

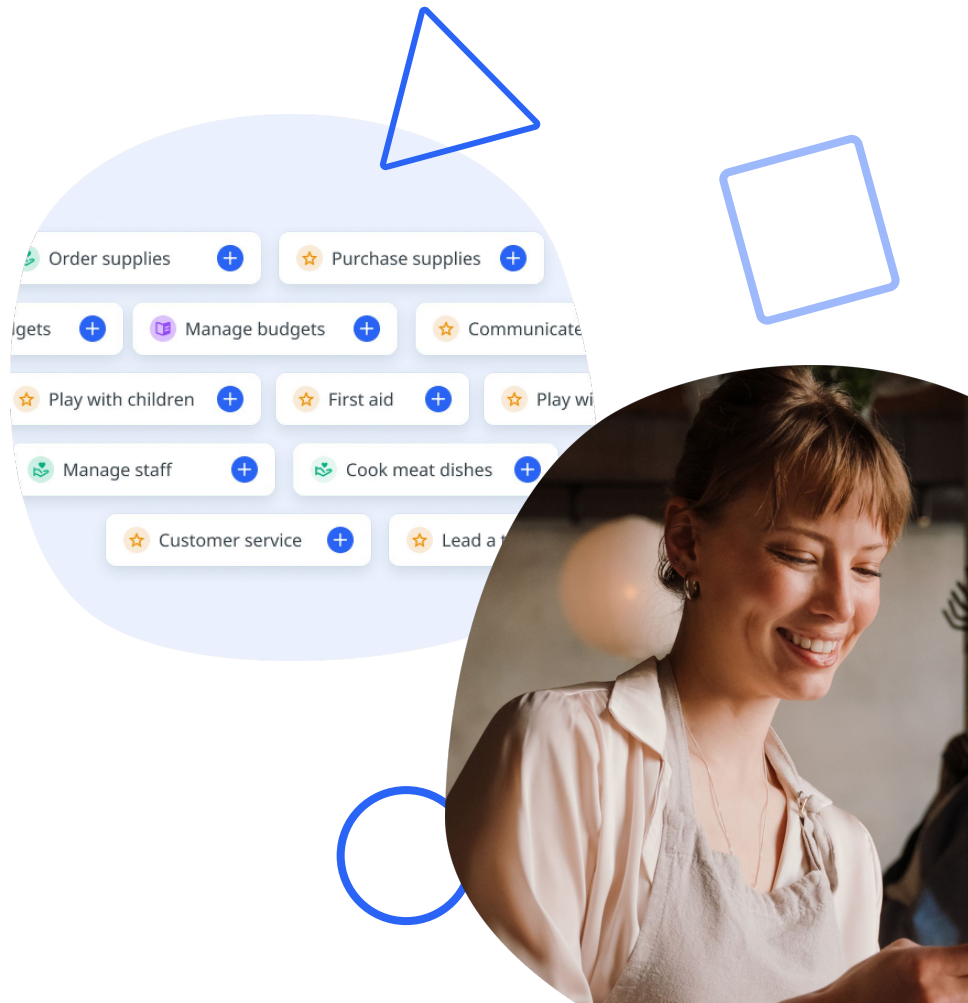
Leveraging AI for Skills based labour market mobility

Rethinking Data, Systems, and Collaboration for Modern Labour Market Systems

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SkillLab

Confidential



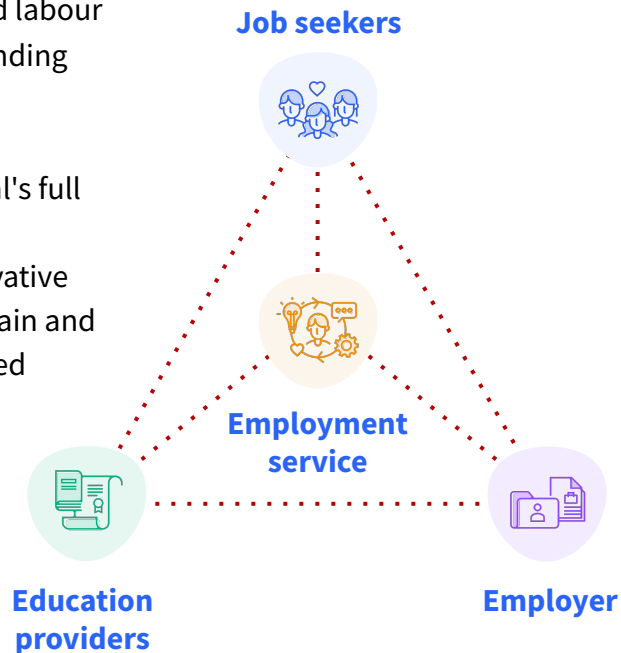
BUILDING TECHNOLOGY TO CONNECT LOCAL SKILLS SYSTEMS

Labor market stakeholders connect locally, through the language of skills

SkillLab is a technology company based in Amsterdam that supports employment and labour market projects worldwide. SkillLab was initially created to address the gap in understanding the skills and capabilities that people have and those that labour markets need.

Recognising that traditional job title-based approaches often fail to capture an individual's full potential and can be discriminatory, SkillLab started to develop and employ artificial intelligence (AI) to enable individuals to express their skills at a granular level. This innovative approach proved beneficial for various labour market groups who struggle to identify, train and leverage skills effectively. The company's technology ensures skill information is validated through input from individuals, employers, and education providers.

