



AGENCY FOR DIGITISATION
MINISTRY OF FINANCE

NemID employee certificate

May 2019





NemID

- The key to all of digital Denmark
- National eID and eSignature solution
- ID for citizens, employees, public authorities and businesses
- Today's focus: Employee

An employee certificate

- Includes the Customer's CVR number and may also be associated with the employee's civil registration number.
- A company digital signature guarantees that the certificate owner is the company stated on the Certificate.
- A company digital signature represents the actual company, not individuals.

Benefits of employee certificate

You can use the employee certificate to identify yourself as an employee of a particular company or organisation when:

- Communicating with the public authorities on behalf of the company.
- Signing documents online.
- Accessing information from a public authority.
- Access private web services.
- Access internal it-systems.
- Receive secure e-mails (encrypted)

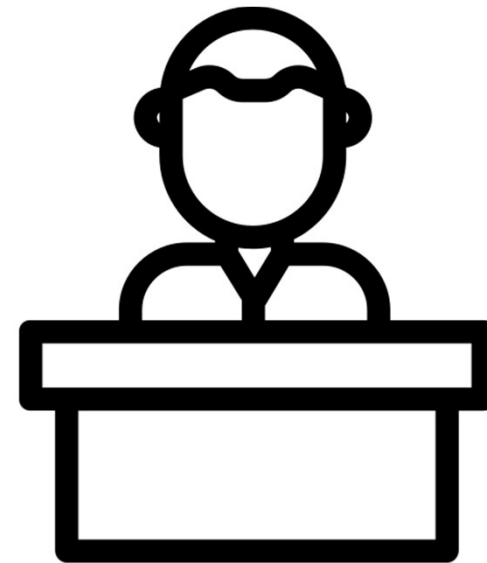
3 types of employee certificate

You have a choice of 3 different types of employee certificate:

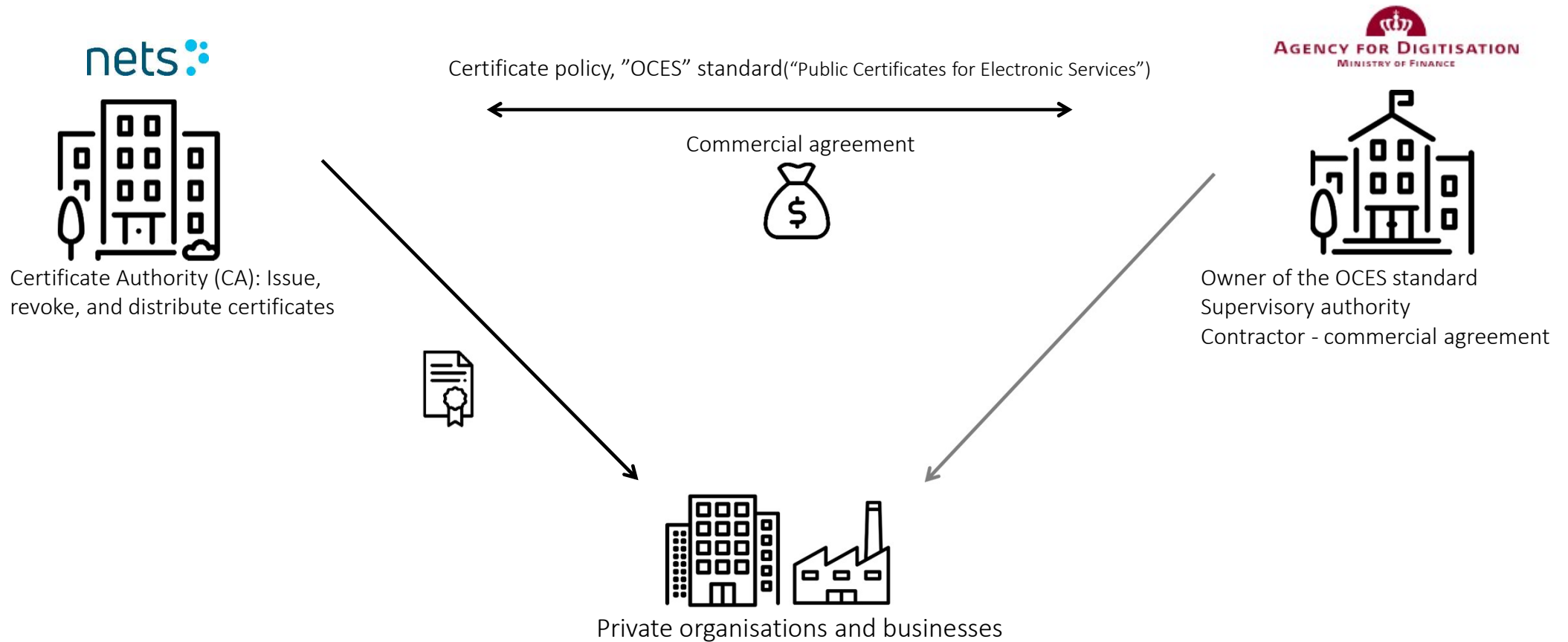
1. NemID employee certificate with a key file that corresponds to your current employee digital signature. This is a software solution where the certificate is installed on the employee's computer.
2. NemID employee certificate with a code card. This is a code card solution with OTP. The certificate is deployed on a central server at Nets DanID.
3. NemID employee signature on hardware means that you store your NemID employee signature on a piece of USB hardware.

Business Administrator

- One company NemID administrator.
- Manage NemID employee signatures in the company.
- Self-service web service.
- Associate rights
- Register other Administrators in the Customer's organisation.



The setup



Other signatures for business



Private NemID
for business

Company
Signature

Function
Signature

Questions



Sofie Nielsen



AGENCY FOR DIGITISATION
MINISTRY OF FINANCE



| Virk: One-stop-shop for businesses

May 24, 2019

Jakob Jensen

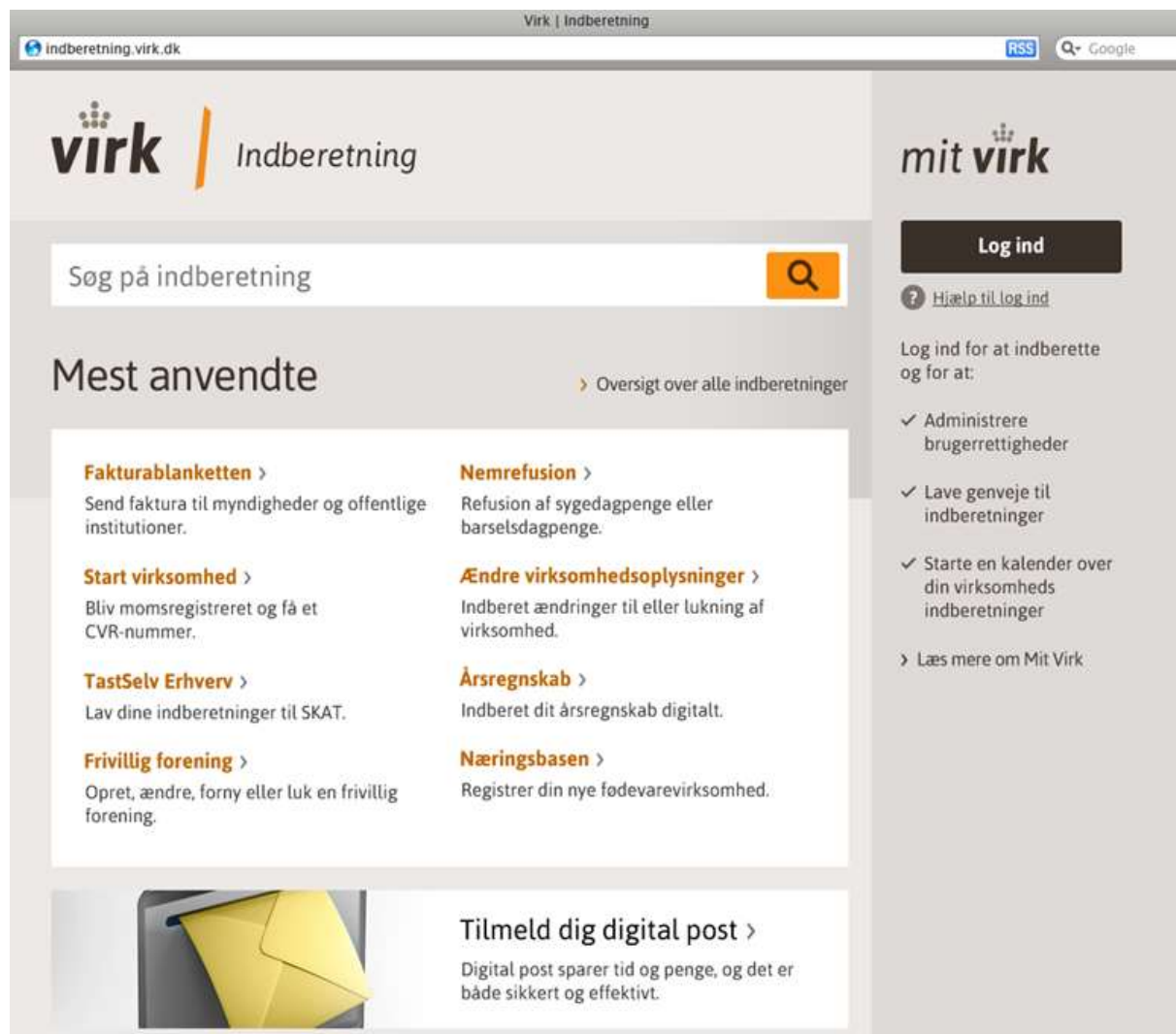
Agenda

Virk:

- What it is
- How it works
- Where we are going

.....Please feel free to ask questions at any time.

