Warwick Summer School

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Product, Services and Innovation

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Objectives

Products and Branding

Services & Characteristics

What is Innovation

Customer needs

Innovation process

What is a product?

Anything that is offered to a market for attention, acquisition, use or consumption that might satisfy a want or a need.

Products include more than just tangible goods. They include physical objects, services, persons, places, organisations and ideas or mixes of these entities

(Kotler et al., 2010)

Product mix

Product Item	Individual product with specific attributes, features, packaging and branding
Product Line	A group of items that are closely related because they function in a similar manner, are sold to the same customer groups
Product Mix	The total group of products offered by a company. A company with several product lines has a product mix

Brand

> *A brand is a distinctive identity that differentiates a relevant, enduring, and credible promise of value*
>
> Ward et al. (1999)

- Totality of perception about a product, service or firm
- Distinctive position in customers' minds based on experiences and expectations
- Short-cut of attributes, benefits, beliefs, and values that differentiate, reduce complexity, reduce risk, and reduce the decision making process for buyers

Brand equity (Aaker, 1996)

- Brand awareness
- Brand associations
- Perceived quality
- Brand Loyalty
- Price premium
- Market share

Managing brands

- Deliver benefits that customers desire
- Remain relevant in the face of changing needs and trends
- Positioned with a point of difference
- Identifiable proposition (the cluster of benefits)
- Consistent message
- Identifiable personality

Managing brands

Line extension	Offering greater variety within the same product line. For example, new flavours. Horizontal stretching
Brand stretching	Product Line can be stretched up, creating a new premium product item, or down, creating a lower priced item
Brand extension	Launch a new product line in a different product category.

Managing brands: Branding strategies

Branded House   Sub brand   Endorsed brand   House of Brands

New product development

- Meet changing consumer needs
- Defend market share
- Enable firm to compete in new and developing segments of the market
- Reduce dependence on small number of products
- Match competitor moves
- Use excess capacity
- Increase turnover
- Exploit existing or new technology
- Respond to shortening PLCs

(Slater et al., 2013)

Innovation failure

Market doesn't exist or too small	Poor positioning	Poor product quality
Price is too high	Poor promotion	Poor distribution

Innovation trends

- Global innovation pools: Firms set up innovation centres across the globe to work together

- Collaboration between organisations

- Open-sourcing or crowd-sourcing

- Frugal Innovation: Low-cost products designed for emerging markets

- Reverse innovation: innovation for emerging markets that is then introduced into advanced economies if demand exists

(Brem, 2017)

Extended marketing mix

People

Because production cannot be separated from consumption

Recruitment
Training
Motivation
Empowerment

Employees are the brand

Customer management

Physical Evidence

Because intangibility limits evaluation prior to purchase

Brochure
Staff appearance
Furniture
Cleanliness
Signage

Process

Because process is important in 'high contact' services

Flow of activities
Number of steps
Role of customer

Based on: Booms and Bitner (1981)

