18 mar 2022

BEES AT WORK
EPISODE 21
Classification of the workforce after COVID-19

By Eleonora Escalante Strategy

BEES AT WORK

Saga Outline

1. **Introduction** 🍯
2. **Rationale, Philosophy and objectives of the saga** 🍯
3. **Before starting** 🍯
4. **The life of the bees at the hive** 🍯
5. **Why are bees crucial for human civilization?** 🍯
6. **Bees Swarm Intelligence** 🍯
7. **How Bees colonies make decisions** 🍯
8. **Bees living in a time of chaos** 🍯
9. **Honeybees' democracy by Thomas Seeley** 🍯
10. **The wisdom of bees applied to human societies** 🍯
11. **Homo sapiens history of work – Our past** 🍯
12. **How humans work now – Our present** 🍯
13. **The forthcoming of work – Our future?** 🍯
14. **How people dignify time by working** 🍯
15. **The meaningful work means happiness too.** 🍯
16. **Women in the workplace** 🍯
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18. **Classification of workforce updated** 🍯 **TODAY**
19. **The workplace as a school: The new Learning organization**
20. **Skills of the halted workforce and consequences**
21. **Why the virtual office is not for all, but for some.**
22. **Figuring out a hybrid working model**
23. **Why are employees quitting?**
24. **Living to work? or working to live?**
25. **An appraisal to workforce and employment trends after the COVID19 Pandemic**
26. **Research agenda in terms of work for the next 10 years: Elements of a new state-of-the-art "working paradigm"**
27. **Summary and conclusions**

The outline has been modified and updated

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Why are NAIQIs (including digitization) so important in terms of productivity and wealth creation?

BAIN & COMPANY

Figure 18

■ Productivity gains from automation will vary broadly across industries by about 10% to 55%
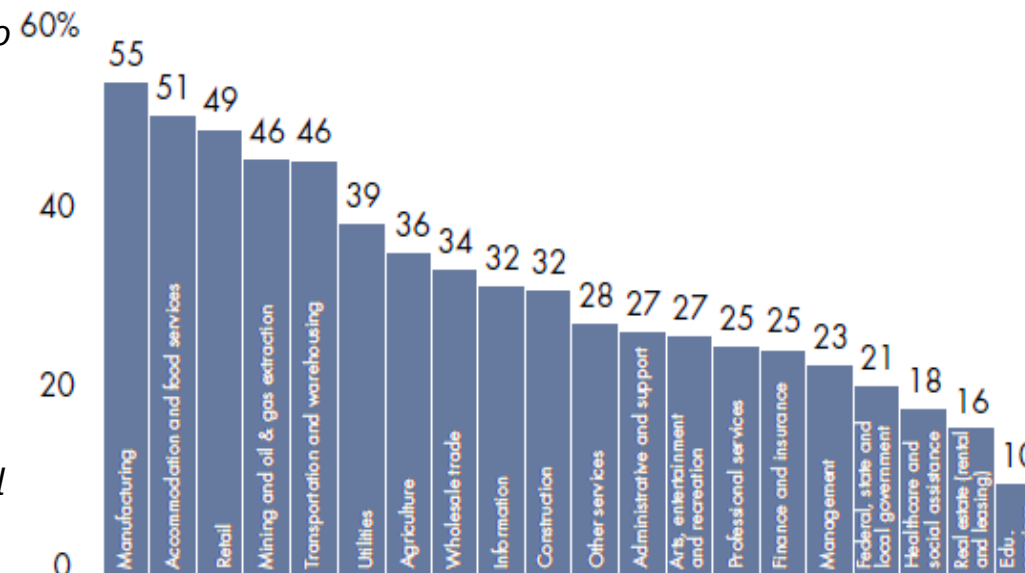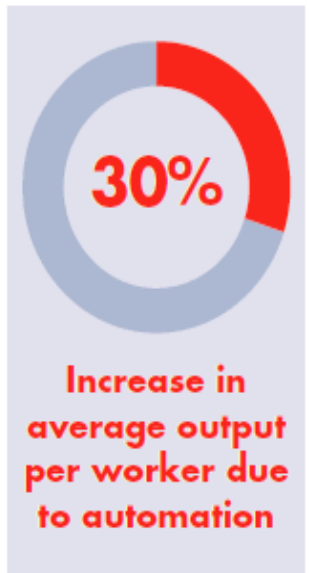
Automation-driven labor productivty growth, 2015 vs. 2030

