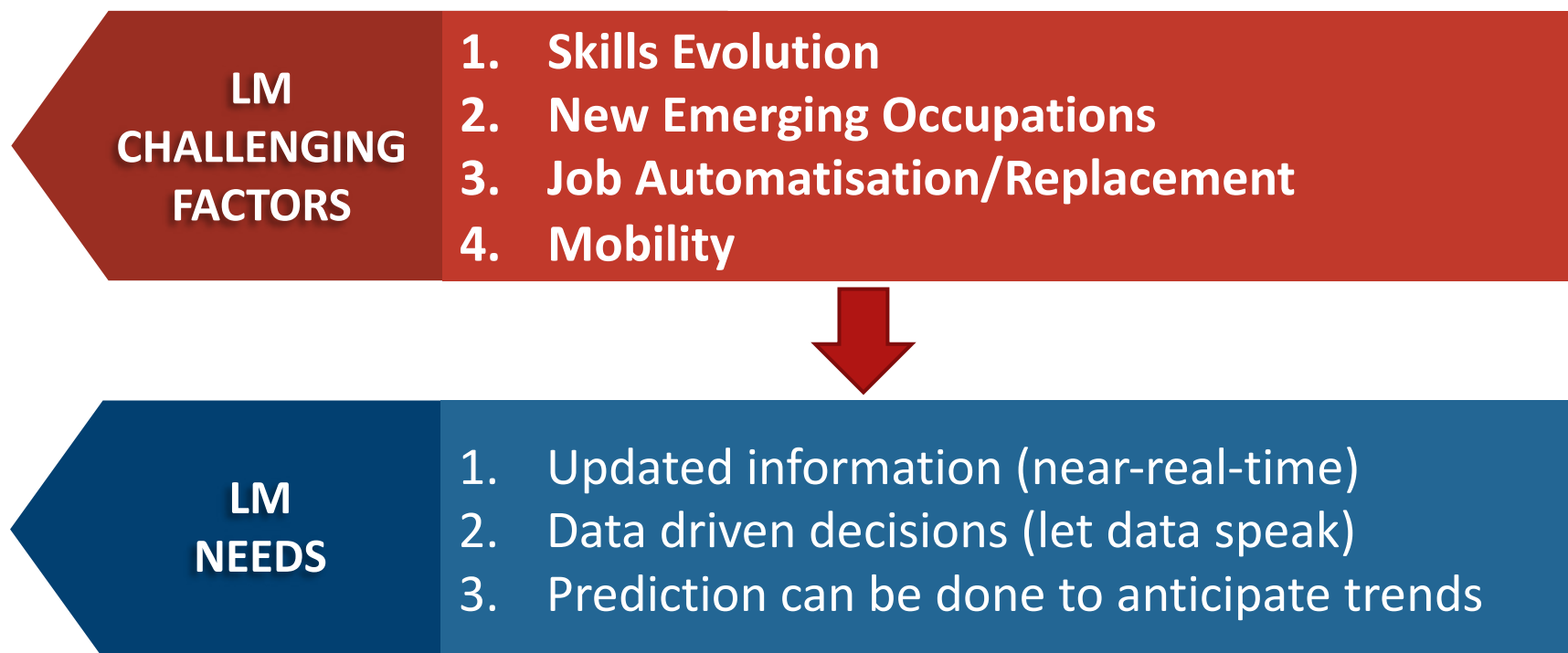


Digital Skill Degree

How to analyse Digital impact in Labour Market Demand

Quo Vadis Labour Market?

2



Knowledge becomes crucial to support different LM actors and policy makers in understanding LM dynamics and trends

Labour market changes

*opportunity or
disadvantage?*

«There's never been a better time to be a worker with **special skills or the right education because these people can use technology to create and capture value.**» However, “there's never been a worse time to be a worker with only 'ordinary' skills and abilities to offer, because computers, robots and other digital technologies are acquiring these skills and abilities at an extraordinary rate»

Erik Brynjolfsson and Andrew McAfee, 2014

- ✓ Which skills are required from Labour Market?
- ✓ How digital skills can impact company's demand?

