

UiO : University of Oslo

IN5431 – spring 2022

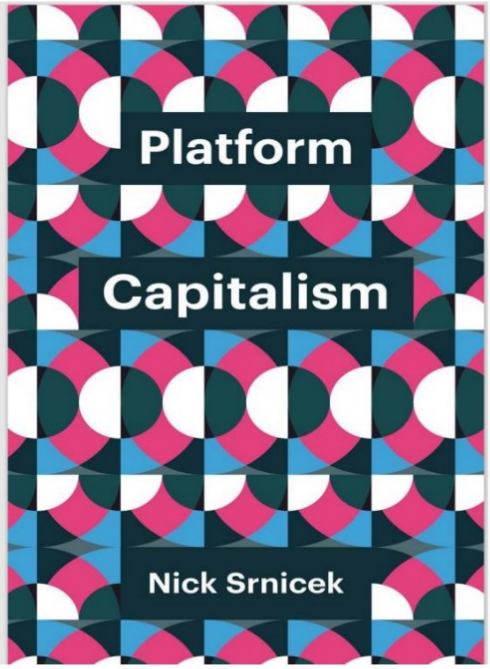
Governmental platforms and joint digital services



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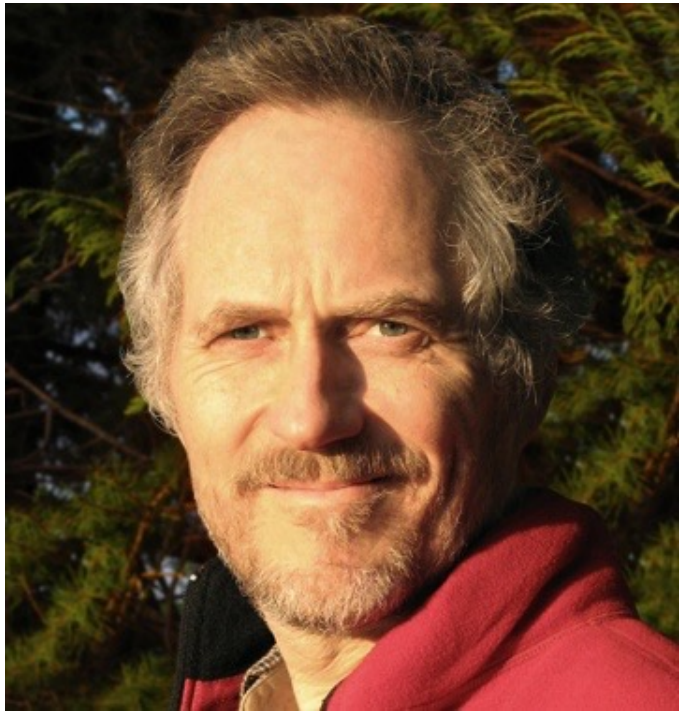
Characteristics of Platforms (Srnicek)

- Platforms are digital infrastructures that enable two or more groups to interact
- Network effects: the more numerous the users who use a platform, the more valuable that platform becomes for everyone else.
- Platforms often use cross-subsidization
- Platforms are also designed in a way that makes them attractive to its varied users
- Platform, in sum, are (can be) a new type of firm



Government as a platform

- Information produced by and on behalf of citizens is the lifeblood of the economy and the nation
- Government information and services can be provided to citizens where and when they need them. Citizens are empowered to spark the innovation that will result in an improved approach to governance.
- In this model, government is a convener and an enabler rather than the first mover of civic action.



Tim O'Reilly

Source: "Government as a platform", 2011
https://www.oreilly.com/library/view/open-government/9781449381936/ch02.html

Practical Steps for Government Agencies

1. Issue your own open government directive.
2. Create “a simple, reliable and publicly accessible infrastructure that ‘exposes’ the underlying data” from your city, county, state, or agency.
3. Build your own websites and applications using the same open systems for accessing the underlying data as they make available to the public at large
4. Share those open APIs with the public
5. Share your work with other cities, counties, states, or agencies.
6. Don’t reinvent the wheel: support existing open standards and use open source software whenever possible.
7. Create a list of software applications that can be reused by your government employees without procurement.
8. Create “a simple, reliable and publicly accessible infrastructure that ‘exposes’ the underlying data” from your city, county, state, or agency.
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11. Sponsor meetups, code camps, and other activity sessions to actually put citizens to work on civic issues.

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How is this in Norway (or other countries you are familar with?)



"Democracy is slow" (Blixa Bargeld, Einstürzende Neubauten)

