



NATIONAL RESEARCH
UNIVERSITY

EMPLOYEES' ACCEPTANCE OF NEW TECHNOLOGIES

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RESER 2018



INTRODUCTION

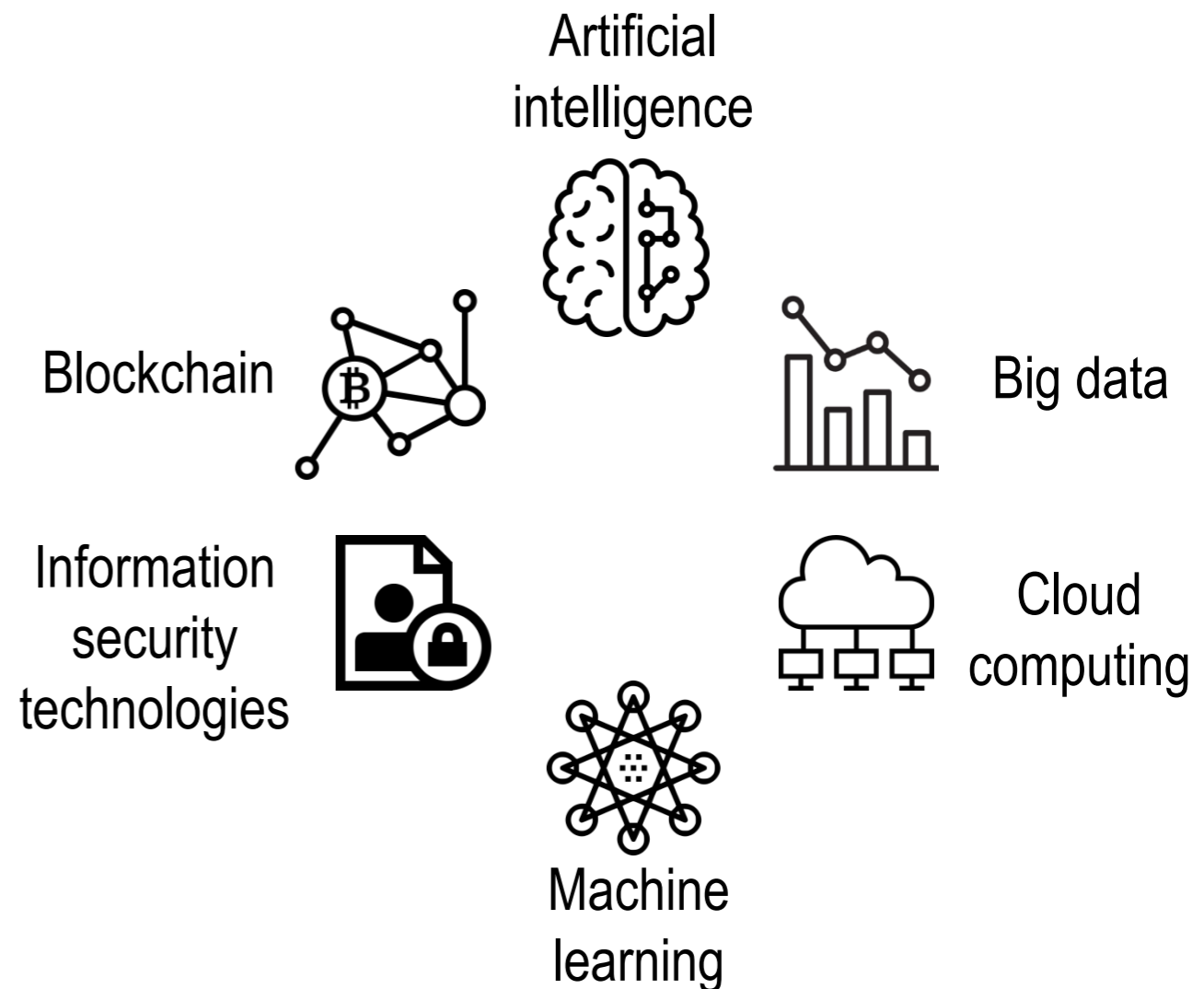
Digitization

In the world by 2036 will be automated up to **50%** of work processes¹

Top opportunities related to the rise of FinTech²

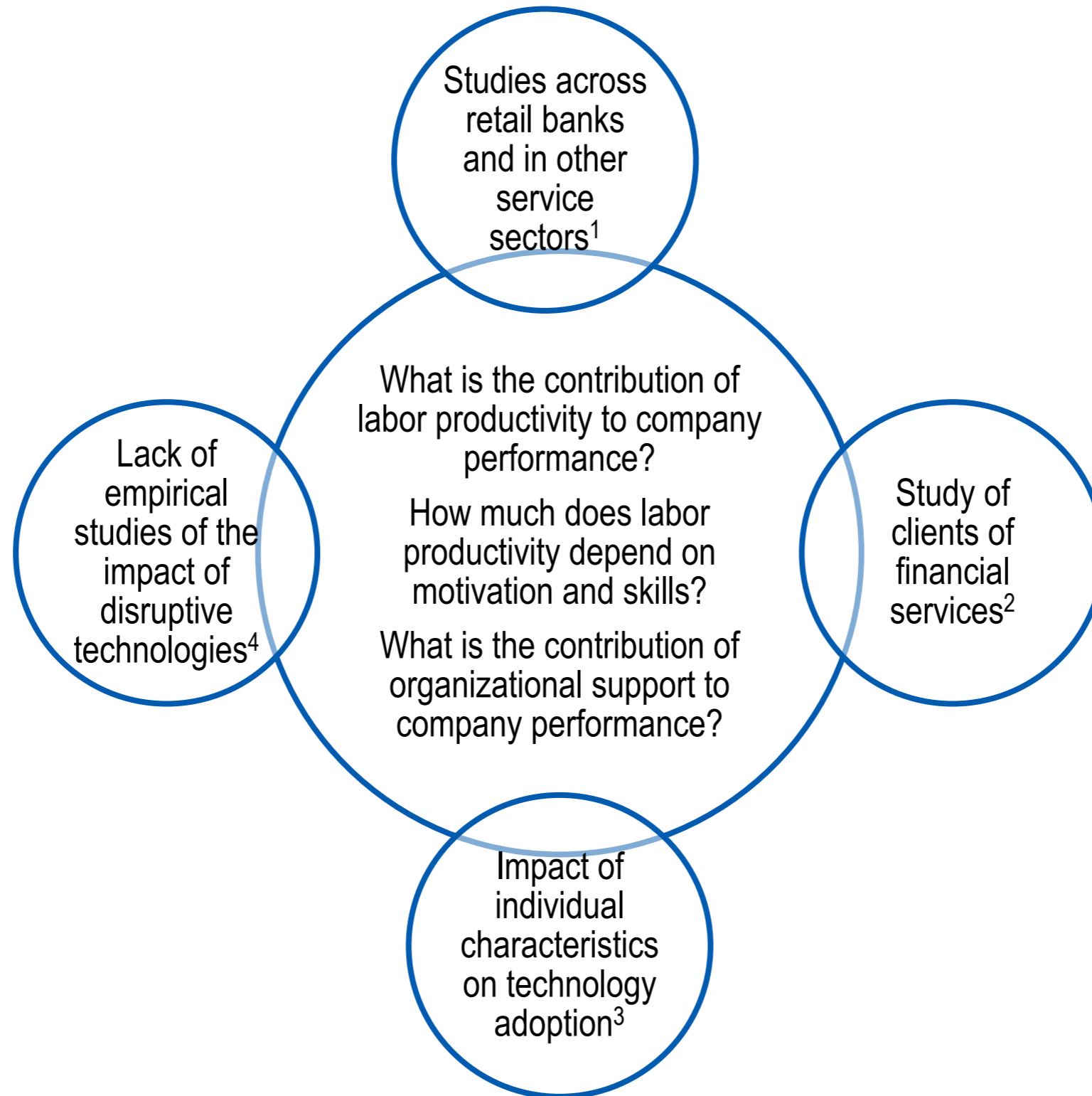
- Cost reduction (**73%**)
- Differentiation (**62%**)
