
Better Regulation Taskforce

Regulatory review project

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Executive summary

The pace of digital disruption on the economy is unprecedented, bringing with it new business models that challenge existing regulation, and new tools and technologies which are themselves disrupting the way regulation is developed and enforced.

Regulation is important for a well-functioning economy. However, its role and effectiveness has been challenged by digital disruption.

Given the pace of change in technology, the role of the regulator is evolving to be:

- less prescriptive,
- more agile, and
- more outcomes-focussed.

While regulation has, more commonly, been viewed in terms of its role in minimising the risk of harms (such as safety and exploitation), the economic imperative requires a greater recognition of its role in also incentivising greater innovation.

The impact of new technologies on the regulatory system will be twofold. **First**, these technologies will give rise to new business models that challenge the existing regulatory regime. Existing regulators and regulations will become less fit for purpose in being able to oversee the operations of these new business models and new markets, and in some cases, will make no provision for new areas of endeavour.

An example of this is the rapid rise of the sharing economy via digital platforms. The growth of accommodation sharing and ridesharing have presented new business models and ways of transacting that were not covered by existing safety, consumer protection or licencing regulations in the hotel or taxi markets. The sharing economy in Australia grew by more than \$500 million between 2016 to 2017 (Bloom, 2017), highlighting the challenge for the existing regulatory regime in keeping up and new issues to be considered by regulators.

Second, the technologies themselves can help regulators and improve their oversight – improving the adaptability of the system and its ability to embrace change. Technologies have increased the flow of data like never before, and big data analytics and artificial intelligence can assist in processing these volumes of information to provide more evidence-driven insights. There will be a need to consider privacy implications of using and analysing this data, relative to the benefits of combining information – as has been seen in open banking and open government data debates.

The new tools for regulators include sandboxes and ‘nudges’ – informed by behavioural economics. An example of new technology opportunities is the open regulatory platform being developed by Data61 and CSIRO, aimed at reducing the compliance costs for businesses and increasing the efficiency of the regulatory reform process (Data61, 2018).

The upcoming challenges for regulators and the regulatory system have been recognised by the Queensland Government, and it is in this context that the Better Regulation Taskforce has conducted a review of the future of

regulation in a digitally disrupted economy, with a focus on the impacts for small business.

This report presents the findings and recommendations from this research. The analysis has been informed by consultation with industry and government stakeholders in September and October 2018, and supported by three case study examples in freelancing and drones and the Queensland Courts system.

The key recommendations for regulation in an environment of new business models and new tools and technologies are summarised below.

It is important to note that digital disruption enables and necessitates a different approach to regulation. Rather than presenting a short-term list of redundant regulation which can be cut, or a narrow approach to reforming regulation in one sector, these recommendations present a different approach to regulation.

Key recommendations

Recommendation 1: Establish a Queensland Council of Regulators made up of CEOs from key regulatory agencies and departments to discuss and drive action on regulatory reform in an environment of disruption, through adoption of technology to better regulate for the future, and fostering a culture of knowledge sharing and cross-institutional collaboration in regards to best practice regulation, including development of handbooks and shared platforms.

The Council should provide quarterly updates to the Better Regulation Taskforce on key actions progressed by the Council members.

Recommendation 2: Through the Council of Regulators, regulators and the Government should consider and progress action in the following areas of regulation:

- **Performance:** Specify system-wide key performance indicators (KPIs) for regulators in terms of outcomes (not just outputs), promote continuous improvement in performance, and move towards insight driven regulation.
- **Guidance:** Increase the use of guidelines, explanatory papers and codes of conduct to assist businesses in interpreting existing rules, reducing reliance on regulation as a policy lever.
- **Engagement:** Proactively engage with small business to improve the delivery of regulatory objectives.
- **Flexibility:** Focus on regulatory flexibility, and move from prescriptive regulation to a risk-based, outcomes-focused approach in regulating new business models.
- **Data:** Embrace the use of data and big data analysis to inform the development and review of regulation.
- **Skills:** Assess the current state of skills across Queensland regulators, identifying where new skills are required to build capacity, and creating a workforce plan to develop skills to better prepare for a RegTech future.

Recommendation 3: Increase streamlining the way small business interacts between all levels of Government to obtain the approvals and licences they need. This could be achieved through:

- Developing and adopting systems for capturing and sharing information between local and state Government entities to reduce duplicated requests for information from businesses (for example similar to the Easy to Do business initiative being progressed by the New South Wales Government).
- Streamlining of licensing application arrangements between local and state governments to reduce application times and the need for multiple applications where there are parallel requirements from more than one regulator.

Recommendation 4: Establish an Information Unit within the Queensland Government, responsible for experimentation (for example with algorithms) and knowledge transfer across government about what works and to drive co-ordination across levels of government. This unit could be responsible for:

- mapping the extent of benefits to be gained from harmonisation of inconsistencies in regulatory requirements of different regulatory agencies
- looking at the utilisation and efficacy of information that is already being collected, with a view to enhancing data collection requirements and reducing the need for multiple subsequent data requirements
- developing a register of sunseting regulations
- mapping interactions between different sets of regulations for different types of small businesses
- communicating the benefits of e-document management
- “joining up” government data and services (e.g. same registration codes across regulators)
- integrating behavioural insights to increase voluntary compliance.

Recommendation 5: Through the Information Unit, partner with an appropriately qualified organisation such as Data61 to identify opportunities to apply artificial intelligence to optimise processes for users, decrease search and transactions costs, and coordinate across local, state and federal regulators. An initial pilot could be established in the area of regulation and compliance processes in the courts system in Queensland.

Recommendation 6: The Chief Entrepreneur should consider launching a pilot regulatory sandbox initiative (in line with the previous recommendation of the BRT). The particular area of regulation for which small businesses can apply to be granted a fixed-term exemption should be determined through consultations with Queensland businesses. The outcome of a successful pilot should be broader adoption of a conditions-based regulatory exemption framework by the Queensland Government.

Case study-specific recommendations

Freelancing: The Queensland Government can assist in the transition to increasing freelancing in the economy through developing guidance that clarifies individuals’ and small businesses’ obligations and rights.

Drones: Queensland Government to build on the Queensland Drone Strategy action (to develop an education campaign targeted at safe and proper recreational use of drones) by developing education resources to help small business drone users understand their regulatory obligations.

Drones: Queensland Government to work with industry to advocate for changes to the Beyond Visual Line Of Sight (BVLOS) regulations, noting that any relaxation in BVLOS regulations should balance potential productivity gains with appropriate safeguards to ensure that the use of drones BVLOS does not pose undue threats to community safety and national security. In this regard, Queensland Government to monitor developments in BVLOS regulations in international jurisdictions.

Law courts: Support digital transformation of the Queensland court system through addressing legislative requirements for the use of hard copy documents, supporting dedicated retraining to drive cultural change and funding for the move to digital systems. This will reduce costs of access for small business and be foundational infrastructure to support further opportunities such as big data analysis and machine learning.

Summary of other considerations for regulators

This regulatory review has uncovered a number of considerations for regulators faced with new business models and new tools and technologies disrupting traditional regulatory processes. While these are not targeted recommendations for Government, these considerations are important in shaping the approach to regulation in a digitally disrupted environment. It is acknowledged that regulators in Queensland are already making progress in many of these areas.

- In enforcing regulation, regulators should consider approaches other than penalties to support small business compliance with regulation.
- With a changing operating environment and unpredictable circumstances and innovations, Queensland regulators should consider the cadence of regulatory response with a phased approach of legislation supported by business rules.
- Regulators should consider utilising risk-based compliance rather than uniform standards across businesses and individuals.

1 Overview

The pace of digital disruption on the economy is unprecedented, bringing with it new business models that challenge existing regulation, and new tools and technologies which are themselves disrupting the way regulation is developed and enforced.

In Queensland, small businesses accounted for 97.5% of all businesses and employed close to half (44.3%) of all employees in 2017 (QGSO, 2017).¹ Further, the rate of new businesses entering the market is accelerating. The number of small businesses actively trading in Queensland increased by close to 12,000 over the twelve months to June 2017 (QGSO, 2017). The number of new companies registered in Queensland each year has grown by more than 180% since 1999 (from 16,105 new company registrations in 1999 to 45,994 in 2017 (ASIC, 2018; ASIC, 2014)).

Emerging digital technology is resulting in new ways of working for small businesses. For instance:

- in agriculture, farmers can use new technology in drones to survey their crops and livestock;
- in retail, new payment technologies mean that it is now easier for a local designer selling their wares at a market to accept non-cash payments;
- in hospitality, food delivery platforms provide restaurants with new avenues for marketing and attracting customers, and may replace the need for them to have their own food delivery drivers; and
- in professional services, cloud-based technologies make it easier for an accountant to share documents with their clients, enabling a paperless office.²

The acceleration of new business models based on these technologies has changed the business landscape. While these new technologies and business models may promote efficiencies for small business (e.g. by reducing transaction costs), it also presents new challenges or risks not considered before, which might impact on small business, their customers, their employees and society more broadly.

Regulation is important for a well-functioning economy. Historically, the role of regulation has been legislating and protecting through defining, permitting and prohibiting, and as such, has been perceived to impose costs on industry.

Regulation can have a disproportionately significant impact on small businesses because they need to allocate a larger proportion of their

¹ These statistics are based on the ABS definition of a small business, which is that the business employs less than 20 people or is a non-employing business (e.g. a sole proprietor or partnership without employees).

² The use of cloud-based technologies and a paperless office is discussed further in (Xero, n.d.).

workforce to deal with such requirements (Australian Government, 2007).³ According to a recent survey by the Chamber of Commerce and Industry Queensland, based on a survey of 500 businesses, the vast majority of whom were small businesses (74.1%), over one-third (34%) of Queensland businesses are spending more than six hours per week on meeting government regulatory requirements and of those businesses, 30% are spending more than 20 hours a week (CCIQ, 2017).⁴ The types of costs that regulation might impose on businesses include administrative costs (e.g. the cost of staff completing paperwork) and licence fees.

These challenges have been recognised by the Queensland Government, and it is in this context that the Better Regulation Taskforce has conducted a review of the future of regulation in a digitally disrupted economy, with a focus on small business.

Given the pace of change in technology, the role of the regulator is evolving to be:

- less prescriptive,
- more agile, and
- more outcomes-focussed.

While regulation has, more commonly, been viewed in terms of its role in minimising the risk of harms (such as safety and exploitation), the economic imperative requires a greater recognition of its role in also incentivising greater innovation.

This report presents the findings and recommendations of a review of the impact and influence of digital disruption on small businesses, with attention to two key areas: 1) new business models, and how government manages, regulates and prepares for them, and 2) new tools and technologies that might enable regulators to regulate differently. While the review considers the regulatory landscape including local, state and federal responsibilities, the focus is at the state level and what can be done in Queensland.

The analysis has been supported by consultation with industry and government stakeholders (see Appendix A) in September and October 2018. Three case studies have been conducted to illustrate the concepts with real world examples:

- the regulatory environment of freelancing;
- regulation of the use of drones and their application by small businesses; and
- regulatory process in the Queensland Courts system.