Practical Steps for Government Agencies

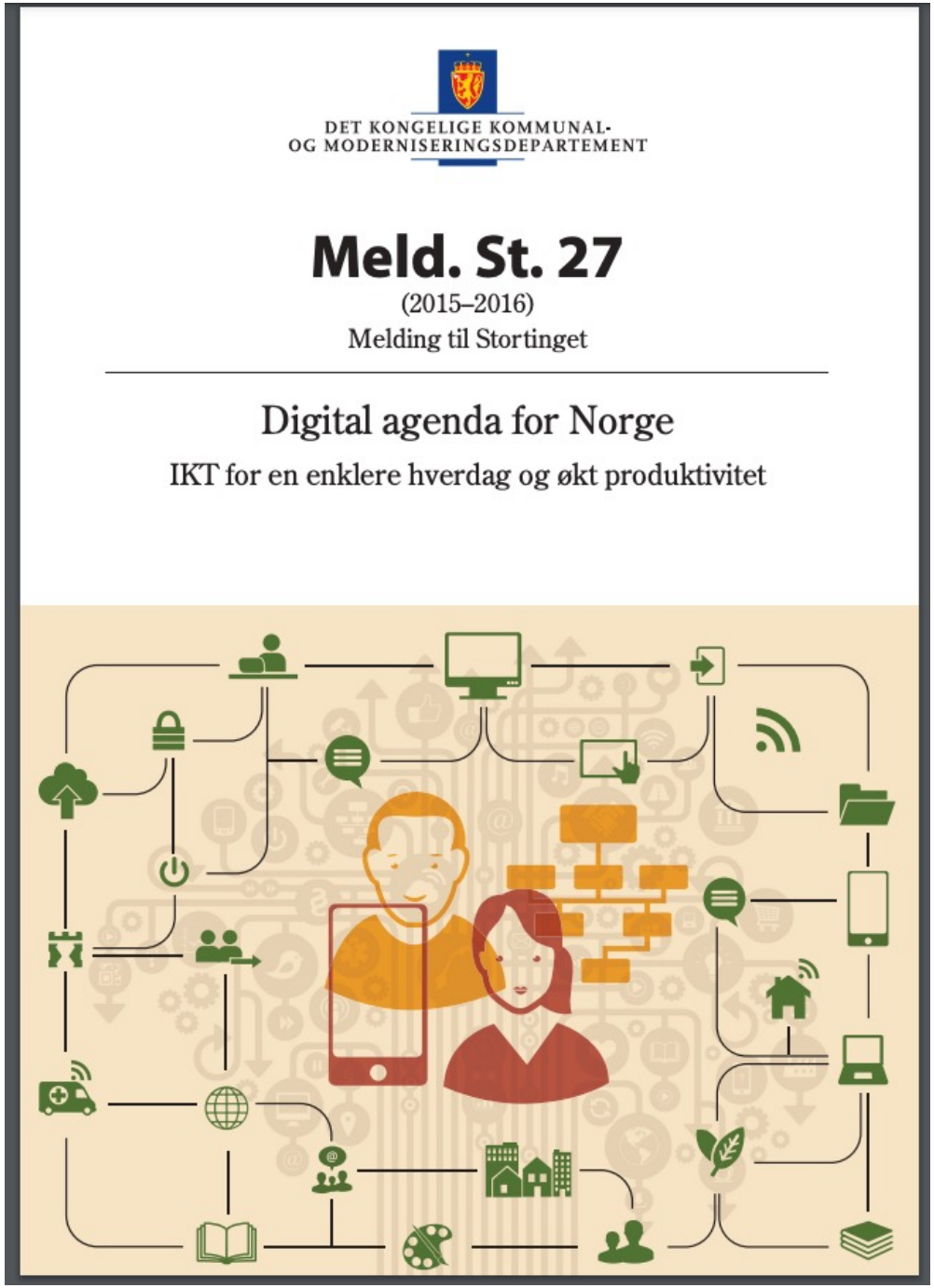
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However...

The government will:

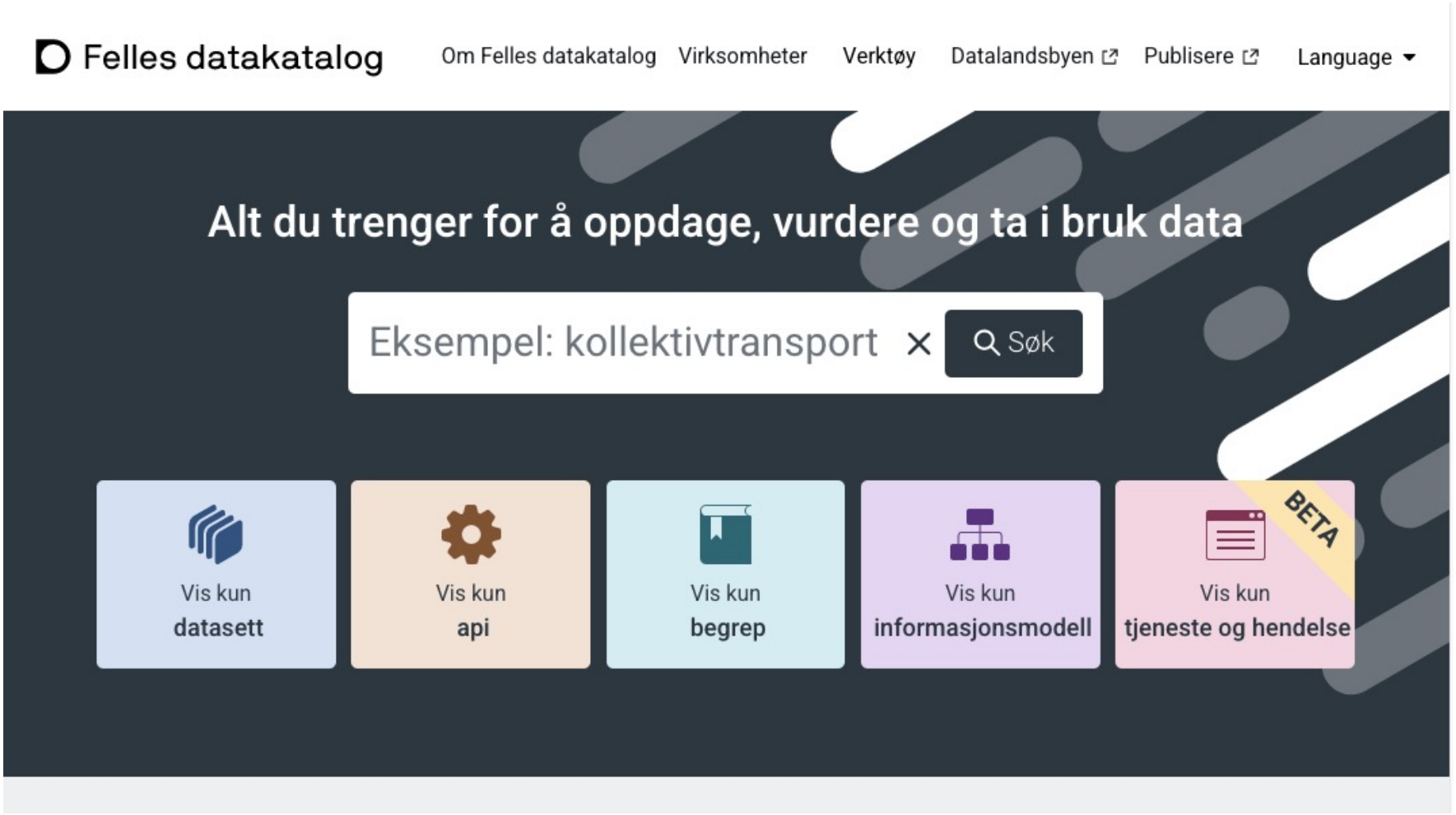
- Make some changes to [the necessary laws to simplify data sharing]
- Develop strategies and action plans for increased access to data (...)
- Follow up the requirement for machine-readable format through a revision of the "Guidelines for making public data available"



