Education Credentials Ecosystem Use Case
by Victor Golubkov – CanaCred

Use case concepts:
Verified Education Credential (VEC): Create an ecosystem that include education providers, government education agencies, and individuals forged around a common purpose to deliver, consume or share VEC and services around VEC. These services will include creation and issuance, verification and assertion, revocation of VEC as well as any required services with VEC. VEC will include digital representations of skills, achievements, competencies, values, behaviour, attitudes, knowledge, abilities, etc.

Personas and Roles:
- **Elise (convener)** - Bureau for International Education (BIE). Responsible for promoting mobility of native and foreign students, diversity of foreign students, overall increase of number of international students studying online in universities from her home country (Canada).
- **Jane (issuer and verifier)** - Guest Students Success Manager in the Canadian University (CU) responsible for enrolment of international students
- **Tracy (issuer and verifier)** - HR manager in the Canadian Hospital (CH) where Katherine would like to obtain an experience.
- **Diego (issuer and verifier)** - Students Success Manager in the Philippine University (PU) responsible for issuance and control over students’ educational credentials
- **Maria (issuer and verifier)** - HR manager in the Philippine Hospital (PH) where Katherine had co-op experience.
- **Katherine (holder)** - current student from PU, who has worked in PH. Katherine wants to come to study to Canada or study online in CU and then get a job in CH.

User stories
- **Elise** has been asked to create policies and standards for verification of VEC of domestic and foreign students for BIE. She has also been asked to propose technological requirements and standards for verification of VEC.
- **Jane** wants to speed up and simplify process of the verification of VEC by reducing the amount of the paper work involved and standardization of the verification process. She would like to increase enrolment to online courses in CU by providing future graduates with digital VEC that will be recognized in Canada and abroad.
- **Tracy** wants to be confident that foreign students’ claims of their previous working experience in hospitals in their home country can be trustfully verified. She would like to be able to have a possibility to verify whether a foreign student studied in Canadian university and has a Canadian working experience.
- **Diego** wants to help students from PU to have access to Canadian job market. He would like to simplify Philippine students’ transition to CU. Diego wants this process to be digitized to reduce the amount of working hours devoted to maintaining forever growing paper data base.
• Maria would like co-op experience in PH to be recognized in foreign hospitals like CH. She believes that by connecting to the BIE verification system she will help Katherine and others in their journey to be successful in Canada.

• Katherine would like to travel to Canada to study in the CU after finishing her education in the PU. She will have VEC from PU, including Claims from PH that as she hopes will help to enrol in CU with better starting position. She also would like to have access to co-op in the CH using Claims from her current VEC.

Workflow

Learn

Elise has learned about Trust Over IP and launches Task Force from her team members. Members of the TF read through TOIP governance frameworks, descriptions of governance roles, processes as well as available concepts and workflows. Members of TF use TOIP resources to look for existing examples of VEC in Europe, USA and Asia.

Convene

Elise organizes several meetings with TF members and stakeholders from various universities and presents them her ideas about launching an International VEC project with the goal to promote mobility of native and foreign students, increase diversity of foreign students, overall growth of number of international students studying online in universities from her home country.

Define

Jane and Tracy join TF with the goal to share their experience and knowledge with BIE. Tracy puts a requirement to have a possibility to trustfully verify foreign students working experience. Jane mentions necessity to drastically reduce amount of paper exchange with foreign universities. They exchange governance, policy and data requirements, discuss available utilities. They consult IT department from their organizations about existing tools and methods.

Create

After several iterations members of TF from BIE, CU, CH formalized several policies, protocols and frameworks using TOIP templates and presented them to executives of their organizations. IT departments of all three organizations combine their efforts to launch common utility and wallet for VEC. Several workshops are organized in all three organizations for staff members involved in credentials issuance, assessment, verification and revocation.

Implement

Elise, Jane, and Tracy publish official presentations of the IVEC on websites of their organizations as well as on the devoted to IVEC project website. All necessary policies and guides are also available online. IVEC projects actively invites students from CU and staff from CH to participate in the project. Elise receives several invites from foreign organizations to speak about the IVEC project and would like to join it. Diego from PU and Maria PH attend one of the IVEC Webinars and after some time join it as a full member.

Grow

Diego and Maria steps up effort to launch a branch of IVEC in Philippines. Due to their efforts Katherine is able to receive digital VEC that she will use to apply to study in the CU and work in the CH.
Educational Credentials Ecosystem diagram

- Bureau of International Education (BIE)
  Governance - Layer 4

- Philippine University
  Layers 2 & 3
  Philippine Hospital

- Canadian University
  Layers 2 & 3
  Canadian Hospital

- Utility
  Layer 1

- Katherine