



NATIONAL RESEARCH
UNIVERSITY

Department of Sociology

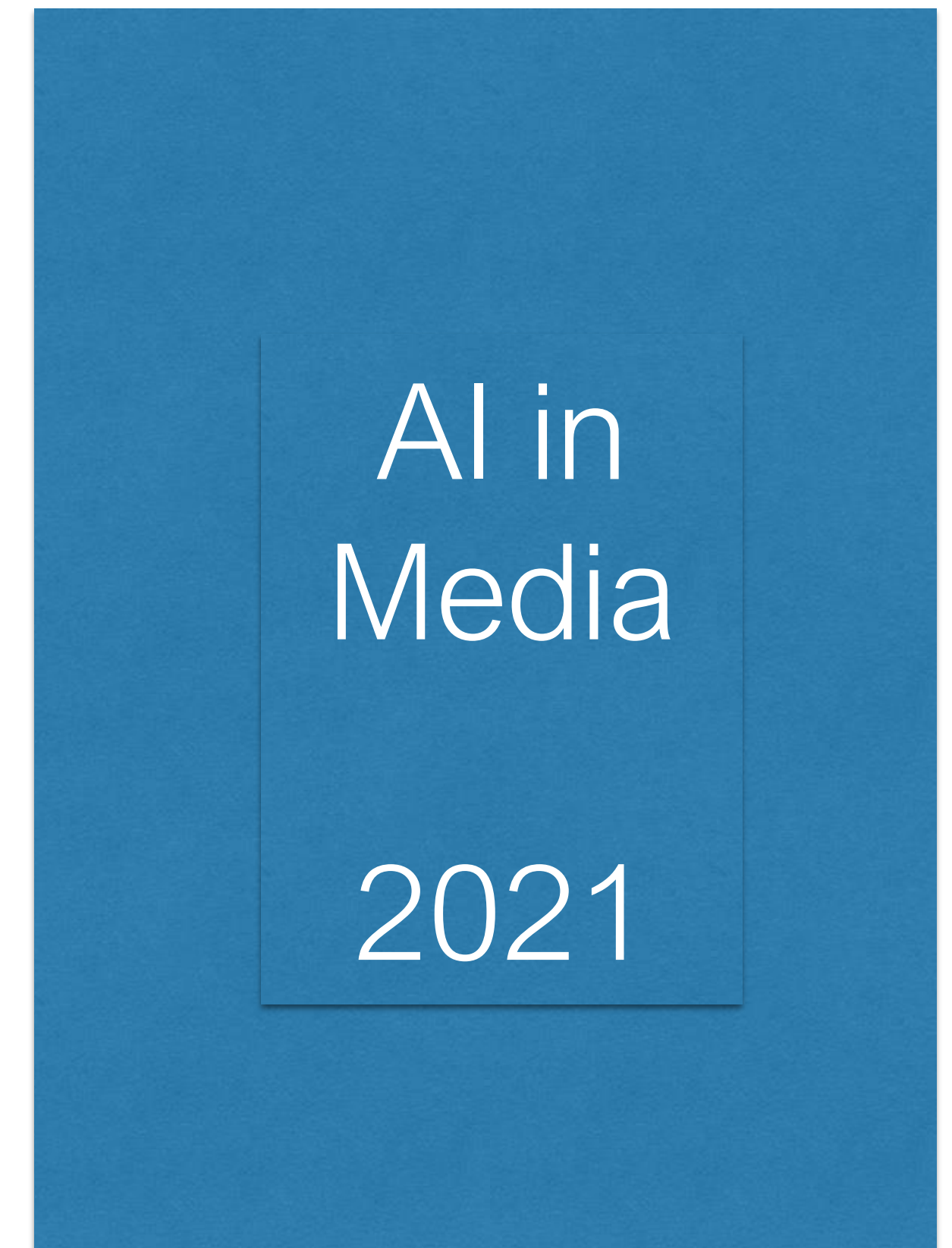
PERCEPTION OF AI-DRIVEN TECHNOLOGIES BY RUSSIAN EXPERTS AND PUBLIC OPINION

Sergey Davydov, associate professor

International online conference *Automation and Data-Driven
Journalism Beyond the Western World*, 6.05.2021

