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THE MOMENT OF REVENUE RECOGNITION IN THE DIGITAL ECONOMY (EXAMPLES OF IT AND AI COMPANIES)

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Abstract: Digital goods and services have unique characteristics that set them apart from physical products in legal, economic, technical, and contractual terms. A trader is considered to have fulfilled the delivery obligation when the digital content, or any means of accessing or downloading it, is made available to the consumer or to the physical or virtual device chosen by the consumer for that purpose; or when the digital service is made available to the consumer or to such a device.

For the purpose of determining the moment when control transfers from the seller to the buyer – used as the point of revenue recognition – new techniques have emerged in practice. This paper presents examples of procedures for identifying this moment at several leading companies in the IT and digital technology sectors.

Keywords: *Income recognition in practice, digital economy, accounting standards.*

INTRODUCTION

The contemporary digital environment has given rise to numerous new business products and services and, at the same time, created new opportunities for monitoring and processing business transactions and their inclusion for control and accounting purposes. Entities create, deploy, and commercialize information technology as their primary source of revenue. At the same time, information technology acts as a tool for execution of revenue-generating business processes. The methods of product production and delivery, the number of product combinations, and the completeness and promised services in sales packages, as well as the speed of business processes and their invisibility and intangibility, pose a significant challenge to the reliable perception and presentation of business results. The first serious confrontation with the accounting coverage of digital processes and products resulted in the development of an accounting guideline adopted by the International Financial Reporting Board (IASB), Interpretations SIC - 32 - Intangible Assets - Website Costs in 2001 (International Accounting Standards Board, 2001). By the early 2000s, many companies were investing heavily in website development. The Interpretation provided answers to the question of whether such costs can be capitalized as intangible assets or must be recognized as an expense. Over the past two decades, intangible capital in the digital economy (data, algorithms, software, brand, knowledge), although invisible, has become the dominant derivative of value, as it provides new opportunities for innovation, and networking gives the organization a competitive advantage.

Digital goods and services have several specificities that differentiate them from physical products, both in legal, economic, technical, and contractual terms. Digital goods (software, e-books, music, online courses) do not have a physical form. Often, the buyer does not acquire ownership, but the right to use (license). There is no physical transport, which affects the timing of risk transfer. Delivery is done by downloading, streaming or activating an account. Instead of physical reception, an activation, access code, or installation confirmation is used.

In 2019, the EU adopted a Directive on certain aspects concerning contracts for the supply of digital content and digital services. According to this Directive, "digital content" means data that is produced and supplied in digital form; 'digital service' means a service that enables the consumer to create, process, store or access data in digital form; or a service that enables the sharing or any other interaction with data in digital form uploaded or created by a consumer or other user of that service; 'goods with digital elements' means any tangible movable property that has or is linked to digital content or a digital service embedded in such a way that the absence of that digital content or digital service would render the functioning of those goods inoperable;

The trader shall be deemed to have fulfilled his obligation in respect of delivery at the time of: when the digital content or any means suitable for accessing or downloading the digital content has been made available or made available to the consu-

mer or to the physical or virtual device chosen by the consumer for that purpose; or when the digital service is made available to the consumer or to a physical or virtual device chosen by the consumer for that purpose. (European Parliament and Council of the European Union, 2019).

This paper aims to identify the moment of revenue recognition in companies that sell digital products and services, using examples from several undisputed leaders in the digital economy.

METHODOLOGY

For this paper, we primarily used data from the financial statements of Microsoft, Meta, Reddit, Netflix, and Amazon, whose businesses are based on the development of digital infrastructure, content management, and interactive platforms, with the application of artificial intelligence in scalable monetization models. These companies are not only shaping the digital economy but also setting ethical and regulatory frameworks for future relationships between technology, users, and institutions. The research process is performed in several steps.

