



Background

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The concept of the MOOC originated at the University of Manitoba in Canada - the *Connectivism and Connectivity Knowledge* course was launched

The idea gained in popularity in the United States following the launch of the free *Introduction to Artificial Intelligence* online course by Stanford University

The New York Times recognised 2012 as the year of MOOCs

On 30 October, 2018, NAVOICA, an e-learning platform developed by and hosted on the servers of the National Information Processing Institute (OPI PIB), was launched



The goals of the NAVOICA project were:

- to create a nationwide e-learning system that enables the delivery of MOOCs,
- to develop a system of accreditation and recognition of online courses,
- to popularise Polish scholarly achievements domestically and internationally,
- to include the academic community in the creation of courses,
- to share experiences between higher education institutions and other organisations.



The definition of MOOCs

The definition of MOOCs

MOOC stands for **massive open online course**. Although the expression seems unambiguous, it requires further clarification, as the terms **massiveness** and **openness** were both used commonly in marketing communication in 2012 to popularise then emerging platforms, such as Coursera, edX, and FutureLearn.

The definition of MOOCs

Massiveness and openness continue to be overemphasised by scholars and casual bloggers alike, who propagate the already-outdated definition of MOOCs, according to which:

- **massiveness** implies their availability to the public; courses can be joined by anyone who has access to the internet, regardless of their age, gender, geographical location, or time zone,
- **openness** is defined as free access and the absence of requirements to use academic knowledge.

The definition of MOOCs

Currently, massiveness and openness cannot be identified as the key features of MOOCs, because **access to the internet**, as well as the range of users' **genders**, **locations**, and **time zones** are characteristic for any type of online course.

Many courses are also offered free of charge, and users need not meet any specific preliminary participation requirements.



duolingo

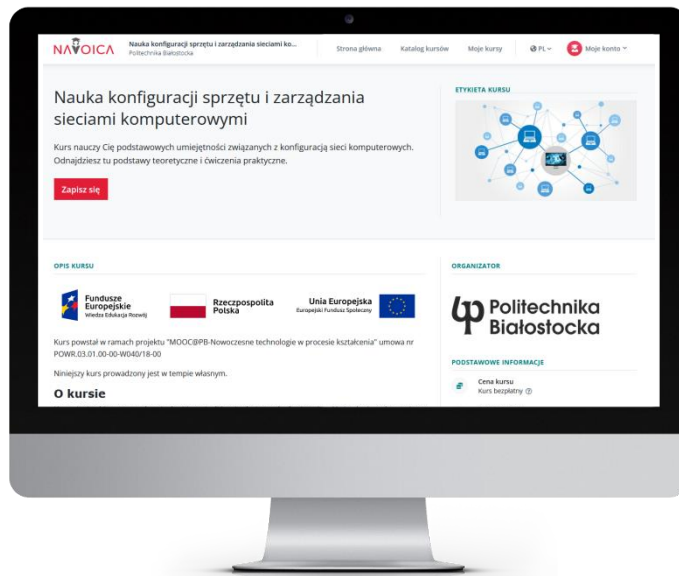


These include, for example, language applications, such as Duolingo. They are available for free and offer materials for beginners (no preliminary requirements).

Some courses, lectures, and webinars are presented in the form of videos on YouTube. The platform offers academic and expert knowledge for free to all users, regardless of their skill level (e.g. TED, or *Strefa Psyche* of the SWPS University of Social Sciences and Humanities in Poland).

The definition of MOOCs

Paradoxically, preliminary entry criteria are not evident, because MOOCs are predominantly addressed to people with higher education, professional development, and students: individuals who possess limited knowledge on specific subjects. Some MOOCs can serve as follow-ups to other online or in-person courses, which implies preliminary requirements.