University of Helsinki

INDUSTRIAL SURVEYS OF AI-DRIVEN TECHNOLOGIES IN RUSSIA



NATIONAL CONTEXT OF THE DISCUSSION



- Digital Economy state project, announced in late 2016 and started in 2017
- National Strategy for the AI Development Until 2030 (Decree of the President of the Russian Federation No. 490, October 10, 2019)
- Definition: A set of technological solutions that allows to simulate human cognitive functions (including self-learning and search for solutions without a predetermined algorithm) and get results when performing specific tasks that are comparable, at least, with the results of human intellectual activity.

WHAT IS AI?

- No conventional definition
- "Umbrella" term and an inaccurate analogy
- Synonyms and substitute terms:
 - robotic intelligence;
 - superhuman intelligence;
 - neural network;
 - machine learning.

Proposed definition:

- AI in a broad sense is a set of technologies for processing various types of data and information, in particular, capable of interpreting such data, extracting knowledge and using it to achieve certain goals.

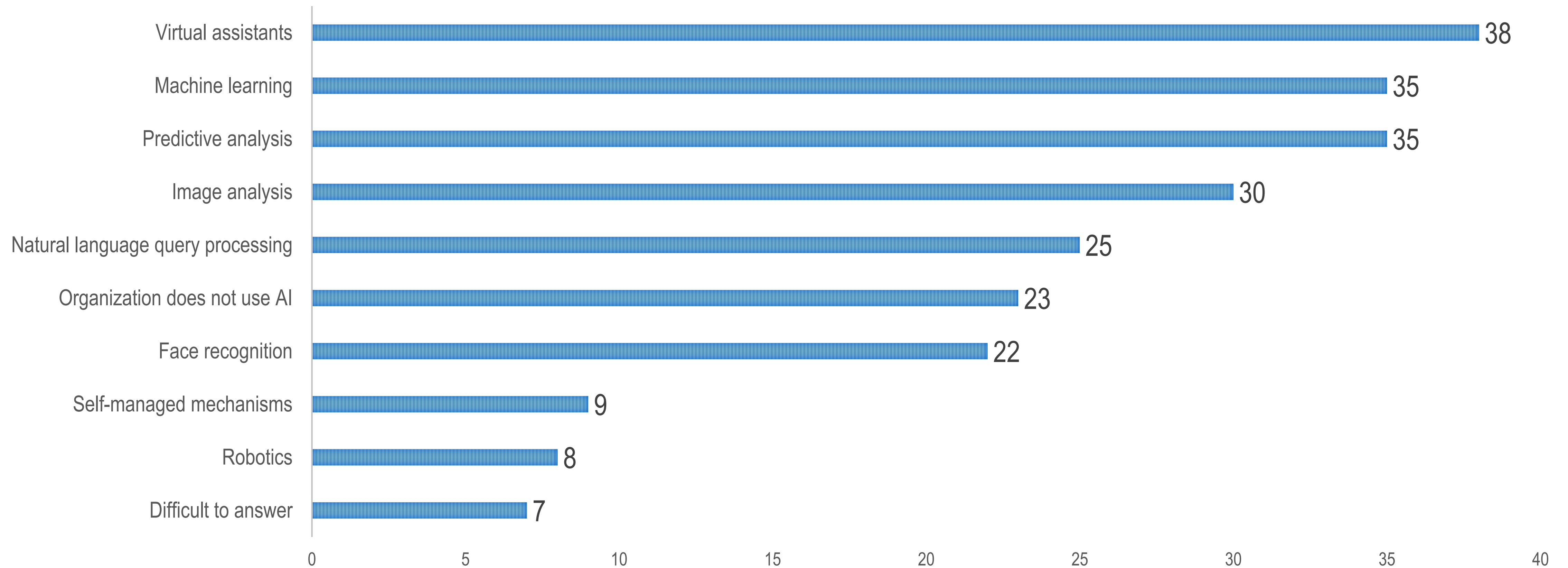
QUOTES FROM EXPERT INTERVIEWS

- AI is, we can say, some program that has the ability to think and make decisions independently. But, on the other hand, I already said that this is a program, it is unlikely that it can think independently.
- This is a system that allows you to use data analysis to draw some conclusions. Either it does conclusions itself, or it gives the person the opportunity to evaluate the assessment that the system has made.