- Improved retention of customers (**57%**)
- Additional revenues (**56%**)

Disruptive innovation





RESEARCH QUESTIONS





LITERATURE REVIEW

Technology adoption

Internal factors

- Personal innovativeness¹
- Digital skills²
- Ambitious³
- Psychological barriers⁴
- Motivation⁵



External factor

- Organizational support⁶

Control factors

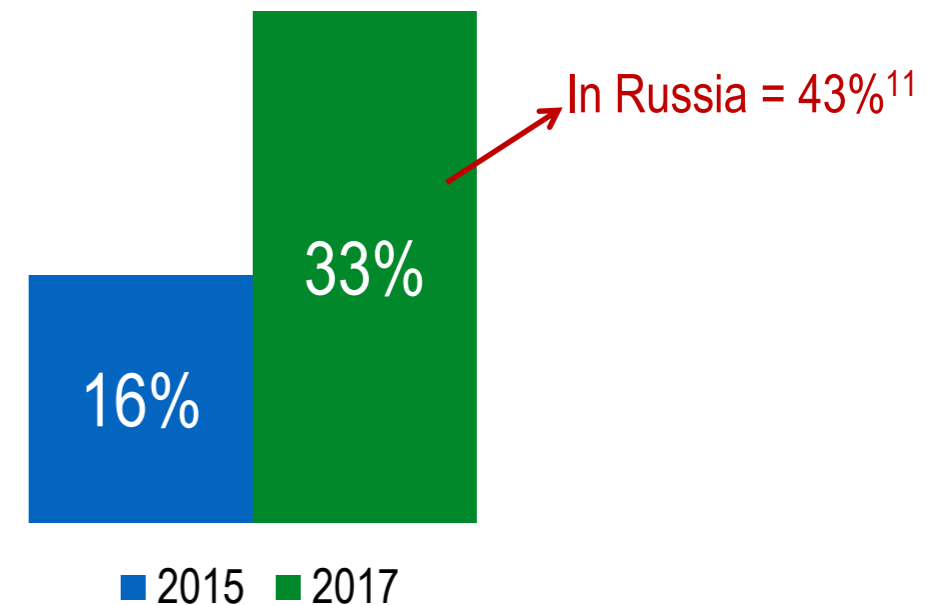
- Individual differences⁷
- Differences in organizations & industries⁸

