

Unlocking Digital Micro and Macro Credentials

An introduction to the importance of embracing both micro and macro digital credentials to future-proof academic and recognition.



Kim Steenkjær Mortensen Co-founder of Diplomasafe

- Diplomasafe work to help universities unlock and navigate the complex landscape of credentialing standards and future-proof their recognition systems.
- Background in digital identity, national eID systems, cryptography, and privacy infrastructure
- Our mission is to cut through the complexity and provide universities with the tools and expertise to embrace both micro and macro credentials, aligning with global digital credential verification methods and authentication empowering thier students lifelong career and learner journey.

Building the EU Credential Infrastructure



EBSI-VECTOR

Implementing European Blockchain Services Infrastructure (EBSI) at 9 Danish universities



MCEU Hospitality

Pioneering EU micro-credentials in hospitality education via Erasmus+ pilot



EBSI Network Expansion

Expanding validator nodes to strengthen decentralised EBSI ecosystem



Autocredify

Reskilling & upskilling automotive workers with micro-credentials

Let's unlock this together!





Institutional Pains! Why old fashioned paper and pdf credentials are so..... 1999



Fake diplomas thrive, paper and PDFs pose risks

100,000+ fake diplomas sold every year

Typical price of \$1,000 for fake credentials

Real parchment, seals & watermarks used indistinguishable from real ones

No ID or academic proof required - just 'pay and receive

\$5M worth of fake degrees sold by one busted operation





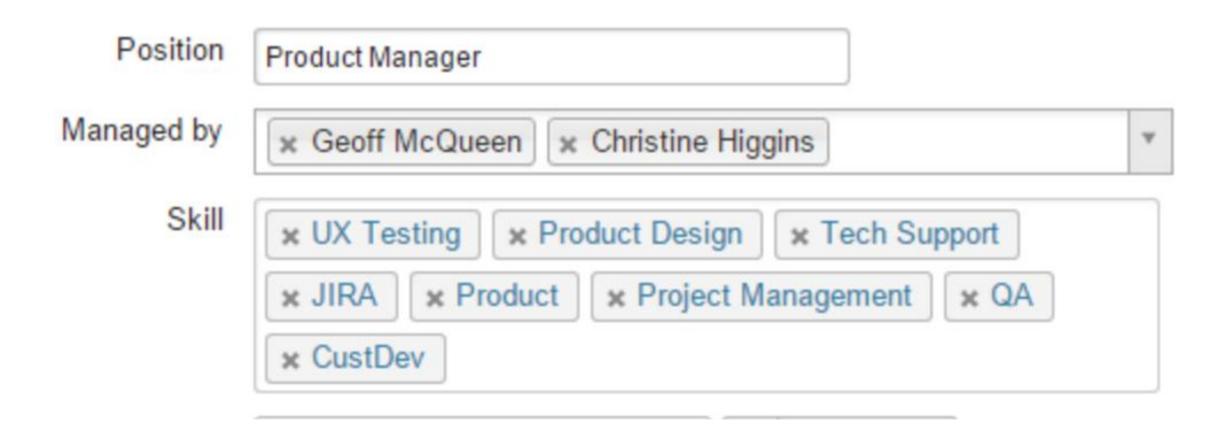
Slow & Cost Inefficient







Skills Tagging: Not possible



No support for Skills based hiring

Skills-Based Hiring

- Prioritizes specific skills and competencies
- Talent pool is broader, includes non-traditional candidates
- High job fit, as candidates are evaluated based on job-relevant skills
- Promotes DEI by removing educational barriers
- Prioritizes learning and adaptability, suitable for dynamic roles

Traditional/ Degree-Based Hiring

- Emphasizes formal educational qualifications and degrees
- Limited to candidates with specific academic credentials
- Job fit may vary, as academic qualifications don't always reflect job skills
- May unintentionally exclude diverse candidates
- Focuses on established knowledge, may lack emphasis on adaptability







So let's face it, there are to many Limitations of Analog Credentials

Costly to produce

Printing, paper, and frames add significant costs

Expensive to distribute

Packaging, postage, and handling drive up distribution costs

Resource-intensive

Manual labor, office space, and printers require substantial resources

Require physical storage

Filing systems, archive rooms, and off-site storage needed to manage physical documents

Reissuance costs

Staff time and material costs to replace lost or damaged credentials

Slow to issue

Can take weeks post-graduation to receive physical credentials

Time-consuming to verify

No automation

Requires full manual workflows, no digital automation

Delays impact opportunities

Delays in receiving credentials can hinder students' job or study opportunities

Vulnerable to fraud

Physical documents are susceptible to forgery and fraud

Not mobile-friendly

Physical credentials are difficult to access and share on digital platforms

Lack of interoperability

Not compatible with skills-based hiring systems or cross-border recognition

Misalignment with initiatives

Not aligned with the EU Skills Agenda, EBSI, Europass, or Digital Identity Wallet

The Maze og Standards - what to do?













