

Big Data for Labour Market Intelligence

Capacity development programme 2024 - **Module 1: new methodologies**

Session 5

**Occupational profiles – developing and testing a data driven
approach using big data**

Elena Magrini, Head of Global Research at Lightcast, 14/02/2024



Agenda – today's topic

1. What is skills-based hiring?
2. Why does it matter?
3. What does it mean for policymakers?
4. How can we get data on employers' skills needs?
5. What metrics can we use to measure skills?

What is skills-based hiring?

A greater focus on skills, rather than degree requirements or past job titles during the recruitment process.

This opens the door to a wider pool of talent.

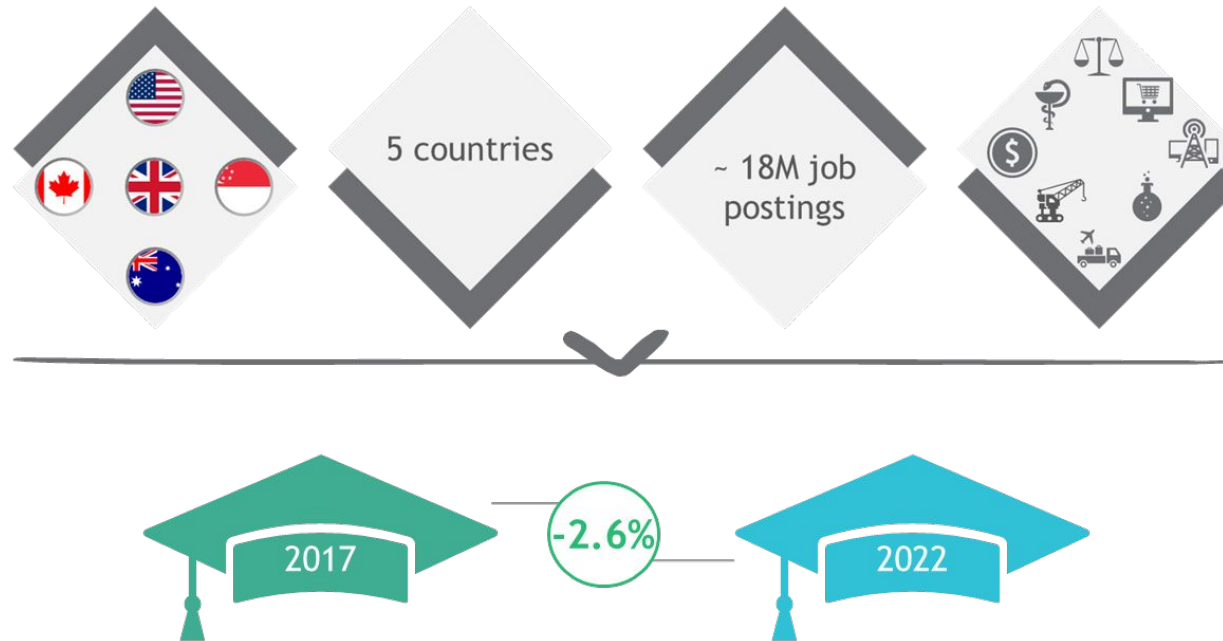


Employers are moving away from qualifications and towards skills

Exhibit 1 - Decrease in job ads requiring BA+ degree across the five countries

Weighted average

% of BA+ degree requirements in job postings 2017 vs. 2022



Source: Job postings 2017 vs. 2022, Total job postings 2017 & 2022

Why does it matter? (1)

Understanding skill needs and how they are changing is a must, not a choice for businesses...

75%

of companies cite that they are facing acute talent and skills shortages.

WEF / Manpower 2022

37%

of the top 20 skills requested have changed over the past 5 years, and 1 in 5 is entirely new.

Lightcast Skills Disruption Index

48%

of CEOs say labour/skills shortages are in their top 3 concerns behind inflation and geopolitical uncertainty.

Deloitte CEO Survey Feb 2023

44%

of skills that workers use are expected to change in the next 5 years.

WEF - Future of Jobs 2023

24%

of skills have changed on average globally since 2015. In the Tech sector this is as high as 57%.

