Module Roadmapping

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Abstract

This module addresses roadmapping.

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Roadmapping

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Abstract

This article describes what a roadmap is, how to create and maintain a roadmap, the involvement of the stakeholders, and criteria for the structure of a roadmap.

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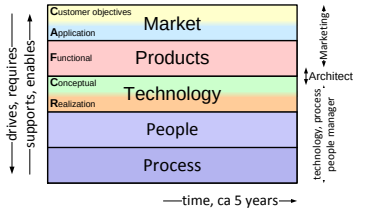
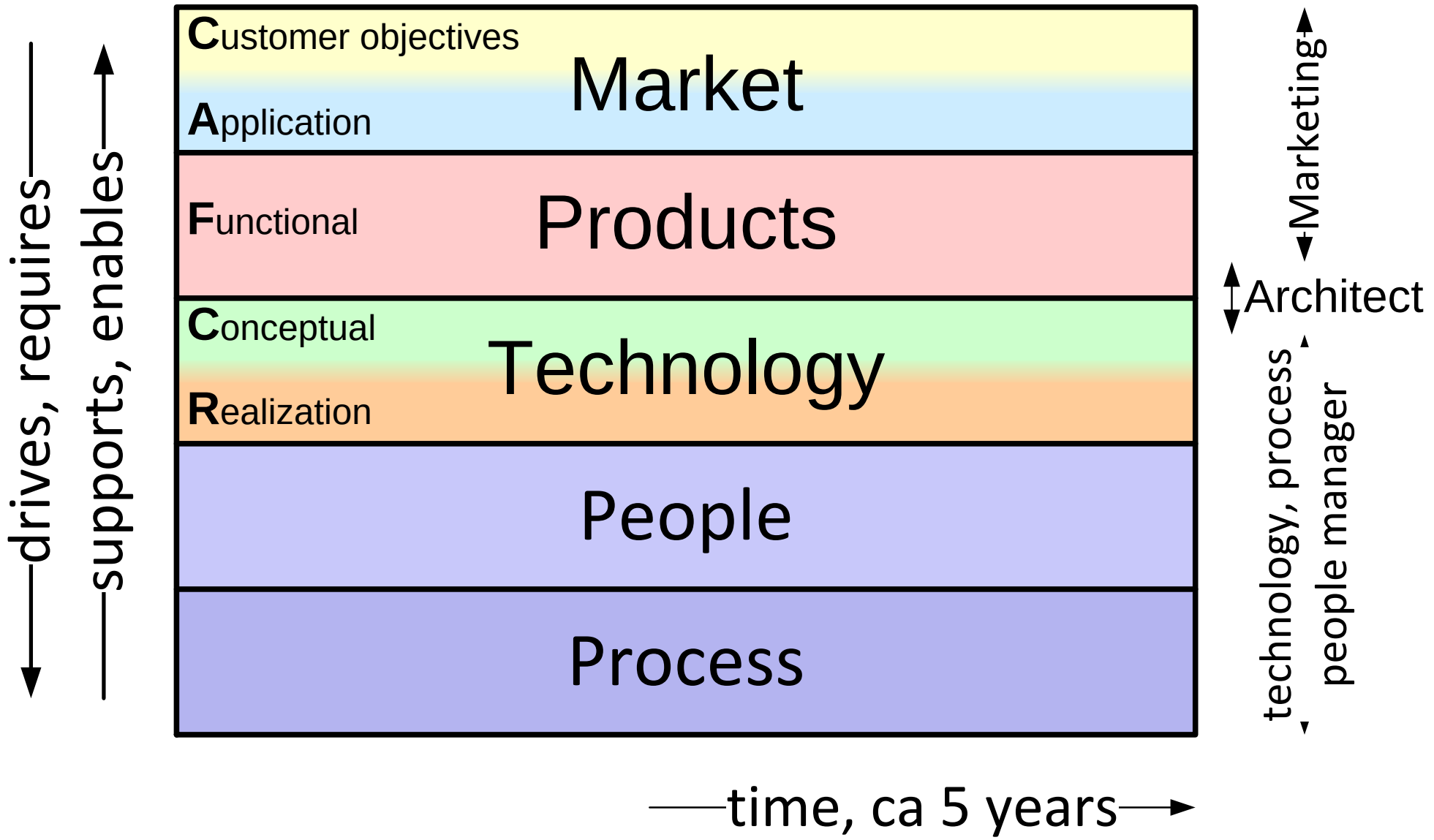
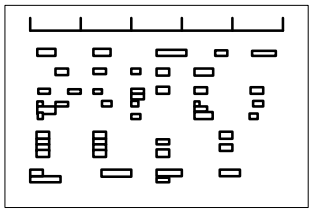


