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FORECASTING MARKETING TRENDS OF DISTANCE E-LEARNING

ПРОГНОЗУВАННЯ МАРКЕТИНГОВИХ ТРЕНДІВ ДИСТАНЦІЙНОГО
НАВЧАННЯ

Under the conditions of information society, the digitalization of education is forming a market of distance e-learning courses. The importance of marketing forecasting is increasing for this market. In contrast to the common thought of lack of skills among young people through distance e-learning during the pandemic of COVID-19, the article highlights lack of the marketing approach to the process of the distance e-learning developing and marketing analyzes of global risks dynamics. It is highlighted that under the conditions of "new normality" distance e-learning is not only to ensure the traditional education, but also to be integrated to the international distance e-learning markets. Some future trends and effective marketing tools were defined in the article for this market, in particular absence of home tasks, integrations with Artificial Intelligence, increasing importance of video-content and so on. Proposed recommendations will ensure future commercialization of the Ukrainian distance e-learning courses and their integration into the global market.

Keywords: digitalization of education, global risks, information society, marketing tools, e-learning commercialization, distance courses.

В умовах інформаційного суспільства діджиталізація освіти виокремлює і формує ринок дистанційних курсів, що підвищує актуальність прогнозування його маркетингових перспектив та виокремлення ефективних маркетингових інструментів. На противагу поширеній у світі точці зору про нестачу сформованих навичок серед молоді саме у наслідок вимушеного під час пандемії COVID-19 переходу традиційної форми навчання на дистанційну, стаття надає аргументи, що справжні причини саме таких негативних наслідків пандемії крилися не у самій формі навчання, а з маркетингової точки зору, недостатньо масової готовності дистанційних курсів, як інноваційної для освітнього ринка послуги, до їх ефективного використання споживачами. Це відбулося через нехтування глобальною традиційною системою освіти аналізу низки глобальних ризиків, недостатній завчасний розвиток дистанційної освіти і підготовки до миттєвого переключення на неї з традиційної форми. У статті підкреслено, що кризові явища стають синхронними та повсякденними, що перетворює їх на «нову нормальність». У цих умовах у статті прогнозується дистанційній освіті роль не тільки інструменту пом'якшення глобальних ризиків і страхування традиційної освіти у період криз, але й відокремленого та перспективного ринку. Зокрема зазначено, що на теперішньому етапі формування ринку розробникам дистанційних курсів доцільно приділити особливу увагу товарній якості і структурі самих дистанційних курсів. Виходячи з актуальних технологій, у статті виокремлені маркетингові тренди і маркетингові інструменти ринку дистанційного навчання, а саме відсутність традиційних домашніх завдань, інтеграція технологій Штучного Інтелекту, важливість створення і монтаж відеоконтенту як у вигляді стрімів, так й асинхронних записів, наявність субтитрів. Підкреслено цінність особистості лектора, у тому числі з психологічної точки зору. Впровадження запропонованих маркетингових інструментів розробниками дистанційних курсів сприятиме подальшій комерціалізації дистанційних курсів і подальшій їх інтеграції на міжнародні ринки.

Ключові слова: глобальні ризики, інформаційне суспільство, діджиталізація освіти, маркетингові інструменти, комерціалізація, дистанційні курси.

Problem statement. By 2000s the world has started to talk seriously about the information society and importance of the digitalization various processes, in particularly the digitalization of education. For example, since 2008 Igor Sikorsky Kyiv Polytechnic Institute has launched various

professional development programs for the digitalization of education process. The annual conference "Moodle Moot Ukraine" formed the Ukrainian scientific community of distance course developers and integrated them into the international Moodle community [1]. The digitalization of

education is a part of the Ukrainian government program as the part of the information society development. But only the pandemic of the coronavirus disease initially and then War in Ukraine have turned into powerful catalysts for accelerating the digitalization of education, especially in Ukraine. All these cases have shown actually why education has to be digitalized. First of all it is to ensure uncertainty and possible extreme challenges and risks humankind will face with in the future.

