

Enterprise Architecture

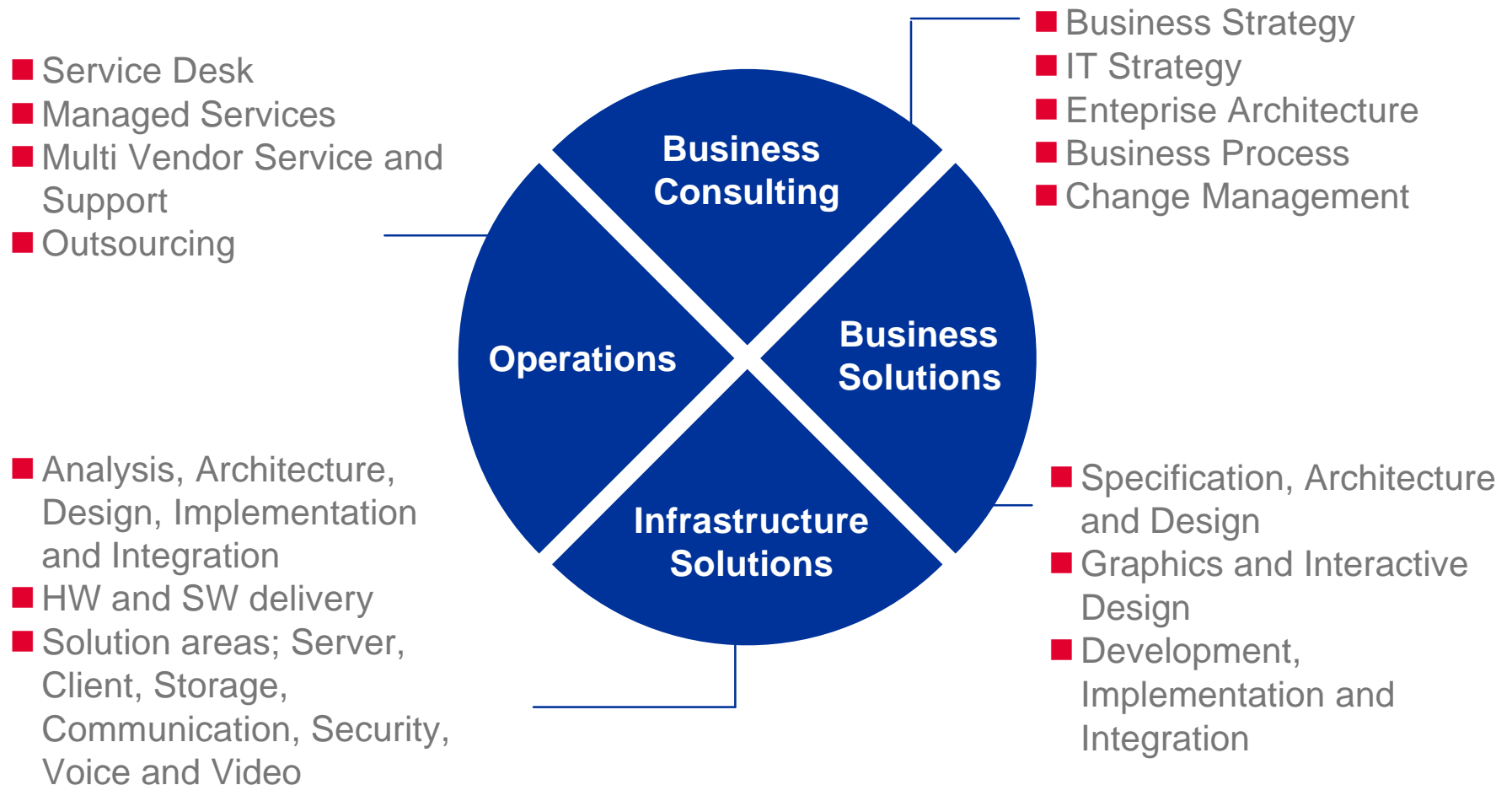
From vision to reality

Case story: Danish Commerce and Companies Agency

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Ementor



The client

Danish Commerce and Companies Agency (Erhvervs- og Selskabsstyrelsen)

- The Danish Commerce and Companies Agency (DCCA) is an agency under The Danish Ministry of Economic and Business Affairs. The responsibilities and activities of the agency take place within three main areas:
 - The administration of company and enterprise legislation.
 - The registration and disclosure of certain information and documents about companies, including company accounts.
 - Improving the conditions of the business community.
 - In all three areas the agency is involved in work at international level
- The agency is responsible of the administration and development of a number of legislative business acts including:
 - Companies Act;
 - Company Accounts Act;
 - Commercial Foundations Act;
 - The Act on Undertakings Carrying on Business for Profit;
 - Furthermore a variety of commercial laws applicable to certain types of business such as accountants, real estate agents, authorised translators, interpreters, and restaurants and hotels as well as the HomeService Scheme.