The importance of Products, Services and Innovation

- Importance of Products, Services, and Innovation
- The significance of products and services in meeting customer needs and creating value.
- Innovation drives growth, competitiveness, and customer satisfaction.
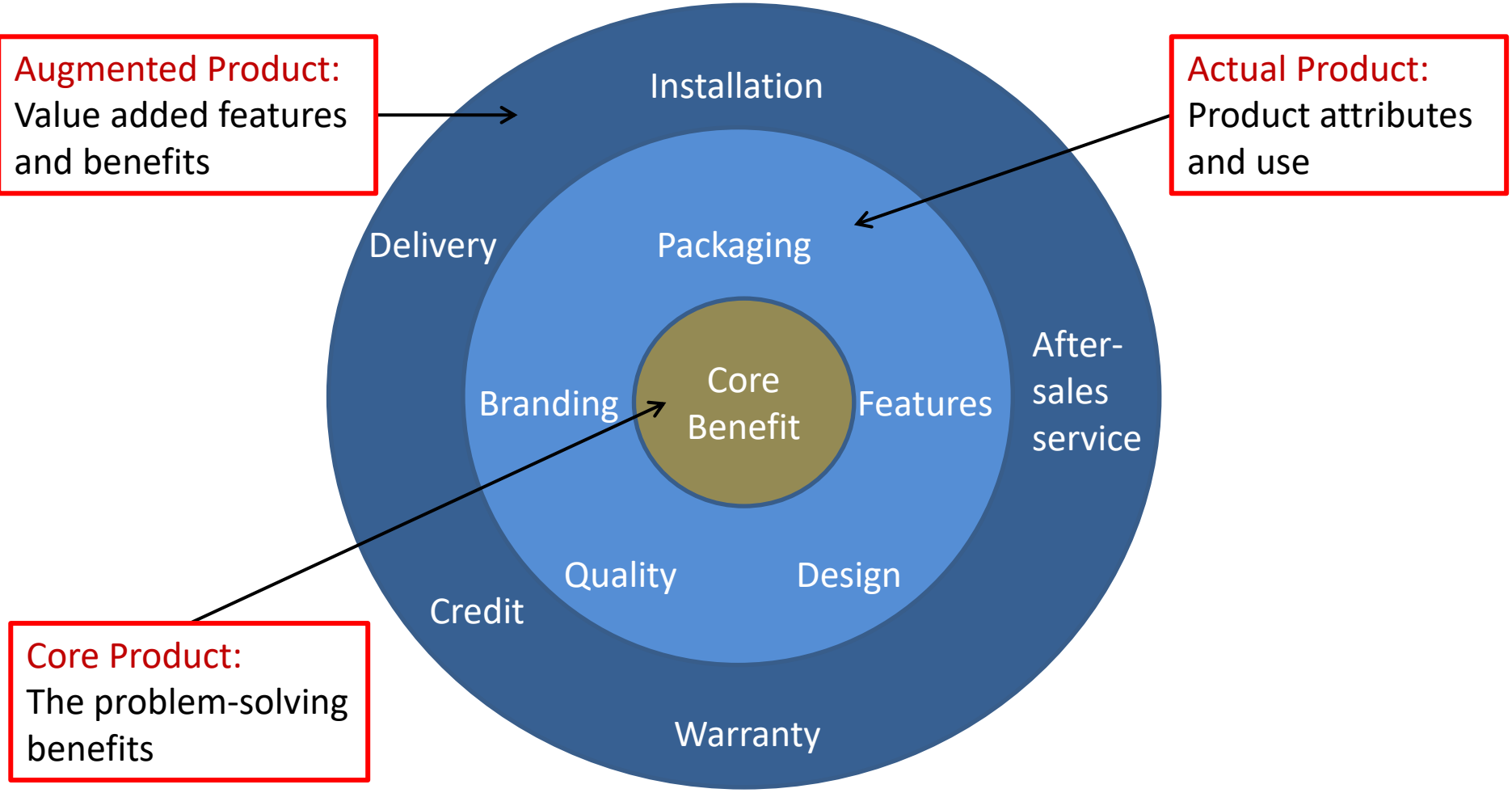
Understanding Products

PRODUCTS AND DIFFERENTIATE
BETWEEN TANGIBLE AND INTANGIBLE
PRODUCTS.

THE CORE, ACTUAL, AND AUGMENTED
PRODUCT LEVELS

Anatomy of a product

Augmented Product: Value added features and benefits

Actual Product: Product attributes and use

Core Product: The problem-solving benefits

Installation

Delivery

Packaging

Branding

Core Benefit

Features

After-sales service

Quality

Design

Credit

Warranty

Services and Characteristics

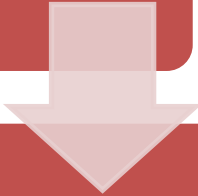Services and highlight distinctive characteristics, intangibility, inseparability, variability, and perishability.

The importance of service quality and customer experience.

Services and Characteristics

- Intangibility: Services are intangible, meaning they cannot be seen, touched, or felt before they are consumed. They lack physical form, making it challenging for customers to evaluate them prior to purchase.

- Inseparability: Services are often produced and consumed simultaneously. The production and delivery of a service typically involve the direct involvement of service providers and customers, resulting in a high degree of interaction.

- Perishability: Services are perishable in the sense that they cannot be stored or inventoried like physical products. They are time-bound and cannot be saved or resold if unused. Once a service opportunity is missed, it is lost forever.

