



# SNS B-SPINE

Coimbatore-35  
An Autonomous Institution

DEPARTMENT OF MANAGEMENT STUDIES

19BAE752-AGRICULTURE MARKETING  
MANAGEMENT

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UNIT 2

NEW PRODUCT DEVELOPMENT



# Significance

New product development (NPD) is a crucial process for organizations that involves creating and bringing new products to the market. The significance of NPD lies in its potential to drive growth, maintain competitiveness, and meet evolving customer needs.

## Significance of New Product Development:

- 1. Business Growth:** Developing new products allows companies to expand their product portfolios and generate additional revenue streams. It's a key driver of business growth and helps diversify sources of income.
- 2. Competitive Advantage:** Staying innovative and introducing new products helps companies stand out in a crowded market. It can be a source of competitive advantage and differentiation.

3. **Customer Satisfaction:** NPD enables companies to address changing customer preferences and needs. By offering innovative products, organizations can enhance customer satisfaction and loyalty.
4. **Market Relevance:** Staying up-to-date with market trends and technological advancements is essential for long-term success. NPD ensures that companies remain relevant in their industries.
5. **Cost Efficiency:** Over time, new products can benefit from economies of scale and improved production processes, leading to cost savings.
6. **Risk Mitigation:** Relying on a single product or a limited product range carries a significant risk. NPD spreads the risk by diversifying the product offering.



# Classification of New Product Development:

New product development can be classified into different categories based on various criteria.

Here are some common classifications:

## 1. Based on Innovation Level:

- **Incremental Innovation:** These are minor improvements or modifications to existing products. They enhance product performance or features but don't represent a radical change.
- Enhancing the design of a traditional plow by adding more durable materials and improved blade configurations, resulting in better soil cultivation.
- **Radical or Disruptive Innovation:** These are groundbreaking innovations that introduce entirely new products or technologies to the market. They often disrupt existing markets and create new ones.
- The development of vertical farming systems that enable year-round cultivation of crops in stacked layers, revolutionizing traditional agricultural practices.

## 2. Based on Development Approach:

- **Internal NPD:** New products are developed internally within the organization by its own teams and resources.
- A large agribusiness corporation using its in-house research and development team to create a new herbicide with improved weed control properties.
- **External NPD:** Companies collaborate with external partners, such as suppliers, research institutions, or startups, to develop new products.
- A small family farm collaborating with a university's agricultural research department to develop a new organic farming method that increases crop yields.

## 3. Based on Target Market:

- **Consumer NPD:** New products developed for end consumers, such as household products, electronic gadgets, and personal care items.
- The launch of a new line of organic fruit juices, targeting health-conscious consumers seeking natural and pesticide-free options.

The logo for SNS B-SPINE, featuring a stylized 'B' with 'SNS' above it and 'SPINE' below it, all within a circular frame with orange and black accents.

#### 4. Based on Market Introduction:

- **First Mover:** Companies that introduce new products to the market before their competitors.
- A startup introducing a novel, IoT-based irrigation system for small-scale farmers, enabling them to conserve water and increase crop yields.
- **Follower:** Companies that enter the market with similar products after the first movers have established a presence.
- Other companies entering the market with similar smart irrigation systems once the initial startup has proven the concept's effectiveness.

#### 5. Based on Product Category:

- **Physical Products:** Tangible products, such as electronics, clothing, or household appliances.
- The development of a new type of seed coating technology that enhances the germination and disease resistance of crop seeds.
- **Digital Products:** Software, mobile apps, and online services fall under this category.
- The launch of a cloud-based agricultural management platform that offers farmers real-time data on weather conditions, soil quality, and crop health.

The logo for SNS B-SPINE, featuring the letters 'SNS' in a small box above a large, stylized letter 'B' with 'SPINE' written to its right. Below the 'B' is a yellow circle with a black outline, and a black arc is positioned to the left of the circle.

