packets of time and commitments. Those matches get to be much closer in terms of interests and personality, largely because they are driven by people with disabilities themselves.

As well, HireUp offers an exchange and payment capability as part of a whole new employment platform that allows disability carers to take care of much of the employment workload – tax file numbers, employment contracts, payments and so on.

HireUp is the new economy at work, at least in one manifestation. The question for policy makers and regulatory is what to do about them, assuming the overriding ambition is to make sure there are as few unnecessary obstacles in their way to further growth and spread and the mainstream disability services marketplace gets to engage these new models quickly, safely and effectively.

Another version of the new economy story takes as its driving narrative the accelerating pace and intensity of technology and the associated digital revolution.

In this story, the dominant themes are the spread of pervasive and increasingly cheap sensor-based technologies, or what Cisco calls the “Internet of Everything”,<sup>5</sup> the rise of new associated capabilities in finding patterns and meaning in the resulting cornucopia of data through better, faster analytics capabilities, the rise of artificial intelligence and machine learning and the “rise of the robots” and the threat to existing patterns of employment and skills.

Add to that list things like 3D printing’s ability to shift patterns and practices in pretty much every sort of manufacturing, and the already-present evidence of its impact in areas like health, housing, defence and education, together with the continuing spread of cloud-based mobile technology and computing capability, and the “new technology” economy story begins to fill out.

The rapidly rising interest in blockchain of “distributed ledger” technologies represents the next likely frontier of the interaction between the new economy and the policy and regulatory response.

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<sup>4</sup> <https://www.hireup.com.au/>

<sup>5</sup> <http://ioeassessment.cisco.com/>; a great example is the work Cisco and others are engaged in for the Square Kilometre Array telescope, a venture that has a powerful Western Australian presence and contribution across business, government and the university sectors; this story illustrates how some of these technology and digital transformation pieces come together – computing, data, analytics, innovation, citizen science – to create whole new ways to conceive of, and deliver, a significant public production system, in this case linked to big outcomes in science, productivity, prosperity, jobs, investment and competitive advantage in the digital economy. [www.zdnet.com/article/how-citizen-data-scientists-will-help-astrophysicists-look-back-to-the-big-bang/](http://www.zdnet.com/article/how-citizen-data-scientists-will-help-astrophysicists-look-back-to-the-big-bang/)

In a recent report, the UK Chief Scientist<sup>6</sup> made this observation about the potential for distributed ledger technologies to dramatically shift the way in which many public services are designed, produced and regulated.

“In distributed ledger technology, we may be witnessing one of those potential explosions of creative potential that catalyse exceptional levels of innovation. The technology could prove to have the capacity to deliver a new kind of trust to a wide range of services. As we have seen open data revolutionise the citizen’s relationship with the state, so may the visibility in these technologies reform our financial markets, supply chains, consumer and business-to-business services, and publicly-held registers.”

A third way to tell the story of the new economy is perhaps a function of the other two stories – the collaborative economy and the technology-fuelled digital transformation of pretty much every part of our lives – and calls out a much deeper transformation of the architecture of capitalism itself.

This version of the story takes as its starting point that the period we’re living through is characterised by an epochal shift in some of the core assumptions and design principles behind the liberal capitalist system under which we’ve been working since the Second World War.

In this conception, the issue is not so much the new tools and platforms for interaction and value creation that technology and the digital revolution are undoubtedly providing. Nor is it the more or less interesting, but still largely ‘edge’ phenomena of the collaborative or sharing economy, some of which its more stringent critics argue are little more than minor, and not always especially elevated, incremental adaptations of largely unchanged and often exploitative business models anyway. A good example is the writing of Evgeny Morozov, whose concern is that the sharing economy might turn out to be another example of the kind of “technology solutionism” against which he has argued more forcefully in the broader context of digital disruption and the new economy.<sup>7</sup>

This third story is infused with a bigger narrative about capitalism and the need to either replace it altogether or adapt it more dramatically to give effect to the urgent demands of big challenges like environmental degradation and rising inequality.