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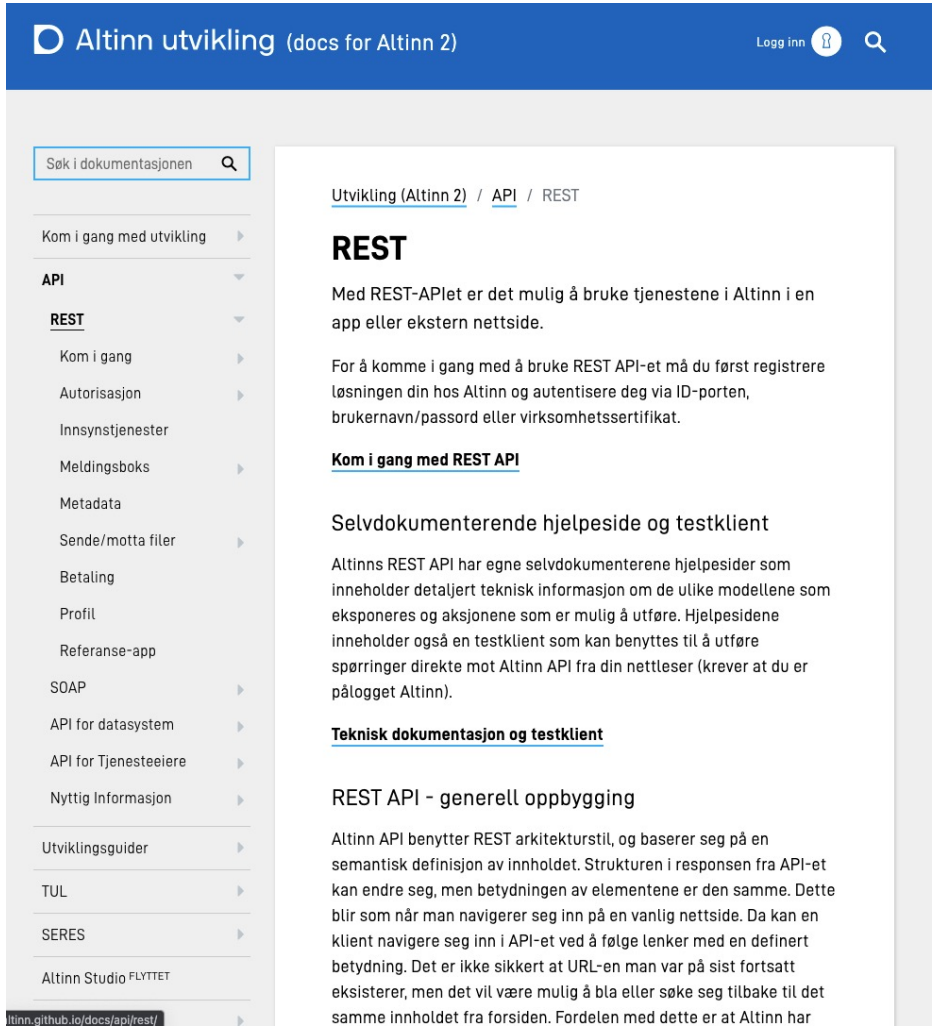


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Altinn utvikling (docs for Altinn 2)
Logg inn
Søk i dokumentasjonen
Kom i gang med utvikling
API
REST
Kom i gang
Autorisasjon
Innsynstjenester
Meldingsboks
Metadata
Sende/motta filer
Betaling
Profil
Referanse-app
SOAP
API for datasystem
API for Tjenesteeiere
Nyttig Informasjon
Utviklingsguider
TUL
SERES
Altinn Studio FLYTTET
Utvikling (Altinn 2) / API / REST
REST
Med REST-APIet er det mulig å bruke tjenestene i Altinn i en app eller ekstern nettside.
For å komme i gang med å bruke REST API-et må du først registrere løsningen din hos Altinn og autentisere deg via ID-porten, brukernavn/passord eller virksomhetssertifikat.
Kom i gang med REST API
Selvdokumenterende hjelpeside og testklient
Altinns REST API har egne selvdokumenterene hjelpesider som inneholder detaljert teknisk informasjon om de ulike modellene som eksponeres og aksjonene som er mulig å utføre. Hjelpesidene inneholder også en testklient som kan benyttes til å utføre spørringer direkte mot Altinn API fra din nettleser (krever at du er pålogget Altinn).
Teknisk dokumentasjon og testklient
REST API - generell oppbygging
Altinn API benytter REST arkitekturstil, og baserer seg på en semantisk definisjon av innholdet. Strukturen i responsen fra API-et kan endre seg, men betydningen av elementene er den samme. Dette blir som når man navigerer seg inn på en vanlig nettside. Da kan en klient navigere seg inn i API-et ved å følge lenker med en definert betydning. Det er ikke sikkert at URL-en man var på sist fortsatt eksisterer, men det vil være mulig å bla eller søke seg tilbake til det samme innholdet fra forsiden. Fordelen med dette er at Altinn har

