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AGILE-MANAGEMENT 3.0 CONCEPT AS A FACTOR OF TECHNOLOGICAL PROGRESS DEVELOPMENT IN THE DIGITAL SOCIETY

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Annotation. The relevance of research into the philosophy of Agile Management 3.0 as a factor of the advancement of technological development in a digital society is of great novelty and great practical importance as it promotes technological advancement in a digital society. The purpose of the research is to formulate the concept of Agile Management 3.0 as a factor of the development of technological progress in a digital society. Formulation of research objectives: to identify the value of Agile management for training coaches; track the evolution of on-demand service platforms; expose the activities of next-generation technology companies; explore the evolution of countries into an information or digital society; to substantiate the directions of value creation of industries and innovations on the basis of digital technologies. Research Methods: Theory and methodology of complexity, based on synergistic principles of self-organization, were used to solve new problems. Today there is a modern evolution from crowdsourcing to crimesorsing. Crowdsourcing started out as a legitimate tool for increasing complex production and research challenges Analysis of the latest research and publications on the subject. We are based on O'Reilly Tim's "Who knows what the future will be" (K., 2018, 448 p.); Ross A. "The Industries of the Future" (K., 2017, 320 p.); Brynjolfsson E., McAfee E. «The Second Machine Age: Work, Progress and Prosperity in a Time of Brilliant Technologies» (Kyiv, 2012, 236 p.). Goodman Mark "Crimes of the Future" (Kharkiv, 2019, 592 pp.). The positive aspects of this technological evolution are undeniable, but there is a downside to this interconnectedness - human and engineering, human and machine, human and digital world. Conclusion - Provided that Agile Management 3.0 is properly used, its principles will help improve efficiency, functionality, optimality, deliver brilliant results, and foster change-oriented development, high levels of employee competence, effective management decision-making, predictability, and managing organizational change. as a whole constitutes the concept of the Agile management philosophy. Practical recommendations have been developed to continually analyze the downside of technological innovation and the implications that threaten our interconnected and endlessly vulnerable world.

Keywords: Agile management 3.0 concept, technological progress, digital society, platform evolution, value formation and innovation

Formulation of the problem in general form and its connection with important scientific and practical tasks

Management 3.0 as a model of flexible adaptive management is a model of managing complex social

systems representing complex organisms engaged in software development using flexible approaches. However, the complex and multilayered virtual spaces are today, in the near future hardware software is being upgraded and a

platform as High Fidelity will provide us with a virtual next-generation world - potentially no less large and complicated than today's real world. The Agile Management 3.0 model incorporates the following conceptual approaches:

1. Set limits.
2. Develop competencies.
3. Empower teams.
4. To grow the structure.
5. Add energy to people.
6. To improve the situation in the organization [1].

Analysis of recent research and publications on the subject. We are based on O'Reilly Tim's «Who knows what the future will be» (K., 2018, 448 p.); Ross A. «The Industries of the Future» (K., 2017, 320 p.); Brynjolfsson E., McAfee E. «The Second Machine Age: Work, Progress and Prosperity in a Time of Brilliant Technologies» (Kyiv, 2012, 236 p.). Goodman Mark «Crimes of the Future» (Kharkiv, 2019, 592 pp.).

Highlighting the unresolved parts of the common problem that are addressed in the topic

To understand the organization in complex problems, a more holistic approach is needed to identify complex social systems. This approach offers a holistic view on the interactions occurring in groups of people and is seen primarily as a reaction against the bureaucratic nature of the formal approaches at the time that were too «orderly». Management, coaching, mentoring as components of flexible and responsive public administration and administration are aimed at personal

growth of employees and represent the conceptual core of the Agile-management concept.

In our view, the problem that remains is the evolution of platforms in the digital society as a factor in technological progress. Due to the fact that the benefits of a business model like Uber and Lyft are being actively discussed in society, the position of well-known networks has strengthened. The development of the Internet has given them even more power, which has made it convenient to communicate with all the customers without geographical restrictions. Everything has changed because people now order the delivery of any item, anywhere, just now, on the day of the order - all in one click. Online retailers like Amazon offer a huge range of products, creating an open market where virtually anyone can work [2].

The purpose of the research is to formulate the concept of Agile Management 3.0 as a factor of the development of technological progress in a digital society.

Formation of research goals:

- Identify the value of Agile management for training employees as coaches;
- to follow the evolution of on-demand service platforms;
- to reveal the activities of the new generation of companies using technologies;
- to follow the evolution of countries into an information or digital society;
- to substantiate the directions of value creation of industries and

innovations on the basis of digital technologies.