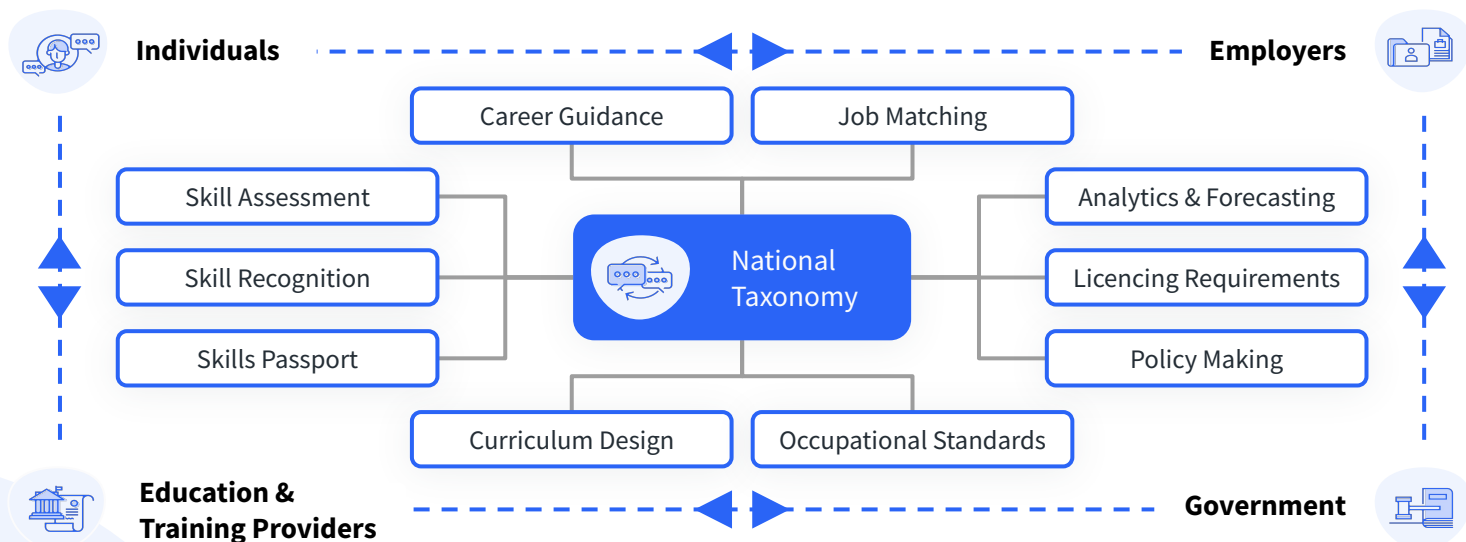
Today, SkillLab operates in over 30 countries, collaborating with education and employment stakeholders to align skill provision with demand. SkillLab also supports employment services in their daily operations and assists governments in the adoption and creation of skills and occupation taxonomies.

