# Digital Social Media Business Models (DLMGHESMMC01)

## Learning Objectives

Many companies still interpret social media as an extension of their communication efforts into the social web. This overlooks the fact that the channels are not only capable of boosting or adapting a company’s own business model but can even enable completely new models.

Upon completion of the course, you will be able to reproduce the history and framework conditions of digital business models.

The course first discusses basic terms of innovation management and definitions of business models. You will then gain a deeper understanding of the characteristics of digital business models, especially of their core elements, value mechanisms, and success factors.

You will then learn about the special features of digital business models.

Finally, you will be able to explain, understand, and evaluate social media business cases.

# Innovation Management and Business Model Definitions

Study Goals

On completion of this unit, you will be able to

- define the essential terms innovation, innovation management, and business models

- understand why innovation management and business models are interconnected

- explain the differences between traditional and digital business models

### Introduction

In the late 1950s, the American car manufacturer Ford developed the Edsel, a car that was supposed to fill what was perceived as a gap in its product lineup between the Ford and Mercury lines. It was meant to compete with General Motors (Drucker, 2002) and Chrysler by offering a car that was innovative, feature-rich, and catered to a growing affluent middle class.

The Edsel featured unique styling, including a distinctive “horse-collar” grille, which was intended to make it stand out but ended up being controversial with consumers. The Edsel incorporated several innovations, such as push-button transmission controls and advanced safety features. However, some of these innovations were not well-received or had reliability issues, which tarnished the car’s reputation.

Figure 1: Ford’s Edsel Car

Ein Bild, das Text, Fahrzeug, Landfahrzeug, Rad enthält.

Automatisch generierte Beschreibung

Source: Adobe Stock, 2024.

Launched in 1957, the timing was unfortunate as the United States was entering a recession. The high expectations set for the Edsel were met with indifferent consumer demand, and sales were disappointing. Consequently, the Edsel is regarded as the biggest new-car failure in automotive history (Drucker, 2002).

The iPhone’s development began in the early 2000s, with Apple recognizing the potential for a new kind of mobile device. The concept was to combine a phone with a music player and an internet communicator, which was a significant departure from existing mobile phones.

Apple’s approach to innovation with the iPhone focused on user experience and design simplicity. The idea was to create a device that was not just functional but also intuitive and enjoyable to use. This involved rethinking the user interface, leading to the pioneering of touchscreen technology and the elimination of a physical keyboard (Apple, 2007).

One of the key aspects of the iPhone’s innovation was its integration of various technologies into a single device. It combined a phone, an iPod, and an internet browser, setting a new standard for what a smartphone could be (Jobs, 2007). This integration also involved developing a new operating system (iOS), which would become central to the iPhone’s functionality and user experience.

Figure 2: Apple’s first iPhone

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Source: Adobe Stock, 2024.

Launched in 2007, the iPhone was an instant success and sold 270 000 units (Apple, 2007). It disrupted the mobile phone market, challenging the dominance of traditional phone manufacturers and shifting the industry’s focus toward smartphones with touchscreens and rich user interfaces.

The contrasting stories of the Edsel and the iPhone in innovation management highlight the importance of understanding market needs, timing, and the power of branding. The iPhone’s success was due to its revolutionary design, keen market insights, and effective integration of technology with user experience, whereas the Edsel faltered due to misjudged market demand, poor timing, and design choices that did not resonate with consumers.

To minimize the risk of innovation failures, innovation management is a critical aspect of modern business strategy, especially in the context of digital business models. It involves not only the creation of new ideas but also their effective implementation and integration into sustainable business practices. Therefore, this chapter explores the foundational concepts of innovation management and examines how these concepts interplay with and support digital business models.

## Basic Terms of Innovation Management and Connection with Digital Business Models

To get a sound understanding of the topic, let’s have a look at the tern “innovation” first.

Innovation is a widely discussed and researched topic in both business and academic circles, leading to various definitions by scholars. The word’s roots trace back to the Latin *innovare*, which translates to “creating or constructing something new.”

One of the earliest definitions goes back to the Austrian economist Joseph Schumpeter, who broadly conceptualized innovation as the introduction of new goods or a new quality of goods, new methods of production, the opening of new markets, the conquest of new sources of supply for raw materials or part-manufactured goods, and the carrying out of new organizations in any industry (Schumpeter, 1950). These innovations drive what Schumpeter famously termed “creative destruction,” a process that is essential for the evolution and progress of capitalist economies. This concept emphasizes the role of innovation in economic change and development within capitalist societies.

This is one of the earliest and most influential definitions, emphasizing innovation as a driver of economic development and competitive advantage. For Schumpeter, innovations were essential to disrupt the status quo by replacing existing industries, products, and business models with newer, more efficient ones. This process of creative destruction leads to economic growth by eliminating outdated and inefficient practices and making way for more productive and innovative ones.

The communication scholar and sociologist Everett M. Rogers is well known for his work on the diffusion of innovations, which includes a definition of innovation and a framework for understanding how innovations spread through society (Rogers et al., 2014). He sees innovation as an idea, practice, or object that is perceived as new by an individual or other unit of adoption. Rogers focuses on the perception of newness by individuals. This emphasizes that innovation is not just about the introduction of something objectively new but also about how it is perceived by potential adopters. Rogers’ framework for diffusion of innovations places a strong emphasis on the role of adopters and their decision-making processes. It explores how innovations are adopted and diffused within a social system. Schumpeter’s definition, on the other hand, is more focused on the supply side, emphasizing the role of entrepreneurs and firms in introducing innovations.

The former American economist Peter F. Drucker stated that “innovation is the specific function of entrepreneurship, whether in an existing business, a public service institution, or a new venture started by a lone individual in the family kitchen. It is the means by which the entrepreneur either creates new wealth-producing resources or endows existing resourcing with enhanced potential for creating wealth” (Drucker, 1998, p.3). Drucker identifies seven potential sources of innovative opportunity: the unexpected, incongruities (discrepancies between what is and what should be), process needs, industry and market changes, demographics, changes in perception and mood, and new knowledge. Drucker underscores the importance of understanding and meeting customer needs and preferences. Organizations should continuously listen to their customers and adapt their offerings accordingly.

The American economist Clayton M. Christensen focuses on the concept of disruptive innovations. In his influential work *The Innovator’s Dilemma*, he distinguishes between sustaining innovations (which improve existing products) and disruptive innovations (which create new markets and value networks). This definition introduced the influential concept of disruptive innovation, reshaping how businesses think about innovation strategy.

Whereas all definitions focus on slightly different aspects of innovation, we will take a closer look at the most important and omnipresent characteristics of innovations.

### From Invention to Innovation

Innovation represents a comprehensive process, spanning from the origination of an idea to its market exploitation. This exploitation encompasses both the introduction of the invention to the market and its wider dissemination as a novel product, methodology, or business approach (Tidd & Bessant, 2021).

The first step in the process of innovation therefore is the creation of an invention, which forms the basis of this stage. This stage focuses exclusively on the creation of an idea, which becomes an invention once it is fully formed and expressed. Technical inventions can be protected and monetized via patents, as long as they are new in the current market, not previously registered, and have not been publicly revealed (Tidd & Bessant, 2021).

Therefore, an invention followed by a commercial exploitation (commercialization) leads to an innovation.

Figure 3: Relationship between Invention and Innovation

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Source: Created on behalf of IU (2024), based on Tidd & Bessant, 2021.

### Degree of Newness

The degree of an innovation’s newness can vary widely. Scholars distinguish between radical and incremental innovations.

Radical innovations involve a significant and transformative departure from existing products, services, or processes. They often create entirely new markets or industries and can render existing technologies or practices obsolete. Radical innovations are more likely to disrupt existing markets and industries. They introduce new, groundbreaking solutions that challenge the status quo, potentially displacing established competitors.

Incremental innovations, in contrast, make small and gradual improvements or enhancements to existing products, services, or processes. They build upon current technologies or practices without fundamentally changing them.

Incremental innovations tend to be less disruptive. They are typically aimed at maintaining or improving the competitive position of existing products or services within established markets.

An example of a radical innovation is the introduction of the personal computer in the 1970s, which radically transformed the computing industry. Today, electric vehicles represent a significant departure from traditional internal combustion engines.

Examples of incremental innovations are updates to smartphones, such as improved camera capabilities or increased processing power.

Overall, radical innovations may face slower customer adoption initially, as customers need to adapt to entirely new paradigms. It may take time for customers to recognize the value and utility of these innovations. Incremental innovations, in contrast, are often easier for customers to adopt since they build on familiar technologies or practices. Customers can more easily realize the benefits of incremental improvements (Mugge & Dahl, 2013).

### Type of Newness

Innovations not only differ in their degree of newness. There are other categorizations of innovation types. Let’s have a look at the most common types of innovation.

Product innovations imply the development of a new or improved product (Oke, 2007) – for example, the introduction of the iPhone, a new pharmaceutical drug, or a more efficient electric car.

Service innovations imply the development of new or improved services to meet customer needs or enhance customer experiences (Oke, 2007) – for example, the introduction of online banking services or the launch of streaming platforms like Netflix.

Process innovations enhance or transform the methods, techniques, or systems used to produce goods or deliver services – for example, the implementation of lean manufacturing principles, automation in assembly lines, or the adoption of just-in-time inventory management.

Business model innovations describe innovations in how a company creates, delivers, and captures value. They may involve changes in revenue models, distribution channels, partnerships, or customer segments – for example, the shift from selling software as a product to offering it as a subscription service, the rise of the sharing economy (e.g., Airbnb, Uber), or the introduction of freemium pricing models.

Technological innovations relate to the development and application of new technologies or scientific discoveries – for example, the invention of the internet.

Social innovations address societal challenges, such as poverty, healthcare, education, or social inequality, with a focus on improving the well-being of communities – for example, microfinance initiatives.

These different types of innovation are only to provide some examples. There are a wide variety of other types of innovation in other areas, such as purchasing, sales, logistics, or finance.

As we have now gained an understanding of the term innovation together with an overview of the different types of innovation, let’s have a look at the meaning of innovation management.

### Definition of Innovation Management

In its broadest sense, innovation management refers to the management and control of all activities involved in producing innovations. Tidd and Bessant (2021) define innovation management as the complete “process of turning ideas into reality and capturing value for them” (p.22). This includes all phases of the process: 1) searching for opportunities for innovation, 2) selecting the innovation, 3) implementation, and 4) capturing value and benefits through the market diffusion of the innovation (Tidd & Besant, 2021, p.22).

### Objectives of Innovation Management

The primary objective of innovation (management) is to secure and expand a company’s competitiveness and growth. Research shows that innovation typically results in monetary returns, such as higher stock prices (Kumar & Li, 2016), which fuel further growth.

Should a company not regularly update or refresh its offerings, including services, products, business models, and methods of creating value, it risks falling behind its competitors who may be more dynamic and innovative in these areas (Bessant & Tidd, 2015, p.4).

However, companies often face a so-called innovation policy dilemma. On the one hand, there may be big economic opportunities from updating the company’s products and offerings. On the other hand, the risk of changing the company’s offers is high.

Therefore, a systematic management of innovation activity is essential to guarantee economic success and control the risks. The British business magnate and co-founder of the Virgin Group, Richard Branson, summarizes thus: “There is no substitute for innovation. Original, revolutionary ideas will always rise to the top” (Branson, 2024).

### Connection with Digital Business Models

Innovators, particularly in the digital sphere, face a significant challenge if they lack a robust business model. This model, which broadly defines how the enterprise creates and delivers value to customers and then converts payments received to profits (Teece, 2010), is essential not only for delivering its innovations effectively but also for ensuring that it can profit from them. This is especially critical for internet companies, where monetizing their services can be difficult. Often, customers expect basic digital services to be available at no cost, and this expectation complicates the creation of viable revenue streams. For example, many online platforms struggle to balance offering free services, like social media or news, with generating income through other means, such as advertising, premium memberships, or data monetization (Teece, 2010).

So, let’s have a look at the characteristics and types of business models as well as their relation to innovation in the following chapter.

### Self-Check Questions

1. Please explain the difference between invention and innovation.

*An invention that has been introduced to a market is called an innovation.*

1. Please name two degrees of newness concerning innovations.  
   *Incremental and radical innovation*

## Business Models: Genesis- Definition – Relation to Innovation

To approach the concept, we adapt the procedure of Osterwalder, Pigneur and Tucci (2005). First, we have a look the terms “business” and “model” separately. “Based on functional, structural, or behavioral similarities or analogies to an original, models are used specifically for the purpose of solving problems whose execution on the original would not be possible or would be too costly. “(Gabler 2018). Thus, a model is an abstraction of the original.

A purpose of a model is a simplified representation of a complex reality, used for analysis, explanation, or prediction. Models help in understanding, explaining, and predicting phenomena by focusing on key elements and their relationships. They can be physical, mathematical, or conceptual, and are widely used in various fields like economics, engineering, social sciences, and natural sciences (Gabler 2018). A “business” can be broadly referred to “the activity of buying and selling goods and services” (Cambridge Dictionary 2024)

The term “business model” was first mentioned in a scientific article by Bellman and Clark (1957). The concept goes back to the beginnings of business information in the mid-1970s (Wirtz 2019). However, it was not until the end of the 1990s that is was broadly used in academic literature. From then on, it was primarily utilized in connection with the rise of the new economy (for an overview see Osterwalder, Pigneur & Tucci, 2005). The reason for the relationship between technology and business models can be attributed to the business models’ roots in transaction cost economics (TCE) (Osterwalder, Pigneur & Tucci, 2005).

Transaction Cost economics

a theory that analyzes and predicts the ways in which companies choose to structure transactions, manage relationships, and organize themselves to minimize the costs of exchanging goods or services, including costs associated with information, negotiation, and enforcement.

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Excursus Transaction Cost Theory

The connection between business models and **transaction cost** theory lies in understanding how businesses organize and structure their operations to minimize the costs associated with economic exchange or transactions. Transaction cost theory, primarily developed by economist Ronald Coase (1937) and later expanded by Oliver Williamson, focuses on the cost incurred in making an economic exchange. Transaction costs include search and information costs, bargaining costs, and enforcement and policing costs. These are the costs of finding a trading partner, negotiating a deal, and ensuring that the terms of the deal are met (Coase, 1937).

The theory suggests that firms exist because in many cases, it is more cost-effective to conduct transactions within an organization (hierarchy) than though the market (Coase, 1937). This decision is based on the comparative cost of transacting the market versus within the firm.

Supply Chain

a network of all the individuals, organizations, resources, activities, and technology involved in the creation and sale of a product, from the delivery of source materials from the supplier to the manufacturer, through to its eventual delivery to the end user.

Transaction cost theory highlights the role of contracts in business exchanges. The complexity, uncertainty and frequency of transactions influence the contractual arrangements of business choose (Williamson, 1971).

Business models are significantly influenced by transaction costs. Companies structure their operations, **supply chains**, and **distribution channels** to minimize this cost. For example, vertically integrated companies internalize transactions to avoid market costs (Williamson, 1971).

Digital business models often leverage technology to reduce transaction costs. **E-commerce**, for instance, significantly reduces the search and information costs for consumers, while automation and digital contracts can lower enforcement costs.

Distribution Channel

A distribution channel is a pathway through which a product or service flows from the producer to the consumer, potentially including intermediaries such as distributors, wholesalers, and retailers..

In digital business models especially in platform-based ecosystems (that are going to be explained later on), network effects can reduce transaction costs. Collaborations and strategic alliances can also be formed to minimize these costs through shared resources and capabilities.

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Today, numerous definitions of a business model exist, nearly equaling the variety of business models themselves. Many studies have compiled or contrasted different definitions and elements of business models.

E-Commerce

the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet

So, let’s have a look at a couple of different definitions.

