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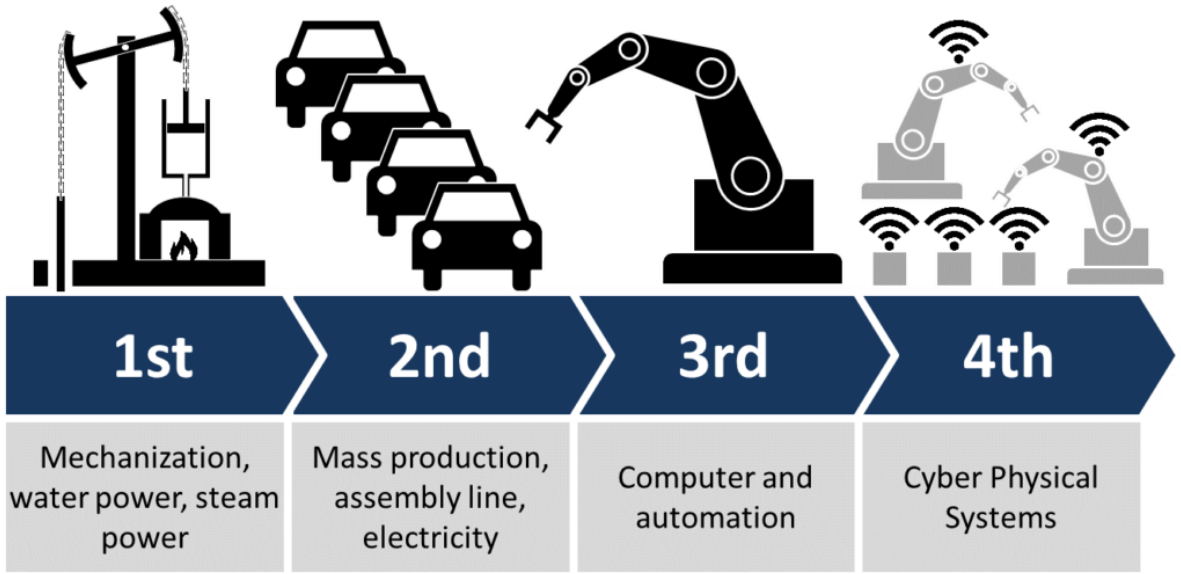
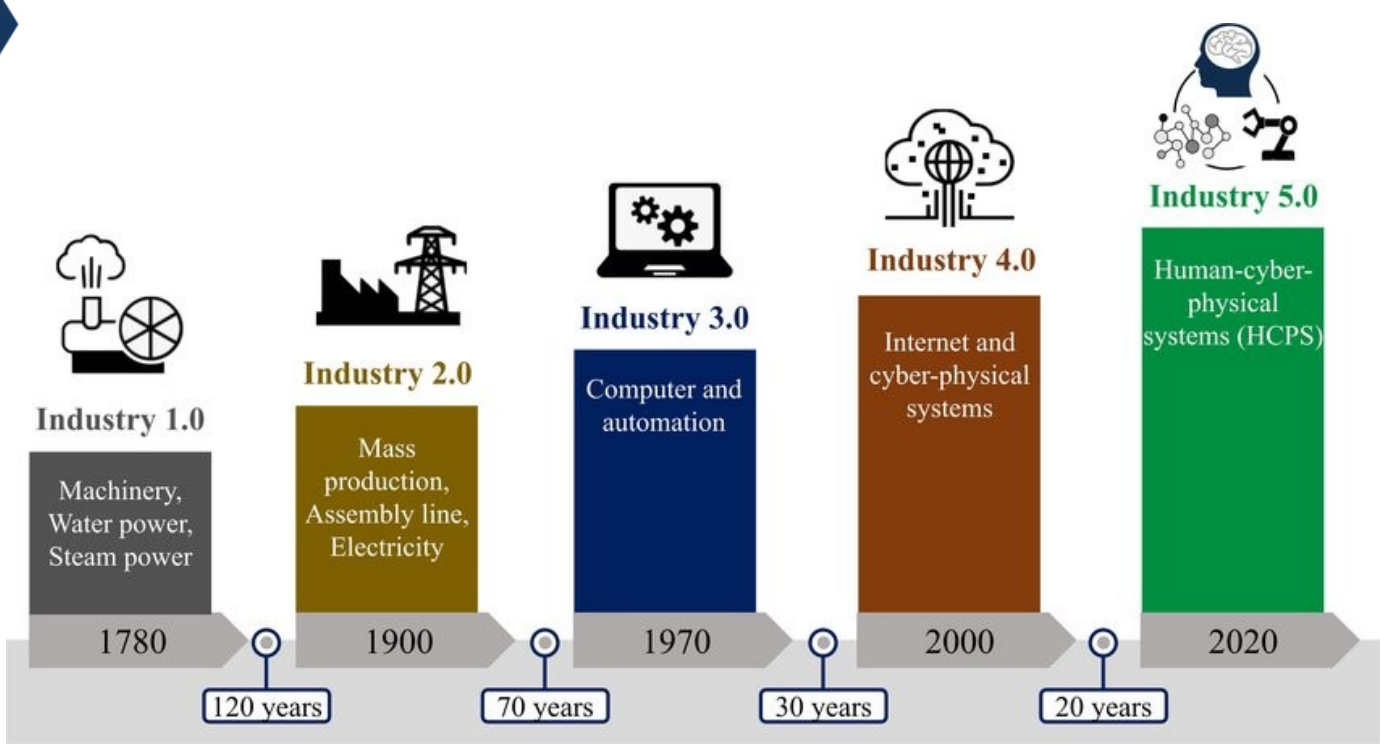
GLOBAL GROWTH PERSPECTIVES IN A WORLD OF DIGITAL INNOVATION AND AI

