

Design is a powerful tool of the modern, interconnected world. It is a key component of innovation, turning great ideas into services and products that consumers want to buy and use, it can help ensure that public services are user-friendly and more efficient, and it can help make cities more attractive places for citizens and skilled migrants to live and work. In short, these design-led firms are contributing to New Zealand's success as a diversified, resilient and growing economy.

The long list of partners that have supported this report makes a powerful statement. It's great to see a strong network of like-minded organisations that include New Zealand's leading tertiary design schools, the design sector's national association the Designers Institute, and local and central government entities, including the Auckland Co-design Lab, Callaghan Innovation, NZTE, ATEED, Auckland Council and the Greater Wellington Regional Council.

This is a timely report. I am particularly pleased it includes profiles of smart design-led firms such as Gallagher and Allbirds, all great examples of New Zealand exporters that are taking on the world and winning.

Hon Steven Joyce

contributing to
New Zealand's success
as a diversified,
resilient and growing
economy

New Zealand's distance from the rest of the world, and the need to create highly scalable product solutions for a diverse foreign end-user, means we must continue to embrace design research, to capture customer insights and to translate those insights into real market opportunities.

Jesse Keith
Group Manager, National Technology Networks, Callaghan Innovation

to make full use of design's potential. New Zealand has a strong foundation of design excellence. We have world-class designers, leading design firms, and globally quality assured design education. The data and case studies in this report highlight the significant value the design sector is already contributing to the economy. But public investment in design is well short of that provided for other components of New Zealand's innovation eco-system. If New Zealand had a national design strategy, if design was privileged even half as much as science in the business growth agenda, design could become one of the most important sectors in the New Zealand economy and this country could be truly remarkable.

The origins of this report date back to 2013 when a national design consortium was established comprising the Designers Institute of New Zealand; design schools of Massey University, AUT, Otago Polytechnic and Victoria University of Wellington; and NZTE's Better By Design programme. The consortium collaboratively developed and submitted a bid for funding for a Centre of Research Excellence (CoRE) in Design — a research entity that would undertake

research into, for and through design in order to enhance design's innovation capabilities for New Zealand. In 2015, the consortium was expanded to include the Auckland Co-design Lab and Callaghan Innovation, and branded itself as DesignCo.

Although the CoRE bid was unsuccessful, DesignCo has continued to connect the constituent parts of the New Zealand design eco-system in a systematic and regular manner, telling the story of New Zealand's design excellence, rectifying the paucity of information about the design sector and gathering statistical data on the value and impact of design in New Zealand.

The DesignCo partners commissioned the data contained in this report because it was not data collected by any government agency. Without data it has been impossible to communicate the extent and value of the design sector to New Zealand. What DesignCo would like to see as a consequence of the significant findings in this report is the government becoming a more engaged partner in ensuring design is fully utilised for economic and social benefit. What this means is not relying on the initiative of individual public servants who 'get' design utilising it for discrete projects.

There is a strong correlation between national prosperity, economic growth and a thriving design sector. International evidence confirms that design leads to more competitive firms making and selling higher value products and services. It is a powerful tool of urban regeneration. In the public sphere it is a way of addressing deep seated, complex and hard-to-solve problems. Recognising design's power for both economic transformation and nation branding, many OECD countries have public policies and a research funding infrastructure that strategically targets their design sectors. New Zealand is well positioned

Nor is it trying to neatly tuck design into the science investment infrastructure. Rather, we are looking to government to show leadership and recognise design as a sector that warrants separate attention and investment

The PwC technical report, from which is sourced the statistical insights in this report on design's economic contribution to New Zealand, draws on two methods. The first method uses an experimental classification for design — a taxonomy — developed by a group of stakeholders expert in design. The second method draws on official census data and a PwC Regional Database which allocates regional GDP and employment totals from Statistics New Zealand. The experimental taxonomy was populated with New Zealand data sourced by an overseas third party provider. This approach was adopted because design is a process that occurs throughout the economy in a wide range of sectors, and is not always well suited to capture through current official industry and occupation codes because they do not adequately represent the current thinking about a definition for design. This is not the first time an experimental approach has been used to overcome the limitations of

official sources, and nor will it be the last. PwC in its technical report notes that whilst there is uncertainty around the accuracy of the dataset that was provided to it by a third party, it is nevertheless comfortable with its technical report, which contains appropriate descriptions of the data and methods and their limitations. The report was reviewed internally at PwC, including a technical peer review.

DesignCo is grateful to PwC for their recognition and support. In addition to funding provided by DesignCo, support for the production of this report was provided by the Auckland Council's Design Office; ATEED; and the Wellington Regional Strategy Office of the Greater Wellington Regional Council. We are grateful to those organisations and individuals who have provided their time and insights, including those we have spoken to in relation to the case studies and interviews in this report.