Analysis of recent studies and publications. Since 2020 the number of scientific publications about distance e-learning has rapidly increased due to the pandemic in the world and, in particular later in Ukraine through war. There are many such kind publications by Scherbyna O., Kukharenko V., Malukova I., Banyoi V., Kharkivska O., Shkurko H., Yatskiv M., Fülöp M., Breaz T., Topor I., Ionescu C., Dragolea L., Bergene A., Wollscheid S., Gjerustad C. and many others. Most of them are the result of the practical experience of implementing different e-learning tools into the educational process of universities, institutes, including studying and comparing various e-learning platforms and applications (Zoom, Moodle, Google Meets, Google Classroom, Telegram, etc.), forms of students activities (watching of lectures, assignments, quizzes, etc.), synchronic and asynchronous ways of e-learning communications between teachers and students, discussions about pedagogical problems and so on.

Most of the authors consider about distance e-learning as the part of the traditional form of education or its replacement during crises. There is not a common singular approach to e-learning in Ukraine as a startup-market that can be effectively commercialized and the number of such kind of publication is not enough. It needs integration with effective marketing tools and realizing marketing prospective of it in the future.

Formulating the purposes of the article. Statement of the aim is to forecast and define main prospective marketing trends and effective marketing tools for the distance e-learning development.

Methodology. The methods of the system analysis, analysis and synthesis, the methods of the historical analogies are used in the article.

Presentation of the main research material. It is considered that COVID-19 has disrupted education systems around the world [2; 3]. On Figure 1 the increasing dynamic of the share of 10-year-old children who cannot read and understand a simple text is shown.

Such kind of consequences of the coronavirus pandemic will be felt and reflected on all spheres of humankind activities for years because the educational gap has been emerging among the entire generation of young people during 2020–2022. On the other hand lack of basic reading and writing skills in 2022 demonstrated the fact that the worldwide education system had not been ready for challenges in 2020. Although the pandemic was predicted by the global risks some years before [4] these global risks had not been mitigated by the educational system in time enough. If the global risks have not been mitigated previously, they turn into topical problems for humankind to be resolved in the long-termed future, much later (at least 3-5 years) than the risks were predicted.

For example, in 2023 the pandemic status of COVID-19 has been canceled by the World Health Organization and the world educational system is trying to return to its traditional form. But the global risks interconnection map of 2020 (Figure 2) has already defined next most influential global risks [5].

Among them there are climate action failure, social instability, extreme weather, food crises, governance failure and involuntary migration, critical infrastructure failure, cyberattacks. They can turn into next reasons for humankind to switch to the remote mode in education again in 2023 and later.

During 2020–2023 the remote e-learning mode scaled up not only in education but also through most fields of economy in the global world. Humankind needed to implement or at least try this tool synchronic all over the world for surviving under the conditions of the pandemic and later the war in Ukraine. Such experience made it possible for various national economies to learn how to be self-sufficient and independent from such global risks as the coronavirus disease, wars and other catastrophes. This way makes it possible to switch to the remote mode at the local level quicker and more effective than before and the edu-

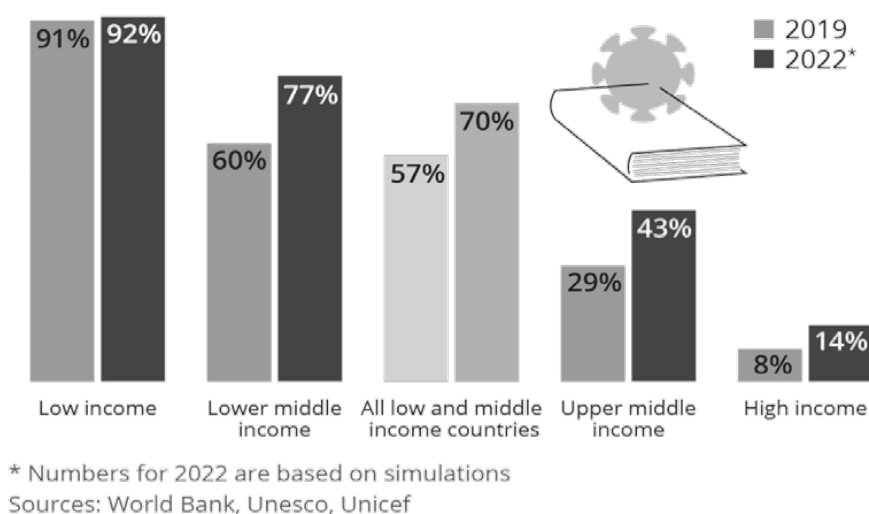


Figure 1. Global Increasing in Learning Poverty through COVID-19

Source: [2]