Virk: The joint public one-stop shop to the Danish business world

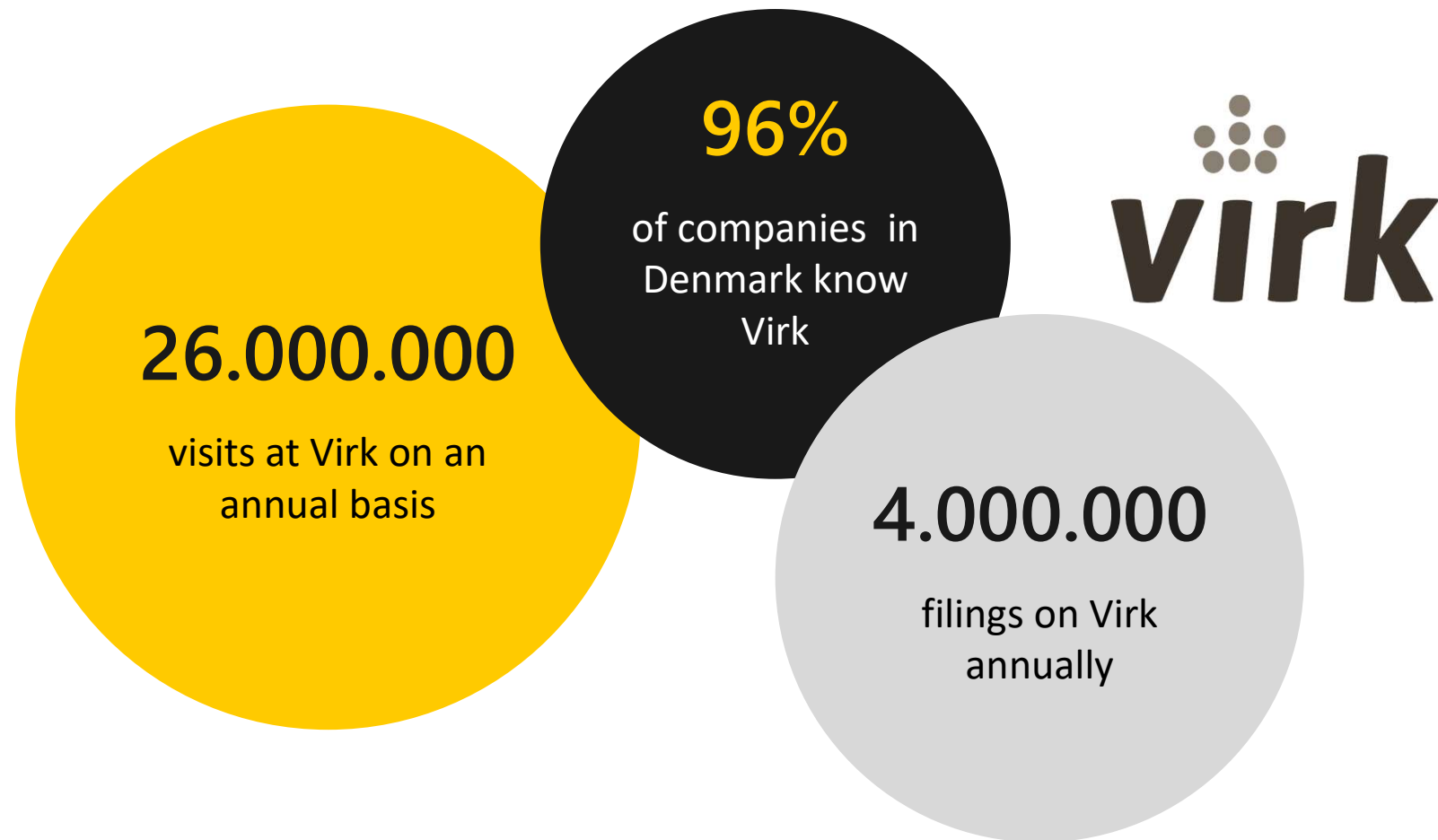


Virk Objectives

Use digitization to cut business red tape and facilitate growth



Some numbers



3 Virk Sections

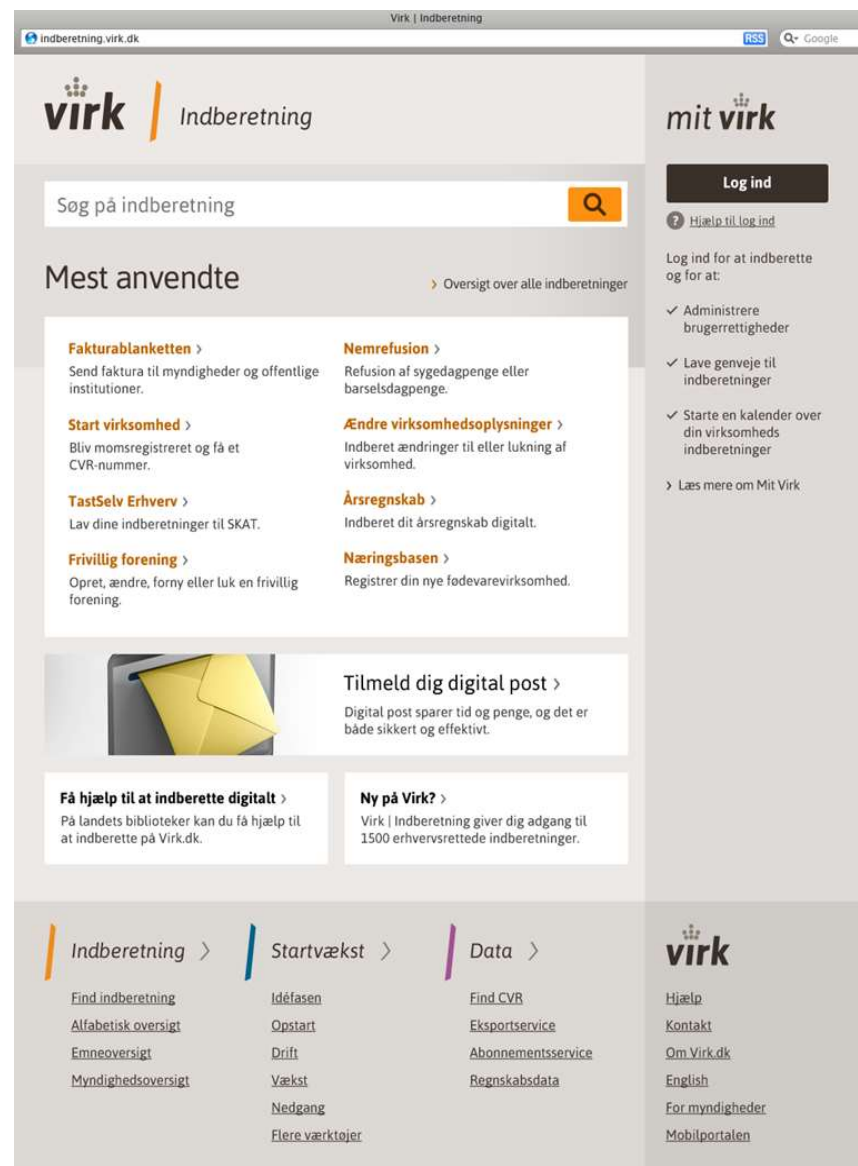


Virk Reporting:

- All 45 business directed state authorities integrate with Virk Reporting
- A total of 1600 forms from authorities on Virk
- Municipalities integrate as well

Requirements:

- Tap into single sign-on application
- Follow interaction design
- Use Virk's analytics script
- Pass the joint public UX test