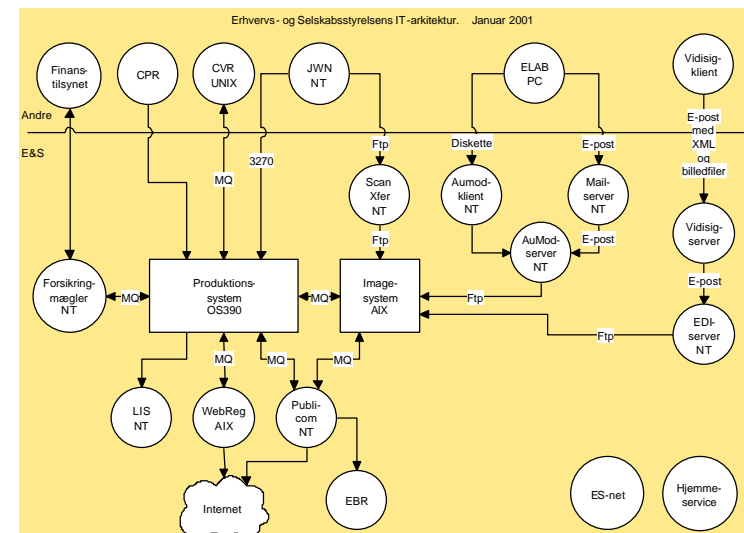


The setting

(As Is – pr. December 2001)

The setting (As Is)

- Core system had been developed for more than 15 years (1986)
- Key functionality had been re-written over the years
- Key business functionality had been added or duplicated in satellite systems
- Some of the key business processes had very little IT support
- Enhancements were project driven
- Some key systems had very few existing maintainers
- Due to bidding conditions most systems are from different vendors and were hence built to project specifications rather than a unifying strategy or architecture



The setting (As Is)

Business perspective

■ Core competencies

- Professional competency within the legislative realm
- Registration, control and publication of information within the legislative realm
- Development of projects, that makes it easier to do business in Denmark

■ Core processes

- Registration and control of certain business events for privately held companies
- Publication of certain information on privately held companies (fee / free)
- Ongoing development projects
- Ministry service projects
- Internal administrative processes

The setting (As Is)

Information perspective

■ Databases

- Like the main system they have been developed during the past 15 years:
- Several distinct databases
 - Main registry for company information
 - Main document registry
 - Web service databases (replicated/copied/converted containing parts of above)
- Several technologies
 - ADABAS
 - DB2
 - Sqlserver
 - Oracle
 - Structured files
- No single datamodel
 - Different databases holding the same information with cross-technology replication

The setting (As Is)

Information systems perspective

■ Main production system

- ADABAS/NATURAL on OS390
- Developed over several years by several consultants
- Expensive maintenance
- Ever growing complexity

■ Main document registry

- AIX based
- Bespoke development
- Few existing customers
- Very few existing consultants

■ Interface systems

- NT based
- Bespoke development
- Several consultants due to EU bidding regulations

■ Customer service systems (web etc.)