The first step was to select the companies that support the research. The selection was aimed at technology companies that develop, deploy, and commercialize information technology as a primary source of revenue, through digital platforms, software services, cloud infrastructure, content, and algorithmically managed customer interactions on a global scale. These companies are key players in the digital economy – whether through software, e-commerce, media, social media, or autonomous mobility. They also have millions of users and shape digital habits around the world. We analyzed the nature of the business, accounting policies for recognizing income and certain expenses. The collected data are systematized and presented from the point of view of their accounting coverage, in particular, the moment when the transfer of control from the seller to the buyer occurs and the recognition of revenue.

Nature of business

Microsoft is a technology company dedicated to making widely available digital technology and artificial intelligence (AI). Microsoft develops and supports a broad portfolio of technology solutions for individuals and businesses, focusing on secure, reliable, and innovative platforms and tools that meet the growing needs of its customers.

Product revenue includes sales of operating systems, cross-device productivity and collaboration applications, server applications, business solution applications, desktop and server management tools, software development tools, video games, and hardware such as computers, tablets, game and entertainment consoles, other intelligent devices, and related accessories. Service and other revenue includes sales like cloud-based solutions that provide customers with software, services, platforms,

and content such as Office 365, Azure, Dynamics 365, and games; support for the solution; and consulting services. The service and other revenues also include sales from online advertising and LinkedIn. (Microsoft, 2025)

Meta Platforms Inc. is an American technology company engaged in the development of social networks, digital platforms, artificial intelligence, and virtual reality. It is best known as the owner of Facebook, Instagram, WhatsApp, and other digital services. It focuses on connecting users, sharing content and digital communication. Most of the revenue is generated through the sale of advertising space on their platforms, using sophisticated algorithms to target audiences. (Meta Platforms, Inc. 2025).

Reddit, Inc. operates with a mission to empower communities and make their knowledge accessible to all. Reddit, Inc. believes that communities unlock the power of human creativity and create a sense of belonging and empowerment for their members. He believes that the world needs community more than ever and that this represents a good opportunity to further enrich the lives of all the people in world. Reddit makes most of its revenue by selling advertising on its mobile apps and website. Other revenue consists of revenue from content licensing, Reddit Premium subscriptions, and other products. (Reddit, Inc.)

Netflix is one of the world's leading entertainment providers, with approximately 302 million paying subscribers in more than 190 countries, enjoying television series, movies, and games from a variety of genres and languages. Subscribers can start, pause, and resume viewing content at any time, from any location, and change their subscription plan at any time. Netflix's primary source of income comes from monthly membership fees. Members are charged a membership fee in advance, prior to the start of each monthly membership period. Netflix acts as the principal contracting entity in all business relationships with partners, including consumer electronics manufacturers ("CEs"), multi-channel video distributors ("MVPDs"), mobile carriers, and Internet Service Providers ("ISPs"), as it retains control over the delivery of services to its members. Netflix also generates revenue from ads displayed on its streaming platform, consumer products, live events, and various other sources. (Netflix, 2025)

Amazon strives to be the world's most customer-centric company. The primary sets of buyers consist of consumers, salespeople, developers, businesses, content creators, advertisers, and employees. Shoppers access Amazon's offerings through websites, mobile apps, Alexa, devices, streaming, and physically visit stores. Amazon also manufactures and sells electronic devices, including the Kindle, Fire tablet, Fire TV, Echo, Ring, Blink, and develops and produces media content. In addition, subscription services such as Amazon Prime are offered, a membership program that includes fast, free shipping on tens of millions of items, access to award-winning movies and series, live sports, and other benefits. Customer orders are fulfilled in several ways, through original and outsourced arrangements in certain countries; digital deliveries; And in physical stores. (Amazon, 2025)

Revenue recognition according to accounting standards

The basic principle of revenue recognition is simple: revenue is recognized when the seller transfers all control of its goods or services (i.e., all risks and rewards) to the buyer, for the amount it actually expects to receive. This definition is widely accepted in both the International Financial Reporting Standards (IFRS) adopted by the International Accounting Standards Board (IASB) and the United States Generally Accepted Accounting Principles (US GAAP) adopted by the Financial Accounting Board (FASB) (Beke-Trivunac, 2021). Under IFRS, revenue recognition is governed by IFRS 15 *Revenue from Contracts with Customers*, and within US GAAP, revenue recognition is governed by Accounting Standards Codification (ASC) Topic 606 – *Revenue from Contracts with Customers*. Both standards are the result of the FASB and IASB convergence project.