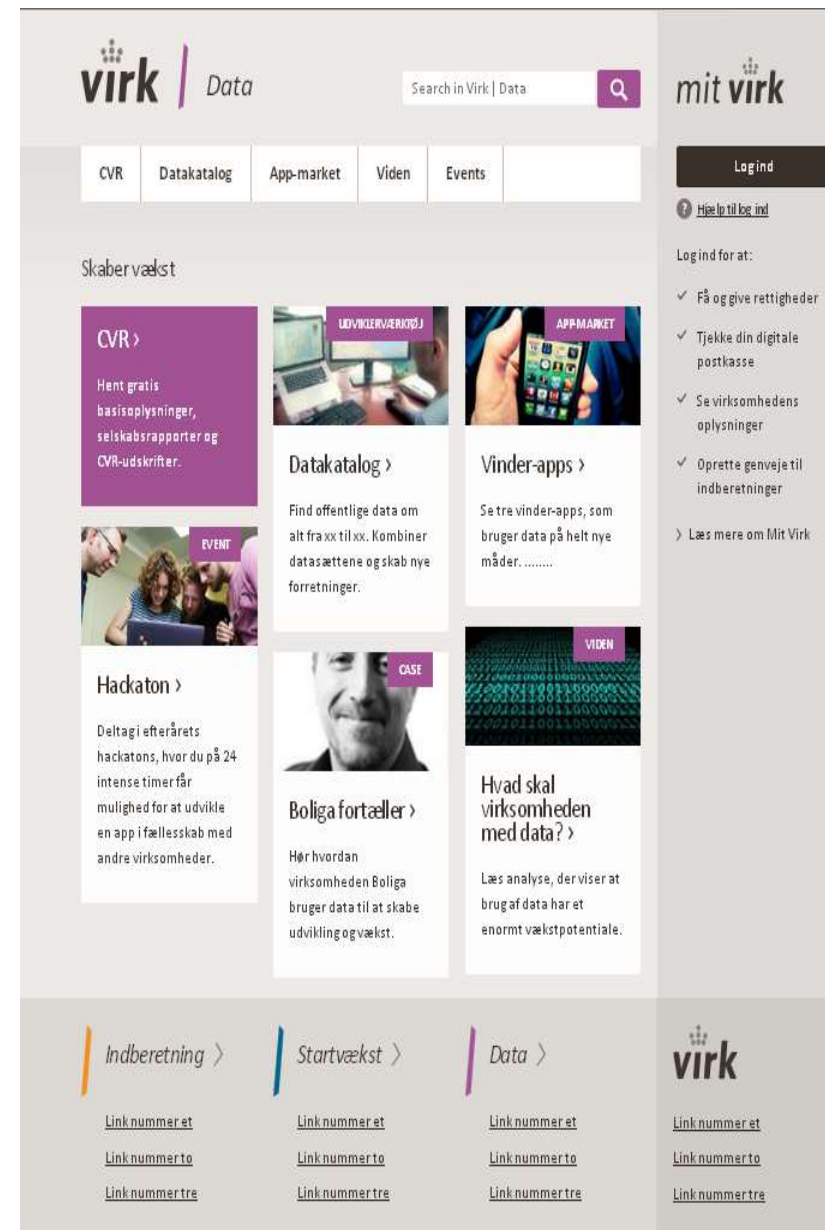


Virk Data:

- All registered businesses in Denmark (650.000)
- Information on management, board, owners, articles, capital, accountant, annual report, business type, history

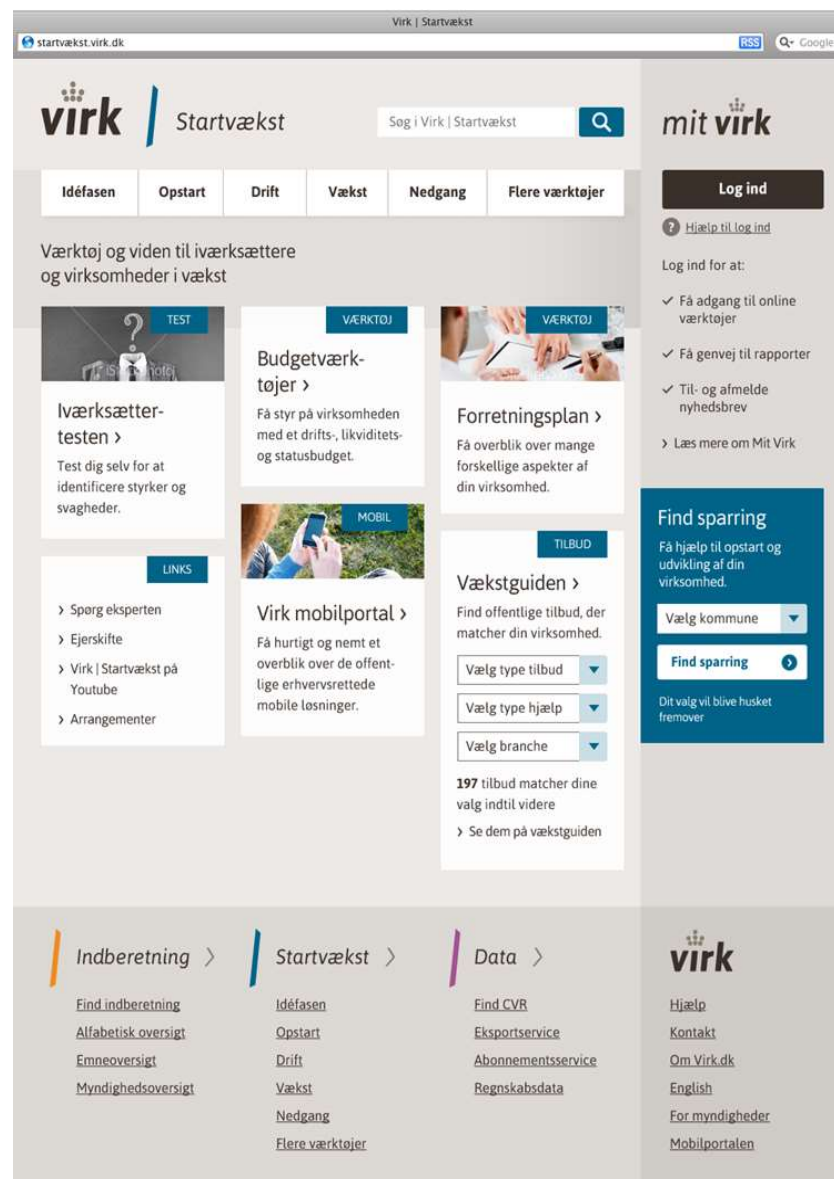
Data catalog

- All sorts of open data sets from authorities
- Many formats (csv, xml, json etc.)



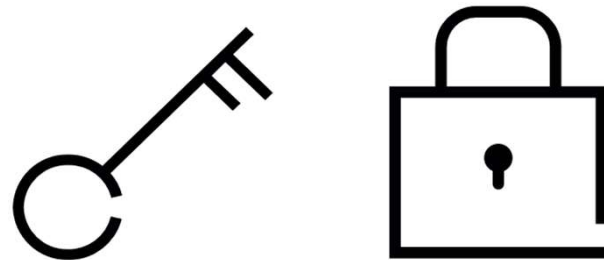
Virk Start up & Growth:

- Help and information for new businesses
- Guides and tools
 - How to raise funds
 - How to make a business plan
 - Your first employee



NemID

- Electronic id in Denmark
- One key to identify your business



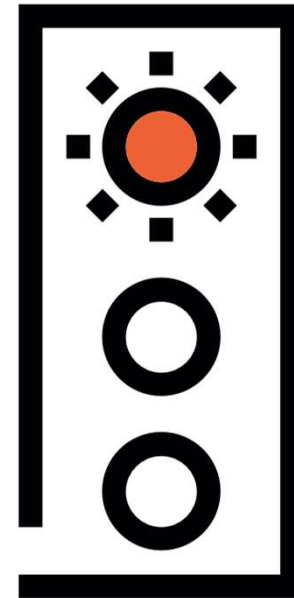
How to make Virk

- 80% politics
- 20% technology



The obstacles

- Organizational independence
- Different cultures
- Financial constraints
- "Soft" mandates



The way forward



EASY

It needs to be easier and quicker for businesses to submit information to the authorities by improving the quality of each digital solution.



COHERENCE

There needs to be a more coherent procedure for the businesses, when they have to solve central tasks that involve multiple authorities.



OVERVIEW

The individual businesses needs to have a better overview of important deadlines and duties, that are relevant for them exactly.



INSIGHT

It needs to be easier and quicker for businesses to gain key-data on business partners and other companies.



TARGETING

The individual business and its staff needs to have a more targeted service - where the content that appears when they log on to Virk is accustomed to them.

The way forward



TOOLS

Gather tools that will make it easier and more affordable for the authorities to improve their digital solutions for submission of information.



KNOWLEDGE


Make knowledge available, that can help the authorities improve their solutions for submission of information – including sharing and reusing data in between them.





COLABORATION

Virk shall work closer with other business-focused-authorities to develop common tools and increase learning possibilities across them.

My dashboard



Søg på Virk Indberet 

Jens Ejnar Jacob Svendsen
Vesterhavets VVS ApS 

4 Opgaver

 4 Opgaver >

 6 Kalender

 5 Digital Post

 Mine genveje

Virksomhedsoplysninger

Brugeradministration

Mine...

ATP Livslang Pension 2. jun  

- Virksomheden mangler at betale ATP-bidrag for Vesterhavets VVS Aps
SE-nr. 13408439
Beløb: 5.250,00 kr.