Pervasiveness of Digital in Labour Demand for non-ICT professionals

Compute Skills Rates and Relevance

5

Skills Rate

estimate the incidence of Digital, Hard non Digital and Soft skills in a single occupation

Skills Relevance

defines the weight of each skill for the considered occupation

Idea: Exploit the informative power of the OJV for computing the Skill Rate and skill Relevance

Skills Rate and Relevance methodology was defined and used by CRISP in 2017 and 2018 for the Italian Observatory of Digital Skills promoted by the Italian ICT associations



WollyBI - Our Labour Market Monitor

6

What Is?

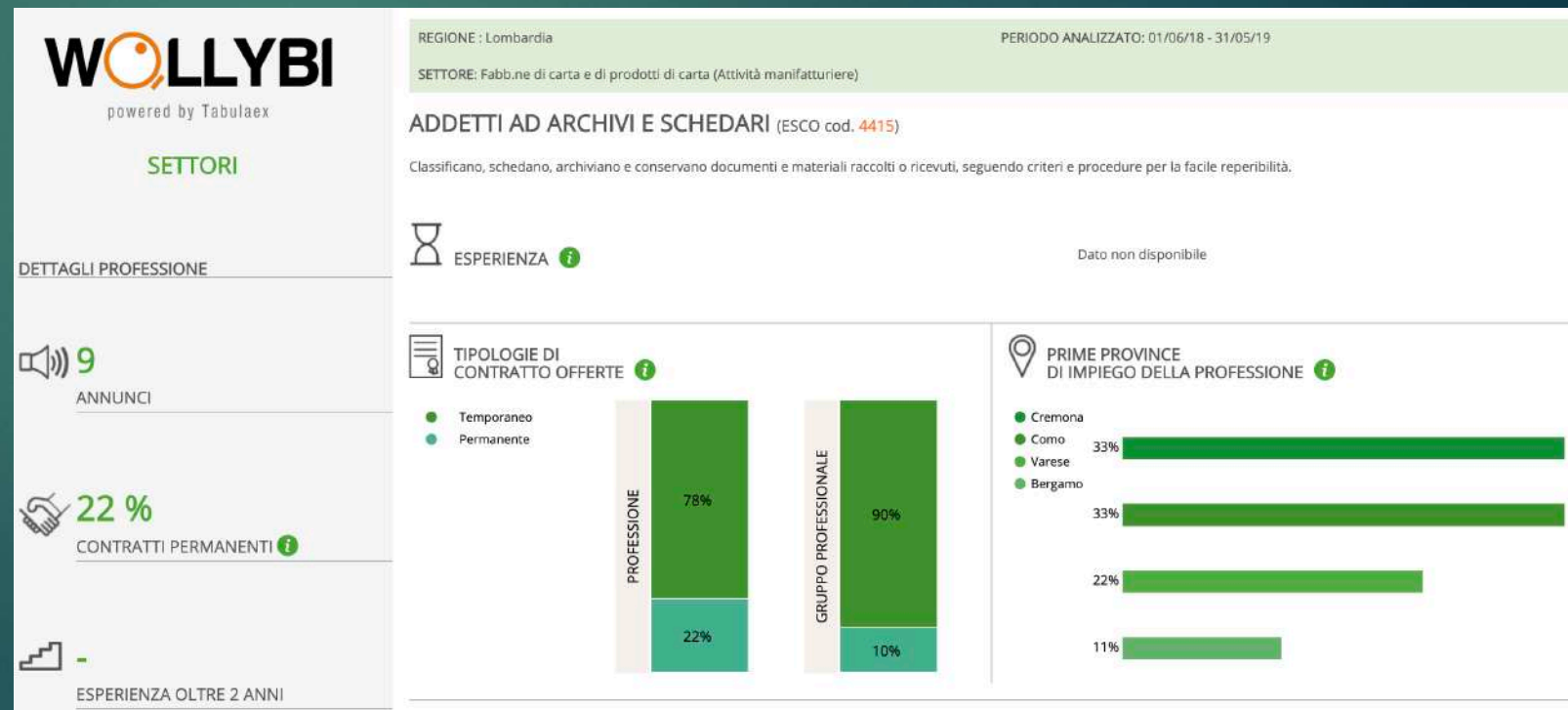
A Real-Time Labour Market monitoring system, based of Big Data and Artificial Intelligence techniques, that collect data coming from OJVs to analyze Labour Market Dynamics