The Roadmap Integrates Five Views



Granularity of Roadmap Material

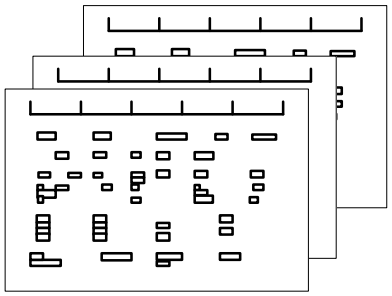


Top-level roadmap

Single page

Poster

part of many presentations

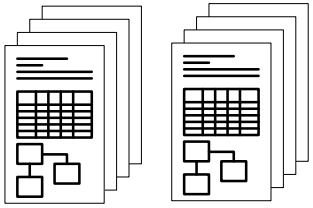


Supporting roadmaps

Single page per view or per driver

Poster

part of many presentations



Supporting reports

Document per relevant subject

Problems that Occur without Roadmapping

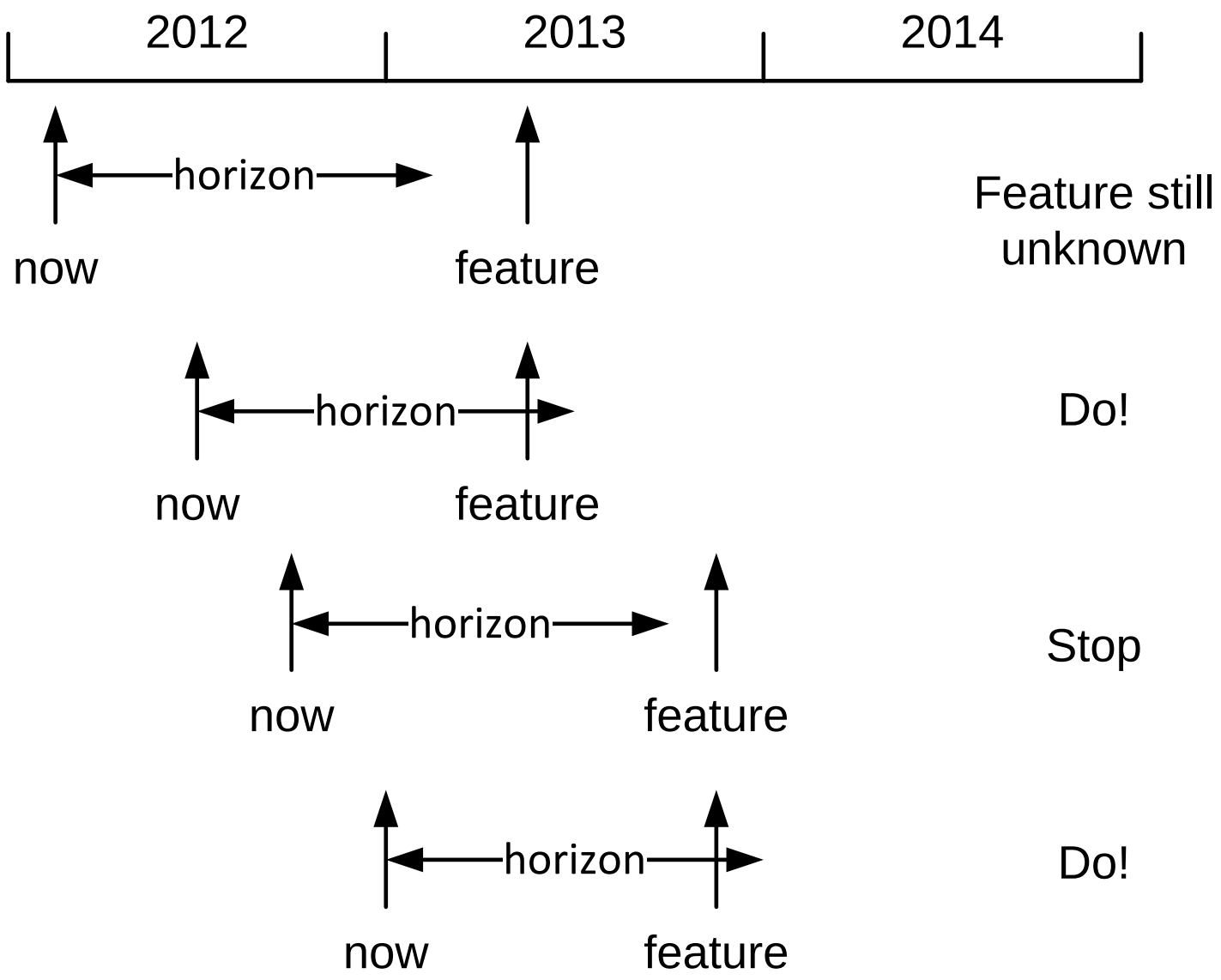
Frequent changes in product policy

Late start up of long lead activities, such as people recruitment and process change