One of the first definitions goes back to Timmers (1998, p.2), who terms it as “an architecture for the product, service and information flows, including a description of the various business actors and their roles, and a description of the potential benefits for the various business actors, and a description of the sources of revenue”.

One of the most cited definitions is the definition of Teece (2010) which has been cited almost 13.000 times. According to Teece (2010) a business model

“articulates the logic and provides data and other evidence that demonstrates how a business creates and delivers value to customers. It also outlines the architecture of revenues, costs, and profits associated the business enterprise delivering that value.(…) In essence, a business model is a conceptual, rather than a financial model of a business.” (Teece, 2010, p. 173).

This definition serves as the basis for the following coursebook. However, due to the strong relevance for practitioners, we will also have a closer look at the components of the business model by Osterwalder, Pigneur and Tucci (2005).

The authors define business models as

“a conceptual tool that contains a set of elements and their relationships and allows expressing the business logic of a specific firm. It is a description of the value a company offers to one or several segments of customers and of the architecture of the firm and its network of partners for creating, marketing, and delivering this value and relationship capital, to generate profitable and sustainable revenue streams.” (Osterwalder, Pigneur &Tucci, 2005, p.17)

The authors suggest four pillars (the product, customer interface, infrastructure management and financial aspects) that can be subdivided into nine business model building blocks, namely value proposition, target customers, distribution channel, relationship, value configuration, core competency, partner network, cost structure, and revenue model.

Table 1: Osterwalder et al.’s Nine Business Model Building Blocks

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Source: Created on behalf of IU, based on Osterwalder & Pigneur, 2010.

Whereas the value proposition gives an overall view of a company’s bundle of products and services, the target customer describes the segments of customers a company wants to offer value to. The distribution channel describes the various means of the company to get in touch with its customers whereas the relationship explains the kind of links a company establishes between itself and its different customer segments. The value configuration describes the arrangement of activities and resources, the core competency outlines the competencies necessary to execute the company’s business model. The partner network portrays the network of cooperative agreements with other companies necessary to efficiently offer and commercialize value. The cost structure that is part of the financial aspects sums up the monetary consequences of the means employed in the business model whereas the revenue model describes the way a company makes money through a variety of revenue flows.

The different building blocks will be discussed in more detail in the following chapters.

### Delineation of Concepts: Business Models and Strategy

Strategy

Strategy : is a comprehensive plan or set of guidelines designed to achieve specific long-term goals under conditions of uncertainty.

Although some definitions include the term strategy, most scholars distinguish between “**strategy**” and “business models” (Teece 2010). According to Teece (2010) strategy is strongly linked to business model design, but strategy is regarded is analytically separate, since it broadly describes how a company will compete. Magretta (2002) also strengthens the aspect of competition as main difference between strategy and business model: “Business models describe, as a system, how the pieces of business fit together. But they don’t factor in one critical dimension of performance: competition. Sooner or later – and it is usually sooner – every enterprise runs into competitors. Dealing with that reality is strategy’s job” (Magretta 2002, p.6)

### Relation to Innovation

According to Teece (2010), a business model essentially describes how a company creates value for its customers, convinces them to pay for this value, and then converts these payments into profits. Businesses must not only innovate in their products or services but also in their business models, understanding customer needs and technological developments. For example, the rise of the Internet brought about new business models, disrupting industries and enabling companies like eBay to leverage network effects in multi-sided markets. Business model innovation, therefore, can lead to industry disruption, new market creation, and sustained growth.

Business models and innovation are closely intertwined. A successful business model not only provides a framework for generating revenue but also serves as a platform for continuous innovation. For instance, companies like Apple have excelled not just because of their innovative products but also due to their unique business models, which include a strong ecosystem of apps, music, and services. Similarly, Netflix revolutionized the entertainment industry not just with its streaming technology but by adopting a subscription-based model, contrasting with traditional pay-per-view services. These examples illustrate how innovative business models can create new markets, redefine customer experiences, and sustain competitive advantages.

### Self-Check-Questions

1. When was the term “business model” first mentioned?

* 1950
* 1957 (R)
* 1960
* 1967

## 1.3 Specifics of Digital Business Models Compared to Traditional Business Models

In examining the evolution of business models, it’s essential to recognize their historical developments, going back to innovations that have significantly impacted the economic landscape. For instance, the 15th-century introduction of Gutenberg’s mechanical printing press marked a revolutionary shift in the business of book production (Osterwalder & Pigneur, 2010)). This innovation leveraged the efficiency of mass production to reduce the cost and time of bookmaking, democratizing information access. Similarly, the early 20th-century invention of Ford’s Assembly Line introduced the concept of a moving assembly line, enhancing manufacturing efficiency and setting new standards for industrial operations. The mid-20th century saw the introduction of the credit card by Diners Club (Osterwalder & Pigneur, 2010), transforming transaction methods and initiating a novel business model based on credit systems and deferred payments. Another fundamental transformation occurred when IBM shifted its focus towards consulting services, moving from a hardware-centric to a service-oriented business model to meet the growing demand for IT expertise.

These historical examples illustrate the traditional business model’s characteristics, heavily reliant on physical assets, in-person interactions, and linear value chains. Such models typically involve a physical distribution network, significant investment in physical infrastructure, and a sequential process of value creation from manufacturing to customer delivery.

In contrast, digital business models, as defined by Wirtz (2019), emphasize the initiation and support of service exchange processes between economic partners through information technology. These models distinguish themselves by leveraging digital technology to create, deliver, and capture value, often disrupting traditional models with greater flexibility, scalability, and customer-centricity. The primary distinctions between digital and traditional business models lie in their approach to value creation, customer interaction, and resource utilization. Digital models frequently utilize network effects (which will be explained later on), direct and personalized customer engagement, and a reliance on intellectual property and human capital over physical assets (Wirtz,2019).

Netflix’s transformation from a DVD rental service to a digital streaming giant exemplifies the shift towards digital business models. Initially operating with a physical inventory and relying on postal distribution, Netflix transitioned to a subscription-based digital model. This shift allowed for scalability, reduced reliance on physical infrastructure, and the use of data analytics for personalized content recommendations, showcasing the advantages of digital models in leveraging technology for efficiency, customization, and broader market access (Verhoef et al., 2021).

Machine Learning

Machine Learning is a subset of artificial intelligence that involves the development of algorithms allowing computers to learn and make predictions or decisions based on data without being explicitly programmed for each task.

The evolution of technology and changing consumer preferences continue to shape the business model landscape, with a growing emphasis on digital-first strategies. Innovations in **artificial intelligence** **and machine learning** are set to further enhance customer experiences and operational efficiency, highlighting the dynamic nature of digital business models compared to their traditional counterparts.

Artificial Intelligence

Artificial Intelligence (AI) is the simulation of human intelligence processes by machines, especially computer systems, which involves learning, reasoning, and self-correction.

### Self-Check-Questions

1. Name two examples of traditional business models

*Gutenbergs Mechanical Printing Press, Ford’s Assembly Line, Diners’Club Credit Card*

1. Name the company which successfully transformed its traditional to a digital business model.

*Netflix*

Summary

Innovation management is deeply connected to the evolution of digital business models. It summarizes the multifaceted process of introducing new or improved products, services, processes, and methods to the market, fostering economic growth and competitive advantage.

There is a broad variety of definitions concerning the concept of innovation. Schumpeter’s (1950) notion of “creative destruction” highlights innovation’s role in economic development, while Rogers et al. (2014) emphasizes the diffusion of innovations through societal adoption. Drucker (2002) identifies innovation as the entrepreneur’s tool for creating wealth, outlining seven sources of innovative opportunity. Christensen (2013) distinguishes between sustaining and disruptive innovations, the latter reshaping business strategy.

The step from invention to innovation is marked by the transformation of novel ideas into marketable solutions, a process that encompasses the creation, commercialization, and broad dissemination of new products, methodologies, or business approaches. Innovation can be distinguished between radical and incremental innovations, with the former introducing radical changes that can disrupt existing markets and the latter offering enhancements to improve competitive positions within established realms.

Innovations can encompass product, service, process, business model, technological, and social innovations, each contributing uniquely to addressing consumer needs and societal challenges.

In order to support a company’s competitiveness and growth by fostering a culture of continuous innovation, necessitating a systematic approach to manage risks and capitalize on opportunities is necessary which is why innovation management is vital to a company’s success.

Digital business models play an important role in enabling innovators to deliver and monetize their creations effectively. These models, characterized by their reliance on digital technology, stand in contrast to traditional models through their emphasis on network effects, personalized customer engagement, and a lean reliance on physical assets. Historical shifts, from Gutenberg’s press to Ford’s assembly line and beyond, illustrate the evolution from physical to digital paradigms, culminating in modern examples like Netflix, which transitioned from DVD rentals to a digital streaming platform, exemplifying the transformative power of digital business models.

All in all, innovation management and digital business models are integral to navigating the contemporary economic landscape, driving growth, and reshaping industries. This complex relationship between innovation and business strategy underscores the importance of adaptability, customer-centricity, and technological leverage in sustaining competitive advantage and fostering long-term success.

### LMS Questions

Q1: Which of the following components belong to the business model components according to Osterwalder & Pigneur (2010)?

a) Value Proposition, Core Competency, Revenue Model (Right)

b) Value Proposition, Key Activities, Key Managers (Wrong)

c) Key Activities, Key Resources, Value Chain (Wrong)

d) Value Chain, Supply Chain, Key Resources (Wrong)

Q2: What degree of newness can innovations show?

a) Radical and Incremental (Right)

b) Radical and stepwise (Wrong)

c) Radical and small (Wrong)

d) Large and new (Wrong)

Q3) Which mentioned authors in the coursebook defined the term “innovation”?

a) Schumpeter, Rogers, Drucker (Right)

b) Schumpeter, Frogers, Drucker (Wrong)

c) Schumpers, Rogers, Drucker (Wrong)

d) Schumpeter, Rogers, Dricker (Wrong)

Q4) What is the correct definition of business models by Teece (2010)

Q4) What is the correct definition of innovation management by Tidd and Bessant (2021)?

1. Tidd and Bessant (2021) define innovation management as the complete “process of turning ideas into reality and capturing value for them”(Right)
2. Tidd and Bessant (2021) define innovation management as the complete “process of turning products into reality and sell them” (Wrong)
3. Tidd and Bessant (2021) define innovation management as the complete “progression of developing ideas”
4. Tidd and Bessant (2021) define innovation management as the complete “progression of developing management processes”

Q5) When was the term business model first mentioned?

1. 1957 (Right)
2. 1950 (Wrong)
3. 1960 (Wrong)
4. 1967 (Wrong)

# 2.Digital Business Models: Definitions and Elements

Study Goals

On completion of this unit, you will be able to

* Describe new elements of digital business models
* Analyze and define core elements of digital business models
* Explain revenue mechanisms of digital business models

## Introduction

Recent advancements in technology have fostered the development of innovative business models, significantly impacting various industries. Technologies like broadband internet, smartphones, and Web 3.0 have been essential in the expansion of e-commerce, enhancing its growth. Additionally, the rise of big data and emerging technologies such as Artificial Intelligence (AI), blockchain, Internet of Things (IoT), and robotics are set to profoundly influence business operations. These technologies not only simplify cost structures by automating services and optimizing logistics but also intensify global competition, especially in retail. This technological evolution has shifted market dynamics, favoring new digital players and intensifying competition, particularly with the rise of major tech companies from the United States and China.

This chapter first focuses on the new elements of digital business models, thereby focusing on customer centricity, multi-sided platforms, and network effects. We will then focus on the core elements of digital business models and have a look at value architecture and value mechanics in digital business models.

## New Elements of Digital Business Models

Having defined the term “business model” in the previous chapter, we will now have a look at the specifics of digital business models. According to Wirtz (2019, p.62), digital business (or e-business) is “the initiation as well as the partial or full support, transaction and maintenance of service exchange processes between economic partners through information technology (electronic networks).”

Although we also find characteristics such as consumer centricity, acting in multi-sided markets and the use of network effects in traditional business models, digital business models are predominantly characterized by those components. Therefore, we will have a closer look at these specificities in the following.

### Consumer centricity

Along with the technological developments, consumer behavior is undergoing a transformative shift in response to the digital revolution. Market data indicates that consumers are increasingly diverting their purchasing activities toward online stores, and digital touchpoints have emerged as important elements in the customer journey, influencing both online and offline sales (Kannan & Li, 2017). The proliferation of new search and social media tools has rendered consumers more interconnected, informed, empowered, and engaged (e.g., Lamberton & Stephen, 2016; Verhoef et al., 2017).

Specifically, digital technologies have empowered consumers to actively co-create value by participating in the design and customization of products, engaging in last-mile distribution activities, and assisting fellow customers through the sharing of product reviews (Beckers, van Doorn, & Verhoef, 2018; Grönroos & Voima, 2013). Mobile devices have assumed a central role in contemporary consumer behavior, for example by facilitating showrooming, which involves inspecting merchandise offline and subsequently making online purchases (e.g., Gensler, Neslin, & Verhoef, 2017). Additionally, consumers have developed a strong reliance on applications and new AI-based technologies.

### Business models in multi-sided platforms

Although business models based on multi-sided platforms are not an entirely new phenomenon (traditional newspapers for example act in two-sided markets where they sell the consumer’s attention to the advertising company and charge the consumers for the newspaper subscription) digitalization increasingly offers attractive opportunities to establish business models in multi-sided platforms.

Two-sided, or more broadly, multi-sided markets, refer to scenarios where one or more platforms facilitate interactions among users. The goal of these platforms is to attract both (or all) groups involved by implementing a suitable pricing strategy for each side.

Jean-Charles Rochet and Jean Tirole, two prominent economists, provided a comprehensive framework for understanding multi-sided markets (also known as two-sided markets). According to Rochet and Tirole (2003, 2004), a multi-sided market refers to a platform or marketplace that facilitates interactions between two or more distinct but interdependent groups of customers, where the value of the platform to one group of users significantly depends on the size and engagement level of the other groups using the platform (Rochet & Tirole, 2003; Rochet & Tirole, 2004). The platform’s primary role is to reduce transaction costs, enabling these different groups to interact more efficiently than they could in its absence.

A key characteristic of multi-sided markets is the presence of network effects, meaning the value of the service increases for one user group when a new user of another group joins the platform. For example, a payment card system becomes more valuable to cardholders as more merchants begin to accept it, and vice versa. Moreover, in two-sided markets, often externalities exist. The more valuable consumers a platform reaches, the more desirable it becomes for advertisers. This is called externality (Rochet & Tirole, 2006; Hennig-Thurau & Houston, 2019).

The externality may be either positive or negative. For example, if too many ads are shown to consumers, they might value platform less, leading to a negative externality (Rochet & Tirole, 2006).

Rochet and Tirole’s analysis of multi-sided markets focuses on how platforms manage these network effects, including their pricing strategies and how they balance the needs and preferences of the different sides to maximize overall participation and value creation within the platform ecosystem.

In a multi-sided market, pricing strategies are complex and crucial. Platforms often subsidize one user group while charging the other more to maximize the total value and balance the network. For example, gaming consoles are often sold at a low profit or even a loss to attract gamers, while game developers are charged for access to the platform.

Managers devote considerable time and resources to figure out which side should bear the pricing burden, and commonly end up making little money on one side (or even using this side as a loss-leader) and recouping their costs on the other side (Rochet & Tirole, 2006).

The Swedish audio streaming and media service Spotify, for example, offers a free version for its listeners, only charging advertising companies.

Figure 4: Example of two-sided market structure

Ein Bild, das Text, Screenshot, Schrift, Electric Blue (Farbe) enthält.

Automatisch generierte Beschreibung

Source: Created on behalf of IU (2024), based on Rochet & Tirole, 2006.