The report is structured as follows:

- **Part I: New business models:** presents key considerations for regulating new business models and case studies of freelancing and drones.
- **Part II: New tools and technologies:** details the new opportunities for regulators arising from technology and presents a case study of the law courts system.

³ The extent to which compliance imposes disproportionate costs on small business is discussed in further detail in Productivity Commission (2013).

⁴ This was based on a survey of 500 businesses, where the vast majority (74.1%) of businesses were small businesses.

- **Part III: Recommendations:** summarises the recommendations identified in the report.

2 The role of regulation

Regulations are the rules and policies used by the government to oversee the behaviour and actions of individuals, businesses and the economy.

Regulation is important for a well-functioning economy. There is a role for regulation where imperfections in the market would otherwise result in negative effects for society. For example, a market cannot always account for all the (positive or negative) impacts of a good or service.

In the case of education, there are benefits for society as a whole, which are above and beyond the benefits accrued by the individual. In the absence of government intervention, and regulation where required, education would be under-provided and not sufficiently invested in by society. On the other hand, pollution is an example of a negative impact, which would be higher in the absence of regulation. If a business were to dump its waste into waterways, it would bear little of the direct costs of its actions, including the impact on society and the environment. Regulation on waste disposal prevents this from occurring.

The government uses different **types of regulation** to support a well-functioning market:

- Economic regulation aims to **incentivise** and **encourage** markets to operate in a more efficient way, through regulations on prices, quantity, service and entry and exit.
- Social regulation aims to **protect** societal wellbeing, including the protection of the rights of small businesses, workers, consumers and the environment.
- Administrative regulation aims to **manage** the operation of public and private sectors, including the management of taxes, business operations, and intellectual property rights (OECD, n.d.).

2.1 Spectrum of regulatory approaches

Regulation involves more than one instrument, ranging from guides used to encourage compliance through to strong punitive sanctions (see Figure 2.1).

Depending on the purpose of the regulation, regulations can greatly vary in terms of the level of:

- flexibility and responsiveness;
- protection offered; and
- costs to develop, monitor, and enforce.

Figure 2.1: Different regulatory approaches



Source: Australian Law Reform Commission (2012)

Self-regulation is characterised by industry-formulated rules and codes of conduct, where industry is solely responsible for the enforcement of these codes. Self-regulatory codes and complaints systems are voluntary in the sense that there is no legislation to enforce compliance. Self-regulation can be a more responsive tool than other forms of regulation. Research by the New Zealand Advertising Standards Authority found that self-regulation operates up to three times faster than other forms of regulation (Wood, Ivec, Job, & Braithwaite, 2010).

Quasi-regulation is an arrangement where government influences businesses to comply, but does not explicitly establish government regulation.

Co-regulation is where industry develops and administers its own arrangements, but government provides legislative backing to enable the arrangements to be enforced. This is likely to be used where self- or quasi-regulation are unlikely to be effective.

Direct government regulation is the most commonly used form of regulation. Government is responsible for designing and administering legislation, and ensuring compliance. Within regulation, there are different regulatory approaches, which government can consider. Governments can choose from taking a prescriptive rules-based approach to a more flexible outcomes-based approach that regulates outcomes rather than processes (Australian Law Reform Commission, 2008).

Some issues may be addressed more efficiently or effectively without the government directly regulating the behaviours of individuals and businesses. Other tools that government can use to influence behaviour and achieve similar goals of regulation include:

- providing more information, education, and guides; and
- using incentives and other market based structures (such as taxes, subsidies, quotas, permits).

The Australian Government's Best Practice Regulation Handbook identifies a number of factors that help determine the most appropriate regulatory reform. These include:

1. Severity of the problem – if the problem is high-risk, or of high impact or importance, direct regulation may be needed, particularly if the problem relates to the health or safety of the public. Conversely, a low risk or minimal impact problem may be more appropriately managed via self-regulation.
2. History of the problem – if self-regulation has been insufficient and there have been system compliance problems, direct regulation may be necessary. However, if there is opportunity for the market to address the problem, then regulation may not be required.
3. Cost of regulating – self-regulation should be considered if the time, effort or cost of direct government regulation outweighs its benefits.
4. State of the industry – the more concentrated, mature or competitive the industry, the more likely it is that self-regulation will be effective, particularly where firms have resources and the collective power to drive compliance.

Regulation can have greater impact on small businesses because it represents a larger proportion of their total costs and many may not have the resources or capacity to be across and comply with all the regulations

that apply to them.⁵ As such, the Guidelines require that impacts on small business should be separately identified in Regulatory Impact Statements.

It is important to note that regulation can impact small businesses in two ways – first, as a regulated business, meaning that they may have obligations to comply with certain requirements and second to ensure that the interests and rights of small businesses are protected.

2.2 Developing effective regulation

The development of regulation can be a costly and lengthy process. There are also costs in maintaining regulation and monitoring its effectiveness, ensuring that it remains relevant as business conditions evolve. In a dynamic business environment, it is particularly important that regulation is not considered a ‘set and forget’ exercise, but that a responsive and iterative approach is taken to its development and maintenance.

The compliance costs of regulation for businesses, especially small businesses, are not insignificant, so it is important to ensure that regulation is required and effective. For instance, Deloitte has estimated that the annual compliance costs to individuals, businesses and the public sector of complying with public sector rules is \$67 billion (Deloitte, 2014). This is in addition to the annual administrative costs to taxpayers of creating, administering and enforcing public sector regulations of \$27 billion (Deloitte, 2014). Further, according to a recent survey by the Chamber of Commerce and Industry Queensland, over one-third (34%) of Queensland businesses are spending more than six hours per week on meeting government regulatory requirements and of those businesses, 30% are spending more than 20 hours a week (CCIQ, 2017).⁶

Emerging businesses or industries can also struggle against ill-fitting regulation. Where the regulatory environment does not appropriately incentivise innovation, new business models may struggle to become operational. For instance, fintech (financial technology) start-ups offer opportunities to deliver innovative new technology in the financial services sector. However, existing regulations may require them to hold an Australian financial services or credit licence, which comes at a cost and/or time in an environment where speed to market and access to capital are among the key issues for start-ups (ASIC, 2017). In recognition of this, ASIC is currently operating a ‘regulatory sandbox’ whereby some fintech businesses can test their products and services for up to 12 months without a licence.

The pace of regulation can also be a challenge for businesses and the economy. If regulation occurs too slowly, consumers may not be appropriately protected. If it moves too quickly, there is the risk that it fails to understand what it is trying to regulate, rendering the regulation ineffective.

The Queensland Government has recognised the burden of regulation on small business, with the Better Regulation Taskforce established to provide advice to government on improving regulation to support small business, including advice on addressing unnecessary regulation and red tape.

⁵ The extent to which compliance imposes disproportionate costs on small business is discussed in further detail in Productivity Commission (2013).

⁶ This was based on a survey of 500 businesses, where the vast majority (74.1%) were small businesses.

Recommendation: Establish a Queensland Council of Regulators made up of CEOs from key regulatory agencies and departments to discuss and drive action on regulatory reform in an environment of disruption, through adoption of technology to better regulate for the future, and fostering a culture of knowledge sharing and cross-institutional collaboration in regards to best practice regulation, including development of handbooks and shared platforms.

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- Flexibility: Focus on regulatory flexibility, and move from prescriptive regulation to a risk-based, outcomes-focused approach in regulating new business models.
- Data: Embrace the use of data and big data analysis to inform the development and review of regulation.
- Skills: Assess the current state of skills across Queensland regulators, identifying where new skills are required to build capacity, and creating a workforce plan to develop skills to better prepare for a RegTech future.

2.3 A new challenge

The next wave of technologies – from artificial intelligence, to self-driving cars and drones – is emerging at an accelerating pace. Power and speed are doubling, and/or costs are halving. These technologies will transform industries and the economy through the rise of new business models unlocking and creating value through harnessing these technologies.

The impact of new technologies on the regulatory system will be twofold. First, these technologies will give rise to new business models that challenge the existing regulatory regime – in terms of existing regulations and regulator culture.

Existing regulators and regulations will become less fit for purpose in being able to oversee the operations of these new business models and new markets, and in some cases, will make no provision for new areas of endeavour. The traditionally risk-averse regulator culture will also be challenged in a dynamic technology environment, as regulation will need to respond more quickly to changes and potentially regulate before all implications are known. This may require a more outcomes-based approach to regulation or change to the cadence of regulation (discussed further in section 3.2.2). It will be increasingly important to ensure an appropriate

balance between regulating to protect consumers and not stifling innovation.

An example of challenges to the existing regulatory regime is the rapid rise of the sharing economy via digital platforms. The growth of accommodation sharing and ridesharing have presented new business models and ways of transacting that were not covered by existing safety, consumer protection or licencing regulations in the hotel or taxi markets. The sharing economy in Australia grew by more than \$500 million between 2016 to 2017 (Bloom, 2017), highlighting the challenge for the existing regulatory regime in keeping up and new issues to be considered by regulators.

Second, the technologies themselves can help regulators and improve their oversight – improving the adaptability of the system and its ability to embrace change. Technologies have increased the flow of data like never before, and big data analytics and artificial intelligence can assist in processing these volumes of information to provide more evidence-driven insights. There will be a need to consider privacy implications of using and analysing this data, relative to the benefits of combining information – as has been seen in open banking and open government data debates.

The new tools for regulators include sandboxes and ‘nudges’ – informed by behavioural economics. An example of new technology opportunities is the open regulatory platform being developed by Data61 and CSIRO, aimed at reducing the compliance costs for businesses and increasing the efficiency of the regulatory reform process (Data61, 2018).

The following chapters explore how the traditional role and practice of regulation has been challenged by new business models and new tools and technologies in a digitally disrupted economy, and consider recommendations for the Queensland Government in adapting to this wave of change.

PART I

New business models

3 Digital age brings in new products and business models

The regulatory response to well-understood business models and situations can be straightforward and effective. However, in a world where the pace of digital disruption on the economy is unprecedented, new business models are arising that are challenging traditional regulatory models.

The current conversation around new technologies in the market revolves around uncertainty. Uncertainty about the timing and size of disruption. Uncertainty around the best course of action and prioritising new business models or technologies. Uncertainty of how to approach harnessing these technologies.

Challenges emerge where new business models come up against existing regulation – and in some cases, new business models arise precisely to avoid this regulation.

Key challenges in regulating emerging technology are summarised in the figure below.

Figure 3.1: Challenges in regulating emerging technology



New business models and regulatory disruption: examples

3D printing and prosthetic limbs: Traditionally, prosthetics have been mass-produced, with oversight for safety, quality and performance. However, with the advent of 3D printing and the costs of this technology decreasing, individuals can now print their own prosthetics. This raises two issues: first, under the existing regulatory framework, the production is not subject to third-party oversight; second, it raises the question of who is legally responsible as the manufacturer, see: Matthews (2018).

Food delivery platforms and food safety: Food safety standards apply to food businesses, which require among other things that the businesses ensure that they take reasonable measures to ensure that persons on their premises do not contaminate food, and when transporting food, that it protected from contamination (Safe Food Australia, 2016). Food delivery digital platforms raise a regulatory question over liability related to food safety – whether this remains with the restaurant or transfers to the food delivery platform?