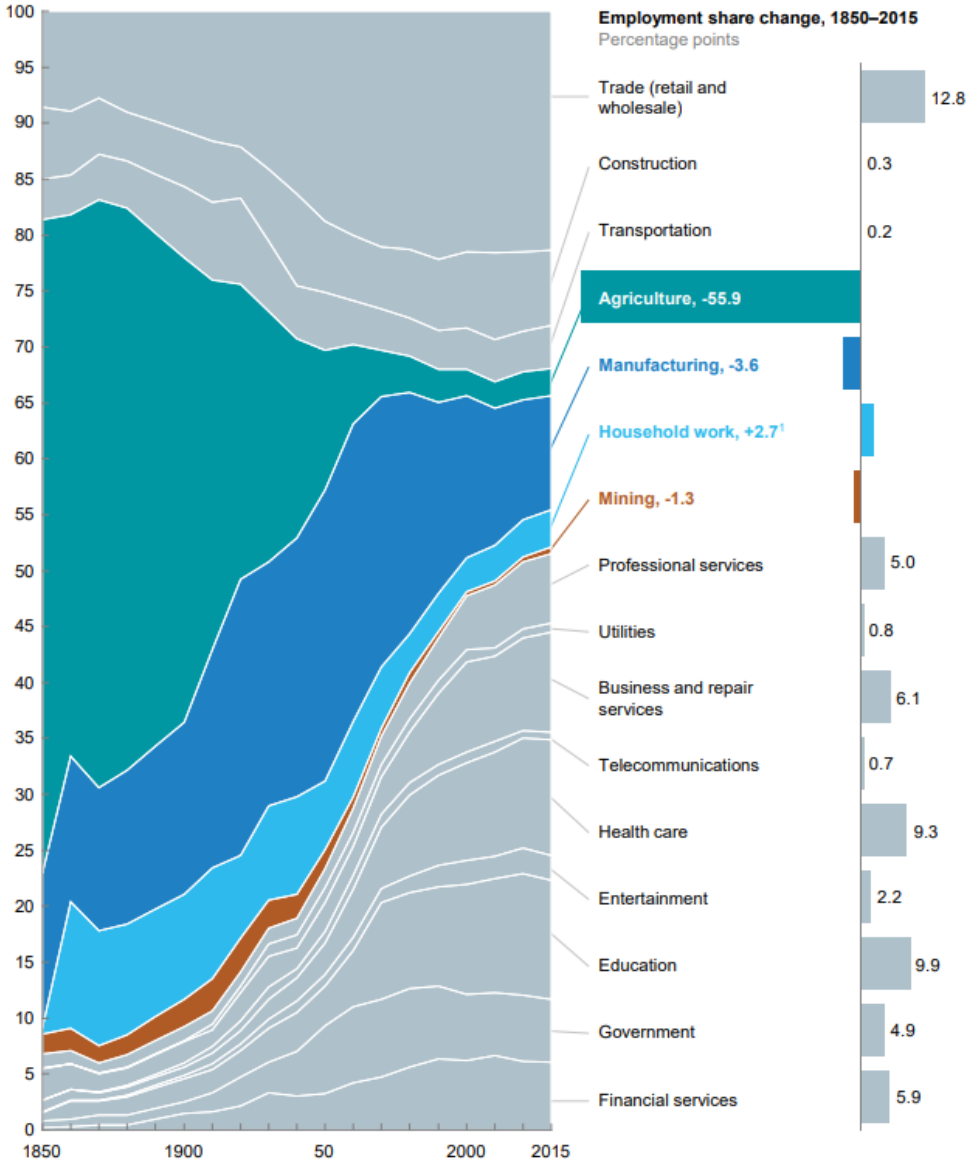
SO FAR, WE HAVE SEEN THREE-FOUR INDUSTRIAL REVOLUTIONS TRANSFORM OUR MODERN SOCIETY