LinkedIn Economic Graph 2022

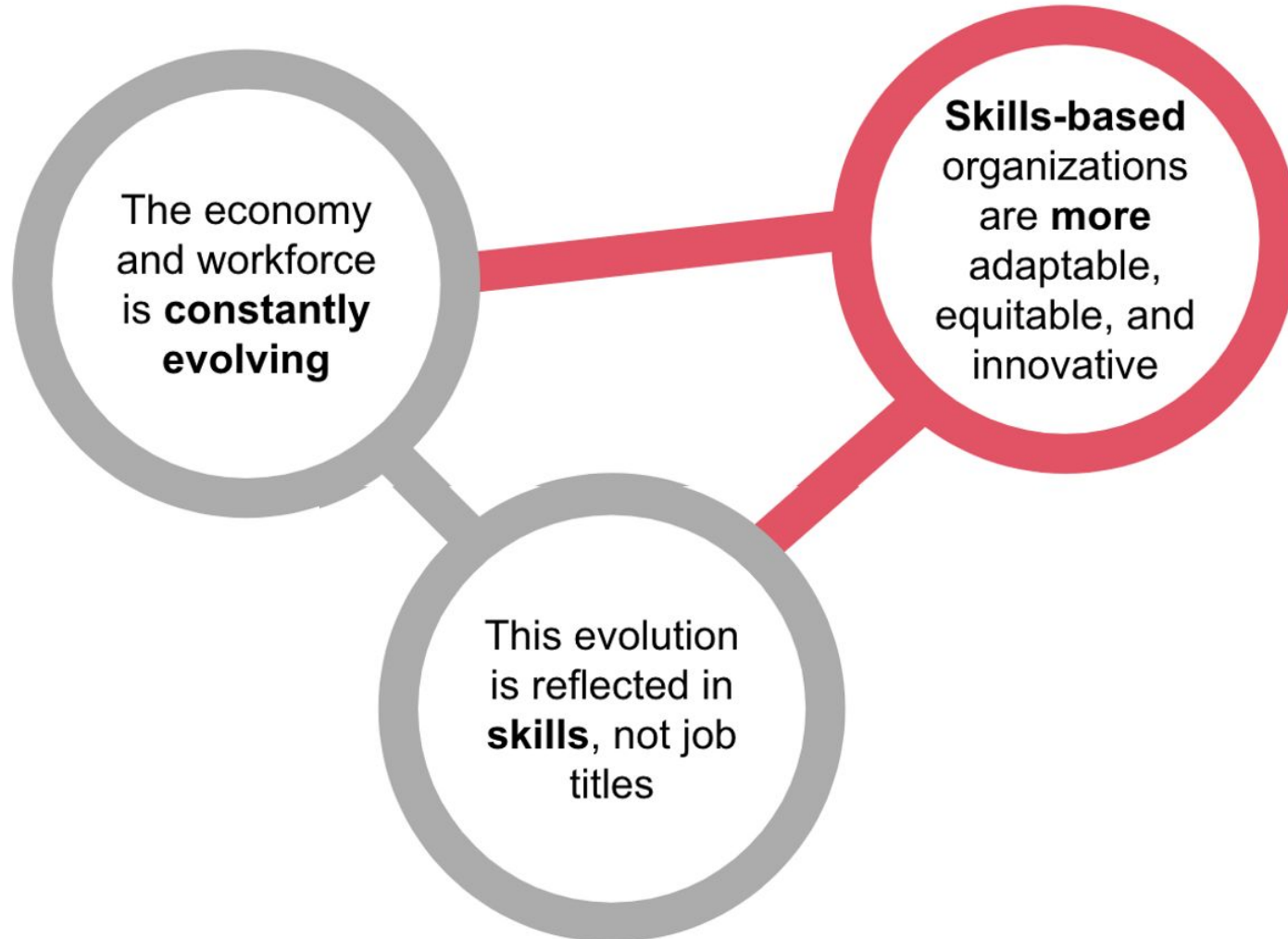
1 billion

of the world's jobs are liable to be radically transformed by technology in the next decade.

WEF / Davos 2023

Why does it matter? (2)

...And skills-based organisations are more resilient in the face of change



What does this mean for policy-makers?

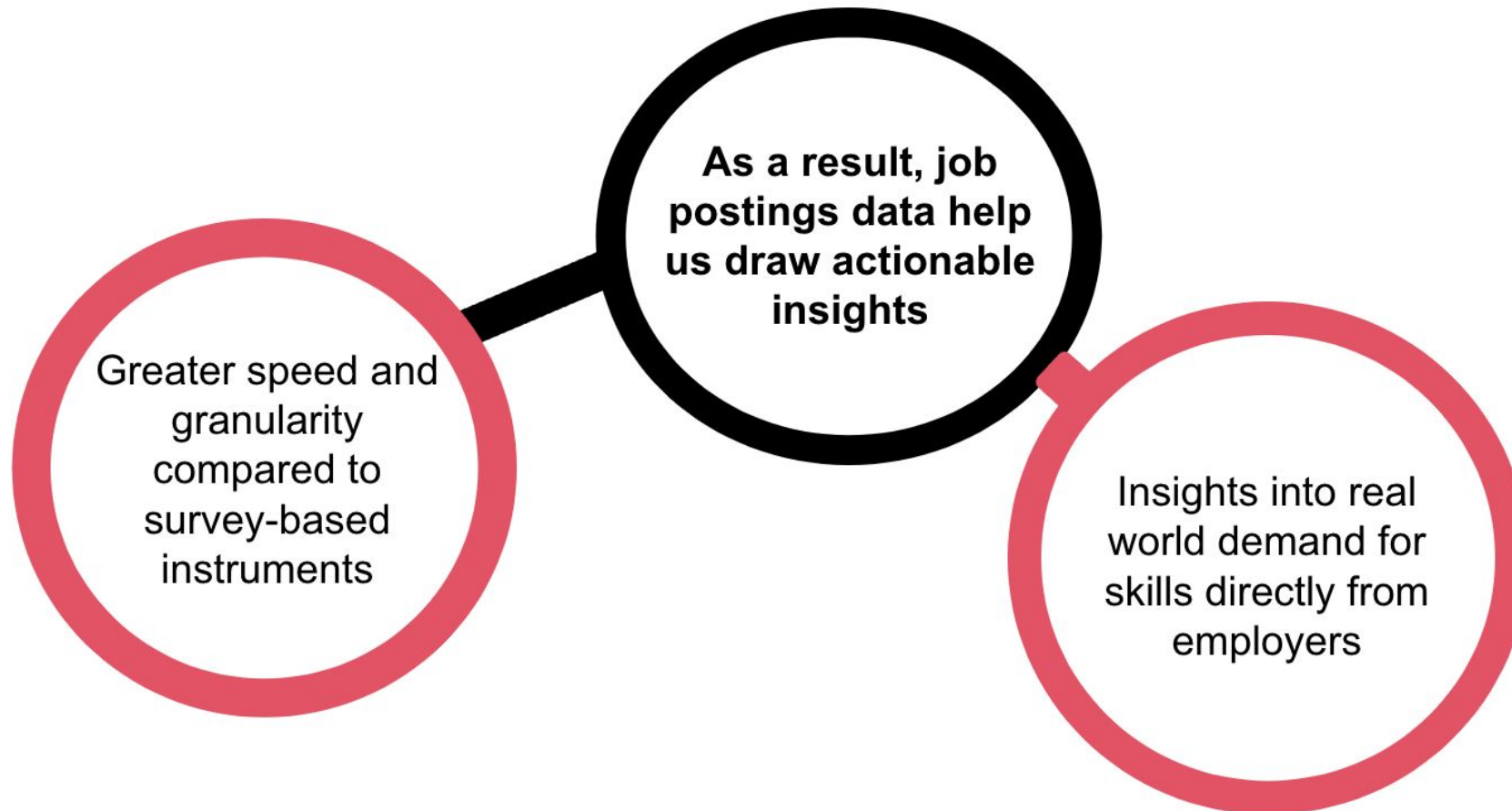
Policy makers need to and are responding to business needs

