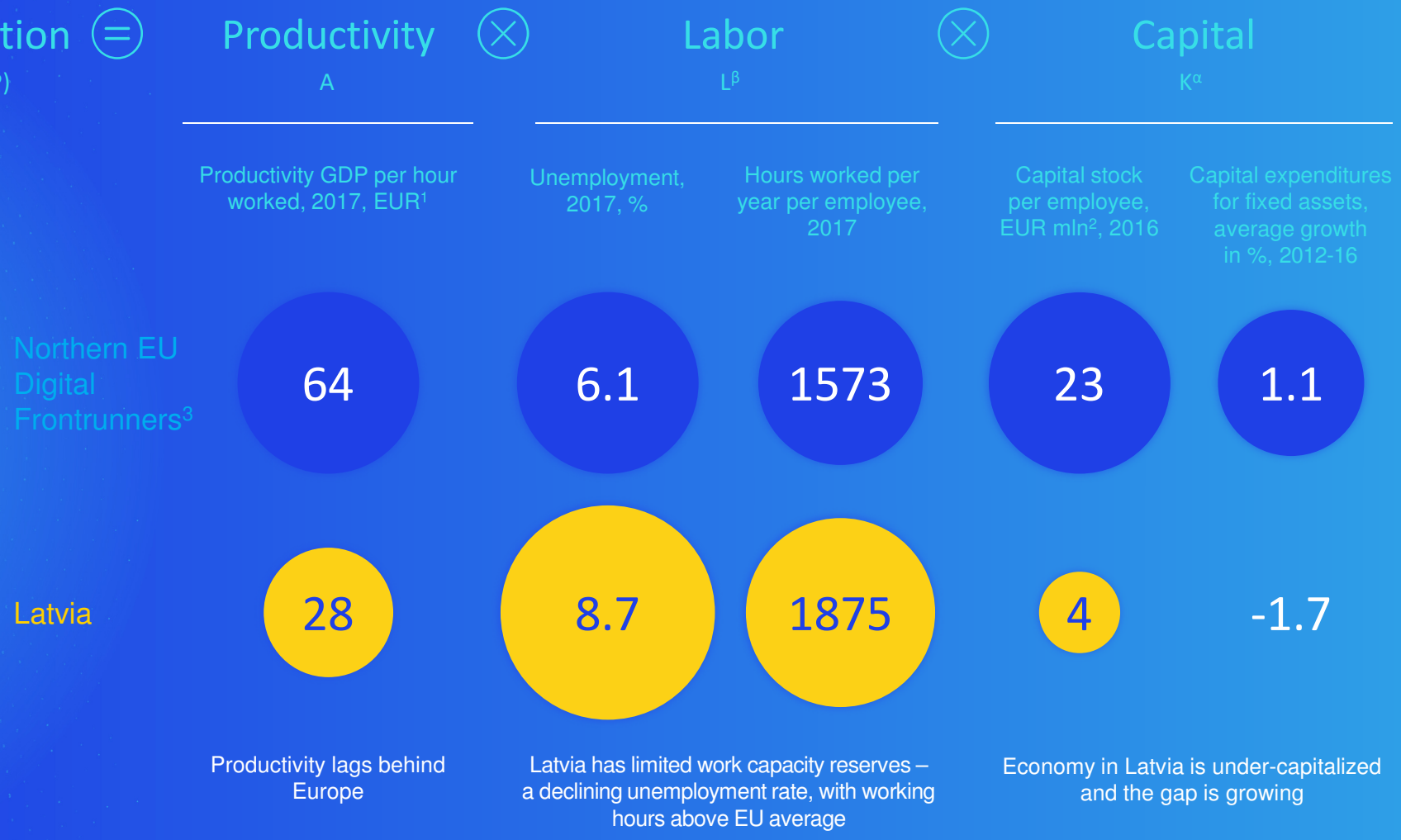
McKinsey&Company

The rise of Digital Challengers

How digitization can become the new growth engine for Latvia and Central and Eastern Europe (CEE)