Industrial revolutions in the modern society
Source: Renaix, ResearchGate

THROUGHOUT HISTORY, LARGE-SCALE SECTOR EMPLOYMENT DECLINES HAVE BEEN COUNTERED BY GROWTH OF NEW SECTORS THAT ABSORBED WORKERS



Employment share in agriculture has declined by 55.9 percentage points, in manufacturing by 3.6 percentage points in the United States between 1850 and 2015, while employment **share in other sectors has risen significantly**

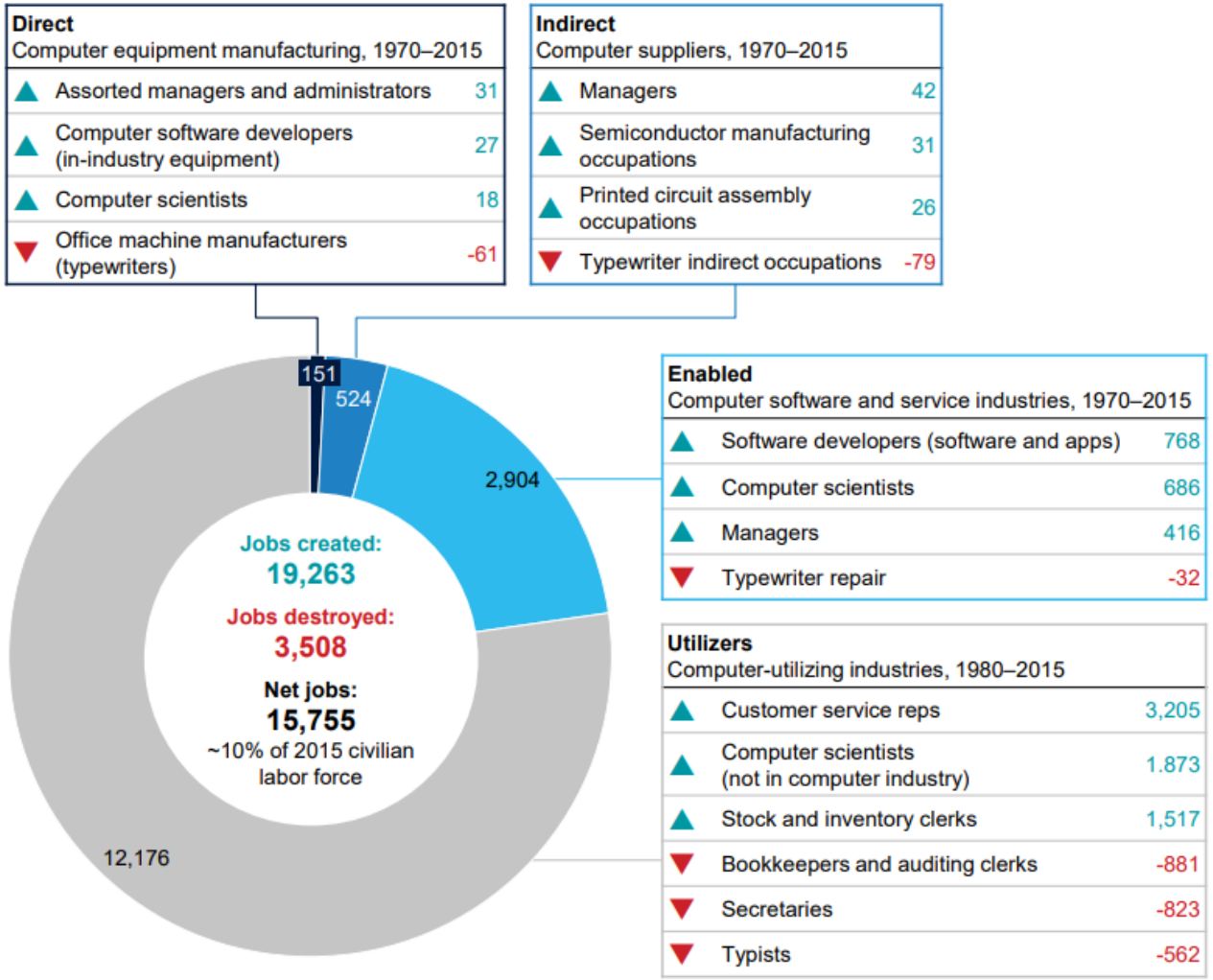
It is expected that the presence of new technologies and **AI will also bring significant changes to the labour market**