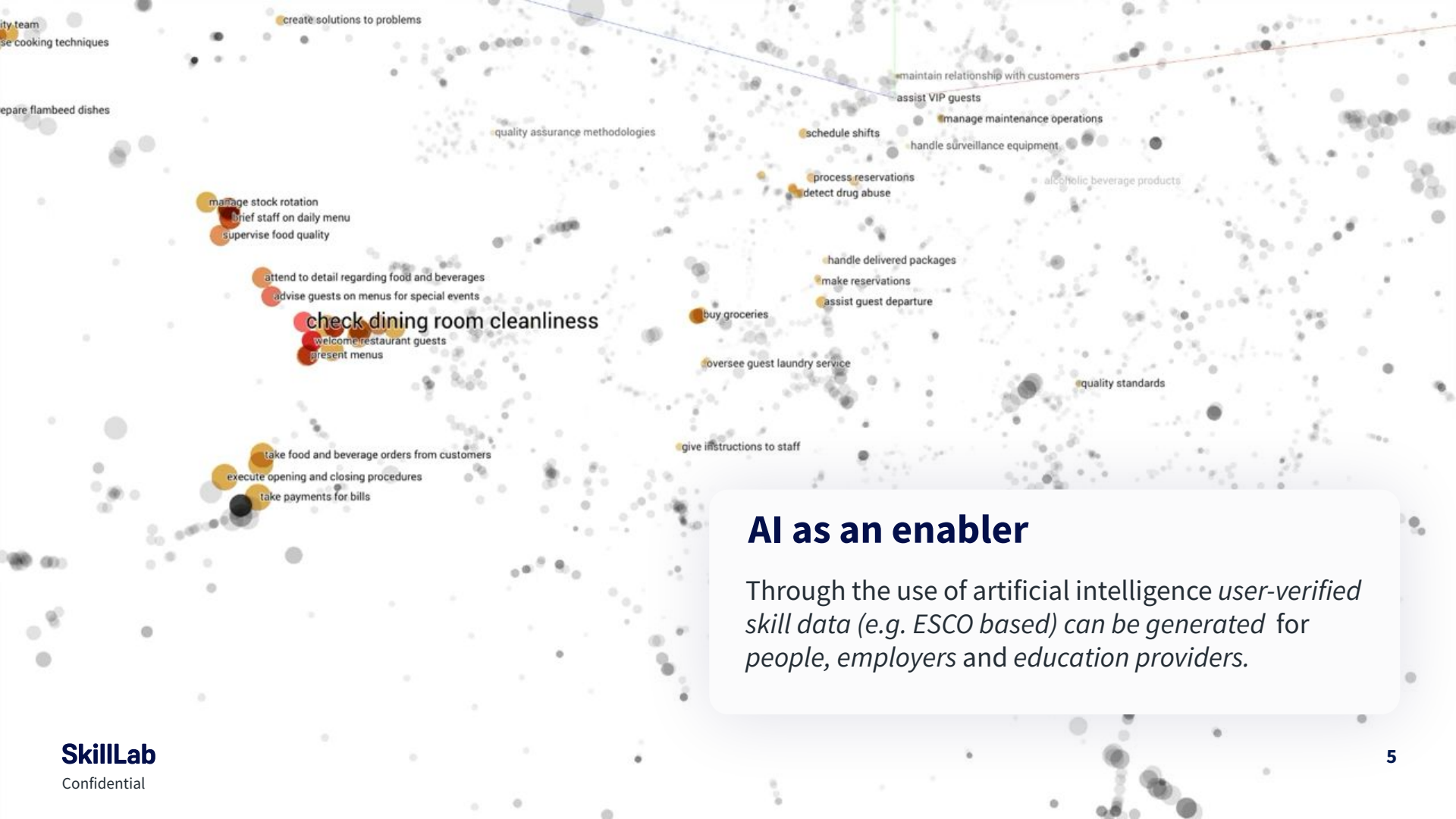


BUILDING TECHNOLOGY TO CONNECT LOCAL SKILL SYSTEMS

Labor market stakeholders connect locally, through the language of skills

Supporting governments globally, SkillLab developed deep expertise in supporting the creation and maintenance of a national skills systems - including the unification of various sources of skills data, such as occupation and skills taxonomies, national skills/competency frameworks, and National Occupational Standards. Unifying these sources is a precondition for alignment between government programmes, education providers, and employers.





AI as an enabler

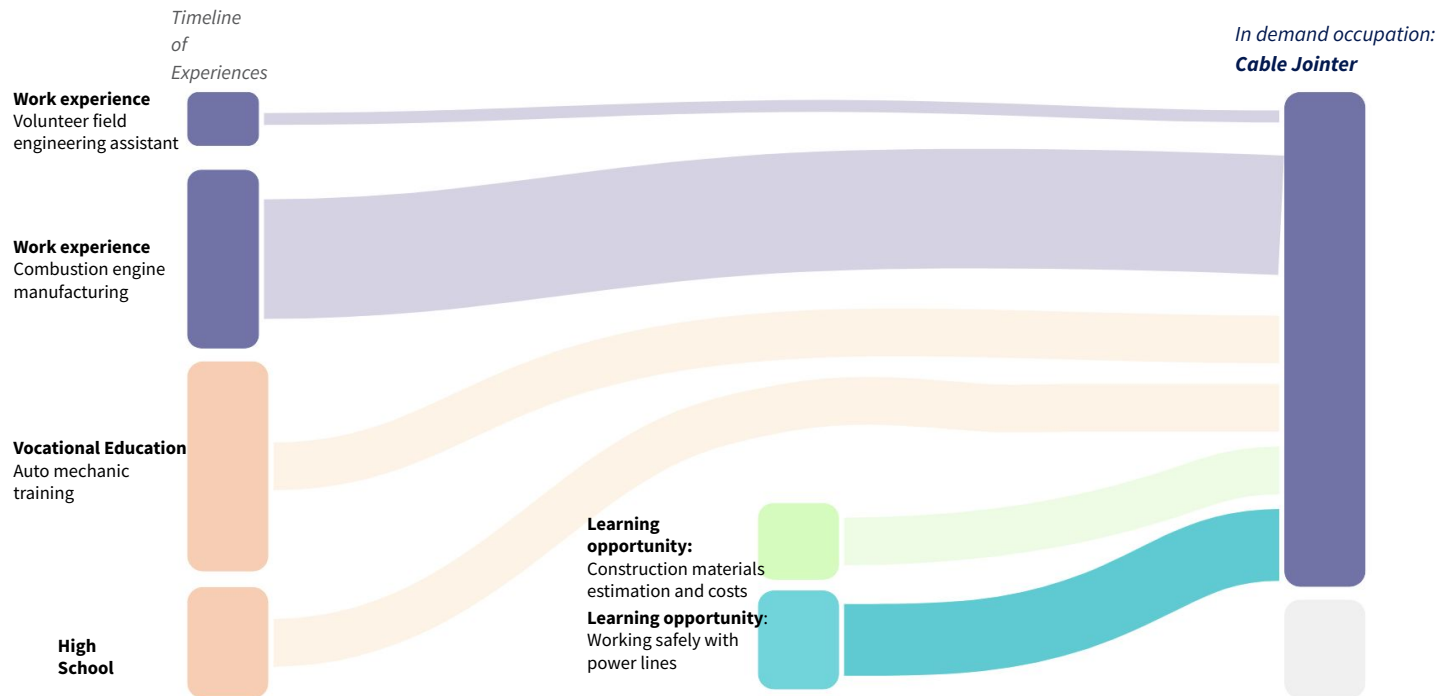
Through the use of artificial intelligence *user-verified skill data (e.g. ESCO based)* can be generated for people, employers and education providers.

