



FREDERICK UNIVERSITY

MSc in Engineering Management

Product Planning

Product Planning

The product planning process takes place **before** a product development project is formally approved.

Product Planning Process

The product plan identifies the portfolio of products to be developed by the organization and the timing of their introduction to the market.

Organizations that **do not carefully plan** the portfolio of development projects to pursue are often plagued with inefficiencies such as:

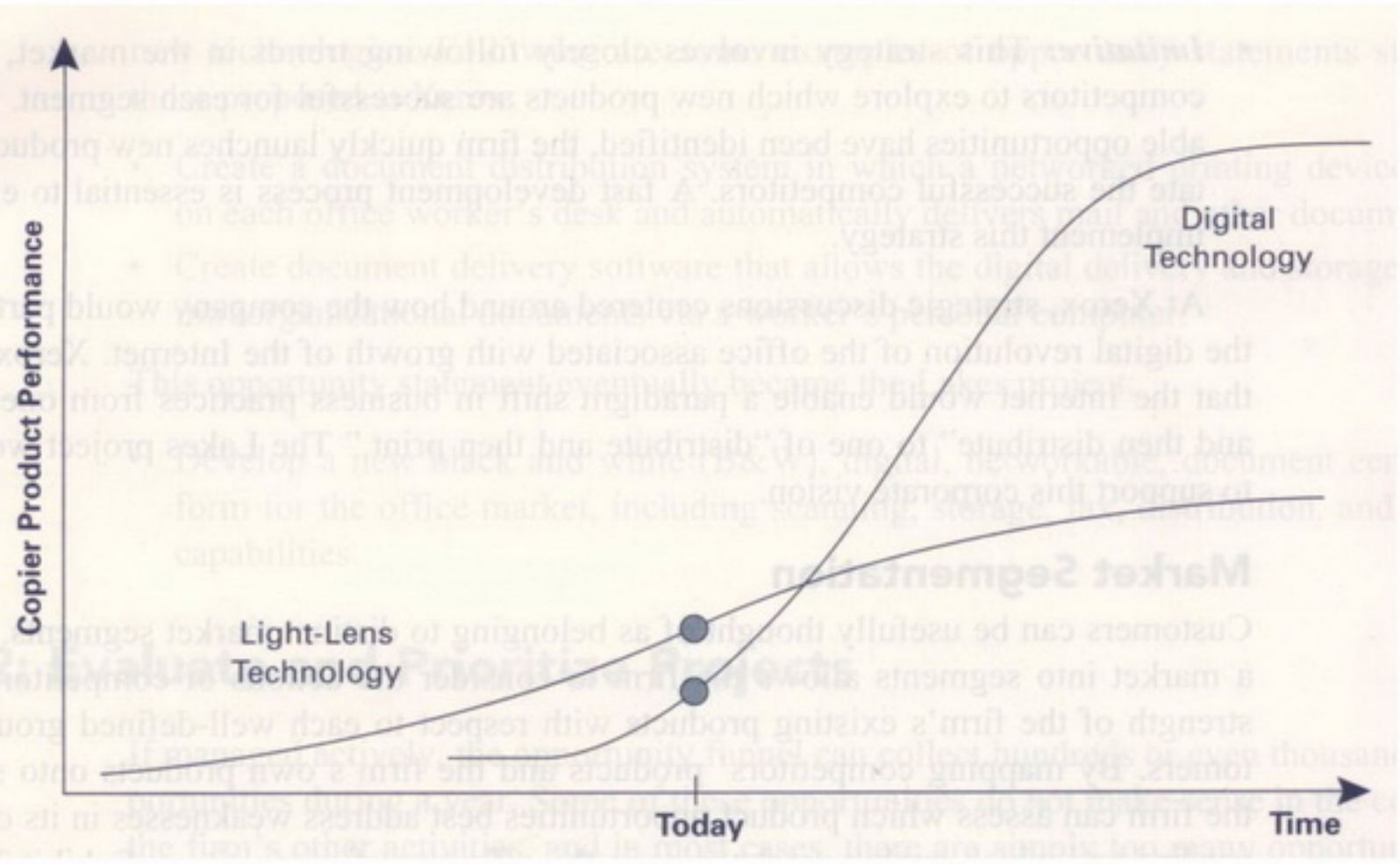
- Inadequate coverage of target markets with competitive products.
- Poor timing of market introductions of products.
- Mismatches between aggregate development capacity and the number of projects pursued.
- Poor distribution of resources, with some projects overstaffed and others understaffed.
- Initiation and subsequent cancellation of ill-conceived projects.
- Frequent changes in the directions of projects.