Betal via selvbetjening →

Erhvervsstyrelsen 31. maj  

Svend Jensen er registreret som ny direktør i Vesterhavets VVS Aps

OK, skjul meddelelse

Ret i selvbetjening →

[Dashboard prototype](#)




| Automated Business Reporting

Presentation

May 24

Rasmus Eskild Jensen, Project manager

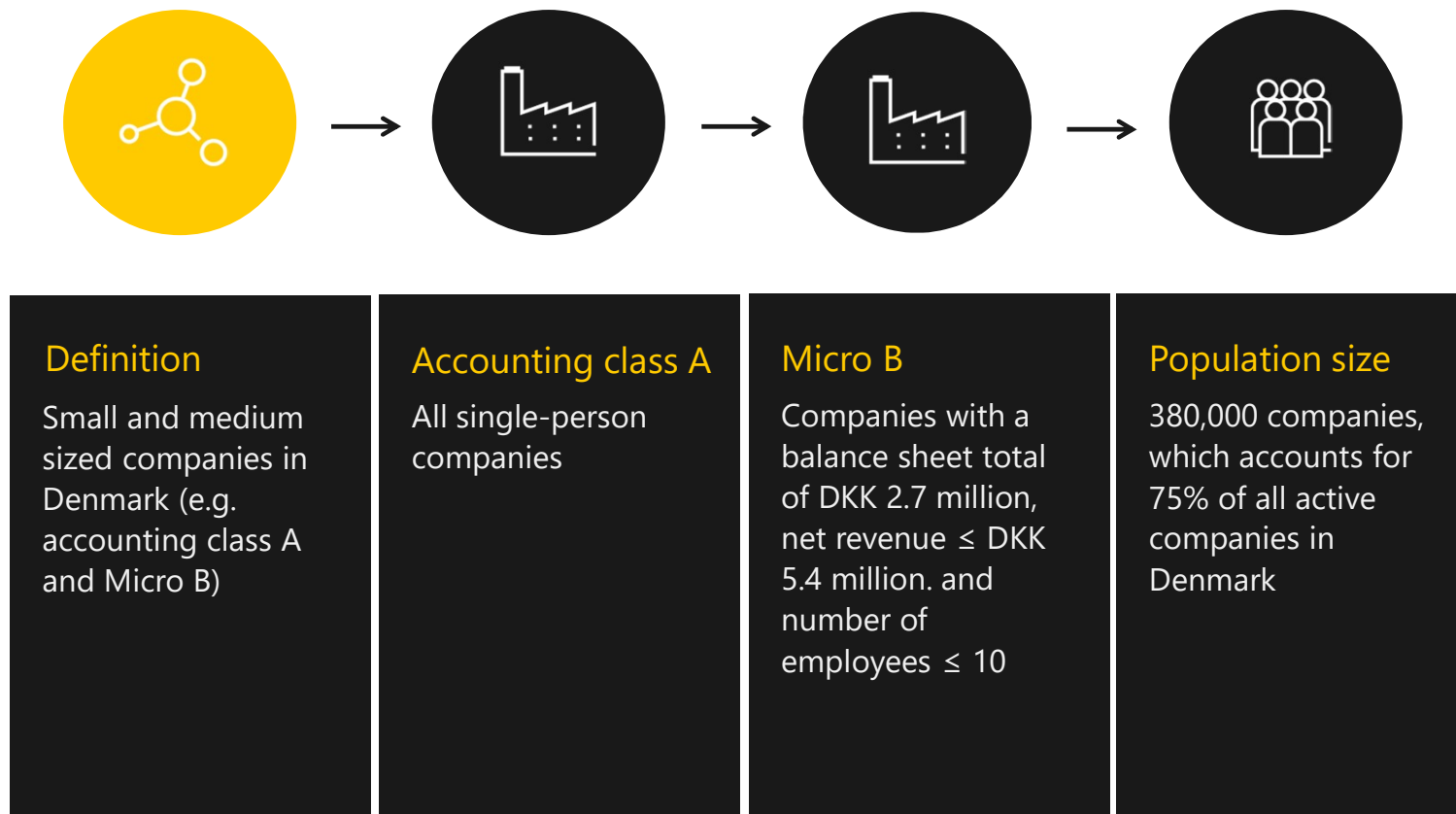
Mission



| Automatic business reporting is an initiative under the joint public digitization strategy 2016-2020.

The purpose of the initiative is to analyze and test the prerequisites for automation of business reports to the public authorities.