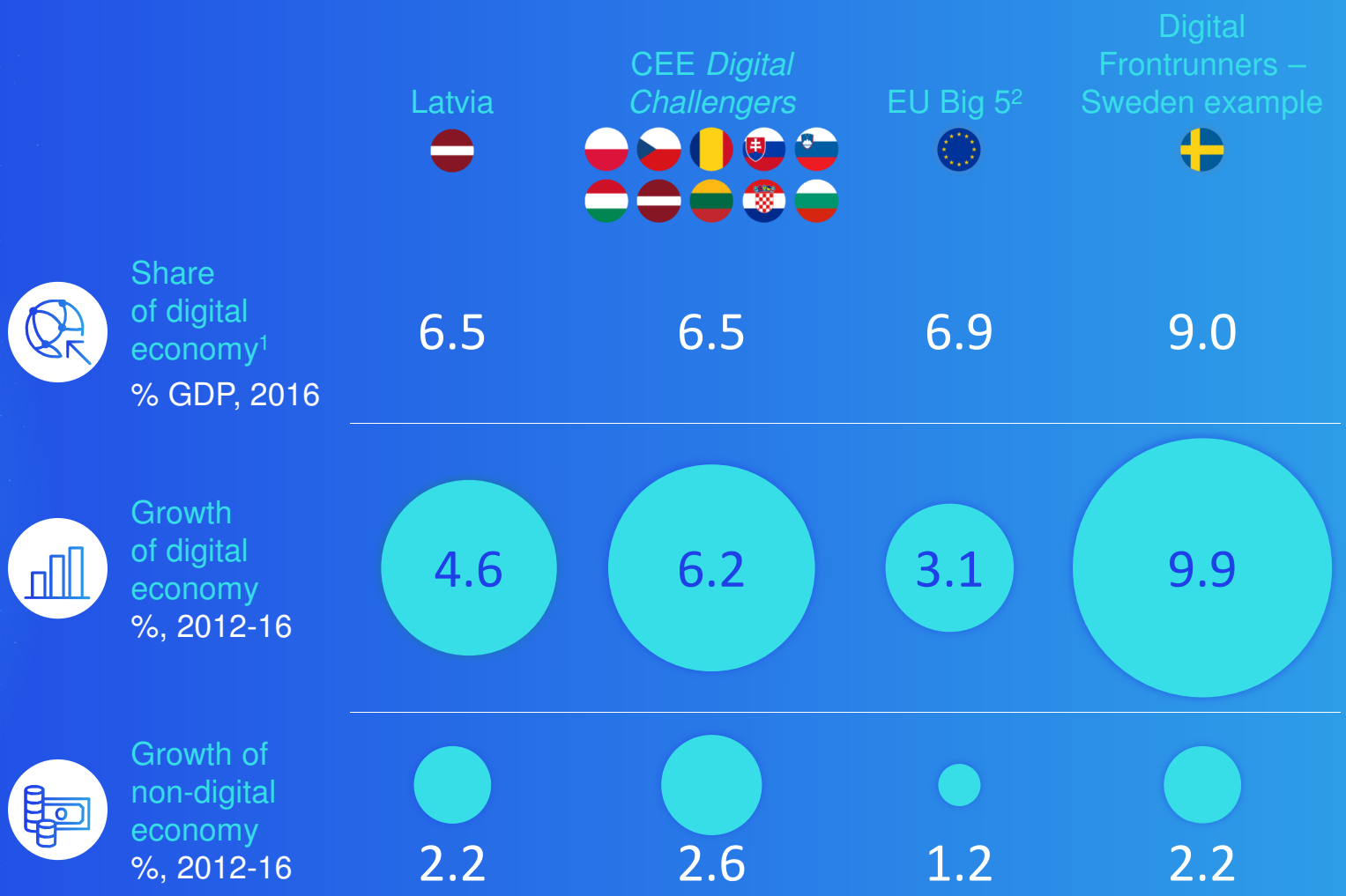
Latvia, similarly to other CEE markets, cannot count on traditional growth levers any more and should look for the next growth engine



1 EUR current prices and purchasing power parities in current prices
2 Net assets per employee, at prices of 2010
3 Belgium, Denmark, Estonia, Finland, the Netherlands, Ireland, Luxembourg, Norway, Sweden

SOURCE: Eurostat; OECD

An acceleration is needed for Latvia to catch up to Europe's Digital Frontrunners