Four types of product development

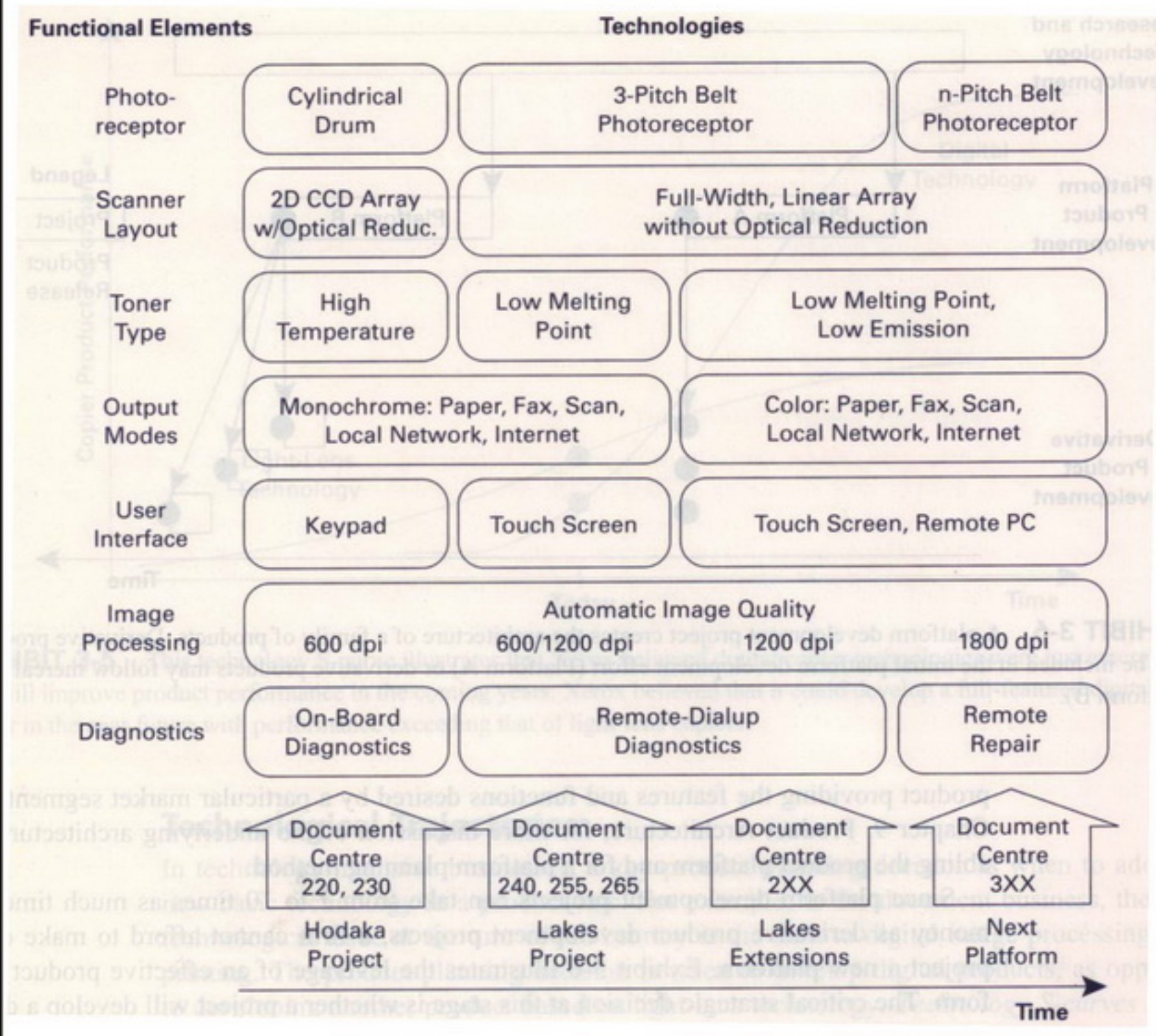
- **New product platform:** This type of project involves a major development effort to create a new family of products
- **Derivatives of existing product platforms:** These projects extend an existing product platform to better address familiar markets with one or more new products
- **Improvements to existing products**
- **Fundamentally new products**

The process to develop a product plan and project mission statements you can follow five steps:

- **Identify opportunities:** Ideas for new products or features of products may come from several sources
- **Evaluate and prioritize projects:** Some of these opportunities do not make sense in the context of the firm's other activities, and in most cases, there are simply too many opportunities for the firm to pursue at once.
- **Allocate resources and plan timing:** It is likely that the firm cannot afford to invest in every product development opportunity in its desired balanced portfolio of projects
- **Complete pre-project planning:** Once the project has been approved, but before substantial resources are applied, a pre-project planning activity takes place. This activity involves a small, cross-functional team of people, often known as the core team
- **Reflect on the results and the process:** In this final step of the planning and strategy process, the team should ask several questions to assess the quality of both the process and the results



Xerox believed digital copier technologies were just emerging and will improve product performance in the coming years. Xerox believed that it could develop a full-featured digital copier in the near future with performance exceeding that of light-lens copiers.



This technology roadmap shows the life cycles of several digital photocopying technologies and identifies which technologies would be used in each product.