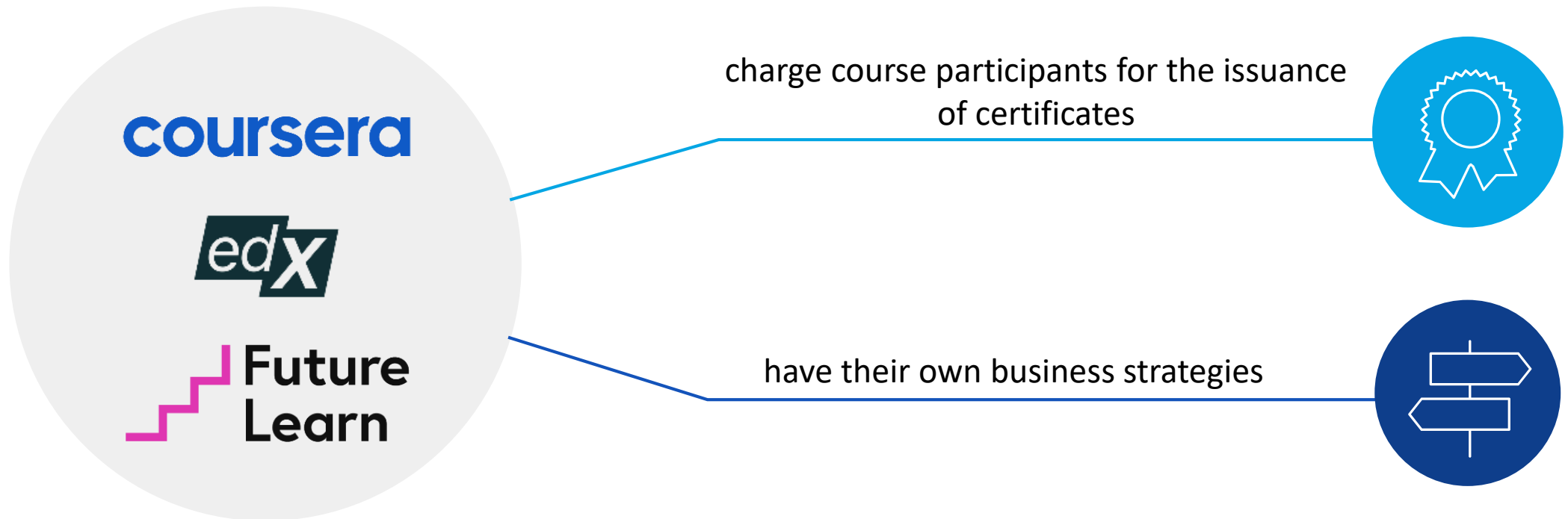
Below are some example from NAVOICA:

- The description of the *Configuration of hardware and management of computer networks* course offered by the Bialystok University of Technology reads: 'The course is for first-cycle students who are pursuing degrees in the field of technology. The course may be used as part of computer network (or similar) classes delivered within information technology (or similar) programmes.'

It appears that the preliminary requirements for some MOOCs contradict the frequently-emphasised ethos of openness.

The definition of MOOCs

Free access to MOOCs is also debatable.