Year 2017: The Bain Macro Trends Group has analyzed a range of technologies at or near commercialization, including humanoid service robots, collaborative robots (cobots), drones, artificial intelligence and machine learning algorithms.
Their analysis confirmed that the rapid spread of NAIQIs will collide over this decade. creating disruptive changes throughout the global economy.

Industry	Value
Manufacturing	55
Accommodation and food services	51
Retail	49
Mining and oil & gas extraction	46
Transportation and warehousing	46
Utilities	39
Agriculture	36
Wholesale trade	34
Information	32
Construction	32
Other services	28
Administrative and support	27
Arts, entertainment and recreation	27
Professional services	25
Finance and insurance	25
Management	23
Federal, state and local government	21
Healthcare and social assistance	18
Real estate (rental and leasing)	16
Edu. services	10

Notes: Labor productivity measured in dollars of gross output per employee; projections do not include baseline forecasts of labor productivity growth
Sources: US Bureau of Economic Analysis; US Bureau of Labor Statistics; Bain Macro Trends Group analysis, 2017

30%

Increase in average output per worker due to automation

3

Source: https://www.bain.com/insights/labor-2030-the-collision-of-demographics-automation-and-inequality

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The big picture of the workforce.
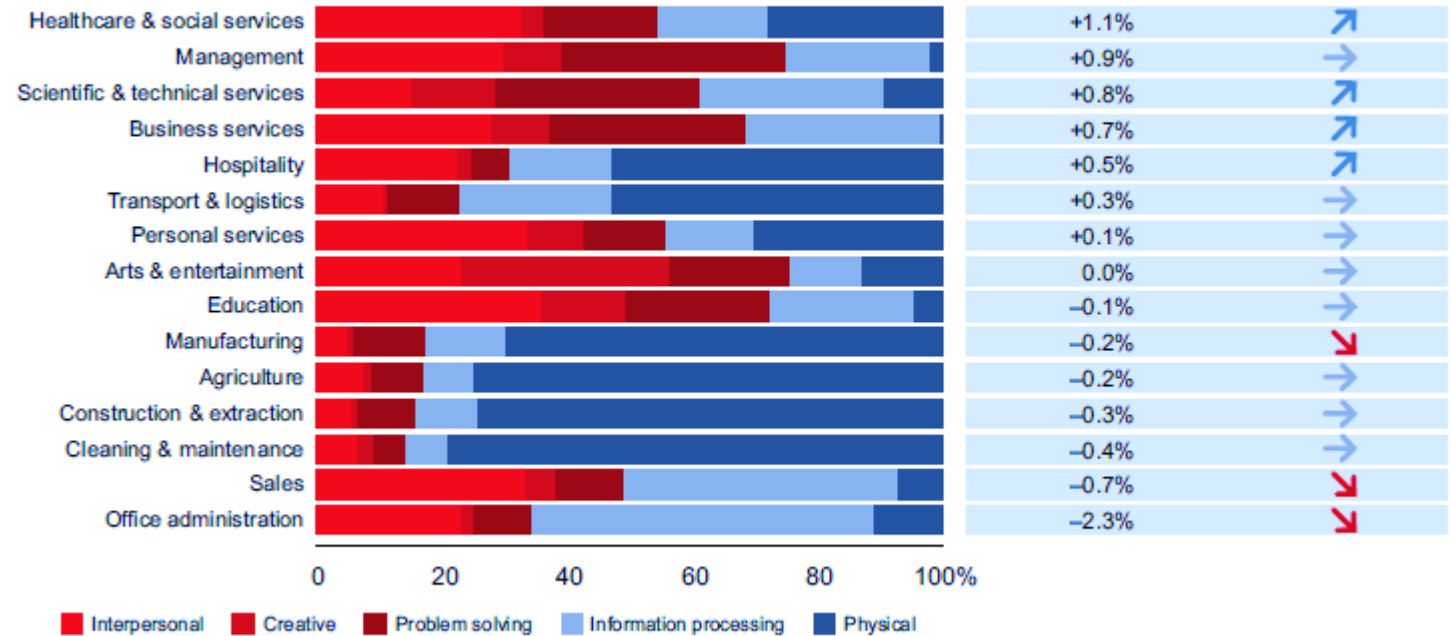**Classification of the future workforce after COVID-19**

