

SADCQF Annual meeting TCCA 2024

Session 9

ACQF-II – Output 3.4 – Common profiles of qualifications

Common profiles of qualifications: a data driven approach
Presentation of results and visualisation tool

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Agenda – today's topic

- What is an occupational profile?
- 2. Importance of occupational profiles
- How can we get data on employers' skills needs?
- What metrics can we use to measure skills and build occupational profiles?
- 5. What does it mean for policy makers and education providers?



Bridging qualifications and occupations: a Data-Driven approach

- Connecting education with Labour Market Needs: the Occupational Profiles dashboard aims to seamlessly connect educational achievements (qualifications) with labour market demands (occupations)
- Data-Driven insights: utilizing big labour market data, the approach is grounded in real-world demands and trends

- Guided standards for qualifications: these data-driven common occupation profiles can guide and inform the design of qualification standards, making them more relevant and aligned with actual job market needs.
- Educational alignment with market demands: ensures that educational institutions can prepare students with the competencies and skills that are truly sought after in the workforce, enhancing employability and career success.

Labour market in increasing in complexity and is rapidly changing at an unprecedented pace

Competition for talent, digitalization of occupations, skill-based hiring, relevance of soft skills, remote-working, the impact of AI on occupations are only few of the big challenges we've to deal with nowadays.

Occupational Profiles are the **real-time visualization tool** that help students, education providers and policy makers facing these challenges enabling jobs and study pathways analysis with **Data-Driven Insights**

Understanding skill needs and how they are changing is a must

75%

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

WEF / Manpower 2022

44%

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

WEF - Future of Jobs 2023

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

24%

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

LinkedIn Economic Graph 2022

48%

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

Deloitte CEO Survey Feb 2023

1 billion

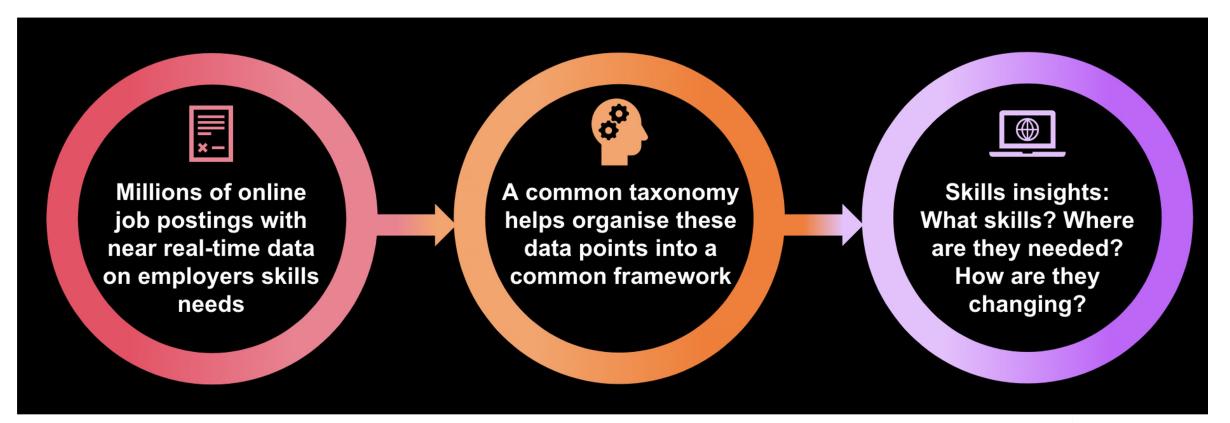
of the world's jobs are liable to be radically transformed by technology in the next decade.

WEF / Davos 2023



How can we get data on skills needs?