According to these standards, the income recognition process continues through the five steps:

Step 1: Contract Identification.

Step 2: Identification of the obligation to perform.

Step 3: Determining the transaction price.

Step 4: Allocation of the transaction price.

Step 5: Recognition of income.

According to accounting standards, a contract can be written, verbal, or even imply your standard business practices. The contract must create enforceable rights and enforceable obligations for both the seller and the buyer. To be the basis for recognition of income, a contract must be approved by both parties, identify the rights of each party, specify the terms of payment, have a commercial substance, and provide the seller with the collection of economic benefits. The contract is the basis for the recognition of income.

An obligation to perform is essentially any promise that the seller will transfer a specific good or service. The promise must meet two criteria: the buyer can benefit from the good or service on its own. For example, when selling a software license and a special training package, the vendor probably has two different performance obligations. A clear distinction between each individual liability is important, because the fulfillment of the obligation determines how it will later recognize income.

The transaction price is the total amount that the seller expects to receive in return for fulfilling the promises made. Pricing requires that potential rebates, discounts, refunds, or performance bonuses be taken into account. If, for example, the buyer is offered the option of returning the goods if he is not satisfied with them, the estimated amount of the refund must reduce the price of the transaction.

The determined price is allocated to each individual performance obligation, i.e. to each product or service as if it were a separate product or service. In other words, it is the price that would be charged for the item as if it were sold separately to the

buyer. If the price itself is not directly visible, it must be estimated. This distribution ensures that the revenue for each item accurately reflects the value provided to the customer.

Revenue can be recognized upon the fulfilment of any performance obligation, which is considered to be the moment of transfer of control of the promised good or service from the seller to the buyer. The transfer of control can occur at a single “moment in time”, such as when the customer exits the car from the parking lot. Or it can happen “over time”, as with an annual subscription where you recognize a portion of your income each month. If control is transferred over time, the entity shall choose a method for measuring progress that is consistent with the objective of presenting its performance and shall apply that method to recognise revenue. (Financial Accounting Standards Board, 2014).

Examples of income recognition in the practice of the digital economy

Accounting for revenue by selected companies is carried out in accordance with US GAAP Accounting Standards Codification (ASC) 606, which is analogous to IFRS 15 Revenue from Contracts with Customers.

The Company uses professional judgment when determining the method of recognizing revenue from individual contracts with customers, which includes the following aspects:

1. Determining whether products and services are considered special performance obligations that should be accounted for separately or together – for example, software licenses and related services that are sold together with cloud services.
2. Establishing a delivery pattern (i.e., the moment of recognition of income) for each specific performance obligation.
3. Identification and treatment of contractual provisions that may affect the timing and amount of revenue recognized (e.g., variable remuneration, optional purchases, free services).
4. Determination of individual sales prices for each specific performance obligation, including products and services that are not sold separately.

Revenue recognition moment occurs when control is transferred from the seller to the buyer. This moment varies from company to company and aligns with the nature of the product/service.