Streaming video on demand services and local content rules: Minimum quotas apply to Australian commercial, free-to-air television licensees in relation to the amount of Australian programming they must show (ACMA, n.d.). Streaming video on demand (SVOD) services are not subject to these requirements, which can provide them with a competitive advantage over free-to-air licensees.

Online shopping platforms and tax: Online shopping platforms operate as an intermediary between buyers and sellers. In many cases, they are not directly responsible for providing the goods sold on their platform. This has raised regulatory considerations around the responsibility of collecting taxes such as GST, and whether this should be the responsibility of the seller or the platform.

Cloud: Cloud technology has changed business models through changing the way computing power is purchased and the way data is stored. This raises regulatory considerations around data privacy and security – if a business stores and processes customer data in the cloud, are they responsible for data privacy and security, or is the cloud services provider?

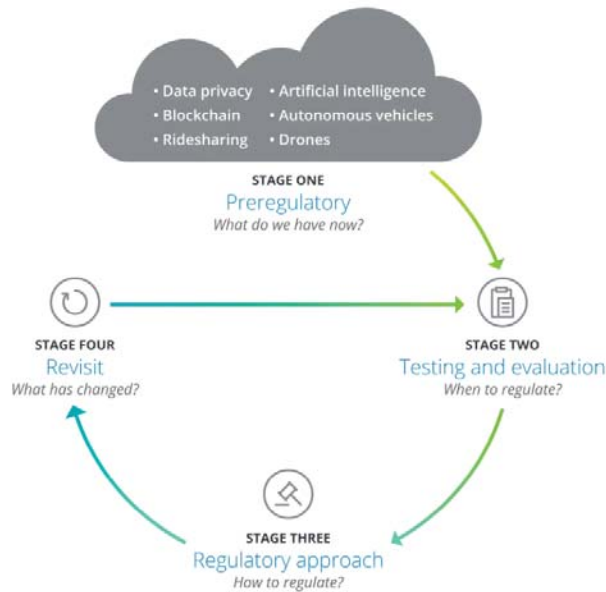
3.2 Regulating new business models

The Deloitte Center for Government Insights (2018b) identifies four foundational questions to address in regulating new business models:

- What is the current state of regulation in the area?
- When is the right time to regulate?
- What is the right approach to regulation?
- What has changed since regulations were first enacted?

This approach to regulating new business models is an iterative approach, with regulation revisited over time to ensure its ongoing effectiveness and relevance.

Figure 3.2: Four critical questions in regulating new business models



Source: Deloitte Center for Government Insights (2018b)

3.2.1 Stage 1: Understanding the change

The first stage of regulating new business models is understanding the changes and opportunities they bring, as well as the current regulatory environment. This is an information-gathering exercise and can require extensive stakeholder consultation. In the case of drone use in Queensland, it can involve understanding the potential commercial uses of the drones in industries such as agriculture and the public sector, the current state of regulation (see Appendix B for high-level mapping of the relevant regulations in this space) and the pain points for businesses arising from current regulation.

It is important to recognise that the scale and extent of digital disruption by new business models may not yet be fully understood. While this stage seeks to provide a starting point to considering regulation of new business models, the implications may not yet be clear and will need to be revisited as they emerge.

3.2.2 Stage 2: When to regulate?

Traditionally, the development of regulation has been linear, with regulation being drafted, presented to the public for comment, then updated. However, once regulations are in effect, they are less likely to be amended. Deloitte (2018b) found that 68% of the regulations in the 2017 US Code of Federal Regulations have never been amended – while some may still be relevant, it is likely that many are less effective than when they were first introduced. On the other hand, Denmark has created a task force to challenge outdated legislation in the wake of digital disruption (Business Affairs, 2017).

Until recently, the regulatory process could keep pace with developments in business. The policy cycle often takes five to twenty years and businesses models have been slow to change. Disruptive technologies have changed this, with ‘unicorn’ startups (those that are valued at or over US\$1 billion) such as Australia’s Atlassian achieving this milestone in 12 years and

international examples such as Jet.com, a shopping website with realtime pricing algorithm, taking only four months to achieve unicorn status in 2015. Overall, the median time for unicorn startups to achieve a US\$1 billion valuation is around 6 years (Fleximise, 2016).

In this time, businesses go from being unheard-of to presenting dramatic changes in business operations, with potential implications for consumer safety or privacy, and regulation is struggling to keep up.

There are also issues when regulation occurs too fast and where laws are introduced before the impacts of technologies are properly understood. Proper consultation and scoping in Stage 1 will limit this from occurring, and this has been more of a historical challenge than one facing regulators in the current business environment.

One approach which can be taken by Queensland regulators is to consider the cadence of a regulatory response to support regulatory agility. This involves structuring laws differently, with minimum decisions within legislation, supported by business rules developed over time by regulators.

An example of this approach is the one taken with the development of the Consumer Data Right (CDR) – where customers can direct that their data be shared with trusted third parties to benefit from its value. In the banking sector, this is known as Open Banking. The Open Banking Review was first conducted to increase understanding of implications and develop recommendations. Legislation will be developed first, and regulation will involve the Australian Competition and Consumer Commission (ACCC) with support from the Office of the Australian Information Commissioner (OAIC). Over time, it is expected that the CDR will be applied sector-by-sector, starting with banking, energy and telecommunications, where there is benefit in doing so (Treasury, n.d.).

This sort of adaptive approach can involve limited trial and error and have faster feedback loops, allowing regulators to evaluate and develop the regulation in a dynamic way.

In other situations, there can be increased proactive use of policy guidelines, information and education to encourage appropriate behaviour, instead of relying on regulation. For example, the ACCC released guidance for platform operators in the sharing economy in 2016. This can give regulators a way to manage expectations in new business models where uncertainty is high, while still giving the industry room to develop. Regulators can use these tools to define the scope of issues that need to be addressed and ask industry to develop their own standards for regulators to certify (Deloitte Center for Government Insights, 2018b).

3.2.3 Stage 3: How to regulate?

As noted in Chapter 2, the regulatory spectrum ranges from light through to heavy regulation, precautionary regulation, with different approaches relevant for different technologies and aligned with the need to protect consumers balanced against providing incentives for innovation.

It is important to recognise that there can be a global market for new business models, with innovation potentially moving overseas if the regulatory environment in Australia is not conducive to entrepreneurial activity. Where possible, increasing use of communication, advertising, education, and training and minimising the use of regulation as a policy lever can be useful in regulating new business models where risks to consumers can be appropriately managed. For example, Seargeant and

Caroline (2016) suggests that the response to ‘fake news’ should be education rather than regulation. Instead of trying to regulate the information available on the internet, the development of individuals’ digital critical literacy around how technology works socially will help managing the flow of information within society.

Where regulation is required, it has a role to play in supporting the entrepreneurial environment in Queensland, helping it to achieve a competitive advantage relative to other jurisdictions. For example, Queensland has a vision to be a world leader in drone technology and application and investment to make Brisbane a ‘startup capital’ through attracting international startups and innovators.

Moving from prescriptive regulation, which focusses on specific actions or activities, towards outcomes-based regulations, which focus on the end result, can assist in supporting innovation and entrepreneurship in Queensland. This can be particularly useful for new business models, where uncertainties around new business models and their impacts can reduce the usefulness and scope of prescriptive regulation to protect consumers. On the other hand, outcomes-based regulation can provide the room to innovate while maintaining control over outcomes.

The answer to the question, ‘how to regulate’ can also differ for regulation that will apply to small businesses. A 2013 survey by the Productivity Commission found that 40% of the 187 regulators surveyed treat small businesses differently. Regulators apply differential treatment for small businesses through the design of the regulations and the delivery of the regulations (that is, the approach to interpreting, administering and enforcing regulation) (Productivity Commission, 2013).

For instance, in relation to the design of regulations, most small businesses are not subject to the *Privacy Act 1988 (Commonwealth)* (OAIC, n.d.).⁷ In relation to the delivery of regulations, many government regulators use information, education and guides to assist small businesses to understand their rights and obligations under relevant regulations. The Australian Competition and Consumer Commission (ACCC) runs a small business education program, which provides a broad overview of the key provisions of the *Competition and Consumer Act 2010 (Commonwealth)*⁸ and publishes various guides about business’ obligations.

3.2.4 Stage 4: Revisiting regulation

The pace of change of business models in response to digital disruption makes this stage particularly important, to ensure that regulation remains relevant and effective. Approaches such as regulatory sunseting (measures which provide that the regulation shall cease to have an effect after a certain date unless further action is taken to extend it) can be incorporated to ensure periodic review.

As part of revisiting regulation, it is important to consider whether regulation is still required. The Better Regulation Taskforce in Queensland focuses on reducing the regulatory burden for small businesses. There is also a role for governments to streamline regulatory processes between local and state governments to reduce duplication and hence the costs of complying with regulation. It is important to maintain the focus on reducing red tape wherever possible, but there should also be a focus on increasing

⁷ There are exemptions to this. Refer to the *Privacy Act* for details.

⁸ To view the program, see: ACCC (n.d.).

regulatory flexibility to ensure the regulation that does exist stimulates innovation in the use of new technologies and business models.

Recommendation: Increase streamlining the way small business interacts between all levels of Government to obtain the approvals and licences they need. This could be achieved through:

- Developing and adopting systems for capturing and sharing information between local and state Government entities to reduce duplicated requests for information from businesses (for example similar to the Easy to Do business initiative being progressed by the New South Wales Government).
- Streamlining of licensing application arrangements between local and state governments to reduce application times and the need for multiple applications where there are parallel requirements from more than one regulator.

4 Case study 1 – freelancing

The development of digital platforms has created new ways of organising work

Freelancing in Australia

A freelancer describes a person who uses their skills and experience to perform a task or set of tasks on a contractual basis. The types of jobs a freelancer might perform are highly varied but would typically fall into what we would classify, 'white collar jobs', for instance, data entry, report writing, proofreading, bookkeeping, business strategy and design. According to one study, almost one-third (32%) of Australians performed freelancing work⁹ in the twelve months to August 2015 (Edelman, 2015).

A major benefit of freelancing is flexibility. For the worker, this manifests in choice over matters such as when and where they work and what projects they work on. For a small business, they can hire expertise for one-off tasks, on-demand without the need to hire somebody on an ongoing basis. This may be particularly useful for small businesses or start-ups who may lack the scale to be able to hire staff to perform these tasks in-house. For instance, a new local café may require a website. Freelancing arrangements mean the café can hire a designer for this specific task, as opposed to employing the designer on an ongoing basis or relying on the owner's expertise.

While freelancing is not a new concept, digital platforms have emerged as a new business model for organising and managing these arrangements.¹⁰ At their core, digital platforms operate as an intermediary that matches freelancers willing to offer their skills and experience to certain tasks, and businesses that need a particular task carried out. In this regard, some of the services that digital platforms offer include one or a combination of the following:

- publishing information (e.g. freelancer profiles and jobs posts);
- analysis and sorting to help facilitate matches (e.g. algorithms to rank suppliers, provision of individualised searches or a shortlist of candidates); and
- value-added services such as invoicing and reporting and payment processing.¹¹

Digital platforms offer additional benefits over traditional freelancing arrangements by reducing transaction costs. For example, for businesses, it reduces the costs associated with searching for workers (Productivity Commission, 2016a), and where value-add services such as invoice and

⁹ Including independent contractors, moonlighters, distributed workers, temporary workers and freelance business owners.

