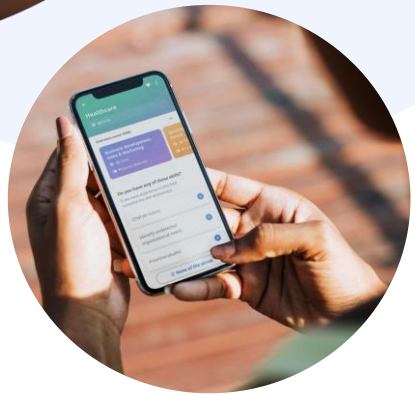
SkillLab

European Bank
for Reconstruction and Development

CIF CLIMATE INVESTMENT FUNDS

In partnership with Canada



Skill Demand in the Egyptian Renewable Energy Sector

Confidential

Project's focus and objective: Improving the **understanding of the requirements** of the green transition in Egypt, focusing on building the **human capital in the renewable energy sector.**

Long-term vision: Supporting a **just transition** in Egypt and offering career guidance for affected workers.

Presentation Outline

- Introduction to SkillLab
- SkillLab & EBRD:
  - Project Background - Green Transition in Egypt
  - Project Objectives
  - Key Activities:
    - Mapping In-demand Occupations for RE sector
    - Mapping In-demand Skills for RE sector
    - Developing Policy Recommendations
- SkillLab’s proven AI Solution: A potential future collaboration for implementing EBRD’s long-term vision

Introduction to SkillLab

SkillLab is an impact business working with organizations around the world. We empower employment, training & career service providers with technology that creates equitable labor markets through the **universal language of skills.**

Our modular solution helps our partners better understand people's unique experience, using artificial intelligence to create an accessible profile of their skills. Based on this profile, we connect **people, jobs and education.**

SkillLab & EBRD

Project Background:

The Green Transition in Egypt

Focus of green transition efforts in Egypt

Egypt has **partnered** with international organizations and partners to support infrastructure development, local industry, and human capital growth in **sustainable projects**

One example of such cooperation is a project with KfW, with the goal of **establishing three competence centres for renewable energies** and energy efficiency

Recommendations for Egypt: To start **preparing a workforce** for **green occupations**, by enhancing their green **skills**[1]

The government plans to **increase green public investments to 50%** of total investments by FY2024/2025

Egypt launched the **"NWFE" program,** focusing on **climate adaptation and green economy transition** across energy, water, and food sectors

The **European Training Foundation** is supporting the establishment of **Sector Skill Councils** with an aim to **align TVET with the renewable energy industry needs**

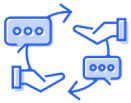
Egypt aims to generate **42%** of its electricity from renewable sources **by 2035** and **60%** by **2040**

1 https://mecouncil.org/publication/egypts-green-transition-nurturing-a-sustainable-economy-and-workforce/

Project Objectives

INNOVATIVE

MULTI-SIDED



USER-CENTRIC

Improving the understanding of the requirements of the green transition in Egypt, focusing on building the **human capital in the renewable energy sector.**

Data-driven

Evidence-based

Participatory

Key Activities

Mapping In-demand Occupations for RE sector

3 Stages of Mapping In-Demand Green Occupations

Literature review and desk research	AI-Based Analysis	Questionnaire *
Conducting literature review and desk research to map out Egypt's relevant occupations for the green transition process	Using AI semantic analysis to analyze and identify a preliminary list of relevant occupations from internationally recognized taxonomy (ESCO)	Engaging with relevant stakeholders to validate the refined list and to identify the in-demand occupations from the preliminary list
Raw list of occupations in RE sector	Refined list of relevant occupations in RE sector	Validated list of in-demand occupations in RE sector in Egypt

* We are currently in this phase - questionnaire is being shared with you as you are subject matter experts in the RE sector.

