



INVESTMENTS IN EDUCATION DEVELOPMENT

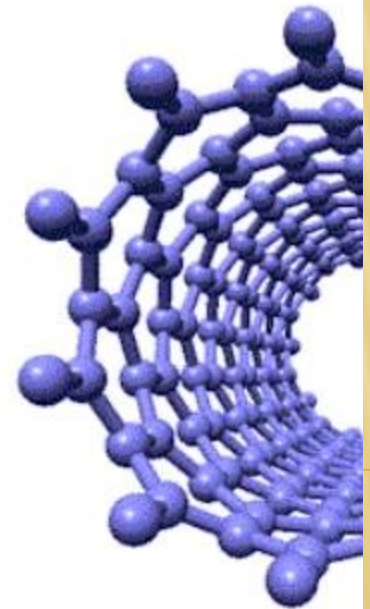
# Innovation and Development of Study Field Nanomaterials at the Technical University of Liberec

[nano.tul.cz](http://nano.tul.cz)

These materials have been developed within the ESF project: Innovation and development of study field Nanomaterials at the Technical University of Liberec



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# **INOVATION AND BUSINESS** **IN NEW TECHNOLOGIES**

# Managing New Product Development

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- Introduction
  - Product Management
  - Key Activities in New Product Development
  - Techniques Used for Testing of New Products By Customers
  - Case Study
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# Product management

## Koncept of four "P"

- product,
  - price,
  - place,
  - promotion
-

## Product management

### Product:

- What the organization offer on its output
  - What is the value for customer.
-

## Product management

Term "product management" used for the first time in 40-ties of 20th century at Procter and Gamble Company, as a name for activities conneted to sale of specific product.

Product is **one product or service**, or their homoeneous group.

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Product manager is responsible for:

- Defining and planning product lines and product enhancements
- Managing product contracts and sales
- Setting strategic direction based on customer needs and business goals
- Interpreting strategic goals into operational tasks
- Making proposals to senior management regarding implications of proposed plans
- Serving as a representative to internal and external clients. Taking the lead in establishing tactical plans and objectives
- Developing and implementing administrative and operational matters ensuring achievement of objectives
- Evaluating risks and trade-offs
- Proposing contingency plans
- Analyzing business processes and creating applications to improve or support those processes
- Branding
- Working with graphic designers to create look and feel
- Defining navigational flow and user experience
- Defining feature sets and scoping releases



A product manager is *not*:

**A developer** – Developers are focused on the technology and not the overall product. Some great product managers are former developers, but it is difficult to do both at once. There is a natural tension between developers and product managers that should be maintained to create a balanced product.

**A software manager** – the software manager is a functional manager and usually not focused on the product or the customers.

**A project manager** – project managers are about *how* and *when*, while the product manager is about *what*. Project managers work closely with product managers to ensure successful completion of different phases in the product life cycle.

**A marketer** – while product management is usually seen as a marketing discipline, marketers are focused on the marketing plan and are usually not driving the overall product direction.

## ***Product Development***

Product development is performed by a multi-disciplinary team whose goal is building, operating, and maintaining the product. Team members may include product managers, software developers, project managers, product operations engineers, customer support managers, software quality assurance engineers, user interface design engineers, marketers, financial personnel, and graphic artists.

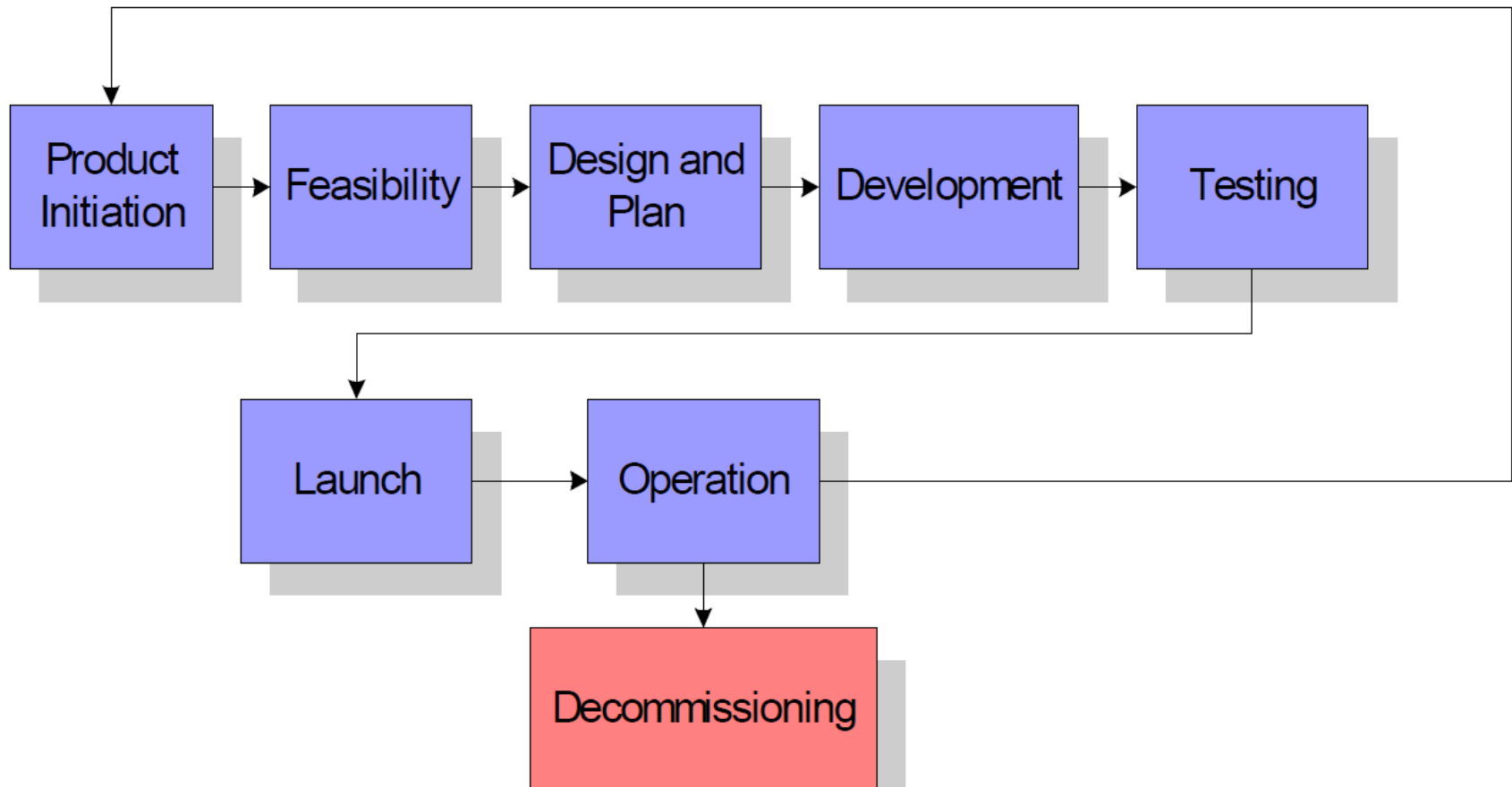
The **product manager** serves as the leader of this cross functional team. While the product manager does not necessarily function as the operational manager for these people, she *does* lead, coordinate, and supervise their work toward the end goal of making the product a reality, launching it, operating it, and managing it throughout its life cycle.