- Policymakers and education providers need to work together to smooth the transition from qualifications to skills-based hiring to respond to a rapidly changing labour market.
- Many examples already at the European level, such as with the ‘2023 Year of Skills’ and the skills focus on the green and digital transitions.



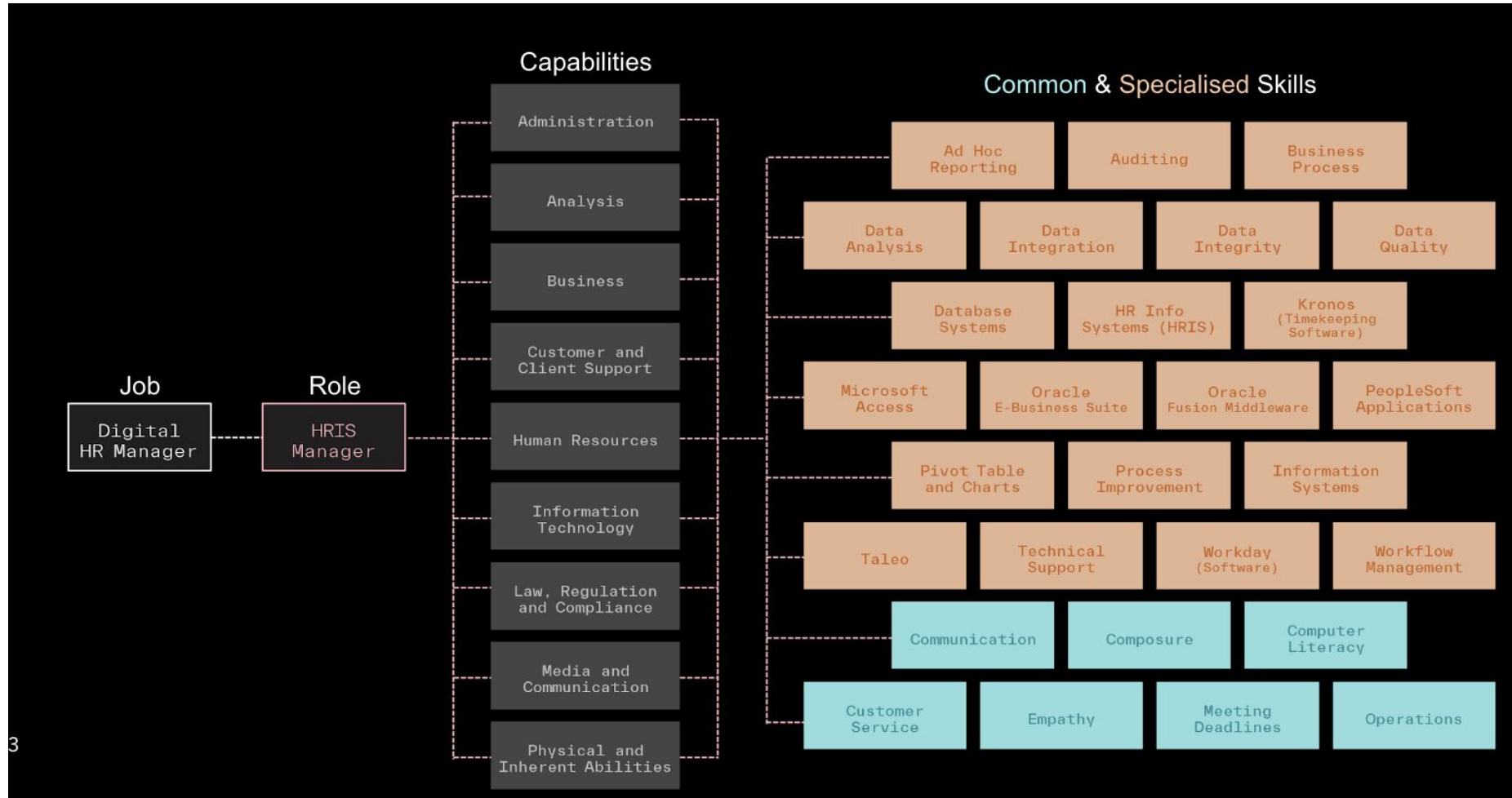
How can we get data on employers' skills needs?

Online job postings is a rich and almost real time data source on skills



How can we get data on employers' skills needs?

Skills taxonomies help us provide structure and understand the data



How can we get data on employers' skills needs?