The McKinsey Global Institute (2017) estimates that **future sector declines from automation are largely expected to be within range of historical declines** on a sector basis, but smaller as a share of the overall economy

Share of total employment by sector in the United States, 1850 – 2015

Source: IPUMS USA 2017; US Bureau of Labor Statistics; McKinsey Global Institute analysis

WILL NEW TECHNOLOGIES CREATE MORE JOBS THAN THEY REPLACE?



In the past, at every stage of the advancements of **industrial revolutions, more jobs were created than destroyed**

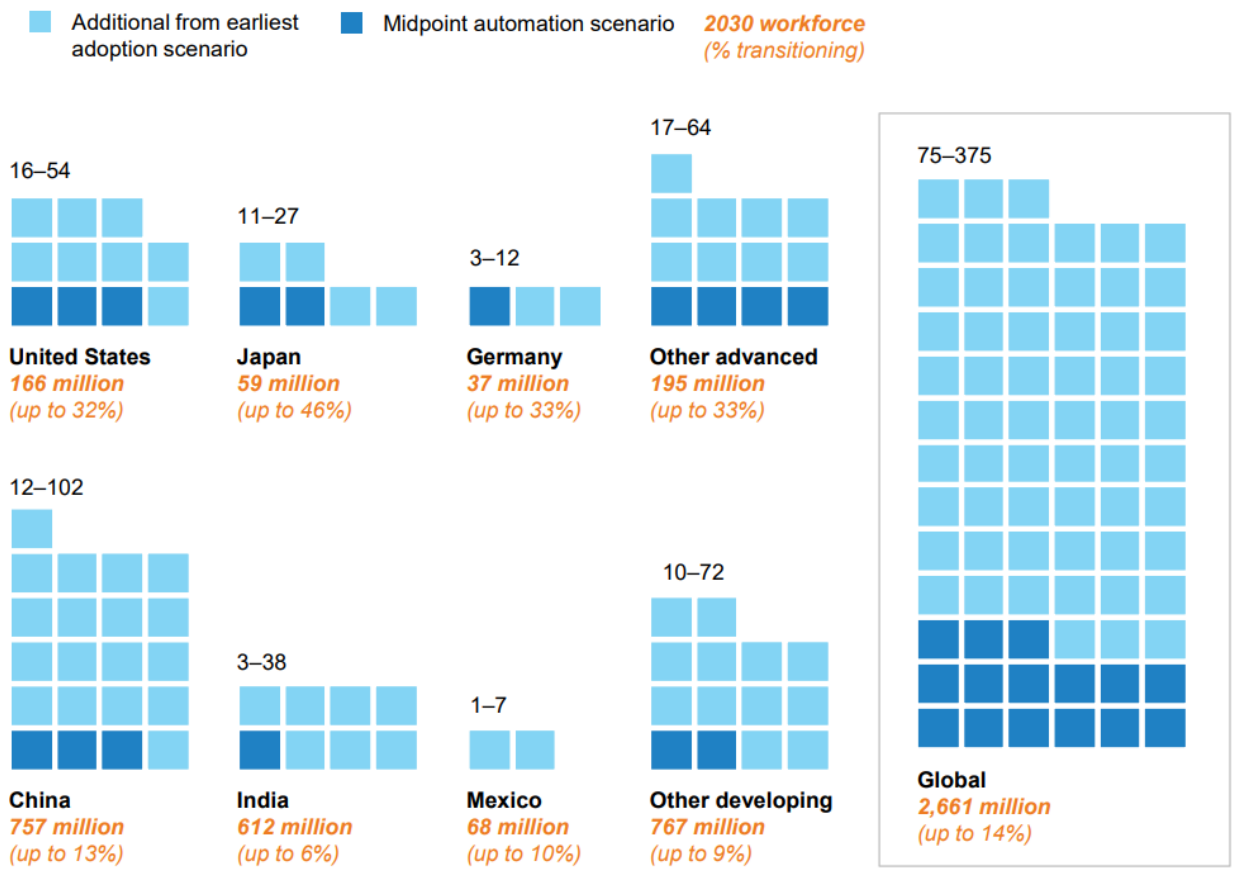
According to World Economic Forum (2020): **85 million jobs would be replaced** by AI by 2025 but it also indicates that another **97 million new jobs would be created** as a result of AI by 2025