¹⁰ See the following reference, which discusses how technology is changing the workforce, including platforms changing how work is organised: Zahidi (2016).

¹¹ The functions of digital intermediaries are discussed further in DAE (2015) and Productivity Commission (2016a).

payment processing are provided, it reduces the costs associated with managing the arrangement. As stated by the Productivity Commission (2016b):

Digital platforms support leaner business models by reducing the transactions costs of outsourcing parts of the production chain. For example, a firm can outsource market research, design, or component manufacturing, assembly, distribution, and marketing. This has always been the case, but digital platforms reduce the transaction costs of finding reliable suppliers of these services. This trend may see a lower share of economy-wide physical capital and employment in very large firms.

The use of freelancing digital platforms could support the growth of small businesses by:

- reducing overhead costs associated with hiring ongoing staff for small, one-off tasks and costs associated with searching for an expert, freeing up capital for other activities; and
- hiring an expert to carry out the task, which might otherwise be performed by an existing employee or an owner who does not have the experience or expertise to perform the task, improving the quality of the output.

Additionally, according to the Australian Taxation Office's (ATO's) definitions, if a freelancer is working as a 'contractor' rather than an 'employee',¹² then they are considered to be running their own business and need to hold an ABN (ATO, 2018c). This suggests that the impacts on small businesses in relation to freelancing digital platforms may arise not only from the perspective of small businesses hiring freelancers but also from freelancers supplying their services on these platforms.

In this respect, freelancing digital platforms offer additional benefits to small businesses through opportunities for them to work on the platform (e.g. as a sole trader). The benefits include reaching clients at relatively lower transaction costs than traditional means such as cold calling or broad-based marketing, and may assist them in managing clients (where for example, the platform provides value-add services such as invoicing).

However, the use of freelancing digital platforms is not without risks for small businesses. For instance, a small start-up will be producing a significant amount of intellectual property; the more short-term workers that have access to this information, the greater the risk that the start-up may be exposed to this information being shared with competitors or other interested parties. This might lead to the need to ensure contracts are clearly defined.¹³ Small businesses also need to be aware of any contracts they are entering into by acquiring services over the platform and how this interacts with other contractual arrangements they may wish to put in place. Dealing with such matters will require legal expertise, which might outweigh the benefits of the freelancing arrangement.

Further, small businesses hiring freelancers on the platform will require workers that are competent and where they do not meet expectations, the business has recourse. These types of issues may be dealt with under the

¹² For the distinctions between a contractor and an employee, see: ATO (2015).

¹³ The use of contractors or freelancers and intellectual property is discussed in IP Australia (2016) (Department of Industry, Innovation and Science, 2017) and Hunter (2018).

existing consumer protection framework (see next section below) and/or through contracting arrangements.

It is important to understand how these new business models fit within the existing regulatory regime to ensure they are fit-for-purpose and accordingly, the benefits of these business models can be realised without imposing undue harm on users and the broader economy.

Regulation of freelancing

There is no single regulator or set of regulations for freelancing digital platforms or digital platforms more generally – rather, platforms and issues related to the use of platforms, are regulated under various Commonwealth and state and territory legislation (Productivity Commission, 2016a). This report highlights some of the key regulatory issues that have been identified in relation to the use of digital platforms operating in the ‘sharing’ or ‘gig’ economy. Appendix B maps the key Commonwealth and Queensland legislation most relevant to freelancing digital platforms.

A key part of digital platforms is how they provide assurances about the quality and reputation of workers supplying their services on the platform. A common way in which platforms do this is through allowing consumers to rate or review suppliers. In doing so, it informs the platform of low quality providers, which in turn can then be disqualified from using it (DAE, 2015), or of high quality providers, which might be provided benefits such as exclusive access to work (see for example, Upwork’s Top Rated Freelancer Program).¹⁴ Further, some platforms also provide a vetting of the workers supplying their services on the platform. For instance, The Freelance Collective approves profiles before they are listed on the platform to ensure the workers are of a high quality and based in Australia. These rating, review and vetting systems are a type of self-regulation, which forms part of the broader consumer protection framework (DAE, 2015).

However, one of the primary focuses of the effectiveness of review and ratings systems is potential biases – that is, the extent to which platform users have incentives to leave reviews in the first instance (non-response bias), leave honest reviews particularly where there is a bilateral rating system (reciprocity bias), and the potential for someone to leave a fake review (DAE, 2015). Where self-regulation is not sufficient, a key issue for consideration is whether other aspects of the existing consumer protection regulatory framework appropriately regulate ratings systems.

Ratings systems may be captured under Australia’s national consumer protection law, the Australian Consumer Law (ACL), where it leads to false and misleading representations about quality. One question that has been raised is who would be responsible for falling afoul of the legislation – the supplier (or freelancer in this context) and/or the platform operator - and whether the relevant party (particularly, the freelancer) is currently subject to those obligations under the ACL.¹⁵

To assist in clarifying these issues, the Australian Competition and Consumer Commission (ACCC) has provided guidance for platform operators in relation to complying with their obligations under the *Competition and Consumer Act 2010* (Commonwealth) and the ACL, particularly in relation to reviews and ratings. For instance, the ACCC states

¹⁴ For information about Upwork’s Top Rated Freelancer Program, see: Tse (2015).

¹⁵ See the following reports, which consider these issues in more detail: DAE (2015) and Productivity Commission (2016a).

that a platform operator is liable for misleading and deceptive conduct where a review is incorrect and misleading and the operator publishes that review (ACCC, 2016).

Other recurrent issues regarding existing regulation and digital platforms relate to industrial relations and taxation.

Australia's industrial relation regulations, under the *Fair Work Act 2009 (Commonwealth)*, recognise two types of workers, employees and independent contractors. The major difference between these two types of workers is that independent contractors are not entitled to many of the protections afforded to employees such as minimum wage, leave and notice of termination. Digital platforms operating in the sharing or gig economy have raised the following concerns about the appropriateness of the existing industrial regulations to deal with these new business models:¹⁶

- the appropriateness of classifying workers on digital platforms as either independent contractors or employees;¹⁷ and
- platform operators mischaracterising an employee-employer relationship as an independent contracting arrangement, known as 'sham contracting'.

Such concerns have typically been raised in the context of digital platforms where, unlike freelancing, workers who are supplying their services do not require specific skills or qualifications, and therefore, in sectors where workers may be vulnerable and industrial relations issues more prominent. Many other countries are similarly dealing with issues regarding the gig economy and the legal status of workers.¹⁸

While existing reports have not identified that industrial relations issues are prevalent with 'white collar' freelancing platforms, any amendments to industrial relations regulations (e.g. adding another category of worker between employee and independent contractor) could have broader implications for small businesses (beyond the direct impacts to digital platforms) such as how small businesses hire and contract with workers. As such, it is critically important to consider the broader implications in the design of any such amendments.

A further challenge that has arisen is whether existing taxation legislation adequately captures activities carried out on digital platforms (Migai, de Jong, & Owens, 2018). Information published by the Australian Taxation Office (ATO) suggests that any income earned through the sharing economy must be treated in the same way as income earned through traditional means (see ATO (2018b)).

Further, taxation and superannuation obligations differ depending on whether the freelancer is considered an 'employee' and 'contractor' (ATO,

¹⁶ These issues are discussed in two Senate inquiries: The Senate Education and Employment References Committee, Corporate Avoidance of the *Fair Work Act 2009*, September 2017 and The Senate Select Committee on the Future of Work and Workers, *Hope is not a strategy – our shared responsibility for the future of work and workers*, September 2018.

¹⁷ Under the current regulatory framework, the distinction between a worker and an independent contractor under the Act is not 'black-and-white'. In determining whether a worker is an employee or an independent contractor, courts will look at each relationship on a case-by-case basis. While there is no single indicator, some of the common factors the courts look at a range of factors including the degree of control over how work is performed, the hours of work and who supplies the tools and equipment of work (Fair Work Ombudsman, n.d.).

¹⁸ See: Kaufer (2017) and Hall & Fussey (2018).

2018c). Freelancers working on digital platforms need to be aware of the distinction and their taxation and superannuation obligations.

What can Queensland do?

The flexibility and low transaction costs associated with freelancing digital platforms mean that they are potentially a useful tool for small businesses and start-ups to contract experts to carry out one-off, specialised tasks. They are also potentially an avenue for a small business (e.g. a sole trader) to find and manage clients relative to traditional means of business development. Given the specific pain points relate to Commonwealth legislation, there is not a clear role for the Queensland Government in addressing these issues.

As identified above, one of the critical features of digital platforms is review and ratings systems. However, individuals and small businesses supplying services on these platforms need to be aware of their obligations under Australian Consumer Law (ACL). To assist them in understanding their obligations, the Queensland Government could develop guidance that clarifies individuals' and small businesses' obligations under the ACL. Guidance should also be produced that assists individuals and small businesses purchasing services on these platforms to understand their rights. This guidance material could be produced as a collaboration between state and Commonwealth consumer protection agencies, specifically, the Office of Fair Trading Queensland and the ACCC.

Industrial relations regulations have been a key focus of the sharing economy, with recommendations made in two recent Senate inquiries,¹⁹ which included extending the protections of the Fair Work Act to all workers, or ensuring increased rights for workers not classified as employees and broadening the definition of employee to include gig economy workers.

Even if these issues are not currently significant for freelancers, any potential amendments may affect these workers and platform operators. As such, the Queensland Government can play an important role in facilitating discussions with small businesses to understand the impact of any potential changes to employment law, and represent these views to the Commonwealth Government.

Recommendation: The Queensland Government can assist in the transition to increasing freelancing in the economy through developing guidance that clarifies individuals' and small businesses' obligations and rights.

¹⁹ The Senate Select Committee on the Future of Work and Workers 2018, *Hope is not a strategy – our shared responsibility for the future of work and workers*; The Senate Education and Employment References Committee 2017, *Corporate avoidance of the Fair Work Act 2009*.

5 Case study 2 – drones

Drone use offer small businesses innovative and more productive ways of doing business

Historically, the military has used 'drones' as an alternative to manned aircraft (Goldman Sachs, n.d.).²⁰ However, in recent years, there has been a significant increase in the use of drones for recreational and commercial uses.

There were an estimated 50,000 recreational drone users and 1,000 commercial drone users in Australia last year (BITRE, 2017). The Bureau of Infrastructure, Transport and Regional Economies (BITRE) expects the number of drone users will continue to rapidly increase in the future with further technological developments and the increasing use of drones for commercial purposes (BITRE, 2017).

Some of the key technological features of drones, which make them useful for commercial and government purposes include GPS, sensors such as thermal sensors, and video or camera. In line with this, the commonly used capabilities of drones include surveying, surveillance and monitoring, inspection, delivery, data collection and aerial photography. Some examples of commercial and government use of drones is shown in Figure 5.1.