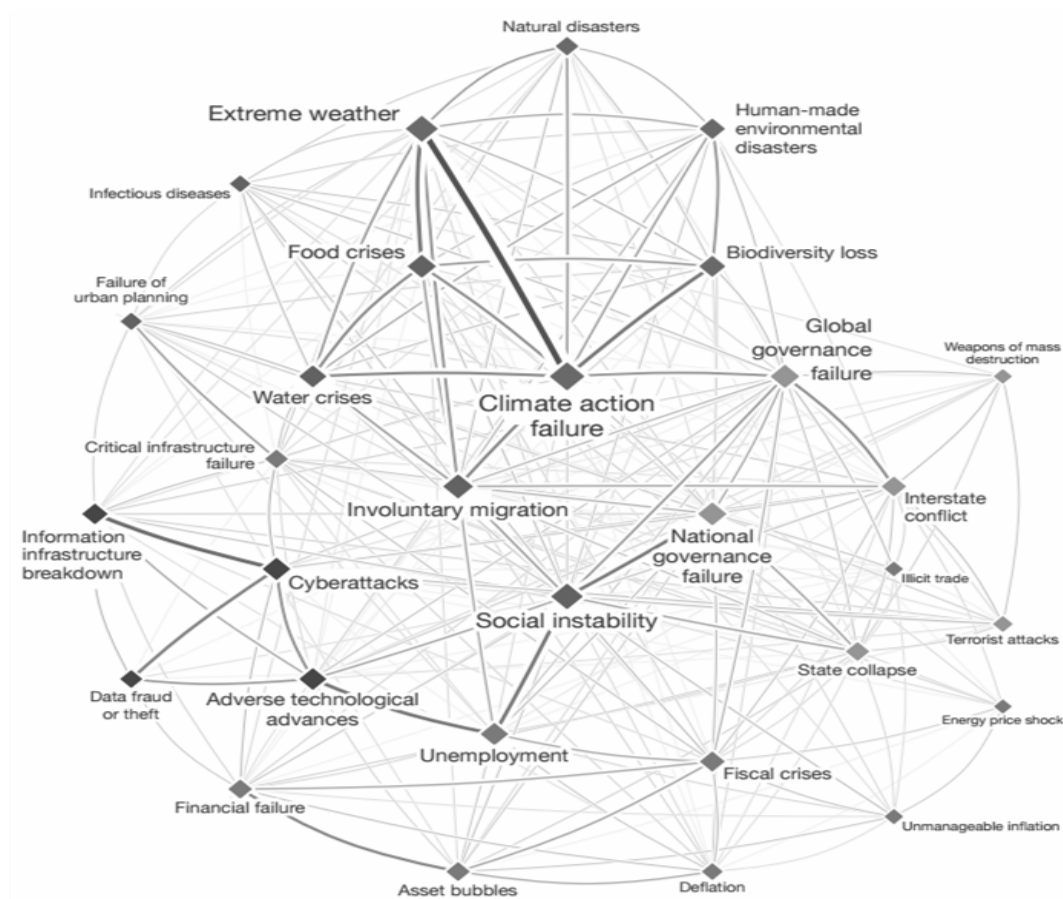


Figure 2. The global risks interconnection map of 2020

Source: [5]

cation system has to be ready to insure future situations of new challenges. In 2023 most experts continue to highlight emerging and developing of various next global risks and the great uncertainty again (Figure 3) [6; 7].

As we can see, the most significant risks associates with erosion of social cohesion, state collapse, collapse of a systemically important supply chain, then cost-of living crisis, interstate conflict, geoeconomic confrontation, large-scale involuntary migration, collapse or lack of public infrastructure and services. Moreover, the main feature of this year forecast is the fact that all these different crises will be emerging simultaneously. Humankind needs a lot of resources, including time, to mitigate these risks enough and prepare for these challenges in time.

