

Operationalizing the LER: What We're Learning About Employer Needs and Credential Transport

Aligning Education and Workforce Adoption of Credentials
A Path to Scalable Credential Data Sharing





From Digital Credentials to Usable Skills Evidence

- Digital credential issuance is scaling.
- Employers are asking for usable evidence.
- The ecosystem now needs alignment around trust, data, and transport.

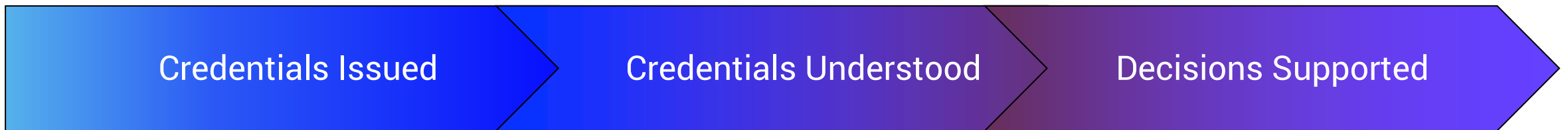


Figure 1. The effect of the number of trials on the number of correct responses.

- Badges are moving into broad adoption.
- Issuance does not equal employer use.
- Next: make credentials useful in existing workflows.





Two Ways Credentials Fail to Become Useful

Failure Mode	What Happens
Movement Fails	The credential has rich evidence, but it never reaches the workflow.
Meaning Fails	The credential moves, but the employers cannot tell what it proves

A Credential's Journey Is Longer Than We Think

STEP 01

Learner earns credential

The process begins when a learner successfully completes a program or demonstrates a skill.

STEP 02

Credential platform issues it

A digital platform generates the verifiable credential based on the earned achievement.

STEP 03

Learner stores or shares it

The learner takes control, placing the credential in a digital wallet or sharing it directly.

STEP 04

Marketplace or profile displays it

The credential is listed on professional profiles or talent marketplaces for discovery.

STEP 05

Employer system receives it

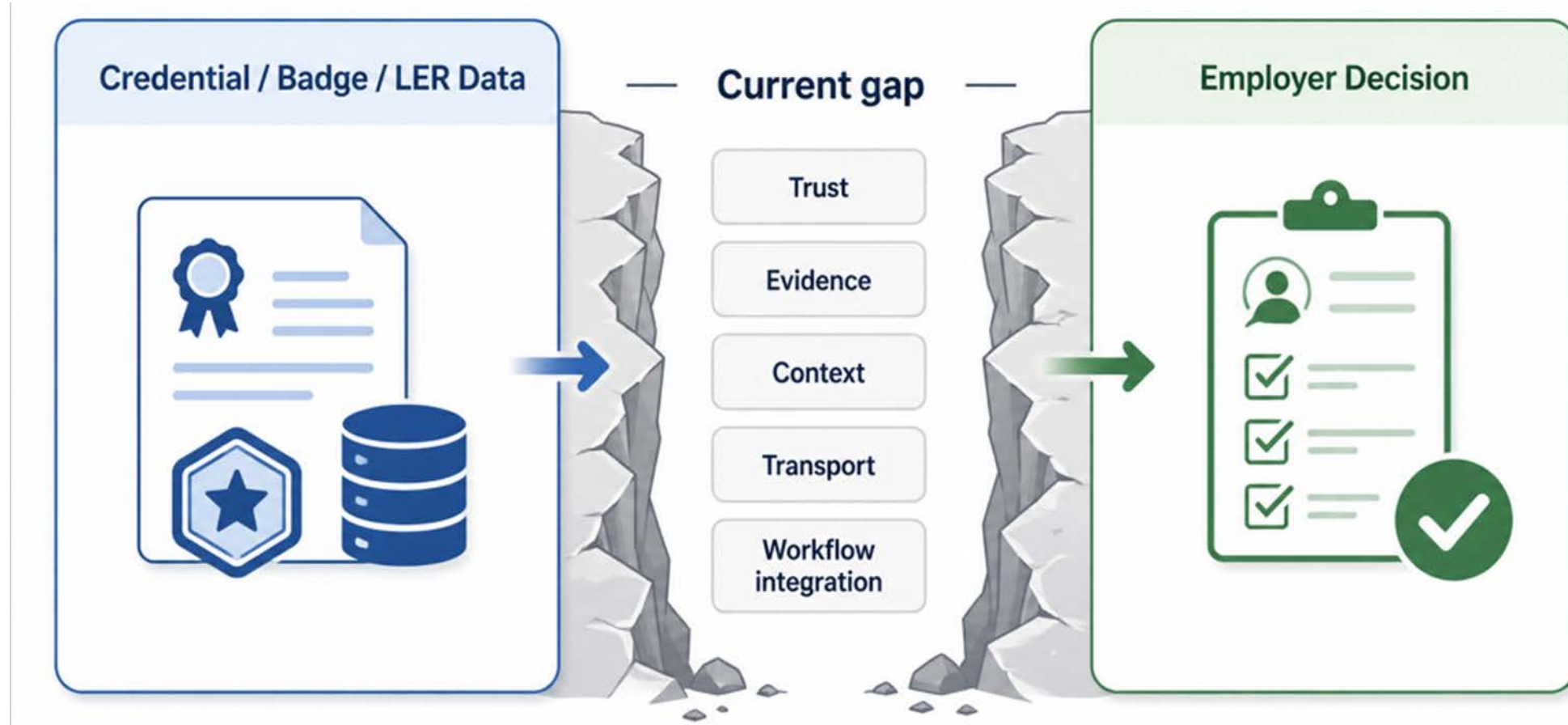
Data is ingested into applicant tracking or HR systems for processing and review.