With job postings data and a common language we can understand skill insights



Data quality considerations

Pros and cons of doing skills analysis using job postings data

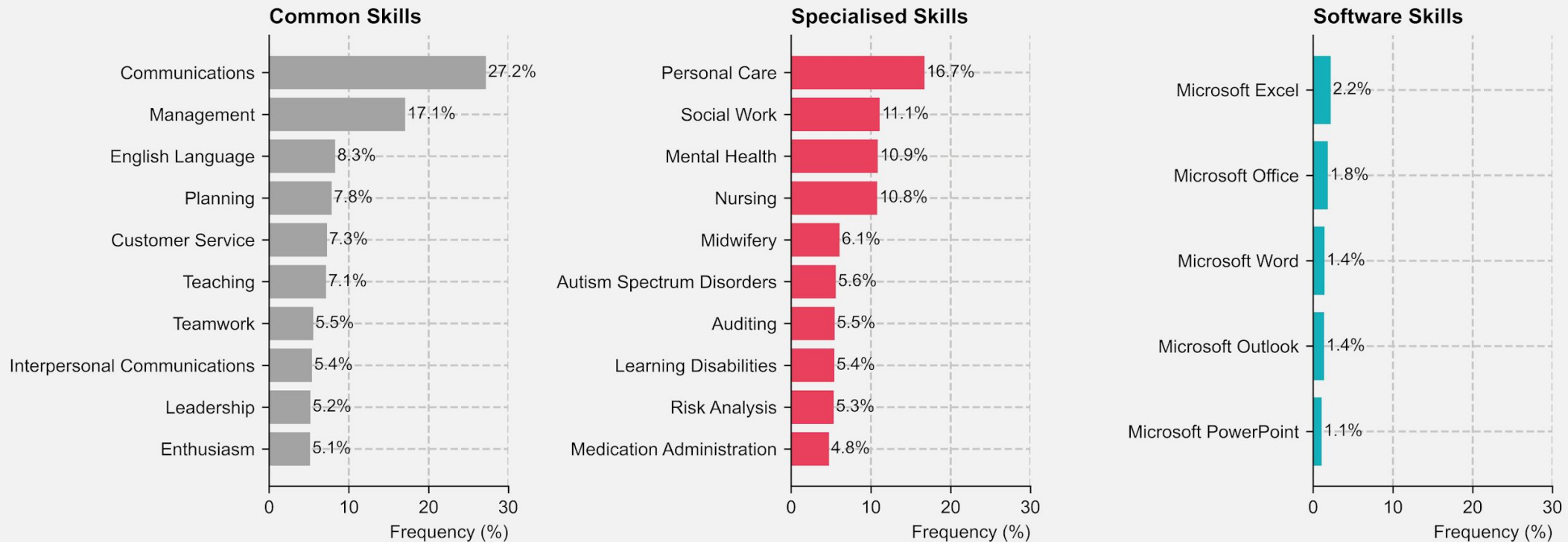
1. Online job postings coverage varies by country and by occupation
2. The quality of the data depends on the type of information provided by employers
3. Employers may not mention skills that are intrinsic to a job
4. Employers may stop mentioning a skill because it becomes widespread
5. The more specific the parameter of the search, the better skills results
6. Emerging trends normally appear first as skills and then as occupations

From skills data to skills insights: what metrics?

Skills frequency as a starting point...

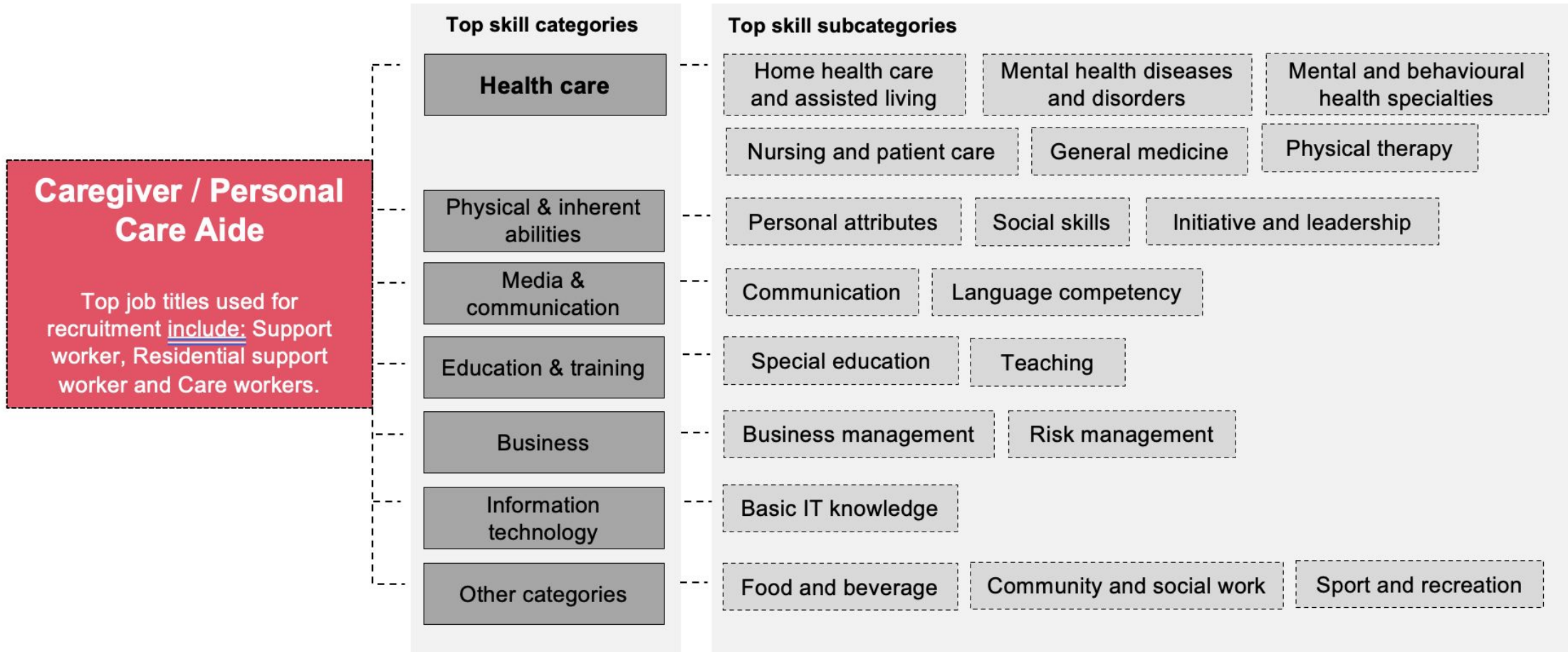
Top common, specialised and software skills mentioned in social care job postings

West London | August 2022 - July 2023



From skills data to skills insights: what metrics?