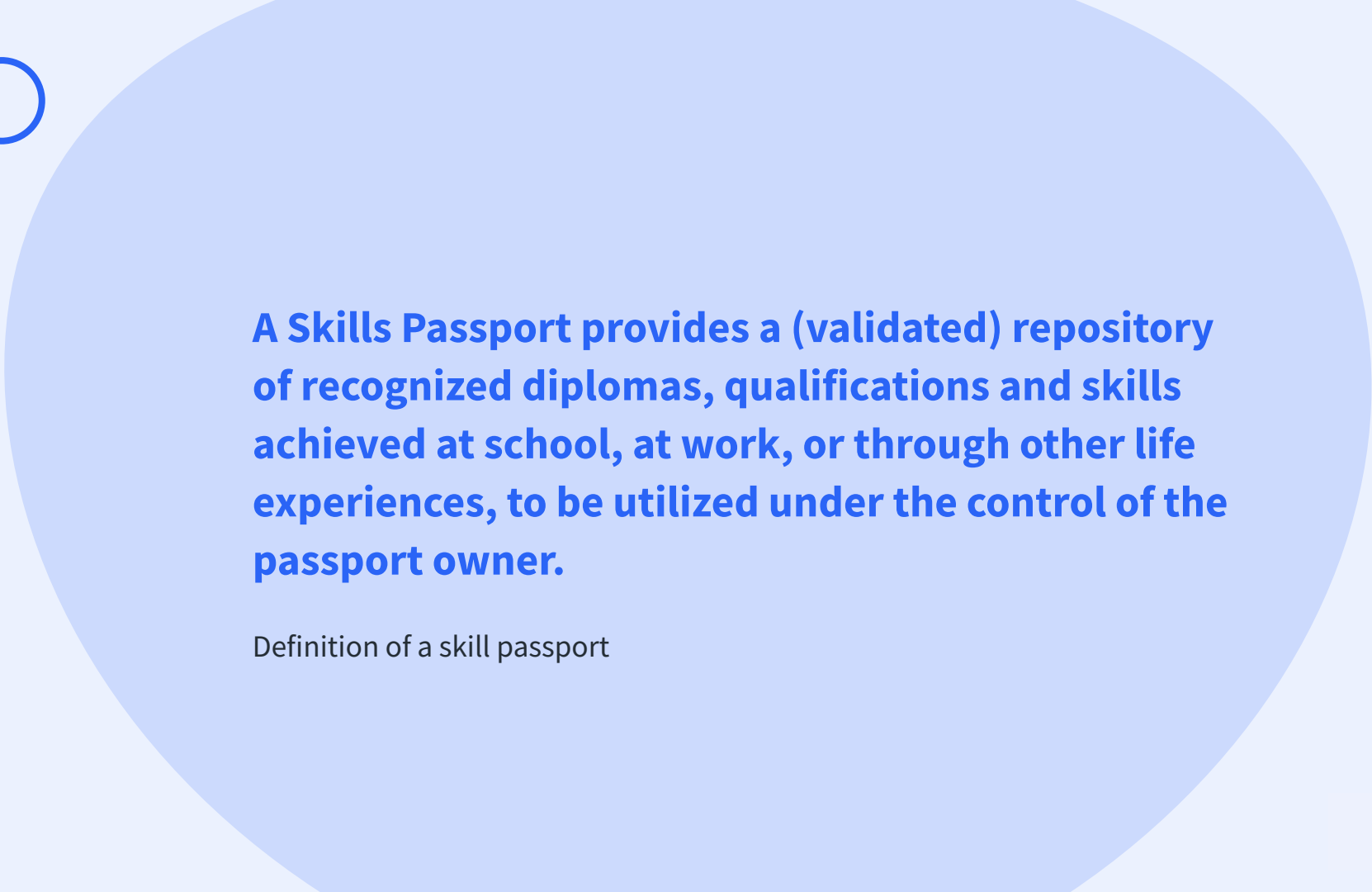
LEVERAGING SKILLS DATA TO TRANSITION PEOPLE LOCALLY

Enabling all labor market stakeholders to connect and adopt a skills-first approach



User Example





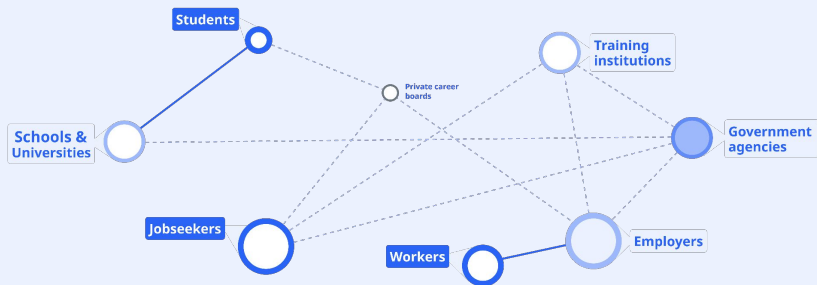
A Skills Passport provides a (validated) repository of recognized diplomas, qualifications and skills achieved at school, at work, or through other life experiences, to be utilized under the control of the passport owner.

Definition of a skill passport

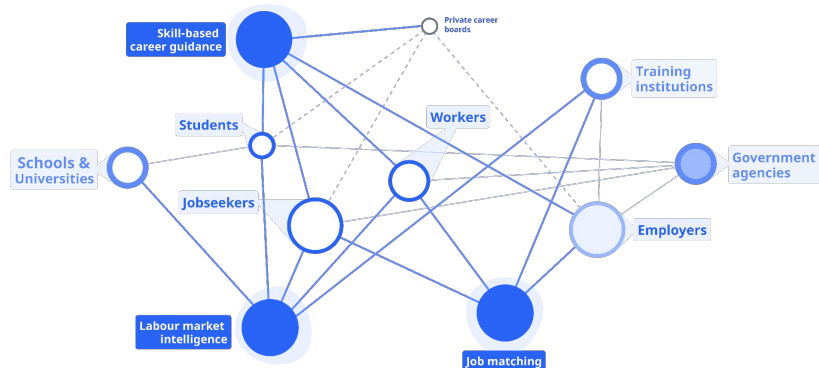
Skills Passport

Making the labour market easy to navigate for all

In the current labour market, stakeholders are often **disconnected**, and struggle to share relevant skills information among each other.