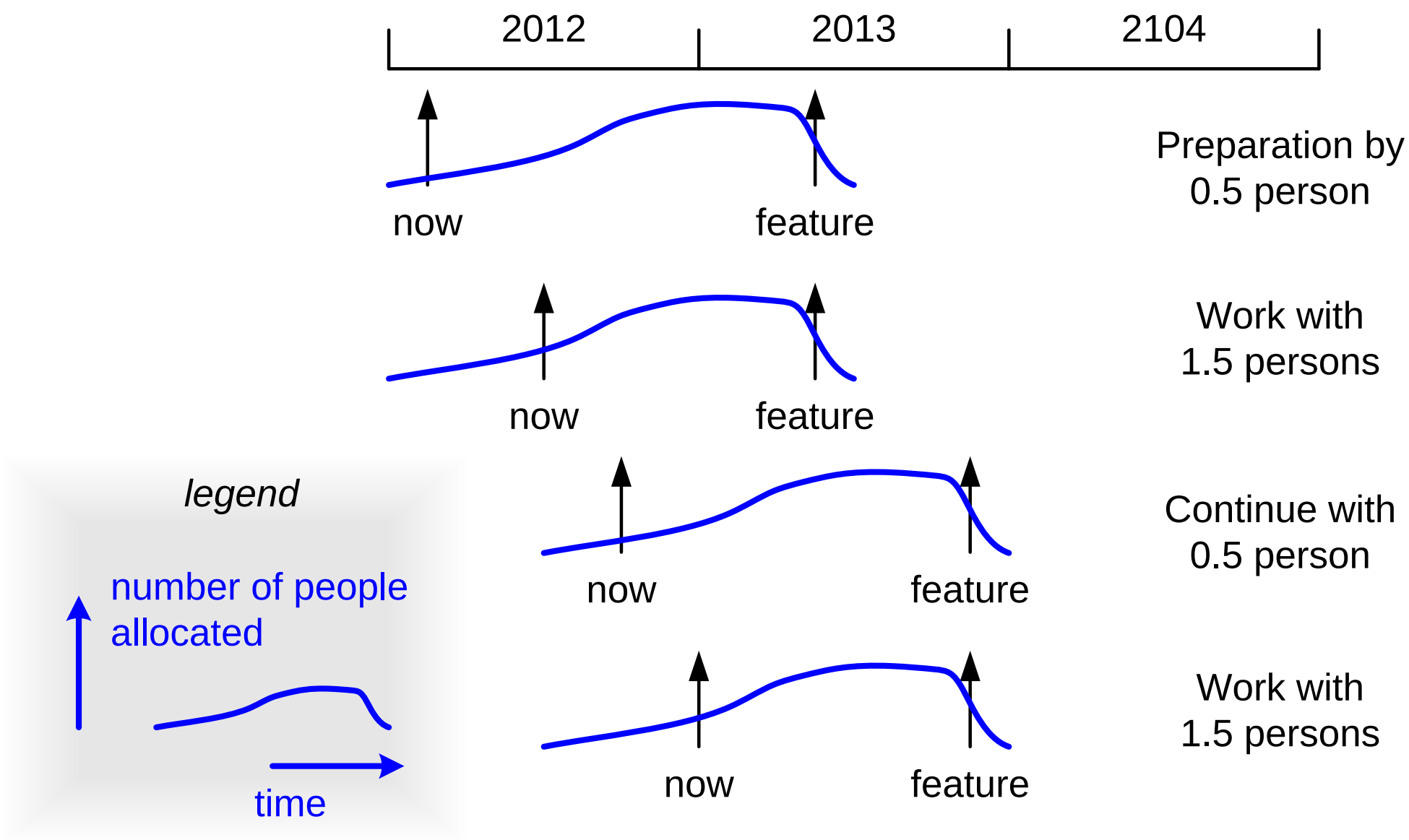
Diverging activities of teams

Missed market opportunities

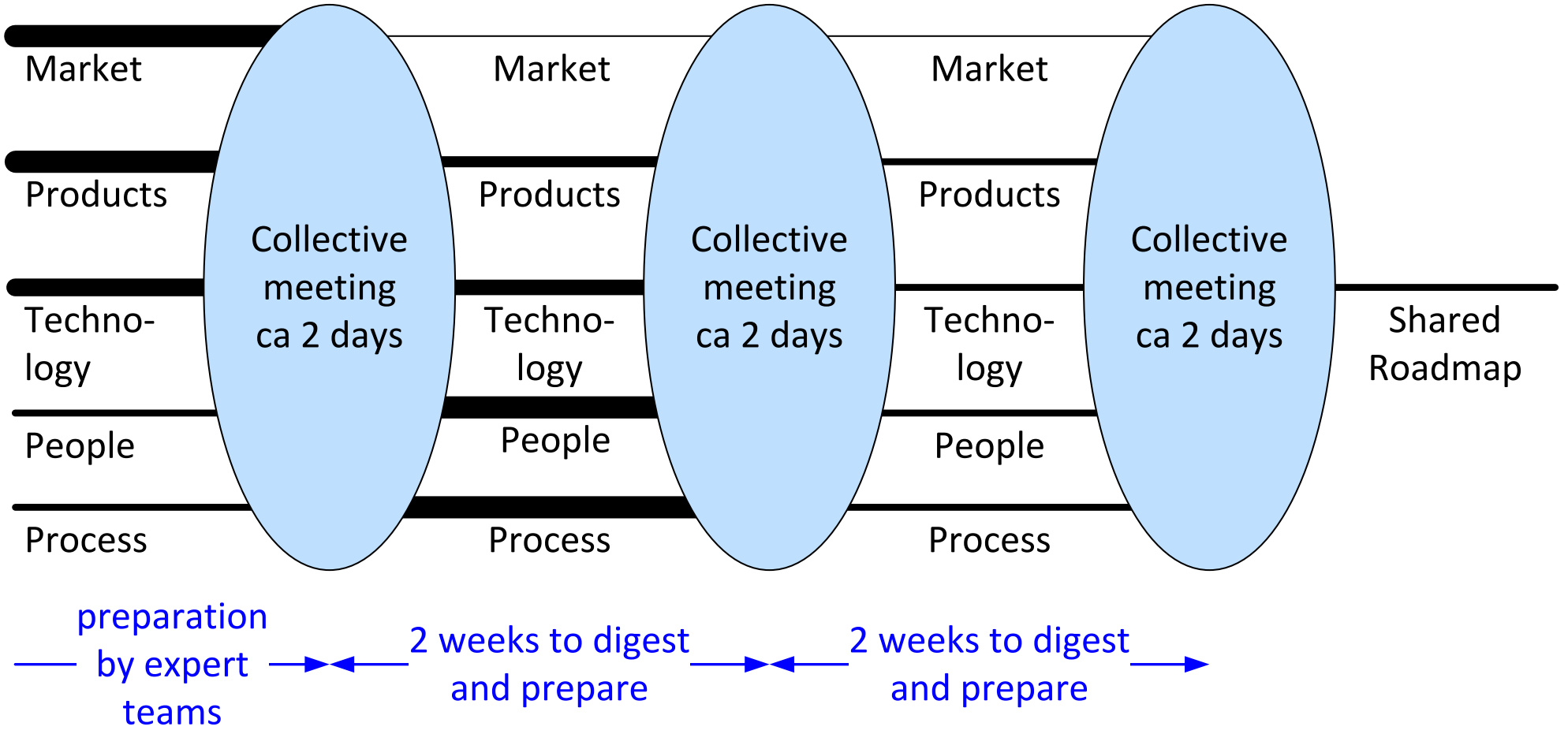
Management with a Limited Horizon



Management with a Broader Time Perspective



Creation or Update of Roadmap in Burst Mode



Typical Stakeholders of a Roadmap

business manager — overall enterprise responsible

marketing manager(s)

people, process, and technology manager(s) — discipline or line managers

operational manager(s) — project or program managers

architect(s)