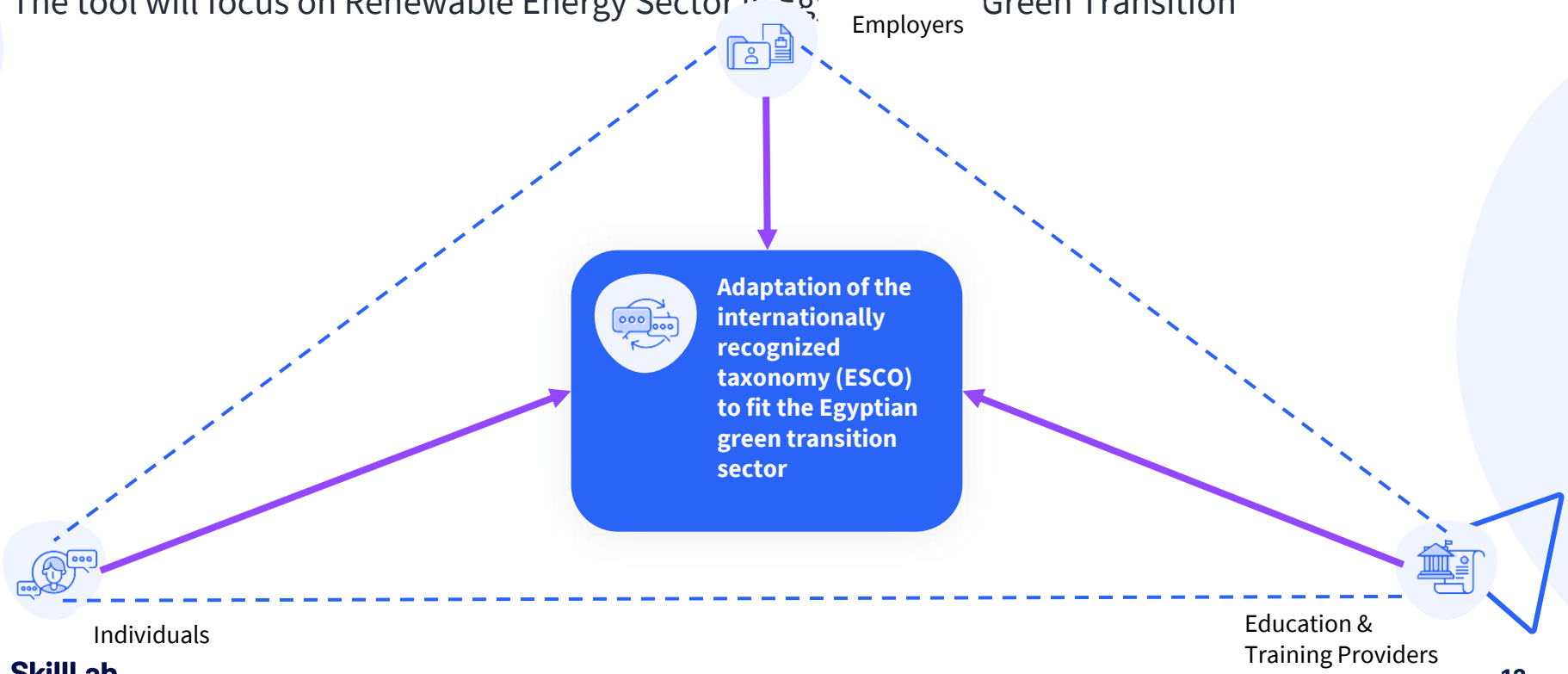
Key Activities

Mapping In-demand Skills for RE sector

(Screenshots and details are subject to some modifications)

Main Objective of the Skill Survey

The tool will focus on Renewable Energy Sector in Eg[illegible] Green Transition



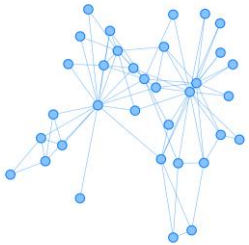
Skill Survey Tool

The tool will be prepopulated with the identified **in-demand occupations for the RE sector in Egypt.**

The tool provides a simple and intuitive method to **collect rich skill data from a variety of user types.**

The data can then be analyzed to validate and enhance our knowledge around **relevant skills for occupations within a given taxonomy.**

Key technical details of the Skill Survey Tool



Data is aligned with an internationally recognized taxonomy (ESCO)

All occupations and skill recommendations comes from the latest version of the **European Skills, Competencies and Occupations (ESCO) taxonomy** which was **refined and validated through the identification process** of the “the in-demand green occupations “.