Some numbers:

5M+ OJVs
6 Years of data

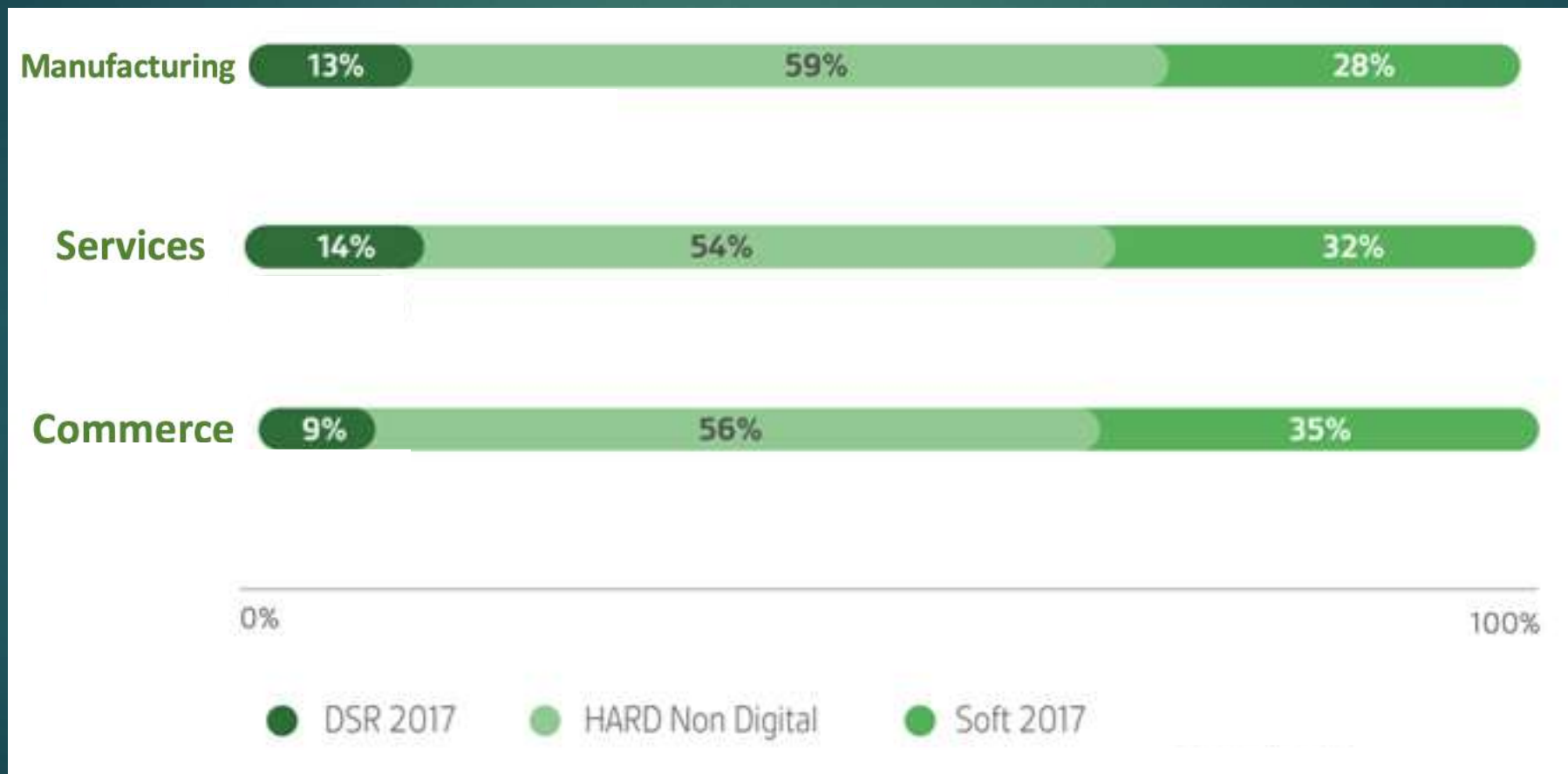
Analytical dimensions:

Occupation and Skills by:
Geography
Sector
Educational Level
Type of Contract
.... (and much more)



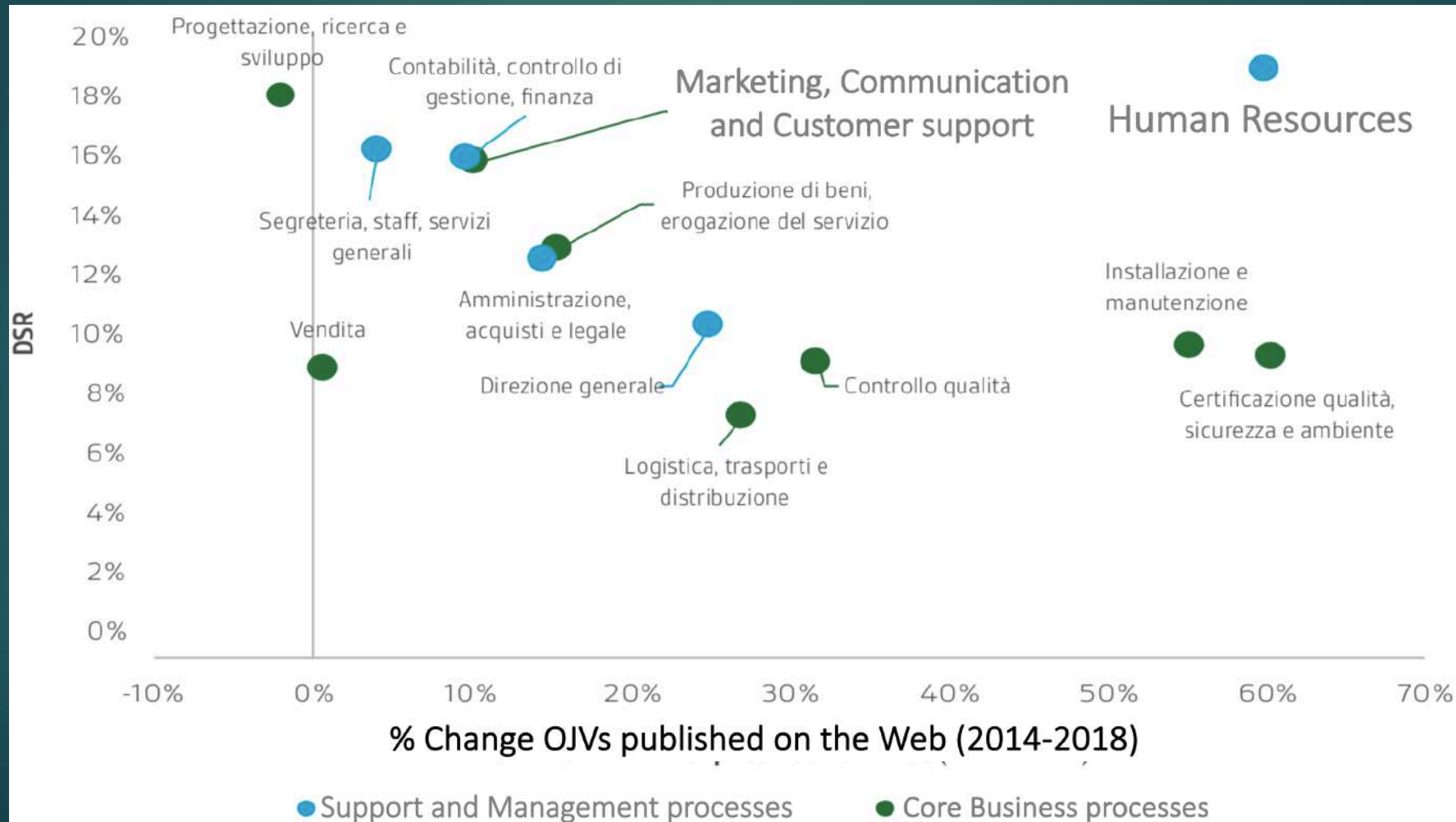
Compute Skills Rate – An analytical path example