Outline of the main research material with justification of the obtained results.

1. The value of Agile management for training employees as coaches. Managers can not remain indifferent to the professional level, knowledge and experience of subordinates, their training and level of discipline. It seems that managers should become personal coaches as well. Part of the responsibilities of a coaching supervisor is to enhance their skills, effectiveness, development of interpersonal communication skills, or purely technical skills required to work and form teams. A group of the most reputable representatives of the Agile movement created the Agile Alliance, a non-profit organization that promotes flexible approaches worldwide [1]. A whole new ecosystem has emerged, consisting of conferences, consultants, books and magazines. First of all, Agile recognizes people to be unique and does not treat them as interchangeable resources. It is also determined that the core value is the interaction and cooperation between people, not their individual competencies. This approach involves working in small cross-functional teams that bring together people who perform different roles (developers, designers, testers). The team needs to organize itself, which means no methods or workflows from outside. The team works with the customer, keeping up-to-date with common priorities, simplicity becomes the key to the successful design of each of the

functionalities. The focus of Agile management is the technical excellence of the project. Agile management followers believe that tools are one of the factors that affect the success of a project. Teams need motivation, many supporters call for a supportive "environment", as well as communication and collaboration [2]. Functionality is recognized as a need for continuous improvement, during which development processes are subject to regular re-evaluation and readjustment through retrospective reflection. The presence of internal conflict is a natural property of complex systems and a prerequisite for creativity and innovation. One of the competitors of Agile-management is cost-effective software development, which transfers the ideas of economical production to the sphere of software development. The seven principles of cost-effective manufacturing are based on 14 «Dao Toyota» principles («Toyota» management philosophies and 14 management principles by E. Deming).

From a management point of view, cost-effective software development has made a significant contribution to the development of the Agile-management world, focusing on boosting cost-effectiveness and optimizing systems as a whole. Although cost-effective software methods emerged several years later than Agile management, they are on par with the number of consultants, coaches, professional consortia, and conferences held. A major role was played by the movement for programming

proficiency, the basic document of which has become a manifestation for the defense of programming proficiency, which is said to be extending the Agile manifest and challenging it. Proponents of this movement believe that software developers are not engineers but craftsmen. The software model to be used in public management and administration contains five levels of process maturity in 22 process areas and aims to produce optimization recommendations. However, this model indicates in which process areas optimization is possible, it is compatible with flexible approaches, since they complement it by providing recommendations on specific ways to optimize processes. One example of optimization is the Rational Unified Process, which was developed in 1987 and provides a description of standard management methods that can be adapted to public management and administration using modifications such as Flexible Unified Process, Open Unified Process, Significant Flexible Process, which, if used properly, contribute to efficiency, functionality, optimality, produce brilliant results and contribute to change-oriented development, foster high levels of employee competence, effective management decision making, predictability and management of organizational change, which is the whole concept behind the Agile management philosophy.

2. The evolution of on-demand service delivery platforms. In an information society environment, the

evolution of on-demand platform services like Uber and Lyft is the epitome of a rapidly evolving transformation business. The retail market has evolved: from chain-stores to internet-retailers such as Amazon, who have driven small-scale local businesses (that is, selling products through retail stores). Due to the cost-effectiveness of online commerce, prices have decreased, choice has increased, the number of users has increased, which in turn has provided better purchasing power of large retail chains and allowed them to further reduce prices and outstrip competitors [1, p. 137]. Amazon organizes employees, suppliers and customers in a holistic system where buyers evaluate products and write reviews, the program allows you to do everything yourself. Each Amazon feature is software-based, which organizes employees, suppliers, and customers into a single system, and each corporation represents a hybrid of human and human-controlled machines to augment reality. Walmart is the most efficient offline retailer with 2.32 million employees providing \$ 482 billion in sales, which means approximately \$ 219,000 revenue per employee. Amazon accounts for 341,000 people who generate \$ 136 billion in sales [1, 119]. New generation companies, such as Uber and Lyft, can be called network platforms that provide services in the real world, where instead of intermediaries, there are programs that provide additional resources [3].