For example, this is the vision of the “new economy coalition”<sup>8</sup>, whose colours are nailed unequivocally to a mast of moral necessity:

At the New Economy Coalition, we’re driven by a belief that all our struggles—for racial, economic, and climate justice; for true democratic governance and community ownership; for prosperity rooted in interdependence with the earth’s natural systems—are deeply interconnected. Rising to the

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<sup>6</sup>[www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/492972/gs-16-1-distributed-ledger-technology.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/492972/gs-16-1-distributed-ledger-technology.pdf). “A distributed ledger is essentially an asset database that can be shared across a network of multiple sites, geographies or institutions. All participants within a network can have their own identical copy of the ledger. Any changes to the ledger are reflected in all copies in minutes, or in some cases, seconds. The assets can be financial, legal, physical or electronic. The security and accuracy of the assets stored in the ledger are maintained cryptographically through the use of ‘keys’ and signatures to control who can do what within the shared ledger. Entries can also be updated by one, some or all of the participants, according to rules agreed by the network.”

<sup>7</sup> <http://www.ft.com/intl/cms/s/0/92c3021c-34c2-11e3-8148-00144feab7de.html#axzz42joBil26>; his book opining against the risks of technology solutionism sets many of these criticisms out at great length <http://www.amazon.com/Save-Everything-Click-Here-Technological-ebook/dp/B00B3M3X2G>

<sup>8</sup> <http://neweconomy.net/about>

challenge of building a better world demands that we fundamentally transform our economic and political systems.

We must imagine and create a future where capital (wealth and the means of creating it) is a tool of the people, not the other way around. What we need is a new system—a new economy—that meets human needs, enhances the quality of life, and allows us to live in balance with nature. Far from a dream, this new economy is bursting forth through the cracks of the current system as people experiment with new forms of business, governance, and culture that give life to the claim that another world is possible.

Another example is Geoff Mulgan's book *The Locust and the Bee* is all about capitalism's contradictory impulses for creation and predation and how, in recent times, it appears that predation especially has gained something of an upper hand.<sup>9</sup> He explains that, as a "system in motion", capitalism has always been challenged to work not just in a narrow economic sense, but "as a system that has meaning for the people within it."<sup>10</sup>

He explores how capitalism can transcend its inherent contradictions to think quite differently about its capacity to engage growth, value and entrepreneurship.

Charlie Leadbeater's work on a project called *+Alt Now*, for the Banff Leadership Centre in Canada,<sup>11</sup> speaks directly to this conception of a new economy.

The project seeks to shift the dynamics of a system in which the gains of growth are going disproportionately to those at the top by supporting people with an entrepreneurial mindset who want to change those dynamics, to create an economy which works in human terms as well as financial.

## What is scalable learning?

John Hagel's work at the Deloitte Centre for the Edge has been focused for some time on the consequences and implications of a "big shift" in the pace, focus and intensity of changes in technology especially which are driving exponential change across business, government and civil society.<sup>12</sup>

An early explanation of their work describes the big shift in terms of three "waves" of change and often deep, structural disruption to the conditions for business and economic activity.

The first wave, measured by a "foundation index", is the combination of the rapid spread of digital infrastructure and capability and the dramatic reduction of barriers to entry and movement of people, ideas, goods and services which that infrastructure has unleashed.

The second wave, measured by a "flow index", is the associated new flows of capital, talent and knowledge which are testing institutional and geographic boundaries and often rendering them if not irrelevant, then certainly highly ambiguous.

The third wave, measured by an "impact index", is focused on the extent to which the first two waves are being translated into effective new performance within and across existing institutions and work practices. In other words, how productively are the new digital infrastructures and associated new flows of capital, talent and knowledge shifting the way institutions of business and government work or even inventing new ones altogether?

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<sup>9</sup> <http://www.amazon.com/The-Locust-Bee-Predators-Capitalisms/dp/0691165742>

<sup>10</sup> *The Locust and the Bee: Predators and creators in capitalism's future*, Geoff Mulgan, Princeton University Press 2013

<sup>11</sup> <https://www.banffcentre.ca/programs/altnow-economic-inequality>

<sup>12</sup> <http://www.johnseelybrown.com/bigshiftwhyitmatters.pdf> | <http://www2.deloitte.com/us/en/pages/center-for-the-edge/topics/deloitte-shift-index-series.html>

This isn't the place to go into the detail of the big shift and the way in which its combined forces are driving unsettling demands for a new ethic of institutional design and performance (basically, the shift from "push" to "pull"<sup>13</sup>) which many existing institutions are struggling with. But the backdrop is important for the shift from efficiency to learning as a way to frame how policy makers and regulators should respond to the new economy.