Skill Passports are a means to enable communication in a **language of skills** that is universally **recognized and approved** among the stakeholders.



Skills Passports in Practice

Use cases

Capturing users' wholesome skill sets

- SP allows users to explore and express their skills from both formal and informal experiences
- SP enables users to store their information in a central database, and have control over their data by allowing them to share it with whomever they chose

Recording education pathways of users

- SP records skills, training, qualifications, certificates, and microcredentials
- This requires active inclusion of education providers to enable verification and credibility

Connecting employers and workforce

- By using the same database, employers can access a rich talent pool, and can trust the data provided as it is verified and credible
- SP needs to use the same skill language as other (national) job boards that connect to vacancies

Enabling evidence-based policy and decision making

- SP enables governments to provide targeted support for different sectors and demographics based on collected data
- It also presents a common standard and tool to be used across sectors

Potential Skills Passports Components

User Profile

- **Personal details:** Name, contact, professional background
- **Career objectives:** Desired career path, goals

Skills Inventory

- **Skills matrix:** Categorized by industry, role, type
- **Digital badges:** Verified skills and certifications

Experience & Education

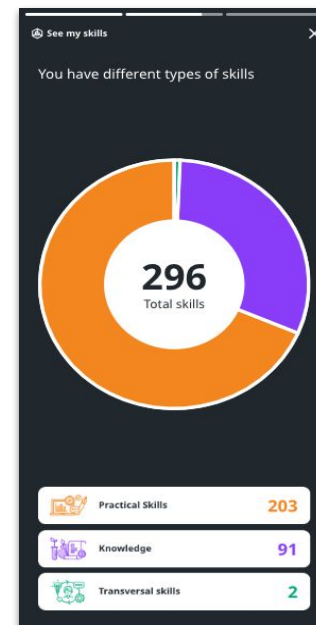
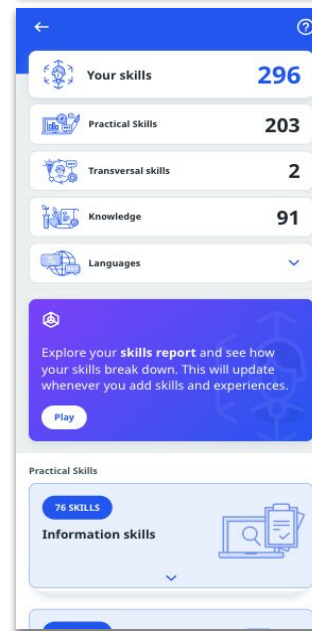
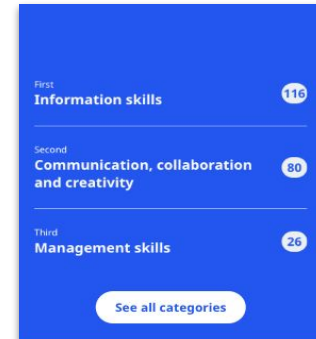
- **Work experience:** Employment history, roles
- **Education:** Academic qualifications, certifications

Skill Gap Analysis

- **Gap identification:** Current vs. desired skills
- **Recommendations:** Suggested training and courses

Job Matching & Career Development

- **Job recommendations:** Tailored opportunities based on skills
- **Career pathway planning:** Visualization and planning of career growth



Skills Inventory for Skills Passports

Gamified, AI-enabled interviews allow people to quickly and easily capture their experiences and skills. Granular skills profiles provide rich data and insights, for people, but also in creating powerful labor market information.

Enter professional, educational and any other experiences, localised to national standards

Discover and document skills with an AI-based interview in 27+ languages

Create a granular skills profile based on **International or National Taxonomies** (e.g ESCO with approx. 14.000 skills)

Utilize methodologies for
user centered design

How often have you used
this skill?



2010-2014



BSc Social Science

Blue Mountain University

Added skills

3 >

Add skills from



Job

Paid work, internships



Education

Degrees, trainings, courses

Add other skills

Volunteering, housework



Add skills

Does not apply



Skills completed!

You've added 60 skills to Visual Design.