- The problem is precisely in the definition of artificial intelligence as a hype, mainstream, in the absence of clear definitions.
- ИИ - это, можно сказать, некоторая программа, которая имеет возможность мыслить и принимать решения самостоятельно. Но, с другой стороны, я уже же сказал, что это программа, вряд ли она может мыслить самостоятельно.
- Это система, которая позволяет с помощью анализа данных, делать какие-то выводы. Либо она делает это сама, либо она дает человеку возможность оценить ту оценку, которую система сделала.
- Проблема как раз в определении искусственного интеллекта как хайпа, мейнстрима, в отсутствии четких определений.

SPHERES OF AI USAGE



AI TECHNOLOGIES USED



Source: Microsoft/RAEC/HSE University, 2019, online expert interviews, n=102

MAIN CHALLENGES OF AI IMPLEMENTATION

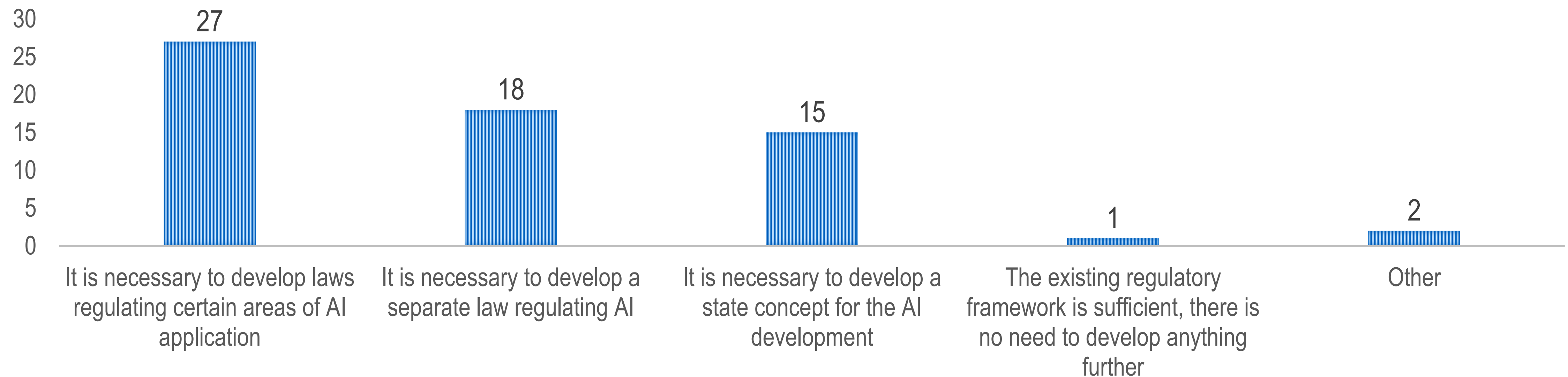
Challenges in the expert industry	%
Data management (collection, analytics, interpretation)	50
Specialists and their qualifications	37
The need to change existing business models	27
Cybersecurity	25
The need to upgrade the existing IT infrastructure	23
Getting data for AI training models	23

Challenges in the government sector of the Russian economy	%
Specialists and their qualifications	37
The need to upgrade the existing IT infrastructure	36
Lack of skills in the use of technology by citizens, their lack of involvement	34
Data management (collection, analytics, interpretation)	30
Cybersecurity	30

REGULATION OF AI IN RUSSIA: EXPERT OPINION

State regulation in the field of AI intelligence in Russia is necessary according to 63% of experts.