BAIN & COMPANY

Year 2022

Occupation by activity type in US

Occupation	Change in share of occupation mix (2010–19)
Healthcare & social services	+1.1% ↗
Management	+0.9% →
Scientific & technical services	+0.8% ↗
Business services	+0.7% ↗
Hospitality	+0.5% ↗
Transport & logistics	+0.3% →
Personal services	+0.1% →
Arts & entertainment	0.0% →
Education	−0.1% →
Manufacturing	−0.2% ↘
Agriculture	−0.2% →
Construction & extraction	−0.3% →
Cleaning & maintenance	−0.4% →
Sales	−0.7% ↘
Office administration	−2.3% ↘

Forecasted share for 2030

■ Interpersonal ■ Creative ■ Problem solving ■ Information processing ■ Physical

Note: Activity mix based on scoring of 2,000 underlying activities across 900 occupations; activities are weighted based on the importance to each occupation
Sources: ONET; BLS; Bain analysis

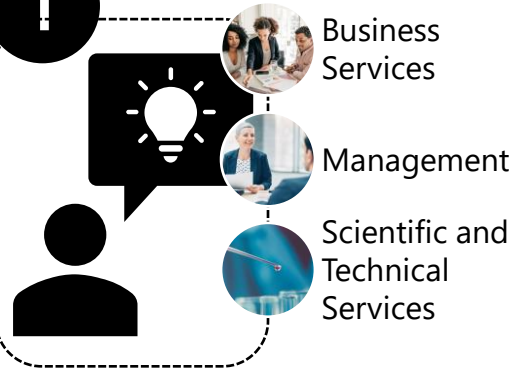*Source: https://www.bain.com/insights/the-working-future-more-human-not-less-future-of-work-report*

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5 big work categories
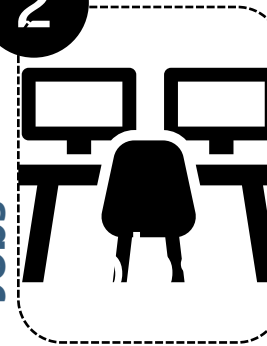*Classification of the future workforce after COVID-19*
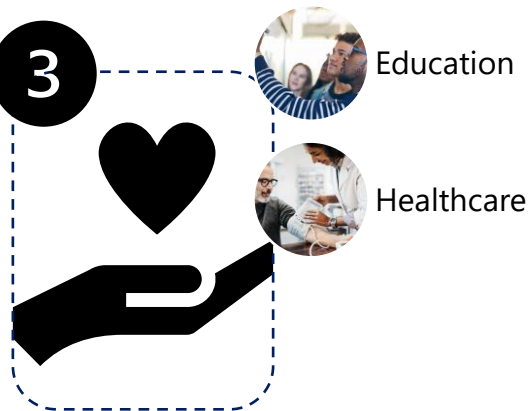
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Year 2022