The latest WEF report (2023) states that the impact of most technologies (big data analytics, cybersecurity, implementation and managing AI tools) on jobs is expected to be a **net positive over the next five years, however**, the rapid increase of **AI technologies will put many roles at risk**

Total US jobs created and destroyed by personal computers (thousand jobs)

Source: IPUMS; Moody's; IMPLAN; US Bureau of Labor Statistics; FRED; McKinsey Global Institute analysis

WHICH COUNTRIES AND PROFESSIONS WILL BE THE MOST AFFECTED BY THESE NEW TECHNOLOGIES?



Between 400 million and 800 million individuals could be displaced by automation, with up to 375 million needing to transition to new occupational categories

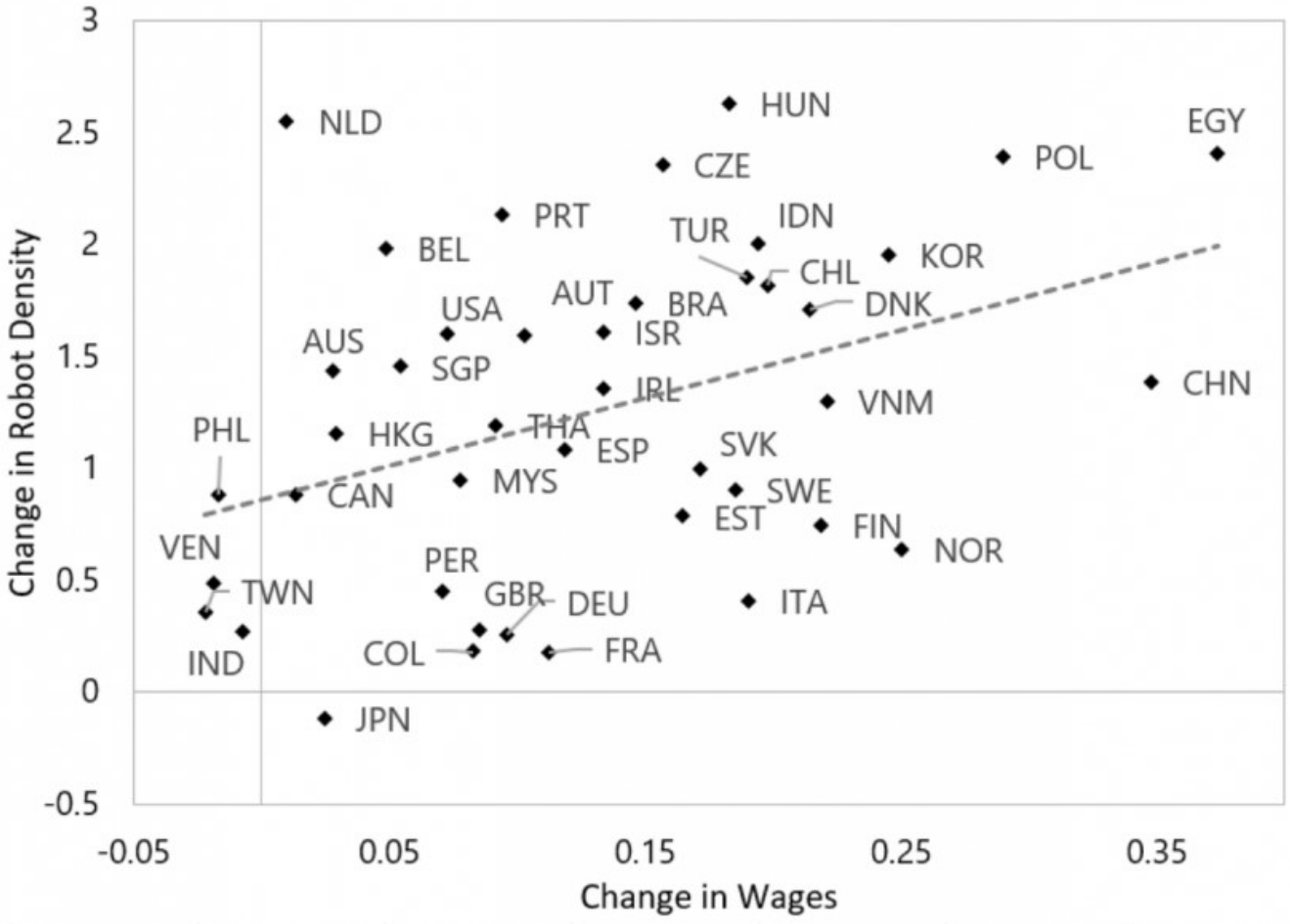
AI technologies could **generate significant job growth** in areas such as **healthcare, education, and renewable energy**

New technological trends will be able to **replace human workforces** in a lot of areas, such as **logistics, transportation, manufacturing work, housekeeping, office and administration support**

Professional occupations with direct human interaction (health and education professionals, lawyers) and jobs requiring **a combination of skills and abilities that are difficult for machines to replicate are the least exposed**

The number of workers needing to move out of current occupational categories to find work, 2016 – 2030 (million people)
Source: U.S. Bureau of Labor Statistics; McKinsey Global Institute analysis, Note: 1 block = 5 million