### Network effects

Shapiro and Varian (1999) explain network effects as the phenomenon whereby the value or utility that a user derives from a good or service increases with the number of other users consuming the same or compatible goods or services. This concept is central to the economics of networks and digital markets, where the utility of a product or service to one user is affected by how many other people are using it.

Shapiro and Varian (1999) distinguish between two types of network effects:

**Direct Network Effects** occur when the value of a product or service increases directly with the number of users. A classic example is the telephone network, where the utility of having a phone is higher when more people you know also have phones, as this allows you to connect with a larger network of people. Direct network effects can also be observed in social networks where each additional user increases the network’s value to others.

**Indirect Network Effects** happen when the value of a product or service increases because of the availability of complementary goods or services, which become more plentiful as the number of users increases. A good example is software platforms like operating systems; the more users an operating system has, the more incentive there is for developers to create software for that platform, which in turn makes the platform more valuable to its users. Another example are smartphones that become mor valuable with more available apps.

Shapiro and Varian (1999) also discuss how network effects can lead to market tipping, where one product or service becomes dominant, potentially leading to monopoly or oligopoly situations due to the high value placed on being part of the largest network. They emphasize the importance of early growth and the strategic management of network effects for businesses looking to compete in markets where these effects are significant. Strategies might include subsidizing early adopters, ensuring compatibility with existing networks, or leveraging unique features that can attract a critical mass of users to initiate and sustain the network effect.

Network effects are critical in digital markets, often leading to market dominance by a few firms. The interaction between direct and indirect network effects can create powerful ecosystems, where each element enhances the overall network’s value, making it challenging for new entrants to compete (Shapiro & Varian, 1999).

The formula for network effects, particularly in the context of direct network effects, is often represented by Metcalfe’s Law (Varian, 2000). Metcalfe’s Law states that the value of a telecommunications network is proportional to the square of the number of connected users of the system (n2). This formula suggests that as the number of users on a network increases linearly, the value of the entire network grows at an exponential rate. However, it’s important to note that this is a simplified representation, and the actual dynamics of network effects can be more complex in real-world scenarios.

Figure 5: Example of network effects

Created on behalf of IU (2024), based on Shapiro & Varian, 1999.

### Self-Check-Questions

1. What does Metcalfe’s Law state?

*Metcalfe’s Law states that the value of a telecommunications network is proportional to the square of the number of connected users of the system (n2)*

## 2.2 Core Elements of Digital Business Models

Gaining a deeper understanding of digital business models requires to delve a bit deeper into the components of business models with special focus on the core elements. Based on Schön (2012) Teece (2018) lists the following essential elements:

**Value proposition**: Product and Service; Customer Needs; Geography

**Revenue Model**: Pricing Logic; Channels; Customer Interaction

**Cost Model**: Core Assets & Capabilities; Core Activities; Partner Network

Osterwalder & Pigneur (2010) provide a similar framework and distinguish between the core elements of value proposition, target customer, distribution channel, relationship, value configuration, core competency, partner network, cost structure and revenue model. Whereas we briefly cover all nine elements in this chapter we especially focus on the value architecture and value mechanisms in the next chapter.

### Customer Segments

Customers are central to all business models, as their profitability is crucial for the long-term survival of any company (Osterwalder & Pigneur, 2010).. To enhance customer satisfaction, companies often categorize them into distinct segments based on shared needs, behaviors, or characteristics. A business model might target one or multiple customer segments, varying in size (Osterwalder & Pigneur, 2010). It’s vital for an organization to deliberately choose which segments to cater to and which to overlook.

Business model designed for a **mass market** do not differentiate between different customer segments. Their value propositions, distribution channels, and customer relationships all address a large group of customers (Osterwalder & Pigneur, 2010).

Niche market

A niche market is a specific, focused segment of a broader market that businesses target to meet unique preferences, needs, or requirements with specialized products or services.

On the contrary, business models addressing the niche market tailor products and services according to specific customer needs and interests.

A **niche market** is a specific, often small segment of a larger market that has its own unique needs, preferences, and identity. Digital businesses are especially suitable to address niche markets and will be discussed in more detail later on. Companies that target niche markets typically offer specialized products or services tailored to meet the specific demands of a focused customer group. The niche concept is closely related to the long tail theory.

Mass Market

A mass market is a large segment of the consumer population that is not significantly differentiated, targeted by businesses with products or services intended to appeal to a broad range of customers

### Long Tail Theory

The Long Tail theory posits that in a digital economy, businesses can profitably sell a wide range of products in small quantities. This includes products that appeal to niche markets. By catering to these diverse and specific interests, companies can tap into markets that were previously considered too small or specialized to be profitable (Brynjolfsson et al., 2006).

The essence of the long tail lies in its focus on selling a large number of unique items, each in relatively small quantities. This approach contrasts sharply with the conventional model that prioritizes high volumes of a limited number of hit products. The digital economy, marked by reduced storage and distribution costs and the global reach of e-commerce platforms, has made it economically viable and profitable to cater to these niche markets (Brynjolfsson et al., 2010). Consequently, this has led to an increase in consumer choice, offering a diverse range of products that cater to specific and varied consumer tastes and preferences.

#### The Amazon Example

Amazon embodies the long tail strategy. Unlike traditional retail stores constrained by physical shelf space, Amazon’s online platform offers an extensive range of products, including numerous niche items. This vast product selection caters to a wide spectrum of consumer preferences, enabling Amazon to tap into various market segments. By harnessing the power of digital technology, Amazon successfully addresses the demand for less popular, niche products, creating a business model that thrives on the diversity of its product offerings (Brynjolfsson et al. 2010).

#### The Netflix Example

Netflix’s adoption of the Long Tail concept exemplifies a strategic approach in the digital content industry, showcasing how diverse and extensive content offerings can cater to a wide spectrum of viewer preferences (Anderson, 2007). This strategy is a cornerstone of Netflix’s business model, allowing it to tap into both popular and niche markets within the entertainment sector.

At the heart of Netflix’s long tail approach is its vast content library, which includes a rich array of movies, TV shows, documentaries, and more. This selection goes beyond mainstream titles to encompass niche genres, indie films, foreign language productions, and original content. Such a broad catalog ensures that Netflix caters not only to general tastes but also to specific, often underserved, viewer interests (Anderson, 2007).

Personalization plays a crucial role in this model. Netflix employs sophisticated algorithms to offer tailored recommendations to its users, analyzing viewing habits to suggest titles that align with individual preferences. This system ensures that even less popular or niche content in their expansive library reaches its audience, maximizing the potential of the long tail (Anderson, 2007).

Original content production further strengthens this approach. Netflix’s investment in original shows and movies includes productions that appeal to a wide audience as well as those targeting specific niches or demographic groups. This diversification not only enhances the platform’s appeal but also serves a broader range of viewer interests, tapping into varied segments of the market.

According to Anderson (2007), Netflix’s global reach amplifies the effectiveness of the Long Tail strategy. By operating internationally, the platform caters to diverse cultural tastes and preferences, offering region-specific content that often represents niche interests in a global context. This international presence allows Netflix to aggregate a vast viewership, even from content that might have a smaller audience base in a single region.

Contrasting with the traditional reliance on blockbusters in the entertainment industry, Netflix’s model thrives on the cumulative viewership across its wide range of content (Anderson, 2007). This approach reduces the dependency on singular hits, leveraging the aggregate demand for a varied content portfolio that includes both popular and long-tail titles.

### Value Proposition

The value proposition is what draws customers to choose one company over another. It addresses a customer’s specific problem or fulfills a need (Osterwalder & Pigneur, 2005. It comprises a tailored combination of products and/or services designed to meet the needs of a particular customer segment. Essentially, the Value Proposition is a collection of advantages that a company presents to its customers. Some of these propositions are innovative, offering new or disruptive solutions, while others might resemble existing offers in the market but come with additional features and enhancements (Osterwalder & Pigneur, 2010.

The value proposition for the customer can cover different aspects, for example the products or services’ newness (i.e., an incremental or radical innovation). Customized products can offer additional value as does an improved performance or a special design (Osterwalder & Pigneur, 2005) and will be described in more detail in the next section.

### Channels

The channels in a business model outline the methods a company employs to communicate with and reach its customer segments, with the aim of delivering its value proposition. These channels, encompassing communication, distribution, and sales, form the critical interface between a company and its customers (Osterwalder & Pigneur, 2010). They function as vital touchpoints that significantly contribute to the overall customer experience. These channels play multiple roles, which include raising customer awareness about the company’s products and services, assisting customers in assessing the company’s value proposition, enabling the purchase of specific products and services, delivering the value proposition to the customers, and providing support after the purchase (Osterwalder & Pigneur, 2010).

### Customer Relationships

**Upselling**

Upselling is a sales technique where a seller encourages the customer to purchase more expensive items, upgrades, or other add-ons in an attempt to make a more profitable sale.

Following Osterwalder and Pigneur (2010), the customer relationship component of a business model is essential in defining the nature of interactions a company establishes with its various customer segments. It’s crucial for a company to specify the kind of relationship it aims to foster with each segment, which can vary from personal to automated interactions. The motivation behind these customer relationships typically includes customer acquisition, retention, and boosting sales through **upselling**.

Customer relationships in a company’s business model can be categorized into several types, often coexisting within the same customer segment. These include personal assistance, where individual support is provided; dedicated personal assistance, offering specialized, ongoing support; self-service, enabling customers to help themselves; automated services, where customer interactions are handled by automated systems; communities, fostering peer-to-peer support and interaction; and co-creation, involving customers in the creation of value (Osterwalder & Pigneur, 2010)

### Revenue Streams

Revenue streams in a business model are essential as they define the income a company generates from each of its customer segments (Osterwalder & Pigneur, 2010). To establish effective revenue streams, a company needs to understand what each customer segment values and is willing to pay for. By accurately identifying this, a company can develop one or more revenue streams from each segment. These streams can vary in their pricing mechanisms, which include for example fixed list prices, auctioning, or market-dependent, or volume-dependent prices (Osterwalder & Pigneur, 2010).

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#### Excursus Pricing Strategies

Price discrimination is understood as a strategy whereby a fundamentally identical product is sold to different customers at different prices in the most profitable way possible (Skiera & Spann, (1998). The goal is to optimize price setting according to the respective, user-specific reservation prices to skim off consumer surplus (Gehrek et al. 2002). The following explanations are based on the classification by Pigou (1962), which distinguishes between first, second, and third degree price discrimination. Skiera & Spann (1998) makes a different division by classifying price discrimination through self-selection or by the provider.

In first-degree price discrimination, the attempt is made to calculate for each consumer exactly the price that corresponds to their willingness to pay. Individual price negotiations or auctions come close to this goal.

In second-degree price discrimination, a provider offers differentiated services at different prices, so that customers themselves segment into different groups. Customers with higher willingness to pay buy at higher prices than those with lower. Forms of second-degree price discrimination include performance and quantity differentiation as well as price bundling.

In third-degree price discrimination, the consumer cannot choose for themselves, but the provider divides their consumers into different groups and sets a different price for each group (Pigou, 1950; Diller, 2008). This way, he can separate based on personal, spatial, or temporal criteria.

Through first-degree price discrimination, also known as perfect price discrimination or individual-based pricing (Skiera & Spann, 2002), the provider prices the product individually for each consumer according to their personal willingness to pay. Thus, the provider charges exactly what the customer is willing to pay. However, this form of price discrimination is considered the ideal form, as consumer surplus, which is the difference between willingness to pay and the price, is completely skimmed off.

If the provider is unable to determine the willingness to pay individually for each consumer, they can use second-degree price discrimination, referred to as versioning by Shapiro and Varian (1999) and Spann and Skiera (2002). Unlike first-degree price discrimination, the consumer chooses their product from a range of product variations and quantities themselves (Skiera & Spann, 2002). Second-degree price discrimination cannot be completely separated from product differentiation, as consumers would hardly be willing to pay a higher price for exactly the same product when choosing themselves compared to another. Essentially, all variants concern the same product, but consumers can choose from an offering of different services. For example, there might be the possibility to use a product only at a specific time or in a limited scope, such as only accessing the news in a newspaper app, but not the background texts and analyses.

In third-degree price differentiation, the provider segments consumers into groups based on segmentation criteria and sets a price for each segment. It is prerequisite that the provider knows the demand function of each segment. Unlike first and second-degree price differentiation, the price is not set individually but is aggregated for the respective segment (Peters, 2010). In the optimal scenario, the company achieves the maximum profit with every customer group.

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### Key Resources

The key resources component in a business model identifies the essential assets necessary for the effective functioning of a business (Osterwalder & Pigneur, 2010). These resources are fundamental for a company to develop and deliver its value proposition, access marketplaces, sustain relationships with its customer segments, and ultimately, generate revenue. The type of key resources required can vary significantly depending on the nature of the business model.

Key resources come in various forms: they can be physical (like buildings and machinery), intellectual (such as patents, copyrights, and proprietary knowledge), human (the skills, knowledge, and expertise of employees), or financial (cash reserves or lines of credit). These resources can be owned directly by the company, leased, or acquired through partnerships with other entities. Recognizing and managing these key resources is critical, as they provide the foundational support for all business activities and strategies (Osterwalder & Pigneur, 2010).

### Key Activities

Key activities are all about identifying the crucial actions that a company must undertake to ensure its business model is effective (Osterwalder & Pigneur, 20109. These activities are the essential tasks and operations that are necessary for a company to achieve success. Just as with Key Resources, these activities are integral to the creation and delivery of a value proposition, penetration of markets, fostering of customer relationships, and the generation of revenue. The nature of these key activities varies with the type of business model (Osterwalder & Pigneur, 2010).

According to Osterwalder & Pigneur (2010) these key activities generally fall into several broad categories, including production (the creation of goods or services), problem-solving (addressing specific challenges or needs of clients), and platform/network (developing and managing networks or platforms that facilitate various interactions or transactions). Understanding and effectively managing these key activities is essential for any business, as they directly impact the company’s ability to deliver value to its customers and maintain competitive advantage (Osterwalder & Pigneur, 2010).

### Key Partnerships

Following Osterwalder & Pigneur (2010), the key partnerships in a business model refer to the essential network of suppliers and partners crucial for the functioning and success of a business. In the modern business landscape, partnerships have become increasingly important, serving various strategic purposes. These partnerships are often formed to optimize operations, reduce risks, or gain access to essential resources (Osterwalder & Pigneur, 2010).

There are four primary types of partnerships that companies typically engage in. First, strategic alliances between non-competitors, which allow companies to collaborate on shared goals without direct competition(Osterwalder & Pigneur, 2010) . Second, there is ‘coopetition,’ a strategic partnership between competitors. This form of cooperation can be beneficial in scenarios where competing entities find common ground for mutual advantage. Third, joint ventures are formed to develop new businesses. These are often strategic collaborations that combine the strengths and resources of two or more companies to explore new market opportunities. Lastly, buyer-supplier relationships are established to ensure reliable supplies, crucial for maintaining the consistency and quality of a company’s offerings (Osterwalder & Pigneur, 2010).

### Cost Structure

The cost structure in a business model encapsulates all the expenses associated with operating that business model (Osterwalder & Pigneur, 2010). This component is crucial as it outlines the primary costs involved in creating and delivering value, maintaining customer relationships, and generating revenue. Once a business has identified its key resources, activities, and partnerships, it becomes relatively straightforward to determine these costs.

Business models can be broadly classified into two categories based on their approach to costs: cost-driven and value-driven (Osterwalder & Pigneur, 2010). Cost-driven models focus intensely on minimizing costs wherever possible, often to offer competitive pricing. On the other hand, value-driven models prioritize creating and delivering additional value to the customer, which might entail higher costs.