Knowledge Jobs

1

- Business Services
- Management
- Scientific and Technical Services

Office Admin Jobs

2

Office Administrative Jobs

3

- Education
- Healthcare

Care Jobs

4

- Arts and Entertainment
- Sales
- Personal Services

Service Jobs

5

- Agriculture
- Transport &Logistics
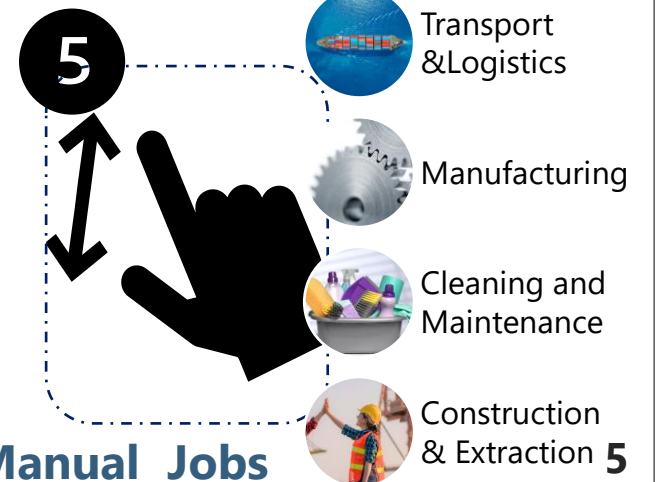- Manufacturing
- Cleaning and Maintenance
- Construction & Extraction **5**

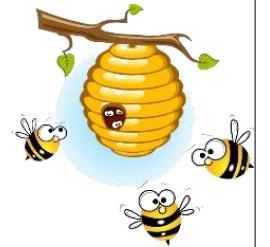**Manual Jobs**

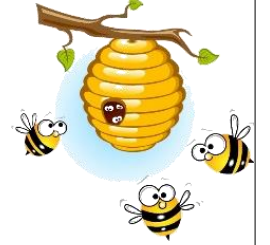*Source: https://www.bain.com/insights/the-working-future-more-human-not-less-future-of-work-report*

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<The potential for digital work is primarily confined to whit-collar workers. Knowledge and administrative jobs.
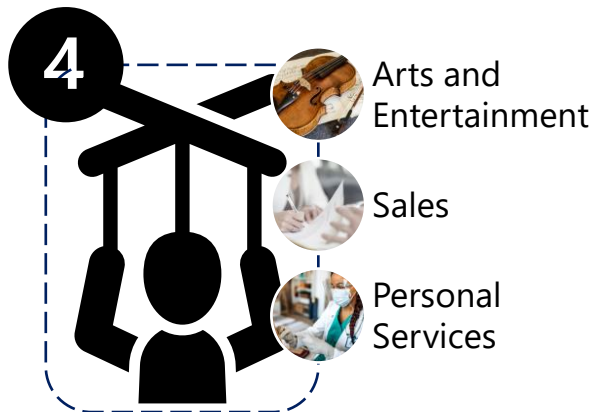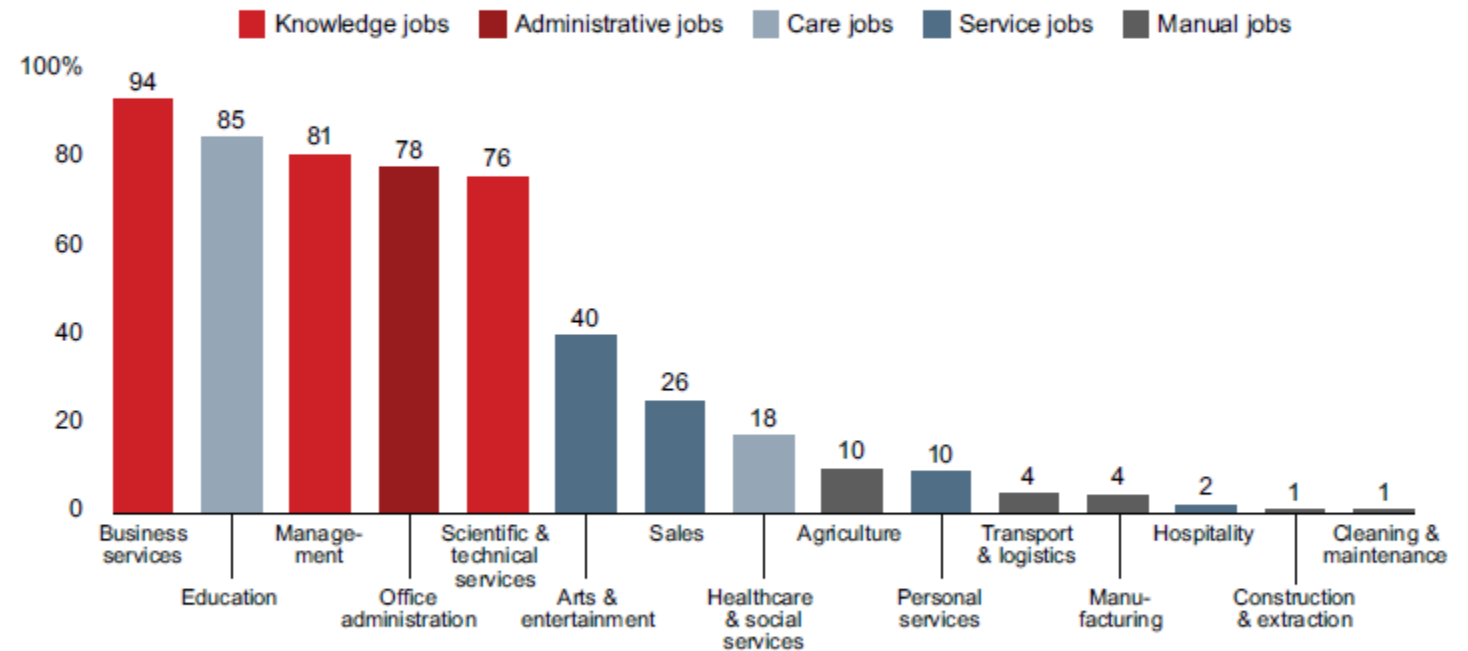
BAIN & COMPANY

