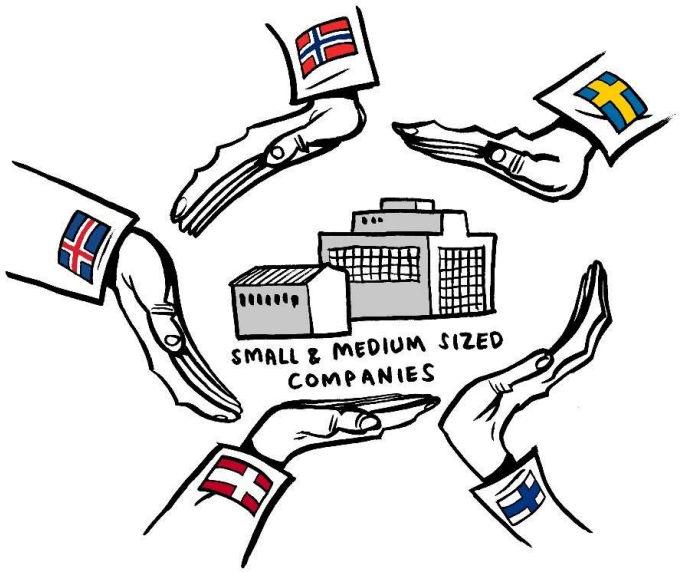
Nordic Smart Government

Einföldun rekstrarumhverfis fyrir atvinnulífið



13:30 **Smart Iceland - Smarter Nordics**
Bjarni Benediktsson, fjármála- og efnahagsráðherra

13:45 **Nordic Smart Government for Nordic Smart Businesses**
Kjersti Lunde, Danish Business Authority

14:05 **Capabilities and Business Processes for the NSG Ecosystem**
David Norheim, Norwegian Registration Office

14:25 **Why Structured Data?**
Vuokko Mäkinen, Consultant Finland

14:45 **NSG Legal Environment**
Franck Mertens, Finnish Patent and Registration Office

15:05 **From Government Programme to Automation in Tax**
Jenni Bärlund, Finnish Tax Administration

15:25 **Umræður**

16:00 **Fundi slitið**

Fundarstjóri: Jónas Magnússon, sérfræðingur hjá Skattinum

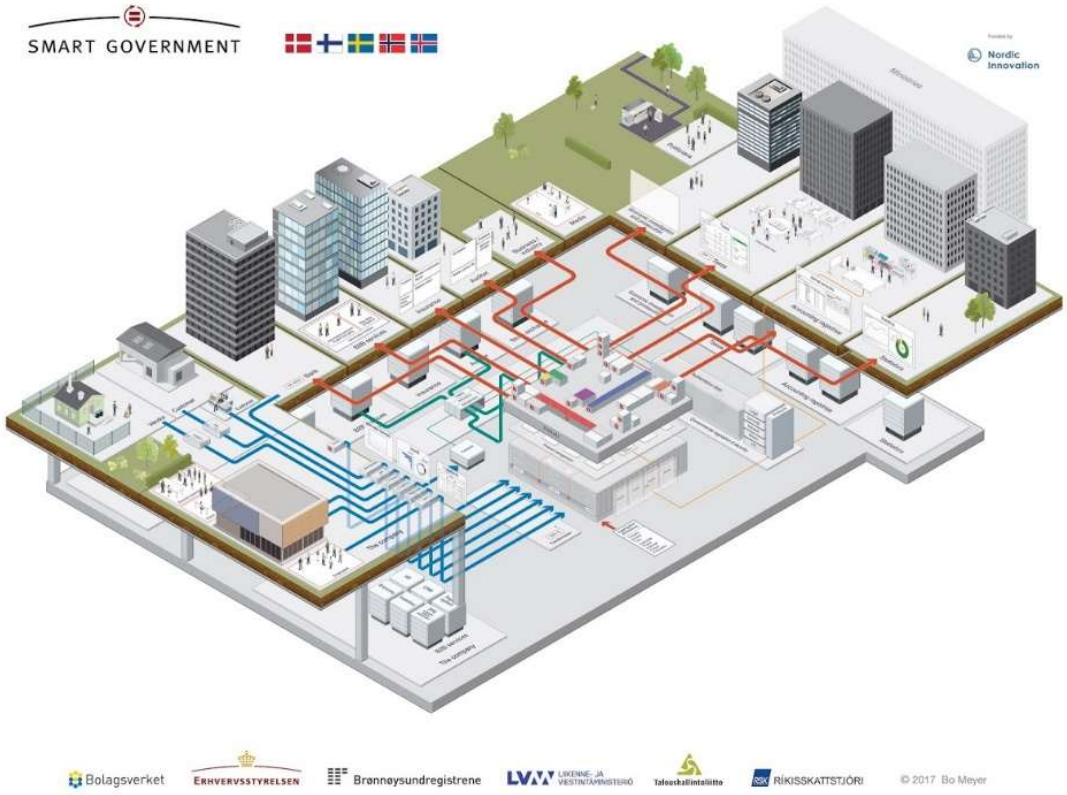
Nordic Smart Government

Nordic Smart Government for Nordic Smart Businesses

Kjersti Lunde, Program Manager

Vision

The Vision of Nordic Smart Government is to **make life simpler for SMEs** in the Nordic Region and to **increase innovation and growth** by digitalisation, automation and real time economic data

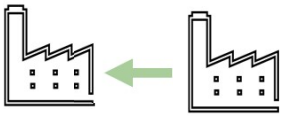


The Nordic region

- 2 mio. SMEs – more than 90 pct. of our businesses
- 19 pct. of our trade with goods and services is within the Nordic region
- The 11th biggest economy (BNP) in the world

The Problem: The lives of the SMEs: buying and selling - chain of manual processes, more or less digital – in digital silos and not standardised today

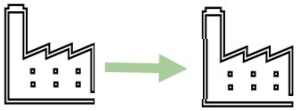
Order



Seller **Buyer**

Buyer places an order - email, phone, online

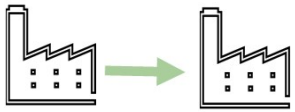
Invoice



Seller **Buyer**

Seller sends an invoice – paper, PDF, sometimes electronic

Receipt



Seller **Buyer**

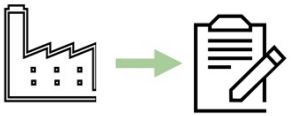
Often in paper format when you buy something directly in a shop

Bookkeeping

SME

- Manual typing
- Need of overview
- Payments without invoices
- Balancing with bank
- Bookkeeper/auditor