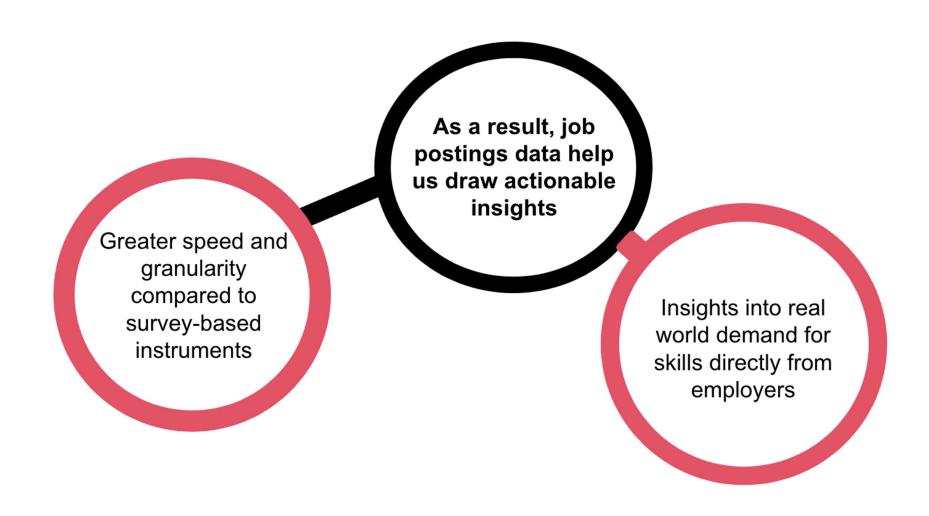
With job postings data and a common language we can understand skill needs insights





Why online job postings?

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





Common Occupational Profiles

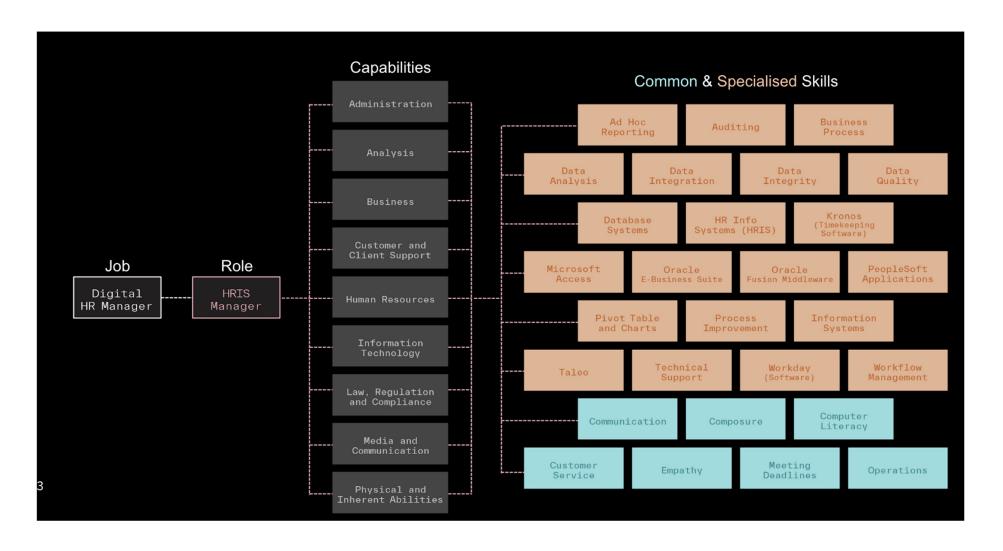
A data-driven definition of a job, with the focus on skills insights.

They mix conventional data and new metrics to inform about the demand and the possible study pathways to an occupation (qualification).



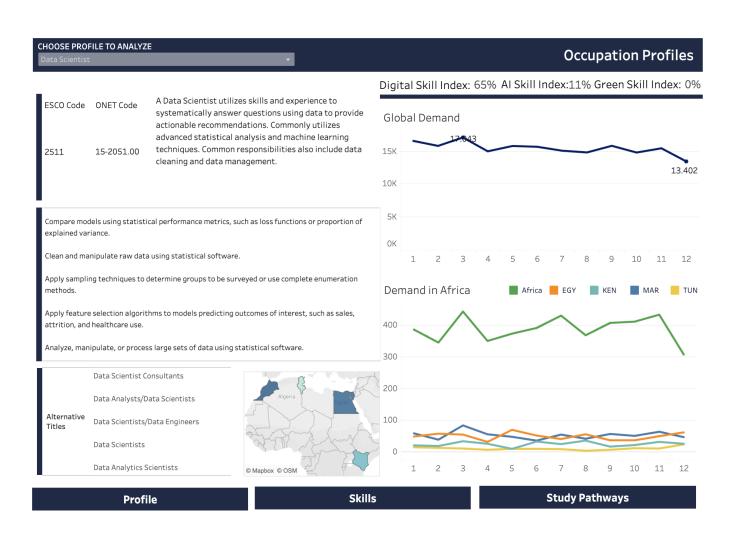
How can we create a common occupational profile?