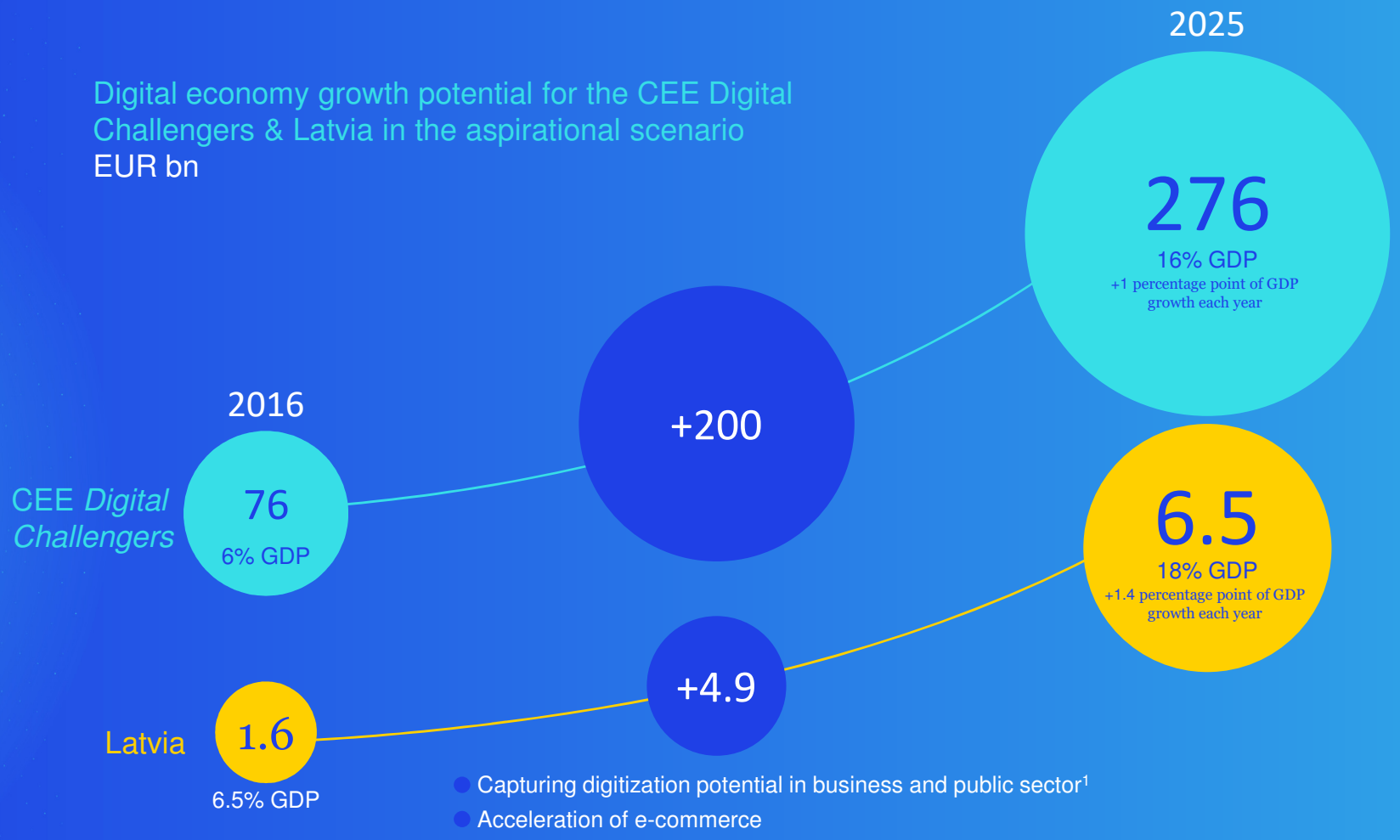
1 Digital economy is calculated as sum of sectors: ICT, e-commerce and consumer spending on digital equipment (e.g., computers, smartphones, smartwatches)
2 Spain, France, Germany, UK, Italy

SOURCE: Eurostat; Local institutes of statistics; McKinsey Global Institute

The digital economy in 2025 can bring up to 200 billion EUR in GDP in CEE and 4.9 billion in Latvia, adding up to 1.4 p.p. to GDP growth per year

Digital economy growth potential for the CEE Digital Challengers & Latvia in the aspirational scenario