Find careers

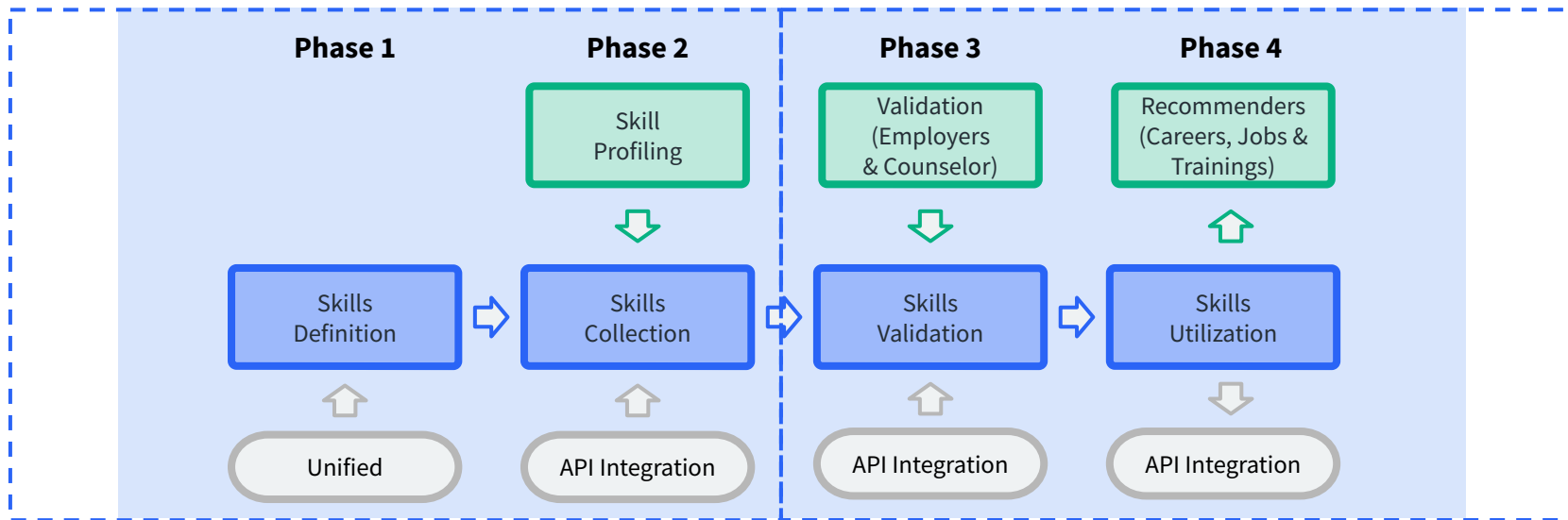
Add more skills

Solution Overview

Integration & Validation

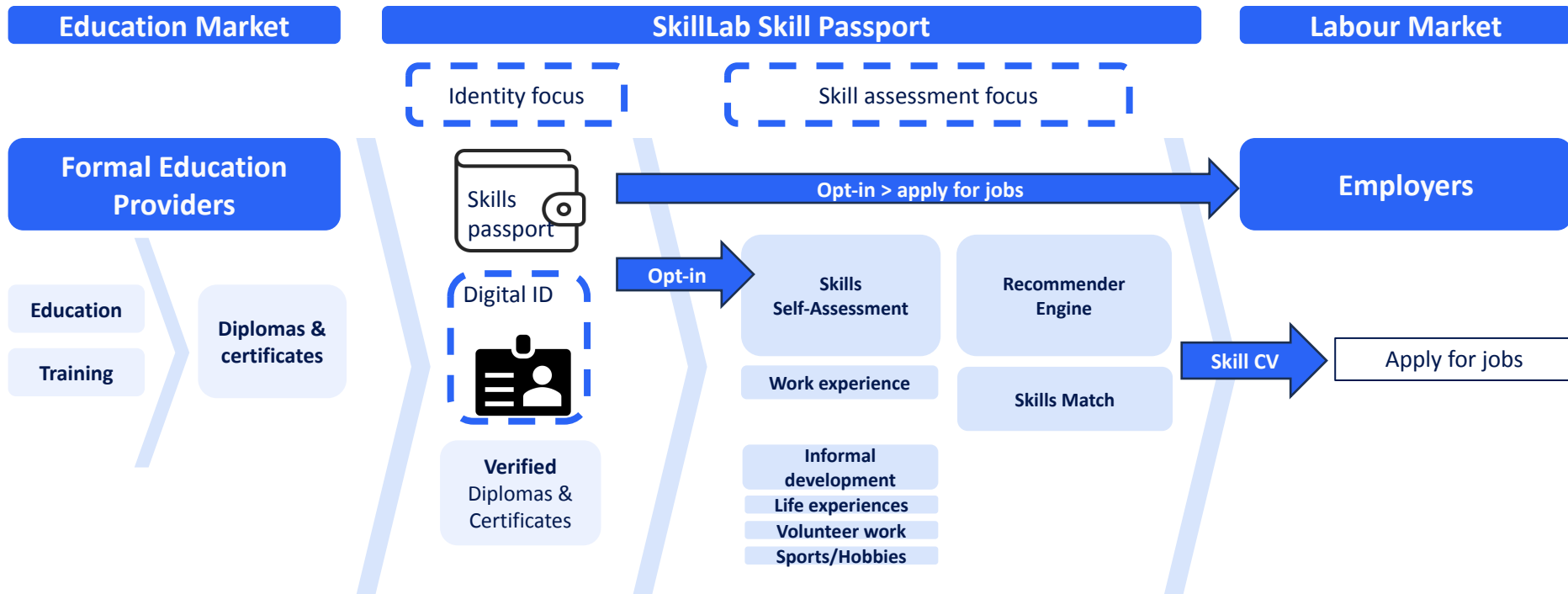
National Skills Passport

Solution component overview



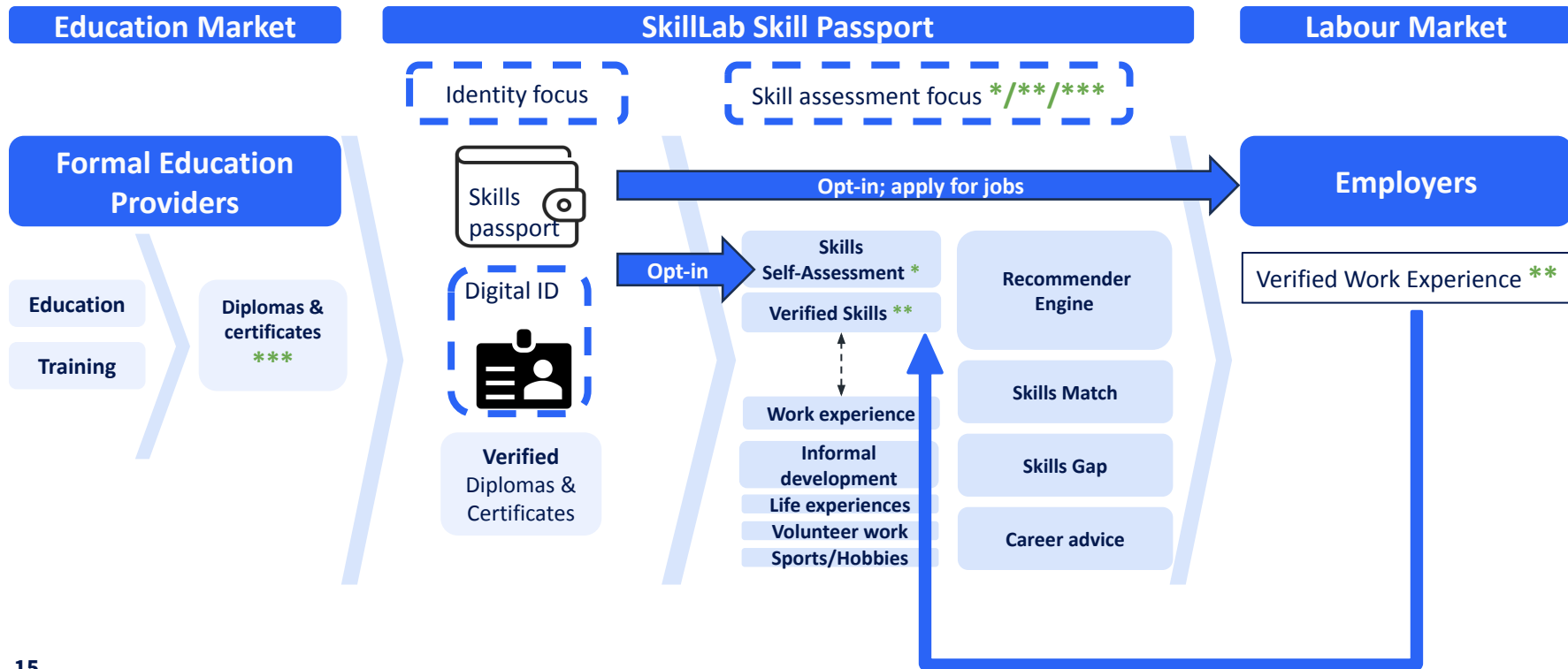