Uses SkillLab’s AI engine for skill recommendations

SkillLab’s AI engine will feed **essential, optional, and potentially-related skills** of an occupation to the user during the skill survey.

Reduce bias through skill randomization

SkillLab’s AI engine will enforce **skill randomization** across different sections to reduce bias in results

There are 6 main components to the skill survey tool

1. Clear **access point** from a general link
2. Easy account **registration and onboarding** to collect general information about the user
3. **Homepage** to track survey submissions and efficiently **search** for an occupation
4. **Occupation card preview** to collect occupation-specific data about the user
5. Lightweight **survey** to collect rich skill data aligned with occupational profile cards
6. **Missing skills** section to capture data around new or outlier skills

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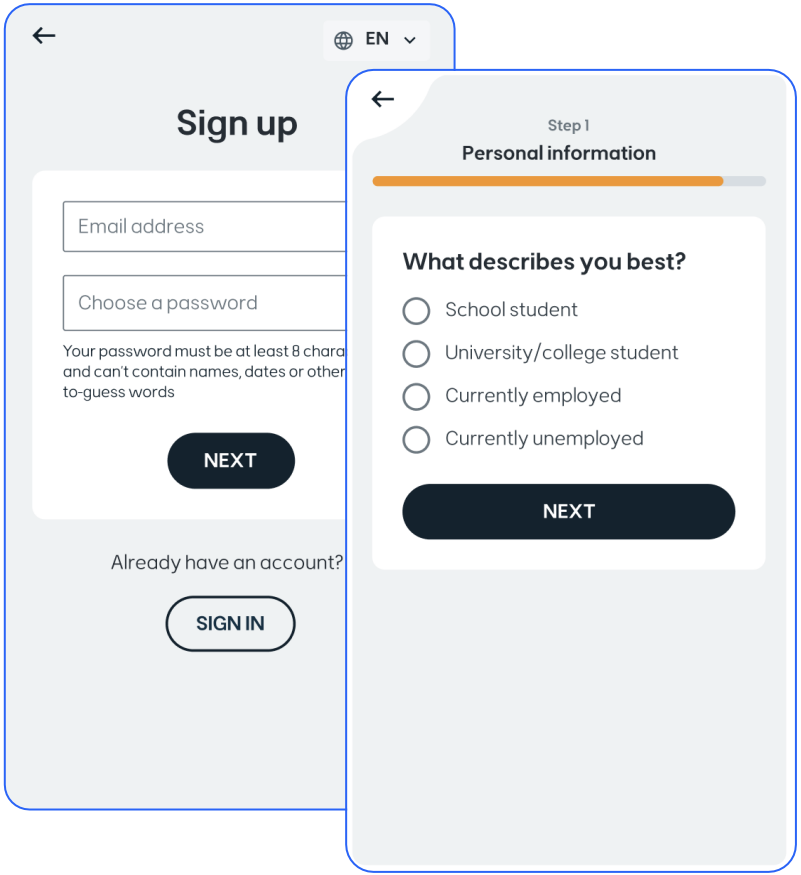
Seamless switching between English and Arabic

Simple account registration with email address

Built-in password validation for a secure experience

User details are saved for efficient experience for future surveys



Onboarding broken down into sections to encourage completion

Simple progress bar that informs user of their status

Tailored onboarding questions based on user input at this step

Once user indicates he/she is currently employed, user will be asked about the organization