Target group

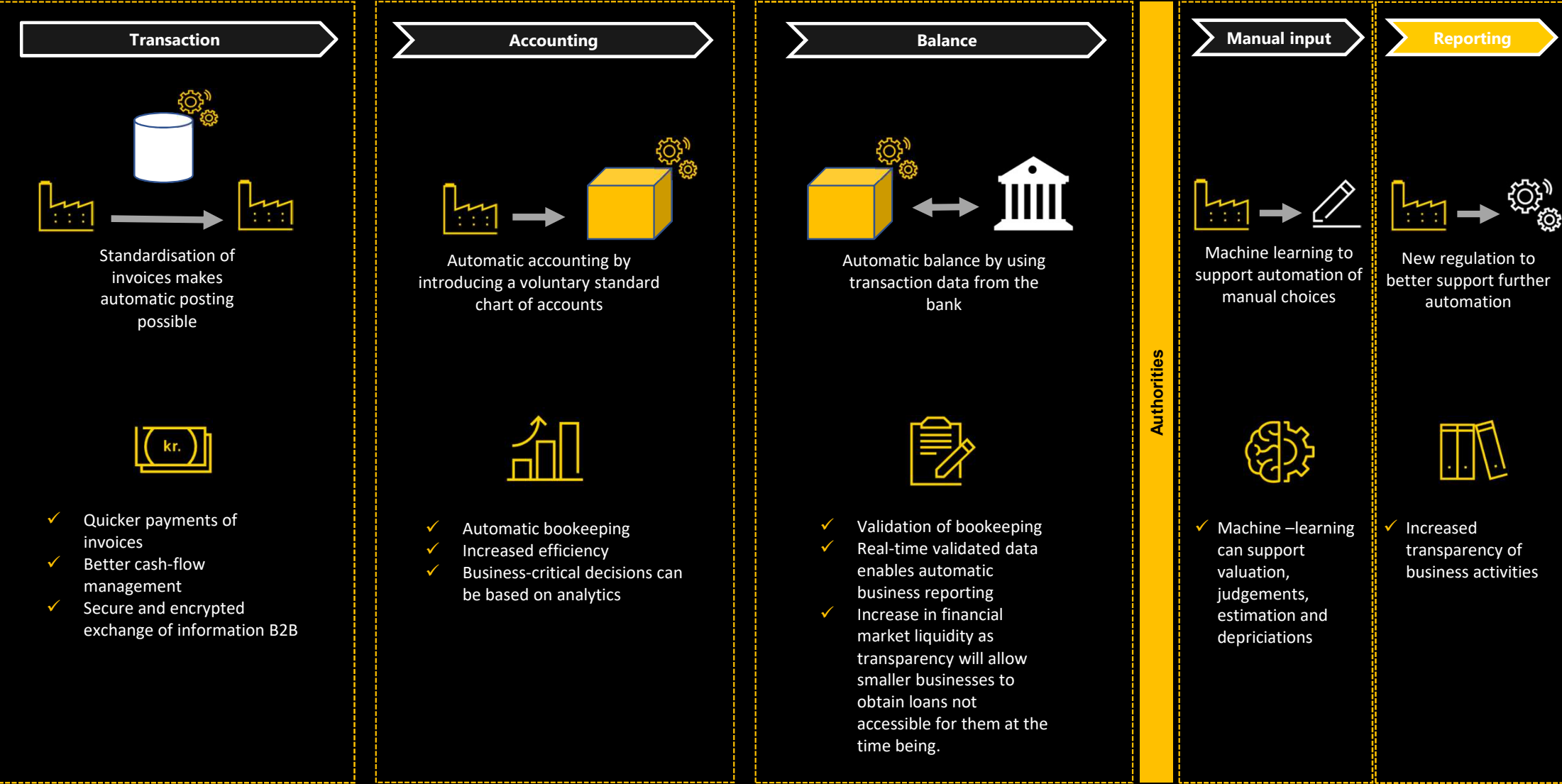


Prerequisites for automation

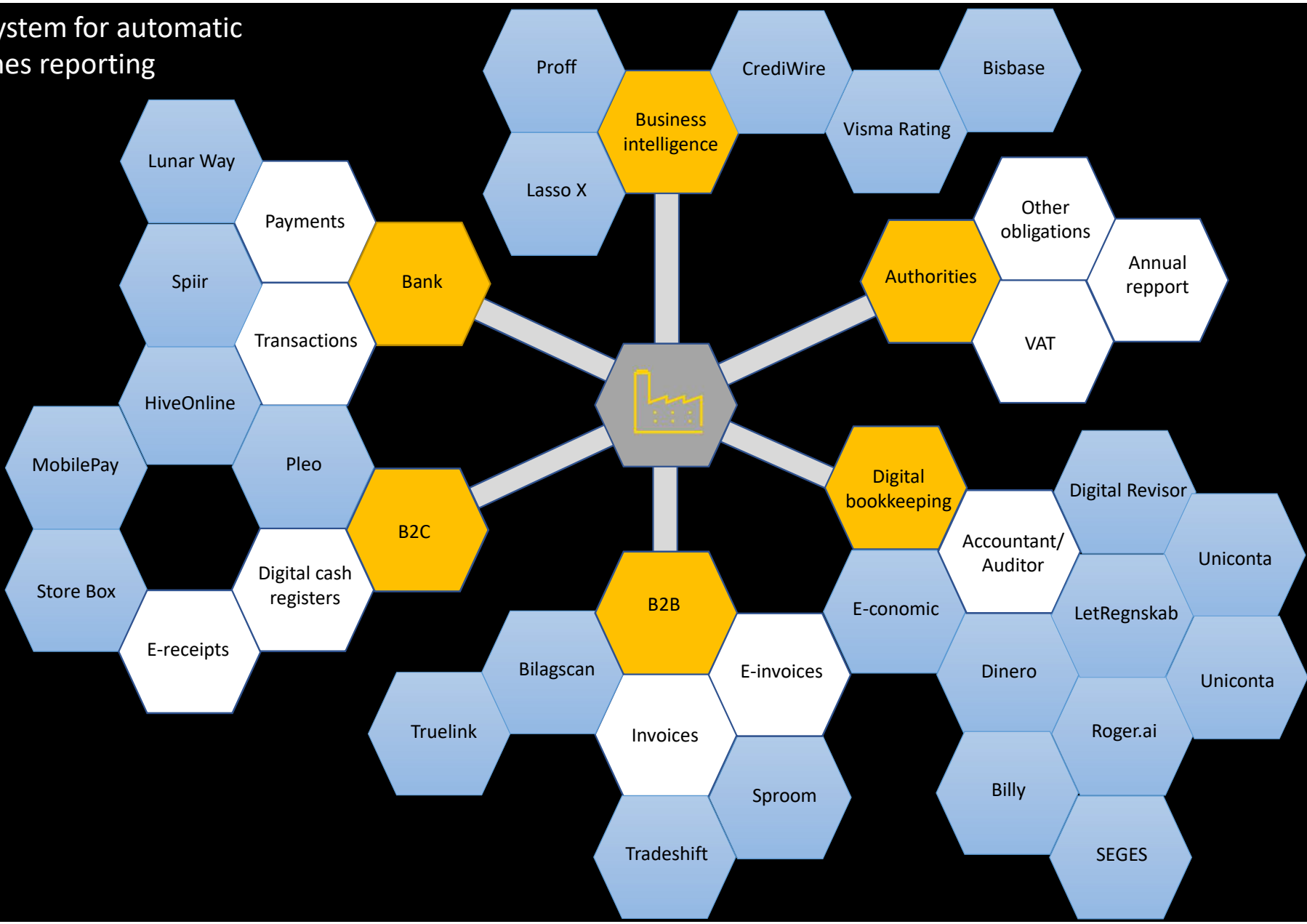
Automation of reports requires updated and correct bookkeeping data. Data is created by the activities of the companies (e.g. the purchase and sale of goods) and is later recorded in the companies' bookkeeping and accounting systems.

- 72 per cent of the Danish auditors state that significant errors in the annual reports happen due to errors in the bookkeeping.
- The majority of bookkeeping errors are present in companies with less than 10 employees.
- The quality of bookkeeping data can be ensured through standardization, digitization and ongoing legislative alignment.

Value chain of automatic business reporting



Ecosystem for automatic
busines reporting



Benefits of Automatic Business Reporting



Increased transparency

The public authorities can target control efforts based on updated and detailed data sets.




New growth potential

The detailed and updated data can be used to utilize new business models for benchmarking and business intelligence

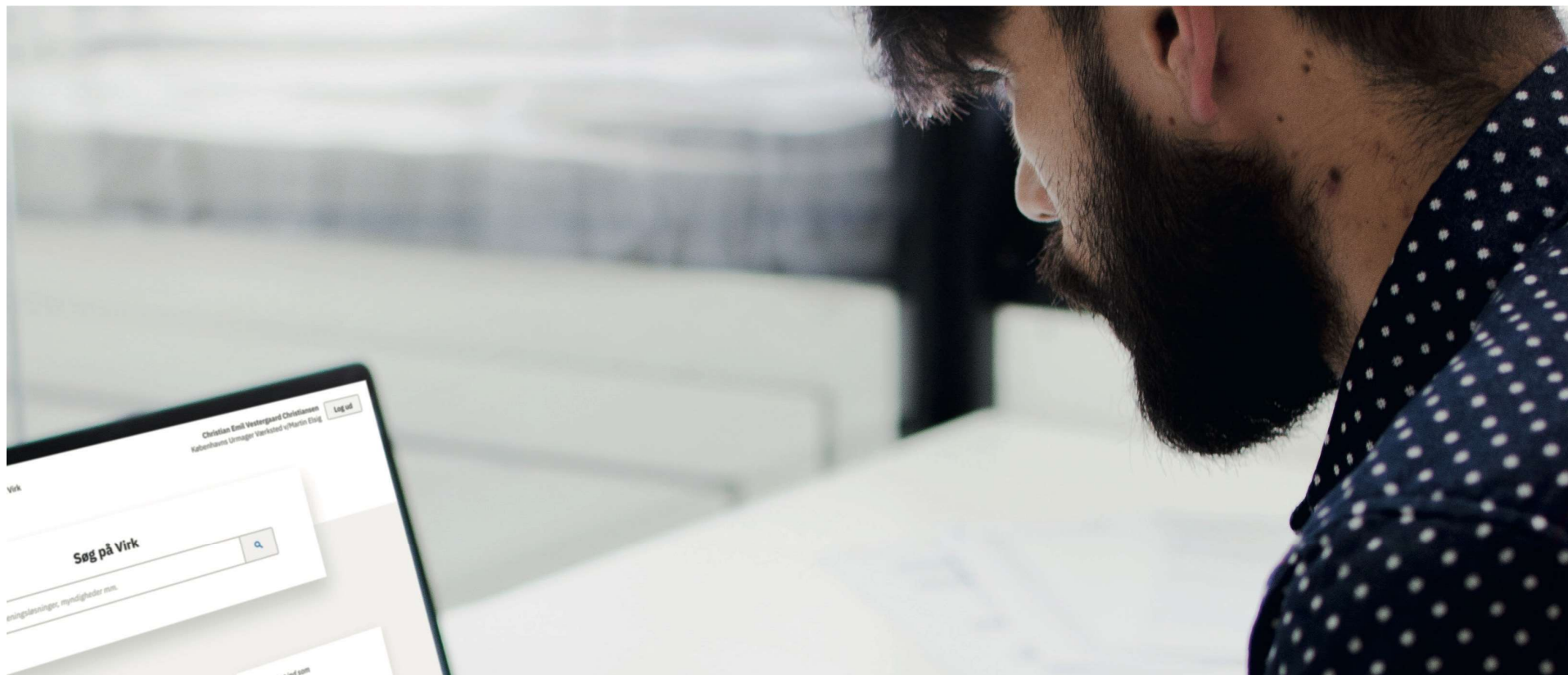


Reduced burdens

Automated business processes between the public authorities and the businesses reduce the administrative burdens



| Questions?



| Virk: Form Builder

May 24 2019

Anne Pedersen

Form-builder



TOOLS

Form-builder:

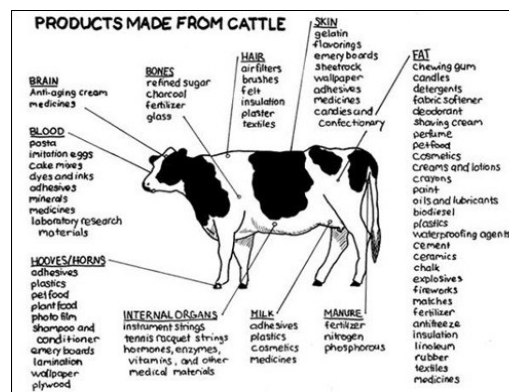
- Digitalization of simple forms
- Reuse of data
- Solutions developed in a uniform design created after common principles of interaction.
- Added special services as digital co-signing, payment etc.

Form Builder: Digitization of simple services



The Danish Transport and Construction Agency

Form for drone registration.



Fødevarestyrelsen
Ministeriet for Fødevarer, Landbrug og Fiskeri

The Danish Veterinary and Food Administration

Form for declaring import or export of animal by-products.






Skatteankestyrelsen

The Danish Tax Appeals Agency

Form for handling cases involving taxation, value-added tax, custom duties etc.