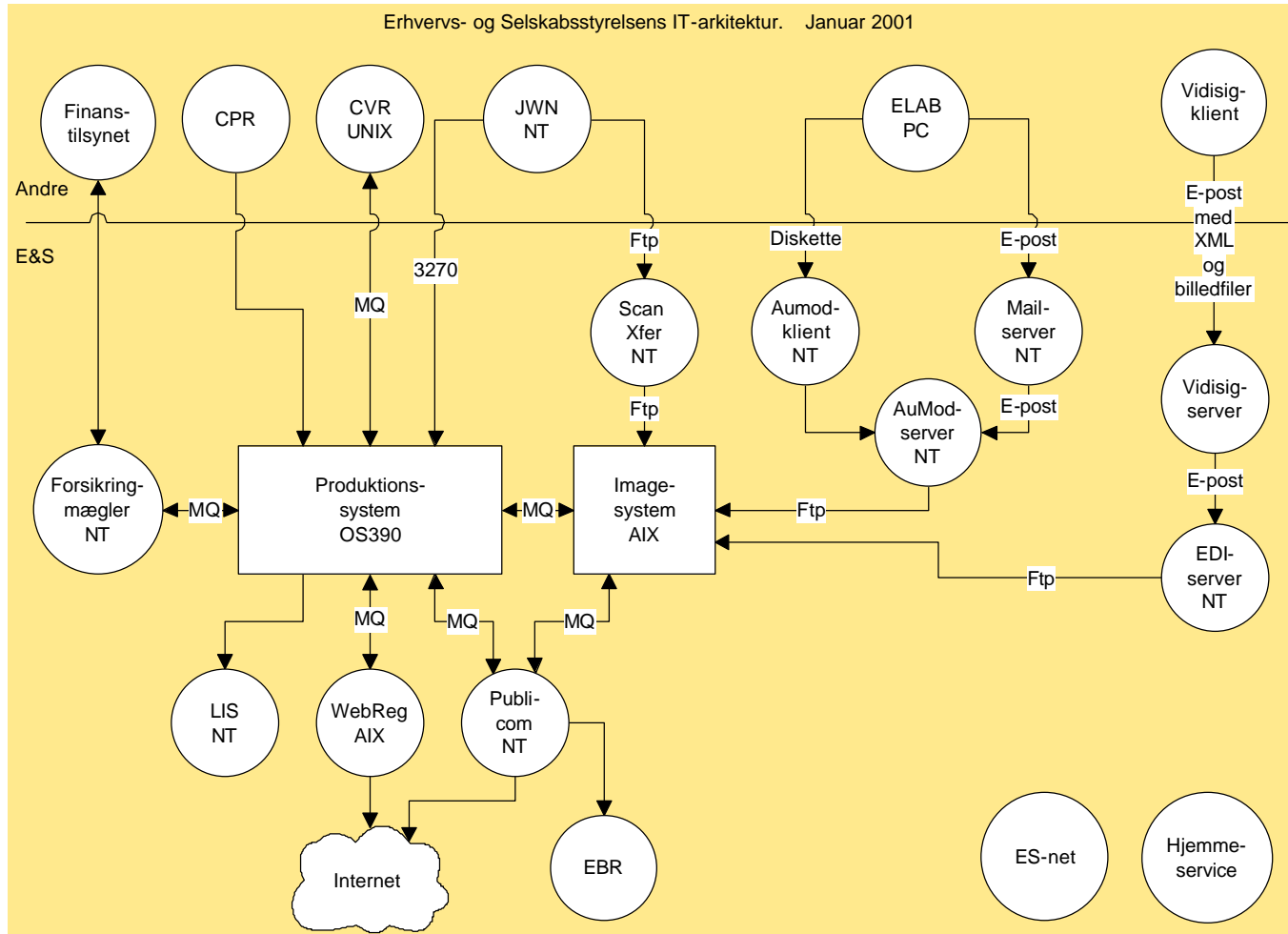
- NT or AIX based
- Bespoke development
- Several consultants due to EU bidding regulations

■ So

- Limited reuse / duplication of effort
- Limited support for auxiliary business processes
- New functionality only in satellite systems

The setting (As Is)

Information infrastructure perspective



The setting (As Is)

Information infrastructure perspective

■ Different dataprotocols, media and information protocols

- Diskettes
- MQ series
- Email
- FTP
- 3270

- EDI
- Structured mails
- Proprietary document formats
- CSV
- Fixed format files
- XML-like formats
- XML proper

■ Different platforms and operational conditions

- OS390
- AIX
- HPUX
- NT
- W2K (servers and workstations)