### Self-Check-Questions

1. Name three components of business models according to Osterwalder & Pigneur (2005)

*For example: Value Proposition, Key Partnerships, Cost Structure*

## 2.3 Value Architecture and Value Mechanics

Having explored the core elements of digital business models, our focus shifts towards the architecture of value creation and the mechanisms that drive it. A business model, as Teece (2010) outlines, acts as a blueprint for how a company creates value for its customers, detailing the processes, customer relationships, distribution channels, and resources involved. It answers the critical question: How is a product or service developed and delivered uniquely?

Beyond detailing what is offered and how it is delivered, a business model also describes how the company’s revenue structure is constructed. Future income streams are crucial in determining the value of the business model and, consequently, its sustainability. This aspect addresses the question: How is money made? This element is the foundation of the business model and underpins all marketing efforts.

Therefore, in this chapter, we will have a look at the value proposition for customer and then focus on the value mechanics, i.e., the way, a company earns money.

We classify the different value propositions according to Wirtz (2019) into content, commerce, context and connection.

Figure 6: Different value propositions for consumers

Ein Bild, das Text, Screenshot, Schrift, Visitenkarte enthält.

Automatisch generierte Beschreibung

Source: Created on behalf of IU (2024), based on Wirtz, 2019.

The content business model describes the production or selection and distribution different types of content on a platform (Wirtz, 2019). The content can either be informational (e.g., news websites or Apps), entertaining (e.g., music on Spotify, films or series on Netflix) or a mixture of information and entertainment (infotainment).

Companies offering digital content often act in two or multi-sided market, i.e., they serve two or more customer groups. Companies generate value, using network effects allowing a large number of interactions between the users. Revenue is generated by pricing one or more sides a fixed or variable price. Companies can choose between different revenue models which we will now focus on.

### The free/advertising based model

Using the free/advertising-based model a company acting in multi-sided markets offers content for one group of customers for free while charging the other group of customers (Halbheer et al., 2014). Consumers receive free access to songs on Spotify, for example, while Spotify charges the advertising side for offering ads to listeners (i.e., selling the listener’s attention). Social media platforms such as Facebook and YouTube (in its basic version) also offer a similar advertising-based revenue model.

### The subscription model

The subscription model (media companies often refer to that model as hard paywall) is another popular revenue model in which companies sell subscriptions for an unlimited access to content. For example, a newspaper offers unlimited access to its articles on its website or app or a streaming company such as Netflix offers unlimited streaming access. Companies can also decide to combine the free and subscription offer.

The average costs for a consumed unit decrease with increasing usage (Skiera & Spann, 1998). From microeconomics, it is assumed that consumers maximize their consumer surplus, that is, the difference between their willingness to pay and the amount billed, when choosing a tariff. However, studies show (e.g., Lambrecht & Skiera, 2006) that consumers often choose a flat-rate tariff even though they would pay less with a usage-based tariff. This phenomenon is known as the flat-rate bias. Conversely, consumers choose a pay-per-use tariff even though they would save more with a flat rate. This is referred to as a pay-per-use bias (Kridel et al., 1993; Miravete, 2002).

### The metered model

The metered model describes an approach where companies offer a certain amount of content for free (“samples”) and charge for content afterwards.

When the limit set by the publisher is reached, the prompt to subscribe or purchase a day pass is issued. The idea behind this is that the free articles allow interested readers to form an opinion about the quality of the content (Pasquay, 2010). However, companies face the challenge of balancing the number of free articles in such a way that, on the one hand, they do not lose existing subscribers (cannibalization), while at the same time generating advertising revenue from readers without a willingness to pay. Existing subscribers to the print edition, for example, might not renew their subscription if they find that they can read a sufficient number of articles online for free. On the other hand, a sufficient number of free articles should be provided to readers with low willingness to pay so that advertising revenue can be captured from them. The optimal ratio needs to be determined here (Zeisberg & Hansen, 2023)

#### The New York Times Example

The most famous example of a metered model is the New York Times. In 2011, it introduced this model for the first time, allowing initially 20 articles per month to be read for free (Pattabhiramaiah et al., 2018). This relatively high threshold for the paywall was intended to generate additional advertising revenue. About a year later, in April 2012, the NYT reduced the number of free articles to 10 to motivate more people to subscribe.

### The freemium model

The basic product is offered for free while the full version and additional features need to be paid for. The neologism “Freemium,” a combination of “Free” and “Premium,” describes the approach of making a portion of the content available to the entire readership for free (“free”), while other, exclusive (“premium”) content is reserved for paying customers (e.g., Zeisberg & Hansen, 2023). This approach, sometimes also referred to as a “Soft Paywall,” typically focuses on paid offerings such as data journalism, features, background reports, or leading articles (Feil, 2019), or more generally, on content that is considered by the newspaper to be of very high quality or exclusive (Pasquay, 2010). The decision on which articles are for pay often is made by the editorial team, for example, at the newspaper FAZ in Germany (Ollrog & Neumann, 2020). LinkedIn and Spotify, for example, also use the freemium model.

The commerce model

The commerce business model allows companies and consumers to start, negotiate and carry out transactions via the internet. These can imply for example auctions (e.g., on ebay) or the use of e-commerce-platforms such as Amazon.

### The revenue/pricing model

As in most cases companies such as ebay or Amazon act in two-sided markets.

Both companies offer several niche products to its consumers. According to the Niche theory, selling a lot of niche products leads to higher sales than few bestsellers (Brynjolffson et al., 2006).

The two companies use different pricing structures for its respective customer bases.

### Context-Model

The context business model describes a model that provides and structures focuses on information available on the Internet. These can be for example search engines such as Google.

### Revenue model

Usually, the context-model is free for the user side and companies charge the advertising side according to an auction scheme (Spann et al., 2012).

Google’s advertising system, for example, operates on an auction mechanism, central to the functionality of Google Ads. This system is designed to decide not only which ads appear in response to a specific user search query but also their order of appearance (Spann et al., 2012)

Advertisers start by selecting keywords relevant to their business and place bids on these keywords. The bid represents the amount they are willing to pay each time a user clicks on their ad for that particular keyword. This process is the foundation of Google’s auction-based advertising (Spann et al., 2012).

When a user enters a search query that matches these keywords, it triggers Google’s auction. This auction is a dynamic and complex process that goes beyond just the highest bidder. Google employs a specific formula to determine the placement of ads, which considers several factors: the bid amount, the ad’s Quality Score, and the anticipated impact of any ad extensions and formats. The Quality Score is a crucial component, as it assesses the relevance and quality of both the ad and its landing page, ensuring that users are presented with ads that are not only pertinent but also of high quality (Spann et al, 2021)

Another aspect of Google’s auction mechanism is the actual cost-per-click (CPC). The CPC is not necessarily the maximum bid amount. Instead, an advertiser typically pays just enough to surpass the bid of the next lower competitor. This system often results in advertisers paying less than their maximum bid, adding a layer of cost-effectiveness to the process (Spann et al., 2012).

Moreover, the auction is conducted in real-time, aligning with the immediacy of online searches. This means that from the moment a search query is made to when the ads are displayed, the auction process is completed almost instantaneously. This rapid response ensures that the ads users see are relevant to their search queries.

### Connection business model

The connection business comprises services of connection, for example model’s of the so-called sharing economy (Osterwalder & Pigneur, 2010) with platforms such as Airbnb but also social networks such as Facebook or Instagram.

### Self-Check-Questions

1. Name two possible revenue models

*Metered Model, freemium model, advertising-based model*

Summary

Recent technological advancements have significantly influenced the development of innovative business models across various industries. The proliferation of broadband internet, smartphones, and Web 3.0 technologies has catalyzed the growth of e-commerce by enhancing its accessibility and efficiency. Similarly, the emergence of big data, artificial intelligence (AI), blockchain, the Internet of Things (IoT), and robotics are reshaping business operations by automating services, optimizing logistics, and intensifying global competition, particularly in the retail sector. This technological evolution has shifted market dynamics, benefiting new digital entrants and intensifying competition, especially with the rise of major tech companies from the United States and China.

Digital business models now focus on customer centricity, leveraging multi-sided platforms, and exploiting network effects to create value. Consumer behavior has evolved due to digital advancements, leading to increased online shopping and the significance of digital touchpoints throughout the customer journey. Mobile devices and AI technologies have become integral to consumer lifestyles, facilitating new forms of engagement such as showrooming and personalized service delivery.

Multi-sided platforms, a concept detailed by economists Jean-Charles Rochet and Jean Tirole, facilitate interactions among distinct user groups, leveraging network effects to enhance value. These platforms adopt complex pricing strategies to attract and retain users, often subsidizing one user group to charge another, as seen in examples like Spotify’s free service funded by advertising.

Network effects, as explained by Shapiro and Varian, increase a product or service’s value as more users join. This phenomenon can lead to market dominance by a few firms, underscoring the importance of early growth and strategic management to harness these effects. Direct network effects enhance value with each additional user, while indirect effects arise from the availability of complementary goods or services, contributing to the ecosystem’s overall value.

Digital business models are underpinned by core elements such as customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. These components collectively define how businesses create, deliver, and capture value, emphasizing customer satisfaction, efficient revenue generation, and strategic partnerships.

### LMS

Q1: What are possible revenue models?

a) Freemium, metered, advertising based (Right)

b) Freemium, counted, advertising based (Wrong)

c) Premium, metered, advertising based (Wrong)

d)Freemium, metered, closed (Wrong)

Q2: What are possible key partnerships in a business model?

a)Strategic alliances, Coopetition, joint ventures (Right)

b) Strategic alliances, Competition, joint ventures (Wrong)

c) Partner alliances, Coopetition, joint ventures (Wrong)

d) Strategic alliances, Coopetition, joint families (Wrong)

Q3) What are possible key resources in a business model?

1. Physical, intellectual, human, financial
2. Psychical, intellectual, human, financial
3. Physical, clever, human, financial
4. Physical, intellectual, artificail, financial

Q4) What are new elements of digital business models?

a) Consumer centricity, Network effects, acting in multi-sided platforms

b) Company centricity, Network effects, acting in multi-sided platforms

c) Company centricity, Network effects, acting in two-sided platforms

1. Consumer centricity, Network effects, acting in one-sided markets

Q5) What kind of pricing strategies are auctions?

1. First-degree price discrimination (Right)
2. Second-degree price discrimination (Wrong)
3. Third-degree price discrimination (Wrong)
4. Versioning (Wrong)

# 3. Success Factors and Strategy

Study Goals

On completion of this unit, you will be able to

* Name success factors of successful business models
* Explain the differences between business model and digital strategy
* Explain the main steps of digital transformation and its relevance for the development of successful business models

### Introduction

In an era where digital technologies are reshaping industries, understanding the success factors and strategic approaches to digital business has become vital. The next chapters focus on the core elements that are essential for the effectiveness and transformative potential of digital businesses. We examine key drivers such as digital innovativeness, strategic flexibility, networking proficiency, and user-centric design. Additionally, we analyze digital strategies, highlighting the critical role of digital resources, agility, networking capabilities, and big data analytics in fostering competitive advantage and facilitating business model innovation. The discourse extends to a detailed examination of digital transformation phases—digitization, digitalization, and digital transformation—underscoring the strategic imperatives for firms at each stage.

## 3.1 Success Factors

The effectiveness of digital businesses is affected by essential prerequisites and accelerators that facilitate fast growth, as noted by scholars like Wirtz et al. (2019) and Laudon and Traver (2017). The rapidly evolving digital landscape, driven by continuous technological advancements, demands that companies develop dynamic capabilities and resources to succeed (Zhu et al. 2006). A strategic approach to digital business, as emphasized by Beheshti and Salehi-Sangari (2007), is crucial for sustained success. Wirtz (2019, p.71) identifies four essential dynamic abilities central to an effective digital strategy: digital innovativeness, strategic and organizational flexibility, networking and integration proficiency, and user-centric design.

Dynamic capabilities

Dynamic capabilities refer to a firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments, thereby achieving and sustaining competitive advantage.

### Digital Innovativeness

In the realm of information and communication technology, the continuous emergence of innovations necessitates continuous market monitoring by companies. It is critical to assess the opportunities and challenges these innovations present. However, innovation alone does not ensure success; thoughtful product and service design, including pricing strategies and customer benefits, is essential for both tangible and digital goods. The strategic significance of IT in fostering organizational agility is highlighted by Lee et al. (2015), illustrating how agility enables firms like Spotify fast adapt to market shifts and technological progress. Furthermore, a data-driven approach to decision-making, as showcased by Netflix’s content strategy, underscores the importance of analytics in enhancing operational efficiency and decision-making processes.

### Strategic and Organizational Flexibility

The digital economy’s inherent volatility requires companies to adopt agile processes and structures to address changing market demands effectively (Wirtz, 2019). This flexibility is vital for adapting strategies and organizational designs promptly. Amazon’s dedication to customer-centricity, focusing on delivering exceptional customer experiences, serves as a model for integrating customer focus into business strategies and innovations.

### Networking and Integration Proficiency

Digital business transcends traditional distribution channels, offering opportunities for novel products and services while adding value to physical offerings through digital enhancements. The adaptability to trends, coupled with the integration of information, services, products, and processes, is crucial (Wirtz, 2019). Effective networking and integration facilitate seamless interactions, eliminating barriers and fostering a competitive advantage through interconnectedness and the exploitation of network effects, as observed with platforms like WhatsApp and Apple’s AppStore. These platforms demonstrate the power of user networks and the potential for customer lock-in due to the high switching costs associated with platform ecosystems (Wirtz, 2019).

### User-Centric Design

The success of digital applications also hinges on their ease of use (Wirtz, 2019). Designing efficient, accessible business processes and interfaces, while ensuring a degree of familiarity with traditional business practices, is essential for meeting user expectations. Prioritizing user needs to enhance usability is a critical component of a digital strategy, contributing significantly to a platform’s appeal and user satisfaction (Wirtz, 2019).

Figure 7: Success Factors of Digital Business

Ein Bild, das Text, Screenshot, Schrift, Electric Blue (Farbe) enthält.

Automatisch generierte Beschreibung

Source: Created on behalf of IU (2024), based on Wirtz, 2019.

### Self-Check-Questions

1. What are the most important success factors for digital business models according to Wirth (2019)

*digital innovativeness, strategic and organizational flexibility, networking and integration proficiency, and user-centric design*

## Digital Strategy

Digital transformation and the innovation of business models have significantly shifted consumer expectations and behaviors, challenged traditional businesses and disrupted markets across sectors. As Verhoef et al. (2021) articulate, consumers today navigate through a multitude of media channels, communicate seamlessly with firms and other consumers, and encounter an ever-increasing array of digital touchpoints along their customer journey. This evolution necessitates a profound reevaluation of strategic imperatives by firms to stay competitive and relevant.

### Embracing Digital Resources for Transformation

Key to navigating digital transformation is the strategic utilization of digital resources. These encompass a firm’s physical and intellectual assets and capabilities, which include human, informational, and organizational capital. To redefine how value is created and delivered, firms must access, acquire, or develop new digital assets and capabilities—ranging from data storage and communication infrastructure to technologies enabling artificial intelligence (AI), machine learning, the Internet of Things (IoT), and robotics (Verhoef et al., 2016). The investment in and leverage of these digital assets allow firms to enhance their offerings and personalize services, thereby creating more value for customers.

### Cultivating Digital Agility

Digital agility is vital for firms aiming to thrive in the dynamic digital marketplace. This agility enables the sensing of market opportunities and the rapid reconfiguration of digital assets to seize these opportunities (Karimi & Walter, 2015; Sambamurthy et al., 2003; Teece, 2010). Firms with digital agility can adapt organizational roles, respond to changing customer needs, and navigate intensified competition. The concept of digital agility underscores the importance of flexibility and the ability to innovate continually, ensuring firms remain competitive and responsive to market dynamics and technological advances.