Year 2022

Figure 4.2: The potential for remote work is primarily confined to white-collar workers

Tasks that can technically be performed remotely by occupation

■ Knowledge jobs ■ Administrative jobs □ Care jobs ■ Service jobs ■ Manual jobs

Notes: Remote work potential based on scoring of more than 2,000 underlying activities across approximately 900 occupations; activities are weighted based on the importance to each occupation
Sources: ONET; BLS; Bain analysis

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Source: https://www.bain.com/insights/the-working-future-more-human-not-less-future-of-work-report

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McKinsey has found that in the United States, companies accelerated the deployment of digitization and automation (NAIQIs) during the pandemic.
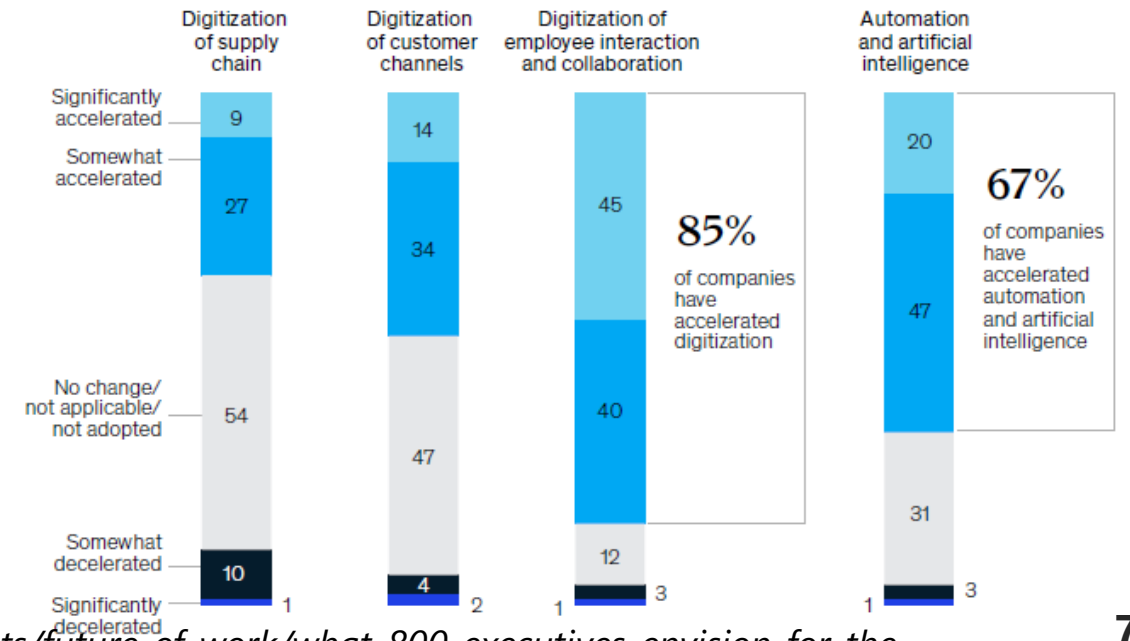
McKinsey & Company