- Inhouse operations
- Outsourced operations

Architecture was a hindrance to business growth

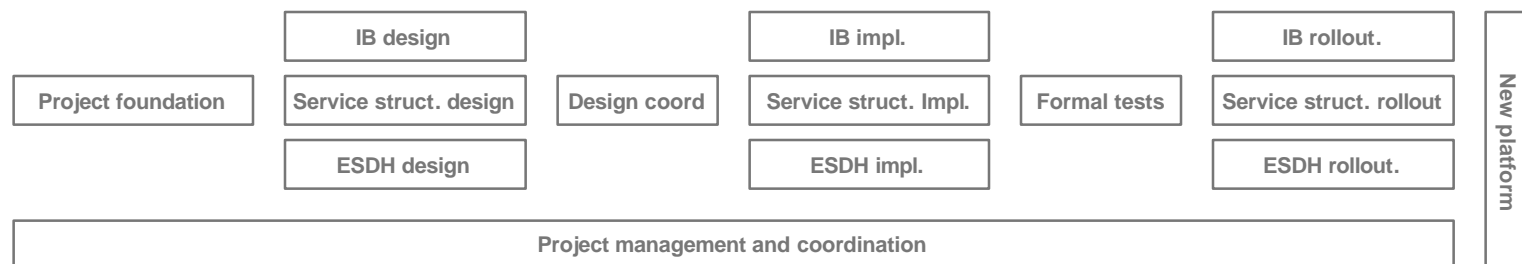


The project

(2001, 2002 - ...)

The project

- DCCA commissioned Ementor to create a new IT strategy focussing on an Enterprise wide architecture vision.
- The new strategy was approved in 2002 and a program consisting of projects to implement the architecture platform as well as migrating the core system and providing ample IT coverage for remaining core processes was commissioned according to EU bidding regulations.





The vision

To Be

The vision (To Be)

■ Business perspective

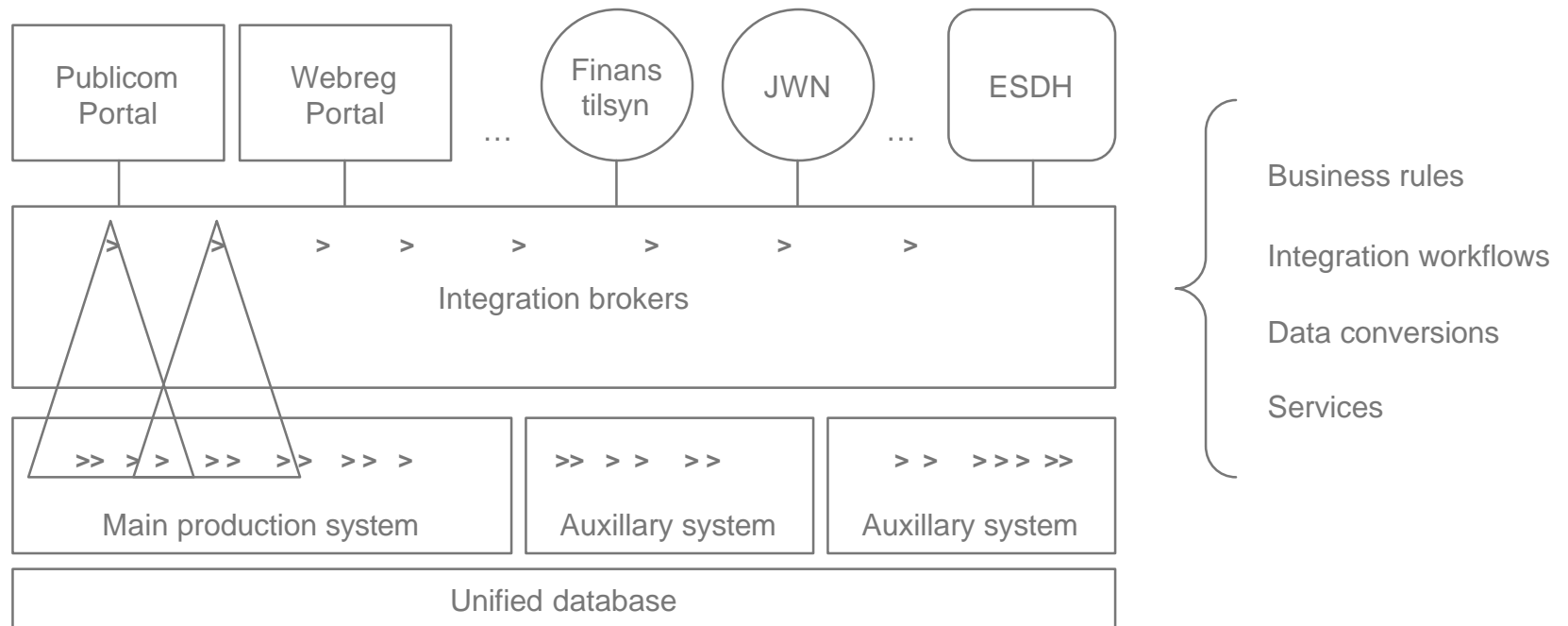
"Improving the conditions of the business community"