Table 1. An overview of revenue recognition moments

Company	Type of income	The moment of transfer of control from the seller to the buyer
Reddit, Inc.	Advertisement	Revenue is recognized when the user performs an action (click on the ad) or during the service period (<30 days)
Microsoft	Advertisement	Revenue is recognized when the ad appears in search results on Facebook, Instagram, Messenger and third-party mobile applications or after the necessary action (click, impression) is performed by the user/customer.
META (Facebook, Instagram, Messenger)	Advertisement	Revenue is recognized at the time of delivery of an impression or click by the user. An impression is considered delivered when an ad is shown to users.
Amazon	Advertisement	Revenue is recognized at the moment of a click or impression.
Microsoft	Licence	Perpetual licenses – are recognized at the moment when the software is available to the customer. License prepayments – revenue is accrued during the period in which the software is available on a subscription basis.
Microsoft	Software updates	During the lifetime of the device/license, during which the update is provided continuously.
Microsoft	Cloud services	Revenue is recognized on a evenly over the subscription period or on a consumption basis (e.g. the amount of storage space).
Microsoft	Combined products/ services	When a cloud-based service includes both on-premises software licenses and cloud services, a judgment is required to determine whether the software license is considered separate and distinct from other cloud services. When integrated (e.g. Office 365) – they are treated as a single obligation. Office 365 revenue is recognized in the period in which cloud services are provided.
Microsoft	Combined hardware & software	Income is recognized at the time of transfer of ownership, because it is a single obligation to perform.
Amazon	Product sales	Sales revenue is recognized at the time of delivery of the goods.
Amazon	Services to third party vendors	Commission income is recognized at the time of delivery of goods or services.
Amazon	Subscriptions (prime)	Revenue is recognized evenly over the subscription period.
Netflix	Streaming	Revenue is recognized evenly over the subscription period.

Source: Authors

Several important conclusions can be drawn about the different revenue recognition models of large technology companies presented in the above table.

Companies apply different models of revenue recognition in accordance with U.S. GAAP/IFRS rules, but the basic logic is the same: revenue is recognized when control of a service or product is transferred to a customer and value is actually delivered. Advertising revenue is recognized on the basis of user action (click, view, view), which means that the realization of revenue is directly related to user engagement.

Advertising is treated as a service whose control is transferred only when a measured event (click, impression, view) occurs, which ensures that revenue reflects the actual delivery of value to the advertiser.

The recognition of revenue from licenses and software in software licenses takes place in two ways. For a perpetual license, revenue is recognized at the time the software is available to the customer. Revenue from software updates is initially deferred and recognized over the lifetime of the device/license, as updates are provided on an ongoing basis.

Revenue from cloud services (Microsoft, Amazon) is also initially deferred, as value is delivered on a continuous basis and depends on usage.

The recognition of streaming income (Netflix) is recognized equally during each month for which the membership fee is paid. Netflix has the simplest model – revenue is evenly distributed, because the service is continuous and uniform.

Combined products require an assessment of whether the components can be separated or not. When software and cloud services are interdependent (e.g., Office 365), they are treated as a single performance obligation, so revenue is recognized over the service period. When the hardware cannot function without the software, the revenue is recognized at the time of the transfer of ownership of the hardware.

The best description of the process for recognizing revenue from combined products is given in Microsoft's financial statements. The reports state that contracts can include different combinations of products and services, which are generally capable of differentiation and accounting for as separate performance obligations. The determination of the standard selling price (SSP) of each specific performance obligation requires judgment. When each of the products and services is sold separately, it is determined whether there is a discount that will be granted based on the relative relationship of the SSP of the different products and services. In cases where the SSP is not directly visible because the product or service is not sold separately, the SSP is determined using information that may include market conditions and other observable inputs. There are usually several SSPs for a combination of individual products and services due to their stratification by customers or other circumstances. In these cases, information such as customer size and geographic region is used to determine the SSP. (Microsoft Corporation, 2025)

CONCLUSION

A digital economy trades intangible goods and services that have imposed new techniques to determine the moment of transfer of control from the seller to the buyer as the moment of recognition of income. In companies that are at the forefront of the digital economy, the timing of revenue recognition depends on the nature of the service or product. For advertising, these are the actions of the user (click, display), for licenses, it is the moment of availability of the rights from the license, for services provided on a continuous basis (cloud services, subscriptions, streaming) revenue is recognized continuously over time. When selling physical products, revenue is recognized at the time of receipt of the goods. Revenues from highly integrated combined products and services are considered a single liability.

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