

Towards a future-proof portal for business respondents

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Abstract

Statistics Norway, Statistics Sweden and Statistics Netherlands have started a community to discuss the building of a portal for business statistics, finding solutions to problems, and discussing best practices.

The Statistics Norway Altinn portal offers several security levels, depending on the security required. Each security level has its own set of two-factor login requirements. In the beginning, the introduction of the two-factor login procedure was criticized for being too cumbersome. Nowadays, the majority of the Norwegian enterprises indicate that they prefer, and save time and money by using Altinn. The increased awareness about security risks will only further underline the importance of two factor login.

Statistics Sweden is developing a new portal for communication with businesses. In this portal businesses can sign-up to deliver data by Machine to Machine solutions, as a part of a secured automated data transport between the data provider and the data collector. Statistics Sweden is thus responding to new technological opportunities. Automated processes are desirable and more achievable than ever, thanks to new technology and cloud-based platforms.

During user tests of the demo of the portal Statistics Netherlands is planning to build, it appeared that companies would like to use statistical information relevant to them, for instance for the writing of annual accounts or the fine-tuning of a business plan. Although the information is available on the SN-website, it appears to be hard for companies to find. To make the data more accessible, SN has built a dashboard, which is now also placed on the SN website. At a later stage it is planned to make this dashboard available through the portal. Currently plans are being made to investigate whether the dashboard meets the user requirements.

Introduction

Statistics Norway, Statistics Sweden and Statistics Netherlands have started a community to discuss and share experiences on the development and use of portals for collecting data from businesses. This provides us with the opportunity to exchange ideas and knowledge. We discuss both practical matters and in-depth technical details, ranging from data security, to machine-to-machine transfer of data and making tailored output available for the respondent. We would like to highlight briefly some topics we've discussed, with the invitation to interested NSIs to contact us.

Statistics Norway: Authentication in Altinn

The portal that Statistics Norway uses, Altinn, offers several security levels, depending on the security required. Each security level has its own set of login requirements. In the beginning, the two-factor login procedure required to respond to Statistics Norway's business surveys in Altinn, was criticized for being too cumbersome.

Nowadays, the majority of Norwegian enterprises indicate that they prefer to use Altinn, and that it saves them time and money. The increased awareness of data value and security risks will only further underline the importance of solid and secure authentication and authorization procedures.

To authenticate is to verify the identity of a user, while authorization is about giving or checking the user's permission to access a specific resource or function. Here we will focus on the former of the two.

When it comes to authentication it is all about finding the right balance between security and ease of use.

With a few exceptions, Statistics Norway has chosen security level 2 for its business surveys in Altinn. This means that the respondents can log in using their national identity number (social security number) and single-use codes from Altinn (sent by post / on paper). Once they are logged in they can choose to register their mobile phone number and their own password in their Altinn profile. The next time they log in, they can use their national identity number together with the password that they created, and a PIN-code sent to their mobile phone. What most people tend to do, though, is that they use the same electronic identification (eID) and login procedure that they use for accessing their bank online, their BankID, to log on to Altinn. This corresponds to security level 4, which is not really necessary to get access to Statistics Norway's business survey forms but seems to be what the users are most familiar with and hence prefer. Today, about 85% of all logins are performed by using BankID. The use of common login procedures and eIDs like the BankID has no doubt made a huge contribution to the prevalence and success of Altinn.

Several security levels and different ways of logging in leads to high flexibility, which may be necessary in a portal like Altinn since it is used by many different service owners with different needs. But this also leads to higher complexity; the more choices the portal users are subjected to, the more confusing and complicated it may be for some of them. Statistics Norway would probably need no more than two security levels, one low level corresponding to today's level 0, which enables users to self-register and log in without a national identity number, and one higher level corresponding to today's level 2-4.

Statistics Sweden: Development of a portal

Statistics Sweden is developing a new portal for communication with businesses. In this portal businesses can sign-up to deliver data using generic machine-to-machine solutions independent of statistical program. Automated processes are desirable and more achievable than ever, and Statistics Sweden is thus responding to new external business requirements using new technological opportunities. Our portal is not in place yet, but we have started by developing the services that should be included in the portal. In the future, we foresee that our portal will include self-service for our respondents; such as a responsive web collection service, automated file transfer (machine-to-machine service and set up/test), recover login credentials and the possibility to book interviews and request paper questionnaires. In this presentation, our focus will mainly be on the machine-to-machine solution. As we are developing the machine-to-machine solution, we are collaborating with other Swedish authorities and software vendors to ensure that we account for the needs of our respondents. In order for Statistics Sweden to stay relevant, reduce the response burden, facilitate the data collection and editing processes for the respondents, meet new user needs and at the same time reduce our in-house costs we have been forced to ask ourselves what we can change and improve. The strategy that we have come up with is to re-design our surveys and try to extend the use of administrative data. The aim is to retrieve administrative data using machine-to-machine solutions. Today primary data collection is our first-hand option most of the time. Now we need to turn away from that approach and use the benefits of automated solutions and administrative data and only use primary data collection as a complement when there is no other way for us to get the data.

What we have developed so far regarding machine-to-machine solutions is a generic solution that will be prepared for all kinds of software vendors and other businesses. We offer a connection process that includes certificate handling and stating the contents and formats of the data delivery together. By the use of a test bench, tests can be done manually in the developing stage. A data delivery test can also be done, where we validate the data retrieval without saving the actual data. When the data provider feels confident to provide the data, we open up the correct channel and approve the data provider for data submission to us. After this point, that data submission is functioning automatically until a change of format or content is needed. The staff at the subject matter departments at Statistics Sweden can handle the complete configuration without involving the IT department.

What we are aiming for is one entrance point for all different collection modes needed, where our respondents are in control of the data submission process. We think that we will always, or at least for many years ahead, need services for primary data collection – even if the volumes of primary data collection hopefully will decrease over time.

Statistics Netherlands: Preparing to build a portal

During user tests of the demo of the portal that Statistics Netherlands is planning to build, it appeared that companies would like to use statistical information relevant to them, for instance for the writing or fine-tuning of a business plan. Although the information is available on the Statistics Netherlands -website, it appears to be hard for companies to find. To make the data more accessible, Statistics Netherlands has built a first version of a dashboard, which is now placed on the Statistics Netherlands website. This dashboard presents at sector level information that is of interest to businesses, such as the number of companies by region and number of employees, turnover, and the latest survey results on expected employment, investments, and turnover. In some time, when the portal is ready, the dashboard can be accessed via the portal, with automatic selection of the right sector.

Currently plans are being made to investigate whether the dashboard meets the user requirements, and what information can possibly be added to the dashboard.

Link to the dashboard (in Dutch): <https://www.cbs.nl/nl-nl/visualisaties/dashboard-bedrijven#A-U>