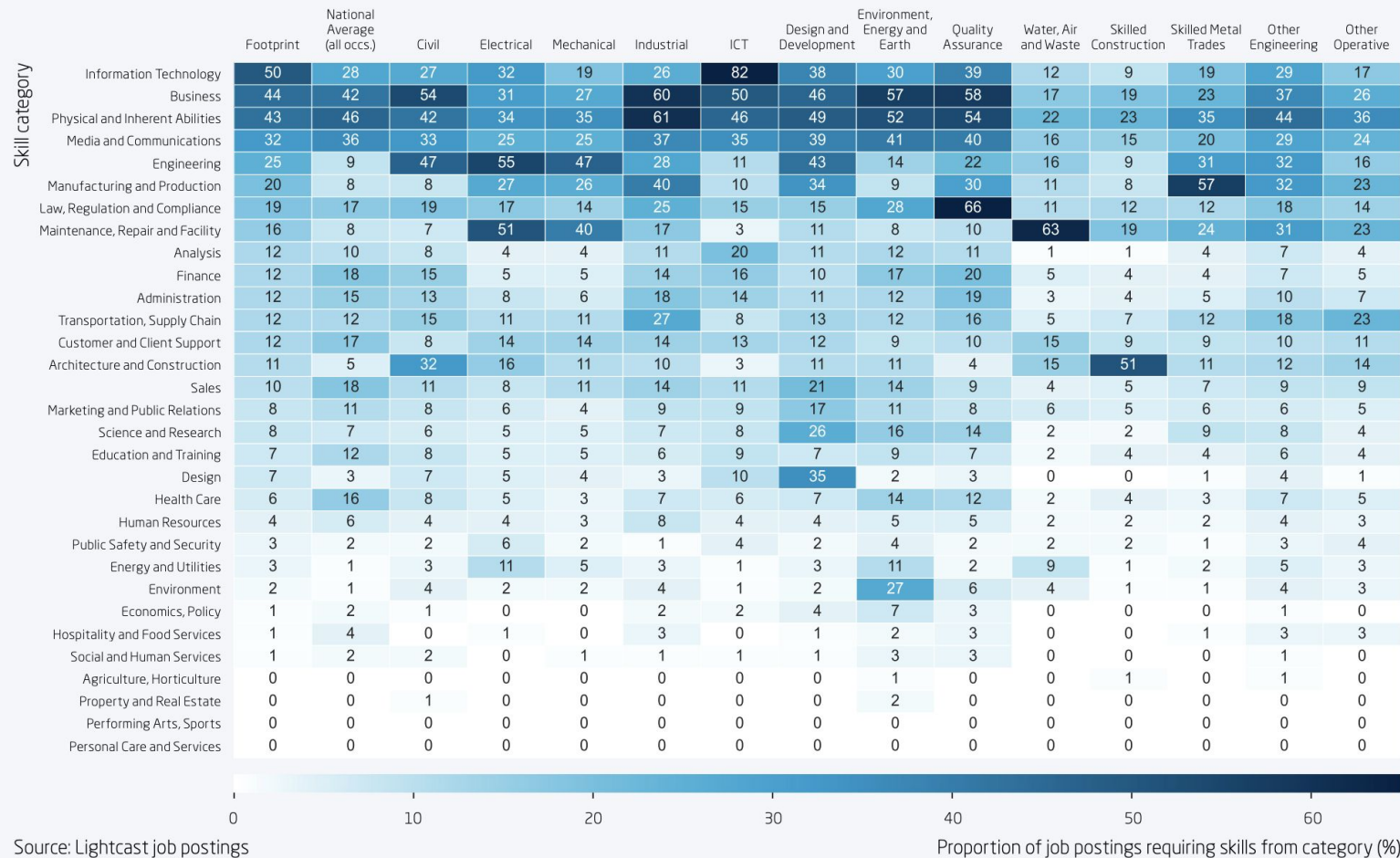
...Skills frameworks can give us a broader view



From skills data to skills insights: what metrics?

Skills categories as a way to compare occupations

Figure 23. Top skills categories across the engineering footprint



Source: Lightcast job postings

Proportion of job postings requiring skills from category (%)

From skills data to skills insights: what metrics?

Skills as a way to capture emerging trends

Share of job postings requiring at least one AI related skill, (%)

