

# Technology Readiness Canvas

## What is a technology readiness canvas?

A Technology Readiness Canvas is a tool for founders. It provides them a comprehensive, structured overview to review and reflect on the status of their specific technology. It is by used by founders in deeptech startups, R&D-heavy ventures, and corporate innovation to:

- Document the current state of a given technology
- Demonstrate its readiness level (e.g., using TRL – Technology Readiness Levels)
- Reveal potential blind spots in the development or strategic positioning of the technology
- Identify opportunities for third-party validation, helping to strengthen credibility and guide next steps
  - In support investment, partnership, or regulatory decisions

## Why is it important?

The Technology Readiness Canvas helps startups and scale-ups to assess the maturity, uniqueness, and scalability of their innovation. By structuring your technological position, it highlights both technical depth and strategic potential. This clarity builds confidence internally and externally. As a result it enables you as a founder to communicate more effectively with partners, advisors and investors.

## How to use the technology readiness canvas?

This canvas is a practical tool for mapping your innovation's technical maturity, uniqueness, and scalability. Start by reviewing it with your founding and technology team. Involve commercial teams or other disciplines if needed, and repeat (on a bi-annual basis for example) as you prepare for the next phase of your startup or scale-up. It is designed to sharpen your own understanding as a founder and identify white spots. Once completely reviewed, consider how the insights gained can strengthen your pitch deck or investor materials. For example:

- Integrate key points into your pitch to convince potential investors or financial partners.
- Prepare supporting technical documentation for your data room.

Use the color-coded stages to guide your review. Focus on the sections that are most relevant to you in the phase you are in.

Technology Validation



Market Fit & Initial Scaling



Scalability & Ecosystem



## After completing the canvas

After having completed the your teams reflection on the topics in the Technology Readiness Canvas, you should have gained a better shared insight on your technology's current state, have identified gaps, and aligned on your next steps. Use insights to integrate parts of the canvas in your pitch deck or other formal communication to add clarity and build confidence during fundraising/partnership discussions.

## Disclaimer: intended use and limitations

The Technology Readiness Canvas is a strategic support tool for founders. It is not a substitute for technical due diligence, legal advice, or investment documentation. Its purpose is to facilitate structured reflection and support communication between founders, advisors and investors and last, to provide a consistent framework for review your technological maturity.

Every venture is unique. Some topics may need attention earlier than others; adapt the canvas to fit your situation. It does not guarantee funding outcomes, nor prescribe a one-size-fits-all path. Use it as a guide towards working where you want to go, not a rulebook.

## In search of third party validation?

TNO Fast Track is the independent technology partner for startups, scale-ups and innovative SMEs. Scan the QR code to start the conversation.

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# Technology Readiness Canvas

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Technology  
Validation

## Technology

Core description  
Unique Mechanism  
Problem Solved  
TRL  
Team

## Uniqueness & IP-position

IP & Know-how  
Protection Strength

## Feasibility & Roadmap

Next Steps On Your Roadmap  
Risks & Bottlenecks  
Demonstrator & Results

Milestones | Prototype, first pilot, basic patents, market readiness level 1-3



Problem/Solution Fit  
and Initial Scaling

## Market Context & Fit

Validation Evidence  
Market & Application Fit  
Promising Categories  
Research & Insights

## Differentiation & Competitive Edge

Competitors  
Differentiations  
Business Model  
MRL

## Feasibility & Roadmap

Critical Resources  
Availability at Start  
Funding & Investment

Milestones | Proven problem/solution fit, launching clients identified, market readiness level 4-5



Scalability &  
Ecosystem

## Ecosystem & Partnerships

Collaborations  
Network(s)

## Security Claims & Standards

Certifications  
Validations

## Feasibility & Roadmap

Availability at Scale  
Funding & Investment

Milestones | International certification, > 50 clients, market readiness level 6-7

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Technology  
Validation

## Technology

### Core description

Describe the core functionality and principle of the technology. Use visuals to explain.

### Unique Mechanism

What is the unique, innovative mechanism the technology is based on (compared to conventional technologies)? Use technical documentation if needed.

### Problem Solved

What problem does your technology solve, how is addressed and how is validated it?

### TRL

How would describe your current Technology Readiness Level (TRL) and why?

### Competences & Experience

Explain why your team has the required technological competences and experience with comparable technologies to deliver? Does the team fit the current phase of the company, and how is your hiring plan structured?

## Uniqueness & IP-position

### IP & Know-how

Do you hold any IP (such as patents or propriety know-how) and are you aware of any competing patents?

### Protection Strength

How strong is your protection? (In terms of patent families, priority date, geographic coverage)

### Infringements

What is the risk of potential infringement?

## Feasibility & Roadmap

### Next Steps On Your Roadmap

Where do you stand now and what are the next steps on your roadmap? Does your technology align with future rules & regulation? How does your technology fit in the bigger picture of the technology landscape?

### Risks & Bottlenecks

How do you navigate between technological risks and engineering risks? Which still need to be addressed and how do you intend to approach that? What development bottlenecks do you foresee?

### Demonstrator & Results

Describe to what extent your solution has been demonstrated? Under what conditions and at what scale? Do you have reproducible technical results?

Milestones | Prototype, first pilot, basic patents, market readiness level 1-3



Problem/Solution Fit  
and Initial Scaling

## Market Context & Fit

### Validation Evidence

What evidence can you share that signals pilot-intention, co-development or other reference conversations from potential end-users of your technology?

### Market & Application Fit

Which markets or applications are most relevant for this technology, where do you see your product market fit and/or 'willingness to pay'?

### High Potential Technology Domains

What areas of technological innovation are likely to deliver transformative outcomes in your industry?

### Research & Insights

What relevant research or market insights exist, and what are your key conclusions so far?

## Differentiation & Competitive Edge

### Competitors

Who are the main competitors, and how does your maturity level compare?

### Differentiations

What are your key advantages in cost, scalability, integration complexity or other factors?

### Business Model

What licensing, pricing, or go-to-market approach are you pursuing?

### Market Readiness Level

What is your current Market Readiness Level (MRL)?

### Manufacturing Readiness Level

Describe the steps you have taken to prepare for manufacturing.

## Feasibility & Roadmap

### Critical Resources

Which materials, components, infrastructure or external processes are critical?

### Availability at Start

To what extent are these critical resources readily available at start? What makes it possible to move from lab/pilot phase to industrial scale?

### Funding & Investment

What is your current funding status and burn rate? And what budget is allocated and needed to advance your R&D roadmap?

Milestones | Proven problem/solution fit, launching clients identified, Market Readiness Level 4-5



Scaleability &  
Ecosystem

## Ecosystem & Partnerships

### Collaborations

Which technology partners, operational partners, industry clients and ecosystem players do you collaborate with?

### Network(s)

How does your network strengthen tech development and future market access?

## Security Claims & Standards

### Certifications

What are typical security claims or certifications that are required to operate?

### Validations

What public certifications or third party validations should be applied to your solutions?

## Feasibility & Roadmap

### Availability at Scale

To what extent are these critical resources readily available when scaling?

### Funding & Investment

What is your current funding status? And what budget is allocated and needed to advance your R&D roadmap?

Milestones | International certification, > 50 clients, Market Readiness Level 6-7