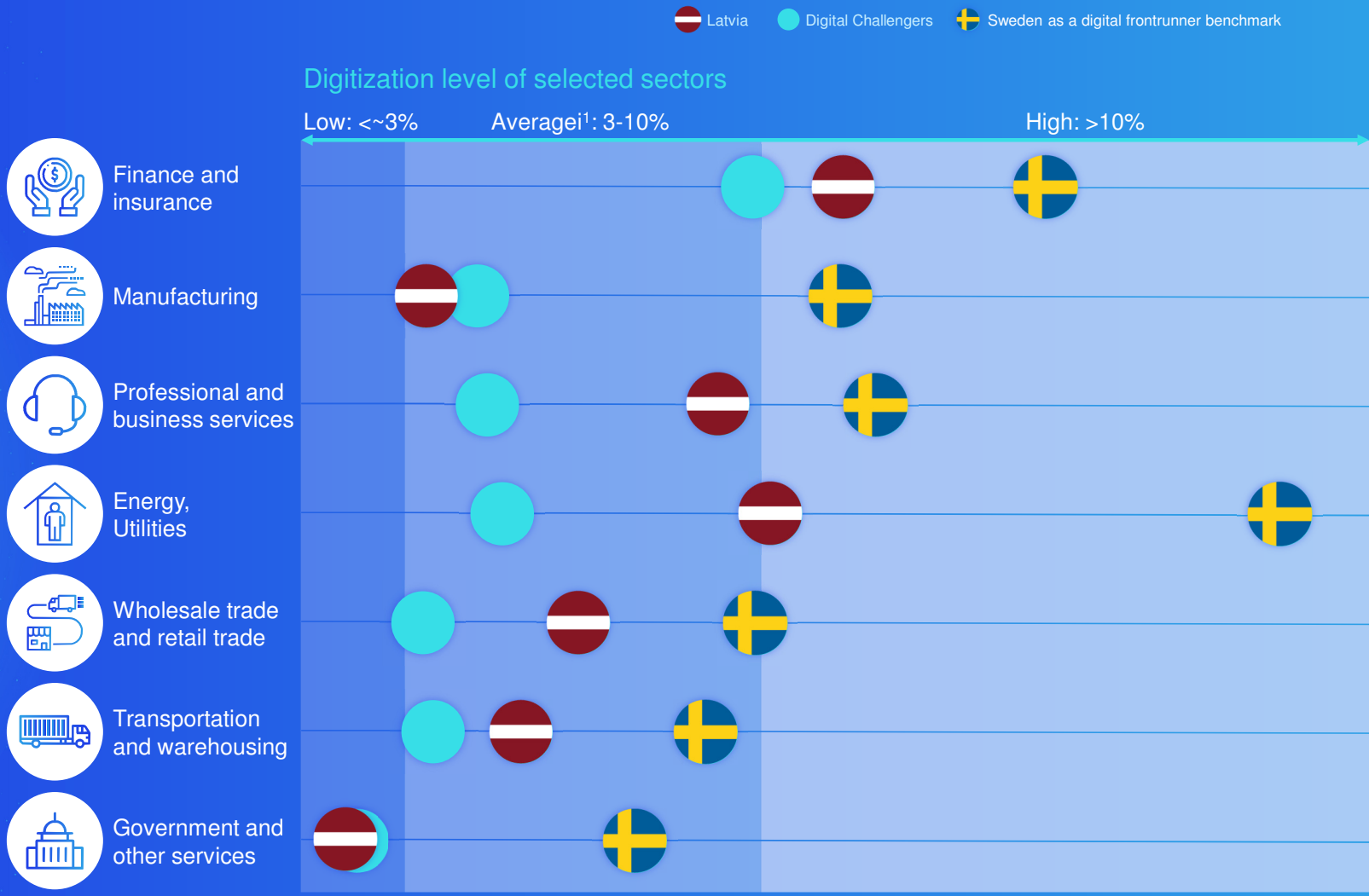
EUR bn



1 Productivity growth captured by increase of traditional ICT usage (software, hardware, telecommunications) to the level of Sweden – representation of Digital Frontrunners

SOURCE: Eurostat; Local statistical offices; IHS; McKinsey Global Institute

Latvia's digital potential can be achieved by addressing gaps in the digitization level of private and public sectors



1 Average level of all sectors (excluding the most advanced ICT sector and finance)

SOURCE: Eurostat; Local institutes of statistics, McKinsey Global Institute

Four strengths supporting Latvia's Digital Challenger status

Good overall quality of the primary and secondary education systems
(mathematics, reading and science literacy PISA[1] average of 487, close to Digital Frontrunners' score of 505)

Well educated workforce entering the job market
4.8% of all graduates are ICT graduates, higher than Digital Frontrunners benchmarks

Well developed digital infrastructure
Approx. 98% of the population with 4G access, above the level of Germany and France