Q: How do you think the development, implementation and use of AI technologies should be regulated?



MAIN INDUSTRIES OF AI USAGE

Banking

Manufacturing
industry

Retail

Telecommunications

AI IN RETAIL: CASES OF INNOVATION

WORK WITH CLIENTS

Loyalty systems



Optimizing the space for the benefit of consumers



Personalization of offers and demand forecasting



INTERNAL ACTIVITIES

Effective management and release from routine work



Optimization of product delivery processes

Pricing



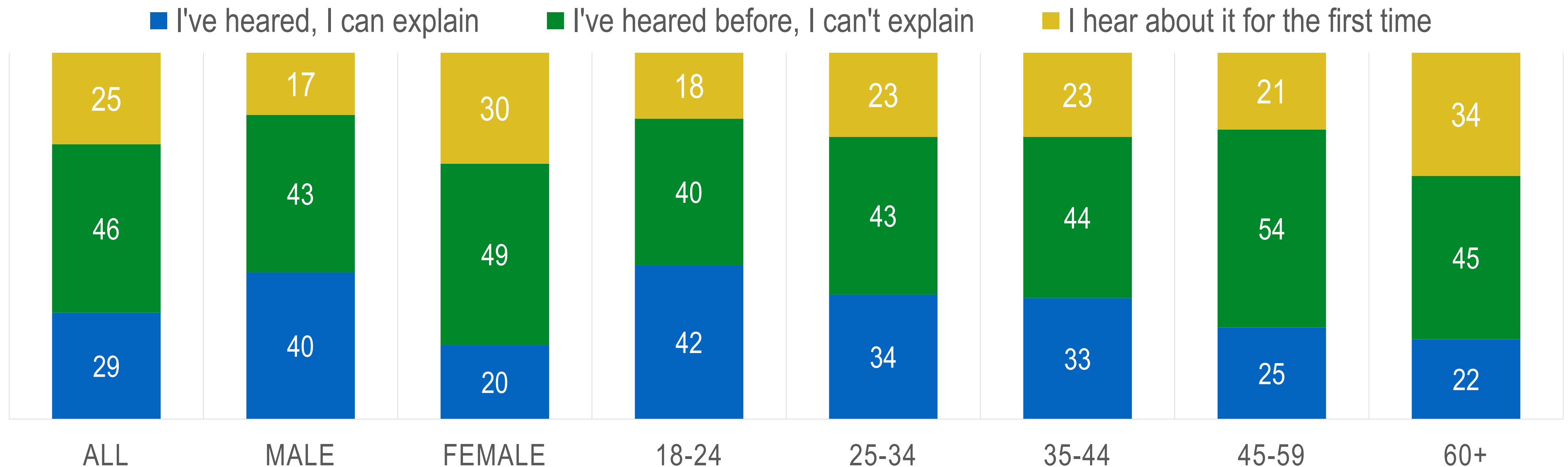
AI IN RETAIL: PERCEIVED LEADERS

INTERNATIONAL

RUSSIAN

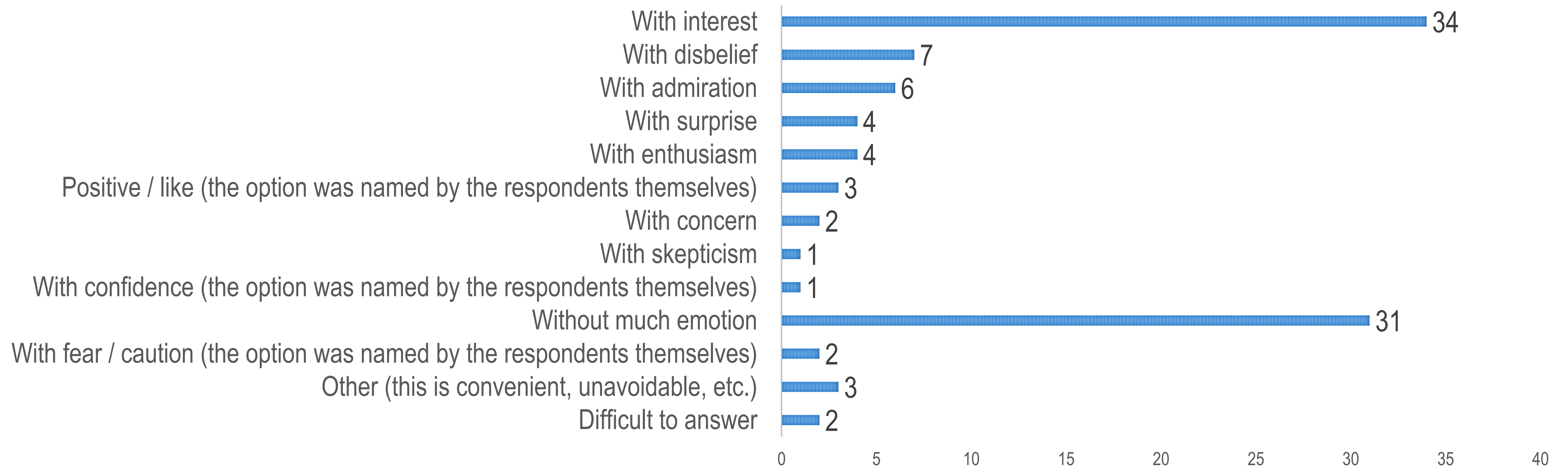
GENERAL AWARENESS OF AI TECHNOLOGIES

Q: Have you ever heard about artificial intelligence technologies before, or you hear about it now for the first time? If you have, how would you explain what it is? (%)