### Leveraging Digital Networking Capability

The ability to digitally connect diverse users to meet mutual needs is another critical success factor (Koch & Windsperger 2017; Libert et al., 2016). In the current technology-driven landscape, adopting a network-centric approach is vital for co-creating value. Firms that engage customers, suppliers, and third parties on their digital platforms to co-create content and customize offerings gain a competitive edge. The strength of external partnerships and ecosystems often determines a firm’s competitive advantage, highlighting the significance of digital networking capability in today’s interconnected business environment.

### EmployingBig Data Analytics

The capacity to acquire and analyze big data is crucial for informed decision-making and strategic planning in the digital age (Dremel et al., 2017; Loebbecke & Picot, 2015). Despite the abundance of data, many firms struggle to analyze it effectively. Developing a big data analytics capability is essential, requiring skills in analytics, data management, and visualization. Firms that excel in utilizing analytics for customization and optimization, such as Amazon and Booking.com, demonstrate the transformative power of effectively leveraging big data.

### Adapting Organizational Structure for Digital Change

Digital transformation not only requires the adoption of new technologies and capabilities but also necessitates significant organizational changes (Eggers & Park, 2018). Flexible organizational structures, capable of adapting to digital changes, are increasingly favored. This includes the formation of autonomous business units for innovation, agile organizational forms for rapid response, and the integration of digital functional areas to support digital value creation. Firms must also focus on attracting and retaining employees with the necessary digital and analytical skills to drive transformation.

### Digital Growth Strategies

According to Verhoef et al. (2021) digital growth strategies are essential for firms during different phases of digital transformation. Various strategies exist to foster digital growth within firms, with the predominant approach revolving around the utilization of digital platforms (e.g., Broekhuizen et al., 2021).

Specific to digital firms, especially digital platforms, is their remarkable growth (Verhoef et al. 2021). Essential for such growth figures are business models of high scalability and the use of network effects (Verhoef et al. 2021). The platforms generate a large user base. Furthermore, the platform model suggests (as previously explained) that an increase in users on one side (e.g., customers or suppliers) attracts users from the other side allowing a growth in utility (Eisenmann et al. 2006)

To gain a deeper understanding of how digital firms can use a platform business model for growth, we follow Verhoef et al (2021) and employ the Ansoff matrix (Ansoff, 1957), which identifies four growth strategies: market penetration, product development, market development, and diversification (Ansoff, 1957).

Figure 8: Ansoff’s growth matrix

Ein Bild, das Text, Screenshot, Schrift, Zahl enthält.

Automatisch generierte Beschreibung

Source: Created on behalf of IU, based on Ansoff (1957).

Horizontally, the strategies market penetration and market development—represent two traditional dimensions of Ansoff’s original framework (Ansoff, 1957).

First, platforms can use their digital, and often disruptive, technologies to achieve substantial growth by attracting non-users, who have not engaged with the product or its traditional substitutes before and convert them into customer (Verhoef et al., 2021).

Traditional retailers, for example, can establish an online presence to draw customers away from other retail outlets, thereby increasing their market share. Moreover, digital companies can also implement platform-based market penetration, introducing a platform with existing products for new customers. Apple, for example has developed a global ecosystem for its smartphones, computers, tablets, and watches (Verhoef et al., 2021).

Concerning the vertical dimension, according to Ansoff (1957)two strategies can be distinguished. Regarding the product development, digital firms can often accelerate the development and launch of new products within a platform environment, since platforms allow the use of synergies (Verhoef et al. 2021).

The second strategy entails the development of a co-creation platform, enabling external users to actively contribute (Cui & Wu, 2016; Grönroos & Voima, 2013). Co-creation can range for example from customers engaging in word-of-mouth promotion or writing product reviews (e.g., TripAdvisor, Booking) to sharing innovative ideas on crowdsourcing platforms. Platforms can also empower customers to undertake more substantial roles, transitioning from consumers to suppliers on online marketplaces (e.g., Airbnb, eBay) or functioning as co-producers by participating in product design, modification, or assembly (Verhoef et al., 2021).

### Self-Check-Questions

Q: Name three aspects of digital strategy.

A: Embrace digital resources, leverage digital networking capabilities, employ big data analytics.

## 3.3 Digital Transformation

Digital transformation, driven by rapid advancements in digital technologies, has significantly reshaped consumer expectations and behaviors, presenting both challenges and opportunities for traditional and emerging businesses alike. Verhoef et al. (2021) highlight how this shift has led to the emergence of multiple digital touchpoints, allowing consumers to interact with firms and each other more dynamically than ever before. This evolution has placed immense pressure on traditional firms, evidenced by the rise of digital entrants like Alibaba and Amazon, which have disrupted established market norms and extended their influence beyond traditional retail into sectors such as banking and shipping (Verhoef et al., 2021).

As the digital landscape evolves, traditional businesses have found themselves left behind by these agile, digital companies. The rapid growth of online retailers and the transformative impact of platforms such as Spotify, Netflix, and Airbnb across various industries underscore the profound effect of digital business models on the traditional business landscape.

### Understanding the Phases of Digital Transformation

According to Verhoef et al. (2021) digital transformation unfolds in three distinct phases—digitization, digitalization, and digital transformation—each carrying strategic imperatives for firms navigating this new era.

**Digitization** refers to the conversion of analog information into digital formats, enabling the storage, processing, and transmission of data by computers. This phase primarily involves the digitalization of documentation processes without altering the core value creation activities of a firm. Examples include the adoption of digital forms in ordering processes and the use of digital tools for internal financial declarations (Verhoef et al., 2021).

**Digitalization** represents a deeper integration of digital technologies, affecting existing business processes and enabling new forms of interaction. It involves the reorganization of socio-technical structures through digital means, leading to optimized business processes and enhanced customer experiences. Digitalization leverages IT to transform business processes, such as communication, distribution, and relationship management, aiming not just for cost savings but also for improving customer experiences through enhanced efficiencies and services (Verhoef et al., 2021).

**Digital Transformation** is the most comprehensive phase, encompassing a firm-wide change that introduces new business models or significantly alters existing ones. It redefines how a firm creates and captures value, potentially offering a competitive edge. This transformation affects the entirety of a company’s operations and may necessitate a reevaluation of its business logic or value creation processes (Verhoef et al., 2021)

Digital technologies have the potential to confer a competitive advantage by reconfiguring the organization to capitalize on existing core competencies or develop new ones. Consequently, digital transformation is inherently tied to strategic shifts in the business model resulting from the integration of digital technologies. In pursuit of digital transformation, firms actively seek and implement innovations in their business models (Verhoef et al., 2021).

Figure 9: Flow model of digital transformation

Ein Bild, das Text, Screenshot, Schrift, Design enthält.

Automatisch generierte Beschreibung

Source: Created on behalf of IU, based on Verhoef et al. 2021.

### Self-Check-Questions

1. Name three stages of digital transformation

*Digitization, Digitalization, Digital Transformation*

Summary

The journey through the critical success factors, digital strategy, and the phases of digital transformation reveals a multifaceted landscape where innovation, agility, and strategic foresight are central. Key takeaways include the importance of fostering digital innovativeness to remain at the forefront of technological advancements, the necessity for strategic and organizational flexibility to adapt to the digital economy’s volatility, and the value of networking and integration proficiency in capitalizing on digital ecosystems. User-centric design emerges as a fundamental pillar, ensuring digital solutions meet evolving consumer expectations.

In strategizing for digital transformation, firms must harness digital resources, cultivate agility to respond to market shifts, leverage networking capabilities for co-creation, and utilize big data analytics for informed decision-making. Organizational structures must evolve to support digital change, emphasizing the need for digital skills and a culture conducive to innovation. The growth strategies identified, grounded in the Ansoff matrix, underscore the potential of digital platforms to drive expansion through market penetration, product development, and diversification, highlighting the dynamic nature of digital growth.

Digital transformation, characterized by the transition from digitization to digitalization, and ultimately to a comprehensive digital transformation, requires firms to rethink their business models and value creation processes. This transformation is not merely about adopting new technologies but about a fundamental shift in how businesses operate, deliver value, and engage with stakeholders. For traditional businesses and digital entrants alike, the path to digital transformation is complex yet essential for achieving long-term competitiveness and success in the digital age. Through strategic implementation of these elements, businesses can navigate the challenges and opportunities presented by digital transformation, positioning themselves for sustained growth and market leadership.

### LMS Questions

Q1: What are success factors for digital business models according to Wirtz (2019)

a) Digital strategy, digital innovativeness, strategic and organizational flexibility, networking and integration proficiency, and user-centric design (Right)

b) Digital strategy, analog innovativeness, strategic and organizational flexibility, networking and integration proficiency, and user-centric design (Wrong)

c) Digital strategy, digital innovativeness, strategic and organizational standards, networking and integration proficiency, and user-centric design (Wrong)

d) Digital strategy, digital innovativeness, strategic and organizational flexibility, networking and integration proficiency, and company-centric design (Wrong)

Q2: Why is digital agility important?

a) Digital agility enables the sensing of market opportunities and the rapid reconfiguration of digital assets to seize these opportunities (Right)

b) Digital agility enables the sending of market opportunities and the slow reconfiguration of digital assets to seize these opportunities (Wrong)

c) Digital agility enables the loss of market opportunities and the rapid reconfiguration of digital assets to seize these opportunities (Wrong)

d) Digital agility enables the sensing of market opportunities and the rapid decrease of digital assets to seize these opportunities (Wrong)

Q3) Why are Big Data Analytics important for successful business models?

a)The capacity to acquire and analyze bit data is crucial for informed decision-making and strategic planning in the digital age (Right)

b) The capacity to acquire and analyze bit data is crucial for informed decision-making and unstrategic planning in the digital age (Wrong)

c) The capacity to acquire and analyze bit data is crucial for non-informed decision-making and strategic planning in the digital age (Wrong)

d) The capacity to acquire and analyze bit data is crucial for standard decision-making and strategic planning in the digital age (Wrong)

Q4) Which strategies belong to the Ansoff-Matrix?

a)Market Penetration, Market Development, Product Development, Diversification (Right)

b) Market Penetration, Market Development, Product Closure, Diversification (Wrong)

c) Market Penetration, Market Development, Product Closure, Specification (Wrong)

d) Market Extension, Market Development, Product Closure, Specification (Wrong)

Q5) What are the steps incluced in digtal transformation

a) Digitization, Digitalization, Digital transformation (Right)

b) Digitization, Analogisation, Digital transformation (Wrong)

c) Digitization, Digitalization, Digital Implementation (Wrong)

d) Digitization, Digitalization, Digital information (Wrong)

# 4. Social Media Business Models

Study Goals

On completion of this unit, you will be able to

* Explain the characteristics of Social Media Platforms
* Understand business models of social media influencers
* Describe social media business models of companies

### Introduction

The rise of social media platforms such as Facebook, Instagram or LinkedIn not only offers a possibility to spread content and reach a huge audience. Social media offer the opportunity to establish new business models and extend existing ones.

This chapter first focuses on social media platforms, explaining the characteristics and economics behind social media platforms. It then analyzes and explain business models of private persons on social media especially analyzing business models of so-called influencers.

The last part of the chapter deals with business models of companies.

## 4.1 Social Media Platforms

One of the earliest and most influential definitions of Social Media originates from Kaplan and Haenlein (2010). They define social media as “a group of Internet-based applications that build on the ideological and technological foundations of the Web 2.0, and that allow the creation and exchange of User Generated Content” (Kaplan & Haenlein, 2010, p.61)

Social media platforms are recognized as spaces where individuals can form networks and exchange information or sentiments, as Kaplan and Haenlein (2010) noted. According to Peters et al. (2013, p. 281) social media are “dynamic, interconnected, egalitarian, and interactive organisms” that have led to three significant changes in the marketplace.

Firstly, they have opened new avenues for interaction between companies and customers, facilitated by various platforms like social networking sites (e.g., Facebook), microblogging sites (e.g., X (formerly Twitter)), and content communities (e.g., YouTube). These platforms foster networks based on shared interests and values.

Secondly, the dynamics of how businesses and consumers interact and impact each other have been reshaped by social media. This interaction, as Chen et al. (2011) suggest, includes both active communications and passive observations that influence individuals’ decisions and consumption habits, a phenomenon Nair et al. (2010) refer to as the “word-of-mouth (WOM) effect.”

Thirdly, the surge in social media data availability has significantly enhanced companies’ ability to manage customer relationships and make more informed business decisions, according to Libai et al. (2010). The vast array of social media data, whether from social networks, blogs, or forums, and in different formats like text, video, or images, can now be easily gathered and utilized effectively with the help of advanced information technologies (Moe & Scheidel, 2017). Consequently, social media data has become a vital tool for customer analysis, market research, and crowdsourcing new ideas. Gnizy (2019) highlights that using social media data as a strategic resource can lead to improved marketing outcomes, showcasing its value in capturing and creating value.

### Economics of Social Media Platforms

Social media platforms like Facebook, Instagram, or TikTok are economically classified as multi-sided markets or platforms (Armstrong (2006); Evans & Schmalensee (2007); Rochet & Tirole (2003, 2006)). Essentially, they serve as intermediaries connecting different user groups. For instance, platforms like YouTube link content creators with their audience. The consumers of these platforms often ‘pay’ through their attention (by viewing ads), sharing personal data, and sometimes a monetary fee, in exchange for access to social media content. The content providers, in turn, receive space on the platform to publish their content and gain publicity.

Three key characteristics define these social media platforms as multi-sided markets.

Firstly, they cater to two or more distinct demand groups: content providers, content consumers, and advertisers. Secondly, they are influenced by indirect network effects, where the presence and number of content consumers positively impact the interest of advertisers. Lastly, they internalize significant transaction costs that would make coordination outside the platform challenging, if not impossible (Budzinski & Kuchinke (2020)).

Additionally, platforms often have inherent payment systems. For example, on YouTube, content providers may earn a share of ad revenue or content views, or through subscriptions. Social media platforms also engage with advertising companies looking to promote their products and services to consumers within these apps and pages. Advertisers typically pay a fee to the platforms for this promotional space, contributing to the platform’s revenue stream.

### Overview of the largest Social Media Platforms

With almost three billion users, Facebook is the largest social media platform, followed by Youtube with more than 2.5 billion users, WhatsApp and Instagram with two billion users worldwide.

Figure 10: Ranking of largest social media networks according to the number of users as of January 2023 (in millions)

Ein Bild, das Text, Screenshot, Zahl, Schrift enthält.

Automatisch generierte Beschreibung

Source: We Are Social; DataReportal; Meltwater (2023).

Although the development of social network platforms underlies a rapid change, we will have a look at the most important platforms as in year 2024.

### Meta and Facebook

Meta Platforms Inc. (formerly Facebook Inc.) not only owns Facebook but also, Instagram, and WhatsApp as well as Meta Quest (formerly Oculus) that develops Virtual-Reality-Headsets (Meta, 2024)

The company behind the social network, with a market value of 341 billion U.S. dollars as of January 2023, is also one of the most valuable internet companies worldwide (Harms, 2024). Initially, Zuckerberg, with co-founders Dustin Moskovitz, Chris Hughes, and Eduardo Saverin, realized the idea of a social network for communication among students at Harvard University (Harms, 2024). Today, the corporation connects billions of internet users through its acquisitions of Instagram (2012) and WhatsApp (2014). In the fiscal year 2022, the company reported revenues of nearly 117 billion U.S. dollars and a profit of around 23.2 billion U.S. dollars (Harms,2024). Facebook generates substantial revenue, primarily through targeted advertising, making it a cornerstone of Meta Platforms’ business.

