MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

An Overview of the Expected Outcomes and Impacts of the New Zealand Data Science Research Programmes

The Data Science Research Programmes offers the opportunity for greater use of advanced data science for New Zealand benefit

Greater use of advanced data science across the economy, environment and society will create new ways of working, helping to position New Zealand for a sustainable, prosperous and inclusive future. Government wants to make sure New Zealand has sufficient advanced data science capability to develop useful and transformative data science techniques, and to apply advanced data science to create economic, environmental and social benefits for New Zealand.

A larger, more connected advanced data science research community with strong links to end-users, will deliver more dynamic, excellent, high impact use-inspired data science research, and support greater use of advanced data science for New Zealand benefit.

Through this investment the New Zealand Government will fund use-inspired data science research programmes that focus on real-world problems, of significance to NZ, that are multidisciplinary, collaborative and with international links.

The Vision of the Research Programmes

The vision of the New Zealand Data Science Research Programmes is that New Zealand has a dynamic, exciting and cutting edge advanced data science research community and advanced data science is solving real challenges for New Zealand, across the economy, society and environment. We will know we have achieved this when there is increased use of data to provide new knowledge, inform policy, and create new products and services/ways of working.

Enablers

What will make the vision possible?

> Quality, complex New Zealand data sets are accessible and available for trusted use.
> Institutions and a regulatory environmental that supports data sharing and data driven innovation.
> Social licence for trusted data use.
> Effective compute and connect infrastructure.

Outputs *(knowledge and skills)*

What will the programme produce? What activities will it encourage?

> Dynamic, excellent, data science research
> New connections across the spectrum of data science research in New Zealand, from discovery to application, to product development.
> New connections with international data science research experts.
> New data science talent in New Zealand.
> New strategic collaborations between data science researchers and end-users, working together to create impact via use of data science to solve New Zealand challenges.
> New uses of data science in specific domains.

Outcomes

What will result from the outputs?

> New Zealand has deep multidisciplinary expertise in advanced data science research; research institutions have increased their data science research capability and capacity.
> New instances where advanced data science is addressing New Zealand research challenges.
> New instances where advanced data science is addressing real world issues and challenges to benefit New Zealand.
> People are using new and improved data science processes tools and technologies to generate commercial benefits.
> A bigger, more capable and strongly connected community of data science researchers, linked with end-users.
> More data science talent in the work force beyond research organisations.

End Impact *(change to the economy, society, or environment)*

What will be the overall benefit to New Zealand?

> World leading data science research is translated into positive impact for New Zealand via new, more efficient and sustainable ways of working.
> Data science is widely used in New Zealand across the government, industry, environment and our society.
> New Zealand's excellent, high impact, use-inspired data science research is internationally recognised, and people want to collaborate with New Zealand data scientists.
> A bigger and more productive data science industry in New Zealand, with more data science jobs and bigger earnings.