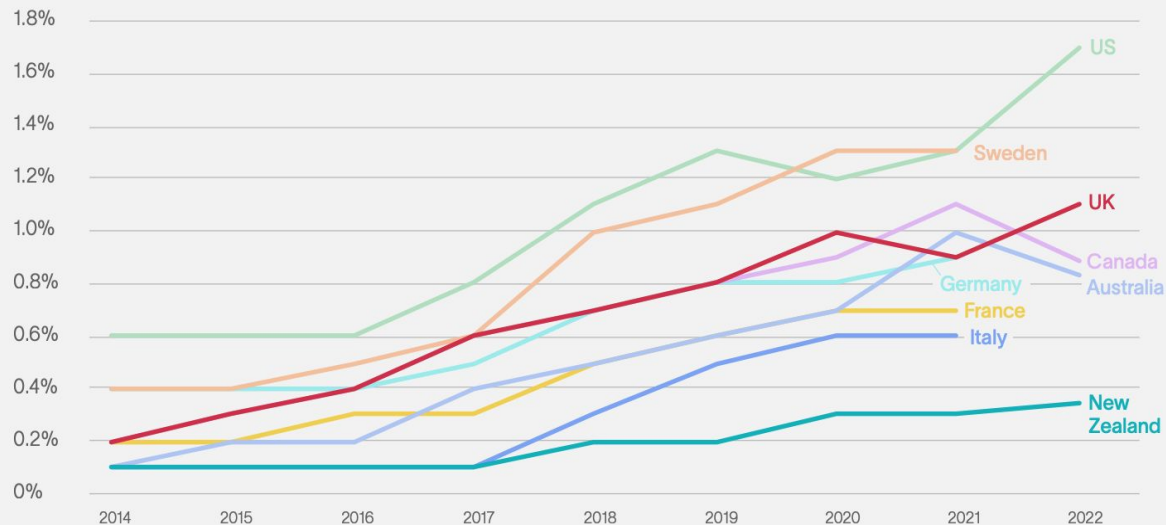
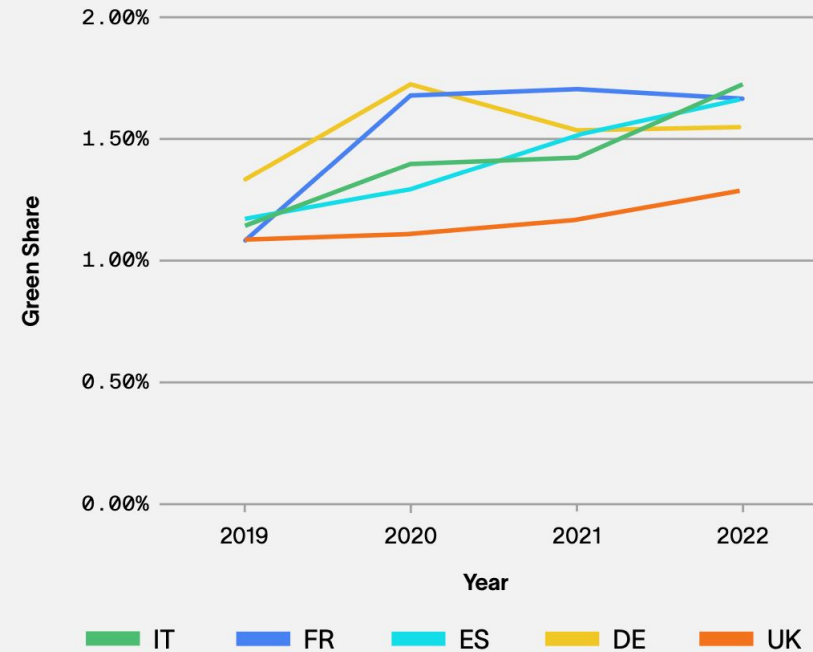


Figure 1: Share of green postings by country, 2019 - 2022 (%)



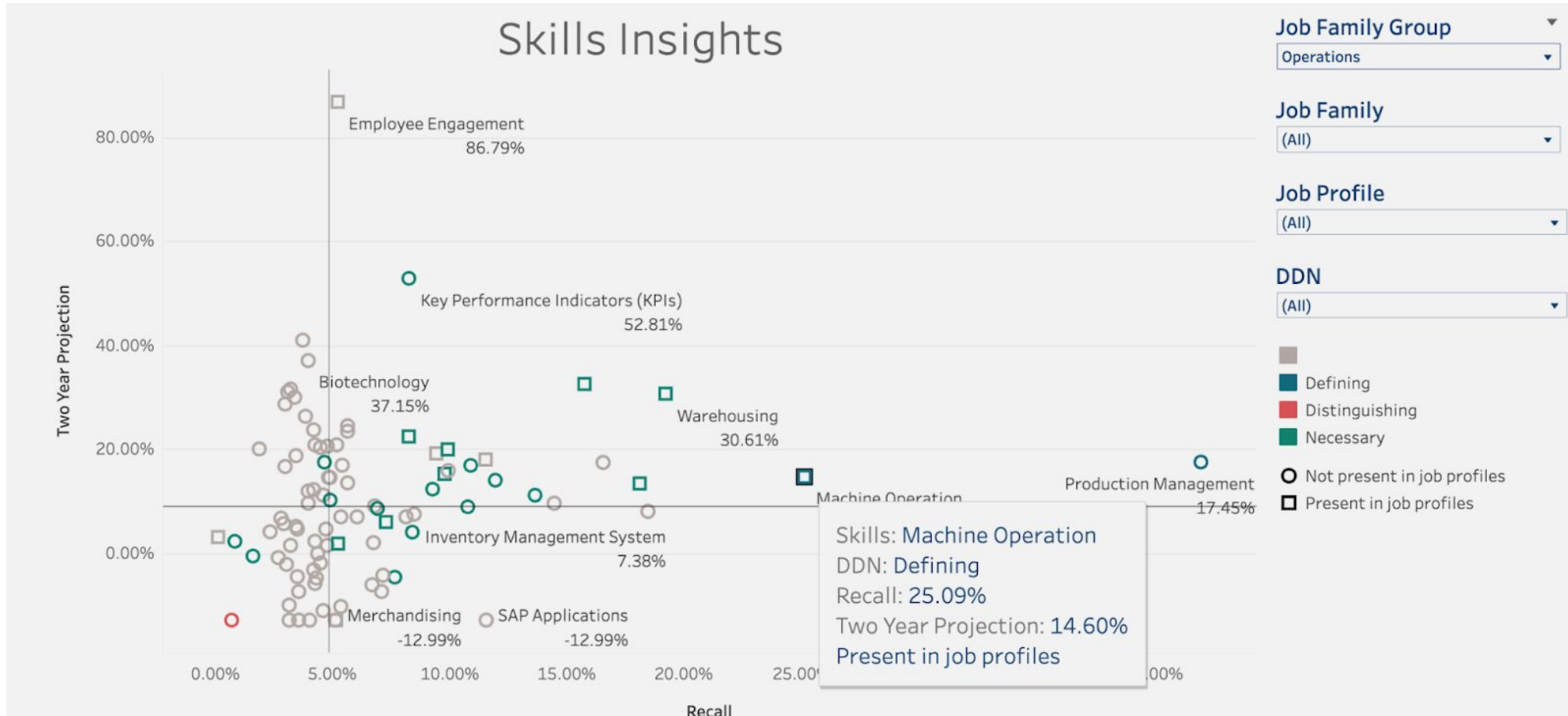
From skills data to skills insights: what metrics?

