

Building on human-centred design principles: How Assurity Consulting guided the design of AgResearch's new HQ



CASE STUDY

After several stalled attempts at establishing its headquarters at Lincoln, agricultural science organisation AgResearch took a unique approach to the design of its new building, which put its people right at the centre of the project. It engaged Assurity Consulting to gather insights and deliver actionable results to guide the design by drawing on the views, desires, and expectations of the people for whom the building is intended. In doing so, the consulting company has uniquely applied human-centred design and agile delivery principles. The work resulted in exceptional engagement from AgResearch employees, a detailed brief to architects, and a design which is expected to facilitate new ways of working, optimise available space and resources, and optimise value for money.

Headquartered in Canterbury, AgResearch Ltd is one of New Zealand's largest Crown Research Institutes and employs several hundred academic and research staff in four campuses countrywide. The organisation conducts a vast array of agricultural research, from seeds to pest control, high value foods and farming systems, delivering science and technology projects for the benefit of the agricultural sector and New Zealand.

With the construction of a new \$98-million headquarters and research centre located on the Lincoln University campus, AgResearch staff members are looking forward to moving into a new purpose-built facility. Along with the project, modern ways of working including collaborative workspaces and enhanced technology will be introduced. The construction of the building will commence in June 2021 and is expected to be occupied in late 2023.

Situation

Like every construction project, the design and delivery of the new AgResearch facility had to take place within various constraints. Beyond the obvious ones like budget, unique circumstances included occupants with very clear ideas of what they do, and do not want in a building. Director of Infrastructure, Farms & Facilities, John O’Dea explains: “A consistent challenge with capital projects is drawing out exactly what users needed. For this building, we had the added consideration of a group of users who had a long list of requirements which had to fit into a finite budget. And many of those needs were based on old ways of doing things, such as individual offices and workspaces, which simply wouldn’t be possible for the new building.”

Research scientists employed at AgResearch are a highly select group of specialists and leaders in their field. It is important, adds O’Dea, that the workspace created for them is not only fit for purpose, but also satisfying. “This plays an important role in staff retention and attracting the very best new talent. Our people tend to have lengthy tenures and they aren’t easily replaced, so getting the workspace right is crucial.”

Having worked with Assurity Consulting in the past, he approached the company with an unusual brief: help design a new building by putting the occupants first.



JOHN O’DEA
DIRECTOR, INFRASTRUCTURE, FARMS & FACILITIES
AGRESEARCH

Solution

Assurity Consulting took a human-centred design approach to the challenge, engaging deeply with AgResearch scientists and other staff, shadowing them through their workdays, and drawing on their insights, observations, likes and dislikes. This was supported with multiple workshopping sessions with a focus group, and then iterative sprints guiding in design of the eventual workspaces.

Those familiar with software development and change programs will recognise these methods as aligned with the Design Thinking methodology – which was indeed Assurity Consulting’s intention.

And, says O’Dea, the approach taken by the firm in terms of engagement is very unlike that which one typically expects from consultants. “This was a fundamental factor in the value created. By gaining the trust and cooperation of our people, the Assurity consultants were able to draw out insights which you wouldn’t ordinarily expect. By studying how people actually work, rather than simply discussing how they perceived their workdays, the consultants achieved a true view of the situation – which, in many instances, came as something of a surprise to the participants.”

The application of tact meant an initially reluctant staff contingent soon warmed to the process, adds O’Dea. “Enthusiasm quickly built as ideas were shared and views and inputs acknowledged and applied. It became clear that the consultants were genuinely interested in drawing out the needs of the users, and they felt their input was valued and valuable.”

An estimated 70 hours went into shadowing and workshops, with the results of each initiative presented the very next day informing and guiding iterative design sprints. “We’d see detailed summaries pulled together as an initial report, referencing real rather than theoretical examples presented in an enlightening way. And the pace of delivery spoke to a rigorous work ethic,” comments O’Dea.



Results

While the construction of the new AgResearch building will commence soon, Assurity Consulting’s work has concluded with the main output being a relevant design brief for the project’s architects. This brief explicitly represents the preferences, design principles and inputs of the study group, including open plan working environments, and a ‘Serviced Apartment’ approach. For the latter concept, science groups which previously had underutilised facilities occupied perhaps 20 or 40 percent of the time, are now rapidly configurable generic spaces, booked and equipped to specific needs as they arise.

“Getting to this point saw a lot of detail and iteration with mockups where the team put together ideas and presented them to their colleagues, utilising low fidelity mock-ups,” explains O’Dea.

Confronted with this innovative approach to building design, he says the architects reacted positively, particularly as the guidance contributes to a highly functional building. “A detailed brief always results in better outcomes while limiting scope creep,” O’Dea comments.

A further benefit is the confidence the AgResearch board of directors has in the return expected from the nearly \$100-million investment in the new building.

“Involving key stakeholders and end users is very powerful. The work which went into the design brief confirms that we’re moving in the right direction and creating ideal spaces for professional productivity.”

While acknowledging difficulty in putting hard numbers to the value of the work delivered by Assurity Consulting, O’Dea nevertheless says there is an indication of quantifiable benefit in the final budget agreed upon for the building.

“Put it to you this way. When the project started, the initial scope was valued at \$140 million. With Assurity’s assistance, we’ve developed a highly functional building for our people for \$98.6 million”

Finally, asked if all buildings should follow a similar design process, O’Dea points out that AgResearch has a specific ‘user base’ and unusual requirements for its real estate assets. “Standard buildings are well-understood by architects and owners. But where you need to create highly technical facilities with demanding requirements, I think you can only benefit by adopting an approach to design which better captures the needs of the end users.”



At a glance



Company:
AgResearch

Industry:
Agriculture

Requirements:

AgResearch's current buildings have been around for than 50 years. They will commence the construction of a new \$98-million headquarters and research centre located on the Lincoln University campus in June 2021. A consistent challenge they faced was drawing out exactly what users needed, with the added consideration of a group of users who had a long list of requirements which had to fit into a finite budget.

AgResearch decided to take a unique approach to the design of its new building, which put its people right at the centre of the project. It engaged Assurity Consulting to gather insights and deliver actionable results to guide the design by drawing on the needs, desires, and complexities of the people for whom the building is intended.

Solution:

Assurity Consulting took a human-centred design approach to the challenge, engaging deeply with AgResearch staff members, shadowing scientists and other staff through their workdays, absorbing important insights, jobs-to-be-done, and the observations between what people say and do. This was supported with multiple workshoping sessions with a focus group, and then iterative sprints guiding in design of the eventual workspaces.

Services provided:

- Empathy research
- Design sprints
- Prototyping
- Workshop facilitation
- User testing
- UX design
- Brief documentation

Outcomes achieved:

- Developed a relevant design brief for the project's architects that explicitly represents the preferences, design principles and inputs of the AgResearch study group, including open plan working environments, and a 'Serviced Apartment' approach
- Reduced the initial building scope value from \$140 million to \$98.6 million whilst meeting the functional needs of the AgResearch staff