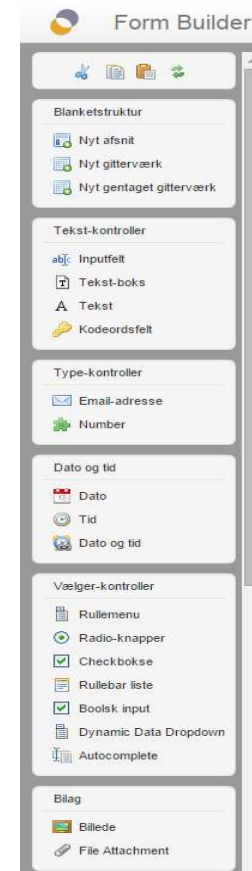
Digitization of simple services

	 Erhvervsstyrelsen	
Registreringsanmeldelse		
<div style="border: 1px solid black; padding: 5px; display: inline-block;">Erhvervsstyrelsen Postboks 600 0900 København C</div>		<div style="border: 1px solid black; padding: 5px; display: inline-block;">CVR-nr. / SE-nr.:</div>
<hr/>		
Afgift af kvælstof indeholdt i gødninger m.m.		
<hr/>		
Virksomheden		
Firmanavn		Dato for påbegyndelse
<hr/>		
Personnavn		
<hr/>		
Adresse	Postnr.	By
<hr/>		<hr/>
Kommune, hvor virksomheden er beliggende		Telefonnummer
<hr/>		<hr/>
<hr/>		
Ansvarlig indehaver(e) eller forpagter(e)		
Stilling og fulde navn		CPR-nr.
<hr/>		<hr/>
Bopæl	Postnr.	By
<hr/>		<hr/>
Stilling og fulde navn		CPR-nr.
<hr/>		<hr/>
Bopæl	Postnr.	By
<hr/>		<hr/>
<hr/>		
Evt. direktor, bestyrer eller herboende repræsentant		
Stilling og fulde navn		CPR-nr.
<hr/>		<hr/>
Bopæl	Postnr.	By
<hr/>		<hr/>
<hr/>		
Oplagshaver		
Fremstilling	<input type="checkbox"/> Kemisk og mineralisk gødning	<input type="checkbox"/> Organisk (husdyrgødning)
<hr/>		<hr/>
Mellemhandel	<input type="checkbox"/> Kemisk og mineralisk gødning	<input type="checkbox"/> Organisk (husdyrgødning)
<hr/>		<hr/>
		Årligt salg _____ kg
<input type="checkbox"/> Olieselskab		
<hr/>		
Varemodtager		
<input type="checkbox"/> Varemodtager		<input type="checkbox"/> Dækningsafgift
<hr/>		
Varernes art:		

	 Erhvervsstyrelsen	
Registreringsanmeldelse		
<hr/>		
Fabrikationsafdeling/udleveringslager		
<small>For hver fabrikationsafdeling/udleveringslager, der ønskes omfattet af virksomhedens registrering, anføres i denne rubrik evt. i et bilag afdelings/forretningsstedets beliggenhed (adresse)</small>		
<small>Øvrige lageradresser indsendes i et særskilt dokument</small>		
<hr/>		
Det erklæres, at oplysningerne er rigtige, og at ændringer vil blive anmeldt til Erhvervsstyrelsen.		
Dato	Underskrift af virksomhedens ansvarlige ledelse	
<hr/>		
Bilag	stk. med oplysninger om lagre o.l.	
<hr/>		
Afsluttende oplysninger		
Bemærkninger		
Navn på kontaktperson	Telefonnr.	E-mail
<hr/>		
Side 2 (2)		
<hr/>		
24.037	<small>Du kan registrere ændringer og ophør i din virksomhed på virk.dk. Har du spørgsmål til blanketten eller registreringen, kan du finde hjælp på virk.dk eller ring: 35281000</small>	

The platform

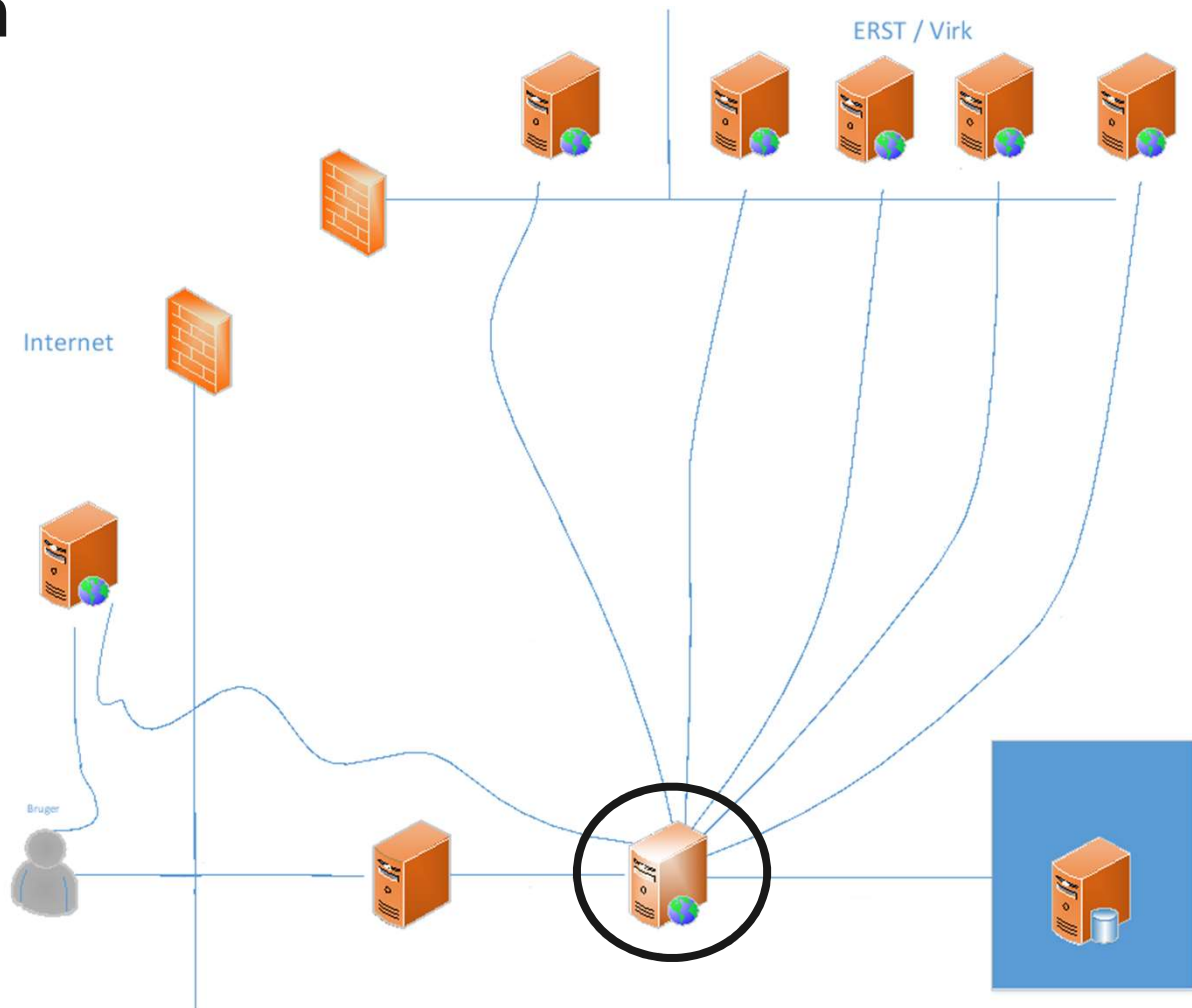
- Orbeon Forms is open source and all the code is available on GitHub.
- However, to run Orbeon Forms on a development server accessed by several users, then you need to get a subscription.
- You can define validation rules, specify errors and warnings, define whether fields are visible or editable by users, calculate values etc.
- All this logic runs in the background, as users interact with your forms, providing them with immediate feedback.



- ✓ Development, staging and production servers.
- ✓ Unlimited incidents and bug priority escalation
- ✓ Perpetual license, which means that existing software that has been deployed will keep running if the license is not renewed
- ✓ 4 hours of technical assistance

The Danish version

- Integrate the Form Builder into the system architecture of the Danish Business Authority.
- Customize the layout according to our design manual.
- Integrate to core components such as the Central Business Register (CVR) and NemLogin (a common secure login method used in Denmark).