3. The activities of new generation of

technology companies significantly reduce the huge hierarchical system of managers. Instead, a more or less peer-to-peer network based on algorithms, reputation systems and market dynamics emerges. These companies rely on their own network of clients to oversee the quality of service. Lyft appeals to its highest rated drivers when hiring new employees. Therefore, companies render their once important function to outsourcing. Today there is a modern evolution from crowdsourcing to crimesourcing. Crowdsourcing started out as a legitimate tool to increase complex production and research challenges. The term "crowdsourcing" was first used in an article written in 2006 by Jeff Howe for Wired magazine, which was defined as "outsourcing a specific task to a large and uncertain group of people through open competition." Although hundreds of examples of crowdsourcing have been reported to have produced excellent results, this method has also been used for criminal purposes. Cybercrime corporations is a business and, moreover, super-profitable. Among the newest methods there is freemium, (according to this pricing strategy the client can get the basic service for free or pay extra for the premium version, that is for the extension of the package of services); gamification, crowdsourcing, crowdfunding, reputation enhancement, a logistic production model «just in time», online training, creating teams for distributed project management in the pursuit of «long tail» of victims worldwide [4].

4. Global criminal syndicates such as Innovative Marketing, based in Kiev, have earned almost half a billion untaxed dollars in the last three years alone. These criminals operate according to «Moore's Law», fully integrated into the network and capable of using or breaking any technology of their own accord. They are doing it almost with impunity, and their actions are increasingly threatening the world, which is increasingly dependent on the functioning of technology. The possibilities of a criminal underground are growing exponentially. This thriving super-organism lives and is controlled from the deepest corners of the Internet - the «dark web», the digital underground and the governing center that brings together numerous cybercriminal organizations.

In today's digital society, those who have become more open-minded and joined the global economy are benefitting, as many jobs have emerged due to the relatively low cost of labor. Instead, those people lost who lived in high-cost markets and have not been able to adapt to the pace of technological change and the demands of the globalized world. The next generation of robot programs have been launched in South Korea, banking tools have been developed in parts of Africa where there are no banks, laser technology has been used to increase productivity in New Zealand, and Ukrainian students are turning sign language into a spoken language. The information technologies that shape our present existence contribute to the

introduction of innovative technologies. India has launched a series of economic reforms aimed at liberalization - bringing more than a billion people to the global economy. China has revised its economic model, creating a new form of hybrid capitalism and drawing more than half a billion people out of poverty. Together with the World Wide Web, web browsers, search engines and online commerce have come into our lives, Amazon has started to work, more communication opportunities have been created, recreation and entertainment have become more affordable, healthier food, safer cars and progress in the medical field, which make it possible to live longer [1, p. 11-12].

5. The evolution of countries into an information or digital society. At the same time, the countries have undergone many changes - both positive and negative, and all changes will fade in comparison to what will happen when all the countries of our planet fall into the next wave of innovation. Any progress that you can imagine in such diverse fields of activity as biology, medicine, finance, military operations and agriculture is now the subject of careful study, development and commercialization. There are also more and more places where innovation becomes a commercial product. Outstanding technological breakthroughs in the United States are no longer confined to the Silicon Valley, in addition, such breakthroughs are now becoming not only in the United States. There are encouraging signs that Indonesia,

Brazil, India and China - countries with a combined population of three billion - are beginning to produce significant innovations that cultivate the value of the digital society, following years of economic growth driven by cheap labor. Gradually, Latin American countries of the Pacific zone - Chile, Peru, Colombia, Mexico - forming an understanding of how to position themselves in the world economy. In European markets, known for being the most skilled workforce, startups are emerging, and in tiny Estonia, the whole economy seems to be already electronic. Innovation is changing Africa too: people in the Congo refugee camps are using mobile phones, African entrepreneurs are now changing the face of the continent, giving it the impetus for development, creating a new class of competitive business in the world [2].

In the near future, we will see robotic suits that will allow paralyzed people to move, and pharmacological drugs that will overcome certain types of cancer. Computer codes will be used as an international currency and at the same time a weapon that will destroy physical infrastructure elsewhere in the world. Progress and prosperity are not evenly distributed: many people win, some win very substantially, many still do not find their place. If the previous wave of digital innovation and globalization has made it possible for more than a billion people to escape poverty, the next wave will affect the middle class in different parts of the world and threaten many to return to poverty. If

the previous wave has provided an economic boom to entire countries, the next wave will lift up emerging economies and place them in the mainstream while creating challenges for the middle class in most countries of the world. In many societies, the mass is dominated by the feeling that finding a place in the world or succeeding is becoming increasingly difficult [3].

6. Industry and innovation value formation based on digital technologies. The values of industry and digital-based innovation bring hope to life. And a threat. The same trends that unleash unprecedentedly positive trends on people's enrichment and public well-being can open up hackers to hack into your personal information, steal money from your bank account, or rob your home. The computer is able to accelerate the analysis of legal documents, reducing the number of jobs for employees. Social networks open up great opportunities for networking, and at the same time can create new forms of social phobia. Electronic payments make trading easier, but also create space for new forms of fraud.