Year 2020

Exhibit 1

Executives say they have accelerated the deployment of digitization and automation during the COVID-19 pandemic.

Since the start of the COVID-19 outbreak, how has your company's or business area's adoption of the following technology trends changed? % of respondents (n = 800)

	Digitization of supply chain	Digitization of customer channels	Digitization of employee interaction and collaboration	Automation and artificial intelligence
Significantly accelerated	9	14	45	20
Somewhat accelerated	27	34	40	47
No change/not applicable/not adopted	54	47	12	31
Somewhat decelerated	10	4	3	3
Significantly decelerated	1	2	1	1

85% of companies have accelerated digitization

67% of companies have accelerated automation and artificial intelligence

Note: Figures may not sum to 100% because of rounding.
Source: McKinsey Global Business Executives Survey, July 2020

Source: https://www.mckinsey.com/featured-insights/future-of-work/what-800-executives-envision-for-the-postpandemic-workforce
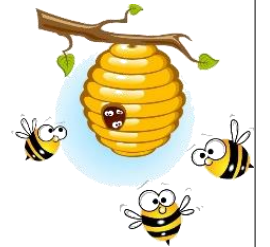
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The big picture of the workforce.
Classification of the future workforce after COVID-19

McKinsey & Company

Year 2022

McKinsey has categorized working roles or jobs according to the level of physical proximity

The future of work after COVID-19

Trends accelerated by COVID-19

Work arenas with high physical proximity were most disrupted short term during COVID-19, and some will see enduring effects.

Remote work
20–25% of workers in advanced economies could work remotely 3+ days a week on a long-term basis

Digitization
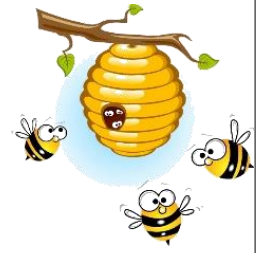2–5x growth in e-commerce, as a surge in digital platforms is underway

Automation
Uptick in use of robotics, robotic process automation, and AI

Classroom and training · Transportation of goods · On-site customer interaction · Leisure and travel · Computer-based office work · High physical proximity · Medical care · Outdoor production and maintenance · Personal care · Home support · Low physical proximity · Indoor production and warehousing

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The big picture of the workforce.
Three years before the COVID19 pandemic, these were the forces driving the changes for the work of the future. BCG explained it.

BCG
Year 2017

EXHIBIT 1 | Twelve Powerful Forces Will Revolutionize How Organizations Function

Changes in the demand for talent	Technological and Digital Productivity	Automation (1)	Big Data and Advanced Analytics (2)	Access to Information and Ideas (3)
	Shifts in Ways of Generating Business Value	Simplicity in Complexity (4)	Agility and Innovation (5)	New Customer Strategies (6)
Changes in the supply of talent	Shifts in Resource Distribution	A New Demographic Mix (7)	Skill Imbalances (8)	Shifting Geopolitical and Economic Power (9)
	Changing Workforce Cultures and Values	Diversity and Inclusion (10)	Individualism and Entrepreneurship (11)	Well-Being and Purpose (12)

Source: BCG research and analysis.