Target of the First Session

Shared vision on market

First iteration of possible products as an answer to the market

Share technology status, as starting point for technology roadmap

Explore people and technology status, to identify main issues

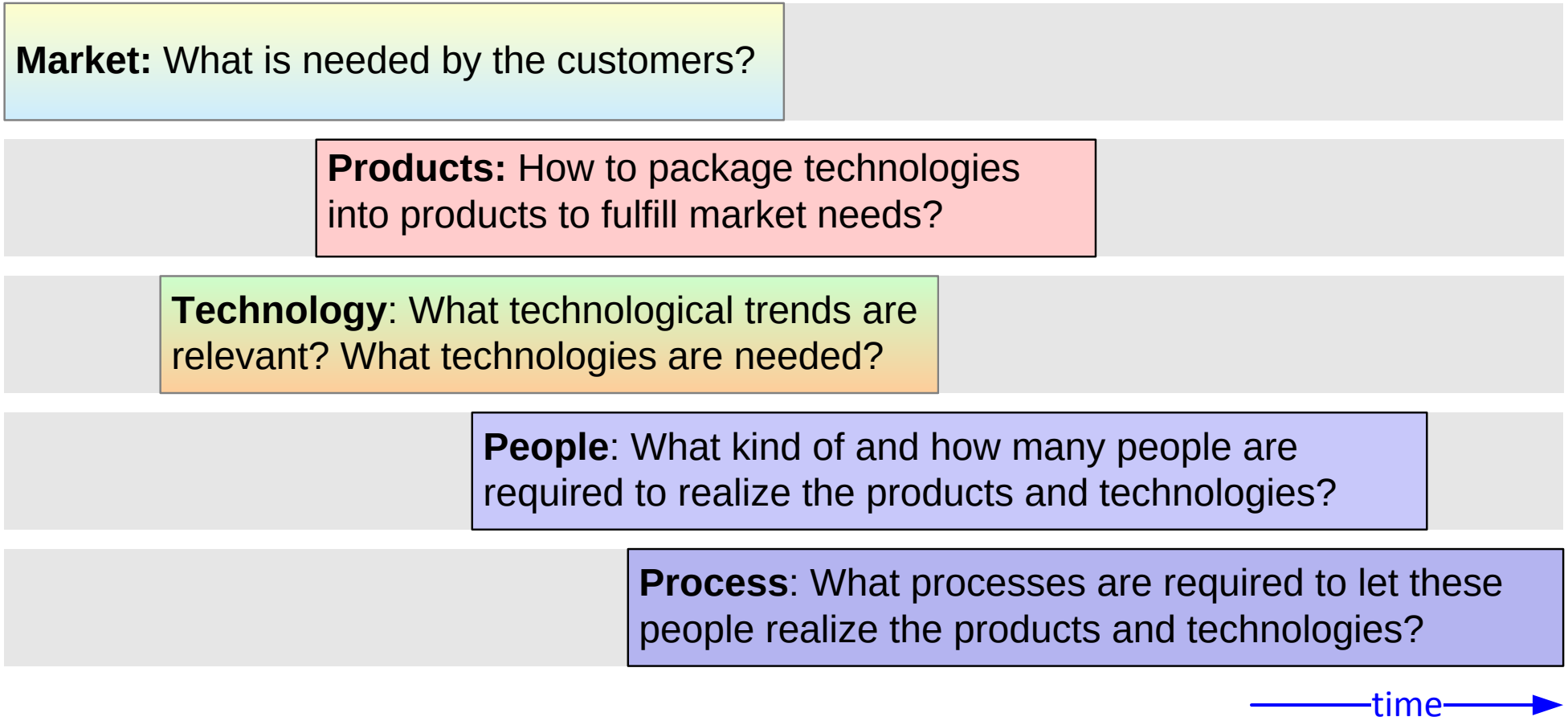
Target of the Second Session

Obtaining a shared vision on the desired technology roadmap

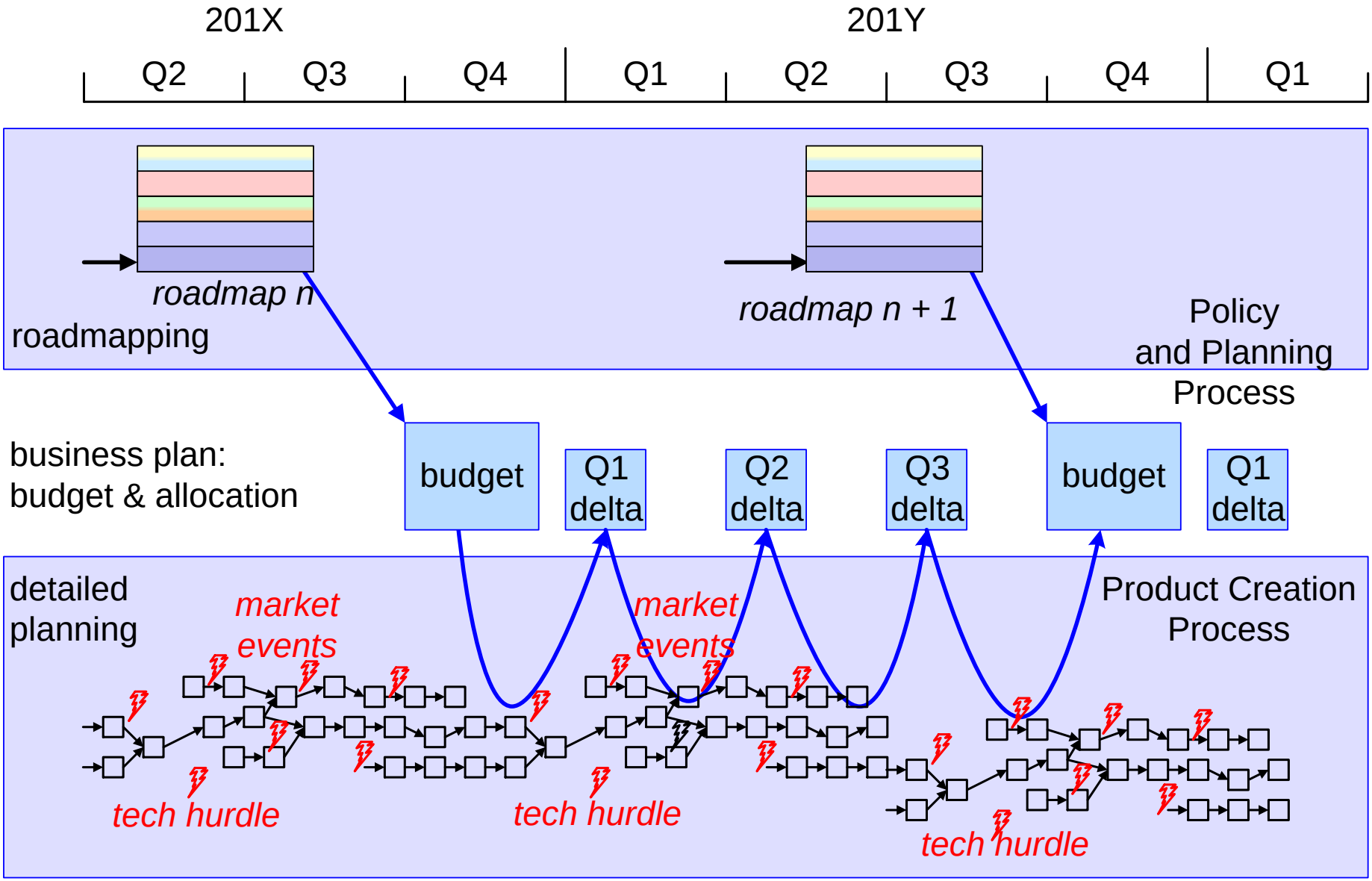
Sharing the people and process issues required for the products defined in the first iteration

Analyzing a few scenarios for products, technologies, people, and process

The Roadmap Update Visualized in Time



From Roadmap to Detailed Plans



3-Tier Approach

	horizon	*update*	*scope*	*type*
roadmap	5 years	1 year	portfolio	vision
budget	1 year	3 months	program	commitment
detailed plan	1 mnth-1yr	1 day-1 mnth	program or activity	control means

Roadmap Essentials

Selection of most important or relevant issues

Key drivers as a means to structure the roadmap

Nothing is certain; ambiguity is normal

Use facts whenever possible

Don’t panic in case of impossibilities

Requirements for a Good Roadmap

Recognizable issues for all stakeholders

Clear positioning in time; uncertainty can be visualized

The main events (enabling or constraining) must be present

Limited amount of information to maintain the overview

Sources of Facts

Market analysis reports

number of customers, market size, competition, trends

Installed base

change requests, problem reports, historical data

Manufacturing (statistical process control)

statistical process control

Suppliers (roadmaps, historical data)

roadmaps, historical data

Internal reports (technology studies, simulations)

technology studies, simulations

Causes for Overestimation

Quantization effects of small activities (the amount of time is rounded to manweeks/months/years)

Uncertainty is translated into margins at every level (module, subsystem, system)

Counting activities twice (e.g., in technology development and in product development)

Quantization effects of persons/roles (full time project leader, architect, product manager, et cetera per product)

Lack of pragmatism (technical ambition is not too bad during the roadmap process, as long as it does not pre-empt a healthy decision)

Too many bells and whistles without business or customer value

Market Product Life Cycle Consequences for Architecting

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Abstract

The lifecycle of a product category in the market determines many aspects of the architecting approach. The lifecycle consists typical of 4 phases: infancy, adolesence, mature and aging.
A discontinuity in market success is seen in the transition from one phase to the next phase. The explanation given is that the phases differ in characterictics and require different approaches. The right approach for one phase is sub optimal for the next phase. A set of characteristics per phase is given and the consequences for architecting are discussed.