Such kind of crises trends turns into the "new normality era" [8; 9]. The term of "new normality" appears in recent scientific publications very often. Initially this term was implemented to education and emergency of online education (EoE), but later it started to be used also for other economic branches and various activities. The new normality means "a way in the post COVID-19 age which will be different from the way was commonly practiced in the pre-COVID-19 days" [10]. In addition to the various crises the new normality also associates with uncertainty and assumes necessary of the future generations increasingly to accept and implement digitalization and other innovative technologies for ensuring the long-term sustainability. But this is also a traditional requirement of the intersection of

the information society, technogenic society and the previous industrial society [11]. Therefore, in a broad sense, the new normality is a set of innovative standards, changed and formed by the conjuncture of the intersection of three economic eras (industrial era, information era and technogenic era) and their simultaneously existence.

For example, this conjuncture of the new normality means that distance e-learning has to be considered not only as the tool of replacing the traditional form of education for some extreme conditions only but it also turns into its "normal" daily part. Moreover, recent extreme conditions (extreme weather, the COVID-19 pandemic, War in Ukraine) turned into effective marketing tools of the distance e-learning promotion campaign among entities of the educational system and accelerated the process of its accepting by them. Most participants of the educational system realized most important strengths and opportunities of distance e-learning education such as economy of time, money, emotions, flexibility, adaptation and availability distance e-learning courses to their participants at any time, ensuring their independence from externalities and so on. Many resent research highlight this innovative trend (for example, see [12]). This means that the market of distance e-learning has emerged in Ukraine and in the global world and it will go on.

It is a similar scenario when innovative goods enter the markets. This trend assumes that distance e-learning courses have to be improved by the progressive innova-

