



Roadmapping

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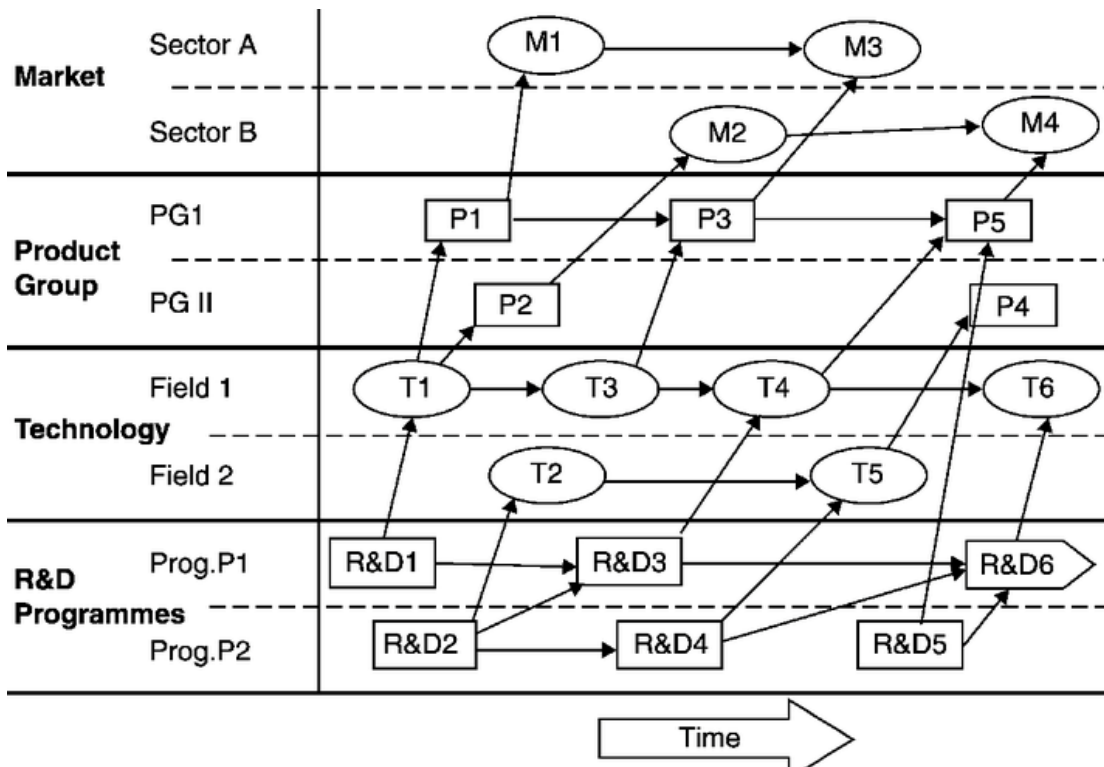
Roadmapping

Roadmapping is a futures tool for innovation which looks ahead to some kind of future state and then tracks back through the stages needed to get to that state. In other words it makes a 'roadmap' of what has to be done to get there. (Another label sometimes used is 'back casting' rather than forecasting).

A typical example is what is called Technology Roadmapping. This might be used to identify the technologies needed and the resources necessary to use those technologies in order to create and deliver some product or service in the future. The stages might look like this:

- 1 Identify future products or services which might be of value in the future environment – say 5-10 years out from today.
- 2 What technologies would be involved in that product or service?
- 3 What steps do we need to start taking to acquire the technological competence to use those technologies in the future? Which skills? Investments in new R&D? Acquisition of key resources or equipment? Etc.
- 4 From today what are the steps towards building those technological competencies?

The figure below shows an example of a simple roadmap



In practical terms there are many different ways of laying out a roadmap but the key elements would involve a timeline and some areas to consider. For example:

Year	What's happening	How did we get there?
2020	New product for intelligent home automation, controlling all your household devices	
2019	Prototype testing with key markets and final development	Applying technologies in a demonstration product
2018	Individual controllers developed and tested and integration into a demonstration product	Applying the technologies in a variety of different controllers – for temperature, time, air quality, etc.
2017	Moving the technologies to application	Mastering the core technologies – having skills and equipment in house and ready to develop products
2016	Establish a new R&D area and laboratory team	Recruit key staff and procure key equipment and resources
2015	Identify product specification and the technologies needed to produce it	Research on potential markets and products for the year 2020 around intelligent energy efficient home automation
2014	Strategic decision to diversify into new product areas around energy efficiency	Forecasting tools to look at the future in 2020 and market opportunities within the environment of that time
2013		

Roadmaps often focus on key stages around technology integration and identify product performance features needed and technologies to enable them – for example reliability and cost. There may be competing technologies which can deliver the same attributes so something about technology exploration and selection is often a feature.

More information about roadmapping can be found at
http://www.ifm.eng.cam.ac.uk/uploads/Resources/Briefings/v2n1_ifm_briefing.pdf