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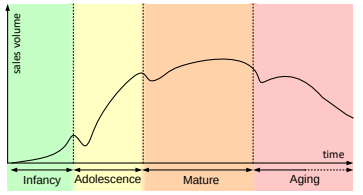
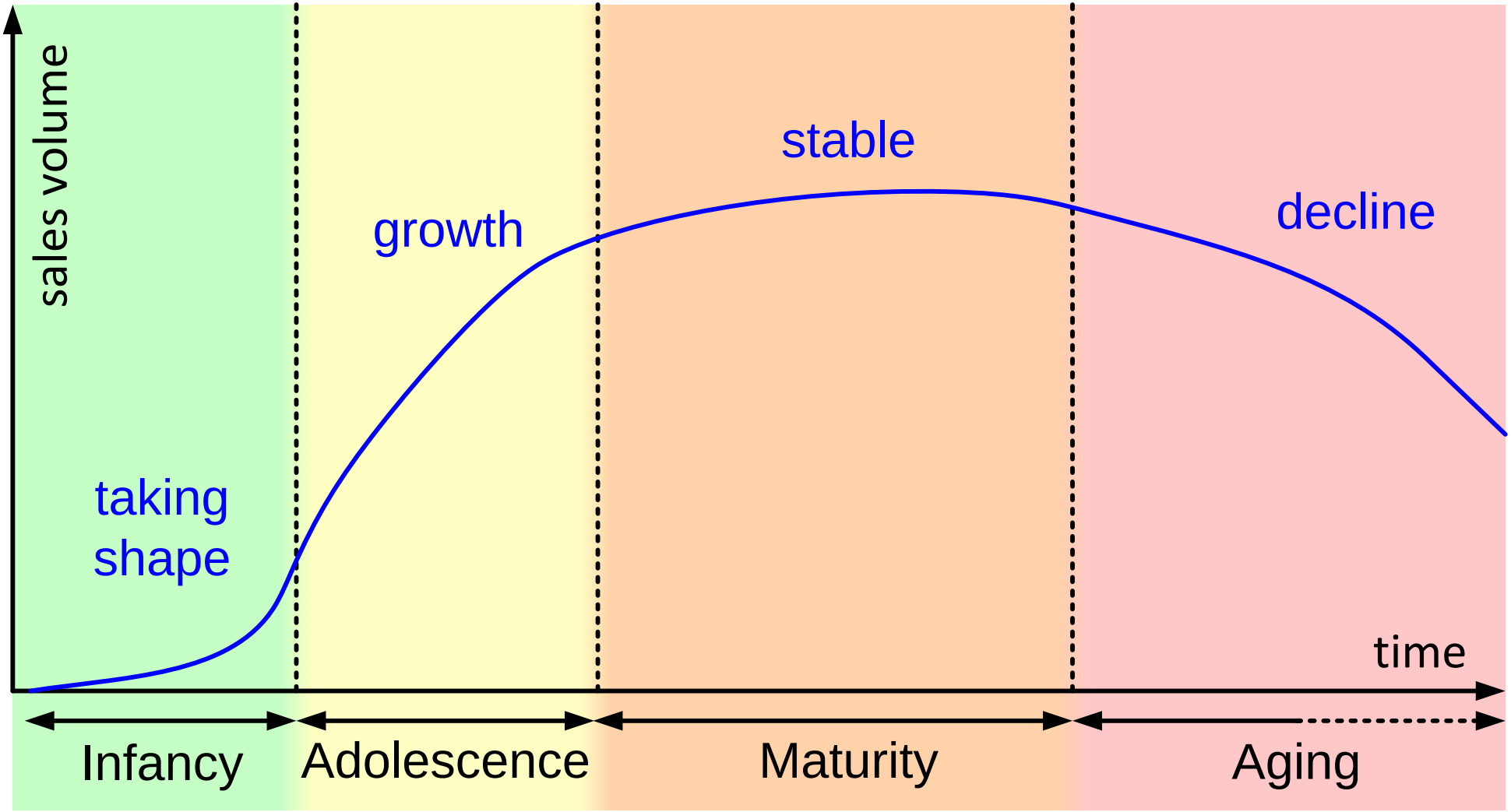
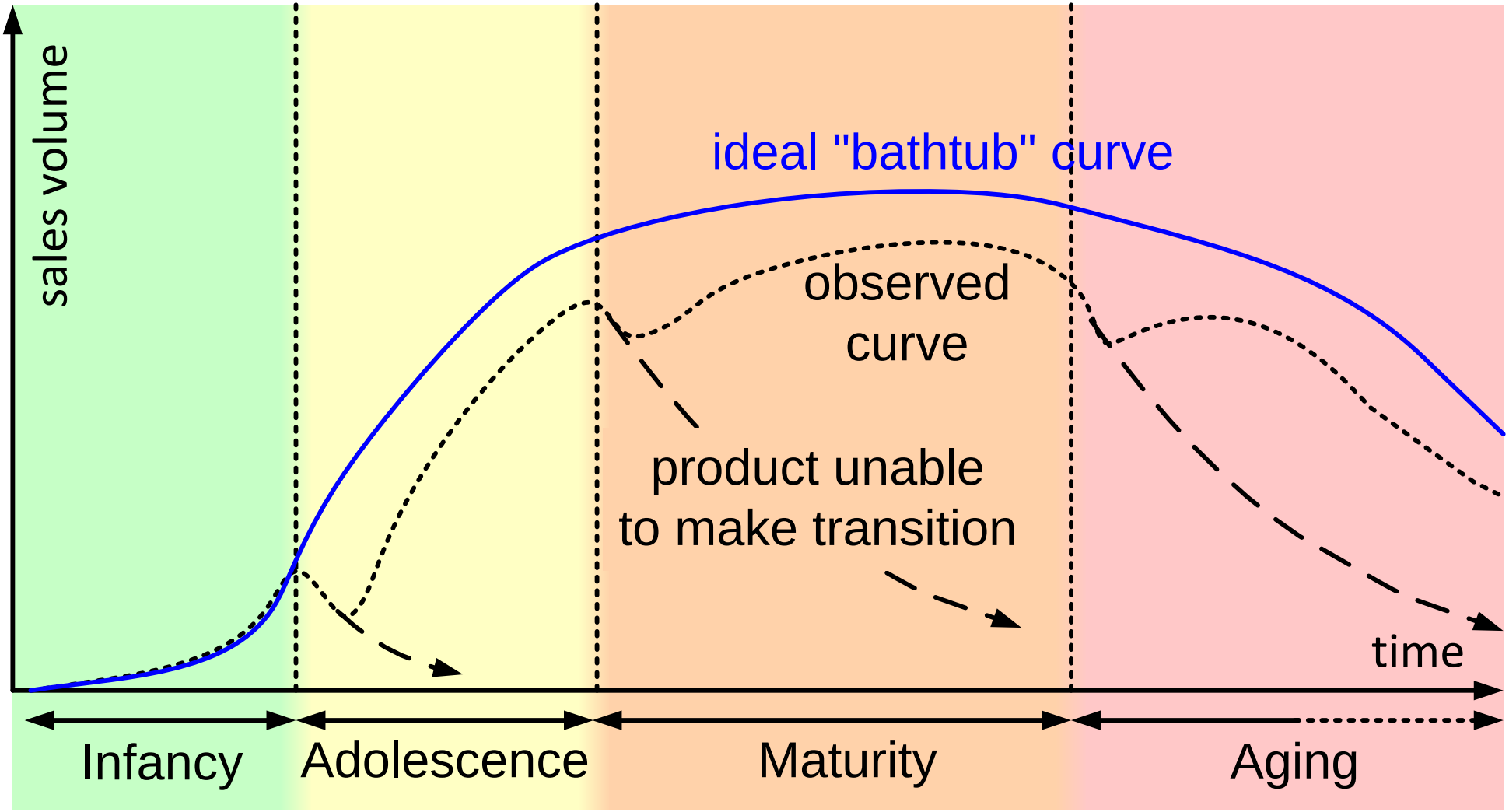