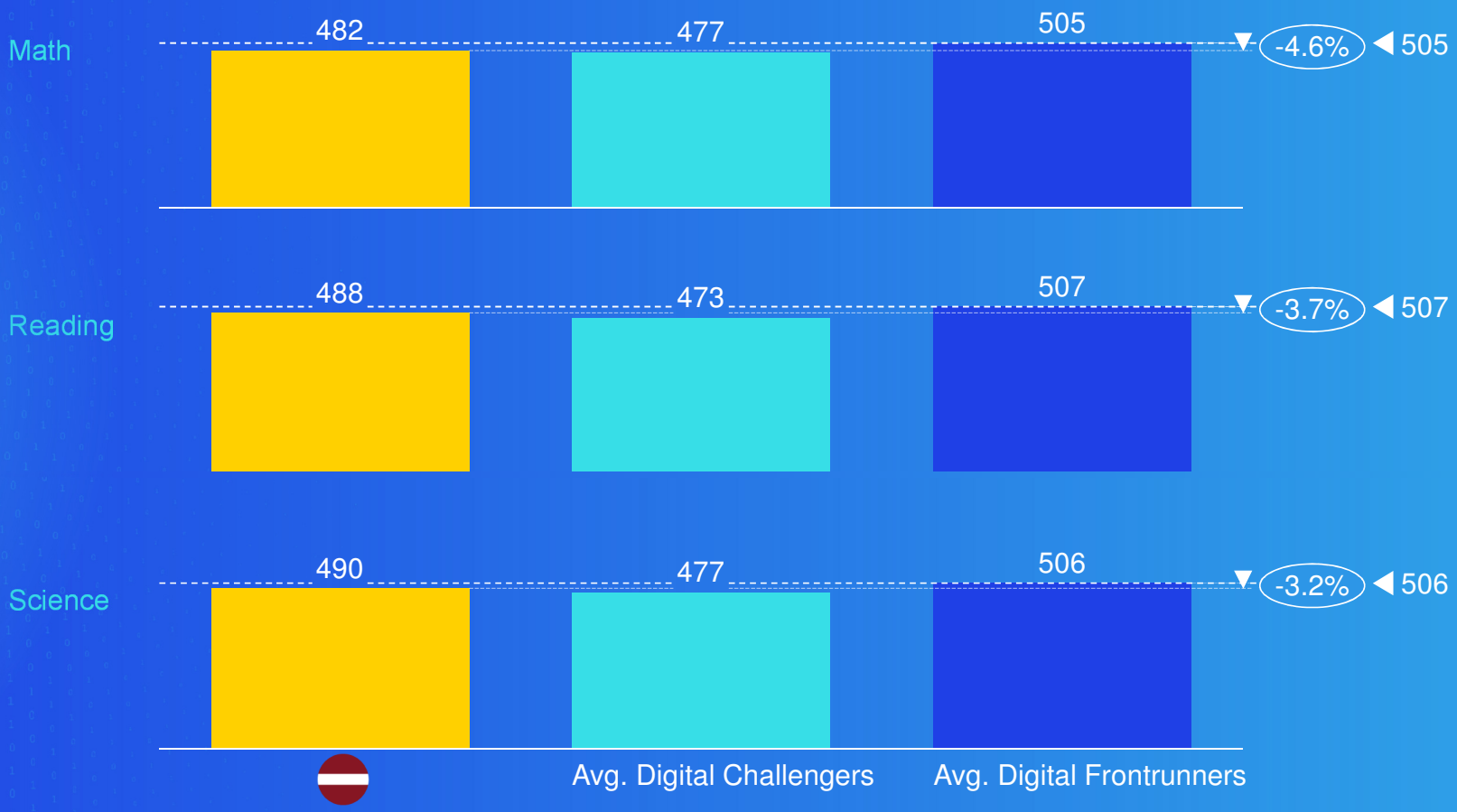
A favorable structure of economic growth –
Based on the competitiveness of work, openness to the development of new sectors and the implementation of ambitious goals in the area of digitization

1 *Program for International Student Assessment* (PISA)

SOURCE: Eurostat, OECD

Overall primary and secondary education quality gap between Latvia and digital frontrunner countries is very small

Scores in Math, Reading, Science Literacy & English Proficiency, PISA (OECD) Synthetic scores, 2016