Taxonomies help us provide structure and understand the data





Skills frequency and international taxonomies are the starting point...



The dashboard introduces the user with the possibility to choose a specific profile and get the following information regarding it:

- Description of the chosen profile
- Correspondence of chosen profile with profiles from ESCO and ONET taxonomies
- Task Description provided by ONET
- Alternative job titles the profile is presented on the market
- Global Demand (number of job postings) for the job profile within 2023
- Demand within all the African countries and 4 countries Egypt, Kenya, Morocco and Tunisia specifically



How to inform on skills trends?

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.



Capture and compare emerging trends



The Skills section in the dashboard analyzes skills for the selected job profile:

- Top Specialized skills by recall of skills within the available job postings Globally, within EU and among job postings of specific 4 countries in Africa. Recall is shown as a % share of available skills
- The data is color coded by the projected skill growth on the market. The exact value of the projected growth can be seen upon hovering on the skill in the skill Tooltip
- Tooltip also demonstrates the detailed description of the skill

Area: EU
Skill Name: Algorithms
Skill Growth: 7,82%
Frequency in the Market: 25,00%

Difficulty to Fill: High difficulty to fill

ESCO Label:

algorithms

Description: Algorithms is a specialized skill that involves developing a logical process or a set of rules to solve a problem or perform a particular task. It entails identifying the steps required to solve a problem efficiently and optimizing them to minimize time complexity and maximize performance. Algorithms are used in various fields such as computer science, mathematics, and engineering, and require expertise in data structures, programming languages, and problem-solving techniques. Developing effective algorithms is a critical skill for software developers, data scientists, and other professionals who work with large datasets and complex systems.

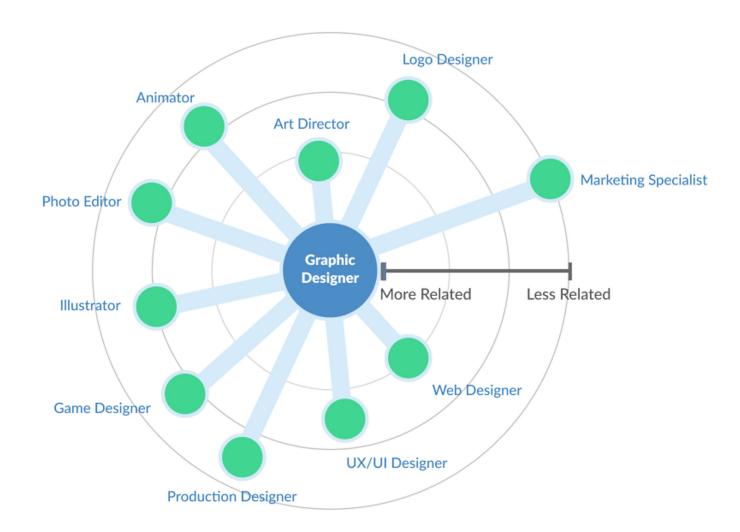
Career and Study Pathways

Career and Study
Pathways: Visualizing the relationship between jobs.

What are the similar jobs?

How similar are these roles?

How do I move from one job to another?