STEP 06

Manager decides trust

The final human hurdle: deciding if the credential's evidence justifies hiring trust.

Skills Data Exists, But Employers Cannot Always Act on It





Two Reports, One Adoption Problem

Employer Data Report	API / Transport Report
What must the credential say?	How must the credential move?
What evidence do employers trust?	Which mechanisms fit which flows?
What makes skills data actionable?	What gaps remain across systems?

LER adoption depends on both: meaningful content + reliable movement.

Clarifying the Layers: Data, Credential, Transport, Workflow

Layer	Question	Examples
Source data	What data creates the credential?	SIS, LMS, Assessments, Edu-API
Credential payload	What is being carried?	Open Badges, CLR, TCP, VC
Transport / presentation	How does it move?	OID4VCI, OID4VP, VCALM, Open Badges API
Receiver workflow	Can it be used?	ATS, HRIS, talent marketplace, HR Open

Employers Are Asking for Better Skills Signals, Not “LERs”

Why Credentials Fall Short



Employer Needs

- Clear skills
- Evidence
- Assessment
- Trust
- Comparability

Current State

- Vague or inconsistent labels
- Missing or hard to access
- Not visible
- Inconsistent signals
- Different formats/structures

Ecosystem Language	Employer Language
LER	Proof of skills
Interoperability	Works in my systems
Verifiable credential	Can I trust it?
Metadata	What does this tell me?

Lead with the employer problem, not the ecosystem term.

What Would Make You Trust a Skill Claim?

**“I can manage a
cross-functional
project.”**





What Employers Say They Need

Research Findings

- Evidence that the skill was demonstrated
- Clear signal that a skill has been validated
- Confidence in who validated the skill
- Ability to assess relevance early and rigor later