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NYHETER STATENS KARTVERK INNOVASJON INNOVASJONSLØFT RINGERIKE

– Dette blir Ringerikes svar på Oslo innovation week



Storsamling: Innovasjon engasjerer! Foto: Statens kartverk

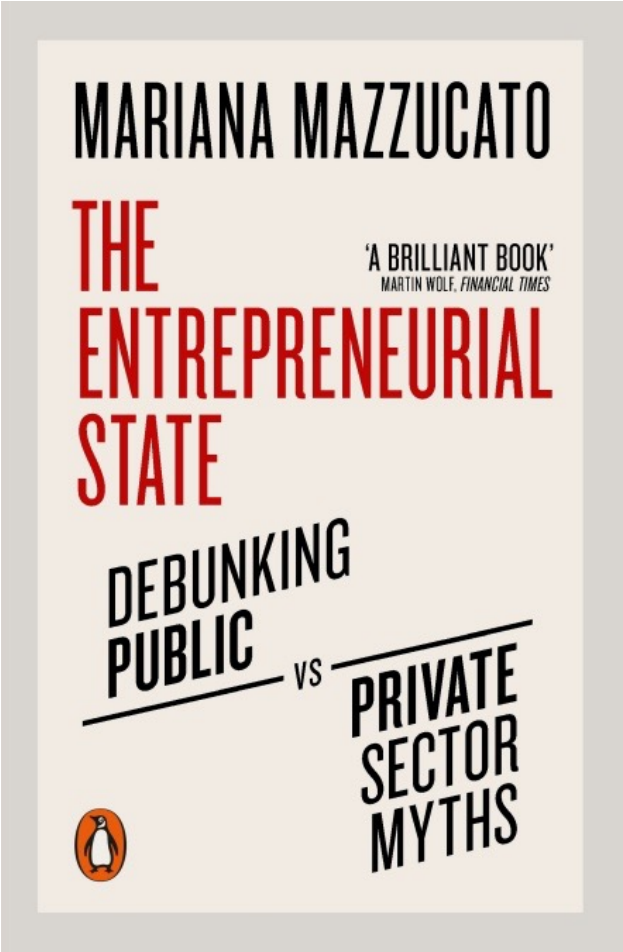
Av Mette Eriksen

Publisert: 10.10.17 11:28

Del

Artikkelen er over 4 år gammel

Ideer, design, koding og lek står i sentrum når Kartverket, Høgskolen i Sørøst-Norge og i alt 14 statlige etater inviterer til idékonkurranse, hackathon og kodesamling i Hønefoss i slutten av oktober.



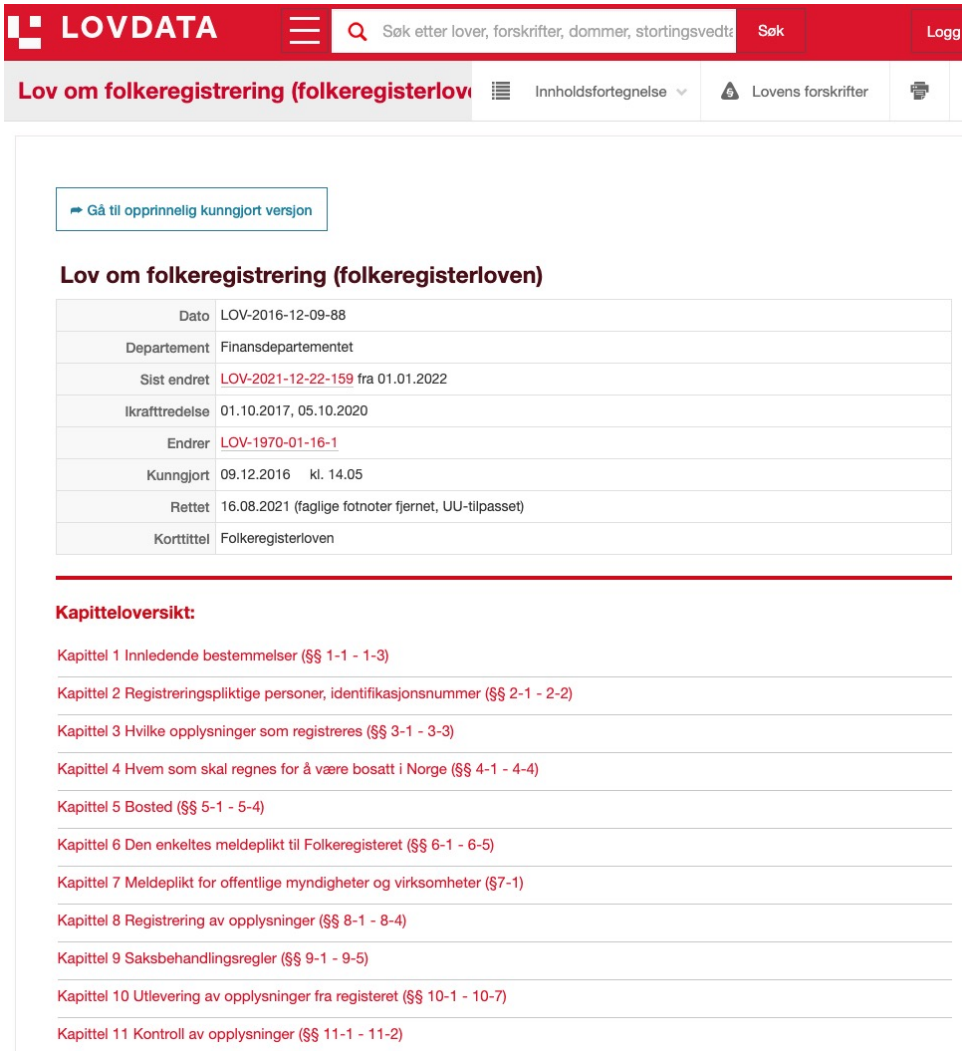


"... the state can proactively create strategy around a new high growth area before the potential is understood by the business community (from the internet to nanotechnology)