Reporting



SME **Authorities**

- VAT-reporting
- Annual reporting
- Reporting to Statistics
- Tax reporting

3rd parties

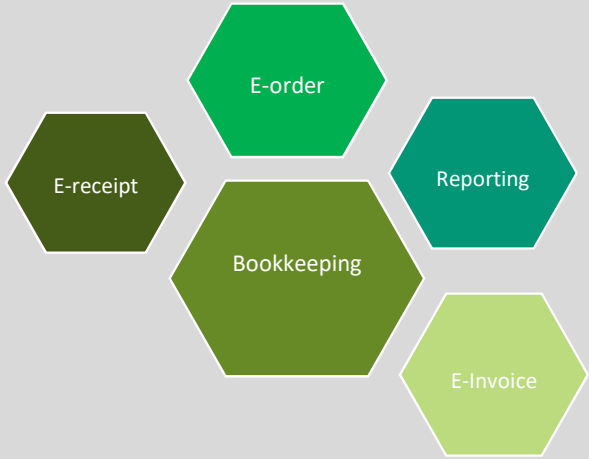
3rd parties

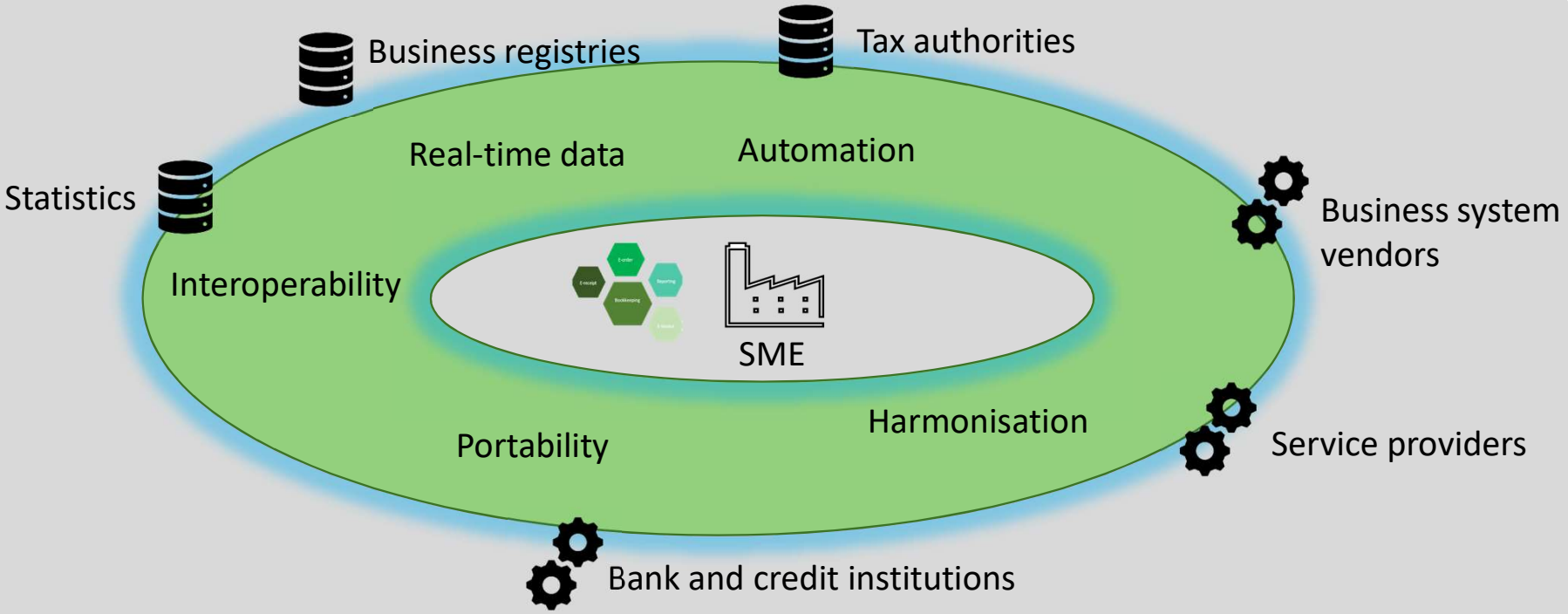
Credit information , bank statement, and other relevant economic information, compiled and sent manually

NSG vision

Automatic flow of structured and standardized data from e-catalogues, e-orders, e-invoices and e-receipts – and automatic reporting and share of real time data with third parties for credit assessment, business intelligence etc.

The solution: Ecosystem for sharing standardized and structured real-time business data





Benefits for the SMEs

- Reducing administrative burdens and saving time by automating business processes
- Increased transparency in the market and increased trust in business partners
- Business intelligence
- Simplifying cross-border business via aligned standards and automated VAT
- Increased access to smaller credits for SMEs, as administrative time on loan applications will be considerably reduced
- The value of making the Nordic SMEs economic data available to creditors and other third-party service providers for innovation is estimated to be 25-27 billion Euros annually from 2027 (EY 2018)
- The Danish National Bank estimates that manual processes related to invoicing cost Danish businesses up to 3,5 billion DKK annually

Benefits for authorities, creditors and business system vendors

- **Authorities**: Better and more timely information for statistics, policy and regulation, as well as for service, compliance and control
- **Banks and creditors**: detailed real time data for improved credit assessment
- **Business system vendors and service providers**: Access to quality data for product development (innovation)

Nordic Smart Government roadmap

An action plan for implementation of the ecosystem, to be delivered to the Nordic Ministers of Business, Copenhagen September 2020

- Initiatives to spread uptake of structured data (e-documents) among the SMEs
- Regulatory changes to remove barriers for automated and consent-based flow of data
- Guidelines that protect SME's needs and enforce fair sharing of data and ensure efficient competition in the market.
- Capabilities of business systems and actions to ensure interoperability and portability
- Governance model for an effective collaboration between the actors that enables up-to-date development and implementation in relation
- Based on user principles protecting SMEs needs for control of data, simple sharing of data and possibility to change service providers and choose tailormade services

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Thank you!

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Capabilities and processes

Presentation to the Islandic stakeholder group

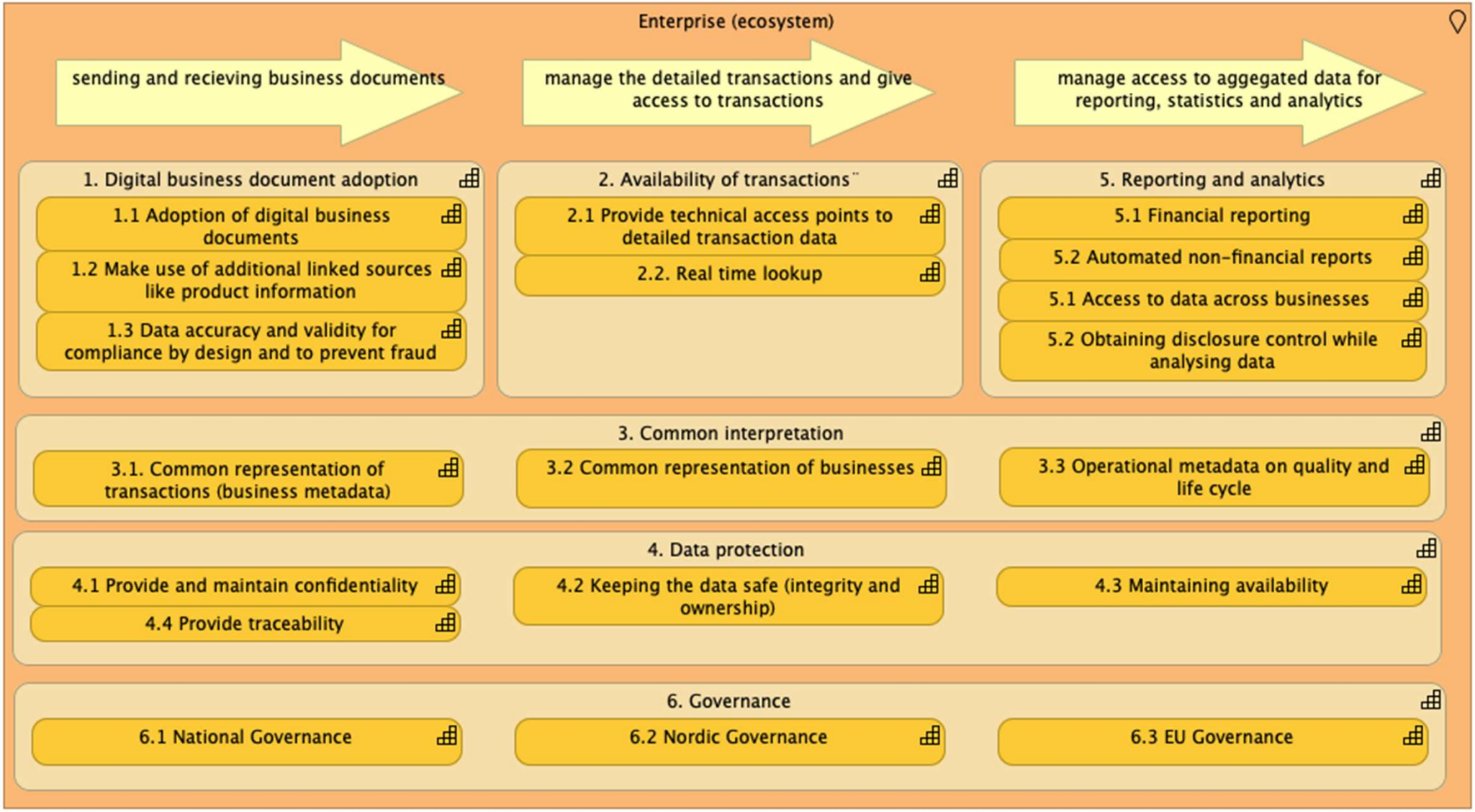
David Norheim, Brønnøysund Register Centre

Nordic Smart Government

Capabilities

Identifying what capabilities that needs to be in place for an ecosystem where financial data is shared without friction

- Capabilities forms the foundation for a set of actions (about 100) that are grouped into bundles in a road map.
- The actions are to be executed by various actors
  - public governments
  - business system vendors
  - standardization organizations etc.


