e-mail: irinav.kubareva@gmail.com

Кубарева І.В.
к.е.н., доцент
Кафедра менеджменту,
ДВНЗ «КНЕУ ім. Вадима Гетьмана», Україна
ORCID: 0000-0001-6950-5937

Kubareva I.V.
PhD in Economics, Associate Professor
Management department,
Kyiv National Economic University
named after Vadym Hetman, Ukraine

ОСОБЛИВОСТІ ЗАСТОСУВАННЯ AGILE ПІДХОДУ ДО ПРОЄКТІВ РОЗРОБКИ НОВИХ ОСВІТНІХ ПРОДУКТІВ

FEATURES OF AGILE APPROACH APPLICATION TO PROJECTS OF NEW EDUCATIONAL PRODUCTSDEVELOPMENT

Анотація: Визначено виклики та проблеми розробки нових освітніх продуктів. Обґрунтовано застосування Agile підходу до розробки освітніх продуктів. Запропоновано реалізацію принципів Agile тавизначено їх значення для розробки освітніх продуктів.
Ключові слова: розробка нових освітніх продуктів, Agile підхід, принципи Agile

Summary: Challenges and problems of developing new educational products are identified. The application of Agile approach to the development of educational products is substantiated. The implementation of Agile principles is proposed and their significance for the development of educational products is determined.
Key words: development of new educational products, Agile approach, Agile principles

Contemporary educational environment is in a state of constant changes. These changes are influenced by many factors that come from both the external and internal environment and the subjects of educational services.A particular challenge for educational institutions is the need to respond quickly to changing technologies, concepts, and approaches. This also applies to those who develop new educational products in the field of economics.This means that the disciplines that are part of educational programs must correspond to the modern environment in which enterprises and organizations operate. These requirements apply to both the content and forms of teaching disciplines, the content of curricula, their compliance with business needs.Therefore, the approach to the development and implementation of educational products should ensure continuous improvement and compliance with environmental conditions. Moreover, modern education needs an approach that provides constant contact with the user of educational services and customers of educational competencies and learning outcomes.

Taking into account the problem of the need to create relevant educational products as well as their improvement, it is necessary to consider the feasibility and effectiveness of Agile approaches to the development of educational products, as well as to identifyappropriate tools and features.

Agile approach solves problems to develop right product and to launch this product to the market in time and in accordance with the needs of the target customers. Agile tools such Scrum and Kanban provide the way to implement key Agile values and to perform Agile principles that in turn set up Agile philosophy.

Scrum is an Agile method designed to add energy, focus, clarity,and transparency to project planning and implementation. Today,Scrum is used in small, mid-sized and large software corporationsall over the world [2].

Properly implemented, Scrum will: increase speed of development, align individual and corporate objectives, create a culture driven by performance, support shareholder value creation, achieve stable and consistent communication of performance at all levels, enhance individual development and quality of life [1].

Considering the mentioned advantages of Agile approaches, it is necessary to determine whether their application is appropriate for educational products. It can be defined on the base of Stacey Complexity model [3, 4]. There are two dimensions in these Complexity model. These dimensions are uncertainty of requirements (level of uncertainty of what product you need to create and satisfy requirements of the customers) and uncertainty of technology (the way to create the product). This model defines four types of tasks and one of them are complex tasks that require the Agile approach. Taking into account the variability of the educational environment and the need to update educational products, as well as technological changes in the modern educational process, it is reasonable to assume that the development of a new educational product is a complex task according to the outlinedStacey Complexity model. Thus, Agile approach to the new educational products elaboration is reasonable to apply.

The features of new educational product development with application of Agile approach can be described at the beginningthrough the Agile philosophy defined by four values and

twelve principles [1]. As an example, consider several principles and their significance for the development of educational products (project for the development of a new discipline).

Principle 1. The highest priority is to satisfy the customerthrough early and continuous deliveryof valuable product. Often the developed discipline does not pass preliminary testing or presentation with students (in terms of the content and forms of conducting classes). Therefore, during the educational process, situations arise when students do not perceive the format or information of the lesson. The educator learns about this either during the course, or at the end of the course.The result is the impossibility of making changes and a decrease in the rating of the discipline. If change the process and receive feedback from students before the start of studies, then there will an opportunity to change the educational product and increase its effectiveness.

Principle 2. Welcome changing requirements, even late in development; Agile processes harness change for the customer's competitive advantage.Often students' expectations from the content and teaching methods are not analyzed throughout the educational process. As a result, lessons efficiency is underestimated. Even if the developed discipline was not presented to students before the start of training, it is possible to conduct a survey based on the results of the first lessons in order to learn feedback from students and be able to adapt tasks to the students' needs and meet their expectations from the educational process.

Principle 4.Businesspeople and developers must work together daily throughout the project. Representatives of business (or organizations) who practice the tools of the discipline often are not involved in a discipline elaboration and educational process. As a result, the educational product does not sufficiently show how to use the studied tools in practice, and the effectiveness of classes decreases. If involve representatives from the business in the discipline's elaboration, the practical application of theories will clarify their essence and form the practical skills of students.

The presented examples of the application of Agile principles for the development of educational products illustrate the positive changes of these products and show the feasibility of changing approachestowards Agile.It will be valuable for the projects of the new disciplines development in a rapidly changing educational environment with technological and informational challenges.

References

1. Manifesto for Agile Software Development http://agilemanifesto.org/iso/en/manifesto.html

2. Jeff Sutherland, Scrum Handbook. Scrum Training Institute, 2016, p. 67

3. Stacey RD, Strategic management and Organizational Dynamics: the Challenge of Complexity. 3rd ed. Harlow: Prentice Hall, 2002

4. Why agile? — The Stacey complexity model https://www.scrum-tips.com/2016/02/17/stacey-complexity-model/