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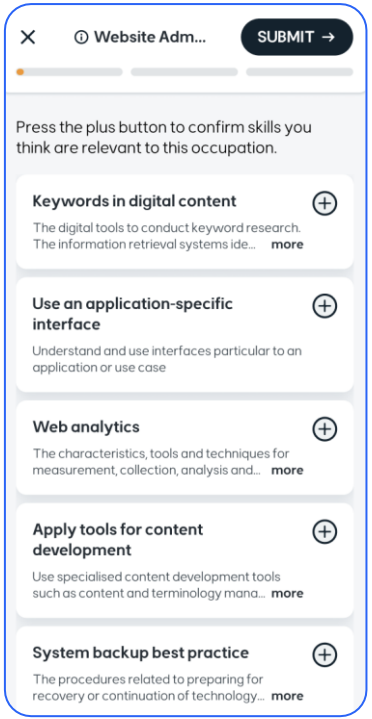
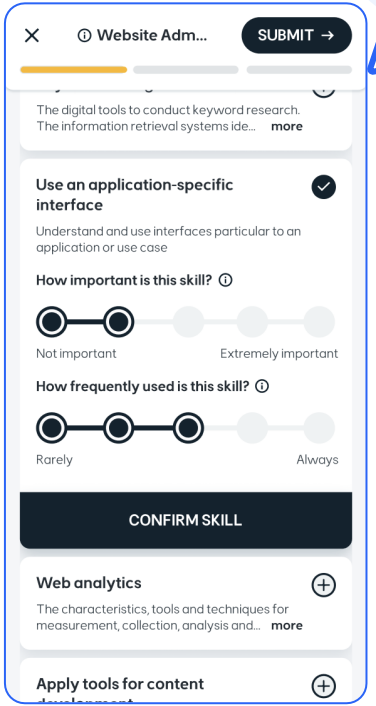
Read instructions of skill survey



Review and accept skills from a list of essential, optional, and potentially-related skills recommended by SkillLab's AI engine



Rate relevant skills by importance and frequency

View occupation name and description any time

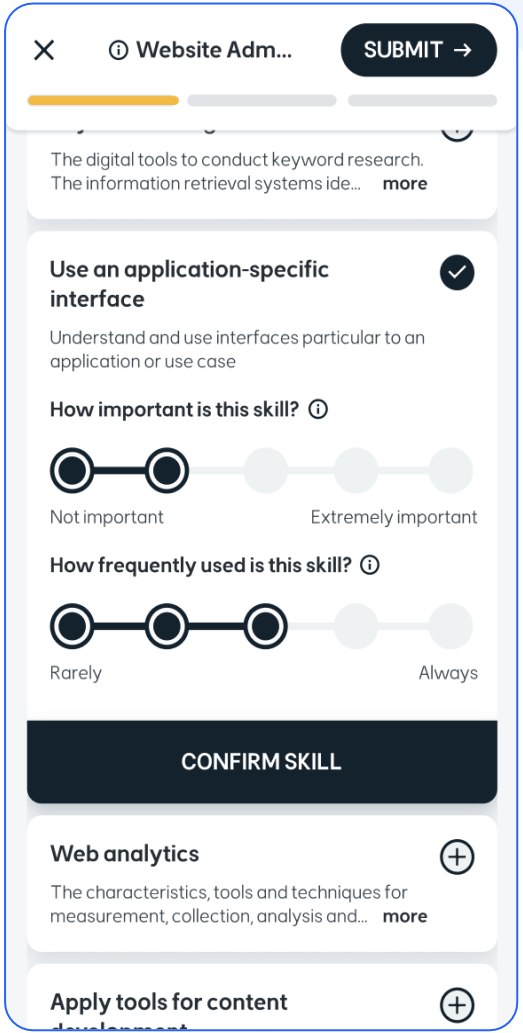
Clear submit button for when user completes the survey

Progress bar that fills based on user's review through the list of skills

Skill name and description aligned with ESCO

Informative tooltip that explains importance and frequency scales in depth

Clear call-to-action to confirm the skill



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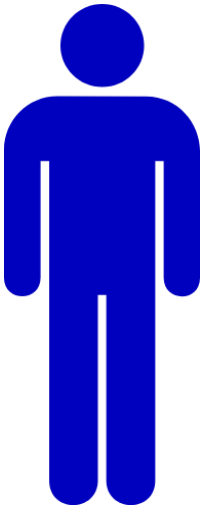
Who will use the Skill Survey Tool?

The tool will be disseminated to the following stakeholders:

Profile 1: An employee who wants to share rich skill data about occupations they have worked in

Hands-on knowledge allows them to provide empirical information about occupations

Able to identify **foundational skills** for an occupation



Motivated by sharing **practical, on-the-ground insights**

More likely to survey **a few occupations** they've worked in

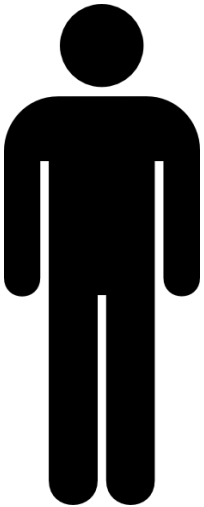
Who will use the Skill Survey Tool?