Defining, distinguishing and necessary skills

- 1. Defining Skills** represent the day-to-day tasks and responsibilities of the job. An employee needs these skills to qualify for and perform successfully in this occupation.
- 2. Distinguishing Skills** are advanced skills that are called for occasionally. An employee with these skills is likely more specialised and able to differentiate themselves from others in the same role.
- 3. Necessary Skills** are specialised skills required for that job and relevant across other similar jobs. An employee needs these skills as building blocks to perform the more complex Defining Skills.

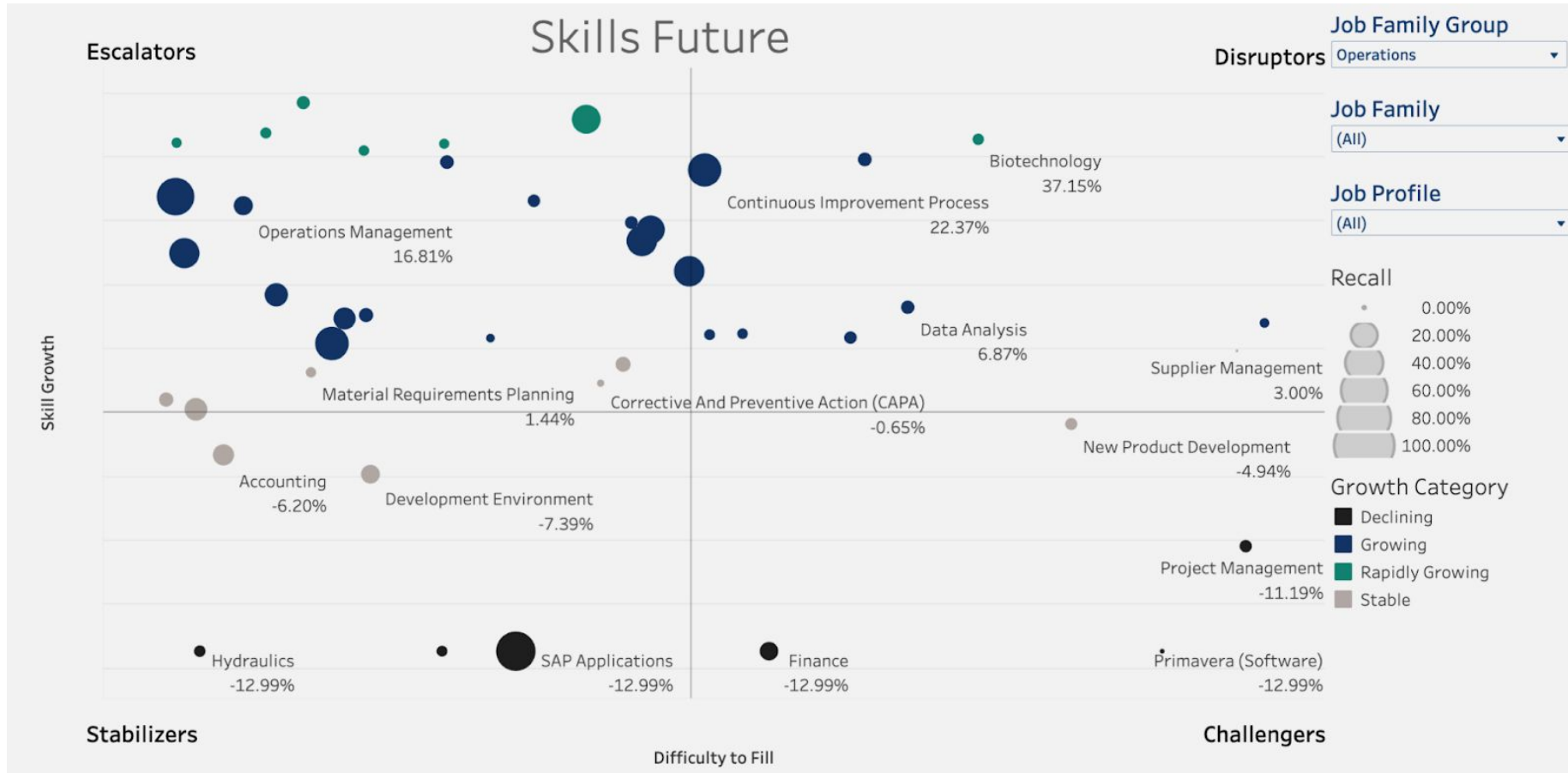
From skills data to skills insights: what metrics?