The DesignCo partners welcome this report and look forward to talking more with Government about how to realise the benefits design can bring for New Zealand.

Professor Claire Robinson
Pro Vice-Chancellor, Massey University College of Creative Arts, and Convenor DesignCo

open a dialogue with government

This report provides information on the substantial contribution of the design sector to the New Zealand economy. The first ever attempt to put an economic value on design in New Zealand, the report details a highly skilled, creative, knowledge intensive sector adding an estimated \$10.1b to New Zealand's gross domestic product (GDP), 4.2% of total GDP, and 4.4% of New Zealand's total employment.

DesignCo's desire has always been to articulate how important design is to New Zealand, but to date had lacked the evidence to do so. In 2016 DesignCo representatives along with another design network, initiated in Auckland by the Designers Institute of

New Zealand around the importance of urban design to the Auckland economy, collectively decided now was the time to undertake a serious economic study on the value of design. The Auckland meeting brought ATEED and the Auckland Design Office into an expanded consortium of interested parties as well the Wellington Regional Strategy Office (WRSO). DesignCo had been working with WRSO in Wellington prior to the Auckland gathering on the definition of a classification for the design sector.

The commissioners of the report hope the data enables them to open a dialogue with government to improve the strategic application of design nationally. It is expected that these discussions would be the initial steps in the ultimate development of a design strategy for New Zealand.

Defining design

For the purposes of this report, we borrow the definition of design from the UK Design Council. Design is defined as the creation of a proposition in a medium, using tools as part of a process. It is noted that a slightly amended definition was required to gather the quantitative data for this study, to build the evidence base.

The definition of design is broad in nature — it is a process or series of processes to create a proposition in any industry. Design is dynamic and can stretch across a number of applications, industries and occupations. It is because of this broad nature that the project group determined that the current classification system for industries and occupations in New Zealand did not adequately capture design in all its forms. As such, the project reference group developed a classification system for design. This allows a common understanding and transparency of what is, and is not, included in this report's classification of design.

The classification has five levels:

2
2
market verticals

1
design sector

264
design processes

4
double diamond components

9
design disciplines

Level 1: 1 Design sector

The first level of the classification is design itself.

Level 2: 29 Market verticals

The second level of the classification captures the market verticals, or industries, which are included in this study.

The project reference group identified 29 industries which are likely to have material design activity in New Zealand, eg manufacturing, human health, food and beverages.

The industries are wide ranging to capture all industries which are expected to have material design activity. It is important to note that in the estimates of design's contribution to GDP for each vertical, only the design component is included (eg not all the GDP for agriculture is included).

Level 3: 9 Design disciplines

The third level of the classification captures the different design disciplines: design education, graphic design, innovation/invention, interactive design, motion design, product design, service design, spatial design and strategy.

Level 4: 4 Double Diamond components

The fourth level is the four 'Double Diamond' processes: Discover, Define, Develop, Deliver. While this is not the only way to describe the design process, the double diamond is used widely by stakeholders to describe the iterative design value chain.

Level 5: 264 Design processes

The most fine-grained level of the classification is made up of design processes. The project group identified 264 distinct design processes (eg market research, program design).

The classification defines the parameters for this report. Note a process can be included in the classification for design and also included in another sector (eg market research is included in design but could also be included in advertising); it is not intended to cast a process exclusively as a design process.



discover

define

develop

deliver

The total contribution of design to the New Zealand economy was approximately \$10.1b in the year to March 2016, which equated to approximately 4.2%* of New Zealand's GDP. For comparison, a UK Design Council study found that the economic contribution of design in the UK was £71.7b in 2013, which was equivalent to 4.1% of UK's GDP.¹

If design were treated as an individual industry, its contribution to the New Zealand economy would be larger than agriculture (\$8.1b) and on-par with retail trade (\$10.6b) and food, beverage and tobacco product manufacturing (\$10.6b).²

4.2%
of GDP

* This figure includes outputs from both methods (the experimental taxonomy and official sources) and is drawn from the PwC technical report.

1. Note that the UK Design Council reports the contribution to gross value added (which is different to GDP) of 7.2% in 2013. We have estimated the contribution of design to the UK's GDP for consistency with our analysis.

2. Statistics New Zealand, National Accounts (Industry Production and Investment): Year ended March 2015 (preliminary figures). We note that agricultural output fluctuates annually due to a number of factors eg weather conditions and the preliminary figure for the 2015 year was the lowest value for agriculture for a number of years. It follows a high of \$13.1b in 2014. The simple average contribution of agriculture to national GDP for the last 10 years was \$9.5b (real).



**larger
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