Demand of digital, specialist and soft skills - by **Sector**



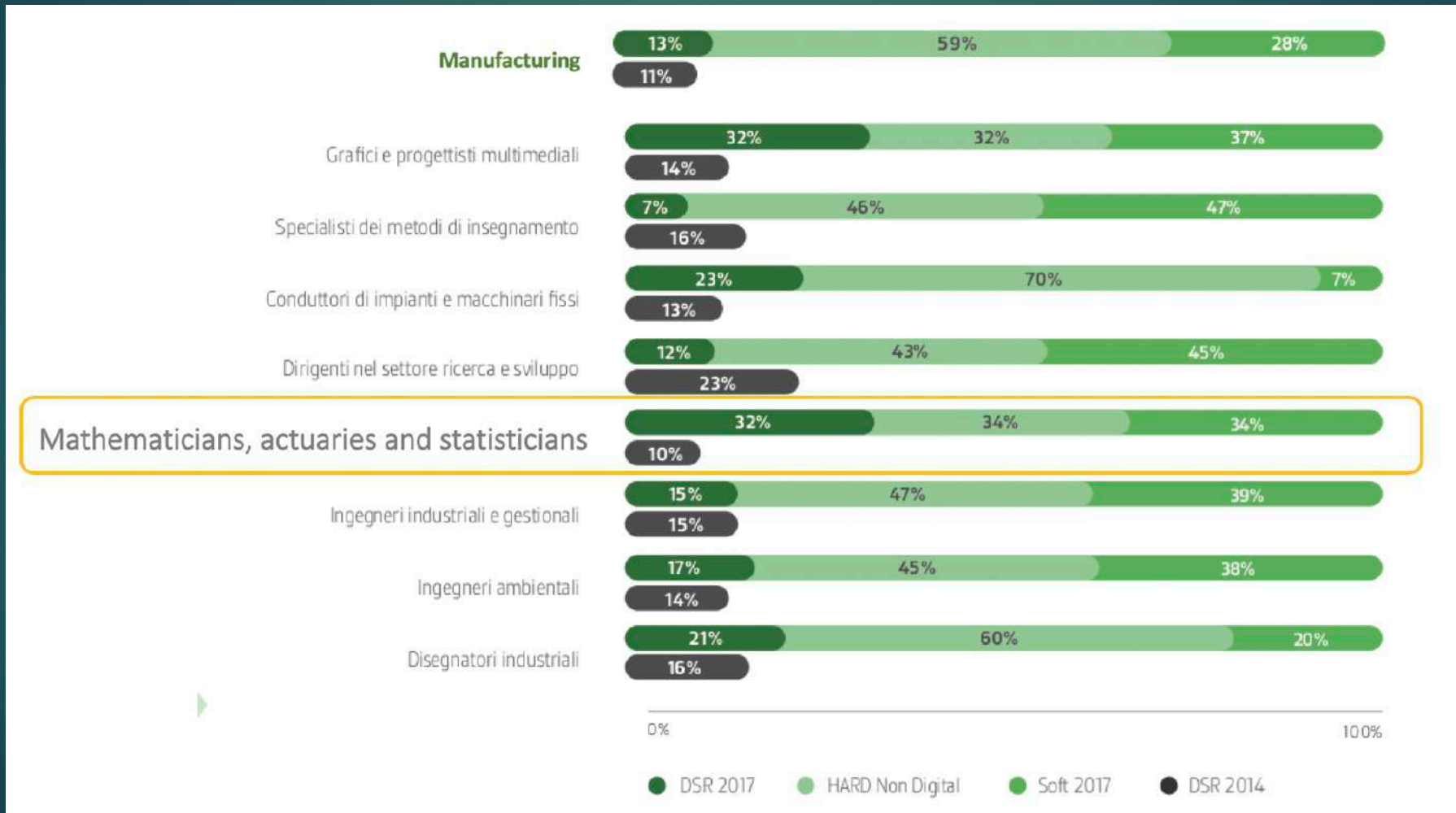
Compute Skills Rate – An analytical path example