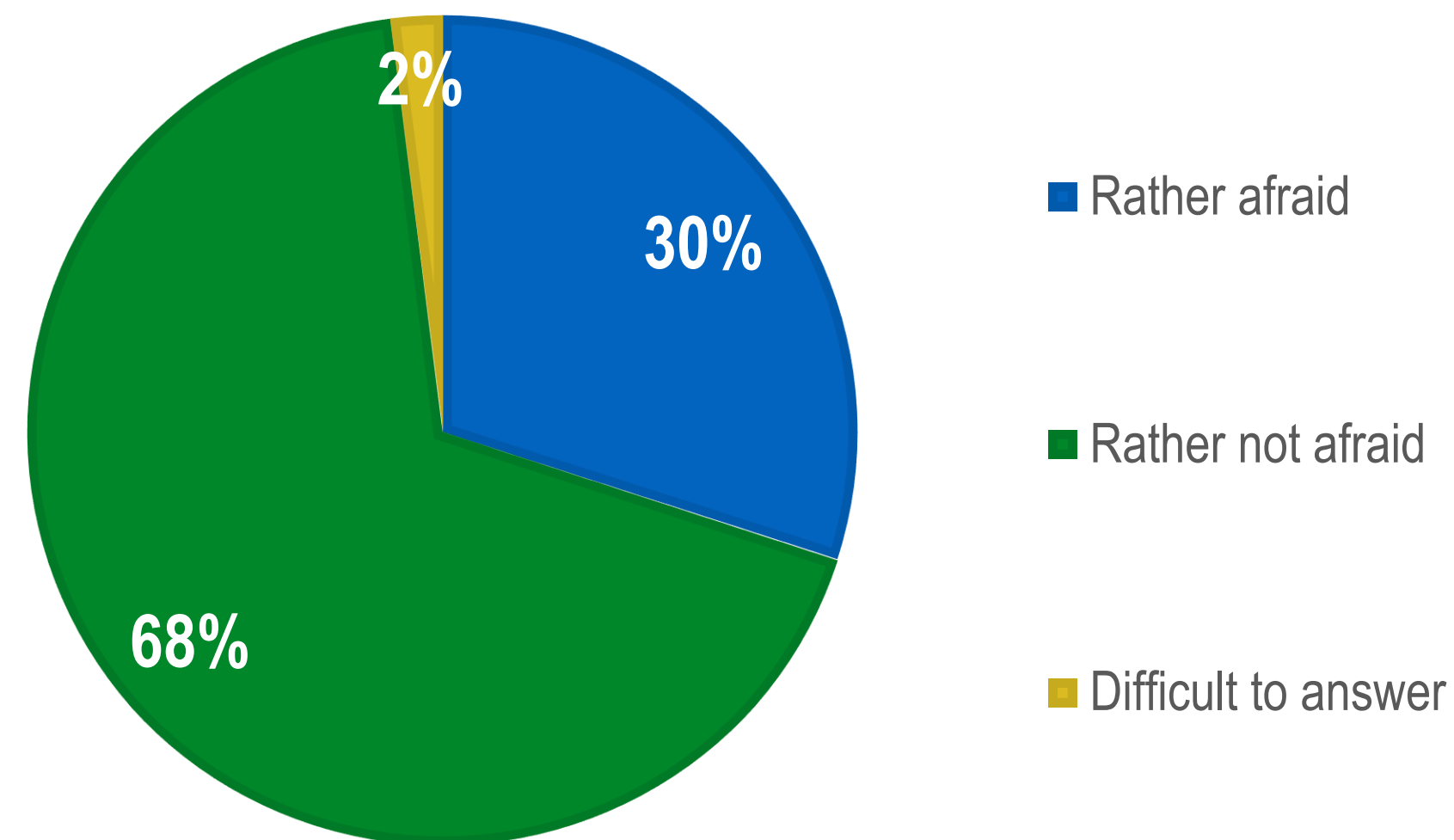
EMOTIONS ASSOCIATED WITH AI

Q: How do you personally feel about the spread of artificial intelligence technologies? (%)

