Extract from the report to the Public Accounts Committee on the usability of public digital services directed at businesses

November 2015

revision

1. Introduction and conclusion

1.1. Purpose and conclusion

1. This report concerns the usability of e-government services as seen from a business perspective. Today it is not possible to run a business in Denmark without using digital services. For instance, all businesses must have a digital mailbox (Digital Post) and VAT can only be reported online.

If the digital services are not user-friendly, businesses will waste time and money searching for the right websites and entering the required data correctly, or they will be forced to buy professional assistance. At worst, the businesses risk making errors in their reports and applications. Inadequate usability may have the consequence that the authorities offering the service have to invest resources in providing assisted online support and correcting errors and deficiencies in reports, applications, etc. that could have been prevented.

2. We have examined how non-professional users like, for instance, the owners of small businesses who handle reports to the authorities themselves, experience the usability of various digital services. We have conducted usability tests where we have asked the test persons to use the services to incorporate, for instance, an entrepreneur company and register it as a food firm.

3. Since the first joint e-government strategy was drawn up in 2002, the objective has been to provide user-friendly and interlinked public, digital services tailored to meet the requirements of citizens and businesses. The steering committee for the present joint e-government strategy has decided that mandatory digital services, in the future, must pass the so-called standardized joint public standardised user test. This requirement shall apply to all solutions that become mandatory as per December 2015 as a consequence of the joint e-government strategy or because they represent new or further developed solutions of existing mandatory solutions. The test is based on the definition of usability reflected in ISO standard 9241. The usability of digital services is evaluated based on real and relevant users' ability to use the solutions with a high degree of effectiveness, efficiency and satisfaction. We have taken this standardized, joint public user test as a starting point for assessing the usability of the digital services included in this study, based on the users' perceptions of the services.

The joint public standardized user test evaluates the usability of data-entry pages. However, Rigsrevisionen is of the opinion that digital services in addition to the *data entry* phase also include a *navigation* phase, which leads the users to the appropriate data-entry page, and a *completion* phase, which is where the users complete the self-service task and should have a clear understanding of what they have achieved and whom they should contact if they have any questions. It is Rigsrevisionen's assessment that for a digital service to be considered user-friendly from point of access to completion of task, all these steps should be user-friendly. We have therefore, together with the experts in usability that have conducted the tests, and based on the definition of usability in the ISO standard, developed a method to evaluate also the usability of the phases that are not covered by the standardized joint public user test.

Non-professional users are, in this context, persons, who only occasionally, as part of their job, need to report data, apply for permits, etc. Unlike the professional users whose primary job it is to report data, submit applications, etc. – either because they are employed in a specialized function like, for instance, a payroll department, or because they are working as external consultants.

Digital self-service services include three phases and may be interlinked with other solutions.

Access to solution

Data entry

Completion

Link to other solutions
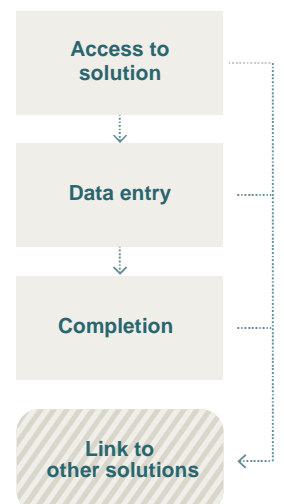
We have also examined whether relevant digital services are interlinked in a user-friendly way and helping the users reach their goals, for instance, by informing the users that a digital mailbox must be set up for a newly incorporated business before it can access mail from the public authorities.

4. The objective of the examination is to assess whether digital services aimed at businesses are user-friendly. The report answers the following questions:

- Are the individual digital services user-friendly from start to finish?
- Are relevant digital services aimed at businesses interlinked in a user-friendly way?

We have examined the following nine digital services provided by five government agencies and the municipalities.

The Danish Business Authority
- *Registration of an entrepreneur company (IVS) (type of company)*
- *Change of address for entrepreneur company.*

The Danish Agency for Digitisation
- *Order a digital signature (NemID)*
- *Set up a digital mailbox (Digital Post).*

SKAT (Danish customs and tax administration)
- *Report VAT*
- *Registration of employees in E-Income (eIndkomst).*

The Danish Veterinary and Food Administration
- *Registration of food firm.*

The Police
- *Application for alcohol licence.*

The municipalities
- *Power of attorney to apply for building permit.*

*When the users have completed registration of an entrepreneur company with the Danish Business Authority, they receive an e-mail confirming the registration. The e-mail is **partly user-friendly**, since it informs the users that they need to order a digital signature and set up a digital mailbox. However, the e-mail does not include links to the relevant digital services and the users are not directed to services of relevance for specific target groups like, for instance, recently incorporated restaurants.*

CONCLUSION

It is Rigsrevisionen's assessment that the digital services directed at businesses, that we have examined, are not sufficiently user-friendly from start to finish, and the authorities need to focus more on ensuring that relevant solutions are interlinked in a user-friendly manner.

Rigsrevisionen's tests show that none of the nine examined solutions are perceived as being user-friendly from start to finish by non-professionals. The inadequate usability manifests itself in various phases of the solutions and the seriousness of the ensuing problems varies. Generally, the solutions are not sufficiently responsive to the users' need for guidance and assistance.

The examination also shows that only the service for registration of an entrepreneur company *(IVS)* provided by the Danish Business Authority offers a partly user-friendly link to other relevant services. The services provided by the Danish Agency for Digitisation are to a very limited degree interlinked with other relevant digital services included in the study, whereas the digital services provided by the Danish Veterinary and Food Administration and the Danish Police do not provide user-friendly links to other relevant services. We have not examined this aspect of usability concerning the four remaining services, since the users of these have no obvious need to be directed to any of the other services included in the study.

Taking into consideration the identified shortcomings in usability, Rigsrevisionen finds it encouraging that all five government authorities and Local Government Denmark, on behalf of the Danish municipalities, have stated that they intend to use the results of the tests to improve the usability of their respective services. According to the authorities, some of the changes have already been implemented.

Based on the outcome of the examination, it is Rigsrevisionen's assessment that the usability of all the phases in digital services that the users must go through to complete a task in a digital self-service solution should be evaluated. The Danish Agency for Digitisation has informed Rigsrevisionen that it will seek to ensure the development of a standardized joint public user test for evaluation of digital services from start to finish. The authority has informed Rigsrevisionen that the test will be developed based on an evaluation of lessons learned from using the current standardized joint public user test of the solutions that become mandatory as per December 2015. The agency expects that the outcome of the evaluation will lead to other adjustments in the test.

Rigsrevisionen also finds it positive that the Danish Agency for Digitisation will develop a joint public user test that covers the functionality of services from start to finish.

Based on the results of the examination, Rigsrevisionen also recommends that:

- The individual authorities should ensure the usability of their solutions from start to finish.

- The individual authorities should ensure that users are directed to other solutions when relevant.

- The Danish Agency for Digitisation and the Danish Business Authority should support the authorities in their effort to ensure that relevant digital services are inter-linked in a user-friendly manner.