I would argue that institutions likely to both thrive in, and respond most effectively to, the opportunities and risks of the new economy are going to be "big shift" institutions that have learned how to replace an obsession with scaleable efficiency with a new obsession with scaleable learning. And it is the job of policy makers and regulators to make that as easy and obstacle-free as possible.

Scaleable learning is a response to the conundrum confronting existing institutions as a consequence of the exponential pace and intensity of digital-driven change in their operating environments.

For much of the history of economic and business growth, and reflecting a period of greater stability and predictability, organisations and institutions have grown larger and more integrated, harnessing the power of "scaleable efficiency" to drive down costs and improve productivity.

The problem is that scaleable efficiency forces a trade-off between efficiency and learning in an environment where, under pressure from the "big shift" forces for change, failure to learn quickly and bring experiments and innovation in from the edge to the centre can be costly, even deadly. In conditions of increasing uncertainty "we have reached a turning point where success is not defined by scale, but by the ability to learn (and unlearn) more rapidly."

As John Hagel points out:

"If we are serious about redefining the rationale for institutions from scalable efficiency to scalable learning, we will begin to see the far-reaching implications of this shift. It is not something that can be done on the margins of our institutions; it will drive us to reassess the entire architecture of relationships both within and across institutions."<sup>14</sup>

Adopting scalable learning as the architectural design principle for new institutions means adopting three dimensions of scaling.

One is about **transactions**. New economy institutions have to create platforms and systems that allow much higher rates of interaction with people inside, but especially outside, their organisational boundaries. These interactions will often take the form of "question and answer" exchanges in the search for ideas and insight to guide strategy and performance at a pace that will feel uncomfortable when it is compared to the way they are generally used to working.

A second is about **relationships**. New economy organisations will be better at both "fast" interactions and "slow" interactions where the combination of skills, assets and expertise require long term, mutually beneficial relationships to build trust and access to tacit knowledge.

And the third is **learning**. New economy institutions create new architectures of working and engagement that "explicitly seek to accelerate and amplify learning among a growing number of participants," in what Hagel describes as "creation spaces."

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<sup>13</sup> <http://www.amazon.com/The-Power-Pull-Smartly-Things/dp/0465028764>

<sup>14</sup> <http://dupress.com/articles/institutional-innovation/>

These are physical and virtual places where trust-based learning gets to move swiftly from theory and testing to new practice, systems and processes.

## The policy and regulatory response

So the argument is that policy makers should see their task in responding to the new economy as an exercise in scalable learning whose primary objective is to make the transition from the experiments and innovation at the edge to new mainstream operating models as swiftly and safely as possible.

The challenges, within that frame, is to select the right mix of four different ways in which the policy and regulation functions should respond:

- Prohibition – an instinct to stop, reverse or deny
- Permission – an instinct to allow, but only on certain conditions
- Shaping – an instinct to make what is happening anyway more effective and better directed
- Learning – an instinct to accelerate the best of what is happening by understanding it better.

I think most policy and regulatory work includes some combination of all four of those instincts. How they are blended and balanced will depend on circumstances, including the prevailing political and cultural mood and the nature of the activity that is being designed or regulated.

To go back to Uber and the *banlieues* of Paris, it's possible to construe the impulse to regulate in favour of incumbent taxi drivers is too weighted to prohibition and perhaps permission. Perhaps a better response would privilege shaping and learning to work out how to bring the Uber-trialed models of point-to-point transport innovation in from the edge.

Of course the concerns of the incumbents about their livelihoods are legitimate, but perhaps not so legitimate as to effectively blot out the possibility of other modes, in this case, of urban mobility being invented, tested and spread, especially where the new modes command considerable public interest and customer support.

If we want to improve the public production system whose job is to achieve important social and economic goals through better urban mobility solutions, then a form of scaleable learning might prove to be a more productive policy and regulatory response.

In NSW, the regulatory bundle in the case of the taxi/Uber report from Gary Sturgess<sup>15</sup> is pitched pretty well across the different possible policy and regulatory modes, with a political and technical instinct to shape and learn, but recognising the practical need for some properly designed and carefully calibrated "permission" provisions not so much to protect incumbents (although to argue for compensation, where that is proper and appropriate) but to further the wider public interest in issues like safety, reliability and access.