W3Cfor credential data
structure

Europass for EU alignment

EU Blockchain for a trusted EU infrastructure

EBSI

for legal digital signatures

eIDAS

the learner's portable, official store

Verifiable Blockchain-based Digital Credentials

Blockcerts

Micro and Macro Credentials: Two Sides of the Same Strategy

Macro-credentials

Still essential, but must be digital and verifiable

Micro-credentials

Agile, stackable, skill-based, mobile, sharable and digital verifiable

Living on the Same Infrastructure

Both macro and micro credentials should live on the same infrastructure

Why You Should Care?

Student Expectations

Costs are rising

Fraud is Real

Skills based hiring is a thing

Your 'customers' have expectations!



Visibility

Want credentials that show skills and achievements to potential employers



Increased Job

digital credentials increase their chances of finding a job



Low effort, high impact

95% are motivated to receive digital credentials; 80% find them easy to use



Career Advantages

96% of learners say digital credentials are valuable for their career development



Structured learning

96% expect clear pathways to develop skills - yet most institutions fall short



Empowerment

84% of learners want their digital credentials to be shareable and accessible via directories, LinkedIn etc.

The Impact of Adopting Digital Credentials in Higher Education







A Happy Eco-System

University



Financial and Strategic Impact for Universities

Automated issuing, reissuing, and verification

90% reduction in admin time, freeing up staff and lowering operational costs

Elimination of physical printing, postage, and packaging

€25 - €100 saved per credential, leading to significant savings for institutions issuing thousands of credentials annually

Instant online verification

Streamlining the verification process, saving staff up to 30 minutes per request and reducing annual costs by up to €50,000 for universities handling thousands of inquiries, with response times slashed from days to seconds.

No long-term physical storage

Eliminate physical credential storage and time to retrieve documents manually saving Universities up to €15,000 per year

Improved student experience and brand value

+20 - 50 point Net Promoter Score (NPS) improvement among graduates, 25% of graduates sharing their credentials online, generating ~500 views each - equivalent to 125,000 brand impressions per 1,000 students

Faster credential delivery

Digital credentialing enables **instant credential delivery**, in as little as seconds after graduation, compared to the many days and often months it requires for traditional paper-based processes



"Digital transformation doesn't have to be complicated."

KIM STEENKJÆR MORTENSEN

Where should You Start?

Start small

Start small by focusing on a specific program type, such as a micro-credentials, short courses, executive training, to build experience and gather feedback.

Align academic, legal, and IT

Ensure key stakeholders across your institution, including academic, legal, and IT teams, are aligned on the goals and process for implementing digital credentials.

One platform policy

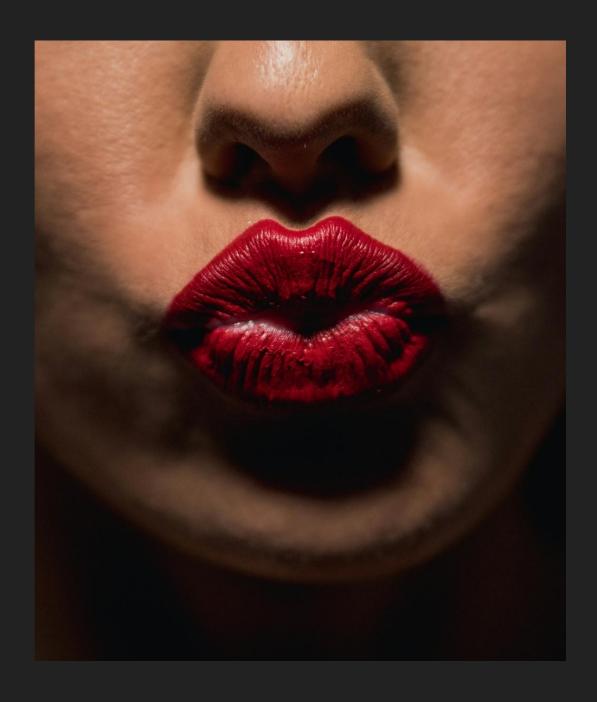
Invest in one platform only for all your credential types and ensure your digital credentials align with the relevant standards and will be future compatible with the evolving credential standards, reducing the noise and ensuring a seamless student experience.

Ensure Compatibility

Issue truly digital (data), at that will keep you future proof and enable adoption of any digital credential standard in the future. And if in the EU, make sure to choose a setup that is or will be EUDI Wallet compatible, as this will be the learner's official digital briefcase and the key to maintaining relevance across Europe & Globally.

An ISO certified partner is a must

Work with **ISO 27001 certified** platforms only! Without this certification, institutions risk data breaches, loss of student trust, non-compliance with privacy regulations, and reputational damage. Consequences that can be far more costly than investing in a secure, certified provider from the start.



KISS

Keep It Simple, Smart.

Because simplicity, done right, scales; And that's exactly what digital credentialing needs right now!



Kim Steenkjær Mortensen

Co-Founder at Diplomasafe - I help universities digitise for the future of credent...



Digital Micro and Macro Credentials unlocked

The presentation emphasises the importance of universities embracing digital micro and macro credentials to future-proof their credentialing strategies. By aligning with EU-wide developments like the EUDI Wallet, universities can reduce administrative workloads, improve fraud resistance, and increase learner satisfaction and international visibility.