## 6. Based on Purpose:

- **Core NPD:** Developing new products that directly align with the company's core business and expertise.
- An established agricultural machinery manufacturer introducing a new line of tractor models, leveraging their expertise in farming equipment.
- **Adjacent NPD:** Exploring new product opportunities that are related but slightly outside the company's core business.
- A fertilizer producer exploring the development of biodegradable packaging solutions for their products, which is related but slightly outside their core business.
- **Transformational NPD:** Pursuing entirely new and unrelated business ventures or products that can potentially reshape the company's direction.
- An agricultural cooperative diversifying into renewable energy production by establishing wind farms on their unused farmland, potentially reshaping their business direction and revenue sources.



# STAGES IN NEW PRODUCT DEVELOPMENT

## 1. Idea Generation:

- **Description:** In this stage, the idea for a smart irrigation system is generated. This idea originates from recognizing the need to conserve water in agriculture and enhance crop yields.
- **Example:** Farmers and agricultural experts identify the increasing need for more efficient water usage in agriculture due to changing climate patterns and water scarcity concerns. This prompts the idea of creating a smart irrigation system that can address these challenges.

## 2. Idea Screening:

- **Description:** The idea of the smart irrigation system is evaluated for its potential viability. Factors like market demand, feasibility, and profitability are considered.
- **Example:** The concept of a smart irrigation system is assessed to determine if there is a substantial market demand for such a product, whether the necessary technology is feasible and cost-effective, and if it has the potential to generate profits for the company.





### 3. Concept Development and Testing:

- **Description:** The idea of the smart irrigation system is refined into a tangible concept. This concept includes features like soil moisture sensors, automated controls, and compatibility with mobile apps. Market research is conducted to gather feedback from potential users.
- **Example:** Engineers and product designers create a concept for the smart irrigation system, complete with specifications and features. They also conduct surveys and focus groups with farmers to gather feedback on the concept, ensuring it meets their needs and expectations.

### 4. Marketing Strategy Development:

- **Description:** The marketing strategy for the smart irrigation system is formulated. This includes identifying the target market of farmers, determining pricing strategies, selecting distribution channels, and planning promotional activities.
- **Example:** The company develops a marketing strategy that targets farmers and agricultural cooperatives as the primary customers. Pricing is determined to be competitive, and distribution channels include direct sales and partnerships with agricultural equipment retailers. Promotional activities include showcasing the system's water-saving benefits in agricultural trade shows and online advertising.



## 5. Business Analysis:

- **Description:** A comprehensive business analysis is conducted to assess the financial viability of the smart irrigation system. This includes evaluating production costs, expected sales volumes, pricing, and projected profits.
- **Example:** Financial analysts assess the costs involved in manufacturing and marketing the smart irrigation system. They project expected sales volumes based on market research and determine that the product has the potential to be profitable for the company.

## 6. Product Development:

- **Description:** The smart irrigation system is designed and engineered. Prototypes are created, and extensive testing is carried out to ensure quality, functionality, and user experience.
- **Example:** Engineers and product development teams design the smart irrigation system, build prototypes, and conduct rigorous testing to make sure it works effectively, conserves water, and is user-friendly for farmers.



## 7. Test Marketing:

- **Description:** The smart irrigation system is introduced to a limited market to gather real-world feedback. This involves testing its performance, identifying potential issues, and refining the marketing approach.
- **Example:** The company selects a specific geographic region with a diverse range of crops and soil types to test the smart irrigation system. Farmers in this region provide feedback on its performance, helping the company identify any necessary improvements and adjust the marketing strategy.

## 8. Commercialization:

- **Description:** The smart irrigation system is ready for a full-scale launch. The company plans the timing, distribution channels, pricing, and promotional activities to maximize market penetration and customer adoption.
- **Example:** After successful test marketing and product refinement, the company launches the smart irrigation system nationally. They strategically time the launch to coincide with the planting season, collaborate with agricultural equipment retailers for distribution, set competitive pricing, and run nationwide advertising campaigns to promote the product.



# Discussion