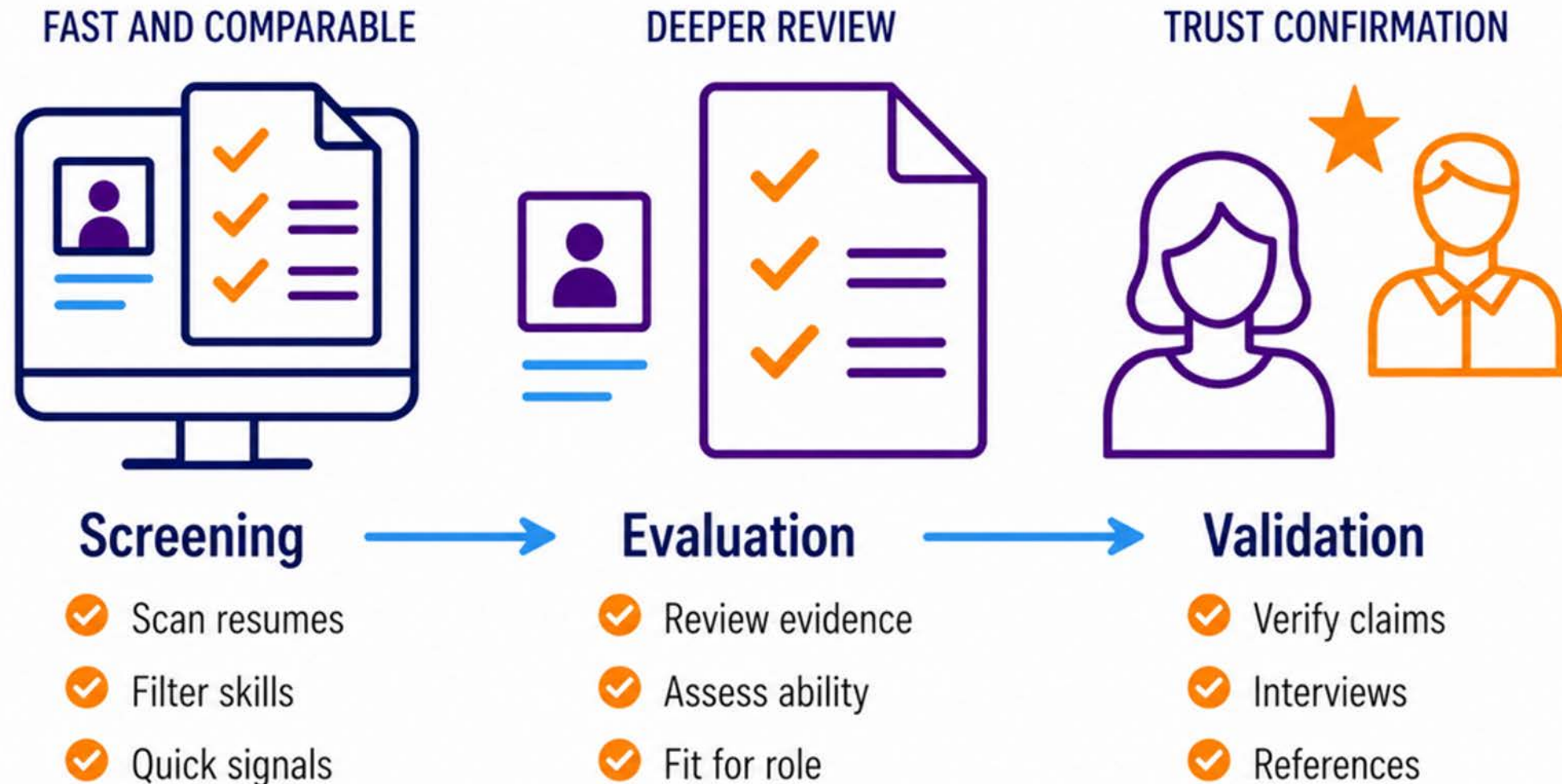
Why current systems fail employer trust

- Parsed resumes and keywords
- Degree and institution proxies
- Inconsistent or missing credential detail
- Little to no native verification

