

EUNIS 2019: Automation of processes based on educational results

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1. Summary

In order to be able to automate processes one needs digital data. The absence of digital data prevents digitalization of processes, and until recently most input documentation has been paper based. With the launch of the Diploma Portal, citizens themselves can retrieve their own data and share them with desired recipients. This opens for new possibilities.

2. EXTENDED ABSTRACT

2.1. A statement of the problem

The digitalisation of the public sector in Norway has been going on for many years. The citizens can now apply for various public services online and all authorities are by law obligated to send the response to their digital mailbox. The necessary documentation - in order to be able to process the application - has in most cases only been available on paper. A major part of the processes in the public sector in Norway is therefore still handled manually.

In 2017 the Diploma Portal was launched. The portal allows students and former students, who have studied in Norway, to retrieve their educational results and share them with a desired recipient. The results are collected as data directly from the HEI's databases. All HEI's in Norway are connected to the Diploma Portal, and all the educational results can be retrieved. Some smaller University Colleges have results digitally stored from 2000 and onwards, but some universities - like the University of Oslo - has a complete register from 1958.

The essence of the Diploma Portal is that only the person who has achieved the educational results can see his/her results. Recipients can only see a person's results if access has been given to them.

The primary way to share results with the Diploma Portal is to transfer them to a recruitment system or other systems connected to the Diploma Portal. As an alternative to transferring results, access to view the results can be given as a link to the portal.

The Diploma Portal is the Norwegian node of the EMREX, which is a network of "Diploma registries" providing result data in a standardized matter. Eight counties are per 2018 part of this network.

There are concrete plans to add results from vocational training and upper secondary schools to the portal. In the future, the portal may also include data regarding driving licenses, certifications, authorizations, results of a recognition process etc. Planning for enhancing the Diploma Portal to a "My competence" portal is in progress right now.

2.2. Example of processes transformed when getting educational results as data

Preventing fraud and a simplification of the data exchange has been the initial important achievements of the Diploma Portal. In the long term however, the goal of the portal and the EMREX network as a

whole has been to help the consumers of these data automate their processes and give better services to the owner of the data.

When a student or former student uses the Diploma Portal to share their results, the receivers get them as structured data. This opens up for new possibilities for the receivers. Receiving standard structured data enables the automation of processes.

Example of processes in a phase of connecting to the portal:

- Applying for citizenship: The Norwegian Directorate of Immigration (UDI) estimates that they can automate up to 70% of the application handling if they receive educational results as data.
- Applying for authorization: The Directorate of Integration and Diversity (IMDi) has recently developed a solution where people can apply for authorization as chartered interpreters. Based on the data from the Diploma Portal, a major share of the applicants will be handled automatically, and be given an immediate answer on the outcome of the application.
- Recognition of foreign education: NOKUT (the Norwegian Agency for Quality Assurance in Education) is implementing an EMREX client to receive data from the EMREX network in order to automate some of the application process.
- Digital CV with digitally signed data: NAV, the Norwegian Labour and Welfare Administration, administers a third of the national budget through schemes such as unemployment benefit, work assessment allowance, sickness benefits, pensions, child benefits and cash-for-care benefits (NAV, 2017). NAV has recently launched a new CV solution. They are working to establish a connection to the Diploma Portal so that they can receive educational data. In the future this can be used to match work seekers with jobs.

The Diploma Portal is built using Scala, Docker and Play, ready for Cloud, and offering rest based services for the systems providing result data. The ELMO format is a common standard, also used in the Erasmus Without Paper network. As part of the EMREX network, partners from different countries have been able to express assessment from different education levels and education systems using the ELMO format. A common unified format is essential for enabling the receivers of this information to automate their processes.

2.3. Major conclusions

When the public sector opens their data and allows the citizens to share them with a third party, new possibilities arise. This enables automation of processes, with better quality and better services for the citizens. From a privacy perspective, this gives the citizen the opportunity to control their own data and transparency in the use of these data. To accomplish this, cooperation both national and international to work on standardization on data and formats, is essential.

3. REFERENCES

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