Its summary of the situation and of the response it offered to the NSW Government, which has largely been accepted, is worth quoting at length as it illustrates very well how an instinct to regulate for sliceable learning plays out:

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<sup>15</sup> <http://www.transport.nsw.gov.au/sites/default/files/b2b/publications/point-to-point-transport-taskforce-report-to-minister.pdf>

“The point to point transport industry is facing a number of fundamental challenges and has entered a period of transformation. New entities have begun providing services, disrupting traditional business models. The way services are delivered to customers has fundamentally changed. The market for booked services has been revolutionised by new booking, tracking and payment technologies, and there is the prospect of radical innovation on an ongoing basis, with new service models that will more effectively meet the needs of individual customers, better manage peaks and troughs, and generally deliver better value for service users.

Ridesharing is only the leading edge.

Disruption in the point to point market will be even more profound with the advent of driverless cars, already being trialled in a number of major cities around the world and soon to be tested in South Australia and potentially other jurisdictions around Australia. The warm response of customers to ridesharing provides us with some idea of how the Australian public will respond to these new service offerings, and it seems unlikely that governments will want to hold them back. It will not be enough, however, to graft ridesharing provisions onto the existing regulatory structure. That would preclude the possibility of further innovation in the booked services market from entrepreneurs with entirely different service models.

The National Roads and Motorists Association (NRMA) has signalled its potential interest in becoming involved in the facilitation of booked services, and while it has not provided any details of its business model, it seems likely that it would differ in significant ways from the one offered by Uber.

Simply amending the law by creating a new category for ridesharing would lock existing point to point providers, particularly the taxi industry, into an outdated regulatory framework and business model that would make it much more difficult for them to compete.

The booked services market must be liberalised to facilitate the emergence of these new service models and to take full advantage of the new booking, tracking and payment technologies.

## Some questions

Here are some questions that might be useful as a focus for further discussion about how policy makers and regulators should frame their response to the new economy:

- Does it make sense to frame the task for policy makers in terms of speeding up the process of learning about the dynamics and impacts of the new economy and to turn that learning into a regulatory framework that allows the new capabilities that are being built and tested at the edge into mainstream capabilities?
- What is the consequence of privileging shaping and learning as the predominant policy and regulatory response to the new economy? Is that realistic?
- Is there a fundamental contradiction between the need for a scaleable learning approach to the policy and regulatory response to the new economy and the political imperative to respond to the interests of the disrupted incumbents?
- Are there any circumstances in which a “get out of the way” response by government to the experimentation and innovation of the new economy is either legitimate or necessary?
- Does it make sense to see the policy and regulatory response to the new economy as part of a larger task of improving Australia’s public production systems to achieve better social and economic outcomes?
- Are there ways in which some of the practices and instincts of the new economy – co-design, collaboration and working with the “crowd”, extending the reach and mix of expertise, knowledge and insights in new networks inside and outside the formal regulatory and policy process<sup>16</sup>– could be used to do the policy and regulatory work? In other words, is there a new economy way to regulate the new economy?

## Some new economy reflections

In that sense, what is happening in the taxi or point-to-point transport sector is exactly what is happening in other sectors as consumers become better informed, easy and cheap (especially mobile) communication dramatically shrinks the distance between consumers and producers, and new sources of power, control and influence over what people want to buy and enjoy are emerging.

The current review is not just a review of the taxi industry and how we cope with the rise of services like Uber. It is about how NSW responds to shape-shifting changes in the core operating systems of commerce and government. The answer it comes up with has to make sense in the light of that future, and not be driven by the need to either protect or privilege the past...

These new services are popular because they are cheap, convenient, responsive, high quality and, crucially, shift the balance of power towards better informed consumers and away from producers. Generally, that is a good thing. Whatever regulatory regime emerges from the review should do nothing to either deny or impede that shift. Indeed, it should encourage and work with its instincts and potential.

Levelling the playing field in terms of regulation and policy should not assume the task is to accept current regulatory models and standards as the appropriate benchmark to which all new services have to comply. The regulatory framework should be designed to work for contemporary conditions in which technology has made the basic producer-consumer relationship more transparent, and therefore more accountable.

From **Public Purpose** submission to the Sturges Transport Review, NSW, November 2015

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<sup>16</sup> Beth Noveck’s latest book, *Smart Citizens, Smarter State: The Technologies of Expertise and the Future of Governance* and the research on which it is based, picks up this challenge of improving the quality and impact of the work of the core policy and regulatory practices and institutions of public governance by using technology, among other things, to make them more open, porous and agile. <http://www.hup.harvard.edu/catalog.php?isbn=9780674286054>