On national registries

National registries require:

1. A data model to capture the necessary information
2. A database to store the actual data
3. Processes and interfaces to
   a. update the registry, aiming to make it represent reality as correctly as possible
   b. retrieve data from the registry, striving for convenience, but also ensuring legal compliance



GOVERNMENT AS A PLATFORM: A HISTORICAL AND ARCHITECTURAL ANALYSIS

Bendik Bygstad, Dept. of Informatics, University of Oslo
Francis D'Silva, Accenture Norway

ABSTRACT

A national administration is dependent on its archives and registers, for many purposes, such as tax collection, enforcement of law, economic governance, and welfare services. Today, these services are based on large digital infrastructures, which grow organically in volume and scope. Building on a critical realist approach we investigate a particularly successful infrastructure in Norway called Altinn, and ask: what are the evolutionary mechanisms for a successful "government as a platform"?

We frame our study with two perspectives; a historical institutional perspective that traces the roots of Altinn back to the Middle Ages, and an architectural perspective that allows for a more detailed analysis of the consequences of digitalization and the role of platforms. We offer two insights from our study: we identify three evolutionary mechanisms of national registers, and we discuss a future scenario of government platforms as "digital commons".

Keywords: e-government, Altinn, platforms

1. INTRODUCTION

In this study we explore the concept of *government as a platform*, and use the case of Altinn to develop our argument. The starting point is that information is power, in particular for a state. In 1086, twenty years after his victory, William the Conqueror ordered the systematic collection and documentation of the assets of England; the population, the land and the buildings. The objective was to create a national register for taxation purposes, and there were no appeal rights for the King's subjects, ever. Therefore it was called Domesday Book (Galbraith, 1961).

The most important part of the Domesday Book was the *cadastre*, the register of property. Defining the property object was important for taxation, but over time even more seminal as the key element in the law of property rights, which is a fundamental element in a capitalist economy (Williamson, 1990). The rest, we might say, is history. Today the digital infrastructures of modern states constitute the backbone of our societies (Scholl, 2015), and the Scandinavian societies have been pioneers in this respect.

In this paper we investigate the development of national electronic platforms, with an emphasis on the Scandinavian tradition. Our case is from Norway, called Altinn, which is a successful and advanced national platform that is used by all business and organizations, and by almost all inhabitants. Our research questions are:

- What are the underlying mechanisms for the evolution of e-government platforms?
- How can government platforms be developed into institutions for a modern society?

Our methodological approach is critical realism, which allows us to investigate the evolutionary mechanisms of digital government infrastructures, i.e. we aim to identify and explain the causal relationships between the assemblages of policies, organization and technology, and successful outcomes.

Our contributions highlight the importance of the historical heritage of national registers, as we identify three evolutionary mechanisms, which explain how national registers grew from simple paper-based