Enterprise (ecosystem)
sending and recieving business documents
manage the detailed transactions and give access to transactions
manage access to aggegated data for reporting, statistics and analytics
1. Digital business document adoption
1.1 Adoption of digital business documents
1.2 Make use of additional linked sources like product information
1.3 Data accuracy and validity for compliance by design and to prevent fraud
2. Availability of transactions
2.1 Provide technical access points to detailed transaction data
2.2. Real time lookup
5. Reporting and analytics
5.1 Financial reporting
5.2 Automated non-financial reports
5.1 Access to data across businesses
5.2 Obtaining disclosure control while analysing data
3. Common interpretation
3.1. Common representation of transactions (business metadata)
3.2 Common representation of businesses
3.3 Operational metadata on quality and life cycle
4. Data protection
4.1 Provide and maintain confidentiality
4.4 Provide traceability
4.2 Keeping the data safe (integrity and ownership)
4.3 Maintaining availability
6. Governance
6.1 National Governance
6.2 Nordic Governance
6.3 EU Governance

The lives of the SMEs: buying and selling - chain of manual processes, more or less digital – in digital silos and not standardised today

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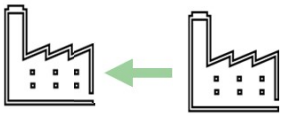

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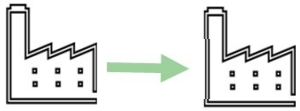
Buyer places an order - email, phone, online

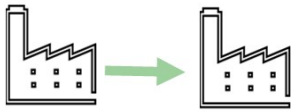
Invoice



Seller **Buyer**

Seller sends an invoice – paper, PDF, sometimes electronic

Receipt



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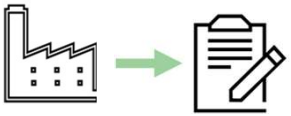

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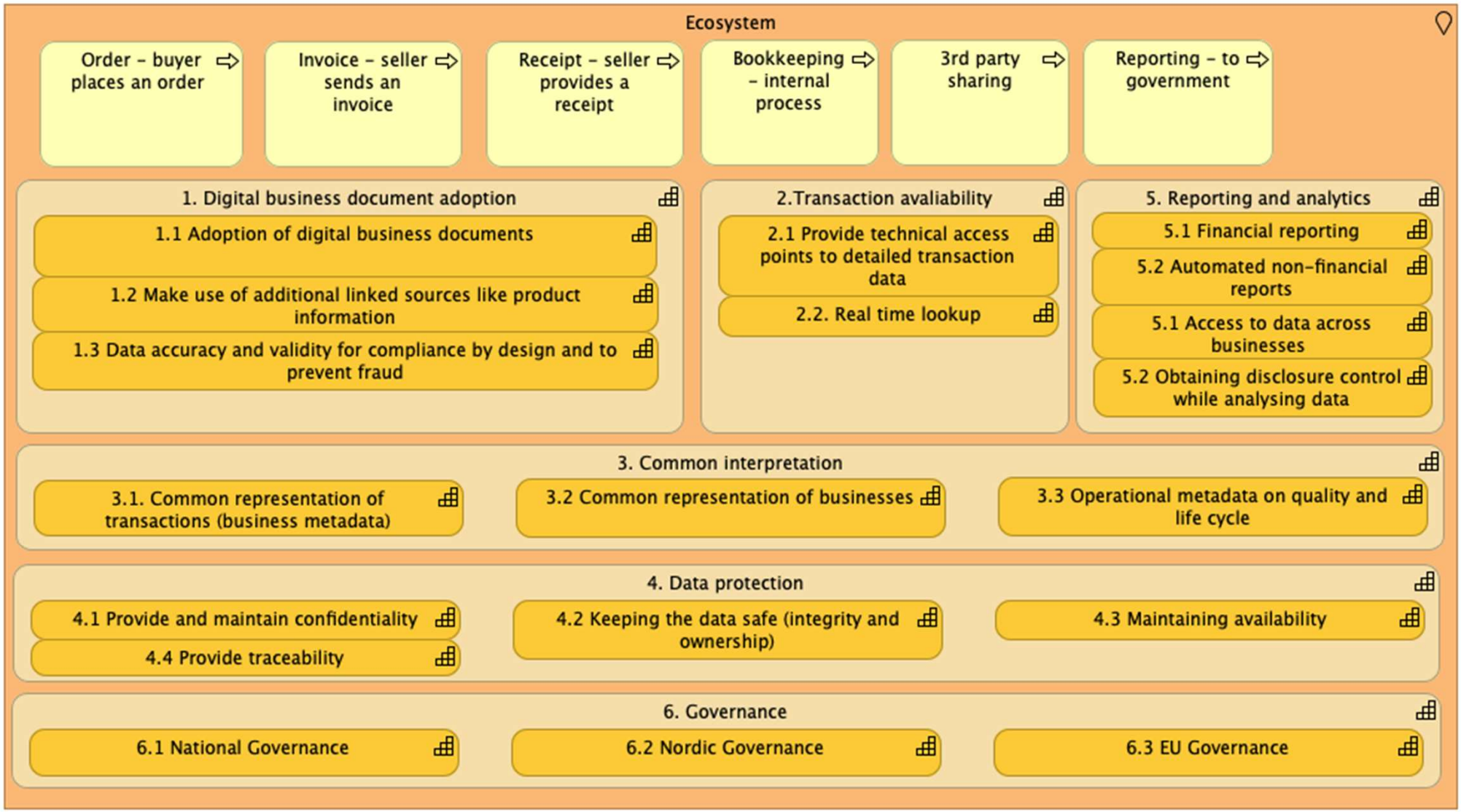
Capability areas

CORE	 Business document adoption	 Transaction availability	 Reporting and analytics	 Governance
SUPPORTING	 Common interpretation	 Data protection		


Ecosystem
Order - buyer places an order
Invoice - seller sends an invoice
Receipt - seller provides a receipt
Bookkeeping - internal process
3rd party sharing
Reporting - to government
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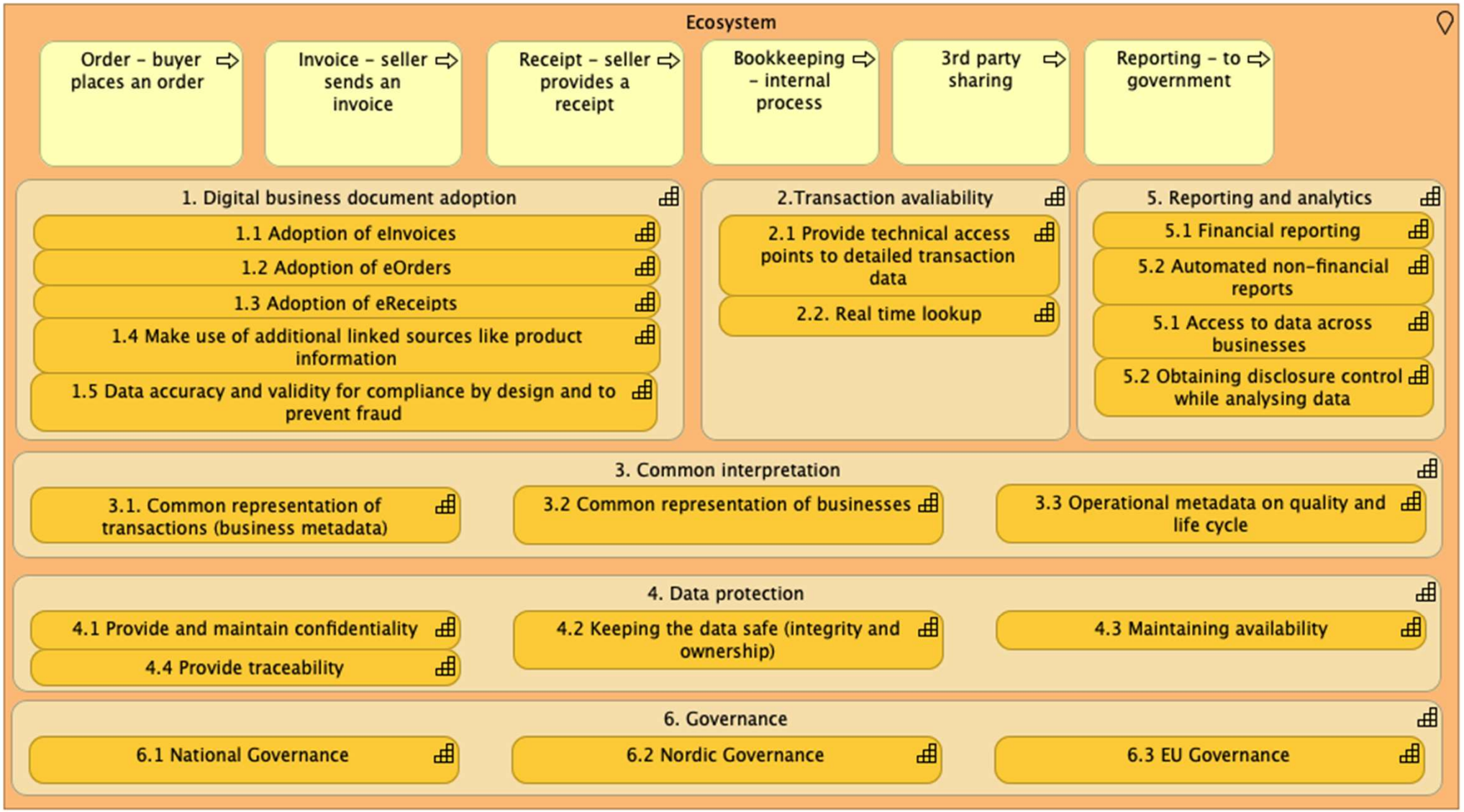
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1. Digital business document adoption

Challenges

- Slow adoption of EU BIS eInvoicing in B2B
  - Sectorial legacy formats (e.g. EDIFACT) for business documents*
  - Several existing eInvoicing formats across the Nordics
  - Low political support for regulation in B2B
  - Accounting agencies consider eInvoicing a challenge to their business model
  - Business case of digital business documents are not well communicated to the SMEs
  - Asymmetry when it comes to the benefits of sender leads to ignorance
- Missing eReceipt standardization
  - does not receive the same push from public procurement
- Lack of validation and integrity services for business documents especially to prevent fraud
  - National differences, also in wether this should be done by the public or private sector
- Digital product information on the rise; a missed opportunity?
  - Relevant for VAT reporting
- Other business documents should be considered evidence of a transaction*
  - e.g. orders in combination with contract