The definition of MOOCs



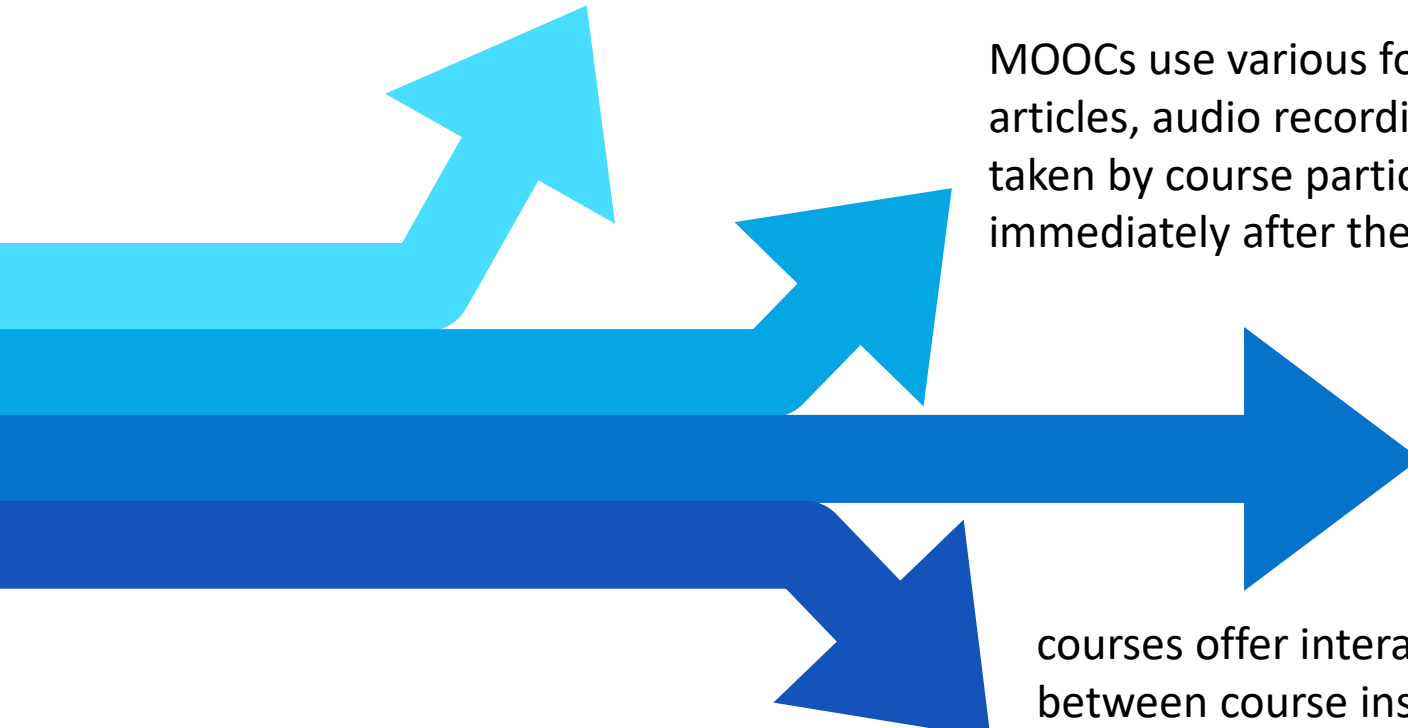
The definition of MOOCs also emphasises that an **unlimited number of users** may participate in such courses.

This, however, is not a characteristic of the courses themselves, but of the environment in which they are organised: scalable platforms that are designed to accept large numbers of participants.

The definition of MOOCs

Numerous authors of MOOC publications point to other aspects of MOOCs (other than those denoted by their name), for instance:

MOOCs are usually designed by higher education institutions.



MOOCs use various forms of educational material: presentations, films, articles, audio recordings, images, interactive quizzes; the results of tests taken by course participants to assess their knowledge are usually available immediately after the tests are completed.

course participants receive course completion certificates.

courses offer interactive forums that ensure communication between course instructors and participants, and between participants themselves.

The definition of MOOCs

Although the features listed above may be characteristic of MOOCs, they fail to differentiate MOOCs from other online courses. Higher education institutions often create and share courses on their platforms, such as Moodle, which offer the same functionalities as other platforms that are based on Open edX code:

- ▶ videos,
- ▶ audio recordings,
- ▶ mutual evaluation exercises,
- ▶ tests,
- ▶ forums,
- ▶ chats,
- ▶ instantaneous feedback,
- ▶ the ability to upload SCORM packages
- ▶ certificates.

The definition of MOOCs must be revised to include features that are characteristic specifically of MOOCs and not of e-learning courses more generally.

The image features a white background with decorative borders on the left and right sides. These borders consist of intricate, marbled patterns in various shades of blue, ranging from light cyan to deep navy, with some white and brownish-gold accents. The patterns are fluid and organic, resembling liquid paint or marbled paper. In the center of the white space, the text "What are MOOCs?" is written in a dark blue, sans-serif font. Below it, the word "Redefinition" is written in the same font and color, but in a larger size.

What are MOOCs? Redefinition

What are MOOCs? Redefinition

All MOOCs are delivered online (which is, correctly, emphasised in their name). This means that they fulfil all of the main functions of e-learning courses (outlined above). MOOCs:

- can be accessed only via the internet,
- can be accessed from anywhere in the world
- can be accessed at any time of the day
- can be accessed by any participant, regardless of their age or gender
- are available to multiple users simultaneously.

Online course authors may decide on whether to charge fees or to establish preliminary requirements. It is worth re-emphasising that these features alone do not define e-learning courses as MOOCs.