Focus on Digital Skill Rate for different corporate areas (**Manufacturing sector**)



Compute Skills Rate – An analytical path example

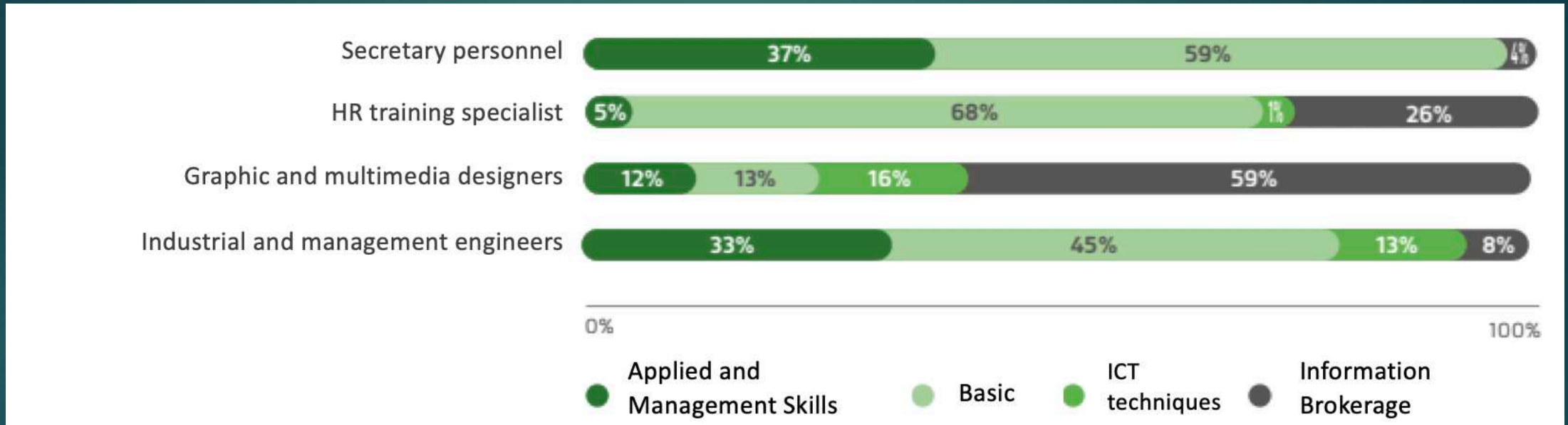
Focus on Skill Rate by Profession (Manufacturing sector, core business areas)



Compute Skills Rate – An analytical path example

10

... and more, looking at **each occupation...**



- **Applied and Management Skills** = ability to use tools and software to manage both operational and decisional processes
- **Basic Skill** = for everyday use of basic IT tools
- **ICT Techniques Skill** = very specialized on solutions, platforms and programming languages
- **Information Brokerage Skill** = for the use of IT tools aimed at corporate communication

Compute Skills Rate – An analytical path example

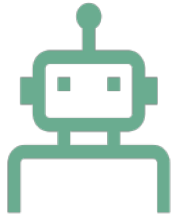
... and more, looking at **elementary skills**

Applied and Management Skills			ICT techniques		Information Brokerage		
Occupation	Database usage	Programs for draughts man	3D modelling	Front-end Website implementation	Web programming	Graphic Software Usage	SW markup usage
Graphic and multimedia designers	25	35	3	45	2	5	2

Applied and Management Skills		Information Brokerage			
Occupation	Database usage	ERP	Digital data management	SEO Search Engine Optimiz.	Social Network Usage
HR training specialist	45	4	45	4	25

Some recap data

12



Sectors with most relevant DSR:

Manufacturing (8-44%)

Services (5-36%)

Commerce (8-17%)



Corporate Areas with most relevant DSR:

Manufacturing: HHRR, Research & Development, Marketing & Communication;

Services: Quality Assurance, Research & Development, HHRR, Secretariat & Office Administration;

Commerce: General Management, Research & Development, Accounting, Management Control, Finance;



Overall relevant Soft Skill Rate

~35%

Thanks for
your time



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Tabulaex/CRISP