### YouTube

YouTube, a subsidiary of Alphabet Inc. (the parent company of Google), stands as the premier video-sharing platform with billions of users worldwide. It earns revenue mainly through advertising, premium subscriptions, and paid content, contributing significantly to Alphabet’s overall earnings (Harms, 2024e).

### WhatsApp

Also, under the umbrella of Meta Platforms, WhatsApp is a leading messaging app with a vast global user base. While it was initially free of ads, its monetization strategies have been evolving, with potential revenue streams including business communication solutions (Whatsapp, 2024).

### Instagram

Instagram, also part of Meta Platforms, has billions of users and generates revenue through advertising. Its visually oriented platform is particularly popular among younger demographics (Seven.One Media GmbH 2023) and is a key driver of Meta’s advertising income.

After Facebook, Instagram is the world’s most successful social network in terms of page views and plays a central role in social commerce (which we will focus on later on). Instagram is a social network for sharing photos and videos and has been part of Meta since August 2012. Meta paid one billion US dollars for the acquisition (Rusli, 2012). With about two billion users, Instagram is now, along with WhatsApp, the fourth largest social network (Harms, 2024b).

### WeChat

Owned by Tencent Holdings Ltd., WeChat is a multi-purpose app dominant in China, with users in the billions. It integrates social media, messaging, e-commerce, and payment functionalities, generating diverse revenue streams.

### TikTok

Run by ByteDance Ltd., TikTok has experienced explosive growth, amassing a vast global user base. Its revenue comes primarily from in-app purchases and advertising, making it one of the fastest-growing social media platforms in terms of both users and revenue.

TikTok is a social network for sharing self-made video clips, which can be accompanied by music. As of January 2023, the global user base of TikTok - known as Douyin in China - was about one billion (Rabe, 2024). ByteDance, the company behind TikTok, was valued at 225 billion US dollars in March 2023, making it the world’s most valuable privately-held company (Rabe, 2024).

In the ranking of the largest social networks and messengers, TikTok stands in sixth place with one billion monthly active users as of January 2024 Harms, 2024 c).

### Snapchat

Snap Inc. operates Snapchat, known for its momentary content and strong appeal to younger users. With over 600 Millions of active users, it generates revenue through advertising and has been exploring augmented reality as a new avenue for growth (Snap AR, 2024)).

### X (formerly Twitter)

X, (formerly known as Twitter) with its unique focus on real-time public conversation in a micro-blogging style, has over 400 Millions of active users (Statista Research Department, 2024). The company was founded in 2006. In 2022 Tesla founder Elon Musk acquired Twitter and renamed it to “X”.

The takeover was accompanied by many scandals including lawsuits, leading to a decline in advertiser confidence and revenue and damage of reputation concerning the reliability for news distribution (for more details, see for example Conger et al., 2022).

As in 2023, Tesla CEO Elon Musk was the person with the most followers on X/Twitter, followed by former U.S. President Barack Obama, Justin Bieber, Katy Perry, and Rhianna (Statista Research Department, 2024).

The last annual report was available in 2022, because from then on, the company was not longer publicly traded. In 2021, Twitter’s revenue were reported to over five billion U.S. dollars and a net loss of 221 million U.S. dollars (Statista Research Department, 2024).

### LinkedIn and Xing

Owned by Microsoft, LinkedIn is the leading professional networking platform. It has millions of users and generates revenue through premium subscriptions, advertising, and talent solutions.

LinkedIn is a social networking platform for maintaining professional contacts. The company LinkedIn was founded in the United States in 2002 and has been a part of Microsoft since December 2016. In the fiscal year 2023, which ended on June 30, LinkedIn generated a revenue of around 15.15 billion US dollars (Harms, 2024 d).

As of October 2023, the number of registered users in the European economic area stood at 249 million. Of these, about 22 million LinkedIn members were from Germany, Austria and Switzerland. LinkedIn recorded around 269 million registered users in the Asia-Pacific region. In October 2023, the United States had the highest number of registered LinkedIn members.

From a business perspective, the platform plays a central role: as of January 2023, about two-thirds of surveyed marketing professionals used LinkedIn. In the Business-to-business sector, there is a strong trend toward increasing presence on the platform.

In Germany, LinkedIn competes with the online business network Xing which belongs to New Work SE. According to a survey, LinkedIn is slightly more popular in Germany than Xing: while 15 percent of respondents said they regularly use LinkedIn, seven percent reported regular use of Xing (Harms, 2024d). At the end of 2022, the number of XING members in Germany, Austria and Switzerland was 21.52 million. New Work SE, the company behind XING, achieved a revenue of around 313 million euros in the fiscal year 2022 (Harms, 2024d).

### Self-Check-Questions

Q: What is the second-largest Social-Media-Platform in 2023?

1. Facebook (Wrong)
2. YouTube (Right)
3. WhatsApp (Wrong)
4. Instagram (Wrong)

## 4.2 Social Media as a Private Person

The possibilities of social media allow companies and consumers alike to create and share content and reach a large audience. Individuals that reach a large audience are called social media celebrities, also known as “influencers”. According to Kolo (2022), influencers are individuals, “mostly not known from other contexts outside social media that pursue an explicit business model by producing their own transmedia content with high relevance to advertisers reaching millions of (at least so far) predominantly young users” (Kolo, 2022, p.17).

Influencers act as media entrepreneurs in two sided markets. They create content for their consumers (i.e., followers). A social media- platform connects followers and advertising companies.

There are different revenue models to generate income via social media platforms. We follow Gaenssle and Budzinski’s (2023) general overview of revenue models:

**Types of platform internal payments:**

1. Advertising revenue: Social Media platforms place ads before and after the content of social media influencers who are then paid per view or click, i.e., another user has watched the video or clicked on the ad (Gaenssle & Budzinski, 2023)
2. It is also possible to directly send money to social media influencers (i.e., tip them) (Gaenssle & Budzinski, 2023)
3. Social media influencers can implement a paywall, i.e., consumers need to pay either per view or via a flat rate. A flate rate implies that consumers pay a certain amount (usually per month) and can access unlimited content.

**Types of external payments**

1. Influencers on social media often establish their own company and create and market their own brand and products.
2. Social media influencers embed affiliate links
3. Social media influencers can include products in their content and promote them (Gaenssle & Buszinski, 2023).

Figure 11 provides an overview of the Youtuber that generate the most revenue worldwide.

Figure 11: Ranking of YouTubers with most revenue (2022, in million US$)

Ein Bild, das Text, Screenshot, Schrift, Zahl enthält.

Automatisch generierte Beschreibung

Source: Social Blade, 2024.

MrBeast, whose real name is Jimmy Donaldson, hails from Kansas, USA. In his early years, he posted ‘Let’s Play’ videos on his YouTube channel. Today, Donaldson is known for challenges where he offers participants large sums of money, sports cars, or even an island as prizes, or gives away large amounts of money to strangers (Harms, 2024e). Forbes ranked MrBeast as the highest-earning YouTuber globally in 2022, with estimated earnings of 54 million US dollars (Harms, 2024e).

Figure 12 shows the TikTok-Account with the most followers.

Figure 12: Ranking of TikTok-Account with most followers (2024, in million)

Source: Social Blade, 2024.

As of January 8, 2024, Khabane Lame had nearly 162 million followers, ranking first among the most popular TikTok accounts globally. Khabane Lame is a Senegalese-Italian TikToker, known primarily for his parodies where he imitates people who complicate simple tasks (Harms, 2024f). The second place was held by the American influencer Charli D’Amelio, with approximately 151.7 million followers on TikTok (Harms, 2024f).

### Self-Check-Questions

Q: What is a Social Media Influencer according to Kolo (2022)

A: According to Kolo (2022), influencers are individuals, “mostly not known from other contexts outside social media that pursue an explicit business model by producing their own transmedia content with high relevance to advertisers reaching millions of (at least so far) predominantly young users” (Kolo, 2022, p.17).

## 4.3 Social Media as a Company

As mentioned before, social media enables a reciprocal exchange of resources between firms and customers. Hollebeek et al. (2019) highlighted that customers offer both operant (knowledge) and operand (equipment) resources during interactions with firms. Gummesson and Mele (2010) further noted that these interactions extend beyond simple one-to-one-relationships to involve multiple actors within a network, emphasizing the importance of network interactions in integrating resources. Additionally, customer-to-customer interactions play a crucial role in fostering higher engagement levels (Fehrer et al., 2018). Therefore, the interconnectedness and interactions on social media—both between firms and customers and among customers themselves—are seen as strategic resources, that are for example important to build a social customer relationship management (CRM). This involves using information from social media interactions to identify and cultivate loyal customers (Trainor et al., 2014), illustrating the shift in social media’s role from a mere communication tool to a source of customer and market knowledge.

Customer Relationship Management (CRM) is a strategy for managing an organization’s interactions and relationships with current and potential customers, typically using data analysis and technology to improve business relationships, enhance customer service, and drive sales.

Li et al. (2021) describe four types of social media (marketing) objectives: promoting and selling, connecting and collaborating, listening and learning, and empowering and engaging, each guided by different mental models.

The direction of social media interactions includes one-way interaction (firm disseminates content), two-way interaction (reciprocal communication between firm and customers, initiated by either party), and collaborative interaction (both parties actively influence each other through frequent activities).

Customer engagement levels vary based on the strength and intensity of the firm-customer interactions, encompassing both transactional and non-transactional activities. This is seen as a continuum from minimal engagement (e.g., “liking” a page) to extensive engagement (e.g., co-creation) (Li et al. 2021)

These classification criteria lead to the identification of four distinct strategies, indicating various levels of strategic maturity: social commerce strategy, social content strategy, social monitoring strategy, and social CRM strategy that can be applied to developing social media business models and following marketing strategies (Li et al., 2021) strategy focuses on different aspects of the marketing mix, from advertising and sales in social commerce to customer management and innovation in social CRM.

### Social Commerce Business Model and Marketing Strategy

According to Li et al. (2021), the Social Commerce Strategy is defined by Yadav et al. (2013) as exchange-related activities within an individual’s social network that span the entire purchase process, from need recognition to post-purchase stages. Rydén et al. (2015) and Malthouse et al. (2013) highlight that this strategy primarily focuses on sales rather than creating engagement or conversation on social media.

It is characterized by its transactional nature, aiming at short-term, goal-oriented activities with a primary objective of selling. This approach, first considered the least mature among SMMS, utilized social media as a one-way communication tool for promotional and advertising purposes, especially targeting the millennial generation. However with increasing activity in social commerce and customers increasingly act with the company, two-way interactions become more and more important. The Social Commerce model will be analysed in more detail in the following chapter.

### Social Content Business Model and Marketing Strategy

Defined by Pulizzi and Barrett (2009), the Social Content Strategy focuses on creating and distributing valuable content across various formats to attract and retain customers. Järvinen and Taiminen (2016) and Holliman and Rowley (2014) describe content marketing as customer-centric, aiming to increase customer engagement through useful, relevant, and compelling content. This strategy encourages two-way communication, where firms actively engage with their audience to build relationships and potentially boost sales indirectly through increased engagement.

While the Social Commerce Strategy targets direct sales through transactional interactions on social media, the Social Content Strategy seeks to build customer relationships and engagement by providing valuable content (Li et al., 2021)

The Social Content Strategy aims to generate brand awareness and popularity by delivering engaging content that encourages virality, stimulates customer interactions, and fosters positive word-of-mouth (WOM). This strategy utilizes social media primarily as a tool for branding and WOM, leveraging both firm-generated and user-generated content to engage consumers. Firms encourage customer-to-customer interactions, such as comment exchanges and content sharing (Li et al, 2021)

To implement a social content strategy effectively, firms need capabilities in content design and presentation, as well as in content dissemination strategies. Understanding customer engagement motivations and the interactive characteristics of social media is crucial for creating valuable content that promotes customer interaction and content sharing (Li et al, 2021). Transforming passive observers into active participants and empowering customers to advocate for the brand are key objectives, highlighting the importance of marketing communication capabilities in content development and dissemination (Li et al, 2020).

### Social Monitoring Business Model and Marketing Strategy

The Social Monitoring Strategy is defined as a listening and response process that requires companies to become actively engaged throughout the communication process (Li et al., 2021). The strategy involves to analyze consumer articulations on social media and answer to their needs and complaints.

This strategy is characterized by two-way communication, initiated by customer comments and behaviors on social media, allowing companies to use customer behavior data to listen, learn, and react. This approach emphasizes the importance of an active firm presence in social media conversations, aiming to address customer concerns and enhance customer satisfaction through direct engagement (Li et al, 2021).

### Social CRM Business Model and Marketing Strategy

The Social CRM Strategy represents the highest degree of strategic maturity among the identified SMMSs. It is a comprehensive approach that integrates social media’s customer engagement benefits with CRM’s customer retention goals (Barger et al, 2016; Li et al, 2021). Unlike traditional CRM, which views customers as passive, Social CRM acknowledges the active role of empowered customers in creating multiple forms of value. This collaborative interaction strategy aims to engage and empower customers, fostering mutually beneficial relationships and superior performance.

Social media’s integration with CRM enables customer segmentation based on characteristics and customization of marketing offerings. Social CRM enhances customer engagement through personalized interactions, with customers contributing innovative ideas and creativity for value co-creation.

Firms must creatively merge social media data with CRM systems and link it with other data sources for enhanced customer learning and innovation. Social CRM emphasizes reciprocal information sharing, supported by the firm’s culture, resources, and cross-functional cooperation, highlighting the importance of social CRM capabilities, organizational learning, relationship management, and innovation in devising an effective social CRM strategy (Li et al, 2021).

Figure 13 shows the most popular platforms for advertising purposes.

Figure 13: Companies’ advertising activities on different social media platforms (2023)

Ein Bild, das Text, Reihe, Schrift, Zahl enthält.

Automatisch generierte Beschreibung

Source: Social Media Examiner, 2023.

### Self-Check-Questions

Q: What are the most popular platforms for advertising purposes?

A: Facebook, Instagram and LinkedIn.

Summary

Social media platforms, defined by Kaplan and Haenlein (2010), are internet-based applications that leverage Web 2.0 technologies to facilitate the creation and exchange of user-generated content. These platforms have transformed the marketplace by enabling new forms of interaction between companies and customers, reshaping business-consumer dynamics, and significantly enhancing data availability for business decision-making. Social media’s role extends from being a communication medium to a strategic resource that captures and creates value through the analysis of diverse data types.

Economically, platforms like Facebook, Instagram, TikTok, and YouTube function as multi-sided markets, connecting different user groups—content creators, consumers, and advertisers. Their economic model is predicated on indirect network effects and the transaction of attention, data, and sometimes money, in exchange for content access. This model supports a variety of revenue streams, including ad sharing, , content behind paywalls, personal branding, affiliate links, and sponsored content.

As of 2024, Meta Platforms Inc. (formerly Facebook Inc.) remains a dominant force, owning several major platforms including Facebook, Instagram, and WhatsApp. Other significant players include YouTube, part of Alphabet Inc., and TikTok by ByteDance Ltd., each with billions of global users. These platforms generate revenue through a mix of advertising, subscriptions, and in-app purchases, underlining the vast economic impact of social media.

Social media celebrities or influencers represent a unique business model within these platforms. They act as media entrepreneurs in two-sided markets, creating content for followers and engaging with advertising companies. Influencers utilize various revenue models, ranging from ad revenue sharing and direct donations to developing personal brands and engaging in sponsored content. Their significant reach and ability to influence consumer behavior underscore the commercial potential of social media.

For companies, social media facilitates a reciprocal exchange of resources with customers and plays a crucial role in marketing strategies. Social Media Business models and marketing strategies transform social networks and interactions into strategic assets, aiming for desired marketing outcomes. These strategies are distinguished by their focus on understanding customers’ motivations, co-determining outcomes through interactive relationships, and valuing customer contributions beyond purchasing behavior.