Services and Characteristics

Variability: Services are highly variable and can differ from one provider to another or even from one interaction to another. Factors such as individual service provider performance, customer preferences, and situational factors can influence the quality and consistency of service delivery.

Heterogeneity: Services are often customized or personalized to meet individual customer needs. Due to the involvement of human interactions, each service encounter can differ based on the specific requirements, expectations, and preferences of the customer.

Customer Involvement: Customers often play an active role in the service delivery process. They may need to provide information, participate in the service experience, or collaborate with service providers to achieve the desired outcomes.

Services and Characteristics

Simultaneity: Service consumption and production occur concurrently, creating a real-time experience for both the customer and the service provider. This simultaneous interaction necessitates immediate responsiveness and adaptability to address customer needs effectively.

Quality and Experience: The quality of a service is subjective and influenced by the customer's perception of the experience. Factors such as reliability, responsiveness, empathy, and tangibility contribute to customer satisfaction and loyalty.

Service Quality

Service quality refers to the measurement of how well a service **meets or exceeds customer expectations**. It is a critical factor in customer satisfaction, loyalty, and the overall success of a service-based business.

Service Quality Measurement

Service quality can be measured through various methods, including customer surveys, feedback mechanisms, mystery shopping, and service performance metrics.

Continuous monitoring and improvement of service quality are essential to meet changing customer expectations, gain a competitive edge, and build customer loyalty.

Organisations that excel in delivering high-quality services often prioritize training, employee engagement, process optimization, and customer-centricity to consistently meet and exceed customer expectations.

Products v Services

Compare and contrast products and services based on their characteristics and customer experience.

Examples of companies that offer both products and services.

Introduction to Innovation

Driving growth and success in organizations.

Importance of continuous innovation to stay competitive.

Types of Innovation

Product innovation, process innovation, business model innovation, and service innovation.

Innovation Process

Idea generation, feasibility analysis, development, implementation, and evaluation.

The importance of creativity, research, and collaboration in the innovation process.

Innovation Process

Idea Generation: The first stage involves generating a pool of ideas that have the potential for innovation. Ideas can come from various sources, such as employees, customers, market research, competitive analysis, or collaborations with external partners. Methods like brainstorming sessions, idea contests, or innovation workshops can be used to stimulate idea generation.

Idea Screening: In this stage, the generated ideas are evaluated and screened to identify those that align with the organization's goals, strategic direction, and resource capabilities. Ideas are assessed based on factors such as feasibility, market potential, competitive advantage, and alignment with customer needs.

Concept Development: Selected ideas are further developed into more concrete concepts or prototypes. This stage involves refining and elaborating on the selected ideas to create a clear understanding of the concept, its features, benefits, and potential value proposition. Feedback from potential customers or stakeholders may be sought during this phase.

Innovation Process

Feasibility Analysis: Before proceeding with full-scale development, a feasibility analysis is conducted to assess the technical, financial, and operational feasibility of the concept. This involves evaluating factors such as technical requirements, resource availability, cost estimates, market demand, and potential risks or challenges. The goal is to determine if the concept is viable and worth pursuing.

Development: If the concept is deemed feasible, the development stage begins. This involves transforming the concept into a tangible product, service, or process. It may include activities such as design, engineering, prototyping, testing, and refining based on customer feedback. Iterative development and agile methodologies are often employed to accelerate the process and incorporate improvements along the way.

Testing and Validation: Once the development is complete, the innovation is tested and validated. This stage involves assessing the performance, functionality, and user experience of the innovation. Testing can be done through internal trials, pilot projects, or limited releases to gather feedback, identify potential issues, and make necessary refinements before full-scale launch

Innovation Process
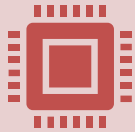
Implementation and Launch: After successful testing and validation, the innovation is implemented and launched into the market or within the organization. This stage involves scaling up production or service delivery, marketing and communication activities, training employees, and ensuring smooth integration into existing systems or processes.