The benefits of drones for businesses and governments include lower operating costs and gains in productivity and efficiency. This is because drones can perform tasks, which currently rely on human labour more quickly and with improved accuracy and precision.²¹ Drones may also be able to reach remote geographical locations that have typically been difficult, expensive or time consuming for humans to reach (Divya, 2017). Further, they can perform tasks that have previously required relatively more expensive equipment such as manned aircraft. For instance, Goldman Sachs has noted that a drone can survey an equivalent amount of pipeline per day as a helicopter crew but at a lower cost (Goldman Sachs, n.d.).

²⁰ Drones are also referred to as Unmanned Aerial Vehicles (UAVs), Remotely Piloted Aircraft System (RPAS) and Unmanned Aircraft System (UAS). A drone may also refer to aircraft and underwater vehicles. This report only considers aircraft.

²¹ The following article discusses the uses and benefits of drones: Divya (2017).

Figure 5.1: Examples of drone uses



Source: Divya (2017).

Drone applications in Queensland

Queensland has a vision to be a world-leader in drone technology and application. The state has significant capability in drone design and manufacturing, including research and development (Queensland Government, 2018b). Further, in the Local Government Association of Queensland's 2017 Digital Productivity Report, more than one-quarter (27%) of Queensland councils reported that they are 'actively' using drones (LGAQ, 2017). The Queensland Police Service was also the first law enforcement and Queensland Government agency to obtain a CASA Operators Certificate (in 2013) (Queensland Government, 2018b).

Agriculture in particular, is an industry where the potential productivity benefits of drones have been widely recognised in Queensland. Small business is prominent in the Agriculture, Forest and Fisheries industry, accounting for 77.1% of employment and 75.2% of sales and service income in this industry nationally in 2016-17 (ABS, 2018).

The Queensland Minister for Agriculture Industry Development and Fisheries recently stated that "[a]griculture is one area where drones are making a big impact in Queensland..." with drones offering the ability to perform tasks in a few minutes that would have previously taken "days of labour-intensive effort" (Queensland Government, 2018a).

Some of the agricultural uses of drones include:

- Crop surveillance – providing an early warning of crop stress or health issues.

- Precision agriculture – using drones to spray pesticides. This is not only saves labour but is also helping to avoid health problems associated with spraying crops manually (Mogili & Deepak, 2018).

Small businesses purchasing and operating drones to carry out various tasks involved in doing business (such as delivery or surveying) is not the only way that drones are relevant to small business. Indeed, drones are also providing opportunities for entrepreneurs to start up a business specialising in the use of drones and sell those services to other businesses and government. For instance, start-ups have reportedly been emerging in the agricultural industry to provide crop surveillance services to farmers (Logan, 2017). Further, Droneforhire.com.au is a digital platform that has emerged for providing a directory for connecting business with drone pilots.

The emergence of drone specialists and digital platforms for connecting them to business presents further opportunities for business because it means they can achieve the benefits of using drones, without themselves investing in the technology, licensing and registration fees, and training.

For Queensland small businesses to fully unlock the productivity benefits of drones, it is critical that the regulations are fit-for-purpose, striking an appropriate balance between innovation, and safety, security and privacy.

Categories of drone regulation

Businesses wanting to use drones for commercial purposes must carry out appropriate due diligence to ensure that they comply with the relevant regulatory requirements. However, the current regulatory environment that applies to the 'where, when and how' drones can be flown is complex. First, there are three layers of regulations that a user must be aware of – that is, regulations at the Commonwealth, state and local council level. Second, within the Commonwealth legislation, the regulations apply differently across a number of different circumstances.

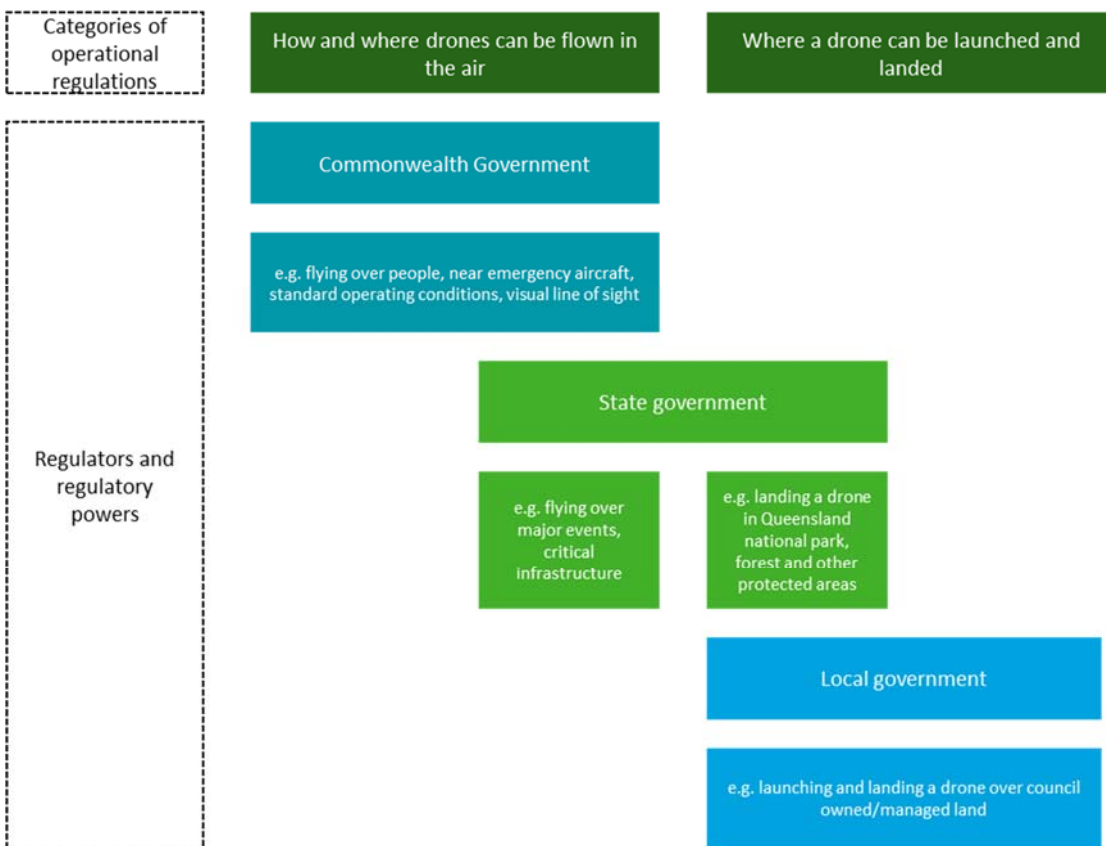
The primary legislative instrument for the operation of drones is Part 101 of the *Civil Aviation Safety Regulations 1998 (Commonwealth)* (the Regulations), which have been made under the *Civil Aviation Act 1988 (Commonwealth)* (the Act). The main objective of the Act is "to establish a regulatory framework for maintaining, enhancing and promoting the safety of civil aviation, with particular emphasis on preventing aviation accidents and incidents".

The Civil Aviation Safety Authority (CASA) is responsible for administering the Act and Regulations. CASA is Australia's air safety regulator. Accordingly, the Regulations cover the operation of a drone once it leaves the ground.

Part 101 sets out various conditions on the use of drones such as limits on how a drone can be flown and flying a drone over people or near emergency services aircraft. It also covers licensing and certification requirements. The regulations are tiered, meaning they apply differently depending primarily on the purpose of use (e.g. sport and recreation or commercial) and drone size (by weight). For instance, recreational users flying a drone under 150kg are subject to fewer conditions than commercial users; similarly, commercial users flying a drone under 2kgs are generally subject to fewer conditions than commercial users flying a drone larger than 2kgs (CASA, 2018c). However, this is complicated by additional exclusions set out within Part 101.

In Queensland, there are additional operational regulations applying to the use of drones, which have been put in place by state government and some local councils. For instance, Queensland legislation regulates the flying of drones over critical infrastructure, major events and prisons, and the Brisbane City Council regulates the launching and landing of drones on council-owned/managed land (Brisbane City Council, 2018). Compared to CASA, the role of state government and local council in regulating drones is limited; nonetheless, the additional regulations contribute to a complex regulatory environment.

Figure 5.2: Categories of drone operational regulations, and different regulators and their powers



For small businesses where drones are not the core part of their business but could help to deliver a task, they may be able to avoid the complicated regulatory environment by outsourcing their drone-related activities to the various specialist drone businesses and start-ups, which are emerging. However, it is important that the regulatory environment does not impede safe uses of drones.

Visual line of sight regulations: A key pain point for industry

A pain point for industry in relation to the use of drones is the visual line of sight regulations. Specifically, industry considers being able to operate drones ‘beyond visual line of site’ (BVLOS) is vital to using drones for commercial purposes.

Currently, the ‘standard operating conditions’ in Part 101 require that drones be flown within the visual line of sight. This means that the pilot must be able to orientate, navigate and see the drone with their own eyes (CASA, 2018b). CASA does allow drones to operate on a BVLOS basis,

however, it is not 'routinely permitted' and CASA approval is required, with applicants needing to meet a number stringent requirements (CASA, 2018a). CASA recently noted that it was receiving an increasing number of BVLOS approvals both in terms of frequency and complexity (CASA, 2016).

Relaxation of visual line of sight regulations is an issue that is also being considered in international jurisdictions. For instance:

- Japan has reportedly removed requirements for a safety assistant to be present during long-distance commercial drone operations on the condition that the drone has a long safety record and is flown at an altitude of less than 150 metres (The Japan Times, 2018).
- Alike Australia, the United Kingdom also currently provides for beyond visual line of sight operations under certain requirements (CAA, 2015), but recent reports suggest that UK's National Air Traffic Control Service (NATS) intends to relax such regulations next year (Margaritoff, The U.K. Might Rid Itself of Beyond Visual Line-of-Sight Drone Regulations, 2018).
- In the United States, the government is expanding drone testing to include flying over people, at night time and beyond the visual line of sight (Margaritoff, 2017).

However, consultations also noted the need for caution in relaxing the BVLOS regulations, identifying it as a very technical area, with implications for safety, e.g. with the ability to operate a drone in Australia from anywhere in the world.

Reforms to visual line of sight regulations may not be achieved in isolation; rather, they will need to be considered alongside broader regulatory reforms. As an example, as noted by the UK Department for Transport, an unmanned traffic management system that integrates drones in the airspace is "seen as an important step in realising the full potential of drones including routinely and safely flying 'beyond the visual line of sight'" (Department of Transport, 2018).

Further, in a recent speech, CASA noted airworthiness standards and detect and avoid systems alongside BVLOS reforms:

While CASA doesn't have clear regulation in support of BVLOS operations, and more specifically airworthiness standards, CASA is still able to support the RPAS industry in developing BVLOS operations. The key limitations on broader use of RPAS is the lack of limited airworthiness standards and lack of limited information on reliable and high performing detect and avoid systems. There is also the lack of aircraft/system reliability data (including fail-safe systems), the lack of robust standards for aircraft communication, navigation, surveillance and telemetry and the need to meet current performance standards for on board equipment, much of which is too large and heavy to be easily integrated into RPAS. Many of these are technological issues that can only be resolved through international efforts and technology development (CASA, 2016).