*Phillip J. Windley: The Discipline of Product Management*

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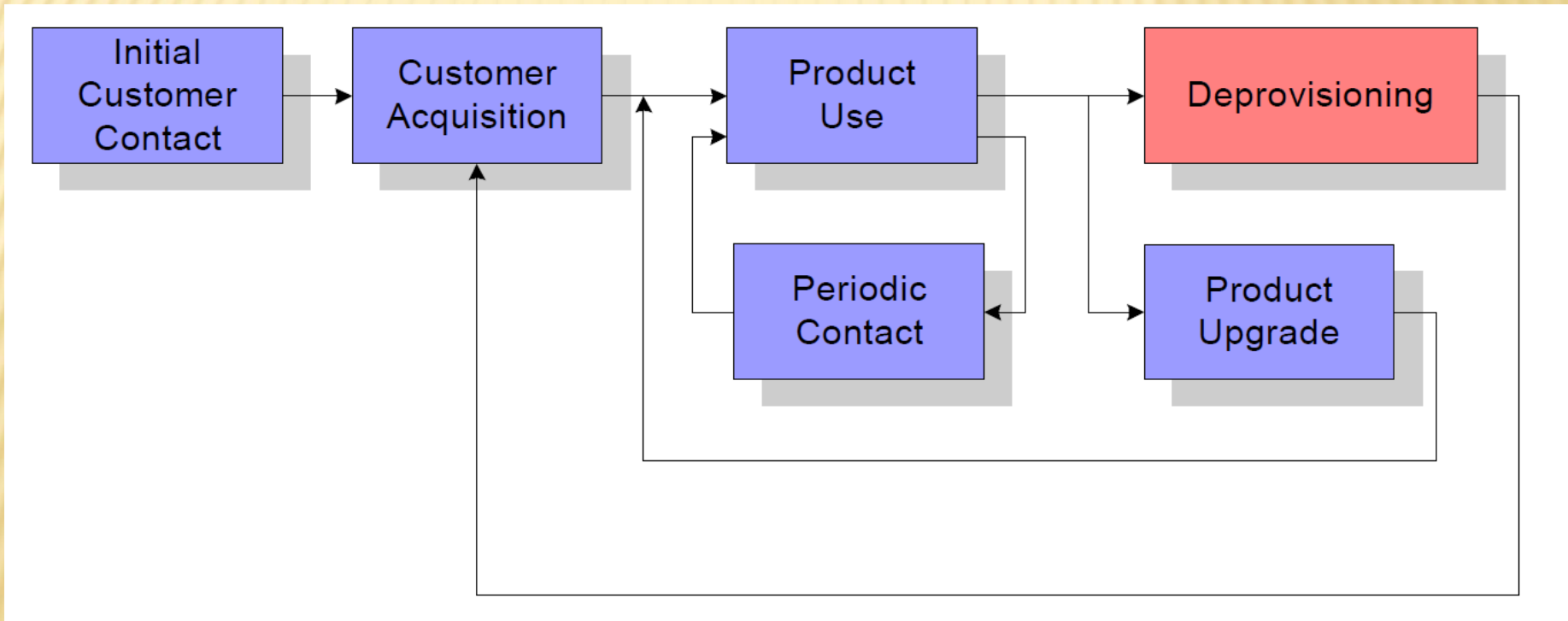
## Product Life Cycle

1. Develop the product
2. Operate the product
3. Decommission the product



## Customer Life Cycle

1. Customer buys the product
2. Customer uses product



## *The Discipline of Product Management*

As a members of a discipline, product managers work at all levels of a company in the product development process.

<b>Role</b>	<b>Driver</b>	<b>Work Product</b>
Product Strategy Director	Business Strategy	Product Portfolio
Lead Product Manager	Product Life Cycle	Product Roadmap
Product Manager	Customer Life Cycle	Product

## Case Study:

New product NS 1WS500U („SuperLAB“)