Evaluation and Continuous Improvement: Following the launch, the innovation's performance and impact are continuously monitored and evaluated. Feedback from customers, market response, and other performance metrics are analysed to identify areas for improvement. This feedback loop helps organizations refine and enhance the innovation to meet evolving customer needs and market dynamics

Innovation Drivers
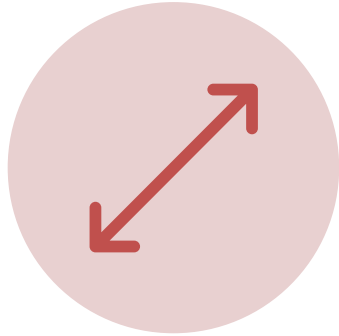
TECHNOLOGICAL ADVANCEMENTS, CUSTOMER NEEDS, MARKET TRENDS, AND COMPETITION.

THE IMPORTANCE OF A SUPPORTIVE ORGANIZATIONAL CULTURE AND LEADERSHIP IN FOSTERING INNOVATION.

IMPACT OF THESE INNOVATIONS ON SOCIETY, BUSINESS, AND CUSTOMER EXPERIENCES.

Innovation Benefits

- Benefits organisations and individuals gain from embracing innovation.
- Improved competitiveness, increased market share, enhanced customer satisfaction, and the potential for societal impact.

Challenges and Risks of Innovation

- Resource constraints, resistance to change, and technological obsolescence.
- Effective risk management and continuous learning.

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The role of Customer Needs

- The importance of understanding customer needs in developing successful products and services.

- Customer-centricity and how it drives innovation

- Understanding customer needs requires active listening, market research, data analysis, and continuous engagement with customers. By identifying and effectively meeting these needs, businesses can develop offerings that resonate with customers, build loyalty, and gain a competitive advantage.

Customer Needs
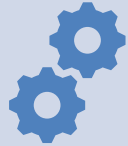
Functional Needs: These are the basic, tangible requirements customers have for a product or service to perform its intended function. For example, a customer may need a laptop with a specific processing power, storage capacity, or battery life to meet their functional needs for work or entertainment.

Emotional Needs: Emotional needs are related to how a product or service makes customers feel. It includes desires for pleasure, excitement, joy, confidence, or peace of mind. For example, customers may seek a luxury car not only for its performance but also for the prestige and status associated with owning it

Social Needs: Social needs involve customers' desires for acceptance, belonging, or social interaction. Products or services that fulfil social needs may enable customers to connect with others, be part of a community, or enhance their social status. Examples include social media platforms, group fitness classes, or shared workspace facilities.

Customer Needs

Cognitive Needs: Cognitive needs refer to customers' desire for knowledge, information, or intellectual stimulation. Customers may seek products or services that provide educational content, problem-solving capabilities, or tools for personal or professional development.

Convenience Needs: Convenience needs revolve around making customers' lives easier, saving time, or reducing effort. Customers often seek products or services that offer convenience, such as online shopping with fast delivery, self-checkout options, or mobile apps for quick access to information or services.

Cost-Effective Needs: Cost-effective needs involve customers' desire for value for money or affordability. Customers may prioritize products or services that offer good quality at a reasonable price, discounts, cost-saving features, or flexible payment options.

Customer Needs

Environmental and Ethical Needs: With increasing awareness and concern for the environment and social issues, customers have a growing need for products or services that align with their values and contribute to sustainability. They may seek eco-friendly, socially responsible, or ethically sourced options.

Customization and Personalization Needs: Customers often desire products or services that can be tailored to their specific preferences, needs, or individuality. Customization options, personalized recommendations, or flexible configurations can address these needs.

Design Thinking

DESIGN THINKING AS A HUMAN-CANTERED APPROACH TO INNOVATION.

FIVE STAGES OF DESIGN THINKING: EMPATHIZE, DEFINE, IDEATE, PROTOTYPE, AND TEST.

HOW DESIGN THINKING HAS LED TO INNOVATIVE PRODUCTS AND SERVICES.

Design Thinking Stages

Empathize: The first stage of design thinking is to develop empathy by understanding the needs, desires, and challenges of the users or customers. This involves conducting research, observing users, and engaging in direct conversations to gain insights into their experiences and perspectives. Empathy helps designers develop a deep understanding of the users' context and informs the subsequent stages of the process.