Minimum Employer Trust Dataset



Trust Builds as Decisions Become More Consequential



Employers Want Usable Skills Evidence



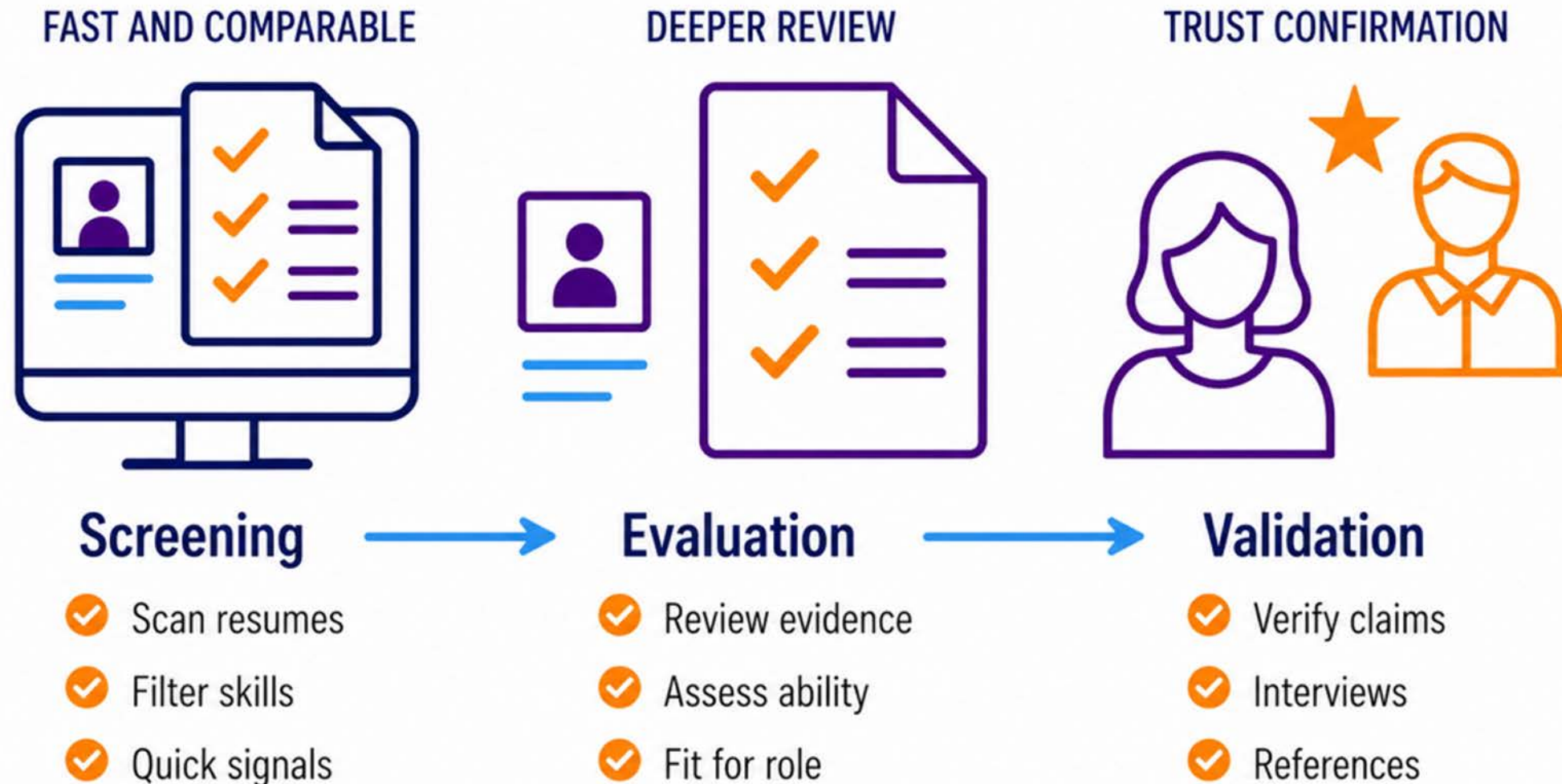
Skills Evidence Card



Skill: Data Analysis

 VALIDATION STATUS  Validated	 EVIDENCE Portfolio project + assessment
 PROFICIENCY  Proficient	 ASSESSED BY Example University
 DEFINED BY / ALIGNED TO NACE / O*NET	 CONTEXT Capstone + internship

Trust Builds as Decisions Become More Consequential





What's In Your Credential?

What is one data element your credentials currently do not make clear enough?

From Earning to Sharing



Our Approach



Define Real Movement Scenarios

- ✓ Map how credentials actually move today
- ✓ Prioritize high-value use cases
- ✓ Focus on end-to-end learner and employer workflows



Evaluate & Align on Existing Mechanisms

- ✓ Assess current APIs and protocols
- ✓ Identify strengths, limitations, and overlaps
- ✓ Leverage what works before creating new



Address Gaps with Targeted Solutions

- ✓ Close interoperability gaps
- ✓ Clarify profiles and best practices
- ✓ Only develop new specifications if necessary



How are digital credentials most likely to reach an employer in your environment today?

