EFFECTIVE DIGITAL TRANSFORMATION IN THE CONTEXT OF HIGHER EDUCATION

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Acknowledgment

The aim of this article to contribute to the discussion of an effective digital transformation in the context of higher education based on the latest education trends and frameworks of leading global vendors and to explore the main aspects of digital transformation process implementation.

Digital Transformation is the use of new digital technologies, such as mobile, artificial intelligence, cloud, block chain, and the Internet of things technologies, to enable major business improvements to augment customer experience, streamline operations, or create new business models (*Warner, Wagner, 2019*).

Digital Transformation of education is considered as an inevitable process of change content, methods and organizational forms of educational work, which takes place in a rapidly developing digital educational environment and is aimed at solving problems socio-economic development of the country in the conditions of the fourth industrial revolution and the formation of digital economies (*Uvarov, 2019*).
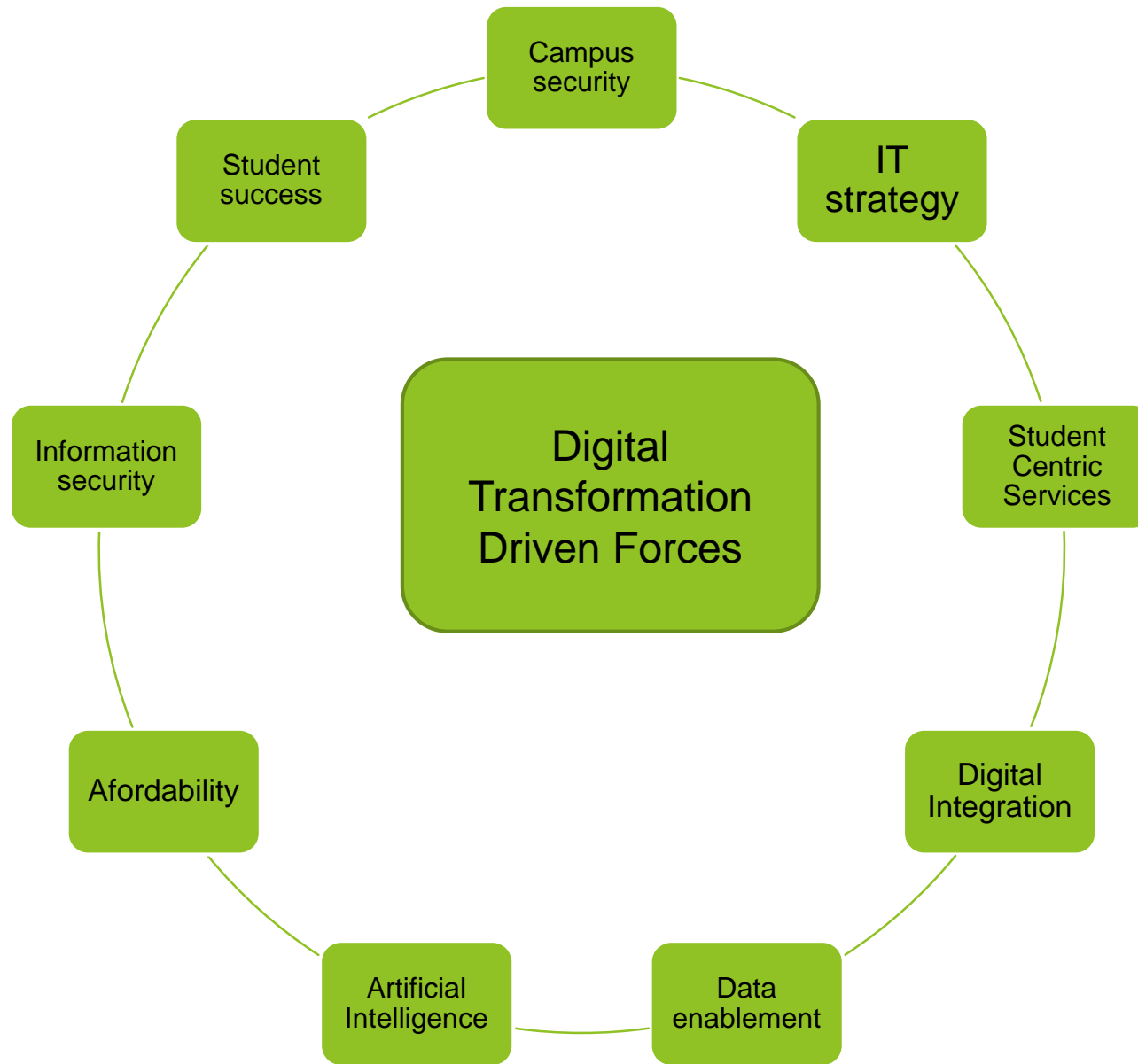
(Microsoft, 2019)