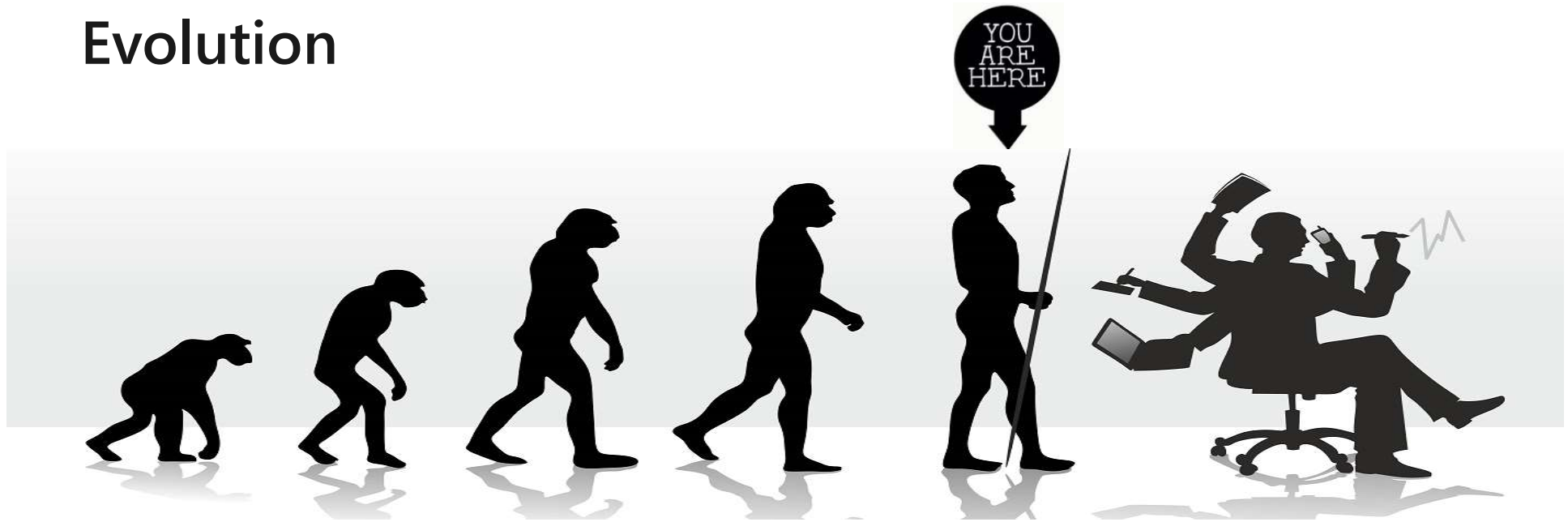


Custom built features and improvements

- Payment module
 - Signature service
 - Responsive design
 - Made integrations to internal and external registries and databases
 - Added encryption
 - And numerous minor changes
-

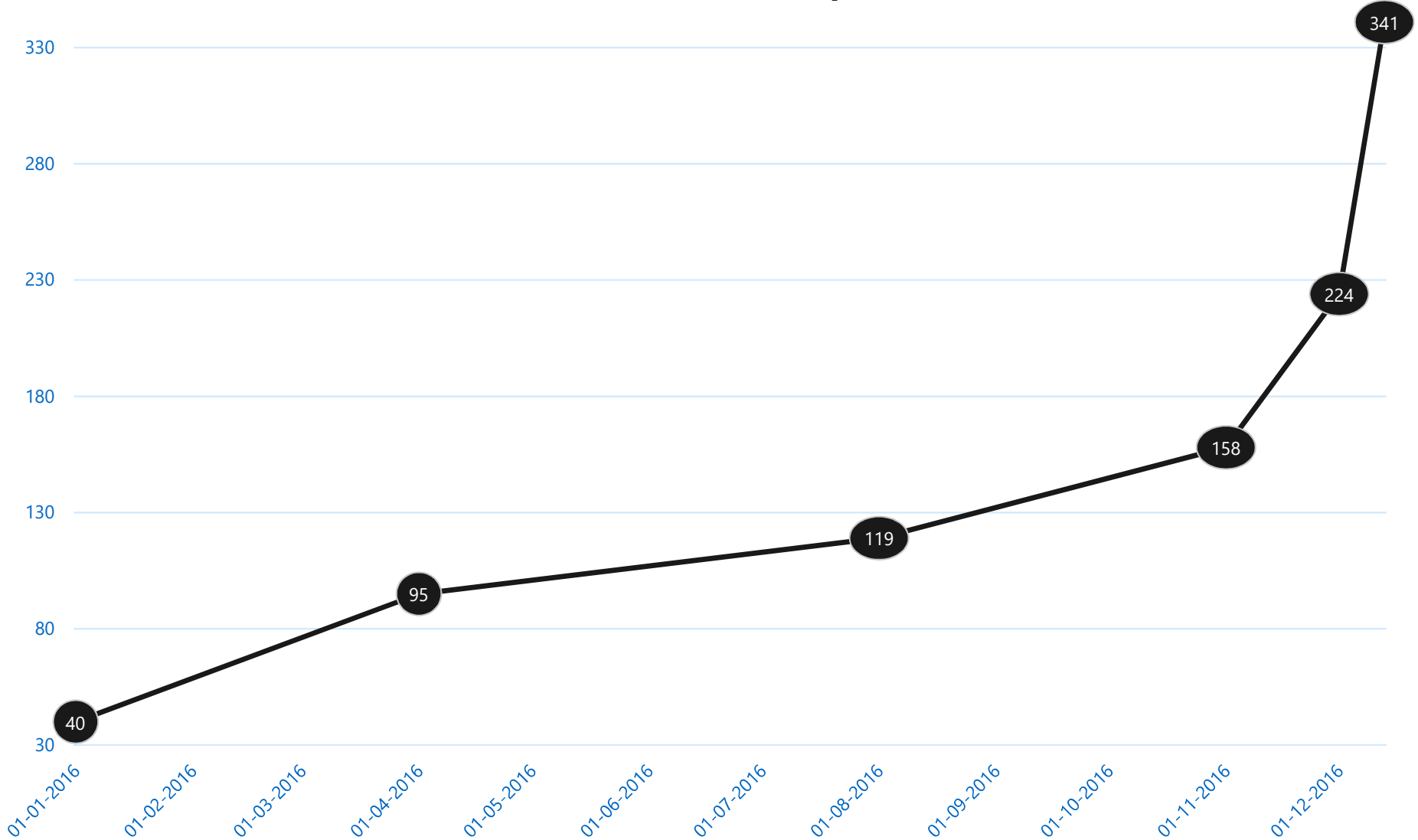


Evolution



- The purpose was to create an easy and cost-efficient way for the Government institutions to digitize areas where there was not a sufficient business-case for developing new systems that could handle the numerous paper-based forms and applications.
- However, as I and other authorities discovered the possibilities with the Form Builder, the forms quickly became more and more advanced.
- This meant that new features, service and integrations had to be developed in order to support the growing interest and subsequently the rise in demands.

Number of forms in production



Two portals

The business portal

virk | Indberet

Søg på Virk | Indberet

Mest anvendte indberetninger

Fakturablanketten >
Send en faktura til det offentlige

NemRefusion - sygedagpenge >
Søg om refusion af sygedagpenge

NemRefusion - barselsdagpenge >
Søg om refusion af barselsdagpenge

Moms >
Indberet moms til SKAT

Det Offentlige Ejerregister >
Registrér virksomhedens ejeroplysninger

Start virksomhed >
Opret en virksomhed og få et CVR-nummer

Ændre virksomhed >
Registrer ændringer i en virksomhed

Lukke virksomhed >
Luk en virksomhed

mit virk

Log ind

Hjælp til log ind

Log ind for at:

✓ Få og give rettigheder

✓ Tjekke din digitale postkasse

✓ Se virksomhedens oplysninger

✓ Oprette genveje til indberetninger

> Læs mere om Mit Virk

The citizen portal

borger.dk

Digital Post

Min Side

Log på

Ny adresse
Meld flytning til CPR

Feriepenge
Få udbetalt dine feriepenge

Genveje

> Boligstøtte

> Pladsanvisning

> EU-sygesikringskort

> Søg SU

> Folkepension

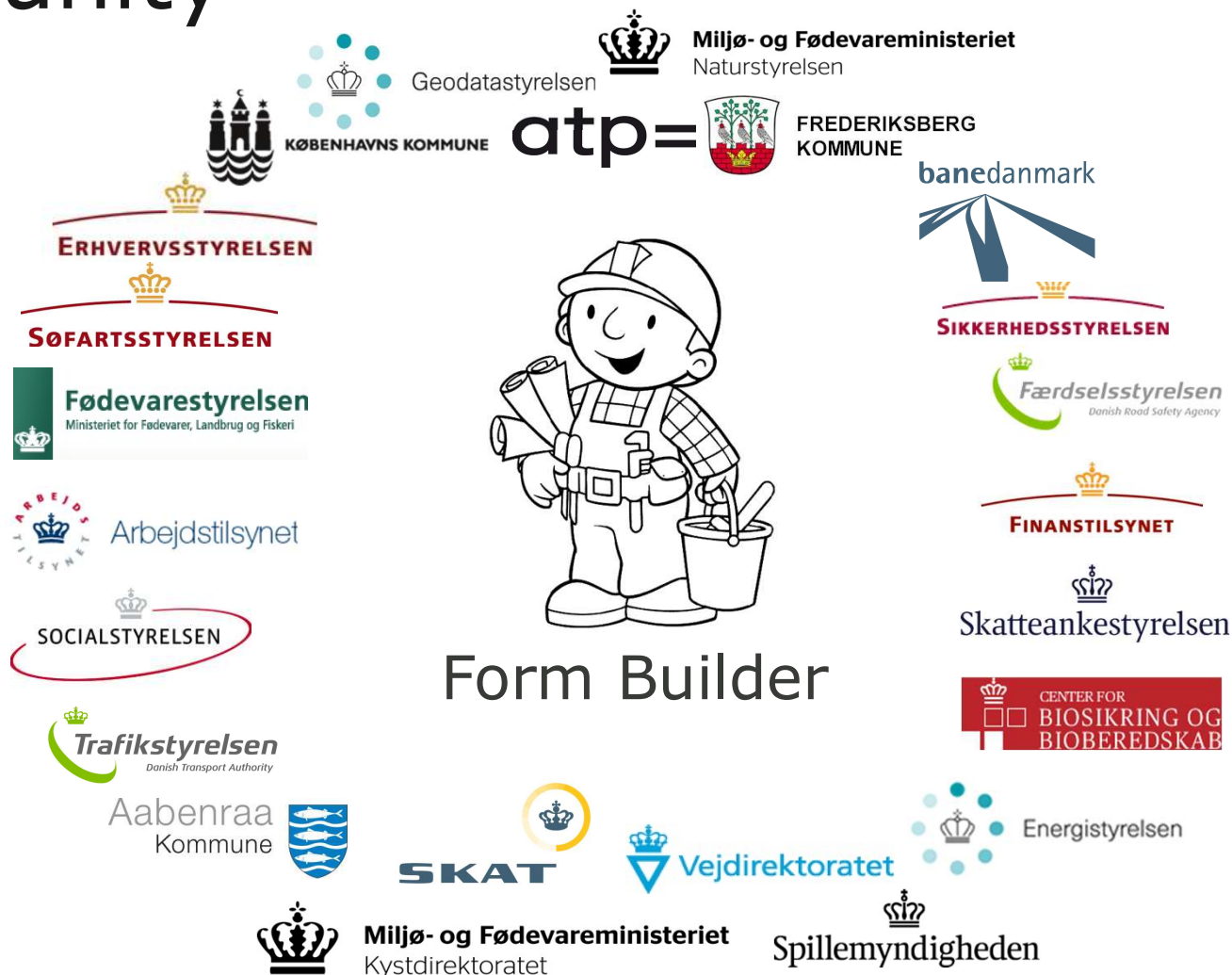
> Barsel

> Valg af læge

> NemSMS

The community

- Currently more than twenty state and municipal institutions have begun using the Form Builder thereby creating a community.
- All at varying stages in their use of the Form Builder and all with individual needs, requirements and ambitions.
- When accepting to use the Form Builder, each government authority signs an agreement and pays a yearly fee for maintenance.
- Invited to participate in meetings to discuss needs, issues and overall progress.



Advantages

- Well-executed forms are better for both the caseworker and the businesses.
- Easy to edit/update existing forms.
- Integrate to case management systems.
- Integrate data from own and/or other sources = higher data quality.
- Apply business rules and requirements in the form = less chance of error.
- Secure payment directly in the form.
- Collect digital signatures



Disadvantages

- Unable to create a digital dialog surrounding the case. One-way traffic.
- Challenges concerning login possibilities and validation of foreign businesses.



"The sky's the limit"

Why is the Form Builder a success?

- The product is simple and easy to use
- The need is evident
- The price is right
- And because the desire within the community to improve its services to the public is there and it is growing.

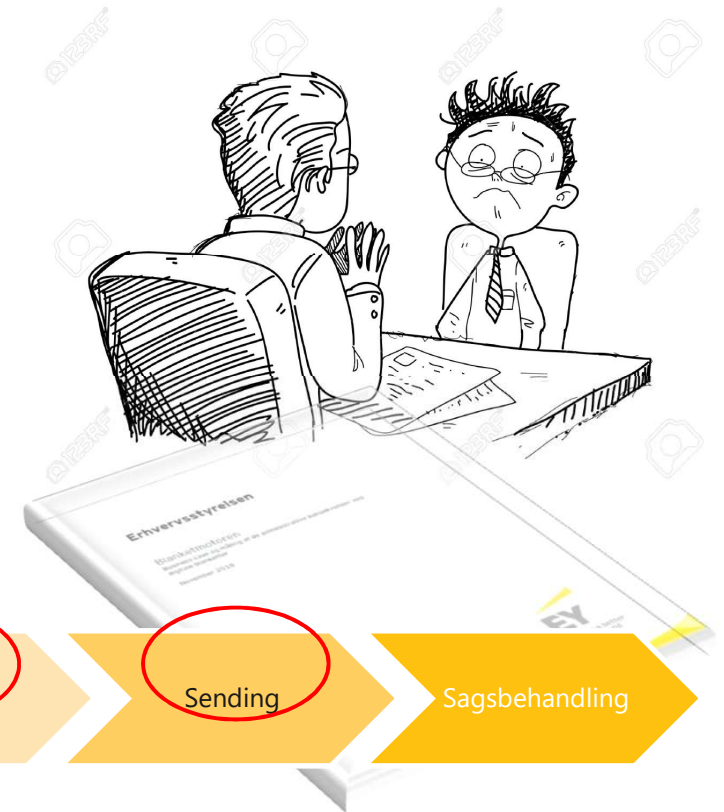


Business Case: Measure administrative burdens to cut red tape



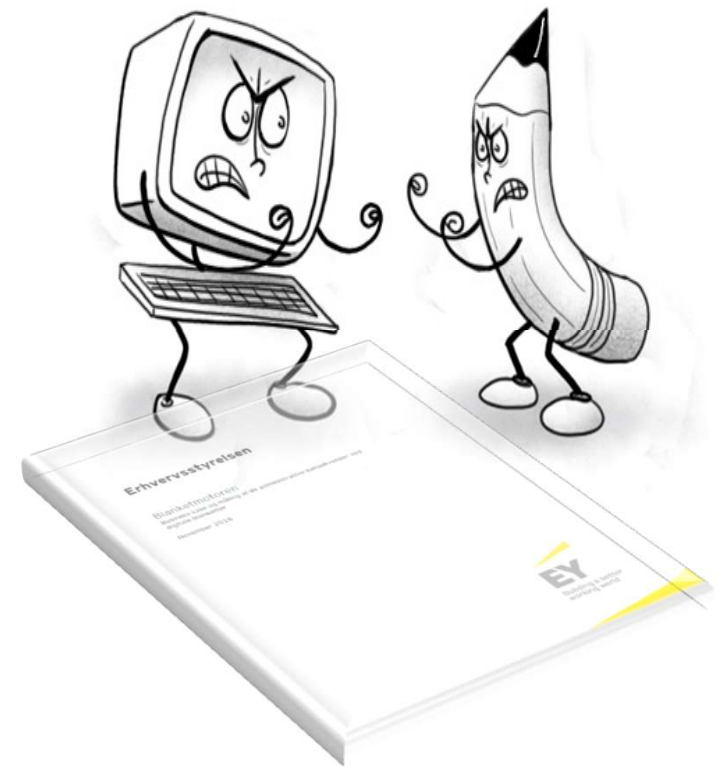
Purpose

- Examine administrative consequences for companies when transforming paper into digital solutions.
- Examine the potential of the Form Builder and digitization of 'left overs': 577 paper forms not yet digital
- How has the use of the Form Builder affected the use of the company's



Level of digitization

- Categori 1: Enter data digitally
- Categori 2: Data are validated while companies are filling in forms.
- Categori 3: Systemintegration



The result:

Cutting red tape:

- Category 1: 0.2 mio dkr.
- Category 2: 6.0 mio dkr
- Category 3: 8.8 mio. dkr
- Total 15. mio. dkr.



Category 3: As an example

- The paperforms were not matching the workflows of the companies.
- Reporting security issues.
- The companies save 25. minutes every time they use is.
- The companies wants more
- The digitization of the 'leftovers' will cut red tape by 60. mio. dkr year

Made integrations to
internal and external
registries

Integrated to
core
components

Payment
module

AP3

Signature
service



kategori 1, 2 og 3

"... But we recommend you to stay a little longer"

"It only takes you 20 minutes..."

Administrative lettelser ved indberetning af kategori 1-blanketter

Tabel 4 - Administrative lettelser ved indberetning af blanketter (kategori 2)

Beskrivelse af administrative lettelser	Administrative lettelser (mic. kr.)
Administrative lettelser ved indberetning af kategori 2-blanketter	6,0 mic. kr.

Tabel 5 - Administrative lettelser ved indberetning af blanketter (kategori 3)

Beskrivelse af administrative lettelser	Administrative lettelser (mic. kr.)
Administrative lettelser ved indberetning af kategori 3-blanketter	8,8 mic. kr.

Any questions?