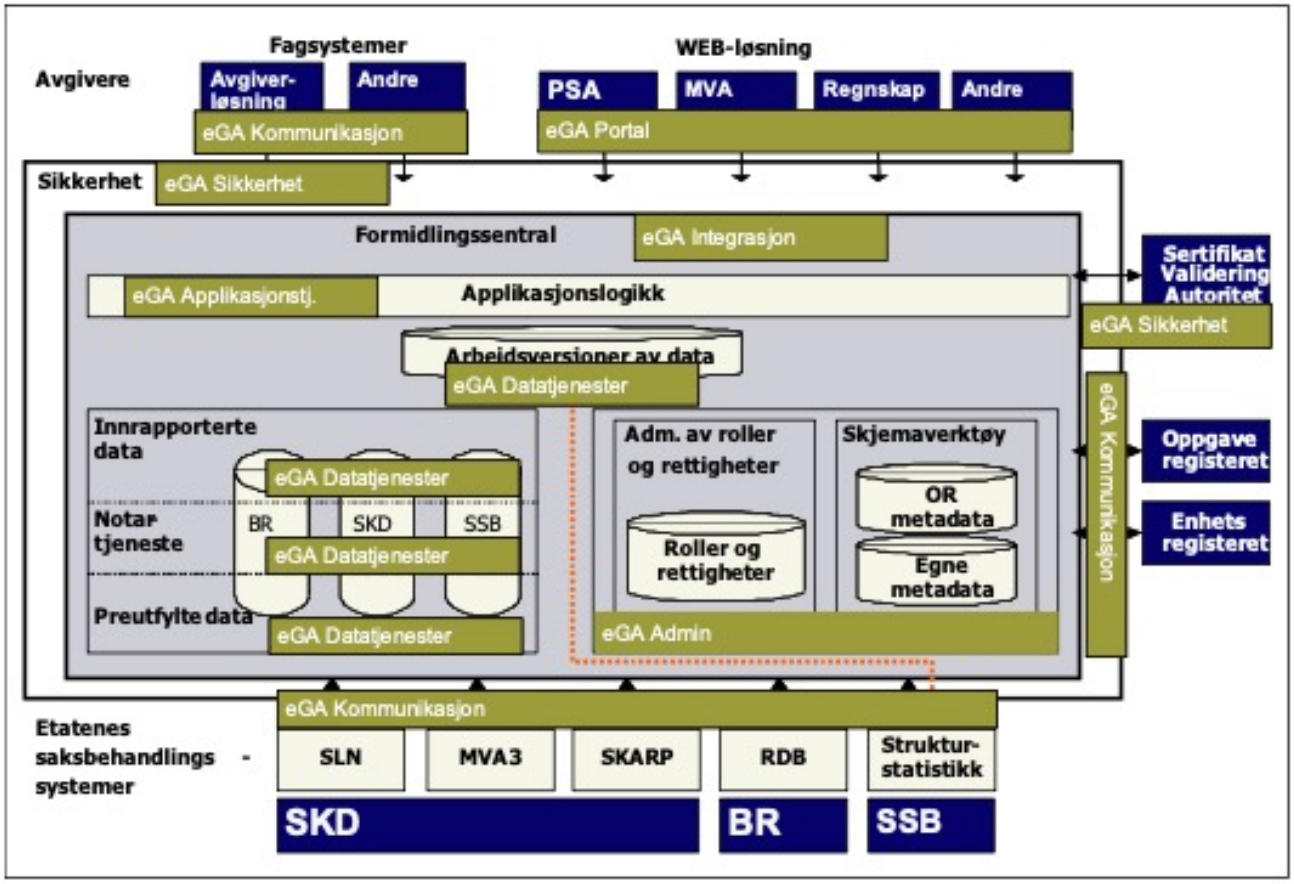
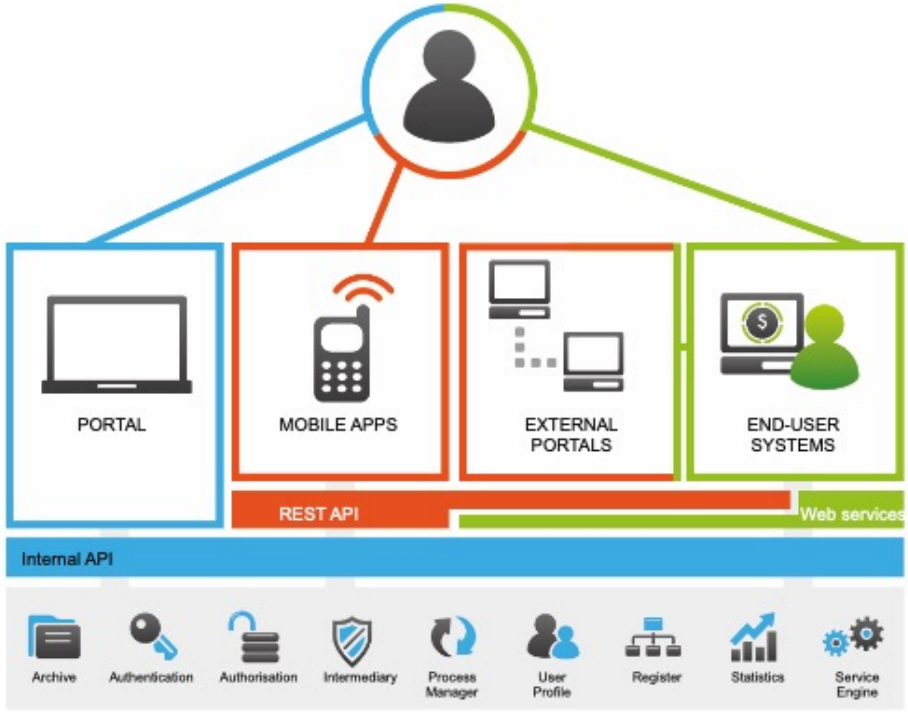
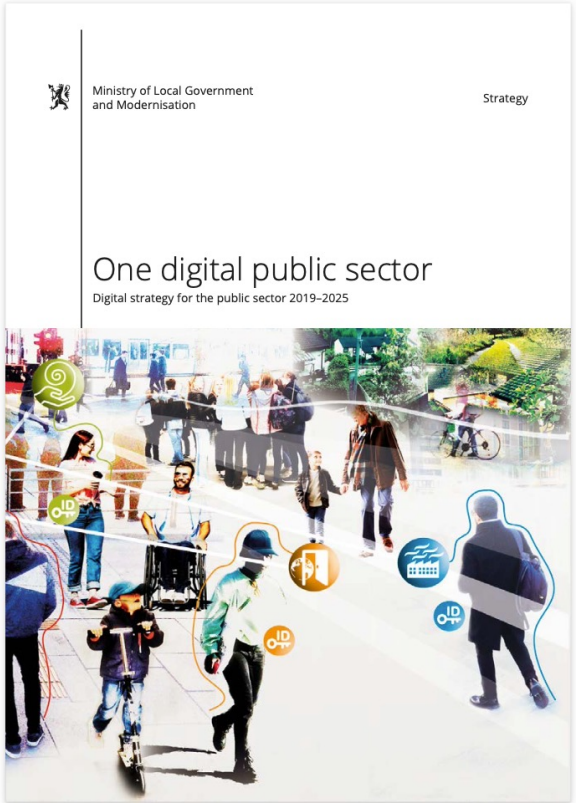


Figure 5. Schematic representation of key components of Altinn (in Norwegian)