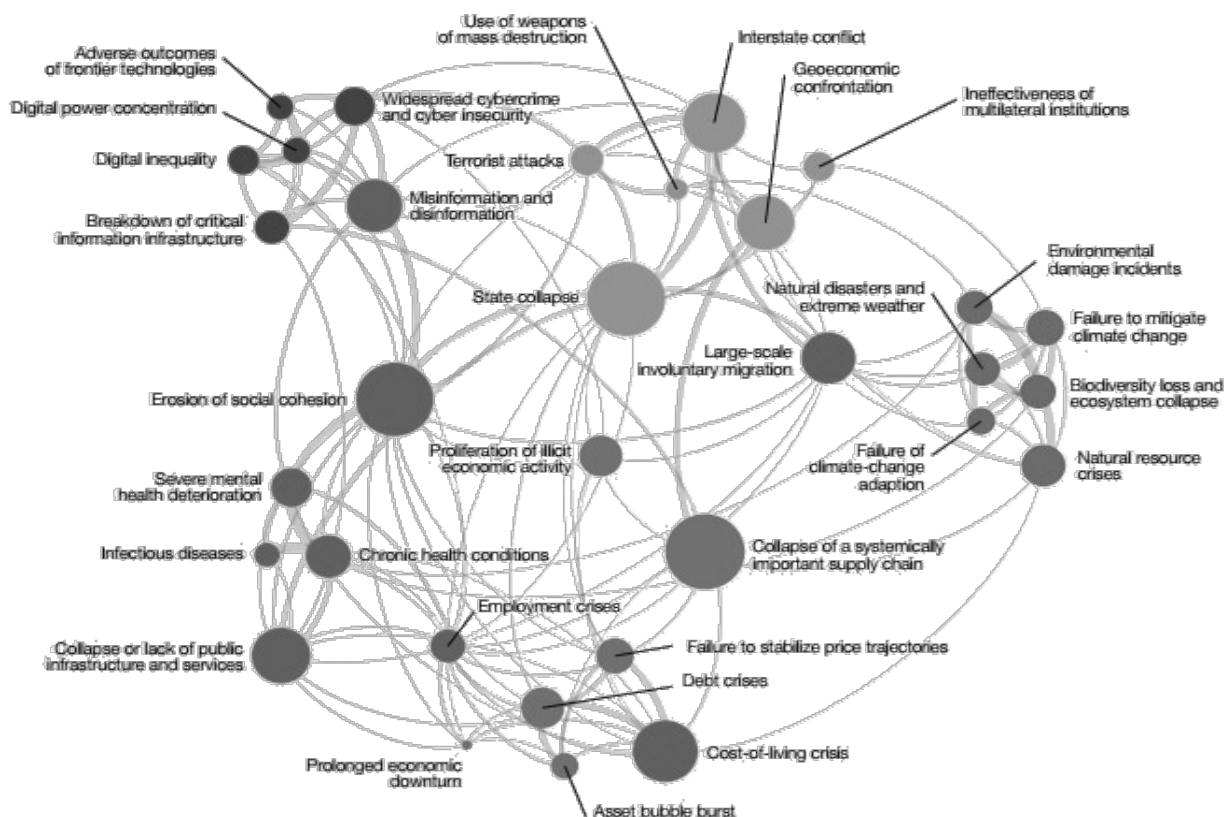


Figure 3. The global risks interconnection map of 2020

Source: [7]

tions and be matched the requirements of the contemporary life. For example, the driving forces of the future progressive innovations are:

- 1) the rise of Artificial Intelligence (AI);
- 2) the accelerating of global connectivity to mitigate the global risk of erosion of social cohesion;
- 3) the convergence of the physical, digital and biological worlds [13].

These innovations will reflect on trends of the distance e-learning market. This means that e-learning developers have to be ready to implement these innovative technologies in their courses in the recent future as soon as possible.

On the basis of these three driving technological forces there are two important conclusions and marketing research results which have already emerged in various distance e-learning programs in the different countries in the world. The first one is very controversial because it corresponds with home tasks. Humankind has already faced with a great challenge of the information society that corresponds with ultimate shortage of time as the main economic value of the information society. In contrast to the fact that information is an unlimited resource of the information society and this fact destroys the traditional principles of the industrial society economy, time remains the only one resource that is limited under conditions of information society. Therefore even under the innovative conditions of the information society time can be commercialized quite well with the traditional economic principles.

It is natural that e-learning developers try to transfer and adopt home tasks, as the important part of traditional education to the features of information society. But online

time, been also integrated into the information society, assumes that it is additional to participants' offline lives and it is different of its previous offline version for industrial society. For example, a traditional lesson lasts 45 minutes. A distance e-learning lesson can also last 45 minutes, in particular if a student is watching an educational stream from its beginning to the end on Zoom, Google meet or Microsoft Team. But also this lesson can last during 1 minute, when the student doesn't follow the material of the lesson because he or she needs to switch attention on other aspects of his or her offline life. This lesson can even last for 4 hours or even more for some participants, in particular when the lesson has been recorded and the students want to watch it some times or they are able only to watch the video intermittently over time due to other pressing offline matters. That is why students and teachers work at night much more than it has been before. Actually, if the workload remains the same, it provokes students to use Artificial Intelligence (AI) tools to accelerate and replace them in this process.

E-learning developers shouldn't fight against AI but they have to learn how to use it in teacher's professional activity effective as soon as possible. On the one hand teachers will have to refresh assignments and make them much more sophisticated for AI, and make it possible for students to use AI for resolving some intermediate tasks quicker. On the other hand the other possible and effective solution of this controversial problem assumes using online-seminar rooms for small groups of students. Students from different countries have to have one mutual assignment during an online meeting (not at home) and

need to achieve the same goals in limited time. This way helps to motivate students to stay tuned and activated, because a teacher may ask students something at any time. This way also develops some soft skills like teambuilding, discovering multicultural moments and helps to accelerate of global connectivity to mitigate the global risk of erosion of social cohesion. In contrast to home tasks the creating quizzes can be proposed for students. Assignments to create a quiz by students on the basis of lectures motivate them much.