Two prominent Social Media business models include the Social Commerce and Social Content Strategies. The former focuses on direct sales through social media, leveraging platforms for promotional purposes, while the latter prioritizes engaging content creation to build relationships and indirectly boost sales. Implementing these strategies effectively requires a deep understanding of social media’s role in marketing and specific organizational capabilities.

In summary, social media platforms and strategies represent a dynamic and complex ecosystem that has fundamentally altered how businesses interact with consumers and approach marketing. The economic models of these platforms, combined with the strategic use of social media by influencers and companies, highlight the multifaceted impact of social media on contemporary business practices.

### LMS Questions

Q1: What is the largest professional networking platform?

a) LinkedIn (Right)

b)Xing (Wrong)

c)WeWork (Wrong)

d)Snapchat (Wrong)

Q2: What is the largest social network worldwide?

a)Facebook (Right)

b)Instagram (Wrong)

c)Tiktok (Wrong)

d)Snapchat (Wrong)

Q3) What is the largest micro-blogging Platform?

a)X (formerly Twitter) (Right)

b)Xing (Wrong)

c)LinkedIN (Wrong)

d)Snapchat (Wrong)

Q4) What is the name of Twitter as in the year 2024?

a) X (right)

b) Y (wrong)

c) Z (wrong)

d)Meta (wrong)

Q5) To which company does Youtube belong to?

a) X (right)

b) Y (wrong)

c) Z (wrong)

d)Meta (wrong)

# 5. Social Commerce & Social Selling

Study Goals

On completion of this unit, you will be able to

* Explain the characteristics of Social Commerce
* Explain the characteristics of Social Selling

### Introduction

In today’s world, the ubiquity of smartphones and the internet has become a fundamental aspect of daily life. Their prevalence not only facilitates communication but also enables consumption behavior in virtually any setting. This transition has been bolstered by ongoing research and development in wireless technologies and electronic devices, coupled with advancements in the field of electronic commerce (e-commerce). As noted by Senn (2000), these developments have given rise to mobile commerce (m-commerce), revolutionizing how consumers engage with shopping platforms.

**M-commerce** brings the convenience of shopping platforms directly to consumers’ fingertips. Users can effortlessly browse through apps offered by various providers, save their favorite products, add items to wish lists, and participate in an immediate, see-now-buy-now shopping culture. Taking this a step further, social commerce (s-commerce), as discussed by Lin et al. (2017), expands the scope to include various consumer tools designed for socializing and sharing commercially related information. This integration of social interaction into the shopping experience reflects a significant evolution in how modern consumers discover, discuss, and purchase products.

B2B

B2B, or business-to-business, describes transactions or interactions between businesses, such as between a manufacturer and a wholesaler, or a wholesaler and a retailer, rather than between a business and individual consumers.

M-Commerce

M-Commerce, or mobile commerce, refers to the buying and selling of goods and services through wireless handheld devices such as smartphones and tablets.

The new technologies not only influence the possibilities to interact with consumers, it also influences the business to business (**B2B)** selling process,

In the following chapter we first define social commerce and its possibilities and then focus on social selling. This chapter provide the theoretical perspective and the next chapter will focus on the real-world business cases.

## 5.1 Social Commerce

Social commerce (s-commerce) witnesses a substantial rise in scholarly interest since 2004. This interest coincides with the emergence and popularity of social media platforms such as Facebook and Twitter (Zhou et al, 2013; Lin et al., 2017). The concept of s-commerce, however, remains somewhat nebulous, lacking a definitive description and presenting multiple interpretations, making it a “fuzzy” subject with varying meanings for different readers and scholars.

Generally, s-commerce can be considered “an interdisciplinary subject that concerns business models and strategies, consumer and organization behavior, social networking technologies, analytical techniques, system designs, business practices, research methodologies, and perspective and retrospective assessment of business value” (Zhou et al. 2013, p.2)

The advent of social media platforms like Facebook, Twitter, Instagram, and Pinterest has revolutionized the corporate landscape. Moving away from the traditional monologue of broadcasting messages, companies now engage in a dialogue with their audience. This interactive approach enables businesses to share multimedia content, conduct polls, and engage with a global audience in real-time, fostering an environment where consumers can actively participate by sharing, commenting, and expressing their views instantly (Busalim & Hussin, 2016).

The term s-commerce was first academically explored in 1999, with research primarily focusing on the themes of organization, advertisement, and word-of-mouth, especially in the context of post-purchase consumer behavior (Lin et al., 2017). S-commerce is characterized by its emphasis on interactivity, contrasting with e-commerce through the communal and collaborative creation of content facilitated by social networks. This paradigm shift encourages new entrants in the electronic marketplace, epitomized by the rise of peer-to-peer sharing platforms like Airbnb and Uber (Yamakami, 2014).

Amazon’s initiation of e-commerce in 1994 marked the beginning of a new era in online shopping. Since then, many of social media platforms have emerged, offering unique business opportunities despite initial skepticism regarding their impact on societal norms (Olenski, 2015; Chahal, 2016). The blend of e-commerce and social media has created a landscape where products can be instantly showcased and shared globally, necessitating businesses to adapt and leverage these platforms for their economic benefit (Taylor & Pentina, 2017).

S-commerce has significantly impacted various industries, altering how consumers discover, share, and engage with content. It has redefined the landscape of music, fast fashion, beauty, luxury, and travel sectors by integrating user-generated content (UGC) and influencer marketing through social media and e-commerce platforms. This integration has enhanced the consumer experience, providing a personalized and community-centric approach to brand interaction (Arnold, 2018).

The future of s-commerce is expected to grow, with platforms like Instagram’s ‘shop now’ feature pioneering new shopping experiences. Augmented reality (AR) presents further opportunities, as seen with Snapchat’s ‘shoppable AR’ lenses, enabling consumers to virtually try products before purchase. Such innovations, including partnerships with companies like L’Oreal, signify the evolving landscape of s-commerce, emphasizing the importance of a unified and immersive shopping experience (Mintel, 2018; Vizard, 2018).

S-commerce continues to redefine the digital commerce paradigm, influencing consumer behavior and business strategies. Its integration with social media has transformed traditional commerce methods, fostering a more interactive and personalized shopping experience. Despite the challenges in understanding this evolving field, the potential for innovation and growth in s-commerce is vast, with emerging technologies promising to further enhance the consumer journey in the digital age.

### Self-Check-Questions

1. Due to which development for example is the future of social commerce expected to grow?

*Augmented reality as seen with Snapchat’s “shoppable AR” lenses allow customers to virtually try on products.*

## Social Selling

According to Montag et al., (2018) social selling transcends traditional sales tactics by leveraging social networks to enhance sales performance and better meet customer needs. Barney-McNamara et al. (2019) further clarify that social selling involves understanding, connecting with, and engaging influencers, **prospects**, and existing customers at various touchpoints along the purchasing journey, making it a strategic investment for enhancing customer insight and engagement.

Prospect

A prospect is a potential customer or client who has been identified as fitting a business’s target market criteria and shows interest in the company’s product or service, but has not yet made a purchase

According to Agnihotri et al, 2017, the integration of Customer Relationship Management (CRM) and social media marks the beginning of social selling, facilitating a robust engagement platform for buyers and sellers (Agnihotri et al., 2017). However, despite its significance, the concept still lacks a universal definition, with interpretations varying across academic and practical domains. However, a consensus emerges around combining traditional selling processes with the strengths of social media to support every stage of the sales cycle (Agnihotri et al, 2012; Inyang, 2019).

Barney-McNamara et al. (2021) identify both individual and company antecedents to social selling, that influence the different types of social selling activities, which include personal branding, information exchange, networking and social listening.

Moderation

In a scientific context, moderation refers to the process or phenomenon where the relationship between two variables changes depending on the level of a third variable, which is known as the moderator variable.

Based on a literature review the authors expect these activities to influence the outcome, i.e., the buyer, engagement, value-co-creation and salesperson performance (Barney-McNamara et al., 2021). focusing on attitudes, behaviors, characteristics, strategic orientations, and company behaviors These factors could also potentially **moderate** social selling outcomes.

We will now focus on the identified Social Selling activities in more detail (for an encompassing overview see Barney-McNamara et al., 2021)

### Personal branding

The concept of personal branding, introduced by Peters (1997), emphasizes the importance of individuals acting as chief marketers for their own brands, with the goal of distinguishing themselves from others. According to Berkman (2013) Ralf VonSosen, former head of Marketing for LinkedIn Sales Solutions, highlights the role of social media and online platforms in building a professional brand, offering low-cost opportunities for salespeople to engage with various stakeholders and reinforce their company’s brand. Personal branding within social selling not only affects sales performance positively (e.g., Wang et al., 2016), as shown by empirical studies, but also blurs the lines between company and individual, suggesting salespeople’s significant influence on customer relationships and decision-making.

### Information exchange

According to Barney-McNamara et al. (2021) technology tools have transformed the information exchange process between salespeople and customer (Agnihotri et al. 2009), fostering a systematic and bidirectional flow of knowledge. This shift has reduced customers’ reliance on salespeople as their sole information source, encouraging them to independently gather data from various platforms early in their decision-making process. Digital media promotes interactive exchanges, changing the traditional dynamics of information control and encouraging the sharing of relevant information and timely responses to enhance customer satisfaction (Barry & Gironda, 2018). The strategic use of social media not only aids in the initial stages of sales by allowing buyers to control information but also necessitates that salespeople adapt by providing critical information to boost customer satisfaction.

### Networking

Following Barney-McNamara et al. (2021) networking in sales involves creating interdependent relationships among individuals within their smaller circles and the broader society, aiming to connect salespeople with potential prospects (Berkman, 2013). Technological platforms, particularly social media, play a crucial role in enabling salespeople to identify and engage with their target markets effectively. Social selling techniques, which integrate social media with customer relationship management (CRM) technologies, are highlighted as more efficient than traditional methods for finding and connecting with the right prospects. Social media not only facilitates connections with a large number of individuals and firms but also helps in leveraging existing connections to expand one’s network.

Social media has elevated traditional networking skills by enabling salespeople to reach out to more contacts and deepen customer engagement (Sashi, 2012; Lacoste, 2016).

Social listening  
According to Barney-McNamara et al. (2021) social listening is a critical strategy in sales, transferring the traditional practice of listening to customers into the online environment to build trust. By monitoring social media, salespeople gain a deeper understanding of their customers and the market (e.g., Itani et al., 2017) collecting valuable information about customer habits, feedback, and needs. This information is then stored in CRM systems for strategic use in sales activities, allowing salespeople to tailor content that aligns with customer expectations.

The strategy involves not only gathering customer data to inform organizational strategy and content creation but also actively participating in conversations to stay relevant and identify key influencers (Trainor, 2012). This proactive approach can lead to strategic adjustments and improved service offerings.

### Self-Check-Questions

1. What are the most important Social Selling Activities according to Barney-McNamara et al. (2021)

*Personal Branding, Information Exchange, Networking, Social Listening*

Summary

Social commerce and social selling have become fundamental in redefining the landscape of digital marketplace interactions, blending the ubiquity of social media platforms with the dynamics of e-commerce and sales methodologies. The concept of social commerce, despite its varied interpretations, encapsulates the fusion of social networking technologies with online commerce, fostering an environment where users can actively participate in the content creation and shopping process. This evolution from traditional e-commerce to a more interactive social commerce model is marked by the transition towards dialogues between companies and their audiences, facilitated by platforms like Facebook, Twitter, Instagram, and Pinterest.

Historically, the journey of social commerce began in the late 1990s, focusing initially on post-purchase consumer behaviors and gradually embracing the interactive capabilities offered by social networks. This shift has not only encouraged the emergence of new business models, such as peer-to-peer sharing platforms exemplified by Airbnb and Uber but has also significantly impacted various industries. By integrating user-generated content and influencer marketing, social commerce has transformed how consumers discover, share, and engage with products, offering personalized and community-centric brand experiences.

The future of social commerce is expected to offer several opportunities, driven by technological advancements such as augmented reality (AR), which enhances the shopping experience by allowing consumers to virtually try before they buy. Platforms like Instagram and Snapchat are at the forefront of these innovations, introducing features that merge the convenience of online shopping with immersive experiences.

Parallelly, social selling represents the adaptation of sales strategies in the digital era, leveraging the power of social networks to cultivate relationships with potential customers. Unlike traditional sales approaches that often prioritize direct selling, social selling emphasizes building trust and establishing a meaningful presence within potential customers’ networks. This modern approach to sales is characterized by the strategic use of social media to understand, connect with, and engage influencers and prospects throughout the purchasing journey.

The essence of social selling lies in its focus on individual and company factors, such as attitudes towards technology and social media, strategic orientations, and behaviors that influence its adoption and success. Sales professionals utilize various activities, including personal branding, information exchange, networking, and social listening, to develop a comprehensive understanding of their prospects’ needs and preferences. These efforts are aimed at transitioning passive observers into active participants, thereby fostering a deeper connection between the brand and its consumers.

In essence, both social commerce and social selling illustrate the significant shift towards more interactive, engaging, and technology-driven methods of connecting with consumers and prospects. These strategies underscore the importance of leveraging digital platforms for business innovation, enhancing customer engagement, and achieving competitive advantage in the rapidly evolving digital marketplace.

### LMS Questions

Q1: What are the most important Social Selling Activities according to Barney-McNamara et al. (2021)

1. Personal Branding, Information Exchange, Networking, Social Listening (Right)
2. Personal Branding, Information Disclosure, Networking, Social Listening (Wrong)
3. Personal Branding, Information Exchange, Networking, Social Hearing (Wrong)
4. Personal Disclosure, Information Exchange, Networking, Social Listening (Right)

Q2) Due to which development for example is the future of social commerce expected to grow?

1. Augmented reality (Right)
2. More brick and mortar stores (Wrong)
3. Less income (Wrong)
4. Slower Internet (Wrong)

Q3) What is important for successful social selling?

a)Information hiding, Networking, Personal Branding (Wrong)

b) Information exchange, Hiding, Personal Branding (Right)

c) Information exchange, Networking, Personal Success(Wrong)

d) Information exchange, Networking, Personal Development (Right)

Q4) In which year did the scholary interest in Social Commerce start?

a)2004 (Right)

b)2000 (Wrong)

c)2008 (Wrong)

d)2010 (Wrong)

Q5) Which company marked the beginning of e-commerce in 1994?

1. Amazon (Right)
2. Asos (Wrong)
3. L’Oreal (Wrong)
4. Facebook (Wrong=

# 6. Social Media Business Cases

Study Goals

On completion of this unit, you will be able to

* Get to know business cases of social commerce and social selling
* Understand possibilities to engage in the Metaverse
* Explain how Artificial Intelligence extends business models

### Introduction

Whereas the previous chapters have theoretically explained the fundamentals of digital and social media business models, the following chapter will focus on practical business cases.

The features of Facebook Marketplace and Instagram shopping will be explained as well as microblogging features. Moreover, business cases in the Metaverse will be described as well as the use of Artificial Intelligence (AI) in social media business models.

## 6.1 Social Commerce

Facebook Marketplace and Instagram Shopping are two examples of how social media platforms are evolving into spaces for social commerce, blending community interaction with e-commerce functionalities.