Altinn as an innovation arena





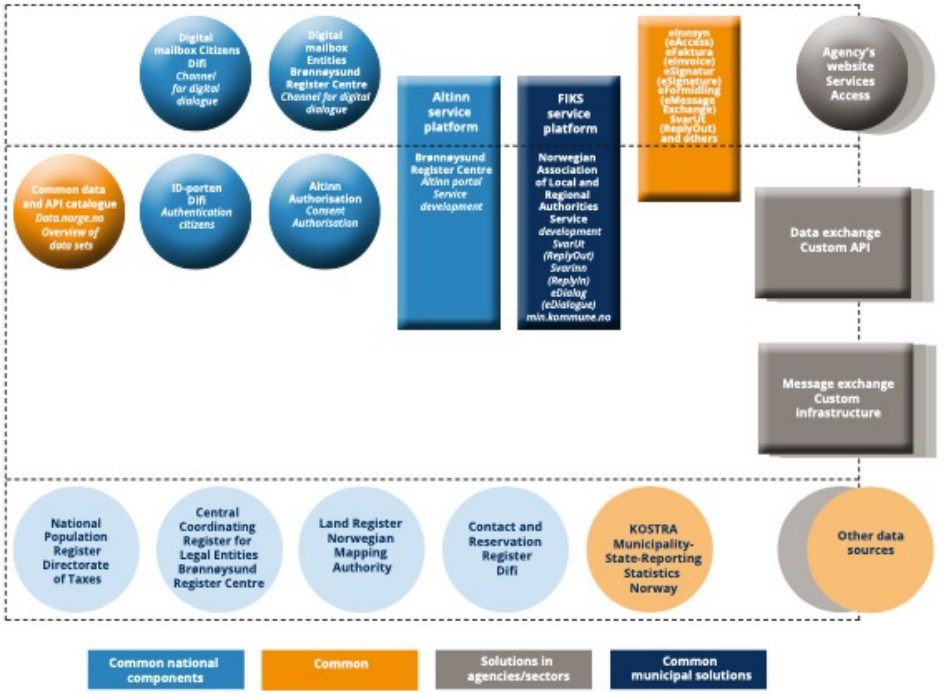


Figure 1.5 Overview of key common components and common solutions in 2019

Source: One digital public sector (2019), https://www.regjeringen.no/contentassets/db9bf2bf10594ab88a470db40da0d10f/en-gb/pdfs/digital_strategy.pdf



Source: Nasjonale fellesløsninger, https://www.digdir.no/felleslosninger/nasjonale-felleslosninger/750

Car ownership update (Statens vegvesen)

Nyhet på FINN! Gjør hele bilhandelen på ett sted

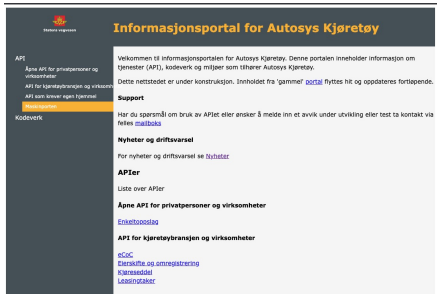
6.4.2021 07:30:00 CEST | FINN.no

Del

FINN motor kan nå tilby en smidig, enkel og trygg bilhandel mellom privatpersoner der alt kan gjøres på ett sted. Dette er en gledelig nyhet for alle som skal selge eller kjøpe bil.



Nå trenger du ikke å forlate FINN før hele prosessen i en bilhandel er gjort, inkludert eierskifte. Det er både enkelt, trygt og smidig.



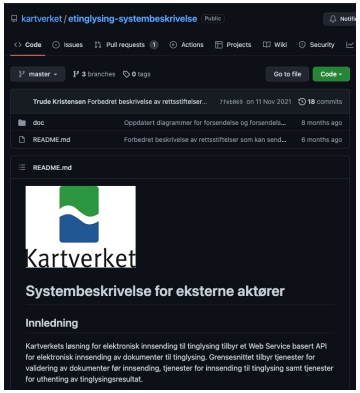
Property ownership update (Statens kartverk)

Nå kan skjøtepakkene tinglyses elektronisk

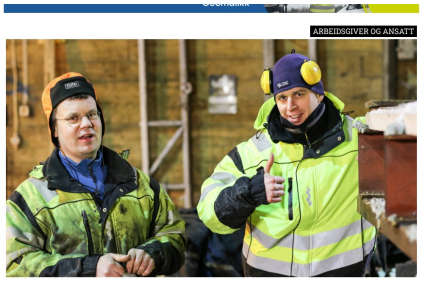
Av: Redaksjonen | 29. oktober 2020 | Forsidenytt, Nyheter



En privatperson som kjøper bolig, kan nå signere alle dokumentene elektronisk, inkludert pantedokument og skjøte. Skjøtepakken kan tinglyses digitalt. For kundene betyr dette en raskere og tryggere handel. I koronasituasjonen er dette ekstra viktig.



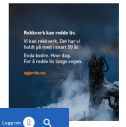
Employee monthly reporting ("A-meldingen")



Det blir enklere for daglig leder Asbjørn Daugaard (t.v.) å være arbeidsgiver for Lauri Proskina og resten av staben i Finnmark Entreprenør AS. (Foto: Jørn Søderholm)

A-ordningen for arbeidsgivere

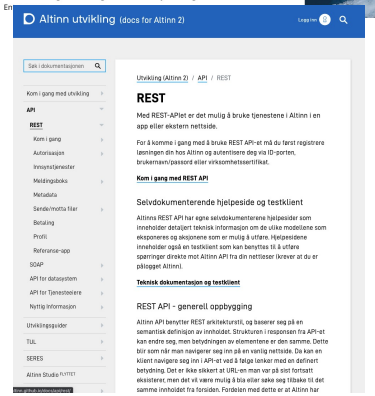
ANNONSE



Publisert 1. mars 2014 av Jørn Søderholm • Sist endret 15. april 2015

Fem blir èn

Det er ikke alle nyheter fra det offentlige som betyr flere og mer kompliserte regler. Nå krymper fem skjemaer til ett, og det blir litt enklere å være arbeidsgiver. – Veldig bra, mener Asbjørn Daugaard i Finnmark