What are MOOCs? Redefinition

E-learning courses can be called MOOCs only if they possess **all** of the following features:

- course materials should be of academic or, more precisely, expert quality; all topics should be presented in great detail
- expert materials should be allowed to be used extramurally; this widens access to knowledge (this feature does not merit further discussion in the business context—many platforms offer paid access to MOOCs [business subscription fees], which contradicts the massiveness and openness of MOOCs)
- the environment in which MOOCs are available should allow for unlimited numbers of users
- MOOCs should be presented in a specific structure that, for example, corresponds to one semester of a university programme, or replaces in-person classes at a university or another specialist course
- participants should receive certificates after successfully completing their courses.



Development of MOOCs. MOOCs in Poland

Development of MOOCs. MOOCs in Poland

MOOCs, which can easily substitute university classes, have risen to the challenges posed by the COVID-19 pandemic—particularly the shift to remote education.

These students are most numerous among the millennials and younger generations, for whom the digital world is a natural environment for learning, working, and developing their interests.

Statistics suggest that following the large-scale implementation of MOOCs, the number of people who are willing to benefit from open access to knowledge and to develop their passions and professional skills has increased.

The total number of users of global platforms (Coursera, edX, Udacity, FutureLearn, and Swayam) reached 180 million in 2019 and 220 million in 2021.

Development of MOOCs. MOOCs in Poland

A similar trend can be observed in the NAVOICA education platform of the Polish Ministry of Education and Science.

As of May 2023, NAVOICA offers 244 MOOCs in twenty fields:

- biology;
- business and management;
- education;
- economics and finance;
- information technology;
- engineering;
- foreign languages;
- mathematics;
- nature and environment;
- humanities;
- pedagogy and didactics;
- politics;
- law;
- programming;
- psychology;
- personal development;
- sociology;
- science and higher education systems;
- arts;
- health.

Development of MOOCs. MOOCs in Poland

The courses meet the expectations not only of students pursuing degrees in particular fields, but also of those who want to develop their passions. They also prove useful in fulfilling the requirements that are necessary for careers in IT, economics, finance, and management. NAVOICA is the ideal platform for the sharing of expertise.

NAVOICA offers courses in the Polish, English, Russian, Swedish, Hungarian, Norwegian, German, and Ukrainian languages.

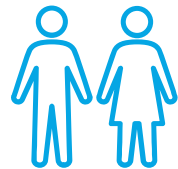
Due to the fact that Poland, in 2022, became the host country of a large number of Ukrainian refugees, NAVOICA has released free courses to help our neighbours integrate with local communities and to better understand Polish reality, culture, and language.

Development of MOOCs. MOOCs in Poland

Higher education institutions, such as the Cracow University of Technology, Bialystok University of Technology, the University of Szczecin, the University of Silesia in Katowice, and Adam Mickiewicz University in Poznań, as well as numerous nongovernmental organisations that had reposed trust in NAVOICA's virtual environment, used the platform to their advantage during the abrupt changes to the digital world and education caused by the COVID–19 pandemic.

During that difficult period, academic teachers sought online education solutions, identified potential problems with remote education, familiarised themselves with tools and techniques, and came to understand the role of collaboration and experience sharing, which has led to the increased popularity of MOOCs in Poland.

Number of registered users



In May 2020
12 639

In May 2023
101 428

Number of issued certificates



In May 2020
3 516

In May 2023
67 090



MOOC Opportunities. Business Context

MOOC Opportunities. Business Context

The subject matter of many courses on NAVOICA not only caters to students of a particular field or those who simply want to pursue their interests, but also meets current requirements in job listings for positions in the IT sector and other industries, such as economics, finance, and management.

In terms of industry-specific issues, there is an opportunity for the phenomenon of sharing specialized knowledge on the platform.