Source: https://www.bcg.com/publications/2017/people-organization-strategy-twelve-forces-radically-change-organizations-work
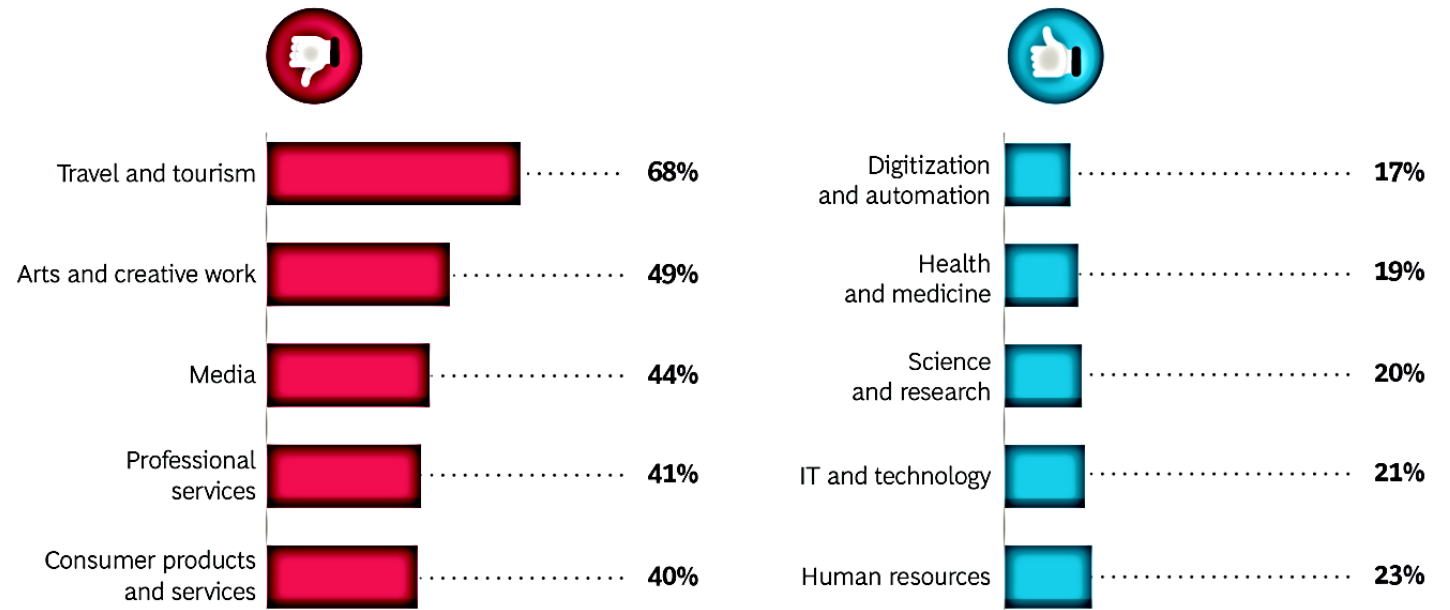
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The big picture of the workforce.
Workforce who was hit the most during the pandemic COVID-19

Worst and Best Fields to Be in During the Pandemic

% of people who were laid off or worked less

Year 2020

Worst		Best	
Travel and tourism	68%	Digitization and automation	17%
Arts and creative work	49%	Health and medicine	19%
Media	44%	Science and research	20%
Professional services	41%	IT and technology	21%
Consumer products and services	40%	Human resources	23%

Source: https://www.bcg.com/publications/2021/decoding-global-trends-reskilling-career-paths