Define: In the Define stage, designers synthesize the information gathered during the empathy phase to define the core problem or challenge. This involves reframing the problem statement, identifying user needs and pain points, and establishing clear design objectives. Defining the problem sets the stage for generating creative and targeted solutions.

Ideate: The Ideate stage is focused on generating a wide range of potential solutions without judgment or constraints. Designers engage in brainstorming sessions, sketching, mind mapping, or other ideation techniques to encourage creativity and explore diverse possibilities. Quantity and variety of ideas are encouraged during this stage.

Design Thinking Stages

Prototype: In the Prototype stage, designers transform selected ideas into tangible representations that can be shared and tested. Prototypes can take various forms, from physical models to digital simulations or storyboards. The goal is to create a simplified version of the solution that allows for feedback, iteration, and testing.

Test: The Test stage involves gathering feedback and insights by putting the prototypes in front of users or stakeholders. Designers observe how users interact with the prototypes, gather feedback, and identify areas for improvement. Testing helps validate assumptions, refine ideas, and ensure that the final solution meets users' needs effectively.

Iterate: The design thinking process is iterative, meaning that designers cycle through the stages multiple times. Based on the feedback and insights gained during the testing phase, designers refine their solutions, make necessary adjustments, and iterate on the design. This iterative approach allows for continuous learning and improvement throughout the design process.

Disruptive Innovation

Disruptive innovation and explain its impact on established industries and markets.

Disruptive innovations and their effects on businesses and consumers.

The importance of staying vigilant and adaptive to disruptive forces.

Disruptive Innovation Examples

Netflix: Netflix disrupted the traditional video rental industry by introducing a subscription-based streaming service. By offering a vast library of movies and TV shows accessible anytime, anywhere, Netflix transformed the way people consume entertainment and led to a decline in brick-and-mortar video rental stores.

Uber: Uber disrupted the taxi industry by introducing a mobile app-based ride-hailing service. By connecting riders directly with drivers and providing convenient, on-demand transportation, Uber revolutionized the way people book and experience rides, challenging traditional taxi services worldwide.

Airbnb: Airbnb disrupted the hospitality industry by offering a peer-to-peer online platform for short-term lodging rentals. By enabling individuals to rent out their homes or spare rooms to travellers, Airbnb created a new marketplace and provided an alternative to traditional hotels, impacting the accommodation sector.

Disruptive Innovation Examples

Tesla: Tesla disrupted the automotive industry with its electric vehicles (EVs). By developing high-performance, stylish EVs with advanced technology and long-range capabilities, Tesla challenged the dominance of traditional internal combustion engine cars, driving the shift toward sustainable transportation.

Amazon: Amazon disrupted the retail industry by establishing an online marketplace for books and expanding into a wide range of products. With its focus on customer-centricity, efficient logistics, and competitive pricing, Amazon revolutionized e-commerce and reshaped consumer shopping habits.

Spotify: Spotify disrupted the music industry by introducing a music streaming service that offered access to a vast library of songs on-demand. By shifting the music consumption model from physical CDs or digital downloads to streaming, Spotify changed the way people listen to music and challenged the traditional record industry.

Disruptive Innovation Examples
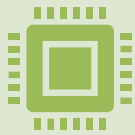
3D Printing: 3D printing disrupted manufacturing by enabling the creation of physical objects through additive processes. It revolutionized prototyping, customization, and small-scale production, reducing costs and lead times, and opening up new possibilities in various industries, from healthcare to aerospace.

Blockchain: Blockchain technology disrupted industries like finance and supply chain management by providing a decentralized and secure system for recording and verifying transactions. It has the potential to revolutionize areas such as banking, digital currencies, and data integrity by eliminating the need for intermediaries and increasing transparency.

Open Innovation

Concept of open innovation and how it involves collaborating with external partners, such as customers, suppliers, and universities.

The benefits of open innovation, including access to new ideas, resources, and expertise.

Examples of Open Innovation

LEGO Ideas: LEGO Ideas is an open innovation platform where LEGO enthusiasts can submit their own designs for new LEGO sets. Users can vote on the submissions, and if an idea receives enough support, LEGO considers it for production. This approach allows LEGO to tap into the creativity of its fans and bring unique sets to market.