HIGHER REAL WAGES APPEAR ASSOCIATED WITH HIGHER USE OF ROBOTS IN MANUFACTURING – ACCORDING TO THE IMF



Higher wages coincide with significantly higher use of robots

This is consistent with the idea that **firms substitute away from workers and towards robots** in response to higher labor costs

Improvements in the productivity of robots drive divergence between advanced and developing countries if robots substitute easily for workers

How Artificial Intelligence Could Widen the Gap Between Rich and Poor Nations? For most countires data spans: 2006-2016
Source: IMF, Authors' calculations (Cristian Alonso, Siddharth Kothari, Sidra Rehman)

AI AND THE FUTURE OF BANKING

GENERATIVE AI'S IMPACT ON PRODUCTIVITY COULD ADD TRILLIONS OF DOLLARS IN VALUE TO THE GLOBAL ECONOMY

Generative AI could add the equivalent of $2.6 trillion to $4.4 trillion annually

About 75 percent of the value that generative AI use cases could deliver falls across four areas: **Customer operations, marketing and sales, software engineering, and R&D**

Generative AI will have a significant impact across all industry sectors. Across the **banking industry, for example, the technology could deliver value equal to an additional $200 billion to $340 billion annually**

Source: McKinsey Global Institute – The economic potential of generative AI: The next productivity frontier, ITChronicles.com

HOW CAN THE DEVELOPMENT OF TECHNOLOGY CHANGE BANKS LENDING – HIGHER PENETRATION?