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2. Transaction availability

Challenges

- Disruptions in business models
  - new actors are providing banking and accounting services?
  - Rise of low cost accounting system actors that challenge the larger business systems
  - Call for “open accounting”
- Increased value in real time data for a number of services in private and public sector
  - instant access to early obligations (transactions accepted but unfinished in bookkeeping process)
  - 75% of the business systems vendors consider standard APIs as the way to reduce integration costs
- Missing global standard for representing transactions (interoperability)
- Portability formats exists only in two Nordic countries
  - 63% of ERP-vendors say portability - always or often - is a problem,.
- Move to cloud infrastructure
  - However, national regulations require domestic hosting

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3. Common interpretation

Challenges

- Lack of common semantics carries a cost when it comes to integration, and a barrier for adoption of new fintech services.
- The standards that exists, national or national adopted standards, have strong limitations when it comes to common semantics
  - SIE is only adopted in Sweden
  - SAF-T is an OECD standard but big differences in the countries that have implemented it
- XBRL GL is considered complex
- Different (or missing) standard chart of accounts inhibit nordic sharing
  - 100% of the ERP vendors - agree or strongly agree - that this and different processes is a major obstacle for going into business in another Nordic country
- Core information about Business across the Nordics is not harmonised
  - national terminology varies, and implementation of EU standards in domestic services are weak

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4. Data protection

Challenges

- Authentication and authorization of businesses across the Nordics is still a problem
  - harmonization is needed
  - consent will be used in B2B, need a common approach which allows for recall
- Providing confidenciality and integrity of the transaction is a major concern
  - need a common apporach to identify and protect trade secrets, personal information and insider information
  - 100% of the business system vendors agree that the company owns their data, however sharing detailed data with company's partners is a major challenge. What are the responsibilities
- Ensure avaliability of both current and historical transactions regardless of business system, and vendor going out of business

5. Reporting and analytics

Challenges

- The reporting formats varies across Nordics
  - Three nordic countries (FI, SE, DK) have selected XBRL as their reporting format.
- Automated reporting of financial reports requires a well established standard chart of accounts.
- For analytical use, privacy must be built into the solutions from the start, and disclosure control must be proven
- Product information give rise to a automation of non-financial reporting
  - In many industries the businesses report non-financial data to document compliance with environmental or food legislation, chemical registers and other
- Access to data across businesse in a distributed architecture requires eAdressing,
- Users consent for analytics will create skews in the sample of businesses, and challenge the quality of the analysis

6. Governance

Challenges

- Each country needs to have governance in place to implement the road map and follow up on country specific actions.

- **Nordic governance is needed to follow the milestone plan and if all countries are going to be ready where the milestone was set.**

- European governance is needed to influence standardization, regulations and infrastructure needed for NSG at EU level

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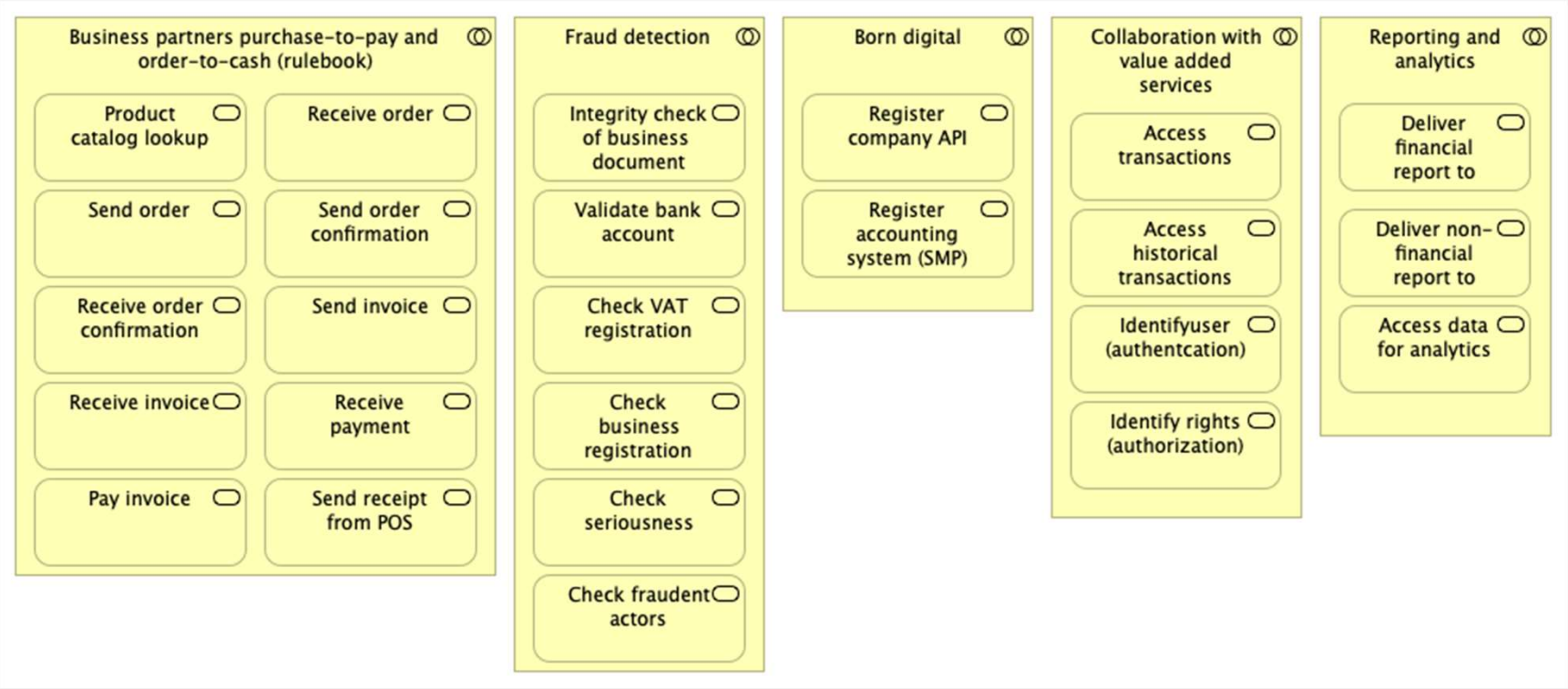
Business Services



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100 identified possible actions that will increase the capabilities are furthermore categorized into about 30 bundled actions.

EXAMPLE:

A bundle with four possible actions which individually will improve capability 1.1

B. Increase SMEs use of digital business system - and ability to exchange eInvoices

1.1.8	Demand a certain group of companies to use digital accounting systems. E.g. remove the minimum capital requirement for limited companies, but demand a digital accounting system
1.1.9	Making sure business system (accounting system) fulfill a set of requirements
1.1.10	Enable registration of business directly from business systems (accounting system, banks or other) (“born digital”)
1.1.11	When registering a business, enable registration for an automatic electronic document exchange, e.g. in the OpenPeppol SMP

Short term bundles (2020-2023)

- Adoption of eInvoices - implementation in business systems and extending regulations beyond public procurement for B2B
- Increase SMEs use of digital business system - and ability to exchange eInvoices
- Adoption of eReceipts - Receival of eReceipts in all business systems
- Adoption of digital product codes
- Integrity in the business document exchange
- Trusted services to enable and increase secure business
- Standardize access to business systems transactional data (technical interoperability)
- Standardize content of business system transactional data (semantic interoperability)
- Common representation of base registry data on businesses (semantic interoperability)
- Maintain confidentiality and availability of business system
- Generate and automate financial reports
- Permanent Governance for Nordic Smart Government: National, Nordic and EU-level

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Challenge

How do we ensure stakeholder involvement related to the actions?

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Action 1.3.5 Access to a service that checks the validity of a bank account number against the company number

responsibility of the national teams

Establish a lookup-service for general use that can validate if a particular bank account is owned by the organization number. Nordics: We should be able to handle international account numbers as well in order for a Finnish company to validate a Danish company. Effects: reduce invoice fraud

impact and interest

	Stakeholder	NO	SE	DK	FI	IS
	General comment	Largely compliant - Being developed as part of the banking industry's shared customer registry	Non compliant - Need to look into the question further. Is it bank account number or "Swedish Bankgiro number"	Patly compliant - Authorities can check the main account (NemKonto)	Partly compliant- Private service f.ex OP bank	Partly compliant - Internet banks do this
Gov	Political	High interest				
Gov	Registry	High interest				
Gov	Tax	High interest				
Gov	Statistics					
ivate	SME					
ivate	Business system vendors	High impact High interest				
ivate	Accountants					
ivate	Auditors					

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Action 1.1.10 Enable registration of business directly from business systems (accounting system, banks or other) (“born digital”)

Establish a service where a company can be registered through an digital service (API).
Effect: This will move the ability to register a business into banks and accounting systems, which will automatically register the business’ accounting system in the SMP.
Nordic: ?

impact and interest

	Stakeholder	NO	SE	DK	FI	IS
	General comment	Relevant; on the road map for 2022				
Gov	Political	High interest[1]				
Gov	Registry	Decision maker High interest (funding required)				
Gov	Tax	High interest				
rivate	Statistics					
rivate	SME					
rivate	Business system vendors	High impact High interest				
rivate	Accountants					

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In Norway

public-private sector development - portfolios of actions in sectors (independent of NSG)

Finance OPS (DSOP)

- Starting a business digitally (public)
- Bank account/company validation (private)
- Consent based access to accounting data
- Know your trading partner

Finance Norway, Tax admin, Labour and Social admin, Police, Business registry, Dig. directorate

Agricultural OPS

- Confidentiality of transactional data (trade secrets)

Agricultural Data Flow, Food authority, Agr. university, Business registry

Seafood OPS

Norwegian Seafood Federation, Food authority, Dir. of fisheries, Business registry.