Disruptive innovation & Digitization



Finance and insurance is on the **third level** by MGI Industry Digitization Index⁹

The average percentage of FinTech services penetration across 20 markets¹⁰



Source: ¹[Elie-Dit-Cosaque & Kalika, 2011]; [Walczuch et al., 2007];
²[Rubel et al., 2017]; ³[Lee et al., 2013]; ⁴[Chen, 2013]; ⁵[Strizhova, 2017];
⁶[Sengupta et al., 2015]; ⁷[Palfrey & Gasser, 2008] ⁸[Rauch & Hatak, 2016] and etc.

Source: [McKinsey Global Institute, 2016]¹⁰[EY, 2017]; ¹¹[EY Russia, 2017].



LITERATURE REVIEW

Labor productivity

Esprit de corps¹

- Teamwork and cohesion
- Employee attachment to seek common objectives
- Proudness, loyalty and dedication of employees



Commitment²

- Performance of responsibilities specified in his/her job description
- Compliance with formal performance requirements of the job
- Neglect of aspects of the job he/she is has to perform

Company performance

Financial performance¹

- Return on investment
- Cost reduction
- Revenue growth
- Profit margins
- Market share

Service performance²

- Quality and flexibility of process
- Dependability of delivery process
- Customer satisfaction



Source: [Riley et. al., 2017]; [Rauch & Hatak, 2016]; [Kaufman, 2015]; [Vosloban, 2012]; [Mathew et. al., 2012].

Operational performance³

- Innovation
- Entrepreneurial orientation
- Differentiation
- Quality of products/services.

Perceived performance⁴

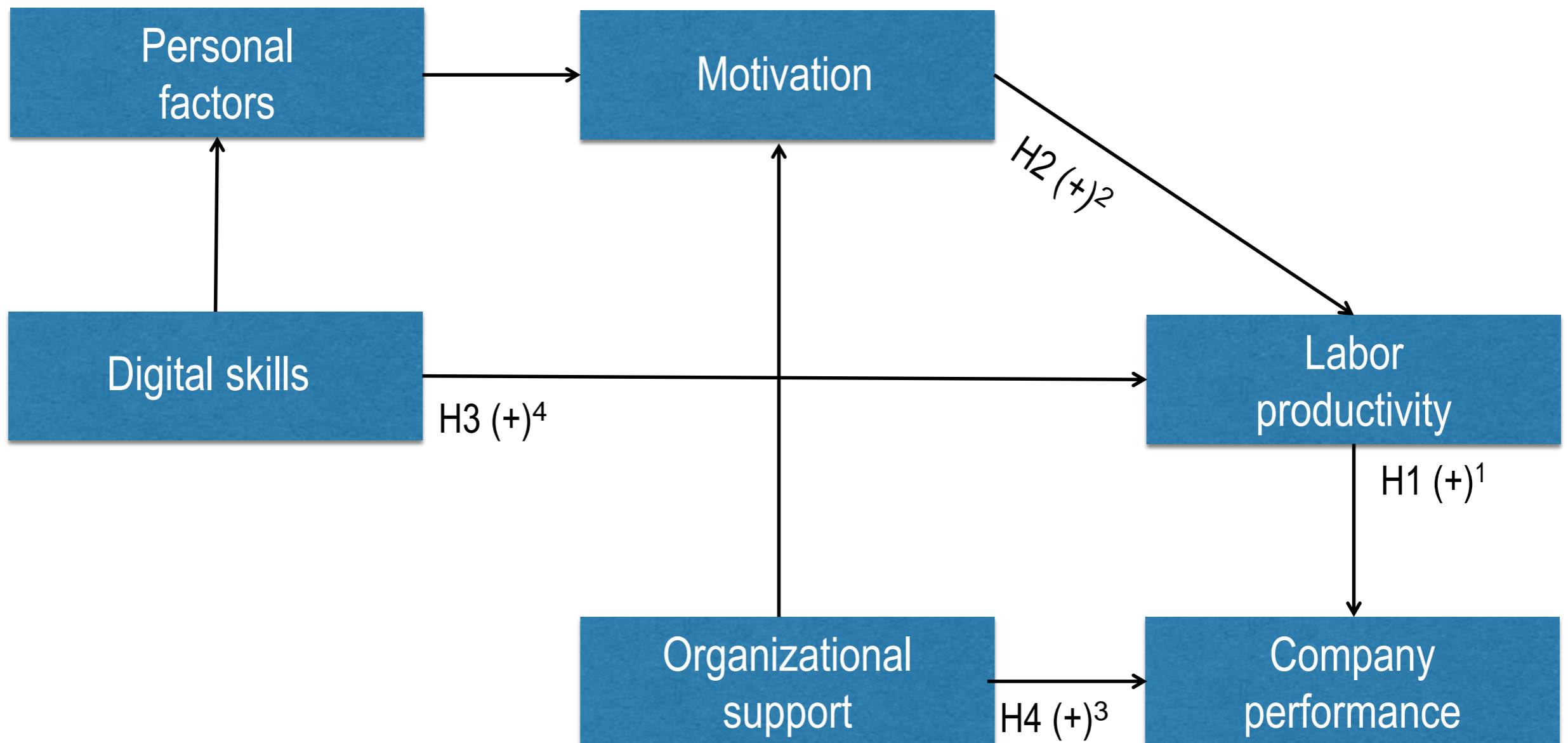
- Benchmarking (comparing with the performance of major competitors)