DT Strategy for education

| High capacity, secure, smart communication **network** | Real-life, real-time data **infrastracture** decisions | New, flexible **business model** with updated software | Simple **platform** |

(Alcatel-Lucent, 2018)

Digital transformation of higher educational institution
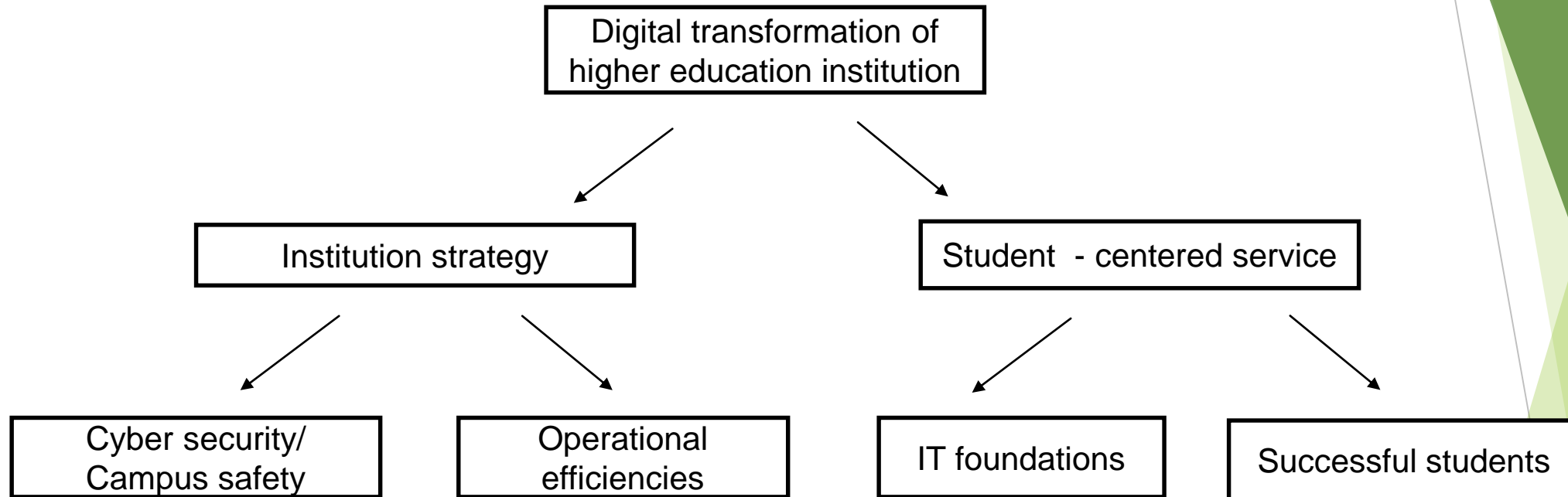
(Alcatel-Lucent, 2018)

In the terms of higher education DT has its effect on two main business parts:

1. **Services transformation**
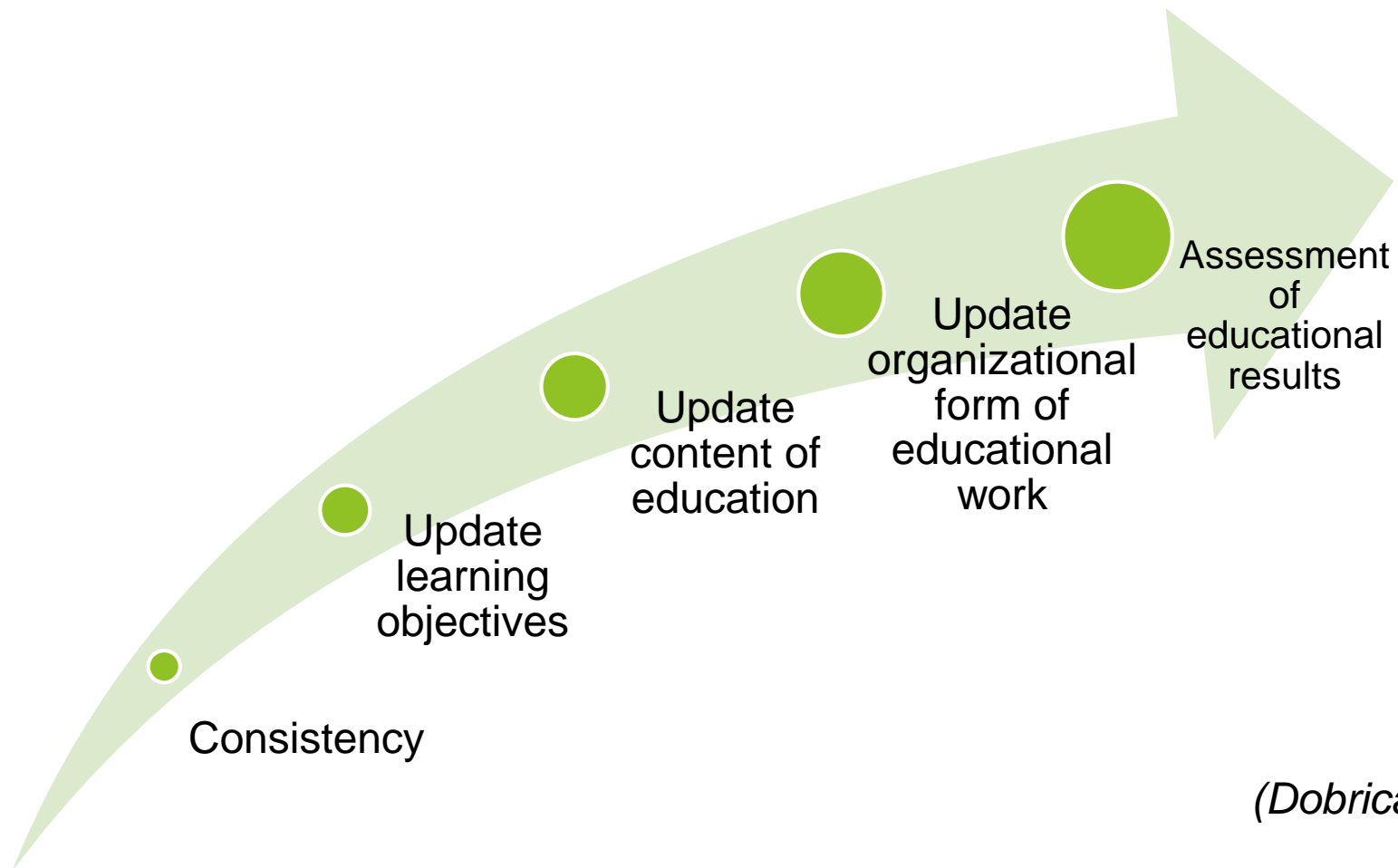2. **Operations transformation**

Services transformation focuses on creating new education products and transforming existing products into digital ones. Converting offline lectures into video ones, creating digital texts and quizzes, providing digital means for communication between students and teachers.

Operations transformation would basically require a digitalization of all the common operations educational institutions have such as students' admission, registration for programs and courses, examination, program development, and their quality assurance. In addition, supporting services as study planning, facility management, teacher allocation, scheduling *(Jackson, 2019)*.

The following **aspects** are required for implementation of DT in education:

- to change or update **learning objectives and content**;

- to proceed from teaching and educating everyone to learning of each, by changing **the organization and methods** of educational work;

- to review and optimize the sets of used **educational, methodical and organizational solutions**, information materials, tools and services;

- **to revise traditional** business processes to include all interested parties in this work;

- to implement the rapidly growing **potential of digital technologies**, including artificial intelligence, computerizing and digitalizing of all types of work with information *(Uvarov, 2019).*

Key principles for DT

Consistency

Update learning objectives

Update content of education

Update organizational form of educational work

Assessment of educational results

(Dobrica, 2019)

CONCLUSIONS

Digital Transformation in the context of higher education is observed within **two directions**:

- strategy of higher education institution;
- student-centered service.

For **the strategy** of higher education institution DT is specified as:

- the usage of digital technologies for dramatic improvement of labor productivity,

- a deep transformation of the following: production and organizational operations; processes; employee responsibilities and models for productivity increase;

- taking into consideration what has already happened, ongoing future-oriented technological changes.

In the context of **student-centered service**, DT is specified as:

- updating of planned educational results,

- educational content,

- methods and organizational forms of educational work,

- evaluation of the results achieved in the evolving digital educational environment for significant improvement of educational results of each student.

The essence of the DT of higher education is the achievement by each student of the necessary educational results through **the personalization** of educational process based on the use of the growing **potential of the digital tools**, including the use of artificial intelligence techniques, virtual reality tools; educational institutions of the digital educational environment; providing public broadband access to Internet, work with big data.

CONCLUSIONS

DT of higher education is associated with **qualitative changes in educational work**. These changes are necessary to form the ability of each member of society to live and work **productively** in a changing digital economy, continuing their education throughout all life. The essence of this change is the use of rapidly developing digital technologies for a consistent transition to a **personalized result-oriented organization of educational process**.

CONCLUSIONS

DT should provide for a coordinate **solution** of main aspects, including:

• **development** of material infrastructure;

• **development**, approbation and implementation of digital educational and methodological complexes, using adaptive learning algorithms and assessments based on artificial intelligence and other end-to-end technologies;

• **development** of online learning;

• **development**, testing and implementation of platform of universal functionality of digital educational environment for identification and authentication of users.

Thank you for your attention!