Other pain points

Our market soundings process also highlighted that industry values regulation and rules from the perspective of ensuring the safe operation of drones. In particular, there is a concern about recreational users doing the wrong thing and affecting the broader use of drones.

Further, a question raised in our market soundings process was how to balance community safety and innovation. This was echoed in a recent Senate Committee Inquiry focusing on safety concerns relating to the use of drones. The Committee commented that the “challenge is in establishing a regulatory regime, which does not impede continued innovation, whilst also instilling community confidence and providing assurances with regard to safety and privacy” (Rural and Regional Affairs and Transport References Committee, 2018). The Committee made a number of recommendations to “enhance public safety” in response to its concerns about the number of drones falling within the ‘excluded’ category of Part 101.

More generally, market soundings also identified that industry is concerned about the uncertainty surrounding the existing regulatory framework in relation to what you can and cannot do, and challenges regarding the amount of legislation drone users need to be aware of. This is likely to be a key issue for small business who do not have significant resources to invest in legal expertise to ensure they are complying with all relevant requirements.

Further information about the categories of regulation applying to drones in Australia is set out in Appendix B.²²

What can Queensland do?

The Queensland Government has identified the important role that they foresee drones playing in their economy through the Queensland Drones Strategy, released in June 2018.

Based on the pain points identified in market soundings and the drones strategy, there are three key areas where the Queensland Government could play a role in assisting small business in relation to drone regulation.

The first area concerns education and information transparency, in recognising the concerns regarding the safe use of drones and the complexity of the existing regulatory framework. The Queensland Government’s drone strategy includes an action (under Objective 4 to support community-friendly drone policies) to develop and roll out a new education campaign targeted at recreational drone users to provide information on the safe and proper use of drones and respecting others’ privacy. The Queensland Government could build on this action by developing education resources that are targeted at small business users of drones to similarly help them to understand their legal obligations when flying drones.

The second area is to test and build drone capabilities such as operating drones BVLOS. The Queensland Government’s drone strategy includes an action (under Objective 1 to attract national and international investment) to commission the development of a specific commercial drone zone. The Queensland Government could build on this action by negotiating with CASA to obtain an exemption over the site to fly drones BVLOS alike the current trial of drone delivery systems in Canberra.²³ The aim of the testing would be to help navigate the potential safety issues associated with relaxing such regulations.²⁴

²² The following website also includes an overview of drone regulations applying to different countries, see: Simpson (2017).

²³ Further details about the existing drone site is available at: CASA (2018d).

²⁴ However, we note that safe operation is only one regulatory issue that will need to be considered in regards to BVLOS; for instance, CASA and other policymakers

The third area is to ensure state legislation is not inhibiting drone use. The Queensland Government, in consultation with business, should ensure there is no state legislation unnecessarily inhibiting drone use, which promotes business innovation and efficiency. For example, as highlighted in the Queensland Drones Strategy, the Government recently amended legislation, allowing drones to be used by licensed chemical applicators for aerial distribution of agricultural chemicals.

Recommendation: Queensland Government to build on the Queensland Drone Strategy action (to develop an education campaign targeted at safe and proper recreational use of drones) by developing education resources to help small business drone users understand their regulatory obligations.

Recommendation: Queensland Government to work with industry to advocate for changes to the BVLOS regulations, noting that any relaxation in BVLOS regulations should balance potential productivity gains with appropriate safeguards to ensure that the use of drones BVLOS does not pose undue threats to community safety and national security. In this regard, Queensland Government to monitor developments in BVLOS regulations in international jurisdictions.

(including those in overseas jurisdictions) will need ensure that national security is not comprised by the ability to remotely operate a drone.

PART II

New tools and technologies

6 Regulator 4.0 – the digital age brings with it new tools and technologies for regulators

Regulating complex environments does not have to be cumbersome or expensive. New technologies and new ways of thinking can help regulators operate more efficiently and effectively, reducing compliance costs and improving the small business experience.

In striving to protect consumers, while allowing for innovation, rules and regulation are a necessary part of balancing business bottom lines and public interests. Regulatory reform can involve much more than reducing red tape.

Regulatory systems can often be complex, subject to change and difficult to navigate for businesses - costing time and money, and ultimately bringing down productivity. As a result, the cost of compliance is growing faster than most industries and now sits at an estimated cost of between \$179-250 billion a year (Novak, 2016; Chan & Downey, 2017). This cost is disproportionately borne by small and medium sized businesses (Douglas & Pejoska, 2017).

Change is, however, on the horizon. Technology is not just a disruptive force requiring changes to regulation to keep up. Some technologies – indeed, sometimes the same technologies that challenge traditional regulation – also offer new opportunities to re-invent regulation, oversight, assessments and enforcement. Innovative problem-solving approaches such as design thinking and behavioural economics can help regulators find effective ways to address both old and new challenges (O’Leary & Murphy, 2017).

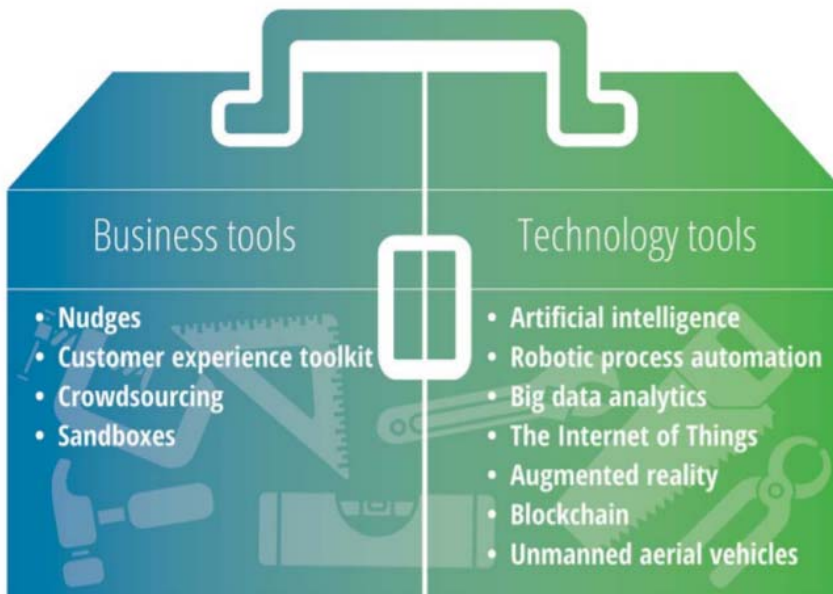
The Deloitte Centre for Government Insights pioneered the concept of a ‘regulator toolkit’ to demonstrate the different technologies and business models available to Government to regulate new and old industries. The toolkit includes both business and technological tools, all of which are available to Queensland regulators, but may not yet be fully explored, see Figure 6.1 (Deloitte Center for Government Insights, 2018a).

Industry 4.0 refers to the current trend of automation and data exchange transforming industries in Queensland and across the globe. The first industrial revolution combined steam power and mechanisation in a commercial setting. The second and third revolutions refer to the the widespread adoption of the electric assembly lines and ICT technologies respectively. The fourth industrial revolution (known as Industry 4.0) is expected to extend ICT technologies into the cyber-physical realm, automating processes and potentially even giving rise to devices that can “think” for themselves.

Regulator 4.0 recognises the oncoming wave of digital transformation and moves onto the front foot in adapting to this change. Transitioning to Regulator 4.0 in Queensland means thinking differently about how regulation can be done and learning from the cutting edge in other jurisdictions.

Effective regulation in the context of Industry 4.0 must use the most fit-for-purpose technologies and keep the interests of the end-user – small business – at the heart of the design of these policies and reforms.

Figure 6.1 A toolkit for regulatory modernization



Source: Deloitte Center for Government Insights (2018)

New tools

- Sandboxes: mechanisms for piloting new approaches in a low-risk environment allow regulatory agencies to collaborate with the private sector in environments that foster innovation.
- Crowdsourcing: using technology to tap into the collective intelligence and enabling more effective regulation. Agencies have utilised crowdsourcing through launching various challenges with prizes. In the UK, for instance, a Red Tape Challenge program asked citizens to suggest ways to simplify existing regulations.
- Nudges: drawing on the fields of psychology and behavioural economics, nudging involves prompting people to make decisions that support their own long-term goals. Regulators can use nudges to encourage on-time payment of tax, or to encourage compliance with regulation.
- Customer experience (CX) mindset: regulators can improve voluntary compliance rates through understanding customers, focusing on user design and experience, and creating a unified vision for change.

New technologies

- Big data and analytics: The massive amounts of data available to regulators can be analysed to identify redundant, outdated, and overlapping regulation.
- Internet of things: networks of connected devices, sensors, data and analytics can assist regulators to monitor compliance with regulation.
- Blockchain: a distributed, encrypted digital transaction ledger, the technology also could be useful for agencies dealing with high volumes of sensitive records.

- **Robotic process automation:** RPA software mimics the steps humans would take to complete various tasks, such as filling out forms, transferring data between spreadsheets or accessing multiple databases. Regulators can use RPA to automate repetitive, predictable processes such as claims settlement and application processing.
- **Augmented reality:** AR technology overlays digital information on the physical environment to enhance the user's view of the real world, and can be used by regulators to overlay information on regulatory compliance.
- **Unmanned air vehicles:** UAVs, commonly called drones, can be used by regulators to conduct safety inspections of facilities or other locations, particularly useful in dangerous settings.
- **Artificial intelligence:** AI-based technologies include machine learning, computer vision (image recognition), speech recognition, natural language processing and robotics. AI is being used by regulators via algorithms to assist in decision making and as "virtual assistants" capable of answering common questions.

Recommendation: Establish an Information Unit within the Queensland Government, responsible for experimentation (for example with algorithms) and knowledge transfer across government about what works and to drive co-ordination across levels of government. This unit could be responsible for:

- mapping the extent of benefits to be gained from harmonisation of inconsistencies in regulatory requirements of different regulatory agencies
- looking at the utilisation and efficacy of information that is already being collected, with a view to enhancing data collection requirements and reducing the need for multiple subsequent data requirements
- developing a register of sunseting regulations
- mapping interactions between different sets of regulations for different types of small businesses
- communicating the benefits of e-document management
- "joining up" government data and services (e.g. same registration codes across regulators)
- integrating behavioural insights to increase voluntary compliance.

6.2 The many regulatory interfaces between regulator and small businesses

The essence of a regulator's role is to administer and enforce regulation, see Figure 6.2 (Productivity Commission, 2013). There are many potential interfaces between regulators and small businesses within which technological innovation can be applied. These can be:

- **Education** - dialogue about changes to regulation and advice on compliance.
- **Licensing and approvals** - administrative responsibilities including application assessments, registration and licensing, and fee collection.
- **Compliance and risk monitoring** – assessing risks, collecting data and information, monitoring business compliance and outcomes, and conducting inspections and audits.
- **Enforcement** – imposing pecuniary and non-pecuniary penalties, incentivising good behaviour and resolving disputes.