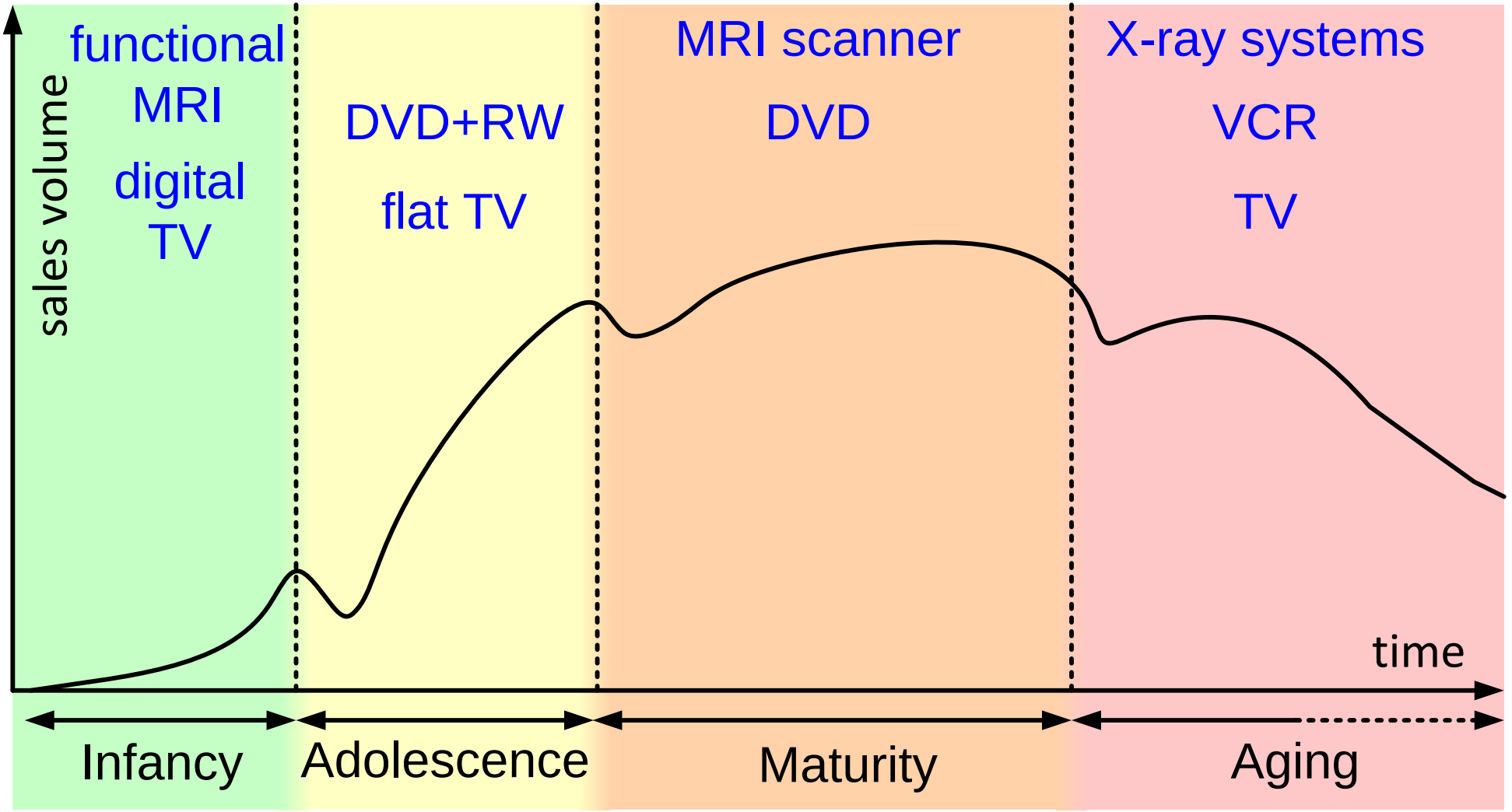
Ideal Bathtub Curve



Market Product Life Cycle Phases in Practice



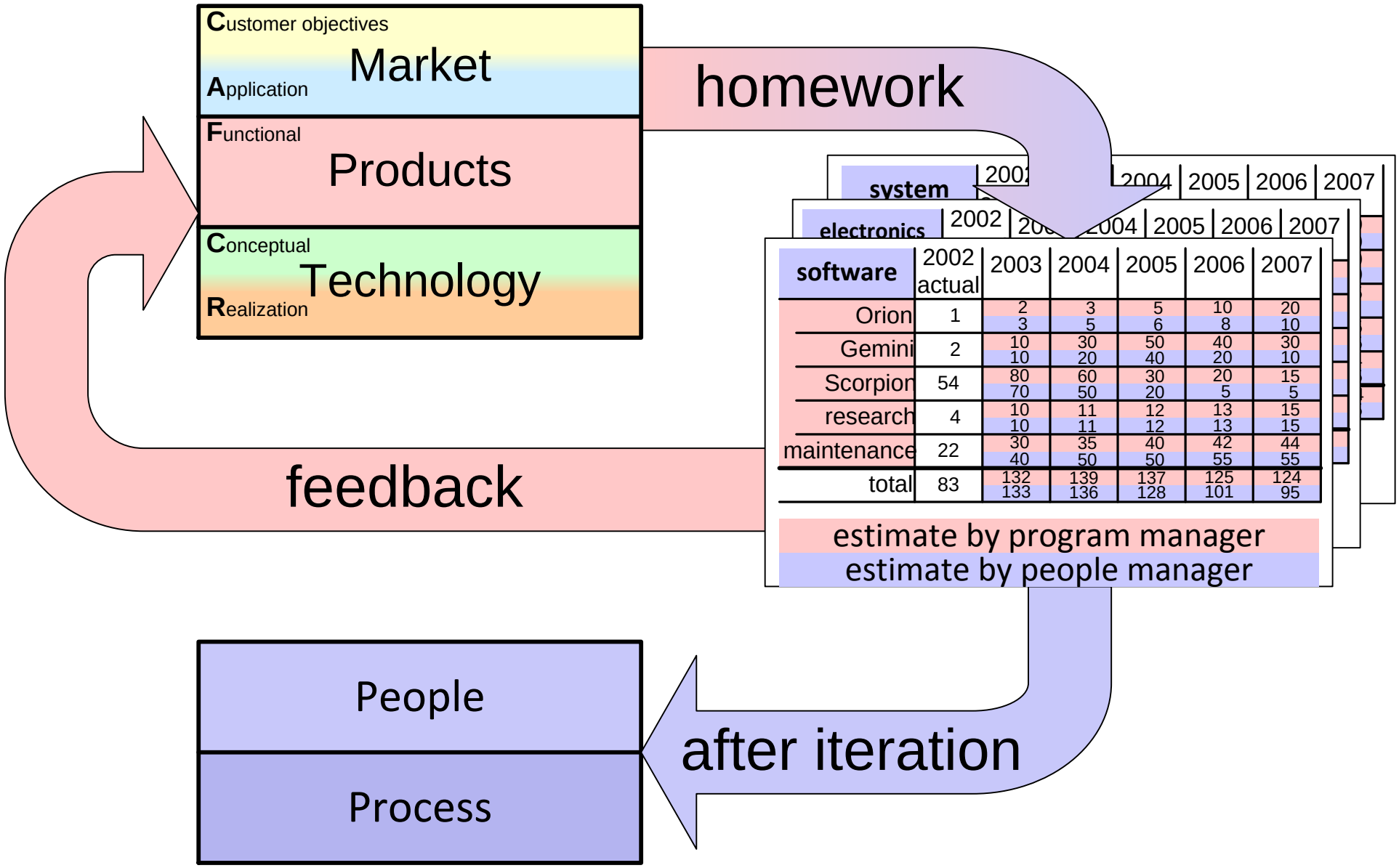
Examples of Product Classes on the Curve