Combining skills metrics to draw insights



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Combining skills metrics to draw insights



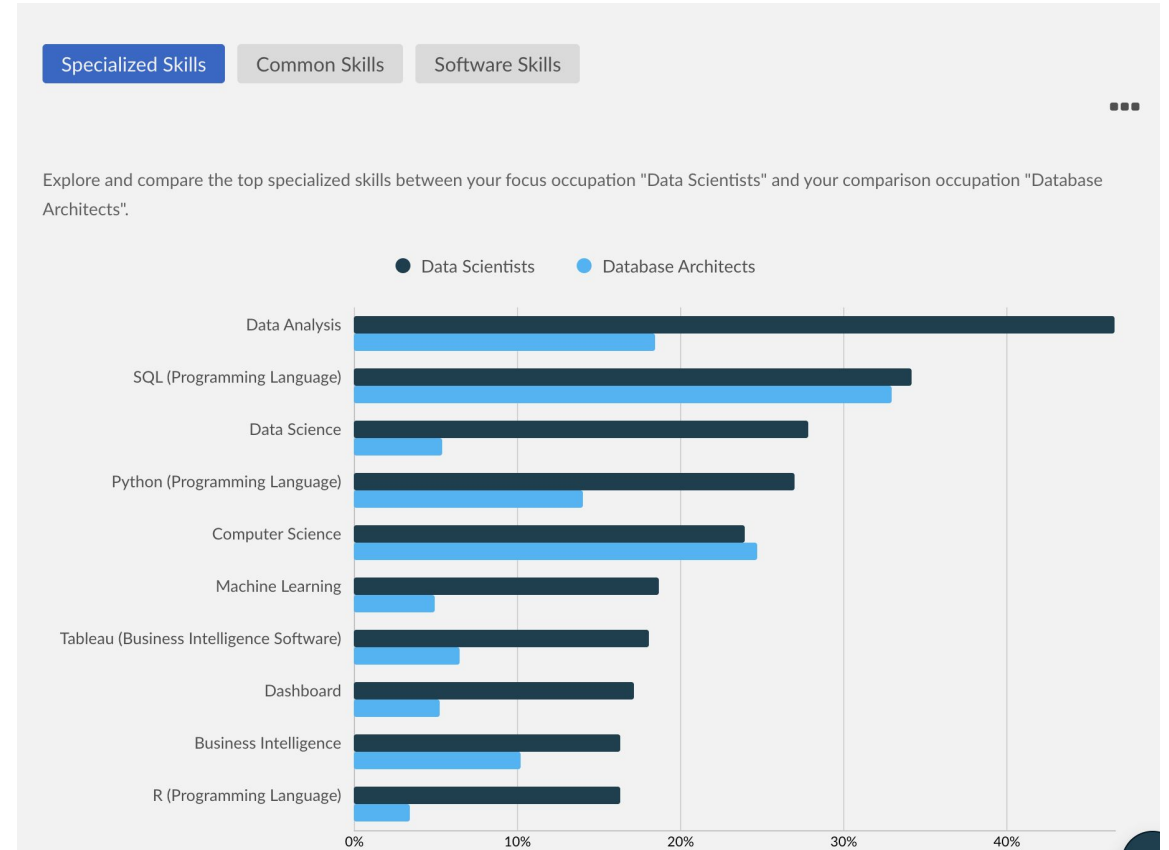
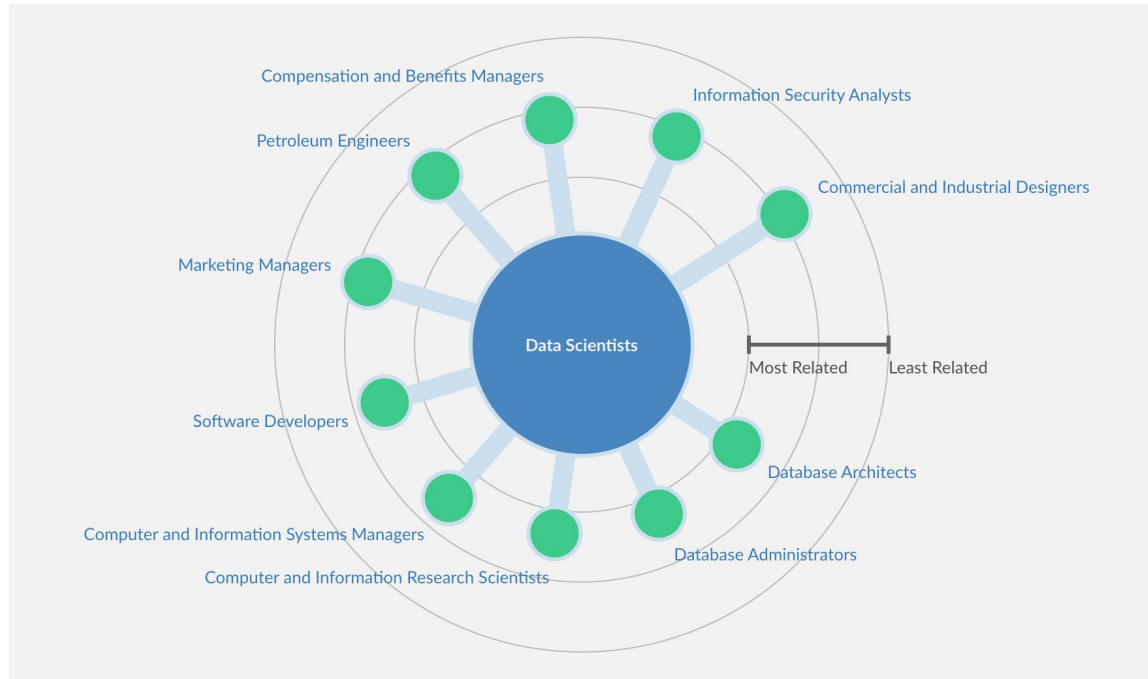
From skills data to skills insights: what metrics?

Identifying career pathways

1. **Advancement:** Jobs that pay more and are within the same occupation group as the source occupation.
2. **Lateral Advancement:** Jobs that pay more but require transition to a new occupational group as opposed to the source occupation.
3. **Similar:** Jobs that pay a comparable salary and are within the same occupation group as the source occupation.
4. **Lateral Transition:** Jobs that pay a comparable salary but require transition to a new occupation group as opposed to the source occupation.

From skills data to skills insights: what metrics?

Identifying career pathways



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Thank you! Any questions?

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