The tool will be disseminated to the following stakeholders:

Profile 2: An employer or corporate representative who wants to share rich skill data about occupations in the sector where their company are active

Hands-on knowledge allows them to provide empirical information about occupations

Motivated by sharing **practical, on-the-ground insights** reflecting the company's **current & future needs**



Able to identify **foundational skills** for several occupations in their company

More likely to survey **some occupations** they've worked in or available in their company

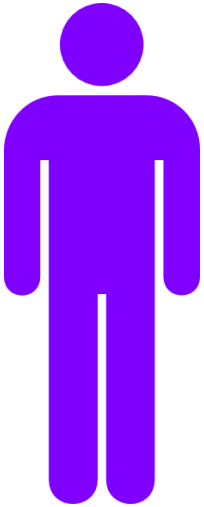
Who will use the Skill Survey Tool?

The tool will be disseminated to the following stakeholders:

Profile 3: A subject matter expert, such as members of the Sector Skill Council, who wants to provide rich skill data based on their deep expertise in specific industries and occupations

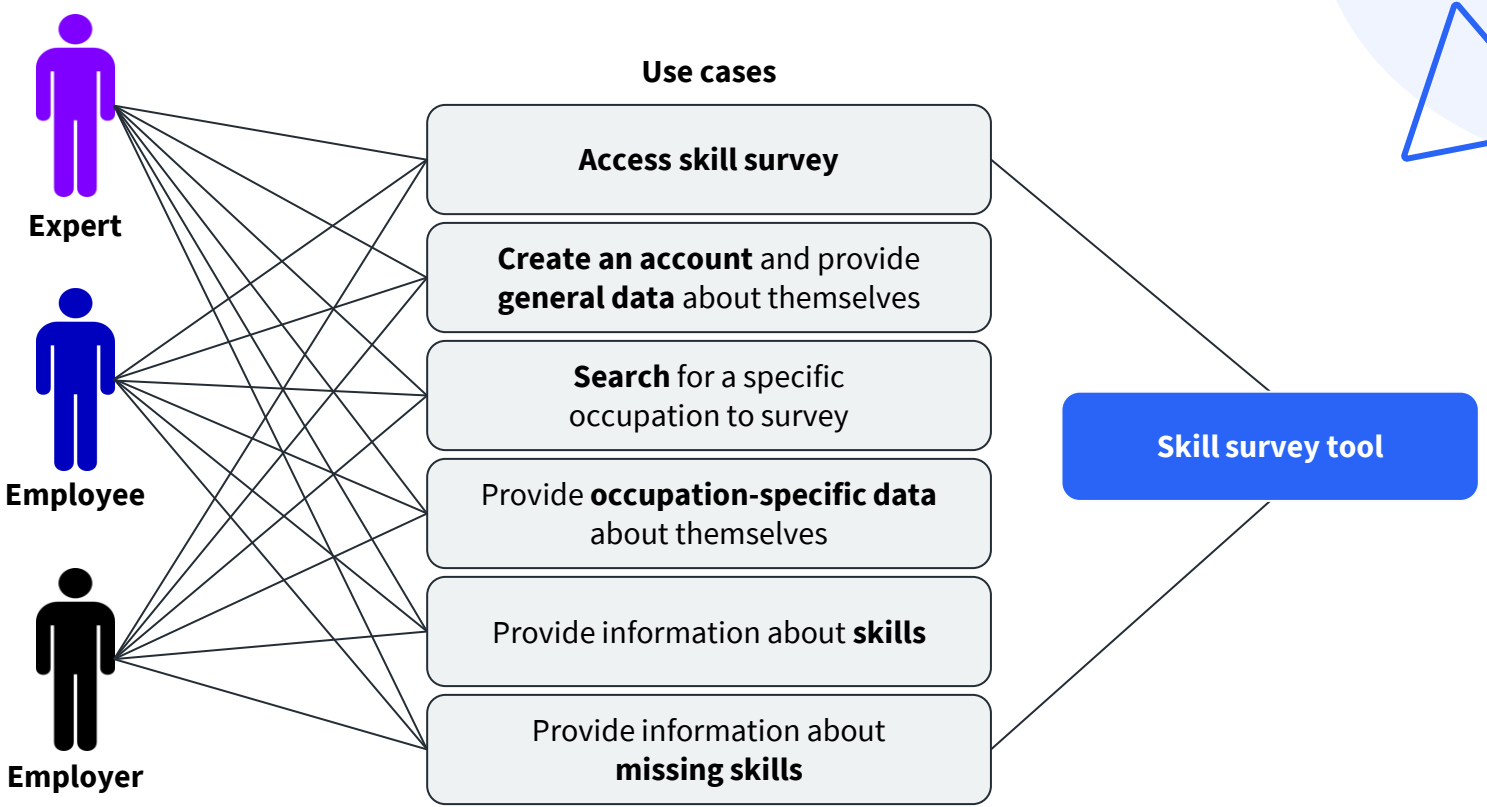
Specialized knowledge ensures the taxonomy is aligned with the latest industry standards and practices