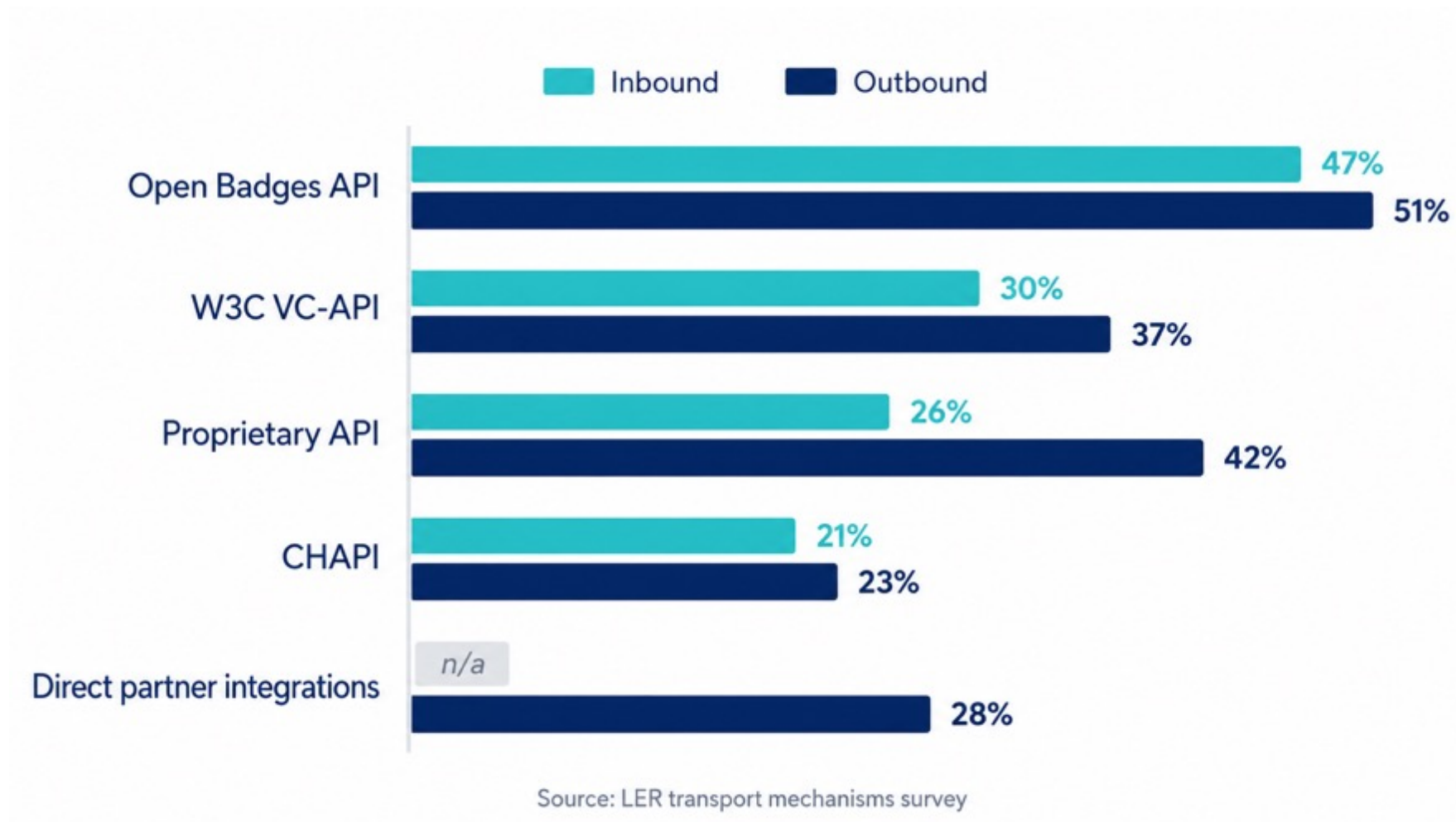
- Listed or attached to a résumé
- Shared through a link or QR code
- Shared from a wallet or portfolio
- Sent through a direct platform integration
- Entered manually into an application
- They generally do not reach the employer
- Not sure



API Survey: What We Asked

- Which transport mechanisms are in use today
- Which use cases they support
- Where proprietary approaches are filling gaps
- What works well vs. where friction persists

Most Commonly Supported Transport Mechanisms



Perceived Sufficiency of Existing APIs





API Survey: What We're Seeing

- Multiple transport approaches in active use
- Heavy variation by use case and actor
- Hybrid and proprietary solutions remain common
- No single approach meets all needs

Actors and Use Case Overview

LEARNER-INITIATED, 1:1

1. Issuer Platform → Embedded Wallet Functionality
2. Issuer Platform → Separate Wallet
3. Wallet → Employer Platform
4. Wallet → Talent Marketplace / Job Platform
5. Wallet → Wallet