Source: ¹[Zaheer et. al., 2010]; ²[De Clercq et. al., 2018].

Source: ^{1,2}[Chari et. al., 2017]; [Hu et. al., 2017]; ^{3,4}[Rauch & Hatak, 2016].



CONCEPTUAL MODEL & HYPOTHESES

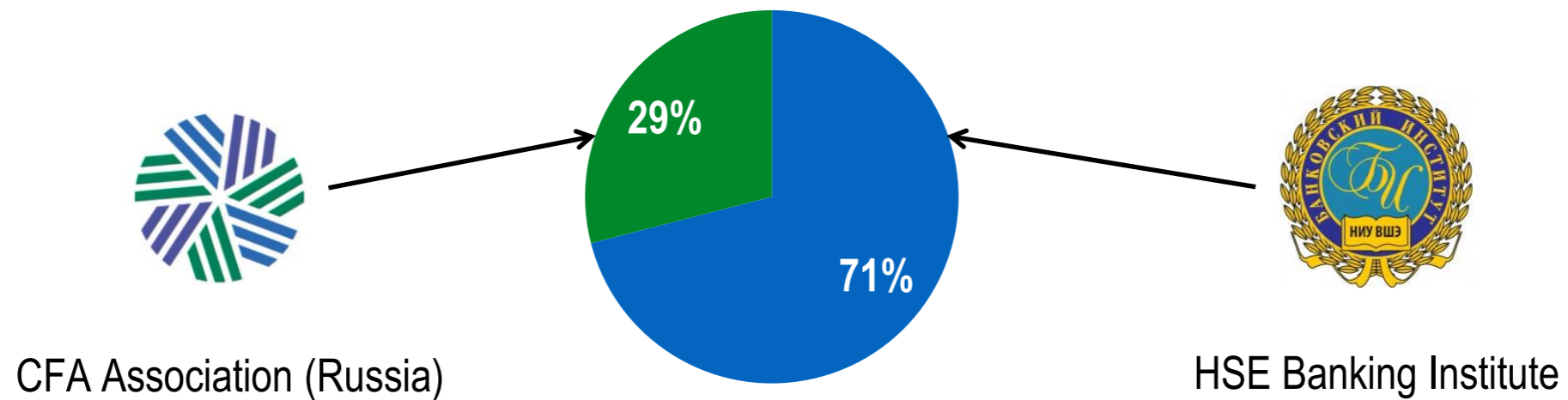


Source: ¹[Riley et. al., 2017]; ²[Ali et. al., 2012]; ³[Sengupta et. al., 2015]; ⁴[Rubel et. al., 2017].



ONLINE SURVEY PROCESS

Total number of respondents = 148



Data collection



1 round	28 February	600 members of CFA Russia
2 round	28 March	449 level III CFA exam candidates