National Skills Passport

Assessing and Matching People to Jobs



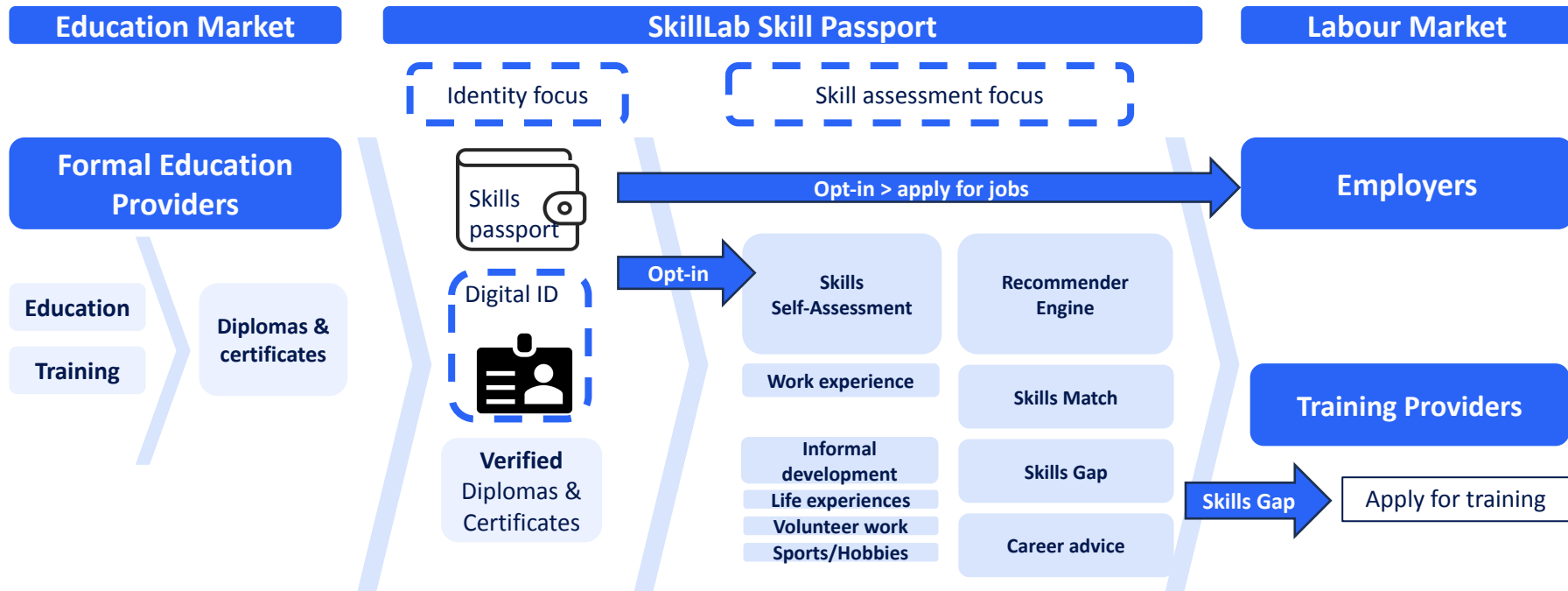
National Skills Passport

Validating People's skill-level: *Self, **Employer/Counselors, ***Certified examiner