SYSTEM-INITIATED / INSTITUTION-CONTROLLED

6. Server-to-Server Platform Transfer (bulk, event-driven, or scheduled sync)

SUPPORTING CAPABILITY ACROSS FLOWS

7. Verification / Status / Trust Resolution

Expected Workflow

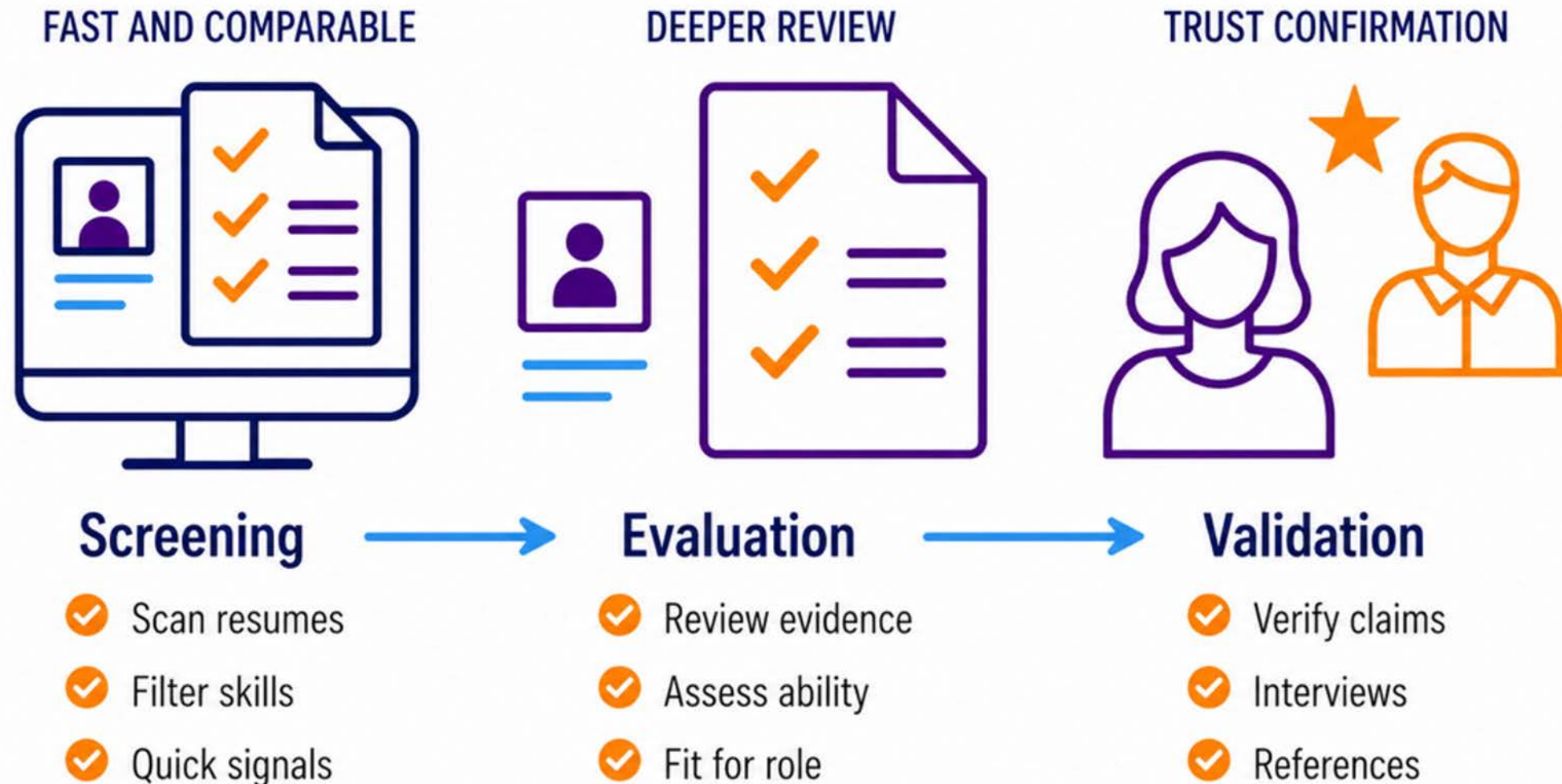
What is Happening	APIs / Mechanisms
1. Issuer platform creates a credential with the required metadata.	Open Badges 3.0, VC data model, platform-specific issuance logic
2. The issuer signs the credential or prepares it in a verifiable format.	Open Badges 3.0, VC data model, issuer signing and proof methods
3. The learner is notified and chooses where to receive it.	Platform claim flow, issuance notification, claim link patterns
4. The learner authenticates to the destination wallet or otherwise completes the claim flow.	OID4VCI
5. The credential is delivered to the wallet.	OID4VCI, Open Badges-compatible delivery mechanisms
6. The wallet validates issuer identity, format, and signature.	Wallet validation logic, issuer metadata, status/revocation endpoints, and other verification-related APIs and endpoints
7. The credential is stored so the holder can organize, curate, and later share it.	Wallet storage model, wallet-specific import / management features



Movement Scenarios – Some of the ways they move

- Consider electronic movement and someone sharing a link to a webpage that shows the credential data – who uses what and when?