Qualified criminals can now easily acquire the tools they need to identify system vulnerabilities, steal personal data, hack servers and steal data. Sometimes it is enough just one or two mouseclicks. As a result, the dark web has become a virtual «Crimezon.com», the world's largest online shop where criminals buy the goods they need. You are offered universal shopping, so you can safely leave your card at home and pay with bitcoins. The most popular malware

programs include the following, - from hidden keystrokes to stealing digital encryption certificates required for online banking; falsification of bank accounts and bank transfers; developing an antivirus module program to detect their main rival - Zeus Trojan - on infected computers of users. Detecting the presence of Zeus, SpyEye removed the competitor's software and remained the only piece of malware to work on the computer, - Mark Goodman notes in *The Crime of the Future* [4, p. 311]. At the same time, it should be noted that the Internet of Things has all the potential you need to transform cities into living, breathing ecosystems that will consist of an intelligent environment and related sensors that will greatly improve people's quality of life. In a Utopian vision of smart cities, even garbage cans with built-in sensors will begin to notify the garbage collectors that they are full, and they will immediately send the nearest garbage truck equipped with GPS to empty them. The growing number of "municipal sensor networks" will be able to measure the contamination of individual homes, the quality of the air in a particular neighborhood or the number of pedestrians on a particular street. Improved street lamp sensors will provide the optimum level of lighting according to daytime, season and weather conditions, reducing electricity costs by 30%. So, let's summarize. The values of industry and digital-based innovations have both positive and negative effects. The criminal use of technology is harmful and destructive,

but the whole world is passionate about smart and innovative methods, as the digital society is constantly updating techniques and tools to apply the latest digital technologies in its operations. The technology we introduce into our lives every day - with minimal self-reflection or no thought at all and without testing it - can easily turn against us, so sooner or later we will have to face the technologies that are developing geometrically, creating a real tsunami of threats, capable of destabilizing even global security [5].

Conclusions. In a few years, without much reflection, we have suddenly turned Google from a mere search engine to the force we rely on, receiving instructions, making agendas, using address books, voicemail, making phone calls, watching videos, and immersing ourselves in entertainment. Billions of people have posted the most intimate details of their lives on Facebook and provided social interaction charts to our friends, family and colleagues. We've downloaded billions of apps for everything from banking to cooking to photo archiving. We connect to the Internet through our laptops, mobile phones, iPads, TiVo devices (both a receiver and a digital video recorder

that records HDD transmissions); Apple TV digital media players. The positive aspects of this technological evolution are undeniable, but there is a downside to this interconnectedness - human and engineering, human and machine, human and digital world.

Practical recommendations.

1. Continuously analyze the flip side of technological innovation and the impact it poses on our interconnected and endlessly vulnerable world.

2. As Restricted Artificial Intelligence (AI) becomes more powerful, robots become more autonomous, and AI gradually looms on the horizon, we need to make sure that tomorrow's algorithms are better suited to address programmatic conflicts and moral dilemmas.

3. As the risks of AI are noticeably increasing, many non-core organizations are being created to identify and study them, including the Institute of Humanity within the University of Oxford, Institute for Mechanical Engineering Research, Institute for the Future of Life, Oxford University, Institute for Mechanical Engineering Research, Cambridge Centre for the Study of Existential Risk. Similar centers should be established in Ukraine.

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КОНЦЕПЦІЯ AGILE-МЕНЕДЖМЕНТУ 3.0 ЯК ЧИННИК РОЗВИТКУ ТЕХНОЛОГІЧНОГО ПРОГРЕСУ В УМОВАХ ЦИФРОВОГО СУСПІЛЬСТВА