Figure 6.2: Primary interfaces between regulator and small business



Source: Based on Productivity Commission (2013)

Regulatory reform is best approached from a whole-of-system perspective that integrates new tools and technologies into every interaction between small business and regulators.

6.3 There is a RegTech universe out there

Queensland can learn from the experiences of other jurisdictions. Deloitte Luxembourg has identified 248 examples of regulatory technology (RegTech) applications from around the world that seek to improve the experience of both regulators and businesses across all points of interaction (Hugé, Laurent, Ramos, & Laurent, 2018). While the majority of examples in the study were in the fintech industry, there are nevertheless several points of relevance to the Queensland small business context. Some example applications are listed in Table 6.1.

Table 6.2 Global RegTech applications – lessons for Queensland

Tools	Global examples	Examples and potential applications to Queensland small business regulation
Business tools:		
Sandboxing	Singapore created a fintech sandbox for applications with easy requirements to join, allowing firms to test and launch innovative solutions faster.	As of 2017, ASIC can grant waivers through sandbox measures to allow eligible fintech businesses to test certain specified services for up to 12 months without an Australian financial services or credit licence. 12% of Australia's fintech businesses that are

		based in Queensland (Ernst & Young, 2017).
Customer experience (CX)	The city of Boston used design thinking and journey mapping to develop a platform for businesses to apply, track and obtain regulatory permissions (Eggers & Turley, 2018).	The Department of Main Roads and Transport is currently engaged in a Customer Experience program, where a wide range of interactions such as driver licensing payments and reminders, vehicle inspection bookings, vehicle registration renewals and vehicle registration transfers will be made simpler and faster through online options (Queensland Treasury, 2018).
Technology tools:		
Robotic Process Automation (RPA)	The UK's Revenue and Customs agency uses RPA to automatically open case files for its 7,500 call centre workers, reducing customer handling time by 40 percent (iGovNews, 2016).	E-document management systems, across Queensland regulators will facilitate the application of RPA and allow several repetitive processes that are currently labour-intensive can be automated.
Analytics	The Fire Department of New York (FDNY) built a predictive model that uses data gathered from multiple departments to identify buildings at high risk of fire (Deloitte Center for Government Insights, 2018a).	Pre-empt the need for small businesses to engage with the court system by using analytics to predict those of highest risk of violating regulations and allocating sufficient inspection and enforcement resources to remedy the conditions for potential future violation.
Artificial Intelligence (AI)	In the US, the Georgia Government Transparency and Campaign Finance used computer vision software to process 40,000 pages of campaign finance-related documents, greatly	The Australian Taxation Office created a chatbot named Alex, which uses natural language processing and conversational dialogue to answer tax-related questions from website

	reducing human staffers' workload (Deloitte Center for Government Insights, 2018a).	visitors. Launched in 2016, Alex has answered more than a million inquiries with a resolution rate of 80 percent —significantly higher than the industry benchmark of 65 percent (ATO, 2018a).
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Source: Deloitte Center for Government Insights (2018)

Today's regulators have a range of opportunities to utilise new tools and technologies to improve the process of regulation, for example, beta testing regulations, sandboxing small segments of innovation, crowdsourcing Q&A, and leveraging consumer data and demand – to decide how, when, and where to exercise control over technology.

By experimenting with more malleable methodologies, regulators and policy makers may be able to achieve the balance and agility that will be so crucial to a successful transition to Industry 4.0 (Deloitte Global, 2018).

6.4 Zooming in #1 - sand boxing and beta testing

Regulatory sandboxes provide innovators with an opportunity to beta test their products without adherence to certain pre-defined regulations. Sandboxes provide the benefits of minimising legal uncertainty, improving access to investment, opportunities to test-and-learn, and the ability for regulators to determine what rules are required for new products and business models (Shoust, 2016).

Globally, the financial, energy and aviation sectors have seen the most high-profile applications of sand boxing approaches. These have been found to be particularly conducive to and supportive of new entrant small businesses. In order to allow businesses in early development to experiment, the Swiss Federal Council, for example, amended the definition of "acting on a commercial basis" — which requires a banking license — to enable new entrants to the banking and financial system to operate without being subject to the full burden of regulatory supervision.

There are also clear links between innovative regulation and innovative business models. For example, the UK Office of Gas and Electricity Markets (Ofgem) has implemented an 'Innovation Link' sandbox, This 'one stop shop' offers support on energy regulation to businesses looking to launch new products, services or business models whilst adhering to the broader regulatory framework (Ofgem, 2018). 'Innovation Link' provides timely advice on the compatibility of new products and services with existing regulations. In cases where such regulations would prevent the launch of such products that could benefit consumers, Ofgem can look to granting a regulatory sandbox to enable trials.

As small businesses in Queensland experiment with more innovative business models, which can complicate the categorisation of certain goods and services into existing markets and regulatory arrangements, there will be a greater need for Queensland regulators to consider sandboxes as a viable approach to small business regulation. For example, state and local governments could consider easing small business regulatory requirements for licencing and permits for a given grace period in approved

circumstances in order to trial new business models without the need for administrative burden. This will reduce barriers to entry to new firms and enhance innovation.

Barriers to implementation is primarily an issue of mindset and regulator culture. Risk aversion and a low tolerance for uncertainty may limit the adoption of these more experimental regulatory frameworks, like sandboxes. Well-designed sandboxes can confine unintended consequences to a controlled setting and enable innovative small businesses to establish themselves in their markets.

There is a role for government in reducing these barriers and leading the way in adopting regulatory technology. A government unit could be responsible for using and communicating benefits of a range of technologies, as identified in our market sounding.

Recommendation: The Chief Entrepreneur should consider launching a pilot regulatory sandbox initiative (in line with the previous recommendation of the BRT). The particular area of regulation for which small businesses can apply to be granted a fixed-term exemption should be determined through consultations with Queensland businesses. The outcome of a successful pilot should be broader adoption of a conditions-based regulatory exemption framework by the Queensland Government.

6.5 Zooming in #2 - data analytics

Regulators have used data analytics to both facilitate and enhance the regulatory process and outcome. In Australia, the work undertaken by Data61|CSIRO is fostering a data-driven RegTech future for the Australian public sector. This project is built on ten years of research and development, and is looking to build an open platform based on a machine-readable version of current laws, acts, policies and regulatory documents. The tool that is being developed, Regorous, uses Defeasible Deontic Logic to map rules and regulations, as well as a company's business processes, into equations (Chan & Downey, 2017). The tool enables organisations to:

- Identify and fix process compliance issues before deployment
- Automatically report on compliance
- Rapidly check compliance when processes or regulations change.

Data analytics can therefore provide for a greater relationship between government and small businesses. In New York City, the 'Business Atlas' has been used to provide city demographic and location data in order to support business decision-making. Bloomberg's What Works Cities initiative consists of 100 cities committed to "use of data and evidence to improve services, inform local decision-making and engage residents" (Bloomberg Philanthropies, 2015). Kansas City and Syracuse are both stand-outs from this program as local governments who effectively utilise data analytics to better allocate internal resources and to enhance government transparency by providing greater information to the public and to better incorporate public feedback (Cronemberger, 2018).

In the city of Syracuse, "DataCuse" hosts extensive and user-friendly open data platforms of datasets ranging from housing to public health risks. Through this website, analysis and insights are crowdsourced enabling evidence-based decision-making.

These examples show that regulators can use data analytics to provide greater transparency of government decisions related to small business and to facilitate better communication between the regulator and businesses.

A major barrier to implementation of these technologies to Queensland small business regulation will be skills constraints. In a world of exponentially increasing data, regulation in Queensland cannot continue to be drowning in information, but starved of wisdom, in the words of biologist, Edward Wilson.

Regulator 4.0 will need to have the capabilities to make insight-driven decisions. Deloitte Access Economics (2018) has identified the need for an extra 100,000 ICT jobs in coming years (on top of the 100,000 already forecast), in areas such as artificial intelligence, data science, cyber security and blockchain, for Australia to become a global leader in digital skills and employment.

Recommendation: Through the Information Unit, partner with an appropriately qualified organisation such as Data61 to identify opportunities to apply artificial intelligence to optimise processes for users, decrease search and transactions costs, and coordinate across local, state and federal regulators. An initial pilot could be established in the area of regulation and compliance processes in the courts system in Queensland.

7 Case study 3 - RegTech applications in the court system

Criminal and civil court action are forms of regulatory enforcement tools available to regulators. They are typically used where other forms of enforcement have been ineffective (or have been challenged).

The value of claims in civil cases determines the relevant court to hear those particular cases. The Queensland Civil and Administrative Tribunal (QCAT) deal with the majority of small business cases.

Court action as an enforcement tool is relatively time consuming and costly, both for regulators and for business. A major pain point highlighted through market sounding exercises was the use of outdated document management systems in Queensland, restricting access and imposing unnecessary costs on small businesses. While the Queensland Courts are in the midst of a major digital transformation, there is still a long way to go to improve access for small businesses.

A perfect storm of limited spare resources, tight time constraints, and large amount of required documentary evidence face small businesses that are subject to regulatory enforcement measures through the courts. This manifests in a number of ways:

1. The 'formulaic' and regimented documentation requirement procedures for the initiation of a court action and subsequent activities impose costs on small businesses through the sheer volume of required form-filling and documentary evidence provision.
2. In-person, paper lodgement discriminates against suburban and regional stakeholders, who geographically have higher proportions of small to medium sized businesses.
3. The registry does not answer to the judges: the disjointed organisational structure between the administration and the judiciary distorts incentives for the court system to deliver a high-quality service to small businesses.
4. The printing, labour, and time costs of physical printing increases the costs of legal service provision across the industry, adding to the barriers of access for small businesses.

The situation in Queensland courts is very different to the experience in their Federal counterparts, attributable to different regulator culture. The Federal Courts have been identified as a leader in this space, as early adopters of technology designed to make their processes more efficient. A well-designed, user-friendly website facilitates access for litigants, regardless of their geography, through an e-document system.

In the long-term, a move to digital document and evidence management will enable the implementation of higher-tech tools that are already being seen in other regulatory contexts. Some examples include the deployment

of artificially-intelligent text processors that are able to process and summarise large quantities of information to enable judgements to be delivered in a more timely manner. On the administrative side, the establishment of a consistent digital database of documentation and evidence will enable large scale data analytics of pain points and opportunities within processes so that the courts can more efficiently and strategically allocate resources. This would lead to further streamlining of the processes required to deal with small business claims.

There is a significant amount of low hanging fruit in the adoption of RegTech in the court system in Queensland. One example is the QCAT process of rolling out interactive forms that support payment capabilities to Queensland's regional courthouses. QCAT is also experimenting with the use of chatbots automate the resolution of user queries. Resolution of regulatory disputes through the courts can be made significantly less costly and more efficient through the adoption and diffusion of relatively low cost technology, including those discussed in Chapter 6.

Achieving digital transformation in Queensland Courts will also help to open up these opportunities. Digital information is more readily collected and analysed, and this can be used to improve regulatory processes more broadly. For example, artificial intelligence and machine learning leverage vast volumes of data in the form of algorithms that can simplify decision making. That said, it is important to recognise that there can also be limitations to these technologies, and the 'black box' of algorithms has been criticised for the potential for inherent biases. This needs to be balanced against the potential for biases through alternative approaches to consider suitability in different contexts.