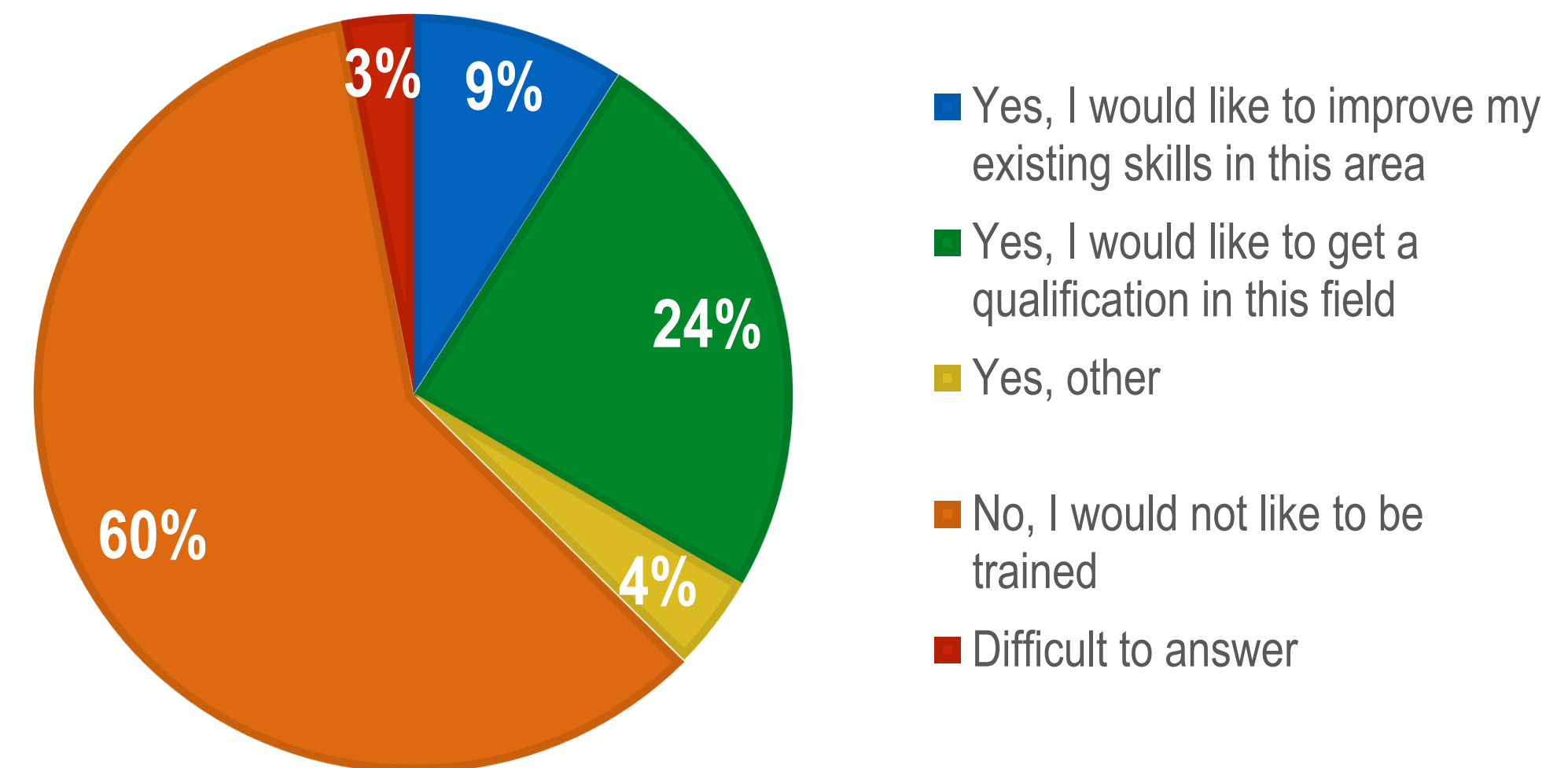


PRESENCE OF FEAR / DESIRE TO LEARN

Q: Tell me, please, are you personally afraid or not afraid that in the future in your profession a number of tasks will be solved not by a person, but by artificial intelligence?