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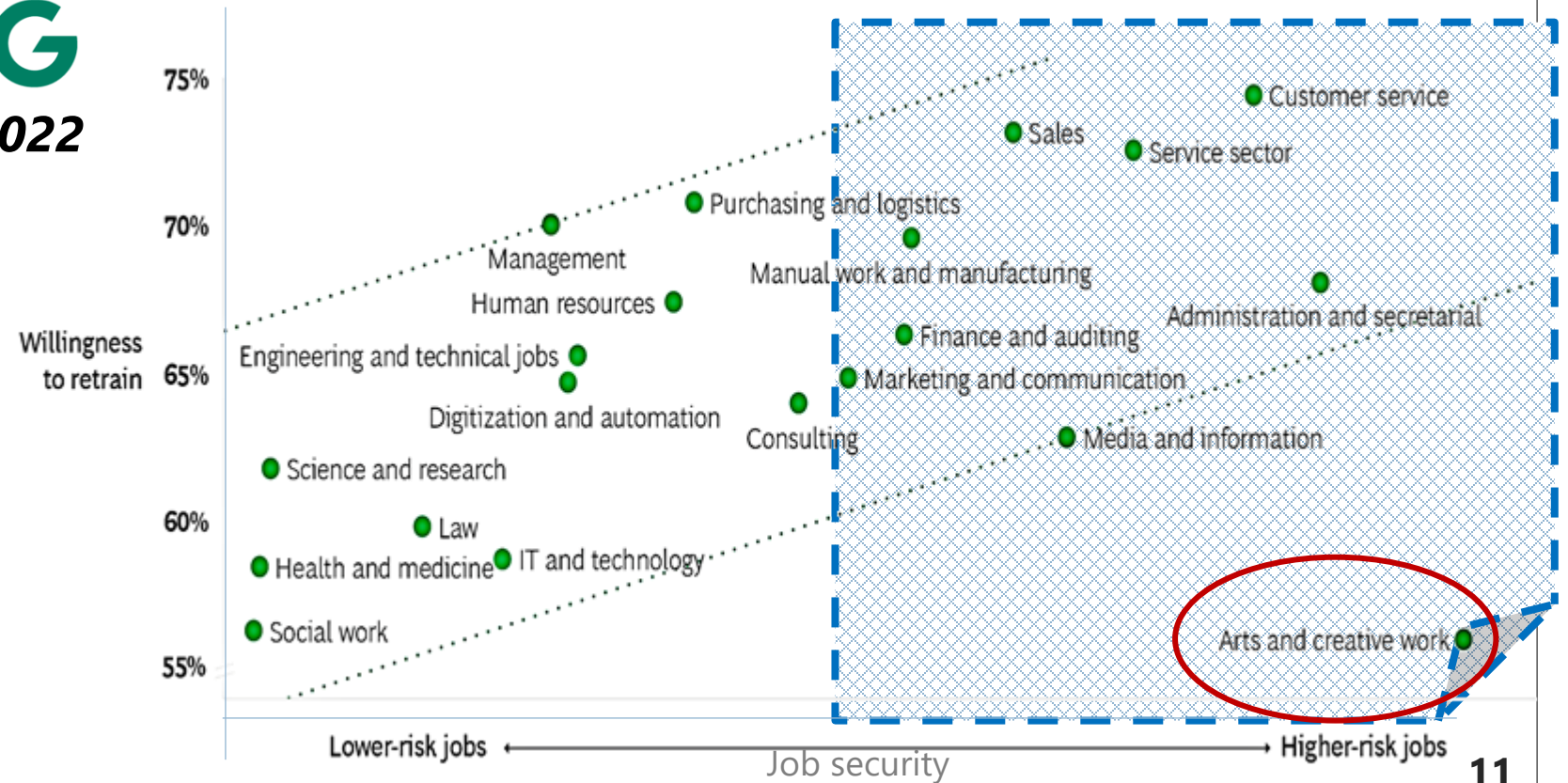**Higher risks Jobs that might disappear with the NAIQIs after the pandemic: some can´t be retrained for digitization because they may vanish forever as traditional arts and the creative industries.**

BCG

Year 2022

75%
Customer service
Sales
Service sector
70% — Purchasing and logistics
Management
Manual work and manufacturing
Human resources
Willingness
to retrain   Engineering and technical jobs
65% — Finance and auditing
Administration and secretarial
Marketing and communication
Digitization and automation
Consulting
Media and information
Science and research
60% — Law
Health and medicine — IT and technology
Social work
55% — Arts and creative work

Lower-risk jobs ← Job security → Higher-risk jobs

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Source https://www.bcg.com/publications/2021/decoding-global-trends-reskilling-career-paths