



# Technology adoption by firms

## Technological change and the future of work inquiry



The Productivity Commission has been asked to examine how New Zealand can maximise the opportunities and manage the risks of disruptive technological change and its impact on the future of work and the workforce

So far this inquiry has found:

- There are many predictions of job losses and labour market disruption from automation ...
- The economy has grown on the back of increased labour force participation, but low labour productivity growth
- The best option for workers at risk of job loss is a dynamic labour market so that there are many chances to find better, suitable work
- Changing jobs can require learning new skills or using new technologies. Education and training can make these job-to-job transitions easier
- An education system that prepares people for the future of work should empower them to learn new skills and knowledge throughout life, and support them to make well-informed choices



... but available data don't support those predictions. The main problem facing New Zealand today isn't too much technology, it's not enough



Firms need to adopt more technology to improve labour productivity, but will not do so if they face high adjustment costs



Providing more income security to people between jobs will also help. Moving to a "flexicurity" labour-market model could better support workers through change, reduce adjustment costs for firms, and help increase technology adoption



A more responsive, broader and more innovative education and training system is necessary to improve access for workers to participate in training



There is evidence of a systematic failure to implement the national curriculum, constrained pathways into work, and a persistent tail of underachievement



### WHAT DID THIS REPORT FIND?

Decisions about whether and how to adopt technology are taken by individual firms. Many factors influence these decisions, but relative prices, risks, rewards and management capability are important.

Government policies and infrastructure affect firm technology adoption decisions, sometimes in unexpected or unintended ways.

Productivity growth is driven by the entry of new firms, the exit of weaker firms, and the shifts of resources from low- to higher-performing firms.

Protecting and extending business environment dynamism should be a priority of any government seeking to encourage technology adoption.

### Government can help remove barriers to, or increase the rewards for, technology adoption by firms

#### Higher emissions prices

- To encourage investments in carbon-reducing technologies.

#### A strong national innovation system

- To better enable firms to identify and adopt productivity-enhancing technologies.

#### Review limits on the use of genetic modification technologies

- To help ensure regulation keeps pace with technological change and evolving knowledge.

#### Refresh competition and consumer protection laws

- To make them fit for the digital age.

#### Accelerate open banking and consumer data right reforms

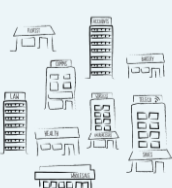
- These could create new markets, opportunities and rewards for technology adoption.

#### Adopt less restrictive land use regulation

- This could increase employment opportunities for workers and the supply of labour for firms..

**SUBMISSIONS** Submissions are welcome on any of the inquiry's draft reports until **17 February 2020**

### WHAT'S NEXT?



Final report to Government is due March 2020

### OTHER INQUIRY PUBLICATIONS



Previous draft reports:

- *New Zealand, technology and productivity*
- *Employment, labour markets and income*
- *Training New Zealand's workforce*
- *Educating New Zealand's future workforce*

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