Building industry OPS (Opptrinn)

- Machine readable product information

Federation of Norwegian Building Industries, Business registry, Building auth, Design univ.

Stakeholders: Business system vendors

Digital solutions need to be a part of the digital ecosystem and support real-time data between a variety of system and authorized parties. The ecosystem needs to support automated processes to increase quality. Since business system vendors handles the data owned by the SMEs, they are one of the most essential stakeholder group. The program has worked with identifying what needs to change in the handling of the data in the business systems.

Business systems in the Nordics has given their input on the work of identifying actions where the business systems need to change in the handling of the data. Representatives from NSG have had several one-to-one meetings with business system vendors across the Nordics. In general, business system vendors are positive towards the vision. The main findings are*:

- They all support NSGs vision
- Increase adoption of eInvoices
- Data should be available through standardized APIs
- SMEs should own their own data when changing business system vendor
- It should be easier changing business system vendor
- Accounting at the general level before the detailed bookkeeping
- Agreement and order as evidence
- The government should offer a validation services
- Responsibility and roles regarding business secrets and personal data

* These findings are based on Norwegian interviews with Norwegian business system vendors and needs cross-Nordic validation


Thank you for your patience!

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Why structured data?

Vuokko Mäkinen

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Structured data development in Finland; the beginning

Big company 1

Electronic messages:
Orders
Order confirmations
Invoices
Etc

Big company 2

EDI

From 1960s

Any challenges?

- SME vendors

Small companies couldn't use expensive point to point connections and systems (EDI)

All transactions had to be processed on paper

Manual work

Slow processes

Solutions!

- developing new electronic infrastructure

- Collaboration:
  - Big companies
  - Banks
  - Government

➡ Verkkolaskufoorumi.fi

xml

- eInvoice taxonomies were developed
- Service providers network (operatiors) started
- Banks joined the intermediators network and developed their own taxonomy for eInvoices

eInvoicing started in 2000

Forced by big companies demanding eInvoices

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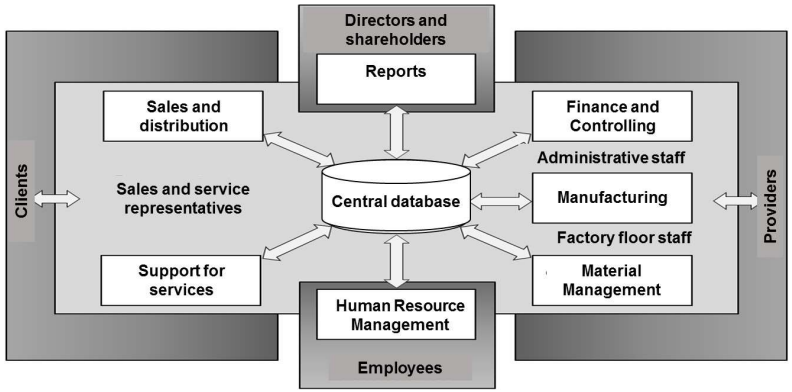
What about the SMEs ?

Why they don't use eInvoices between each other...



systems are designed

according to processes

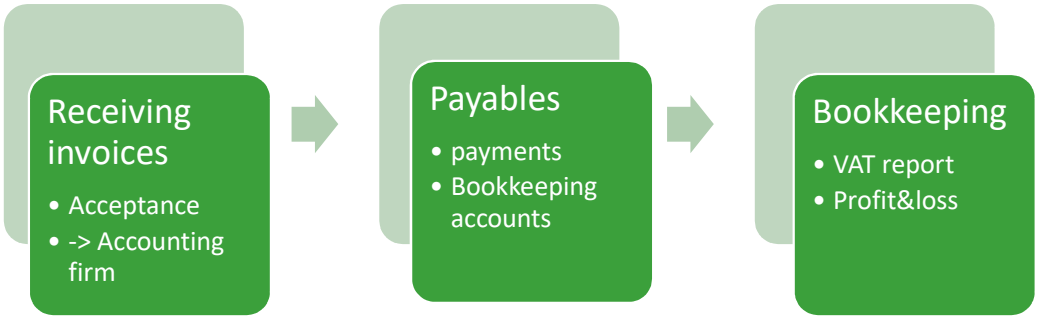
No processes... just work

Lack of proper tools

Sales process is seldom the problem, most companies use invoicing software and are able to report sales

As in big companies

procurement prosess is crucial also for SMEs



No product information

Stock management

Profitability calculations

Tool : Excel

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Structured data is a platform for a new generation of solutions

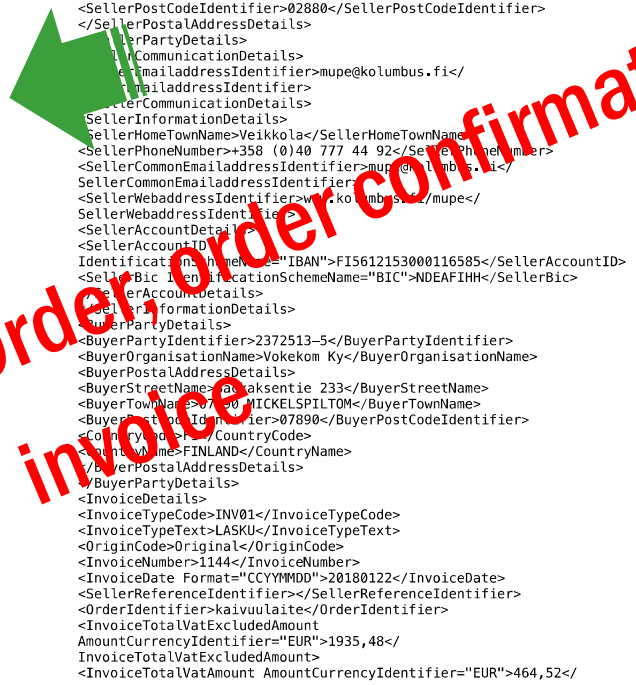
Create and maintain vendor information

-company ID,

- addresses,

-bank account

- etc.

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<InvoiceTotalVatAmount AmountCurrencyIdentifier="EUR">464,52</
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Reuse product info

Product ID, -name,

amount of goods,

VAT rate/amount,

Price/unit, etc.

VAT info -> Cash flow Reports

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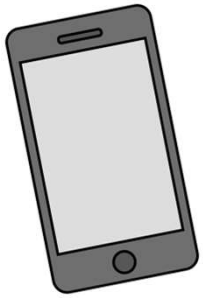
By reusing data in eDocuments:

- Profitability calculations
- Stock management
- Product info lookups
- Daily base cashflow

JUST LIKE THE BIG ONES



With handy tools while working

EU Semantic data model of the core elements of an electronic invoice EN 16931-1:2017

- Invoice line identifier
  - *(Item identifier)*
- Item name
- Invoiced quantity **MANDATORY**
- Invoiced quantity unit of measure code
- Invoice line net price (without VAT)
- VAT category code
- VAT rate (%)

  - *(invoice line charges, other taxes than VAT)*

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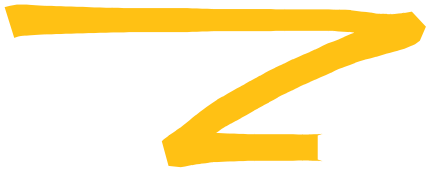
Let’s make it happen!