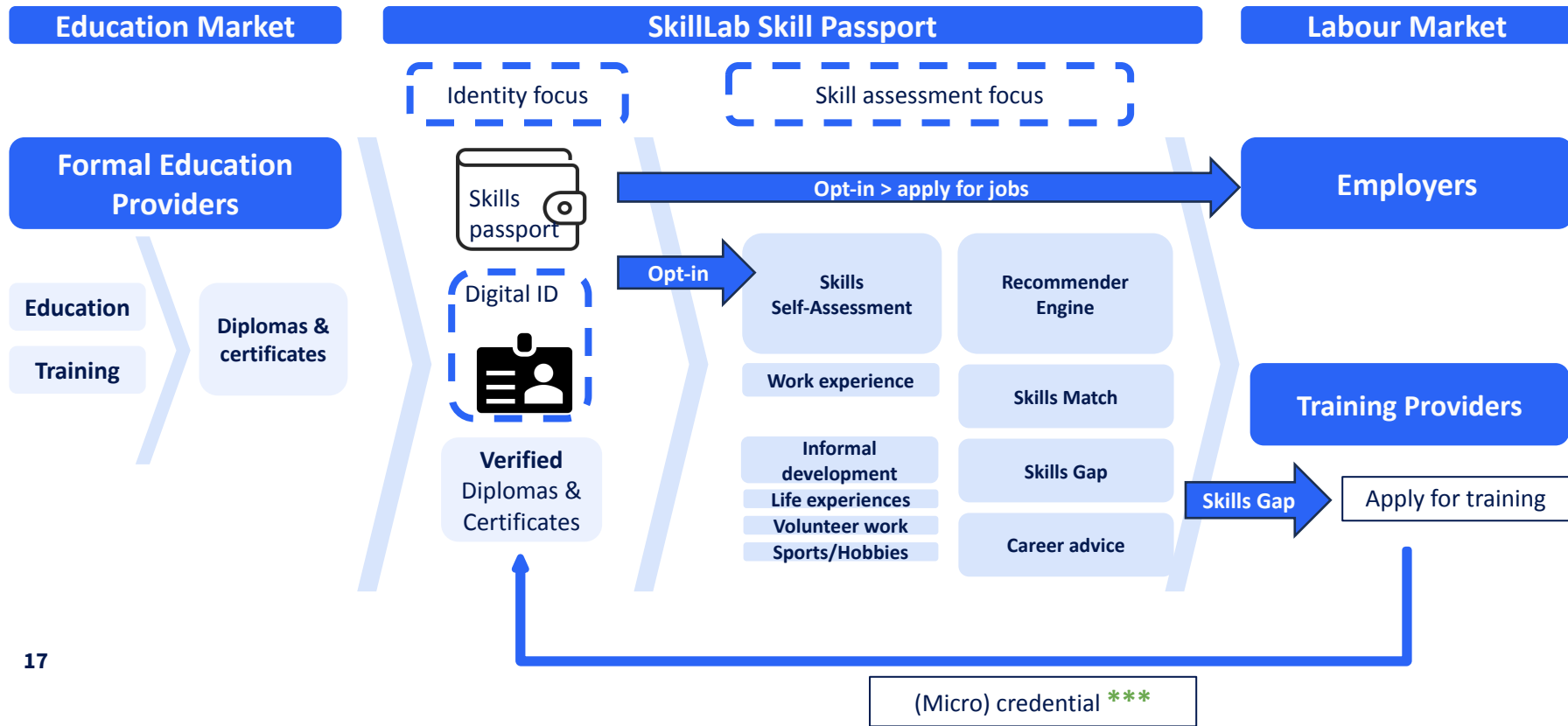
National Skills Passport

Assessing and Recommending People to Trainings



National Skills Passport

Validating People's skill-level: *Self, **Employer, ***Certified examiner



National Skills Passport

Passport data & verification

	Personal data	Diplomas (education)	Certificates (training)	Work Experience	Skills	Languages	Volunteer work
★ Self-reported	Passport creation	Passport creation	Passport creation	CV creation - occupation support	CV creation - skills profiling support	CV creation	CV creation
★★ Evidence supported	-	Document upload	Document upload	Manager confirmed	Verified Experience	Document upload	Document upload
★★★ Verified / Certified / Examined / Tested	Digital ID/SSO	NQF / National Registry	Edu badges & micro credentials	Government Employment Records	Skill tests & assessments	NQF service Language	National Registry

Verifications can be implemented in multiple ways:

- Fully automated (API service integration)
- Semi-automated (messaging/request)
- In person (counselor)

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Use Cases for granular skills data

Feeding Match Engines



Governments have match engines, which (too) often are imprecise and partially discriminatory. The #1 reason for imprecision is a **lack of quality data to enable matching** - on the supply as well as demand side. Parsing based approaches fail to capture relevant information for a huge part of the population.

Promoting Self-Service Offers



In Europe, career counselors will serve more people with less staff due to retirement as well as macro economic factors. Most services work largely or run on legacy systems. Digital services and self-services are **expected** by citizens and at the same time **increase organisational efficiency** by allowing to explore skills-based options and matches independently.

Policy Analysis and Planning



Governments often rely on high level labour market analysis and lack representative skills data, especially on the **regional level and from user groups that have more fractionated work experiences**. Informing local policy analysis and feeding the design of training and education without generalizing is a key challenge to governments.

Connecting and Opening up Government



Government services increasingly realize that they are creating **parallel structures to the market** is. The need to integrate and work with the private market includes the work of job boards and other adjacent services and builds on **skills as the common language**. Building **technology that embraces private offers to add value** and be superior.



SkillLab

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GLOBAL TOP 100
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OUTSTANDING PROJECT
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Google AI
Winner Impact Challenge

PUBLIC



CAREERTECH
CHALLENGE



Connecting **People. Jobs. Education.**