Response rate = 4,1%



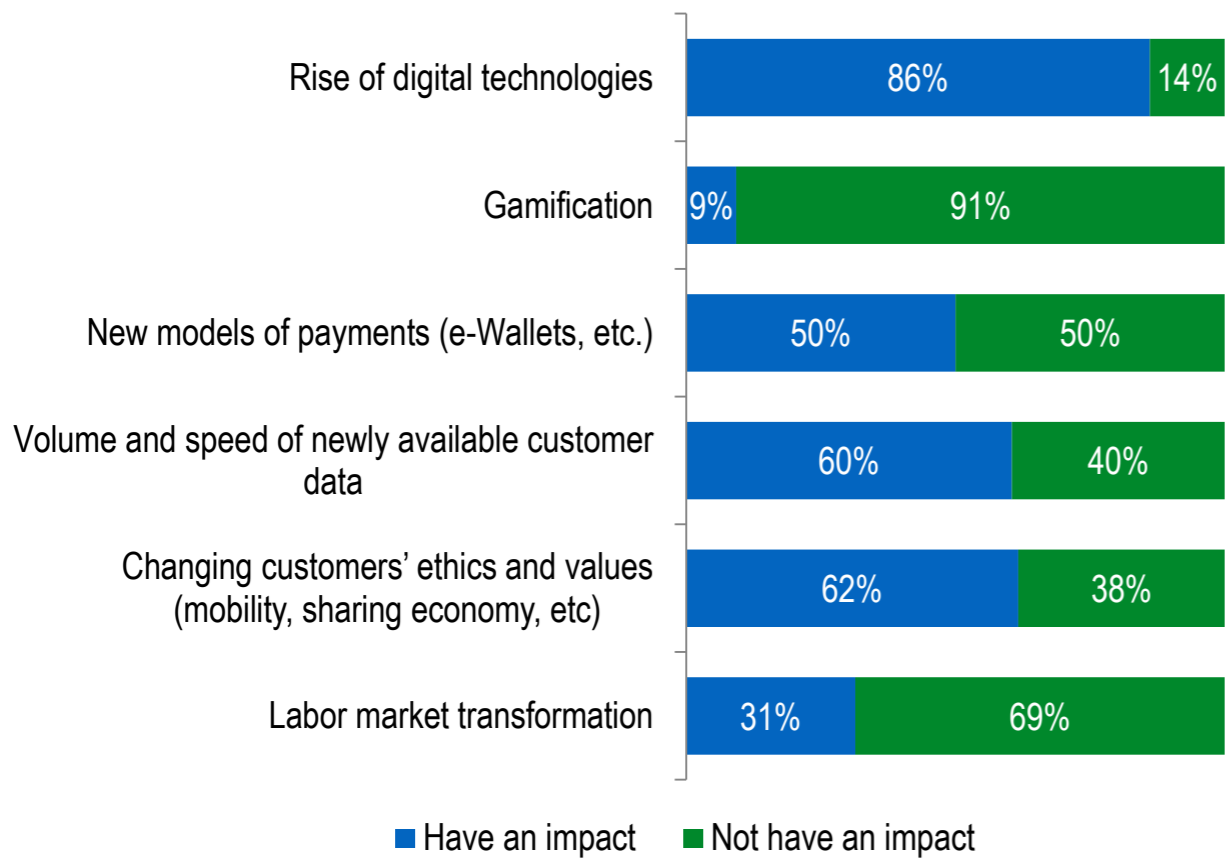
1 round	21 February	279 alumni of HSE Banking Institute
2 round	12 March	361 alumni of HSE Banking Institute
3 round	20 March	304 students of HSE Banking Institute