### Facebook Marketplace

Facebook Marketplace is an integrated feature within Facebook that offers users the opportunity to buy, sell, or trade items within their local communities or regions (Facebook 2024). This platform embodies social commerce by using Facebook’s social networking capabilities to facilitate e-commerce transactions. Users can easily interact with each other, leave comments, and directly engage with sellers, making the shopping experience more communal and interactive. This approach transforms the traditional e-commerce experience into a more social, community-focused activity. Ads are also placed in Facebook Marketplace (Hootsuite, 2024)

### Instagram Shopping

Instagram Shopping takes a different approach by enabling businesses to create a virtual storefront within the Instagram app itself. This feature represents social commerce by merging Instagram’s visually rich environment with e-commerce elements. Businesses can tag products in their posts and stories, linking directly to product pages within the app. This seamless integration allows users to transition from casually browsing their feed to making purchases, tapping into the impulsive buying behavior encouraged by social media (Instagram, 2024).

Instagram Shopping turns a business’s Instagram feed into an interactive shopping experience. Product tagging in posts and stories guides users to detailed product information and purchase options. Additionally, the integration of influencer marketing plays a significant role in this ecosystem. Influencers can tag products in their posts, harnessing their credibility and reach to drive sales.

For businesses, especially smaller ones, Instagram Shopping opens a direct sales channel, reducing reliance on traditional retail channels. Instagram’s data analytics further personalize the user experience, increasing engagement and sales potential. Companies from the US can use the so-called “Checkout on Instagram” as a direct point of sale (Instagram, 2024)

Instagram’s business model leverages this feature for revenue generation. While not charging transaction fees for sales, the platform earns significant revenue through advertisements. Companies invest in promoted posts and stories to reach a broader audience, thereby increasing Instagram’s effectiveness as a marketing platform (Harms, 2024b).

### The example of L’Oréal and Asos

In the realm of social commerce strategy, companies like L’Oréal and ASOS have set remarkable examples of leveraging social media technologies to amplify their business outcomes and customer engagement.

The French cosmetics company L’Oréal has pioneered the integration of social media technologies within its business framework. The brand took a significant leap by launching social commerce platforms on Facebook, thereby enabling potential buyers to seamlessly execute purchases via social media. This innovative approach not only simplified the buying process for customers but also allowed L’Oréal to engage directly with them through on-demand chat interactions. Such strategic engagement initiatives have substantially enhanced the customer experience, boosting the company’s inquiry-to-sale conversion rate to 22% in just five months (Acommerce, 2019).

On the other hand, ASOS, the UK-based online fashion retailer known for its absence of physical storefronts, has demonstrated the profound impact of effectively leveraging social media as a promotional tool. Between 2017 and 2018, ASOS experienced a significant 28% increase in annual profits from online sales (Robert, 2018), a success largely attributed to its adept use of social media platforms for marketing purposes. The company has distinguished itself by humanizing its social media interactions, offering personal touches and engaging in genuine, down-to-earth conversations with its fans on Facebook and Twitter. This approach not only fostered a stronger connection with its audience but also underscored ASOS’s position as a fast-moving and differentiated entity in the competitive fashion industry (Robert, 2018).

Both L’Oréal and ASOS exemplify how a social commerce strategy, centered around the innovative use of social media technologies and platforms, can lead to enhanced business performance and a more engaging customer experience.

### Self-Check-Questions

1. Name two examples for Social Commerce

*Facebook Marketplace, Instagram Shopping*

## 6.2 Social Selling

LinkedIn is one of the first social networks specializing in professional networking (Wirtz, 2019)

LinkedIn has become a central platform for B2B sales professionals, serving as a crucial tool for networking, building credibility, and encouraging professional relationships within the industry (Harms, 2024d). The platform allows sales professionals to connect with potential leads, industry peers, and decision-makers, thereby expanding their reach and visibility. This professional networking is enhanced by various features and tools offered by LinkedIn, specifically designed to support professional growth, networking, and sales activities ((Harms, 2024d).

One of the key aspects of leveraging LinkedIn effectively is content sharing and thought leadership. Regularly posting insightful articles, industry news, and participating in discussions helps sales professionals establish themselves as thought leaders This not only builds trust and credibility, which are vital in the B2B purchasing process, but also nurtures long-term relationships, an important aspect of successful B2B sales (Barney-McNamara, 2021).

Engagement with prospects on LinkedIn is nuanced and personalized. Sales professionals can interact with potential leads by commenting on their posts, sending tailored messages, and sharing valuable insights. This approach goes beyond mere product promotion; it’s about understanding the unique needs and challenges of each prospect (Barney-McNamara et al, 2021). LinkedIn’s tools like Sales Navigator and other CRM integrations are important for lead management, helping sales professionals track interactions, gauge interest levels, and determine the optimal timing for product pitches (LinkedIn, 2024).

The platform’s impact on sales professionals is multifaceted. LinkedIn not only aids in strategic lead generation and nurturing but also allows for a more personalized sales approach. By providing detailed insights into user profiles and behavior, LinkedIn enables sales professionals to tailor their messages and content, making their selling process more effective and increasing the likelihood of successful outcomes (LinkedIn, 2024).

Furthermore, LinkedIn monetizes these interactions through subscription services like LinkedIn Premium and Sales Navigator (LinkedIn, 2024). These services offer advanced features such as in-depth analytics and expanded network access, which are particularly beneficial for B2B sales professionals. The platform’s emphasis on content marketing and engagement keeps users actively involved, which is integral to building and maintaining professional relationships and establishing a strong presence in the industry.

### Self-Check-Questions

1. What is the most well-known social selling platform with most users world-wide?

*LinkedIn*

## 6.3 Social Blogging

Following the classification by Kaplan and Haenlein (2010) blogs, recognized as one of the initial forms of social media, are unique websites characterized by entries posted in reverse chronological order, showcasing the most recent content first. These platforms serve as the social media counterpart to individual web pages, offering a diverse range of formats—from personal journals detailing the author’s experiences to comprehensive overviews of key information within a particular subject area. Typically curated by a single individual, blogs also facilitate engagement and interaction with readers by allowing the inclusion of comments (Kaplan & Haenlein, 2010).

X (formerly Twitter), along with other microblogging platforms, has integrated social networking features, including the creation of profiles and the ability to connect with followers and friends. This connectivity enables sellers to engage these connections for generating powerful word-of-mouth (WOM) marketing (Turban et al., 2017).

X itself, following the two-sided market structure, generates revenue mainly via advertising, selling the users attention to advertising companies. Over time, X has evolved to embrace a more business-oriented model. In 2010, the platform started its first advertising offering, “promoted tweets,”( Miller, 2010) with over 77 Million US $ revenue from advertising in 2011 (Statista Research Department, 2023) By 2021, Twitter’s advertising revenue reached over 4,5 billion US$ (Dencheva, 2023). Businesses can utilize Twitter to share information about their products and services, including special promotions, thereby drawing followers to their physical or online stores (Turban et al., 2017). The platform’s advertising capabilities, enhanced by software tools designed for merchants, allow for the efficient dissemination of promotional content, potentially boosting sales. Merchants can post updates or “tweets” to inform followers about new products or deals (Turban et al. ,2017).

### Self-Check-Questions

1. What is the world-largest social blogging platform?

*X(formerly Twitter)*

## 6.4 Other Business Cases

In the following we will focus on the special characteristics and possible business models of the metaverse and the role of artificial intelligence in social media business models.

### The metaverse

The metaverse increasingly attracts attention of scholars and practitioners alike. Although it still lacks a common definition of its concepts, Hennig-Thurau et al. (2023, p. 889) define the metaverse as a “new computer-mediated environment (Hoffman & Novak, 1996), consisting of virtual “worlds” in which people act and communicate with each other in real-time via digital representatives referred to as avatars” (Miao et al.,2022).  
The metaverse is supported by specific hardware, such as head-mounted virtual reality devices or headsets, which act as the primary entry point. This is complemented by proprietary operating systems (for example, Meta/Oculus) and unique applications that create virtual “worlds,” like Roblox, Microsoft’s Altspace and Meta’s Horizon (Hennig-Thurau et al., 2023; Keach, 2022). It facilitates a wide range of collective human endeavors, spanning from entertainment activities (such as viewing films in a virtual cinema; Baker, 2021) to professional interactions (like engaging with colleagues and holding business meetings; CBS News, 2021). Activities by companies engaging in the Metaverse can be aligned with aspects of both social commerce and social selling, although they often extend beyond these concepts due to the unique characteristics of the Metaverse.

The Metaverse offers unique opportunities for companies to engage in innovative forms of commerce and relationship building, allowing new possibilities how businesses interact with customers and conduct transactions in virtual environments.

### Social Commerce in the Metaverse

The Metaverse enables companies to create virtual storefronts and immersive showrooms, where users can interact with products in a 3D environment (Rösch, 2023). This approach enhances the social aspect of e-commerce, allowing users to experience shopping in a community-oriented and interactive setting. For example, fashion brands can create virtual stores where users try on clothing with their avatars, akin to browsing in a physical store (Rösch 2023) but within a digital, interactive environment. Transactions within the Metaverse can occur seamlessly, with users purchasing virtual goods or services using digital currencies (Dean, 2022), making the process integrated within the virtual experience. This is exemplified by gaming companies selling virtual goods within Metaverse games.

Real-world examples include Nike’s ‘Nikeland’ in Roblox (Hennig-Thurau et al., 2023) and Gucci’s virtual garden in the same platform (Roblox, 2021), where users can buy branded products for their avatars. These initiatives blend brand presence with the interactive nature of the Metaverse, tapping into the digital fashion trend and the social commerce aspect.

### Social Selling in the Metaverse

The Metaverse offers new levels of personalized and immersive sales experiences. Sales professionals can leverage virtual spaces to build relationships and network with potential clients (CBS News, 2021)in a more engaging manner than traditional methods. Virtual events, conferences, or meetings in the Metaverse can facilitate relationship-building similar to social selling.

Sales presentations and product demos can be conducted in immersive 3D environments tailored to each client’s interests (Peyton, 2022). Companies can also use virtual influencers or avatars to promote products or services within the Metaverse, providing information and influencing decisions in a way that’s similar to social selling tactics on social media but with added interactivity.

For instance, B2B companies might host networking events in virtual conference centers within the Metaverse, offering a more engaging setting for business interactions. Real estate companies can give virtual tours of properties, and tech companies might use virtual influencers for product demonstrations (McKinsey & Company, 2022).

All in all, the Metaverse offers enhanced immersion and interactivity, leading to more engaging customer experiences (Hennig-Thurau et al, 2023). The blurring of lines between virtual and physical realities creates new opportunities and challenges in branding, customer engagement, and sales strategies. It introduces novel forms of value exchange, such as digital currencies and NFTs, leading to new business models and revenue streams.

### Artificial intelligence in social media business models

The vast amount of data generated by social networks is beyond human capacity to sort, analyze, or leverage effectively, necessitating the application of artificial intelligence (AI) in this domain. AI’s integration into social media manifests in various forms, significantly enhancing user interaction and data management (Benabdelouahed & Dakouan, 2020).

Chatbots, AI-driven software capable of conducting conversations in natural language across different platforms, are among the most prominent applications (Benabdelouahed & Dakouan, 2020). They represent a foundational step in human-machine interaction, relying on natural language processing to answer queries and provide information. Beyond their basic functionality, chatbots personalize the customer experience and streamline the customer integration process, thereby optimizing service costs. Despite their capabilities, chatbots require human oversight for development and optimization to ensure they meet user needs effectively (Benabdelouahed & Dakouan, 2020).

Another significant application of AI in social media is predictive analytics, which utilizes statistical and machine learning techniques to analyze behavior and make future predictions applications (Benabdelouahed & Dakouan, 2020). This capability allows marketers to tailor campaigns more precisely and efficiently, saving both time and resources.

AI-generated content is transforming content marketing strategies by enabling the automated creation of straightforward reports and narratives, such as financial updates or sports summaries (Benabdelouahed & Dakouan, 2020). While AI facilitates content production and saves valuable time, human intervention remains crucial, especially for content that requires emotional intelligence or humor.

In summary, AI’s role in social media spans from enhancing user interactions with chatbots, enabling precise predictions through analytics, to automating content creation and supporting social selling strategies. These advancements underscore AI’s critical contribution to managing the complexities of social media data and interactions, providing both businesses and users with more efficient and personalized experiences.

### Self-Check-Questions

1. How can the metaverse be defined?

*Hennig-Thurau et al. (2023, p. 889) define the metaverse as a “new computer-mediated environment (Hoffman & Novak, 1996), consisting of virtual “worlds” in which people act and communicate with each other in real-time via digital representatives referred to as avatars” (Miao et al.,2022).*

Summary

The transition from theoretical foundations to practical business cases in social commerce and digital platforms unveils the dynamic interplay between technology and commerce in today’s digital age. Platforms like Facebook with Facebook Marketplace and Instagram with Instagram Shopping exemplify the possibilities for social commerce, merging community interaction with e-commerce functionalities. Facebook Marketplace leverages Facebook’s networking capabilities to facilitate local buying and selling, transforming e-commerce into a communal experience. Instagram Shopping, on the other hand, integrates a visually rich environment with e-commerce by enabling businesses to tag products directly in their posts and stories, streamlining the path from discovery to purchase within the app.

These platforms underscore the shift towards more interactive, community-focused commerce, where the traditional barriers between consumers and sellers are diminished. L’Oréal and ASOS serve as examples of businesses using social media to enhance their market presence and customer engagement. L’Oréal’s use of Facebook’s social commerce platforms and ASOS’s adept use of social media for promotion have demonstrated the significant impact of a well-crafted social commerce strategy on business performance.

In parallel, the concept of social selling is redefining traditional sales methodologies. Platforms like LinkedIn have become essential for B2B sales professionals, offering tools for networking, credibility building, and professional relationship fostering. Content sharing and personalized engagement with prospects on LinkedIn highlight the shift towards a more nuanced, relationship-centric approach to sales in the digital realm.

Emerging speres like Metaverse further expand the scope of digital commerce and interaction. Platforms like X (formerly Twitter) have evolved to include microblogging features that enhance word-of-mouth marketing, while the Metaverse presents new frontiers for social commerce and selling, offering immersive experiences that blend virtual and physical realities.

The integration of Artificial Intelligence (AI) into social media business models is revolutionizing how companies interact with data and users. From chatbots that enhance customer service to predictive analytics that tailor marketing strategies, AI is instrumental in refining the efficiency and personalization of digital platforms.

### LMS Questions

Q1: What are examples for Social Commerce?

1. Facebook Marketplace, Instagram Shopping (Right)
2. Facebook Store and Twitter Shopping (Wrong)
3. Facebook Marketplace and LinkedIN Shop (Wrong)
4. Facebook Marketplace and X Shop (Wrong)

Q2 How can the metaverse be defined?

1. as “new computer-mediated environment (Hoffman & Novak, 1996), consisting of virtual “worlds” in which people act and communicate with each other in real-time via digital representatives referred to as avatars” (Miao et al.,2022). (Right)
2. as “an old computer-mediated environment (Hoffman & Novak, 1996), consisting of virtual “worlds” in which people act and communicate with each other in real-time via digital representatives referred to as avatars” (Miao et al.,2022). (Wrong)
3. as “an new tablet-mediated environment (Hoffman & Novak, 1996), consisting of virtual “worlds” in which people act and communicate with each other in real-time via digital representatives referred to as avatars” (Miao et al.,2022). (Wrong)
4. as “an new computer-mediated environment (Hoffman & Novak, 1996), consisting of virtual “worlds” in which avatars act and communicate with each other in real-time via digital representatives referred to as avatars” (Miao et al.,2022). (Wrong)

Q3) What is an application to create virtual worlds?

a)Roblox (Right)

b)Rolex (Wrong)

c)Roflox (Wrong)

d) Rokolx (Wrong)

Q4) What is Nike’s world in Roblox called?

a)Nikeland (Right)

b)Nike-Air (Wrong)

c)Nikee (Wrong)

d)Nike-World (Wrong)

Q5) What is the company X?

a)A microblogging network

b) A content provider

c) an advertising agency

d)a developer of augmented-reality glasses