Recommendation: Support digital transformation of the Queensland court system through addressing legislative requirements for the use of hard copy documents, supporting dedicated retraining to drive cultural change and funding for the move to digital systems. This will reduce costs of access for small business and be foundational infrastructure to support further opportunities such as big data analysis and machine learning.

PART III

Recommendations

8 Recommendations

This regulatory review leads to recommendations for regulation in an environment of new business models and new tools and technologies.

It is important to note that digital disruption enables and necessitates a different approach to regulation. Rather than presenting a short-term list of redundant regulation which can be cut, or a narrow approach to reforming regulation in one sector, these recommendations present a different approach to regulation.

8.1 Key recommendations

Recommendation 1: Establish a Queensland Council of Regulators made up of CEOs from key regulatory agencies and departments to discuss and drive action on regulatory reform in an environment of disruption, through adoption of technology to better regulate for the future, and fostering a culture of knowledge sharing and cross-institutional collaboration in regards to best practice regulation, including development of handbooks and shared platforms.

The Council should provide quarterly updates to the Better Regulation Taskforce on key actions progressed by the Council members.

Recommendation 2: Through the Council of Regulators, regulators and the Government should consider and progress action in the following areas of regulation:

- **Performance:** Specify system-wide key performance indicators (KPIs) for regulators in terms of outcomes (not just outputs), promote continuous improvement in performance, and move towards insight driven regulation.
- **Guidance:** Increase the use of guidelines, explanatory papers and codes of conduct to assist businesses in interpreting existing rules, reducing reliance on regulation as a policy lever.
- **Engagement:** Proactively engage with small business to improve the delivery of regulatory objectives.
- **Flexibility:** Focus on regulatory flexibility, and move from prescriptive regulation to a risk-based, outcomes-focused approach in regulating new business models.
- **Data:** Embrace the use of data and big data analysis to inform the development and review of regulation.
- **Skills:** Assess the current state of skills across Queensland regulators, identifying where new skills are required to build capacity, and creating a workforce plan to develop skills to better prepare for a RegTech future.

Recommendation 3: Increase streamlining the way small business interacts between all levels of Government to obtain the approvals and licences they need. This could be achieved through:

- Developing and adopting systems for capturing and sharing information between local and state Government entities to reduce duplicated requests for information from businesses (for example similar to the Easy to Do business initiative being progressed by the New South Wales Government).
- Streamlining of licensing application arrangements between local and state governments to reduce application times and the need for multiple applications where there are parallel requirements from more than one regulator.

Recommendation 4: Establish an Information Unit within the Queensland Government, responsible for experimentation (for example with algorithms) and knowledge transfer across government about what works and to drive co-ordination across levels of government. This unit could be responsible for:

- mapping the extent of benefits to be gained from harmonisation of inconsistencies in regulatory requirements of different regulatory agencies
- looking at the utilisation and efficacy of information that is already being collected, with a view to enhancing data collection requirements and reducing the need for multiple subsequent data requirements
- developing a register of sunseting regulations
- mapping interactions between different sets of regulations for different types of small businesses
- communicating the benefits of e-document management
- “joining up” government data and services (e.g. same registration codes across regulators)
- integrating behavioural insights to increase voluntary compliance.

Recommendation 5: Through the Information Unit, partner with an appropriately qualified organisation such as Data61 to identify opportunities to apply artificial intelligence to optimise processes for users, decrease search and transactions costs, and coordinate across local, state and federal regulators. An initial pilot could be established in the area of regulation and compliance processes in the courts system in Queensland.

Recommendation 6: The Chief Entrepreneur should consider launching a pilot regulatory sandbox initiative (in line with the previous recommendation of the BRT). The particular area of regulation for which small businesses can apply to be granted a fixed-term exemption should be determined through consultations with Queensland businesses. The outcome of a successful pilot should be broader adoption of a conditions-based regulatory exemption framework by the Queensland Government.

Case study-specific recommendations

Freelancing: The Queensland Government can assist in the transition to increasing freelancing in the economy through developing guidance that clarifies individuals’ and small businesses’ obligations and rights.

Drones: Queensland Government to build on the Queensland Drone Strategy action (to develop an education campaign targeted at safe and proper recreational use of drones) by developing education resources to help small business drone users understand their regulatory obligations.

Drones: Queensland Government to work with industry to advocate for changes to the BVLOS regulations, noting that any relaxation in BVLOS regulations should balance potential productivity gains with appropriate safeguards to ensure that the use of drones BVLOS does not pose undue threats to community safety and national security. In this regard, Queensland Government to monitor developments in BVLOS regulations in international jurisdictions.

Law courts: Support digital transformation of the Queensland court system through addressing legislative requirements for the use of hard copy documents, supporting dedicated retraining to drive cultural change and funding for the move to digital systems. This will reduce costs of access for small business and be foundational infrastructure to support further opportunities such as big data analysis and machine learning.

Summary of other considerations for regulators

This regulatory review has uncovered a number of considerations for regulators faced with new business models and new tools and technologies disrupting traditional regulatory processes. While these are not targeted recommendations for Government, these considerations are important in shaping the approach to regulation in a digitally disrupted environment. It is acknowledged that regulators in Queensland are already making progress in many of these areas.

- In enforcing regulation, regulators should consider approaches other than penalties to support small business compliance with regulation.
- With a changing operating environment and unpredictable circumstances and innovations, Queensland regulators should consider the cadence of regulatory response with a phased approach of legislation supported by business rules.
- Regulators should consider utilising risk-based compliance rather than uniform standards across businesses and individuals.

Appendix A: Consultation list

Brisbane City Council

Catherine Ball

Civil Aviation Safety Authority

Deloitte Center for Government Insights

Department of State Development, Infrastructure and Planning

Queensland Civil and Administrative Tribunal

Queensland Department of the Premier and Cabinet

Queensland Productivity Commission (The Office of Best Practice Regulation)

Queensland Law Society

Science and Technology Australia

Appendix B: Summary of regulations

Drones

	Commonwealth	Queensland	Local Government
Employment	N/A	N/A	N/A
Taxation	N/A	N/A	N/A
Operations	<i>Civil Aviation Safety Regulations 1998, Part 101</i>	<p><i>Major Event Events Act 2014</i> – operation of aircraft over a major event area.</p> <p><i>Corrective Services Regulation 2017</i> (Queensland) - prohibits unauthorised drones (Remotely Piloted Aircrafts) being brought into a correctional facility.</p> <p><i>Environmental Protection Act 1994</i> – regulates noise nuisances but aircraft movements are exempt; question as to whether drones are also exempt.</p>	<p>Brisbane City Council – publishes a list of Council parklands with designated areas for launching drones.</p> <p><i>Public Lands and Council Assets Local Law 2014</i> (PLACA) - launching and landing drones and other remotely piloted aircraft can only be undertaken in designated areas or with council consent unless it is exempt.</p>
Licensing	<i>Civil Aviation Safety Regulations 1998, Part 101</i>		<i>Sunshine Coast Regional Council Local Law No. 1 (Administration) 2011</i> - it is an offence to undertake a prescribed activity,

			of which the operation of a drone is defined, without a valid permit.
Qualifications	N/A	N/A	N/A
WHS	N/A	N/A	N/A
Privacy	<p><i>Commonwealth Surveillance Devices Act</i> – remotely piloted aircraft fall within the definition of ‘optical surveillance device’ or ‘listening device’ under this Act.</p> <p><i>The Privacy Act 1988</i> (Cth) - only applies to Commonwealth agencies and organisations with an annual turnover of more than \$3 million (with certain exceptions).</p>	<p><i>Information Privacy Act 2009 (Qld)</i> - Queensland government agencies which capture video and audio recordings using a drone must ensure that their collection, storage, use and disclosure of the recording complies with the privacy obligations.</p> <p>May be relevant</p> <ul style="list-style-type: none"> - <i>Invasion of Privacy Act 1971 (Qld)</i> – audio recording of conversations. - the common law relating to trespass against person - <i>Criminal Code 1899 (Qld)</i> (s 227A)- observations/recordings where reasonable person would expect privacy 	

Freelancing

	Commonwealth	Queensland
Employment	<p><i>Independent Contractors Act 2006</i> – unfair contracts.</p> <p>Australian Consumer Law (s23) under the <i>Competition and Consumer Act 2010</i> – protection of small businesses (including independent contractors) from unfair contract terms in standard form contracts.</p> <p><i>Fair Work Act 2009</i></p> <ul style="list-style-type: none"> - sham contracting (attempting to disguise an employment relationship as an independent contracting arrangement); - limited workplace rights afforded to independent contractors and principals and right to engage in certain industrial activities. E.g. protected from adverse action, coercion and abuses of freedom of association. - no entitlements such as leave and notice of termination unless negotiated. - no minimum wage; no enforcement of unpaid invoices. (they have to pay their own superannuation and tax) <p>The common law – determines if someone is an independent contractor or an employee. This distinction is important for tax, superannuation and insurance.</p>	<p><i>Anti-Discrimination Act 1991</i></p>

	<p><i>Competition and Consumer Act 2010</i> - independent contractors must apply to the Australian Competition and Consumer Commission (ACCC) for permission to collectively bargain with a hirer.</p> <p>Various anti-discrimination legislation e.g. <i>Age Discrimination Act 2004</i>; <i>Disability Discrimination Act 1992</i>; <i>Racial Discrimination Act 1975</i>; <i>Sex Discrimination Act 1984</i>; <i>Australian Human Rights Commission Act 1986</i>.</p>	
Taxation and superannuation	<p><i>New Business Tax System (Alienation of Personal Services Income) Act 2000</i></p> <p><i>A New Tax System (Goods and Services Tax) Act 1999</i></p> <p><i>Superannuation Guarantee (Administration) Act 1992</i></p>	<p><i>Payroll tax liability Act 1971</i> - Payroll tax liability and taxable wages from the employer's perspective.</p> <p><i>Public Ruling PTA038.1 Determining whether a worker is an employee</i> – distinction between an employee and independent contractor for the purpose of the <i>Payroll Tax Liability Act 1971</i>.</p>
Operations	<p>Intellectual property – no specific law for independent contractors. They deal with those issues through contracting as per any other company.</p>	<p>Industry-specific e.g.</p> <p><i>Building Industry Fairness (Security of Payment) Act 2017</i> – helps subcontractors get paid in the building and construction industry.</p> <p><i>Queensland Building and Construction Commission Act 1991</i> - a person who is a party to a building contract, must not, without reasonable excuse, cause another party to a building contract to suffer significant financial loss because the person deliberately avoids complying with, or fails to comply with, the contract.</p>

		<i>Building Industry Fairness (Security of Payment) Act 2017 – Project Bank Account held in trust for head contractors and subcontractors until payments are due.</i>
Licensing	Industry-specific	Industry-specific
Qualifications	Industry-specific	Industry-specific
WHS	N/A	<i>Work Health and Safety Act 2011</i> <i>Work Health and Safety Regulation 2011</i> <i>Workers' Compensation and Rehabilitation Act 2003</i>
Privacy	N/A	N/A

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