- DATA will be available
- DATA could be restored for reuse
- New SOLUTIONS could be developped

SMEs will do
better business



Goverments will
receive better
information

Thank you

Vuokko Mäkinen

Nordic Smart Government

NSG Legal Environment

Nordic Legal Analysis

Franck Mertens

Teamleader, lawyer

Enterprises and Corporations, Legal Unit

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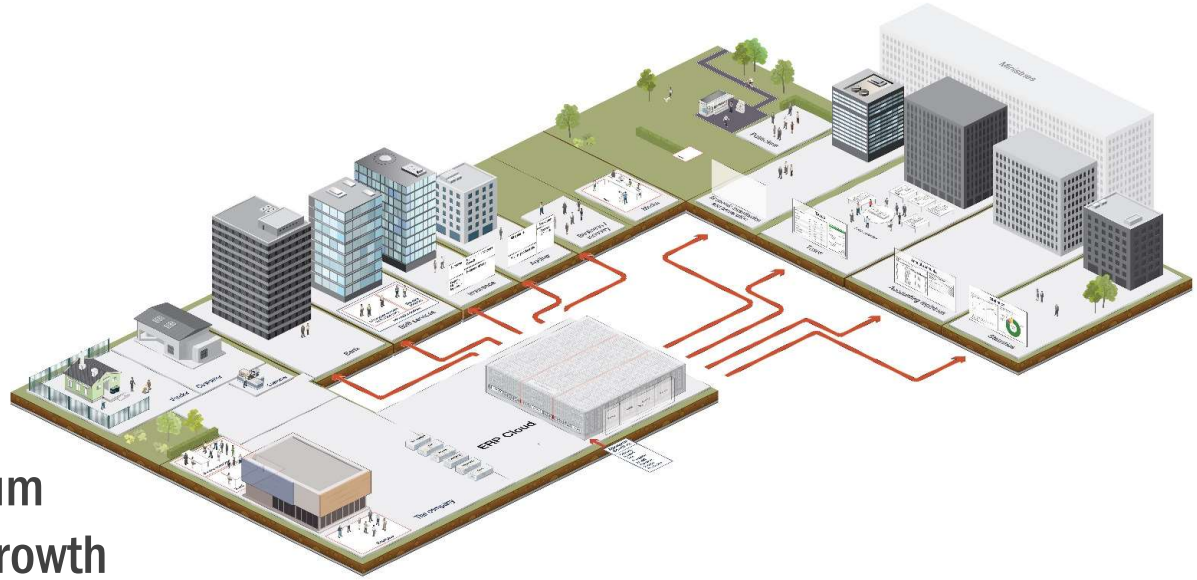
Nordic Smart Government 3.0



VISION

Simplify the administration of small and medium sized enterprises in Nordic region and create growth by effective and innovative use of data, digitalisation and automation.

AIM

To present a road map with regulatory and technical requirements for implementation in public and private system – across the Nordic region

Estimated effect 25-27 billions euro/yearly from 2027

Nordic Legal Analysis

- Quick overview (the Wh's)

- What: Legal Analysis
- Who: KPMG (Finland)
- Where: Countries participating in NSG (incl. EU)
- Why: To identify possible legal barriers for NSG's vision
- (W)How: Questionnaires, use cases, national experts etc.
- When: Expected time of delivery:
  - Part 1: Week 7, 2020 (KPMG analysis)
  - Part 2: Week 12, 2020 (Legal amendments)

SME ownership over its data in business systems

Data ownership – what does it mean?

Laws do not typically designate an “owner” for data. It is more accurate to describe that a company has :

1) obligations to **produce data** for legal reasons (bookkeeping data, compliance data, financial reporting data, employment data);
2) obligations in relation to **keeping, storing and securing the data** of which the company is in possession;
3) obligations to **deliver certain data for public authorities**;
4) obligations that **limit how the data can be legally used by the company**; these obligations arise from several laws, such as competition law, privacy laws and accounting laws.

This means that the company **can be described as the “owner” of certain data produced by it to run its business legally**. While the company has the ability do decide how it uses data “owned” by it, the use of data is always restricted by existing laws.

Data protection issues affecting the processing of business data (“GDPR”)

Limitations arising from the GDPR related to the sharing of personal data

The GDPR places the following limitations on the sharing of business data:

- Both the SME sharing and transferring the personal data and SME receiving the personal data as a **data controller must have a legal basis for the processing of personal data**.
- The SME processing personal data as a **controller must define a purpose for each separate data processing activity** and **must not process personal data for incompatible purposes**. Processing of personal data for **incompatible purposes requires the consent of each data** subject which can be challenging to obtain.
- In relation to sharing business data (that includes personal data), SMEs should ensure that **they only share such data that is relevant for the purposes of processing** and that the appropriate safeguards are followed in the transfer and sharing of data.
- The SME sharing the **personal data must inform the data subjects about the sharing of this data**. The recipient SME has to inform the data subjects about the processing of the personal data unless certain exceptions under the GDPR apply. The rights of the data subjects must also be fulfilled by the **SMEs acting as controllers**.

Overall findings – Status

Preliminary findings for enabling the NSG vision:

"The current legislation concerning business data does not prevent a common digital infrastructure as the legislation is mostly technology neutral and provides flexibility for the sharing of business data."

Enablers

- No laws for interoperability nor data portability
- Storage abroad allowed subject to safeguards
- Electronic VAT reporting allowed
- Sharing of data between authorities possible in some countries

Overall findings – Status

Preliminary findings concerning barriers for the NSG vision:

" The current legislation concerning business data does not contain rules on interoperability and data portability for SMEs' business data. Furthermore there are no perceived incentives for SMEs to share business data electronically. The lack of automated reporting and uniform standards for business data also place limitations on the fulfillment of the NSG vision."

Barriers

- Lack of interoperability of business systems
- Lack of incentives to use electronic form between SMEs
- Lack of automation of reporting
- Lack of uniform standards and requirements for business data
- SMEs are subject to high transaction costs that prohibit development

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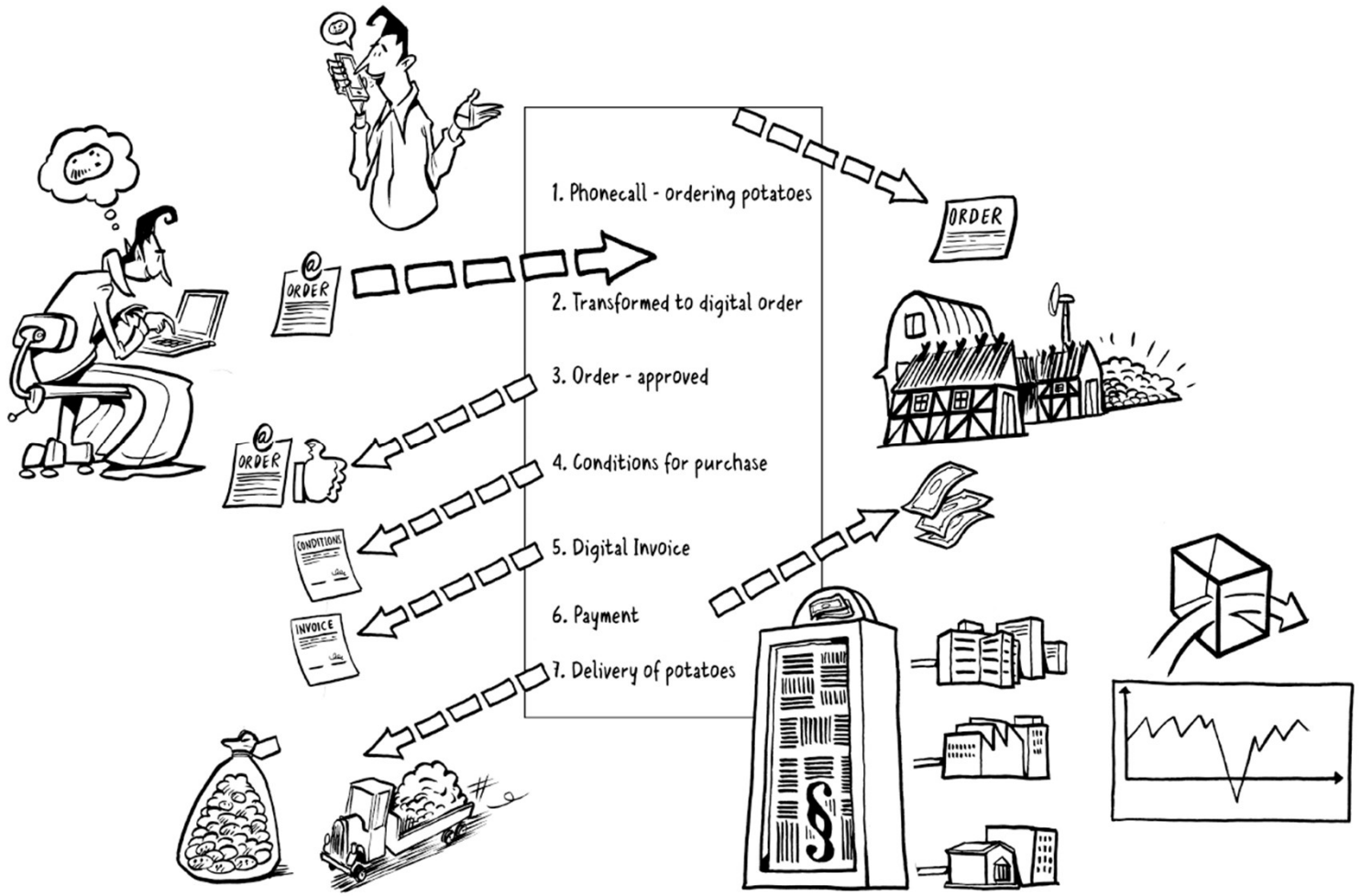
The Business Transaction: End-to-End service