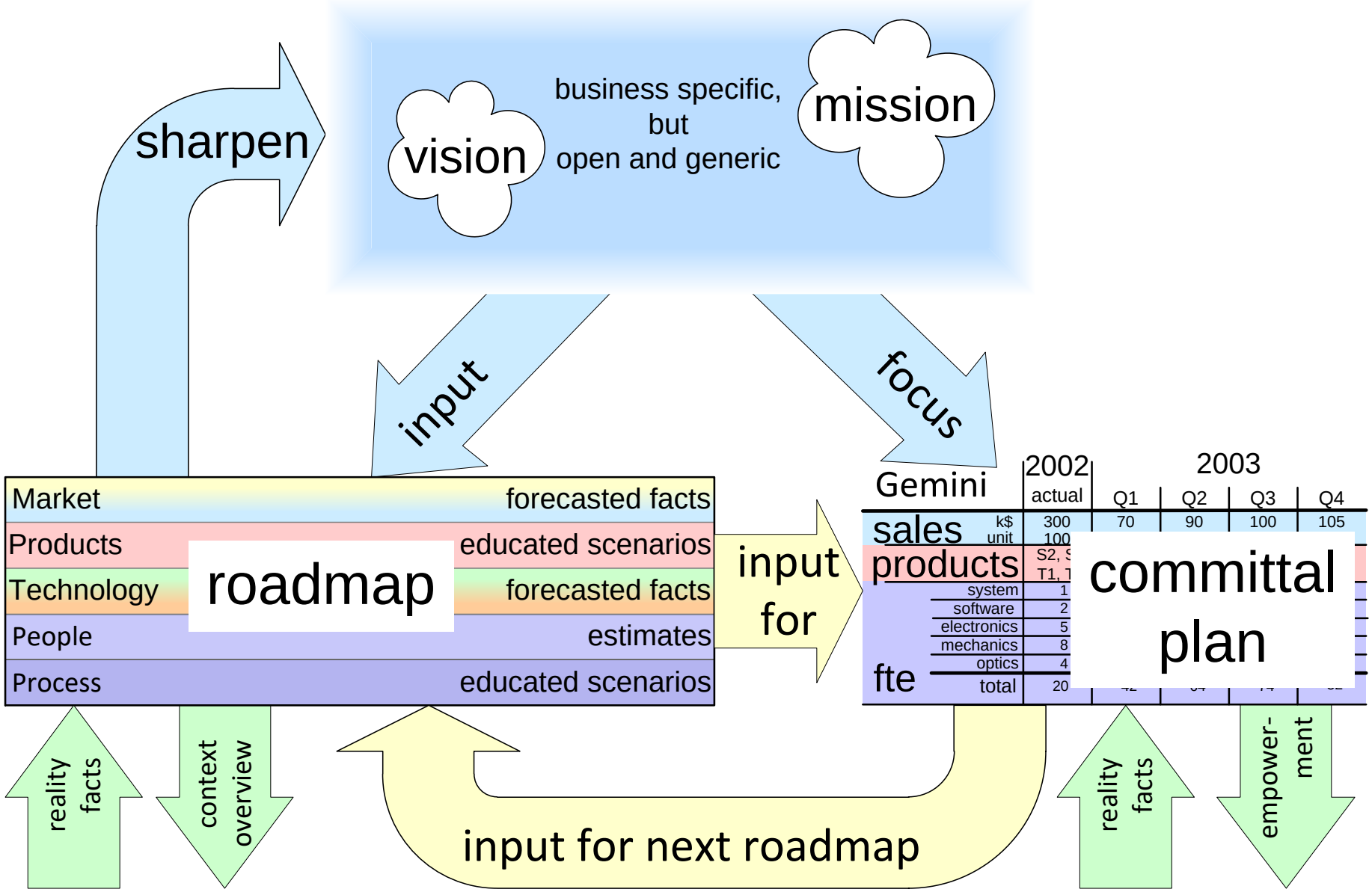
Attributes per Phase

	Infancy	Adolescence	Mature	Ageing
Driving factor	Business vision		Stable business model	Harvesting of assets
Value from	Responsiveness	Features	Refinements / service	Refining existing assets
Requirements	Discovery	Select strategic	Prioritize	Low effort high value only
Dominant technical concerns	Feasibility	Scaling	Legacy Obsolescence	Lack of product knowledge Low effort for obsolete technologies
Type of people	Inventors & pioneers	Few inventors & pioneers "designers"	"Engineers"	"Maintainers"
Process	Chaotic		Bureaucratic	Budget driven
Dominant pattern	Overdimensioning	Conservative expansion	Midlife refactoring	UI gadgets

From Market, Product, Technology to People, Process



Summary of strategy process

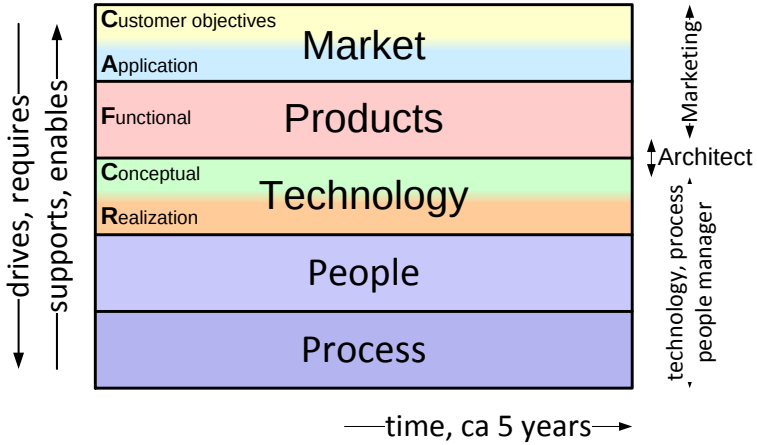


Exercise Roadmapping

Make a roadmap on the basis of what you know at this moment, or what you perceive as the "shared expectation".
Try to fill in as many views (market, products, technology, people and process) as possible.
Present an overview by minimizing the contents to the most essential data.