The second trend corresponds with the fact that the information society proposes users different platforms and digital tools for e-learning. In accordance with a recent comparison Google Classroom with Moodle, it is considered that students prefer Google Classrooms over Moodle due to its simplicity, convenience [14]. In contrast to it, Moodle is wider implemented and preferred by the distance e-learning courses developers. Moodle is a platform that makes it possible for e-learning developers to implement, adopt all digital tools and also concentrate all information about a particular discipline (lectures, assignments, quizzes, messages and links to online meetings) in one place. It has to be highlighted that this drive space belongs to the e-learning developer only. It is important when cyberattacks and geoeconomic confrontation are the global risks for the recent future (see Figure 3). Under the conditions of information society distance e-learning developers do approach to simplify information chaos with the opportunity to concentrate all information in one place that belongs to them. And even if some students miss most of online streams, this platform compensates them all effectively.

The Ukrainian experience of distance e-learning shown, these students' stories were very different. But lecturers might not know the real reasons why a student could be absent or didn't complete an assignment in time. For example, the current ordinary Ukrainian conditions or "new normality" of the spring academic semester in Kyiv consisted of blackouts (power outages), internet and other communication disruptions, air raid sirens, proceeding to the shelters, rocket and drone attacks, sleepless nights and fulltime working days after them. And most other students also faced additionally with other life-threatening and difficult situations. These stories are really deeply moving. Someone had to take their pets to the veterinarian to survive, some other rescued them. Many students became volunteers. Others faced with unexpected illnesses, shocks, fractures. Some of them ended up in the hospital, some persons were forced to be far away from home, some of them had lost it, and some lost their loved ones. There were students who are currently on the front lines. These are very powerful constraints and incredible trials.

Day-to-day life has changed in Ukraine too much, but today the Ukrainian e-learning education system turns into the exemplified way of how to survive, live and learn for all other countries in the world because the world is globalized too much and the "butterfly effect" can scale up all over the world. Ukrainians have learnt how to adopt and ensure such kind of situations. It also turned into the main

competitive advantage of the Ukrainian education specialists to work under the extreme conditions in the future.

That is why it is so important to record streams and be open mind to possible students' problems. Actually most lecturers do not like to be recorded. But lecturers have to understand correctly what their real competitive advantages and their treasure for students consist of. And under the conditions of information society it is not only about theoretical knowledge or practical experience of some teacher. Mental health is very important and such way of communication corresponds with the third driving force, the convergence physical, digital and biological worlds.

In accordance with some recent investigations [15], there is a preference among students for live online lectures (streams) over recorded. Through all recent challenges, global risks of erosion of social cohesion, close integration technologies into humans' life and a trend of replacing people, actually they are trying instinctively to save a traditional way of communications because this conjuncture leads people to feel themselves vulnerable. It can also be explained by the Google-phenomenon that assumes that people don't try to memorize information available on internet [16]. On the other hand, as it has been mentioned above, asynchronous online time may be much longer than the same synchronic online time and student's participation in the live online meeting. Therefore a student has an opportunity to be present, he or she prefer streams more. But in any case these streams have to be recorded and then be available for students.

Also distance e-learning developers have to make subtitles to e-learning videos. It is never known for sure who exactly watch them and under what kind of conditions. Some watchers may not be able to hear us. The various neural networks make subtitles quickly and easy.

Accelerating of the world and innovative knowledge development makes most of courses to be dated. On the one hand this means that every course needs to be updated iteratively by its developer very often. This fact ensures the author's rights of the developer and the consumers' demand on the contemporary product. On the other hand an outdated course will turn into advertising of its developer if it is available en masse. The developer may open some parts of the author's distance e-learning course for free deliberately and makes it to be impossible for unruly and unscrupulous competitors to earn profits illicitly by using this course or some materials from it.

Conclusions. The distance e-learning developers have to realize that the digitalization of education is an interdisciplinary process which turns into production of technological movies and also reality shows about innovative science. Lecturers have to be ready to play various different roles not teachers just, but also movie stars, bloggers, directors, designers, sound producers and so on and turn into multi-tool specialists. Therefore they have to ensure their own versatile and well-rounded development by different training programs all-life-long.

Proposed approach to the distance e-learning development will ensure future commercialization of the Ukrainian courses and their integration into the global e-learning market.

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