



“人工智能时代的高等教育变革” 国际网络教育学院（IIOE）全球伙伴高峰会

Transforming Higher Education in the Age of AI IIOE Global Partners Summit



**"INFORMATION RETRIEVAL OF SCIENTIFIC
INFORMATION AND THE RELEVANCE OF ITS
INTELLECTUALIZATION FOR HIGHER EDUCATION"**

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INNOVATION PROCESS

is the process of converting scientific knowledge into innovation,
but with the requirements of obtaining an applied results

INNOVATIVE POTENTIAL

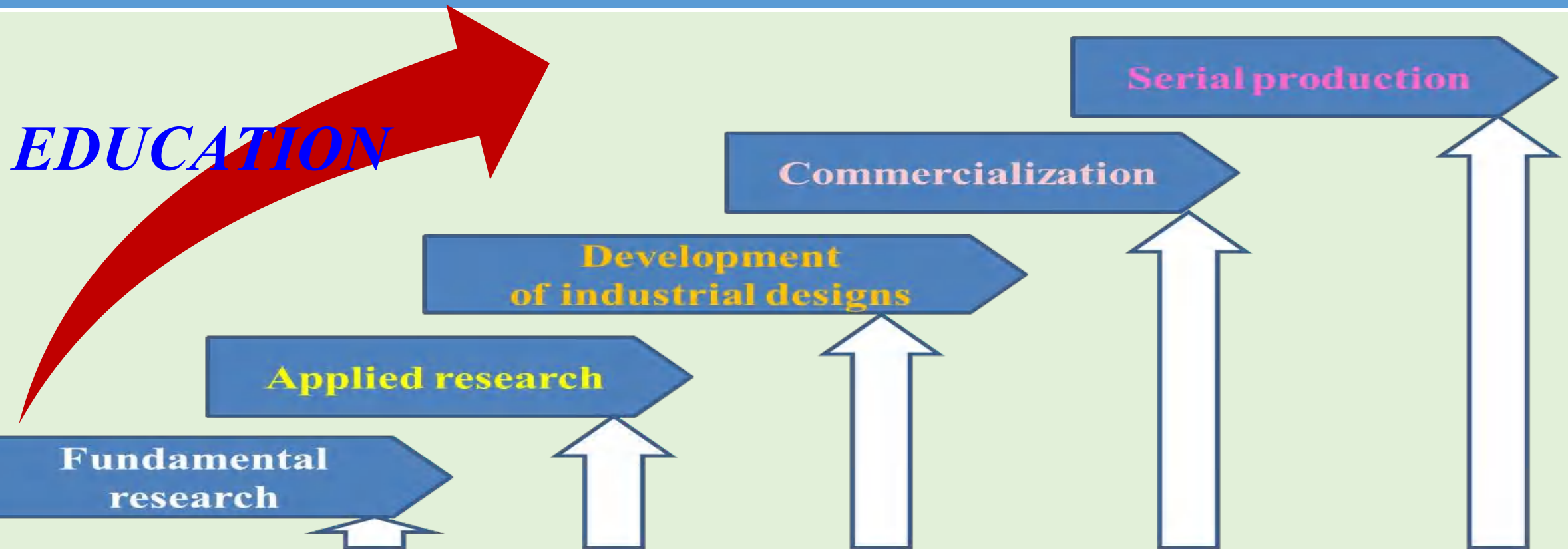
- Research base
- Production facilities and capacities
- Scientific background, production technologies.
- Financial resources for development and/or production
- Distribution networks that ensure the promotion of products to markets
- **Information resources !!!**
- **Personnel with the necessary qualifications !!**



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INFORMATION SUPPORT OF INNOVATION ACTIVITY STAGES



Information for innovative development :

scientific and educational, scientific and technical, patent, information about promising developments, predictive and analytical information, commercial, marketing, statistical and demographic, stock exchange and financial, legal, data on the financial situation of partners, information about competitors, information about potential consumers, data on innovation activity of various structures.