The spread of the use of social media platforms has created a new, easily accessible and analytical information base (such as number of children, important life events, number of jobs)

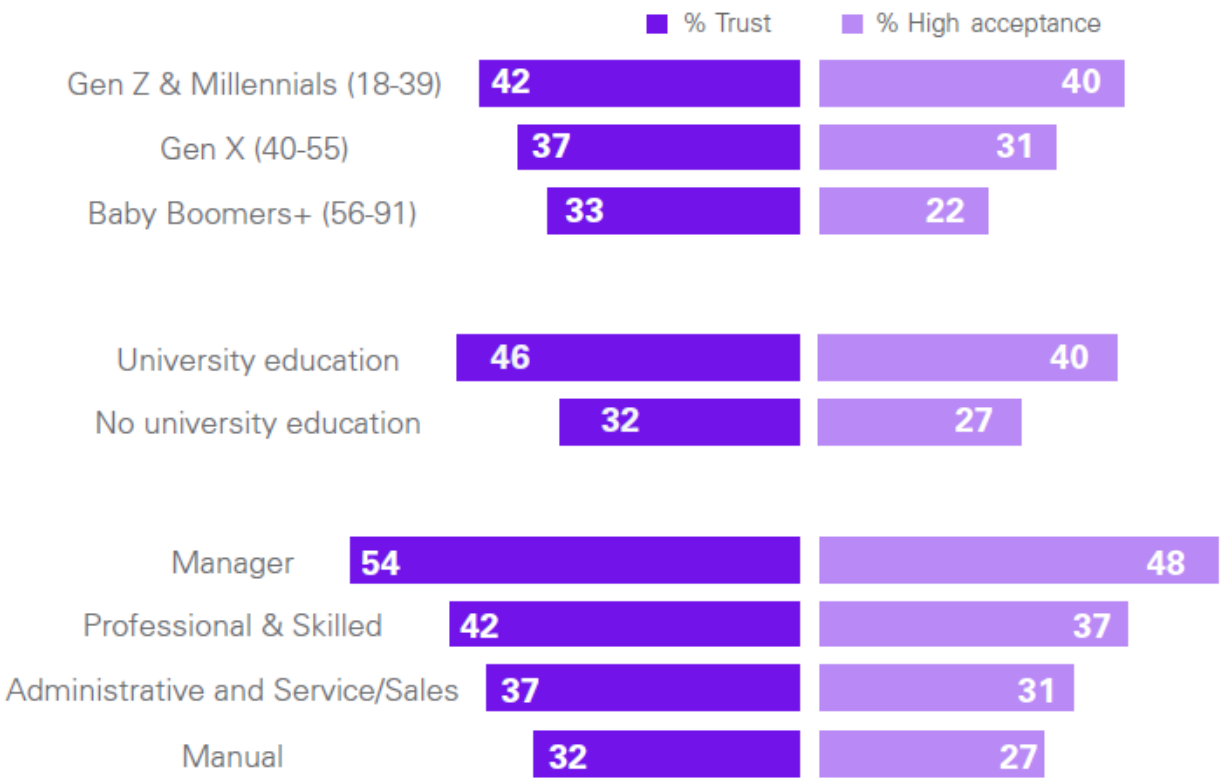
Examination of the wording of the application **(text mining) was first introduced in the case of peer-to-peer and crowdfunding lending**

Mobile applications using machine learning tools can collect data and it can be better determine, whether **the customer is creditworthy or not**

The general consensus of the studies published on the subject is that **models that simultaneously include both traditional banking methods and innovative solutions** are significantly better than those that use them separately

Source: Financedigest.com

HOW CAN CUSTOMERS BENEFIT FROM AI IN USING SERVICES OR IN ACCESS TO FINANCE?



AI-driven chatbots and virtual **assistants streamline customer support, offering quick responses and solutions to queries 24/7**

AI algorithms can analyse vast datasets to personalize financial recommendations

AI can offer predictive insights, budgeting tools, and investment advice, transforming smartphones into comprehensive financial hubs

AI-powered credit scoring can extend financial access to underserved populations by evaluating non-traditional data sources, enabling more inclusive lending practices

AI can increase financial inclusion in a way that all customers could have access to their own private assistant or banker, without the need for a certain income or wealth

Trust and acceptance of AI systems by generation and education
Source: Trust in Artificial Intelligence: A global study (kpmg.com) (2023)

THANK YOU FOR YOUR ATTENTION!