Response rate = 11,1%

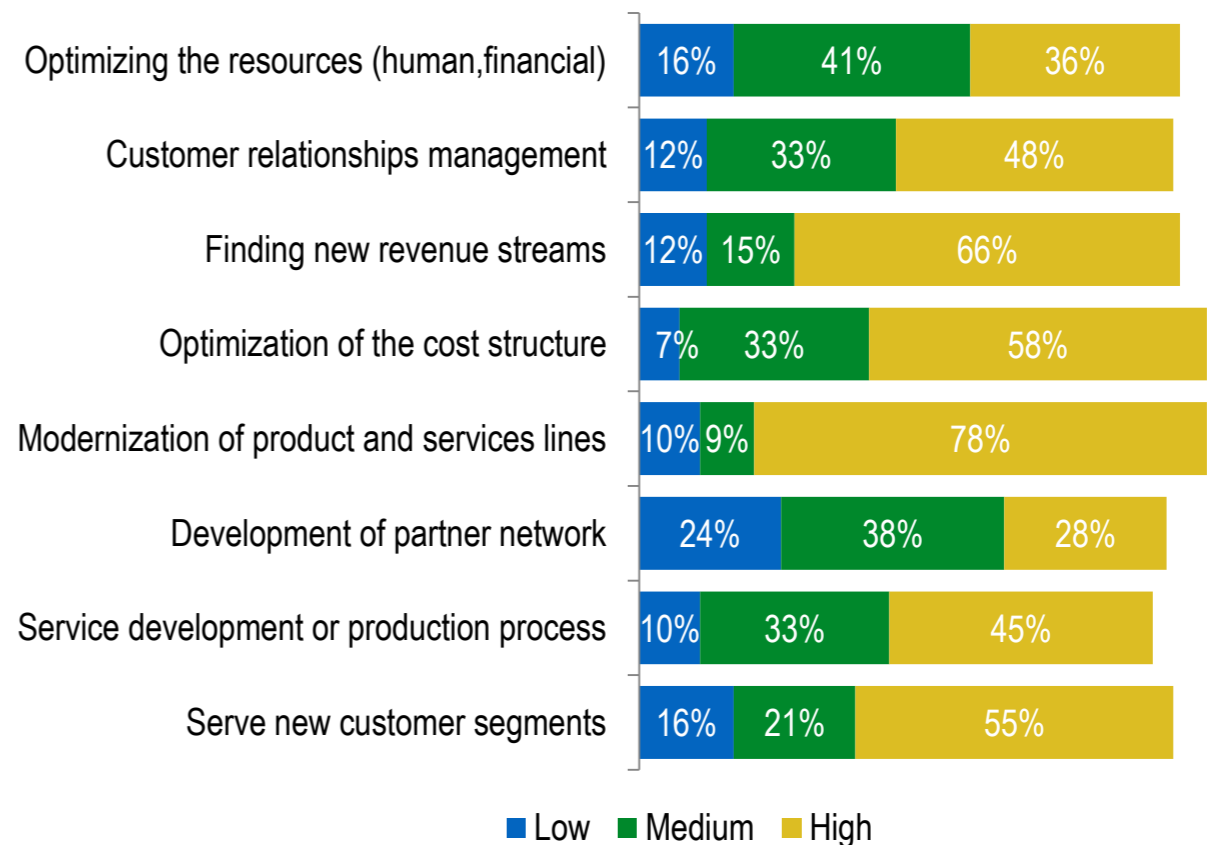


RESULTS: GLOBAL TRENDS

Impact of global trends on the financial industry



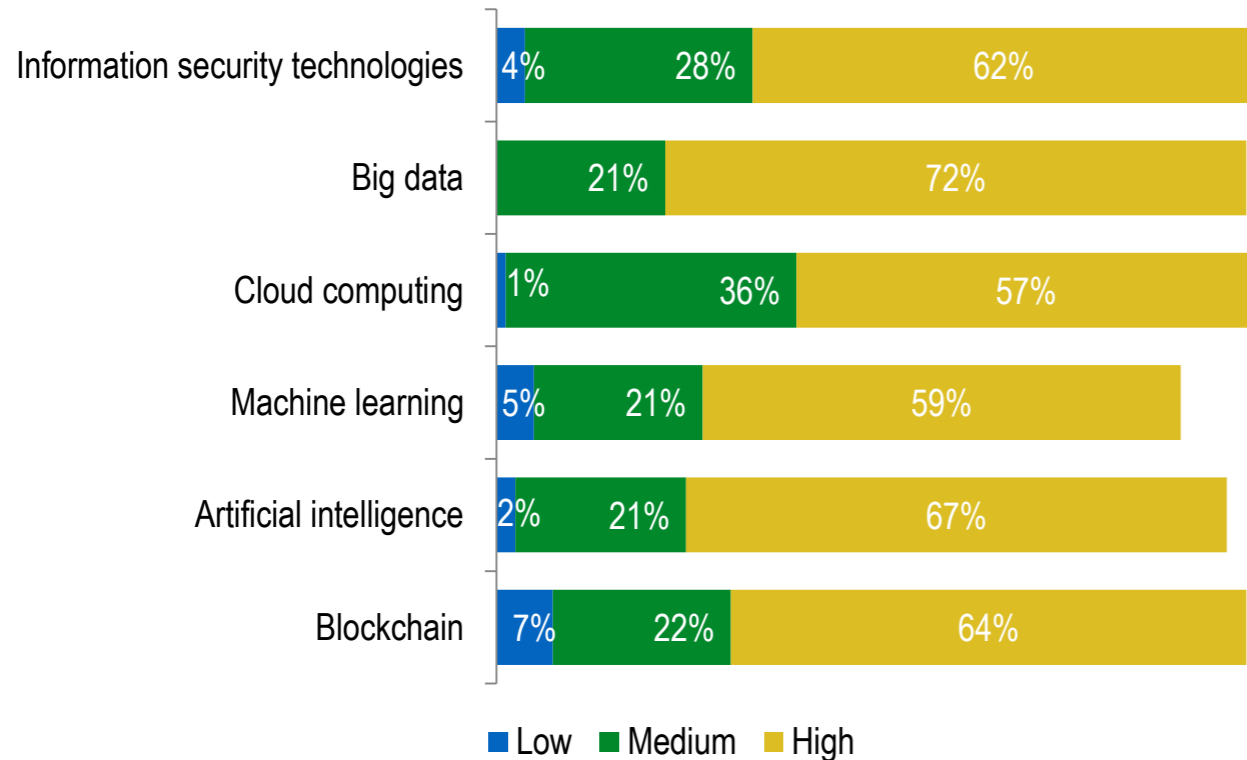
Importance degree of disruptive technologies for business activities in the financial industry