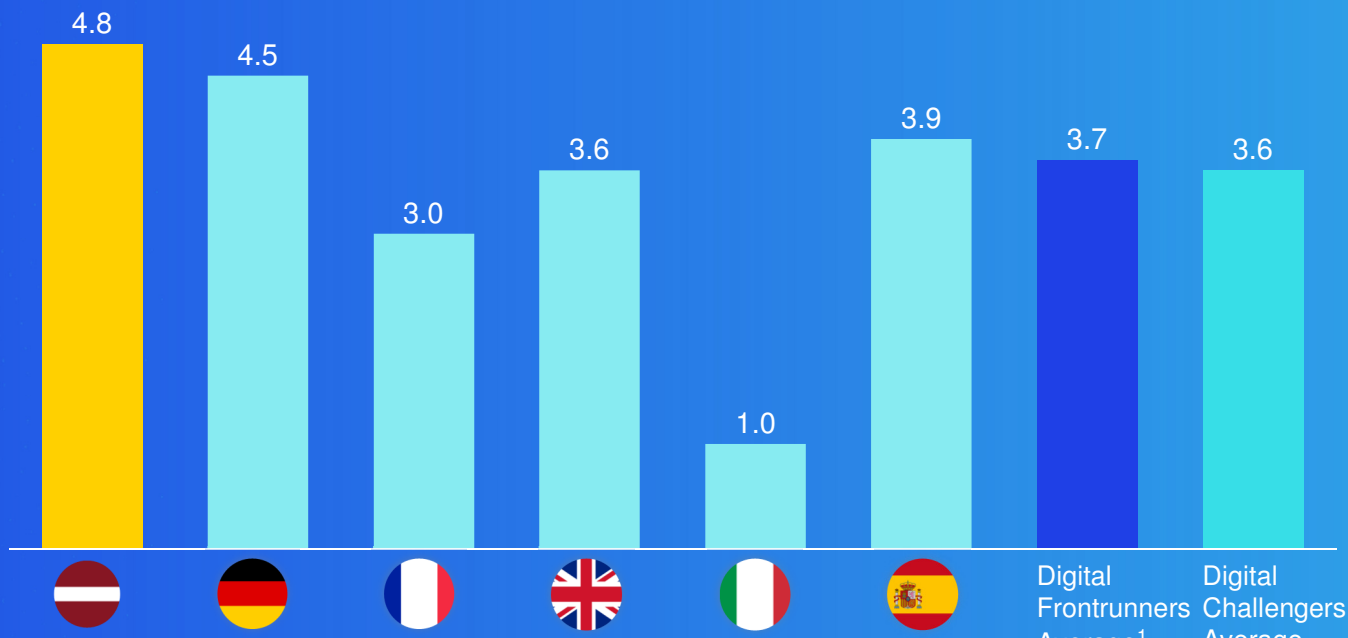


1 Digital Frontrunners: Belgium, Denmark, Estonia, Finland, Holland, Ireland, Norway, Luxemburg, Sweden

SOURCE: OECD, PISA, World Bank

Latvia has a relatively very high share of ICT graduates as part of its student population