Trust Builds as Decisions Become More Consequential





“What survives the trip?”

- Credential title, issuer, and date
- Skills and proficiency
- Assessment method and evidence
- Verification status
- Most or all of the original information
- I have no idea, which may be the problem

Movement Only Matters If Meaning Survives the Trip

- Portable
- Interpretable
- Verifiable
- Actionable





Multiple Mechanisms Already Move Credentials

Mechanism	What it covers
Platform integrations	Issuer, wallet, HR, LMS, and marketplace APIs
Credential and wallet APIs	VC API, CHAPI, VCALM
OpenID-based flows	OID4VCI, OID4VP
Lightweight sharing	Links, QR codes, files, and embedded resume references

Current reality — *useful pieces exist, but implementation is uneven*

API Mechanism Recommendations

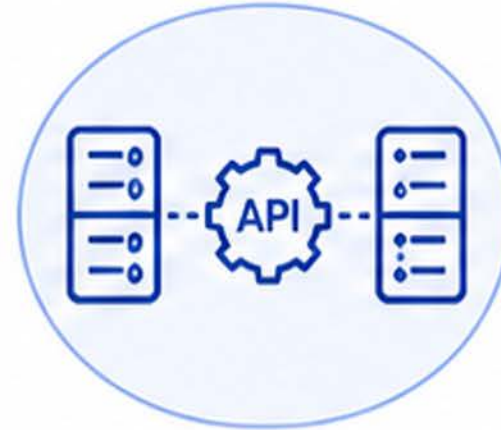
Focused recommendations from the transport workstream only.



1

B1. VCALM + OID-based flows

Best current candidate for learner-mediated issuance, sharing, and presentation.



2

B2. Open Badges API / Badge Connect

Best current candidate for pre-arranged server-to-server transfer.



API Mechanism Recommendations

Focused recommendations from the transport workstream only.



1 B1. VCALM + OID-based flows

Best current candidate for learner-mediated issuance, sharing, and presentation.

- ✓ Use OID4VCI for issuer platform -> separate wallet delivery
- ✓ Use OID4VP for wallet -> employer platform and wallet -> talent marketplace flows
- ✓ Define clearer receiver profiles for employer platforms and talent marketplaces
- ✓ Add guidance for status checking and verification after receipt
- ✓ Add guidance for downstream reuse from marketplace profiles into employer workflows
- ✓ Clarify direct transfer vs. re-issuance for wallet portability



2 B2. Open Badges API / Badge Connect

Best current candidate for pre-arranged server-to-server transfer.

- ✓ Support bulk initial transfer
- ✓ Support event-driven push
- ✓ Support scheduled or delta synchronization
- ✓ Handle updates, corrections, and revocations over time
- ✓ Add guidance for retries, idempotency, and failure handling
- ✓ Clarify how matching and correlation data can travel when appropriate



3 B3. Cross-cutting transport profile work

Supporting profile work that applies across mechanisms.

- ✓ Define a matching and correlation profile for cross-system reconciliation
- ✓ Provide interoperability guidance across credential forms and exchange mechanisms
- ✓ Clarify which credential forms move through which mechanisms in which workflows
- ✓ Prioritize mappings and interoperability rules for the most common combinations first



4 B4. Related barriers to note

Important constraints, but not solved by transport alone.

- ✓ Scope is limited to Verifiable Credentials, including Open Badges, CLRs, and Trusted Career Profiles
- ✓ Employer-side ingestion and field mapping
- ✓ ATS / HRIS workflow integration
- ✓ Verification and trust integration inside receiving workflows
- ✓ Broader adoption and implementation readiness
- ✓ Some barriers can be addressed through collaboration with partners such as HR Open Standards

The Next Phase Is Convergence

01

Agree on the
minimum evidence
package

02

Map flows to existing
mechanisms

03

Profile and enhance
where needed

04

Test with real
employer workflows

05

Promote a shared
LER implementation
package



Quick Poll



“In your role, what is one field, handoff, or workflow you could improve in the next 90 days?”

Questions?



Download the Reports