Transactions are made up of multiple documents, flowing back and forth from buyer and seller

In the Nordics today, most of the ”chain” of B2B documents is just as analogue as the potatoes

Much of the data is typed in multiple times

With structured data in eOrders and eInvoices, both the trading SMEs and public authorities could save time and money

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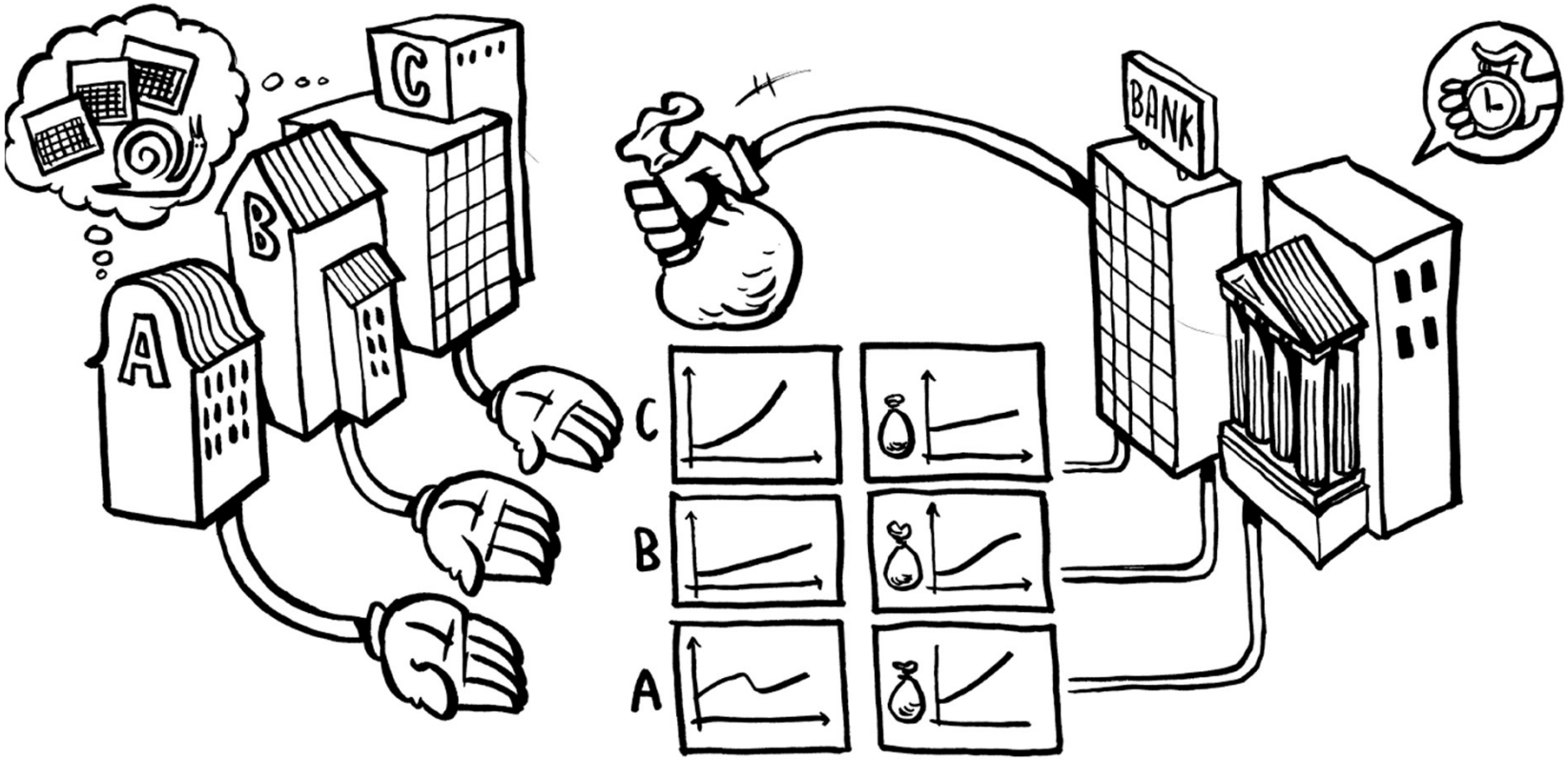
Growth and Liquidity for SMEs



SMEs often need liquidity to grow - and often they need it quickly. Time-to-market is of the essence: Getting a new client or bidding for public tenders means that the SME needs to gear up, get more man-power on board, ensure the stocks are well-supplied, etc. However, getting credit for ramping up your business is neither straight-forward nor quick today.

Structured business data in near real time is essential for moving credit in a timely manner

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Means of achieving the NSG vision

- Cost of regulating
  - Drafting of new legislation or amending existing laws requires more time and costs compared to administrative decisions and guidance issued by authorities
  - Supranational legislation. the costs of drafting legislation can become considerable in addition to the need to find common acceptable and feasible content for the legislation
  - Purely national legislation can be incompatible with the legislation of other countries
- Method of regulation
  - Vision can be achieved trough various different forms. Existing European level and national standards as for consideration
- A) Binding regulation
  - Binding for the relevant stakeholders on which case the stakeholder cannot agree otherwise contractually. This ensures negotation power to the SMEs
  - Binding regulations increase legal certainty
  - Less flexible business environment and legal framework
  - A challenge as technology and business needs of companies are constantly evolving.
- B) Non-binding regulations with financial incentives
  - Such as possible tax reliefs or streamlined reporting duties. This might not be so relevant for each SME
  - Might result in uneven application of the regulation
  - Equal treatment
- C) Voluntary regulations
  - Increases flexibility
  - Reduces legal certainty
  - Lack of SEM ´s negotiation power

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Finnish findings

- Status

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Finnish findings – Status

Preliminary findings for Finland for enabling the NSG vision:

"Both the enablers and barriers for the fulfilment of the NSG vision are related to the lack of legislation and incentives to use electronic form in the processing of business data."

Enablers

- No major legislative limitations disabling the free flow of business data
- Accounting data may be stored outside of Finland
- No limitations to business data format
- No legislation limiting automation, interoperability nor portability
- Businesses own their own data (up for interpretation – no specific legislation)

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Finnish findings – Status

Preliminary findings for Finland concerning barriers for the NSG vision:

" Both the enablers and barriers for the fulfilment of the NSG vision are related to the lack of legislation and incentives to use electronic form in the processing of business data."

Barriers

- Lack of interoperability and data portability due to the lack of legislation
- Due to lack of legislation the free flow of business data depends on the negotiation power of SMEs
- Currently no automatic reporting between business systems and the authorities
- Lack of incentives to use electronic form B2B and B2G (voluntary basis)

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Swedish findings

- Status

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Swedish findings – Status

Preliminary findings for Sweden for enabling the NSG vision:

" National legislation does not set direct limits to the sharing and transferring of business data by SMEs to other third parties. This is dependent on the contractual relationship, confidentiality obligations and negotiation power between the parties."

Enablers

- No set formats for electronic business data other than e-invoices
- No limitations concerning interoperability
- No specific limiting legislation

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Swedish findings – Status

Preliminary findings for Sweden concerning barriers for the NSG vision:

" National legislation does not set direct limits to the sharing and transferring of business data by SMEs to other third parties. This is dependent on the contractual relationship, confidentiality obligations and negotiation power between the parties."

Barriers

- Accounting data has to be stored in
- Business data shall be stored in its original form
- The lack of interoperability in the business systems can be considered to be the greatest challenge in praxis to the free flow of data.

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Danish findings

- Status

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Danish findings – Status

Preliminary findings for Denmark for enabling the NSG vision:

" There is no specific legislation related to the business data in Denmark but there are limiting provisions in for example accounting law."

Enablers

- There are no major legislative limitations in Denmark that would disable the free flow of business data in the future
- Accounting material may be stored outside of Denmark as a main rule.
- There is no limiting legislation on automation, interoperability nor data portability.
- There is no specific legislation on the ownership of business data and this leaves room for interpretation favorable for SMEs.

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Danish findings – Status

Preliminary findings for Denmark concerning barriers for the NSG vision:

" There is no specific legislation related to the business data in Denmark but there are limiting provisions in for example accounting law."

Barriers

- The lack of interoperability in the business systems can be considered to be the greatest challenge in praxis to the free flow of data
- Due to the fact that there is no legislation providing that business system of the relevant stakeholders must be interoperable or that provide SMEs the right to data portability, there is lack of interoperability and data portability and as a result the free flow of business data depends on the negotiation power of the SMEs.
- No automated reporting from the business systems of the SMEs to the systems of the authorities.

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Icelandic findings

- Status

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Icelandic findings – Status

Preliminary findings for Iceland for enabling the NSG vision:

" There are no major legislative limitations that would disable the free flow of business data. However there are certain areas where the lack of legislation can result in lack of incentives for the stakeholders to ensure that SMEs' business data is freely shared. Also the lack of automated reporting can hinder the fulfilment of the NSG vision."