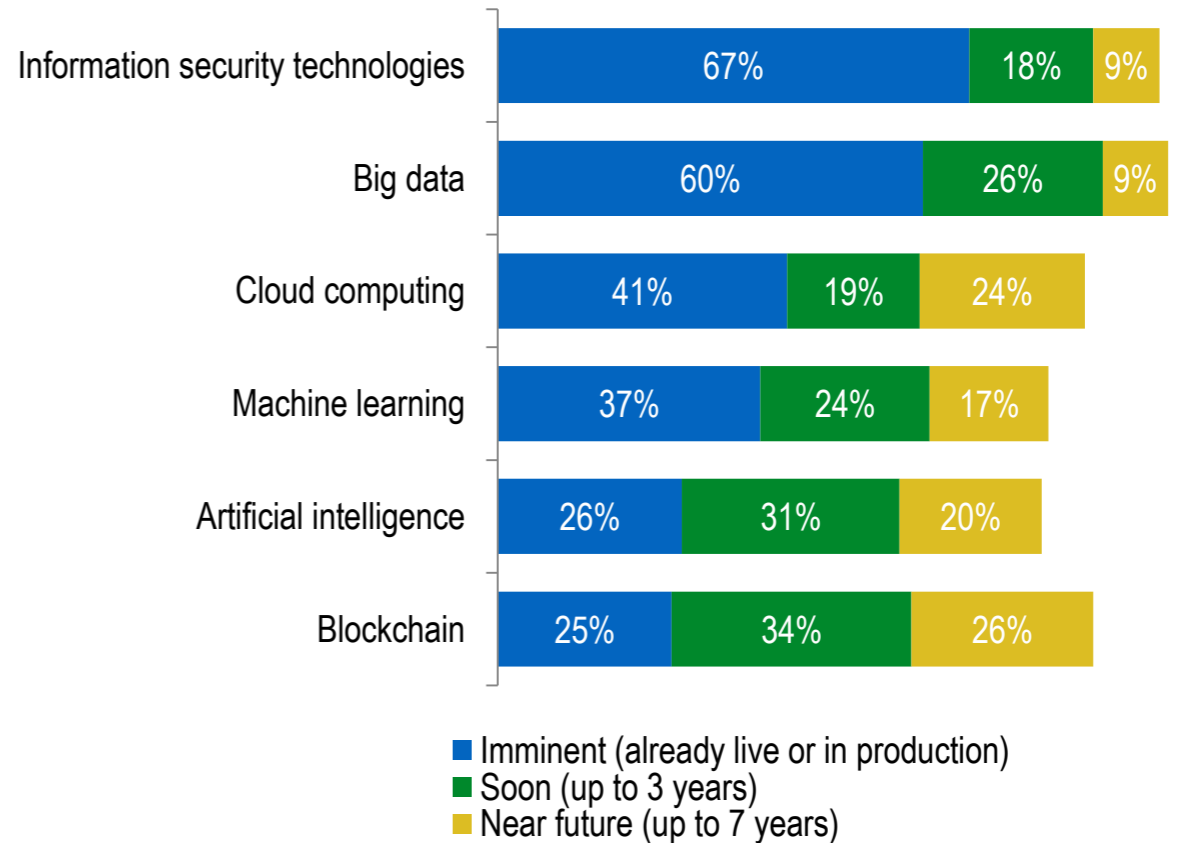


RESULTS: DISRUPTIVE TECHNOLOGIES

Degree of investment attractiveness of disruptive technologies in the financial industry