Motivated by **driving industry alignment** for the Egyptian energy sector and green transition



Able to validate existing skills and identify **overlooked or missing** skills

More likely to survey **multiple related occupations** within a specific sector



The skill survey tool should be **accessible and simple enough to complete for all users**, yet capable of capturing the **detailed insights that experts can offer**.

Capacity Building and Dissemination of Skill Survey Tool

Dissemination of the AI tool to the stakeholders & data collection of the in-demand skills

1. Contact interested organizations
2. Capacitate interested organizations
3. Share access to skill survey with organization

   (whenever required, SkillLab can arrange check-in meetings)
4. Organizations disseminate survey to organization members (employees, hiring managers and experts)
5. Skill survey completed
6. Focus groups & interviews for additional data collection

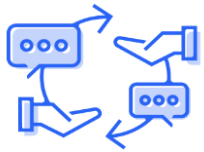
Key Activities

Developing Policy Recommendations

From Skills Data to Policy Recommendation

Initial Questionnaire	Survey for skill validation	Data analysis	Policy Recommendations
Verify the initial selection of green occupations.	Validate the skills associated with the verified occupations.	Identify trends and insights from collected data.	Develop recommendations based on analysis findings.
A refined and verified list of in-demand occupations.	Comprehensive data on skill requirements for green occupations.	Methodology & Metrics: To be determined after assessing the dataset.	Evidence-based policy insights to support green transition.

Policy Recommendations' Impact

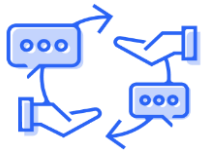


Understanding the RE labor market's needs during the green transition process in Egypt is crucial

- Macro-level
- Meso-level
- Micro-level

Macro-level Impact

Enabling SSC develop the Egyptian economy:



Sector analysis

Capturing the needs of the labor market based on internationally recognized taxonomies

Stakeholders' collaboration

Laying the foundation of a sector where all stakeholders speak the same language of skills

Development

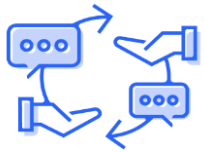
Preparing skill-based career pathways for current and future employees

Sustainability & Prosperity

Enabling data-based planning to enable a just green transition

Meso-level impact

Benefits for employers:



Insight

Gain a better understanding of the present and future needs of the labor market

Progress

Gain a better understanding to develop training programs for employees

Planning

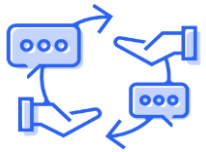
Plan skill-based recruitment process and communicate your skill needs to education and training providers

To prepare skill-based job description for job openings

To attract candidates with the right expertise and the right skills

Micro-level impact

Benefits for workers:



Self-discovery

Discover the skills they have

Self-esteem

Increase their confidence in their skillset

Insight

Gain a better understanding of the present and future needs of the labor market

Planning

Better plan for their upskilling and career progress based on evidence and data

QR code to the questionnaire