Enablers

- There are no major legislative limitations in Iceland that would disable the free flow of business data in the future
- Accounting material may be stored outside of Iceland for a limited period of six months as a main rule.
- There are certain national formats through which electronic invoices need to be submitted to the authorities based on the public procurement terms of the Icelandic state.
- There is no limiting legislation on automation, interoperability nor data portability and the businesses themselves own the business data, which leaves room for interpretation favorable for SMEs.

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Icelandic findings – Status

Preliminary findings for Iceland concerning barriers for the NSG vision:

" There are no major legislative limitations that would disable the free flow of business data. However there are certain areas where the lack of legislation can result in lack of incentives for the stakeholders to ensure that SMEs' business data is freely shared. Also the lack of automated reporting can hinder the fulfilment of the NSG vision."

Barriers

- Lack of automation
- The lack of interoperability in the business systems can be considered to be the greatest challenge in praxis to the free flow of data.

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Thank you

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From Government Programme to Automation in Tax

Jenni Bärlund - Finnish Tax Administration

Nordic Smart Government

- What is RTE?
- How NSG connects with RTE?
- What has Tax to do with both?
- Few words about VAT automation and the PoC

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What is Real Time Economy?

- RTE is an environment where all the transactions between business parties are
  - in digital format
  - increasingly automatically generated
  - and completed in real-time both from business and IT-processing perspectives
- For enterprises, public sector, and citizens this means, for example, that orders, order confirmations, invoices, and payments flow from system to system without delays
- This makes it possible to move towards
  - electronic archiving
  - electronic book-keeping
  - and automated accounting.
- The benefits for society at large are enormous – both in terms of productivity and environment.
- RTE is a joint development project between Aalto University School of Business and industrial partners.
- Real-Time Economy Competence Center operates at Aalto University School of Business.

Moving forward with the realtime economy

- Government programme states:
  - Business entities' financial administration should move towards fully automated processes by implementing eInvoice and eReceipt in structured form.
  - Tax Administration will be supported by legal changes and technologial means so that Tax Administration will be able to get automatically data from the platform economies for taxation
  - More detailed VAT reporting obligation will be investigated
- Status at the moment:
  - Tax Administration is an active actor in moving towards real time economy in co-operation with other public authorities and private sector

The goal is to make Finland real time economy pioneer

- Structured financial data
  - eInvoice and eReceipt, procurement and delivery messages (hankinta- ja toimitussanomat)
  - standardized financial statement
- Public Administration's common service platform, common infrastucture
  - responsibilities, progress and maintanence
  - identification and authorization: needs and solutions, quality, security, data transfer, data validation and data transformation
  - common codes and taxonomy (management, maintenance, common use)
- Legislation
  - legistlation changes to support the goal
  - identify and carry out the needed legislation changes to enable the progress

Why NSG?

- Digitalisation has the potential of serving many needs simultaneously
- Creating an ecosystem requires administrations to work together
  - tax authorities, statistics, state treasury and business registries, SMEs, service providers, creditors

- By collaboration we can acheive:
  - Reduced administrative burden and saving time by automating financial processes and reporting
  - Increased data quality - no more manual typing
  - Access to real time data (or close to) – as data may be efficiently shared
  - Better competition and a more effective Nordic market
  - Simplified and secured cross-border business thru common standard
  - More automated tax processes and better targeted controls

Result: Growth, innovation and more time to do actual business -> Positive taxpayer experience

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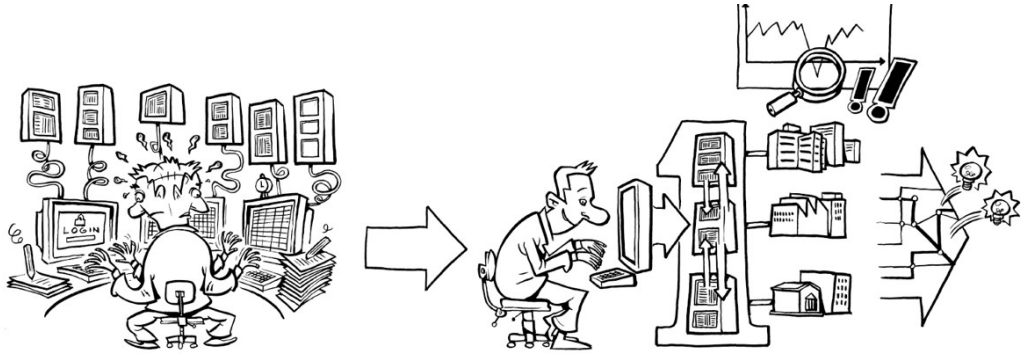
How NSG connects with RTE?



*The Nordic Smart Government ecosystem will provide **real time, detailed and structured data on demand**, and thus serves the different needs for data in both business and government decisions. The availability of **real time data in the ecosystem** opens up for new opportunities such as the development of new data-based products and services that can create value for both public and private actors.*

- so the goal is the same in Finland and in the Nordics!
- National actions that has to be made in each country to achieve the NSG vision will be implemented in the text RTE programme phase in Finland

What has Tax to do with both?

Vision

Best taxation – together

The Finnish Tax Administration is one of the forerunners of digital economy. We have integrated our services with external business platforms. Taxpayers do not have to concern themselves with taxes, because tax is collected at the same time as the taxable event takes place. Taxation has thus effortlessly merged into our daily lives. The tax gap has diminished and financing for society is on solid ground.

Our strategic objectives

Ensuring tax revenue

Fair tax assessment

Positive taxpayer experience

How we reach our goals

Analytics and AI

Automation

International cooperation

Interfaces, getting and using the right information

Operating model and skills

Management of new phenomena

Focused guidance and control

Effectiveness

Wide-reaching impact

Ensuring tax revenue

Fair tax assessment

Positive taxpayer experience

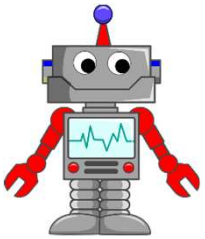
Digitalization's phenomena that challenges taxation

Globalisation

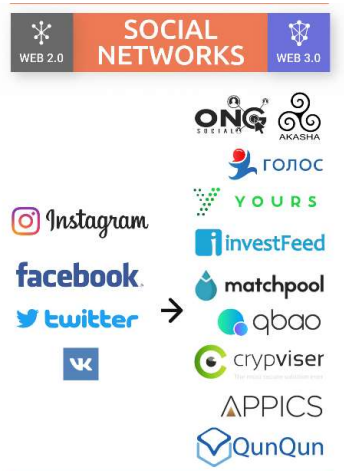
Payment methods are changing

UnionPay · American Express · Diners Club International · PayPal · Google Wallet · FP PayPoint · amazon payments · bitcoin · Authorize.Net · BluePay · DWOLLA · GoDaddy · Google Checkout · intuit · Maestro · ccnow · JCB · Liberty Reserve · Payza · eway · Skrill · PayJunction · Payoneer · ecoPayz · Square · MasterCard · PROPAY · VISA · ACH Payments · wepay · WebMoney · WOO COMMERCE · 2C2P · worldpay · adyen · Atos · bitpay · citibank · Klarna · Cirrus

AI as a tax planner

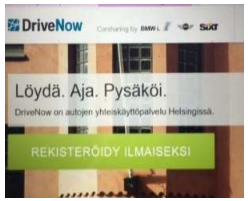


Blockchain decentralizes the data



Platform economy changes earning models

airbnb



UBER

Alibaba.com

freelancer

Business models are changing

VAT processing and Business taxation

- Moving towards more realtime and detailed level VAT data
  - automated tax reporting
  - less clarification requests to customer
  - more efficient tax control: right measures to each customer segment
- Business and corporate taxation's future
- - Goal is to digitalize corporate taxation as a whole
  - what is the minimum set of data that would be needed to process taxes
  - what is the optimal database
  - financial statements in structured format (XBRL) and the ablity to form tax returns based on the financial statement
  - indentifying the possible legislation change needs

NSG VAT PoC

What was the POC about?

- Can we automate VAT payable/receivable calculation without accounting details with NSG Sandbox invoice material?

Why did we do it?

- For businesses: automation can reduce the manual work and administrative burden. Real-time data is important to estimate cash flow and to get better insight about business.
- For regulators: structural VAT declarations, standard structural data enables automated audit, fraud prevention, data is more reliable

What was the goal?

- the goal was to show when accessing standard business data in real-time, the businesses and the regulators can be up to date about their VAT payables, cash flow, purchases and sales

What was the conclusion?

- Domestic basic transactions can be automated but some changes needed to comply with invoice requirement
- Across boarder transactions require short term and long term improvements
  - Can't be automated at the moment
  - Reporting requires that across border transactions are devided between goods, services and in certain cases also tringulation
  - To make PEPPOL standard more usefull for business and tax we need proposals for update and revision of the PEPPOL standard
  - Through co-operation common proposal for revision of the standard.

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Thanks for listening!