100.000 scientific journals

5.000.000 presentations at conferences

110.000 scientific conferences

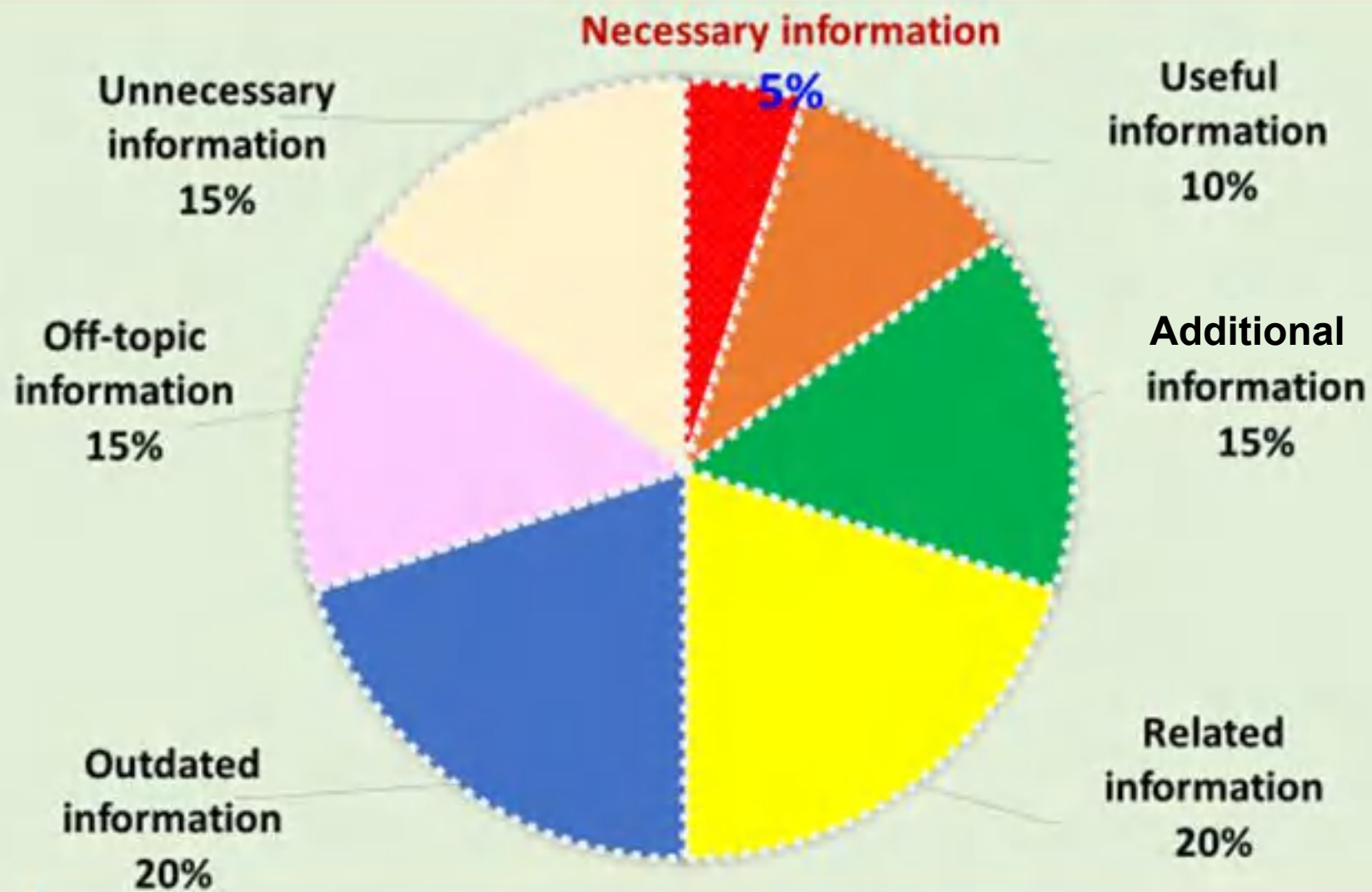
12.000.000 patents

1.000.000+ research reports

100.000 + monographs (annually!!)

What information (sources) do you store and use for scientific and educational activities?.

Survey results.



PARALLELS OF TECHNOLOGICAL DEVELOPMENT IN EDUCATION AND STAFF COMPETENCE

STAGES	Stages of Technology	Competences
Education 5.0 Education 4.0	<ul style="list-style-type: none">• +Smart technical decisions;• Artificial intelligence systems;• Neuron networks• Tools for AI information retrieval• BigData	<ul style="list-style-type: none">• To work with AI systems in the educational processes• Smart classes +;• Independent learning;• The ability to learn anytime, anywhere.
Education 3.0	<ul style="list-style-type: none">• Mobile devices;• Development of remote access systems;• Multimedia systems• Social network• MOOC;	<ul style="list-style-type: none">• + Productive, in a contextual educational environment, self-education of students;• Multimedia in education• online learning methods.• MOOC
Education 2.0	<ul style="list-style-type: none">• Personal PCs• Network Software;• Servers for storing Big Data;	<ul style="list-style-type: none">• Productive, in a contextual educational environment, open educational resources, LMS
Education 1.0	<ul style="list-style-type: none">• Computer technology in HE• Computer classes;• Automation of information processing	<ul style="list-style-type: none">• Traditional teaching methods• Computer classes• e-learning

Why is it necessary to develop AI systems for information retrieval ?