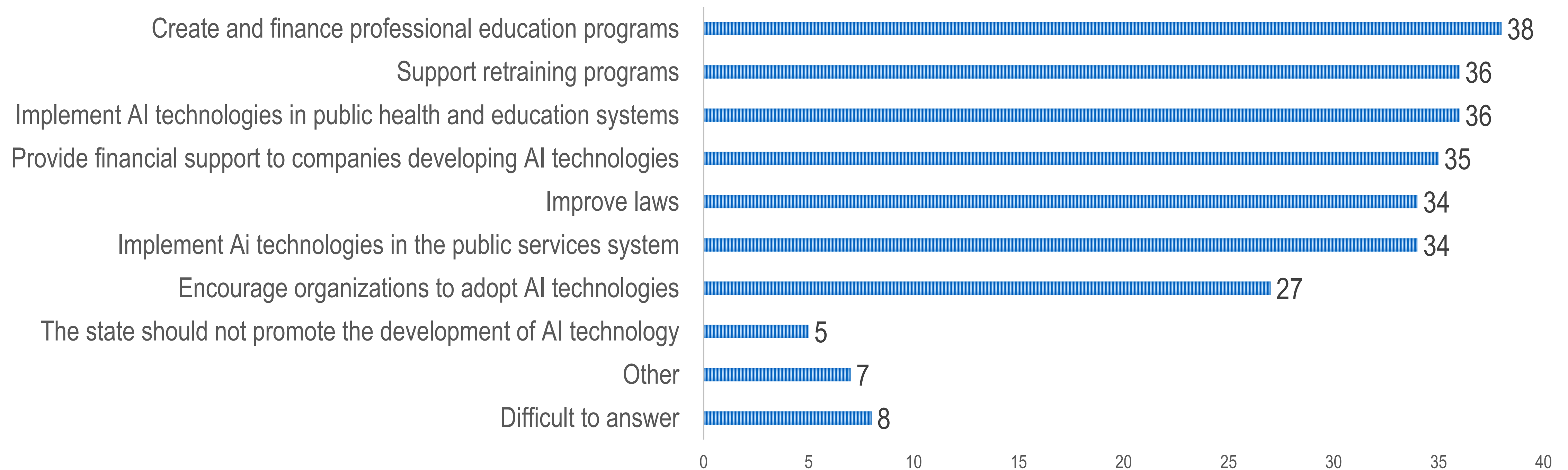


Q: Tell me, please, would you personally like or do not want to be trained in the field of artificial intelligence technologies in the next two or three years?



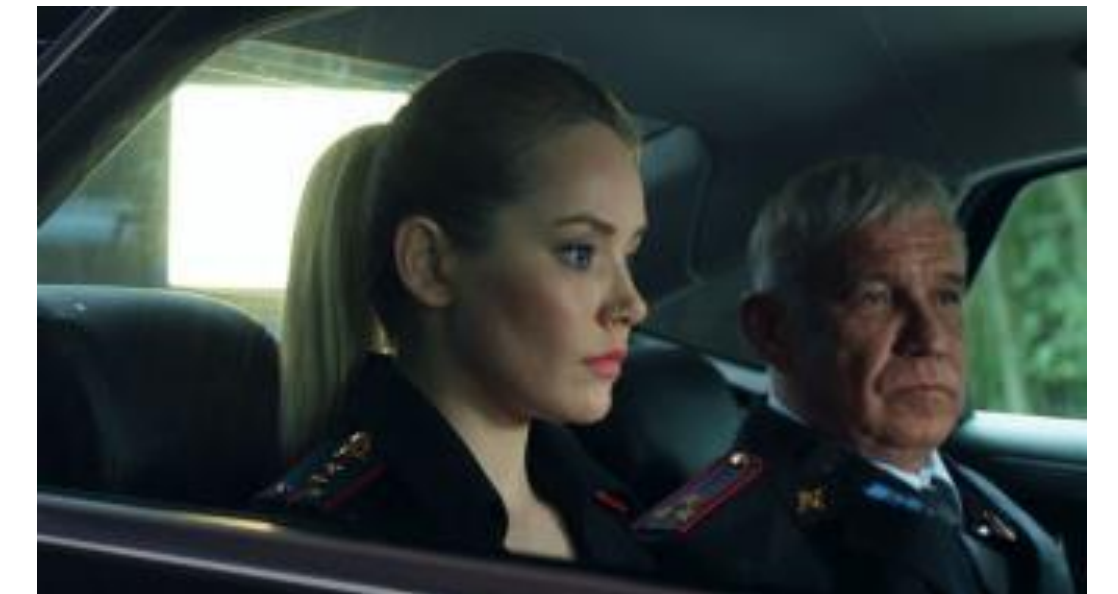
EXPECTATIONS FROM THE GOVERNMENT

Q: Do you think that the state should or should not contribute to the development of AI technology? And if so, how exactly? (%)



AI IN MASS CULTURE

Better, Than Humans and Anna Nikolaevna Project



CONCLUSIONS

- Russia lags behind the leading countries in terms of AI implementation, but according to experts, it has a high potential for using these technologies.
- Main spheres of implementation are banking, retail, telecommunications and manufacturing industry.
- According to the expert community, state regulation is necessary for AI successful implementation.
- Russians are aware of AI technologies and feel interest in it.
- Innovative processes are reflected in the works of mass culture.



NATIONAL RESEARCH
UNIVERSITY

www.hse.ru

Phone.: +7 (916) 350 6264

Address: 20, Myasnitskaya street , Moscow, 101000, Russian Federation