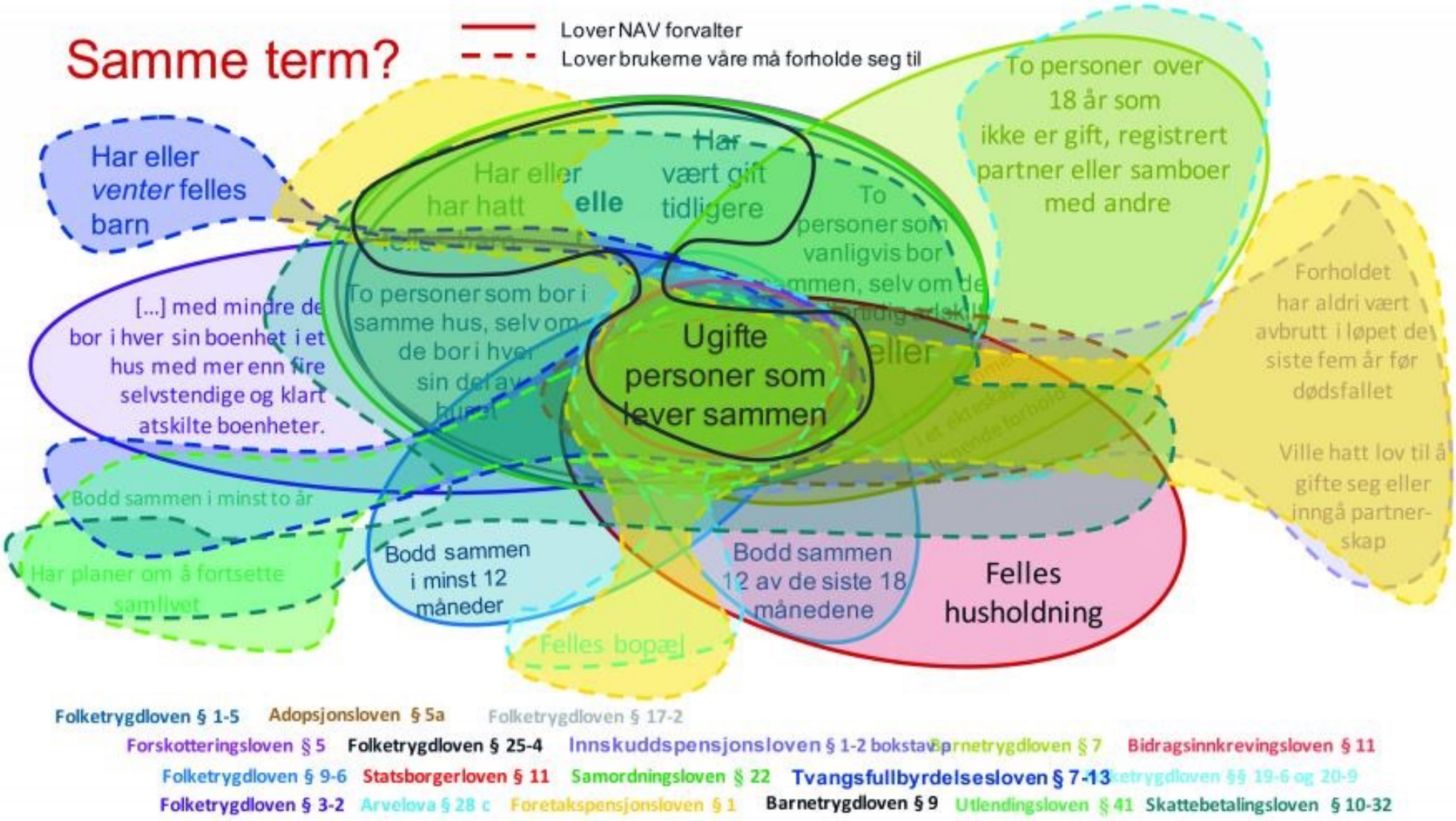


This sounds good, but why is progress so slow?

Important reasons

1. Complexity – in particular to ensure only legal updates are allowed, and providing correction features
2. Standardization (of data model)
3. Security, in particular authorization
4. Governance: which entities should be responsible for what?
5. Testing is expensive and requires specific competence
6. Lack of necessary competence (mainly technical, but also the important combination of technical and functional perspective)
7. Lack of willingness/confidence to invest from important stakeholders




Samme term?
Lover NAV forvalter
Lover brukerne våre må forholde seg til
Har eller venter felles barn
Har eller har hatt felles barn
Har vært gift tidligere
To personer som vanligvis bor sammen, selv om de
To personer over 18 år som ikke er gift, registrert partner eller samboer med andre
[...] med mindre de bor i hver sin boenhet i et hus med mer enn fire selvstendige og klart atskilte boenheter.
To personer som bor i samme hus, selv om de bor i hver sin del av huset
Ugifte personer som lever sammen
Forholdet har aldri vært avbrutt i løpet de siste fem år før dødsfallet
Ville hatt lov til å gifte seg eller inngå partnerskap
Bodd sammen i minst to år
Har planer om å fortsette samlivet
Bodd sammen i minst 12 måneder
Bodd sammen 12 av de siste 18 månedene
Felles husholdning
Felles bopæl
Folketrygdloven § 1-5
Adopsjonsloven § 5a
Folketrygdloven § 17-2
Forskotteringsloven § 5
Folketrygdloven § 25-4
Innskuddspensjonsloven § 1-2 bokstav
Barnetrygdloven § 7
Bidragsinnkrevingsloven § 11
Folketrygdloven § 9-6
Statsborgerloven § 11
Samordningsloven § 22
Tvangsfullbyrdelsesloven § 7-13
Folketrygdloven §§ 19-6 og 20-9
Folketrygdloven § 3-2
Arvelova § 28 c
Foretakspensjonsloven § 1
Barnetrygdloven § 9
Utlendingsloven § 41
Skattebetalingsloven § 10-32

Summary

- Governments are well positions to provide a platform both for external and internal innovation
- Creating an infrastructure for sharing governmental data and APIs are important steps to achieve this platfomrs
- Several Norwegian digitization efforts adopt this approach. Notable examples are Digitaliseringsdirektoratet, Altinn, Statens kartverk and Statens vegvesen