NASA's Centre of Excellence for Collaborative Innovation (CoECI): CoECI is NASA's initiative to engage the public and external experts in solving complex challenges. NASA uses various platforms, such as the NASA Tournament Lab and the International Space Apps Challenge, to collaborate with a global community of problem solvers and innovators.

Linux and Open-Source Software: Linux is an open-source operating system developed collaboratively by a global community of developers. Open-source software, in general, allows developers to access, modify, and distribute the source code freely. This collaborative model has led to the creation of robust and widely adopted software solutions.

Intellectual Property Protection
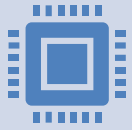
The importance of intellectual property (IP) protection in promoting innovation.

Different forms of IP, such as patents, trademarks, copyrights, and trade secrets.

The role of IP in fostering creativity, incentivizing innovation, and ensuring fair competition.

Intellectual Property Examples

Patents: Patents grant exclusive rights to inventors for their inventions, preventing others from making, using, or selling the invention without permission. For example, the patent for a specific drug formulation or a new technological process.

Trademarks: Trademarks protect distinctive signs, such as logos, names, or slogans, that distinguish products or services of one company from another. Examples include the Nike "swoosh" logo or the McDonald's golden arches.

Copyrights: Copyrights protect original creative works, such as books, music, art, films, or software. For instance, the copyright for a bestselling novel, a hit song, or a popular video game.

Intellectual Property Examples

Trade Secrets: Trade secrets refer to confidential and valuable information that gives a company a competitive advantage. This could include formulas, manufacturing processes, customer lists, or marketing strategies that are kept secret. The Coca-Cola recipe is an example of a well-known trade secret.
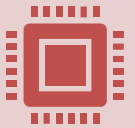
Industrial Design Rights: Industrial design rights protect the visual appearance and aesthetics of a product, such as the shape, configuration, or pattern. For instance, the unique design of an iconic piece of furniture or the shape of a luxury sports car.

Utility Models: Utility models, also known as "petty patents," are similar to patents but provide protection for inventions with shorter lifespans or incremental improvements. Utility models are often used for inventions in fields such as mechanics or electronics.

Intellectual Property Examples

Geographical Indications: Geographical indications protect products originating from a specific region, which possess unique characteristics or qualities due to that region's geographical conditions. Examples include Champagne (region in France) for sparkling wine or Roquefort (region in France) for cheese.

Plant Variety Rights: Plant variety rights protect new plant varieties that are distinct, uniform, and stable. These rights ensure that breeders have exclusive control over the commercial production and distribution of the plant variety.

Sustainability and Green Innovation

The growing importance of sustainability and environmentally-friendly practices in product development and service delivery.

Companies that have embraced green innovation to reduce environmental impact.

The benefits of sustainable practices, such as cost savings, brand reputation, and customer loyalty.
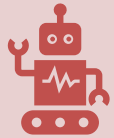
Examples of Sustainability and Green Innovation

Telsa

Solar Energy

Vertical Farming4Green Building Technologies

Water Conservation

Green Packaging

Innovation in Services

The importance of service design, customer experience, and digital technologies in service innovation.

How innovation applies to service industries and the unique challenges and opportunities they face.

Innovation in Services Examples

Online Service Platforms: Companies like Uber, Airbnb,

Self-Service Technologies: Self-service technologies, such as self-checkout kiosks in retail stores or online banking services

Subscription-Based Models: Subscription (Netflix)

Gamification in Services: Gamification involves incorporating game-like elements, For instance, fitness apps that reward users for achieving exercise goals or loyalty programs that offer incentives for repeat purchases.

Co-Creation and Personalization: Co-creation allows customers to participate in the design or customization of services to meet their specific needs

Virtual and Augmented Reality: Virtual and augmented reality technologies are being employed to enhance service experiences. For example, virtual tours for real estate or travel services, augmented reality applications for trying on clothes or visualizing home decor, or virtual reality-based training programs for employee development.

Innovation in Services Examples
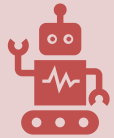
Service Automation and Artificial Intelligence: Automation and AI are being used to streamline and improve service delivery. Chatbots, virtual assistants, and AI-driven recommendation systems are examples of innovations that enhance customer service, provide personalized recommendations, and automate routine tasks.