Roadmap Creation

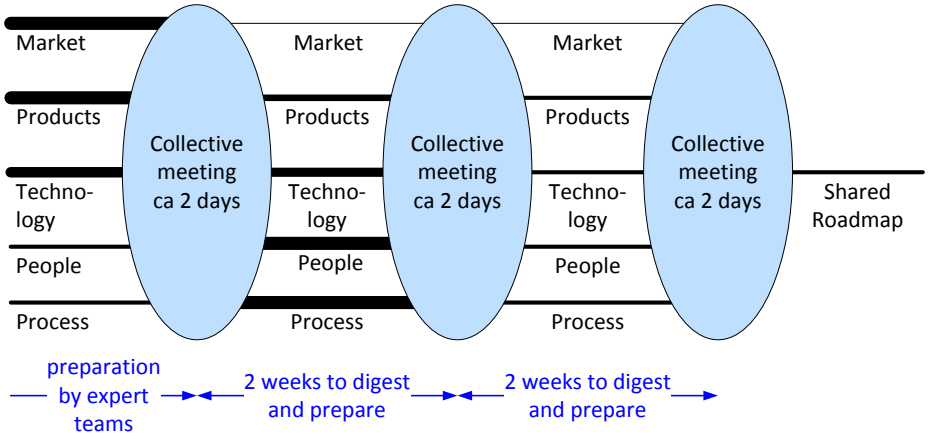
The Roadmap Integrates Five Views



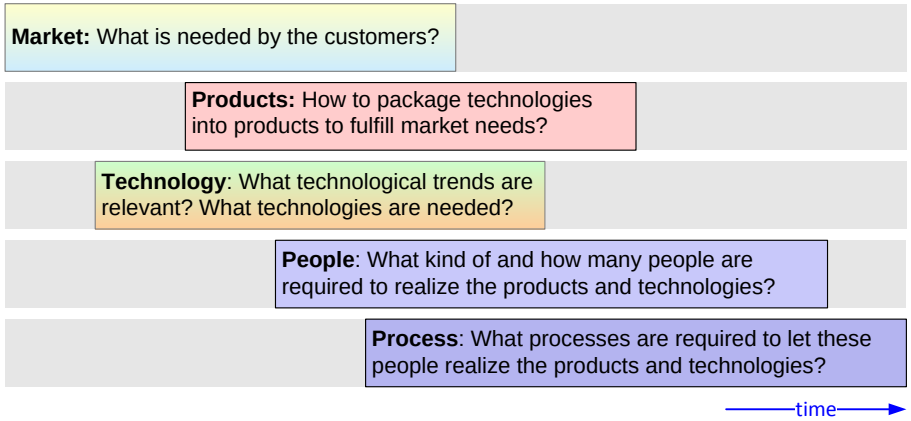
Multiple Levels

Top-level roadmap	Single page	Poster part of many presentations
Supporting roadmaps	Single page per view or per driver	Poster part of many presentations
Supporting reports	Document per relevant subject	

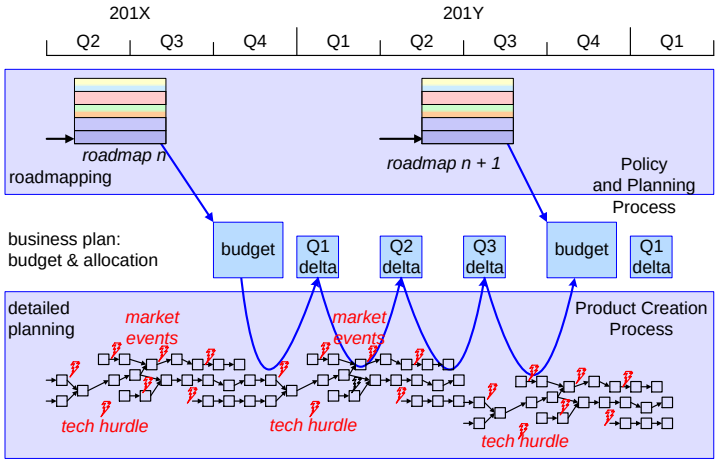
Creation in Teams



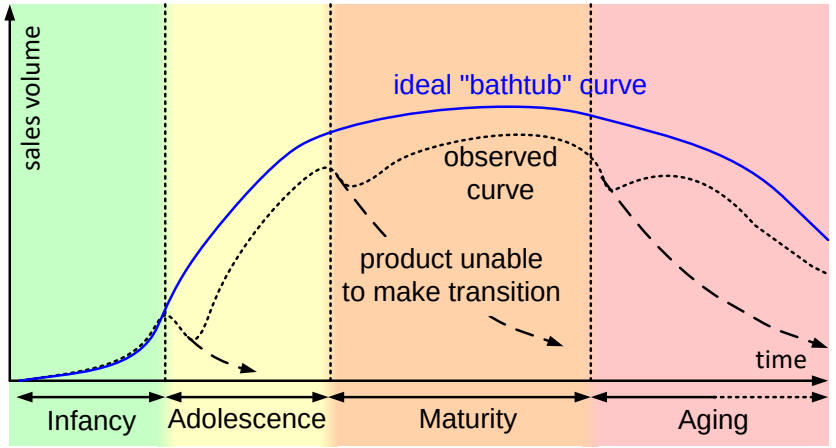
Order of Creation



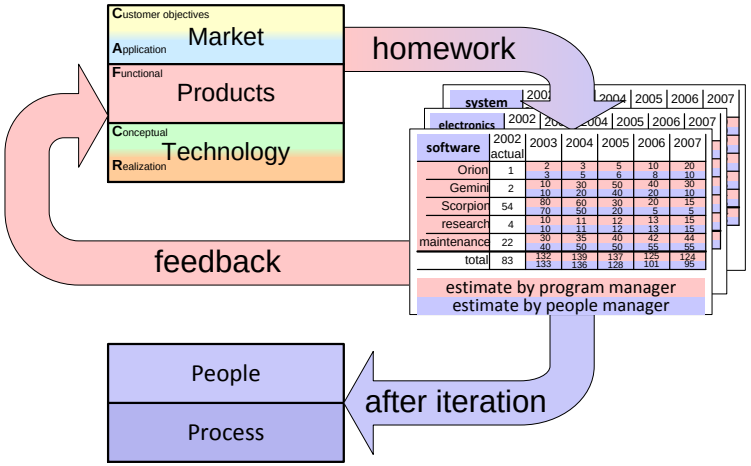
Time Horizons



Life Cycle Transitions



People and Process



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