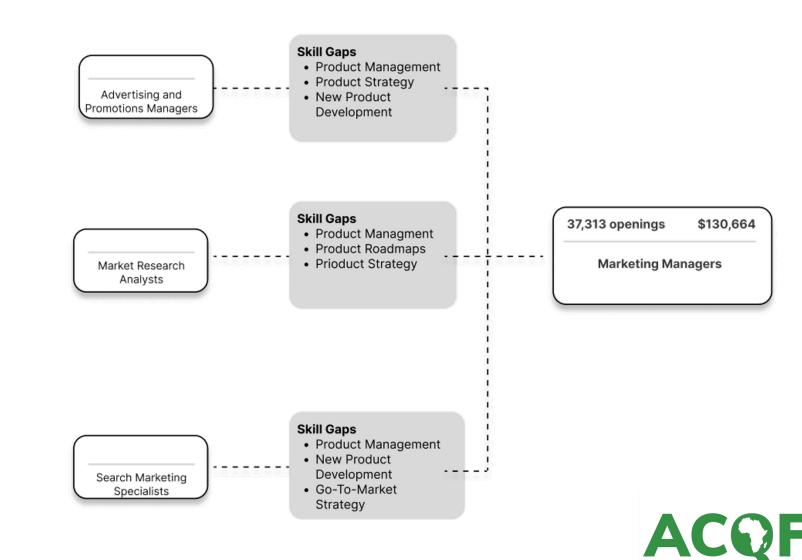
Next-Step Jobs: Career and Study Pathways

Career Pathways enables education providers to identify common skills requirements to advance the local workforce into a need-to-fill role.

Career Pathways Analysis:

Marketing Managers

Pathways are built between roles with strong skill adjacencies, and specify the last-mile skill gaps that can be addressed with targeted training.



African Continental

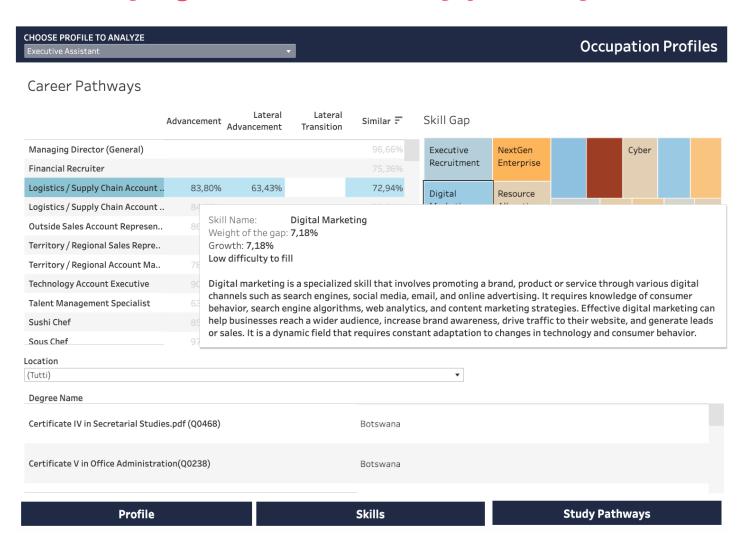
Qualifications Framework

Identifying career and study pathways

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



Identifying career and study pathways



The section analyzes the pathways for the selected profile: **career pathways** related to the specific profile and **educational pathways** leading to them.

For the selected profile, list of occupations are presented, distributed by 4 different hierarchical categories:

Advancement, Lateral Advancement, Lateral Transition or Similar level. For each of them, the index of similarity is given.

Upon selecting specific career, user can also see the skill gap existing from the chosen profile and the original profile of the analysis. The skills are color coded by the skill weight to analyze the gap.

User is also presented with the list of the degrees connected to the profile of analysis at various locations in African countries.



What does this mean for policy-makers and education providers?

Policy-makers and education providers need to work together to link qualifications and demanded skills to respond to a rapidly changing labour market.

- Planning and development: which courses are more likely to provide students a strong career outcome?
- Inform students: communicate to students how your courses will prepare them for their future.
- Course design: what knowledge, competencies and attributes does a course need to develop to prepare students for the world of work?
- Careers advice: empower careers advisors with detailed insights to enrich their guidance, unlocking new possibilities for students.
- **Civic engagement:** engage with wider stakeholders with a common language of data.







4 main points to take-away



The building blocks of work

- Skills describe the competencies and experiences workers need to complete key tasks in their role
- Often described by employers in their job adverts



It's a complex world

- Macro-economic trends are affecting different parts of the labour market in different ways (mix of skills supply and demand)
- It is critical to use a data-driven approach.

Thank you!

Questions?

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