Анотація. Актуальність дослідження філософії Agile менеджменту 3.0 як чинник розвитку технологічного прогресу в умовах цифрового суспільства має значну новизну та велике практичне значення, тому що вона сприяє технологічному прогресу в умовах цифрового суспільства. Мета дослідження - сформуванню концепцію Agile менеджменту 3.0 як чинник розвитку технологічного прогресу в умовах цифрового суспільства. Формування цілей дослідження: виявити значення Agile-менеджменту для підготовки співробітників у ролі коучів; прослідкувати еволюцію платформ, що надають послуги за запитом; розкрити діяльність компаній нового покоління, що користуються технологіями; дослідити еволюцію країн до інформаційного чи цифрового суспільства; обґрунтувати напрями формування цінностей індустрій та інновацій на основі цифрових технологій. Методи дослідження: для вирішення нових проблем було використано теорію та методологію складності, в основі якої синергетичні принципи самоорганізації. Сьогодні відбувається сучасна еволюція від краудсорсингу до краймсорсингу. Краудсорсинг розпочався як законний інструмент для збільшення складних виробничих і наукових завдань. Аналіз останніх досліджень та публікацій по розглянутому питанню. Ми спираємося на роботи О'Райлі Тіма «Хто знає, яким буде майбутнє» (К., 2018. 448 с.); Ross A. «The industries of the future» (К., 2017, 320 s.); Brynjolfsson E., McAfee E. «The Second Machine Age: Work, Progress and Prosperity in a Time of Brilliant Technologies» (Київ, 2012, 236 s.). Гудмен Марка «Злочини майбутнього» (Харків, 2019, 592 с.). Позитивні аспекти цієї технологічної еволюції не викликають сумнівів, проте існує і зворотна сторона цієї взаємної пов'язаності – людини і техніки, людини і машини, людини і цифрового світу. Висновок - за умови правильного використання Agile менеджменту 3.0, його принципи будуть сприяти підвищенню ефективності, функціональності, оптимальності, давати блискучі результати і сприяти розвитку, налаштованого на зміни, високому рівню компетентності працівників, ефективного прийняттю управлінських рішень, передбачуваності та керування організаційними змінами, що в цілому складає концепцію філософії Agile-менеджменту. Розроблено практичні рекомендації, направлені на ті, що постійно аналізують зворотний бік технологічних інновацій і наслідки, якими вони загрожують нашому взаємопов'язаному й нескінченно уразливому світу.

Ключові слова: концепція Agile-менеджменту 3.0, технологічний прогрес, цифрове суспільство, еволюція платформ, формування цінностей та інновацій

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КОНЦЕПЦИЯ AGILE-МЕНЕДЖМЕНТА 3.0 КАК ФАКТОР РАЗВИТИЯ ТЕХНОЛОГИЧЕСКОГО ПРОГРЕССА В УСЛОВИЯХ ЦИФРОВОГО ОБЩЕСТВА

Аннотация. Актуальность исследования философии Agile-менеджмента 3.0 как фактор развития технологического прогресса в условиях цифрового общества имеет значительную новизну и большое практическое значение, потому что она способствует технологическому прогрессу в условиях цифрового общества. Цель исследования – сформировать концепцию Agile-менеджмента 3.0 как фактор технологического прогресса в условиях цифрового общества. Формирование целей исследования: определить значение Agile-менеджмента для подготовки сотрудников в роли коуч; проследить эволюцию платформ, которые предоставляют услуги согласно спроса; раскрыть деятельность компаний нового поколения, которые пользуются технологиями; исследовать эволюцию стран к информационному и цифровому обществу; обосновать направления формирования ценностей индустрий и инноваций на основе цифровых технологий. Методы исследования: для решения новых проблем было использовано теорию и методологию сложности, в основе которой синергетические принципы самоорганизации. Сегодня происходит современная эволюция от краудсорсинга к краймсорсингу. Краудсорсинг внедрился как законный инструмент для увеличения сложных производственных и научных заданий. Анализ последних исследований и публикаций по рассматриваемому вопросу. Мы опираемся на работы О'Райли Тима «Кто знает, каким будет будущее» (К., 2018. 448 с.); Ross A. «The industrie sof the future» (К., 2017, 320 s.); Brynjolfsson E., McAfee E. «The Second Machine Age: Work, Progress and Prosperity in a Time of Brilliant Technologies» (Kyiv, 2012, 236 s.), Гудмен Марка «Преступления будущего» (Харьков, 2019, 592 с.). Позитивные аспекты этой взаимной связанности технологической эволюции не вызывают сомнений, зато существует и обратная сторона этих процессов - человека и техники, человека и машины, человека и цифрового мира. Вывод – при условии правильного использования Agile менеджмента 3.0 его принципы будут содействовать повышению эффективности, функциональности, оптимальности, давать блестящие результаты и содействовать развитию, направленного на изменения, высокого уровня компетентности работников, эффективного принятия управленческих решений, предвиденности и управления организационными изменениями, что в целом составляет концепцию философии Agile-менеджмента. Разработаны практические рекомендации, направленные на те, которые постоянно анализируют обратную сторону технологических инноваций и последствия, которыми они угрожают нашему взаимосвязанному и нескончаемо уязвимого мира.

Ключевые слова: концепция Agile-менеджмента 3.0, технологический прогресс, цифровое общество, эволюция платформ, формирование ценностей и инноваций.

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