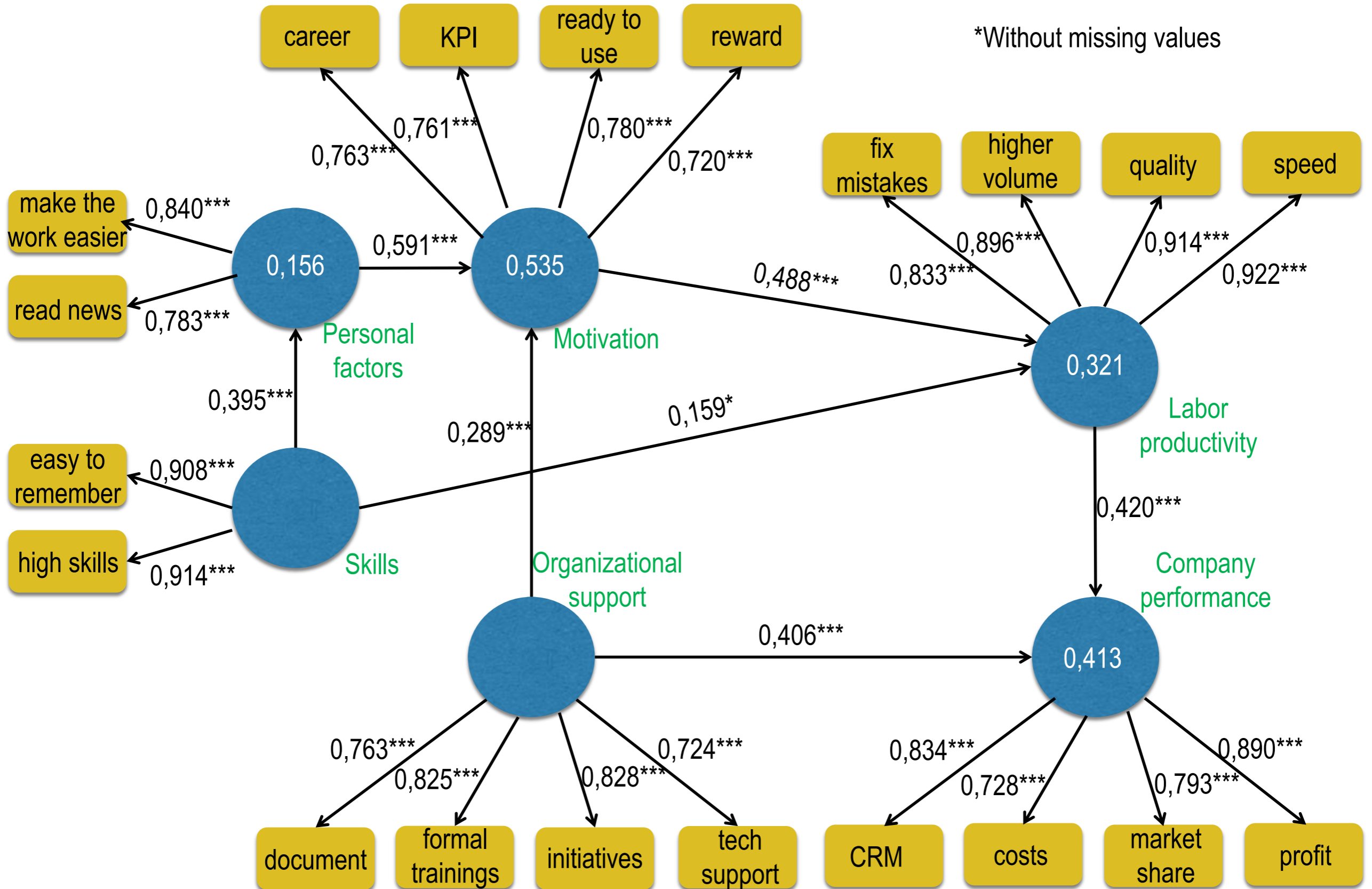


Usage of disruptive technologies in the financial industry





BASELINE MODEL RESULTS*





MORE DETAILS

- [Monitoring KIBS in Russia](#)
- [analytical report in Russian](#)
- forthcoming book chapter in ***Handbook of Financial Econometrics, Mathematics, Statistics, and Technology***

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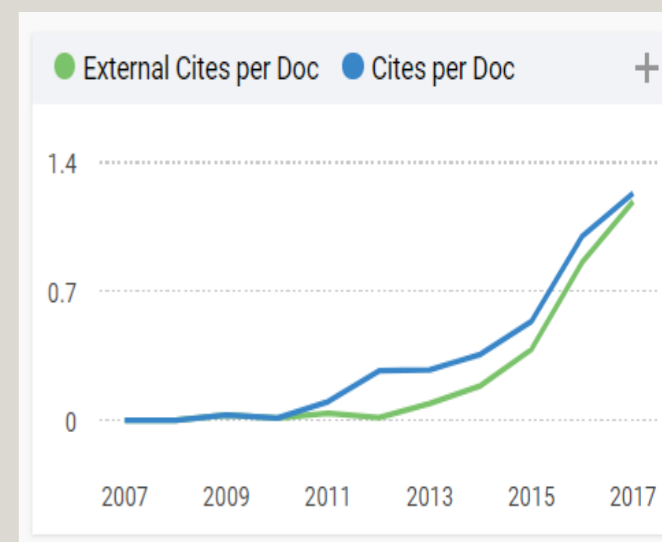
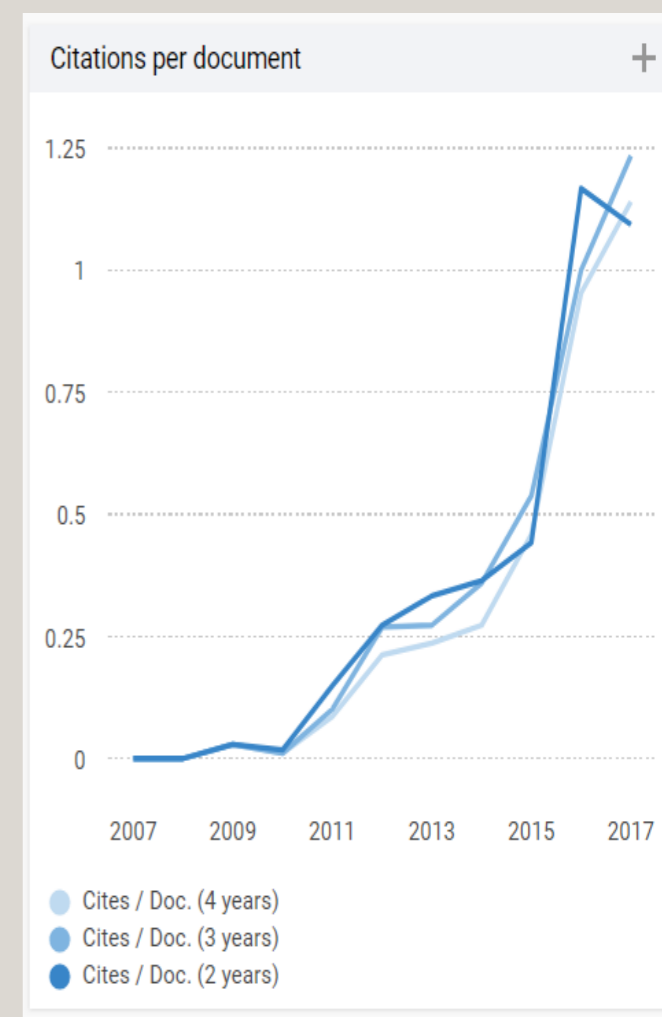
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