- The volume of scientific and educational information doubles every 2-3 years;
- The possibilities of a person for information retrieval are exhausted!
- The fate of society depends on the availability of access and the effectiveness of the search for scientific, educational, technological, business, etc. information;
- Modern traditional information retrieval systems are not able to provide prompt access to the necessary and complete information.



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AI in Uzbekistan (I)

The main strategic directions for the development of AI in Uzbekistan are specified in the Decree of the President of the Republic of Uzbekistan dated February 17, 2021

"ON MEASURES TO CREATE CONDITIONS FOR THE ACCELERATED INTRODUCTION OF ARTIFICIAL INTELLIGENCE TECHNOLOGIES"



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AI in Uzbekistan (II)

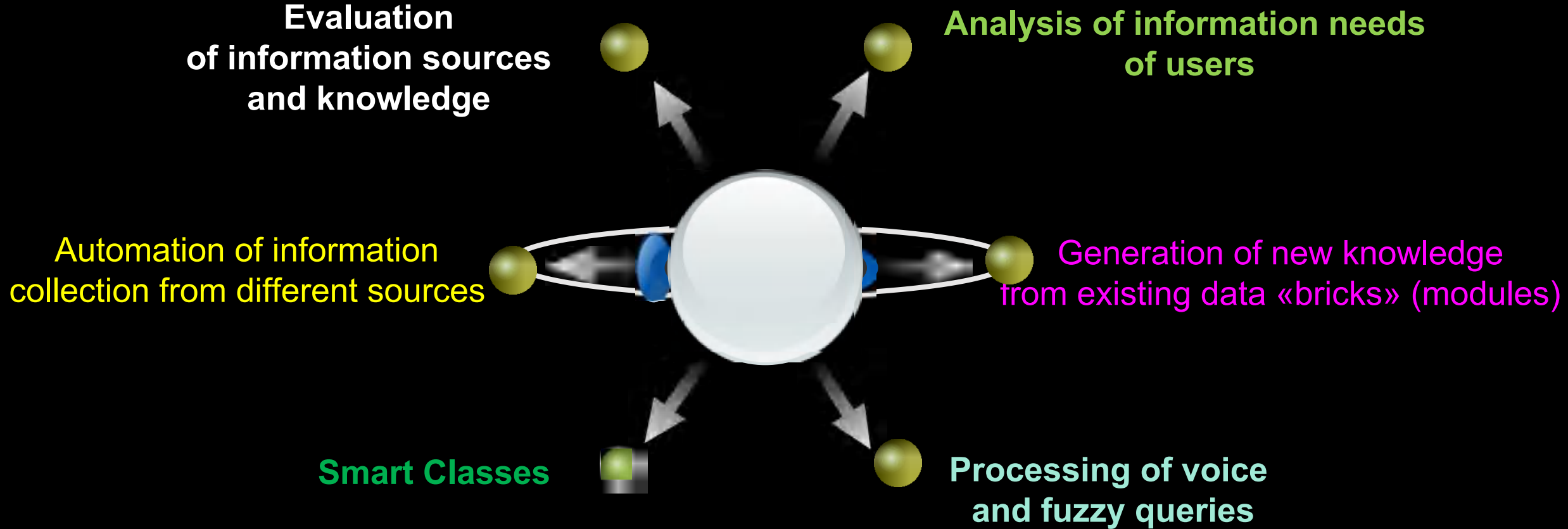
Tashkent University of Information Technologies(TUIT) have opened

- **Postgraduate education in the specialty**
05.01.11 - Digital technologies and artificial intelligence
- **Department “Artificial intelligence”;**

The Scientific Research Institute for the Development of Digital Technologies and Artificial Intelligence was established at the Ministry of ICT;

- **Financing of scientific research and innovative developments in the field of AI is carried out by the Fund for Support of Innovative Development and Innovative Ideas**

FUNCTIONALITY OF AI SYSTEMS for science and education



Conclusion

- Intellectualization of the information retrieval is an important task for the development of higher education;
- There is a great need for AI training in universities.....;
- Integration of efforts to create effective software and AI systems will ensure effective information support for learning, self-learning, training processes;
- Smart classrooms are an important AI development tool for effective learning and knowledge dissemination



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Thanks

Merci

Спасибо

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