Information and Communication technology graduates, % of all graduates

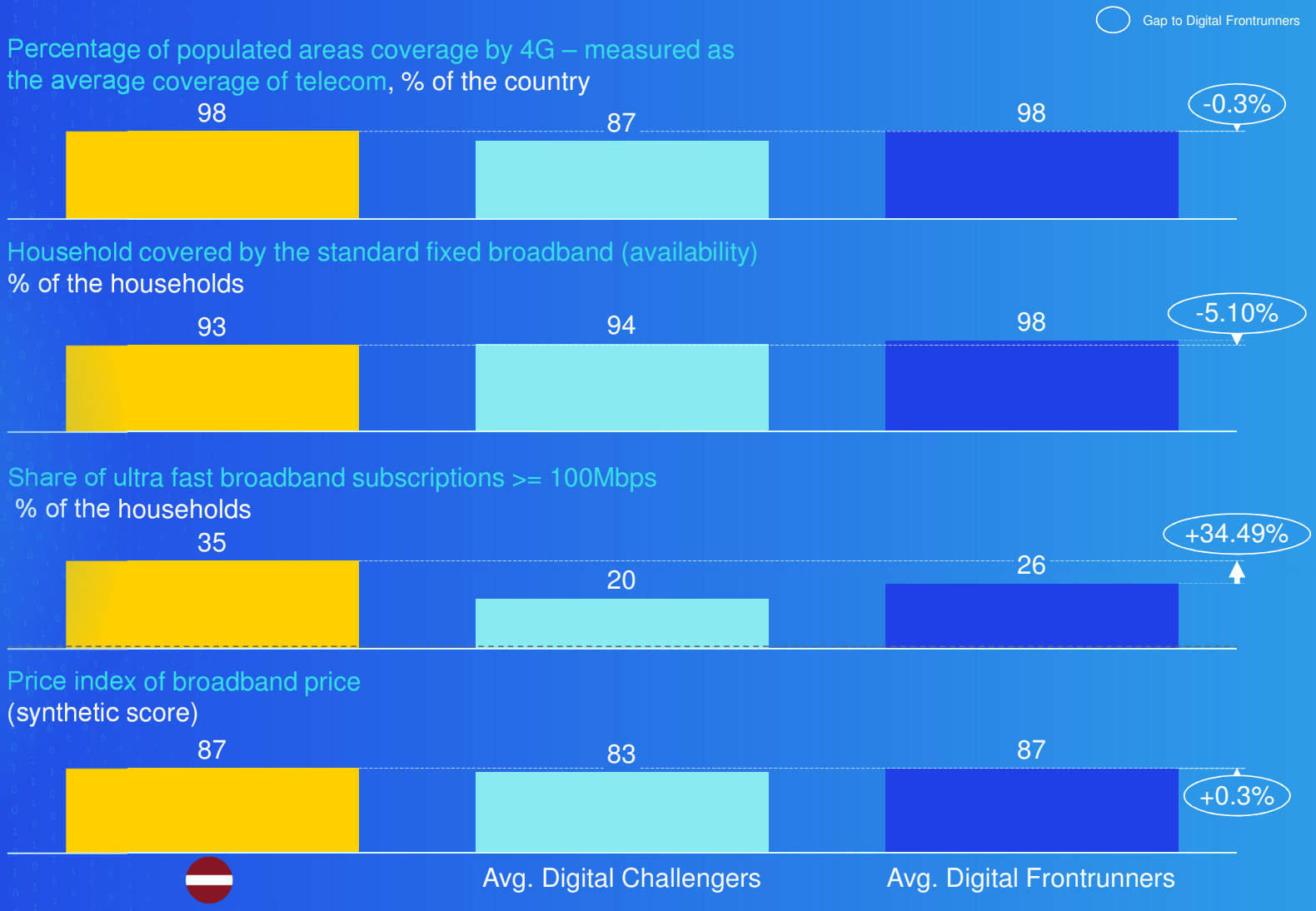


Number of STEM graduates per 100.000 inhabitants, 2016							
164	244	296	303	143	226	215	221

1 Digital Frontrunners: Belgium, Denmark, Estonia, Finland, Holland (data for 2015 assumed), Ireland, Norway, Luxemburg, Sweden

SOURCE: Eurostat, Unesco Institute for Statistics

In addition to fixed and mobile internet coverage in Latvia being on a par with Digital Frontrunners, the country exhibits one of the highest shares of ultrafast broadband subscriptions in Europe