Integrated Omni-Channel Experiences: Organizations are integrating various channels (e.g., physical stores, websites, mobile apps) to create seamless and consistent service experiences across touchpoints. This allows customers to interact with the service provider through their preferred channels and transition between them effortlessly.

Innovation Metrics and Measurement

The importance of measuring innovation and tracking key performance indicators (KPIs) to assess progress.

Innovation metrics such as revenue from new products, time to market, and customer satisfaction.

The role of data analytics and metrics in driving continuous improvement.

Collaborative Innovation

The benefits of collaborative innovation, where multiple stakeholders, including customers, employees, and partners, contribute ideas and insights.

The concept of open collaboration platforms and how they facilitate idea sharing and co-creation.

Social Innovation and Impact

The concept of social innovation and how it addresses social and environmental challenges.

Social enterprises or initiatives that have made a positive impact on society.

The importance of combining financial sustainability with social and environmental responsibility.

Fair Trade

Social Entrepreneurship

Educational Initiatives

Sustainable Agriculture

Renewable Energy Initiatives

Ethical Considerations in Innovation

- Data privacy, ethical AI, and responsible technology use.
- The importance of considering the potential social, environmental, and cultural impacts of innovations.
  - **Social Impact**
  - **Environmental Sustainability**
  - **Human Rights and Social Justice**
  - **Transparency and Accountability**
  - **Ethical Use of Technology**
  - **User privacy and Data Protection**
  - **Long-term thinking/ Consequences**

Innovation Challenges in a Global Context

Challenges and opportunities of innovation in a globalised world.

Cultural, economic, and regulatory differences impact innovation strategies and implementation.

The need for global collaboration and understanding in pursuing innovative solutions.

Innovation Challenges in a Global Context

- Cultural and Diversity Barriers: Cultural differences, language barriers, and diverse perspectives can pose challenges to global innovation efforts. Understanding and bridging these differences is crucial for effective collaboration, communication, and idea generation within multicultural teams.

- Regulatory and Legal Considerations: Operating in multiple countries means navigating different regulatory frameworks, intellectual property laws, and compliance requirements. Organizations must ensure that their innovations align with local laws and regulations, which can be complex and time-consuming.

- Market Variations: Global markets differ in terms of customer preferences, needs, and purchasing power. Adapting innovations to suit diverse market contexts and consumer behaviours requires market research, localization strategies, and a deep understanding of local customers' cultural nuances.

Innovation Challenges in a Global Context
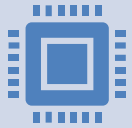
Infrastructure and Resource Constraints: Developing and implementing innovations in certain regions may be hampered by inadequate infrastructure, limited access to resources, or technological gaps. Organizations need to account for these constraints and find creative solutions to overcome them.

Supply Chain Complexity: Global innovation often involves complex supply chains that span multiple countries. Coordinating suppliers, managing logistics, and ensuring quality control across different regions can be challenging. Collaboration and coordination are key to navigating these complexities.

Intellectual Property Protection: Protecting intellectual property rights on a global scale can be complex due to variations in legal frameworks and enforcement mechanisms across countries. Safeguarding innovations and trade secrets requires a comprehensive intellectual property strategy and vigilant monitoring.

Innovation Challenges in a Global Context

Talent Management: Attracting and retaining talent with the right skill sets, cultural competencies, and global mindset is crucial for global innovation. Organizations must establish effective talent management strategies that enable cross-cultural collaboration, knowledge sharing, and continuous learning.

Ethical and Social Responsibility: Operating globally requires organizations to consider ethical implications and social responsibility. Innovations must address social and environmental challenges, respect cultural norms, and contribute positively to local communities while avoiding harm and exploitation.

Economic and Political Uncertainty: Global markets are subject to economic volatility, political instability, and trade tensions. Organizations must navigate these uncertainties, adapt their strategies, and assess potential risks that may impact their global innovation initiatives.

The Future of Innovation

- Emerging trends and technologies that are shaping the future of innovation, such as artificial intelligence, blockchain, and Internet of Things (IoT).

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