Currently (as of May, 2023), the platform offers many interesting courses in both Polish and English in the fields of:



computer science

27 courses



Programming

16 courses



business and management

36 courses



economics and finance

16 courses

MOOC Opportunities. Business Context

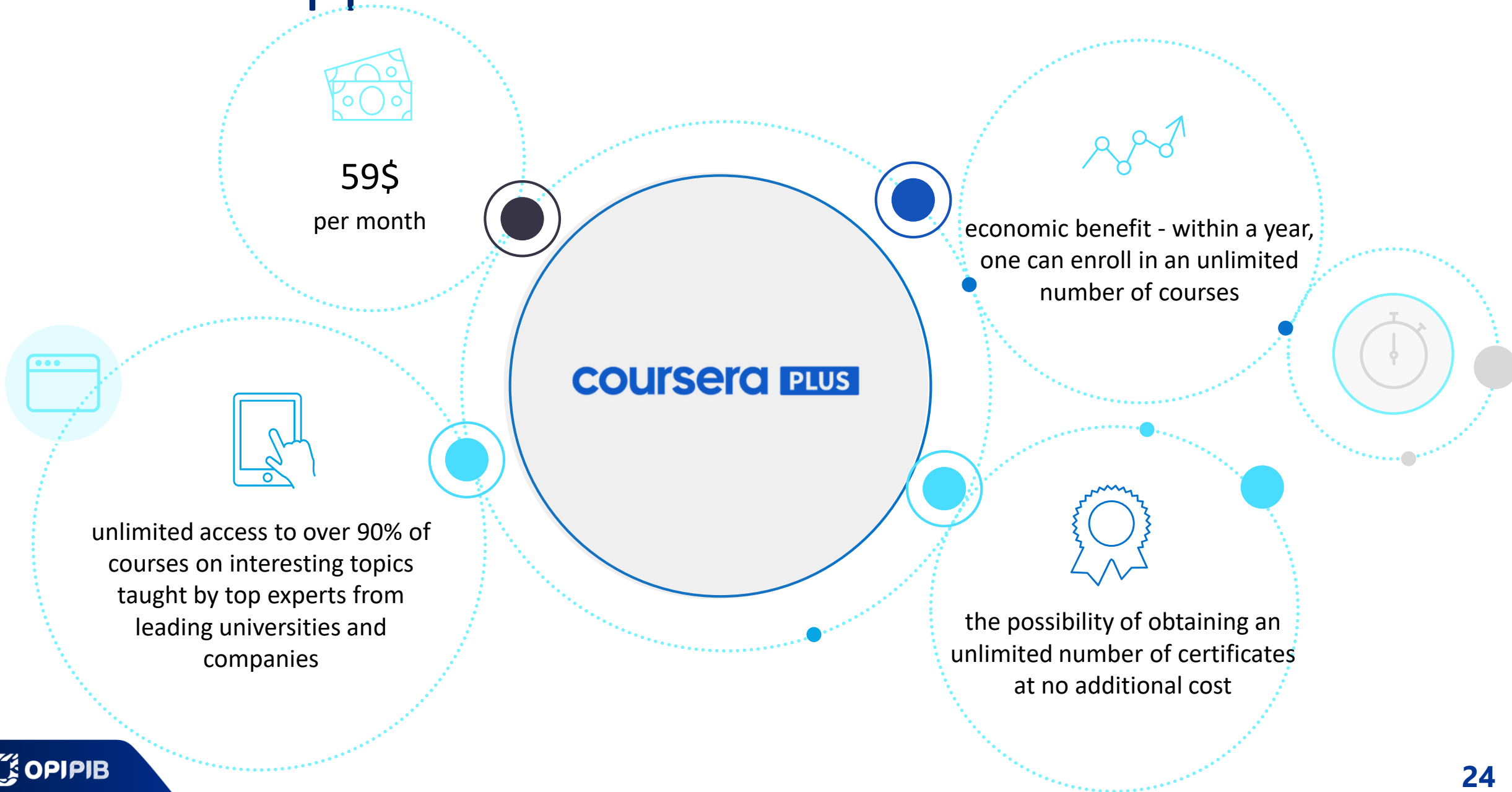


Upon completion of a course, participants receive a certificate of acquired skills (signed by the course author and the logo of the university/institution organizing the course), which they can then share on social media (LinkedIn), attach to their CV, or present at a job interview, thereby increasing their chances of employment.

MOOC Opportunities. Business Context

- Many foreign platforms, such as Coursera, Edx, and FutureLearn, operate not only on an academic level but also on a business model. They offer paid access to industry-specific MOOC courses under subscription plans for companies, which contradicts the massiveness and openness that MOOCs are so emphatically known for. The benefits of the purchased subscription become a privilege only for the company's employees.

