

## Lean R&D

**Developing capability in this area** will help you maintain momentum as you acquire new information and knowledge through your research activities. Lean creates a culture of continuous improvement that helps businesses to improve workflow, create certainty in the face of research uncertainties, keep waste and costs down, and bring focus to customer value-adding activities.

**Lean is a way of thinking about creating needed value with fewer resources and less waste. It is a practice of continuous experimentation to maximise flow and minimise waste.**

R&D projects often go through a rigorous management approval process, require continuous customer and technical testing, and need input from several functions in your organisation (such as operations, sales, marketing etc.) before they are ready for market. These characteristics cause waste and bottlenecks in the process.

Lean production is difficult to apply to R&D in detail. There are too many iterations in the design and development phases, and at the on-set of the design project, you may not be sure what the solution will be. To apply Lean thinking in R&D, you first need to understand the concept and principles and then learn to see where waste exists, and work to eliminate it.

### Key activities can include:

- Identifying customer value-adding activities
- Identifying process inefficiencies
- Improving planning, staff engagement, customer value, and research flow
- Creating a continuous culture of improvement.

### Potential risks of not deploying Lean thinking and methodologies include:

- Negatively impacting commercial success by not optimising customer value
- Increased research time resulting in cost overruns
- Excessive rework
- Slow management decision making.
- Creating products that customers don't need or are not willing to pay for
- Losing knowledge can add to cost and slow R&D delivery

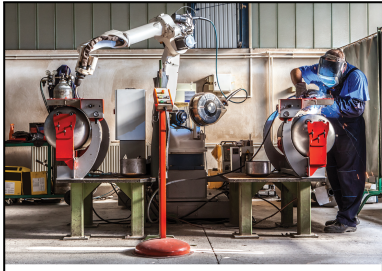
### Potential Capability Partners and Useful Resources

Below you'll find some potential capability development courses and providers plus some useful resources. If you know of suitable providers through your networks or have existing working relationships with providers please feel free to recommend them as capability development partners and let us know [here](#) so that we can add them to this resource page to benefit others. We make every reasonable effort to keep this information current and accurate as a starting point for your capability development plan. However, it is

provided for your convenience only and should be taken as neither an exhaustive list of providers, nor as an endorsement of those organisations represented.

You also have an opportunity to speak directly with a Callaghan Innovation Business Innovation Advisor, who can help put you on the capability development path that best suits you and your current R&D needs.

## Capability Development



[www.callaghaninnovation.govt...](http://www.callaghaninnovation.govt.nz)

### Lean

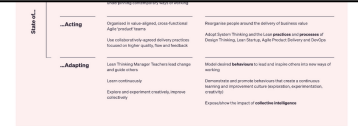
Unleash the value in your business by putting every step of the business process under the Lean lens. Eliminate waste and improve your customer experience.



[www.callaghaninnovation.govt...](http://www.callaghaninnovation.govt...)

### Digital Lean

Build upon your Lean foundations and boost your competitive advantage further through the use of Industry 4.0 technologies.



[www.hypr.nz](http://www.hypr.nz)

### Solutions | Scaling Lean-Agile | Edit the DNA | SAFE | HYPR, NZ

Our Scaling Lean-Agile solution targets the DNA of your organisation to determine if it needs to change to deliver the value your customers need. We do this by helping your teams adopt Lean-Agile mindsets, principles, behaviours and practices using the ...

[assurity.nz](http://assurity.nz)

### Continuous Learning - Assurity

Gain the skills and expertise needed to thrive in a fast-changing technology environment. Outcome-based education. Get hands-on, practical education from expert consultants who work in the industry for a living.

### What we do | IMS Projects | Lean and Innovation consultants

We have helped hundreds of great leaders build better businesses by unlocking the potential of their team. We do this by helping to implement a systematized approach to innovation and productivity. We can do this for you, too.

### Rapid Learning Cycles Global Project Leader Certification Workshop - Rapid Learning Cycles Institute

Rapid Learning Cycles Global Project Leader Certification Workshop Prepare to Lead Your Team to High Velocity Innovation Register Now Innovators Can't Accelerate Product Development Without New Ways of Thinking No ...

## Topic Resources



★★★★★ 5

[www.amazon.com](http://www.amazon.com)

### Creating a Lean R&D System

Creating a Lean R&D System



★★★★★ 10,878

[www.amazon.com](http://www.amazon.com)

### The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses

The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses



[www.lmi.org](http://www.lmi.org)

### An Agile Framework for Research and Development

LMI developed an agile framework for research and development that encourages the creation of rapid prototypes based on Innovation and crowdsourced ideas.

[www.innotimi-ic...](http://www.innotimi-ic...)



### How to Apply Lean Thinking

Lean is a great framework for R&D process development. The focus of Lean is on increasing customer value and process flow efficiency (time-to-market) by decreasing waste. To apply Lean thinking in R&D, first get to know the concept and principles and th...

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