SOURCE: DESI 2018, World Economic Forum

Additional work needs to be done in three major areas

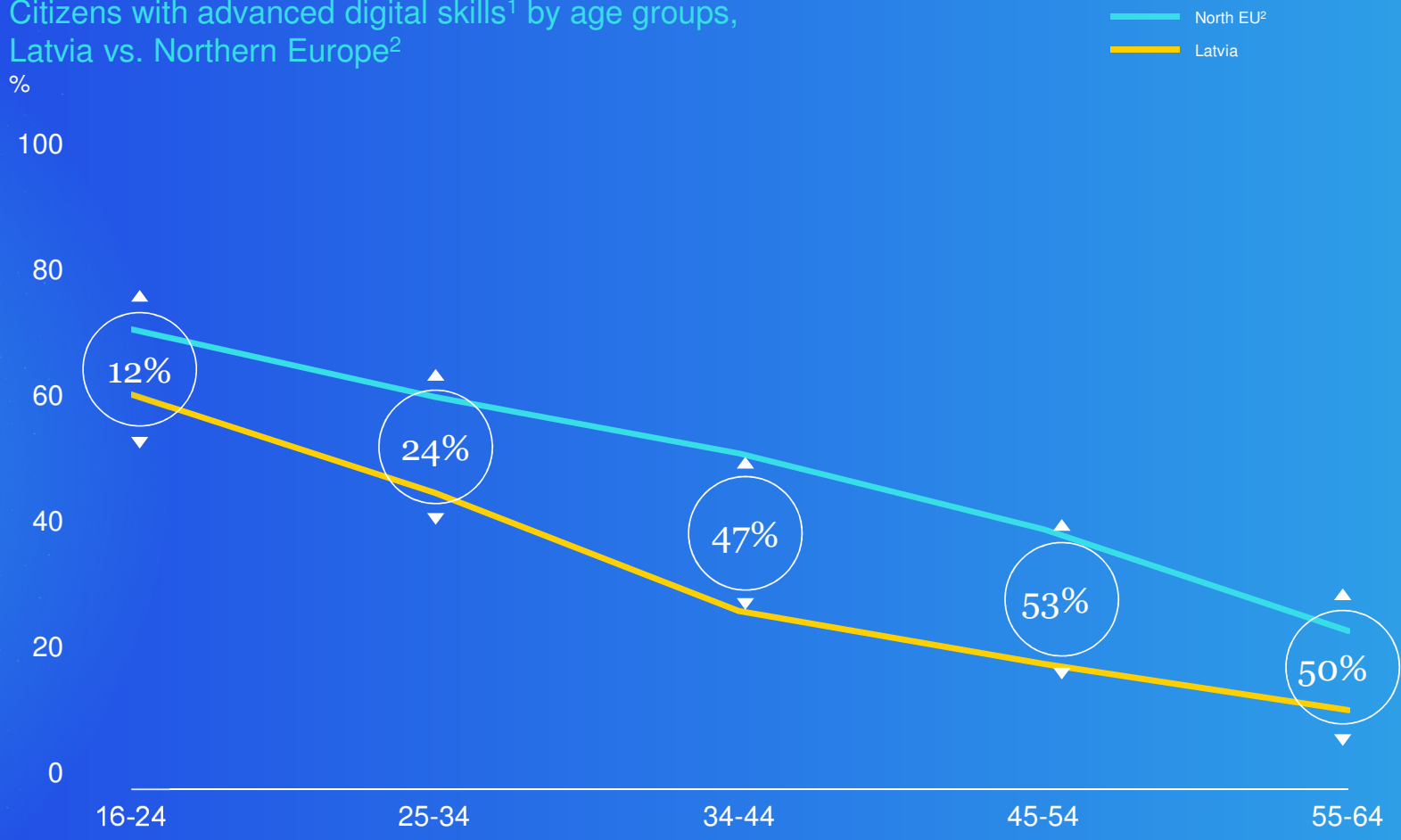
Development of digital and soft skills among the general population

The adoption of digital tools in public and private sectors

Support innovation and entrepreneurship developments and further ease of running a digital business

Across all age groups in Latvia, the percentage of people with advanced digital skills is below Northern European benchmarks

Citizens with advanced digital skills[1] by age groups, Latvia vs. Northern Europe[2]



1 Advanced digital skills - analysis and data collection using digital tools, the use of online tools such as banking or e-commerce, use of online communication
2 Belgium, Denmark, Estonia, Finland, the Netherlands, Ireland, Luxembourg, Norway, Sweden

SOURCE: Eurostat, McKinsey & Company analysis

The private sector in Latvia is less advanced in the use of digital tools than the countries of Northern Europe; SMEs do not fully use the potential of digitization

Selected digital tools
% of enterprises using the tool, 2016

S SME L Large Corporates

1 Belgium, Denmark, Estonia, Finland, Netherlands, Ireland, Luxembourg, Norway, Sweden

SOURCE: Eurostat

Public sector

1. **Build skillset for the future** by developing a wide-ranging reskilling strategy, updating youth education for the future and actively counteracting brain drain
2. **Support technology adoption in the public sector** (e.g., speeding up the development of online public services and its adoption)
3. **Support technology adoption among businesses** (e.g., promote digitization benefits and digital transformation)
4. **Strengthen regional cross-border digital collaboration (**e.g., create a strong digital pillar within regional collaboration platforms)
5. **Improve startup eco-system** through e.g., improving entrepreneurial talent pool and increasing access to capital)

10

recommendations to digitize Latvia

Private sector

6. **Actively adopt technology and innovation** (e.g., adapt your business model to meet the demands of the digital economy)
7. **Embrace a pro-digital organizational culture**
8. **Invest in human capital** (e.g., prepare your talent strategy for the digital economy)

Individuals

9. **Prepare for the digital economy –** invest in life-long learning
10. **Take advantage of digital tools** in all aspects of your life

The digital opportunity in Latvia – summary

10% — Digital economy annual growth in Sweden – Digital Challengers countries and Latvia may aspire to such a growth dynamic in the future

2x — Faster growth of the Digital Economy compared to the Non-Digital economy

5 bn euro — Additional GDP potential can be achieved by digital economy in Latvia by 2025

Adoption of digital tools in public and private sectors and development of digital skills among the general population are essential to fully realize the potential of the digital economy in Latvia

Available at:
Digitalchallengers.mckinsey.com