MOOC Opportunities. Business Context



MOOC Opportunities. Business Context

Paid subscriptions are very beneficial for companies. Expert-level knowledge is concentrated in one place, which employees can simultaneously access (if the customer is a corporation, several thousand users may be registered).

Such a solution is financially profitable - it eliminates the need to organize on-site training, and employees can improve their qualifications remotely, at their own pace and from any location.

An additional benefit for businesses provided by access to the platform is its functionality for reporting users' activity, engagement, and achievements. Employers can quickly download files with selected data in Excel format.

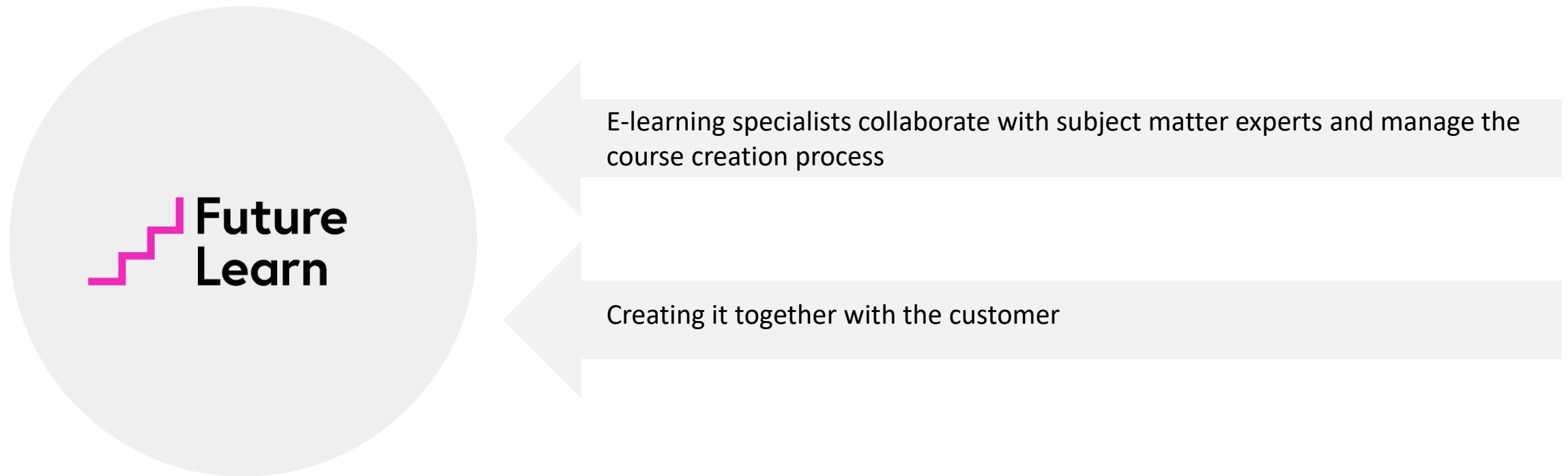
MOOC Opportunities. Business Context

Another example of a business model is the Udemy platform (Udemy Business), which, in addition to subscription services, also encourages companies to publish their own courses. As a result, entities deciding to publish materials in the form of MOOCs gain exceptional visibility for their brand in the eyes of business recipients, as well as an additional source of income.



MOOC Opportunities. Business Context

Another business direction is a personalized approach to the customer, which means creating a MOOC course on demand that meets the needs and budgetary possibilities of the company.



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Summary

Summary

To conclude, e-learning courses can be considered MOOCs only if they meet all of the following conditions:

- 1) course materials must be of expert quality;
- 2) courses must be available globally (except for MOOCs in the business sphere) due to the specific environment;
- 3) the course structure must enable the course to supplement university classes and specialist corporate courses;
- 4) completion certificates must be issued to course participants.

It should be remembered, however, that this definition is subject to change due to the constantly-evolving nature of online education and to dynamic technological advancements.



**OŚRODEK
PRZETWARZANIA
INFORMACJI**
PAŃSTWOWY INSTYTUT BADAWCZY

Thank you for your attention

National Information Processing Institute
National Research Institute
al. Niepodległości 188 B
00-608 Warsaw

tel.: +48 22 570 14 00
fax: +48 22 825 33 19
e-mail: opi@opi.org.pl
www.opi.org.pl