- Open administration
- Improved self-service
- Support for instant registration
- Crossing institutional boundaries – one stop government
- Improved knowledge sharing

■ Technical perspective

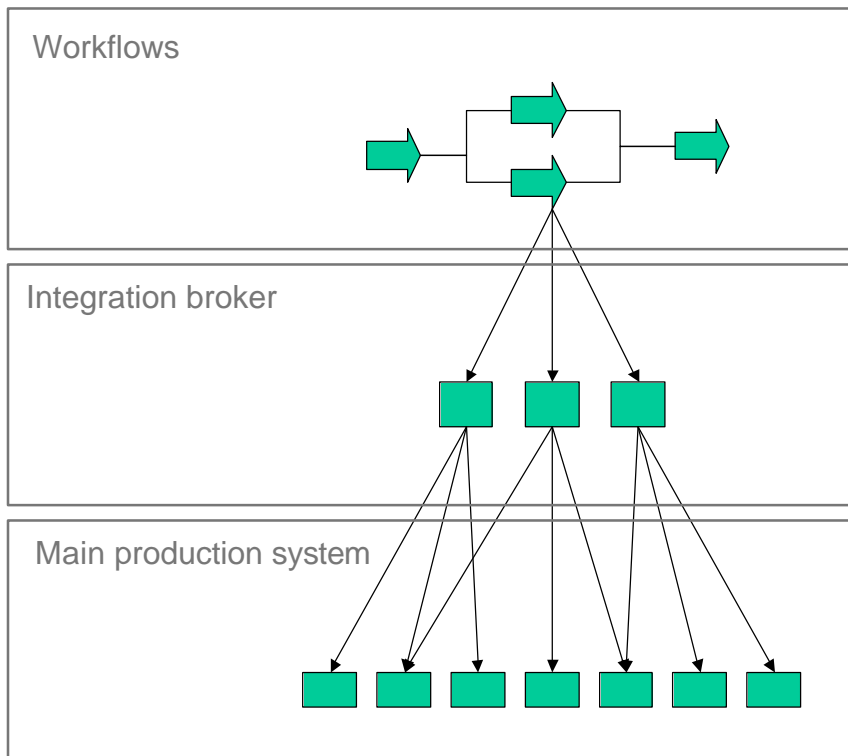
- Improved flexibility
- Integrated systems support for all business processes
- Removal of technical inhibitors
- Create a long lasting industry standard solution

The vision (To Be) Service Oriented Architecture



The vision (To Be)

Service Structuring



Business process
(RegisterNewCompany)

Transactions
(CreateBusinessOwner)

Service components

■ 83 services identified

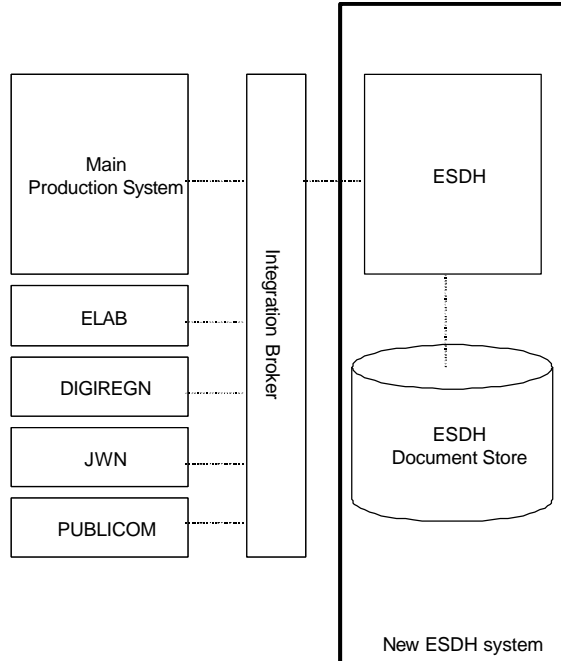
- Companies (34)
- Personal data (13)
- IPO (4)
- Accounts (10)
- Case work (14)
- Others (8)

The vision (To Be)

The ESDH system

ESDH is a Danish term covering a system that offers Integrated Document Management, Record Management (Case work) and knowledgesharing functions

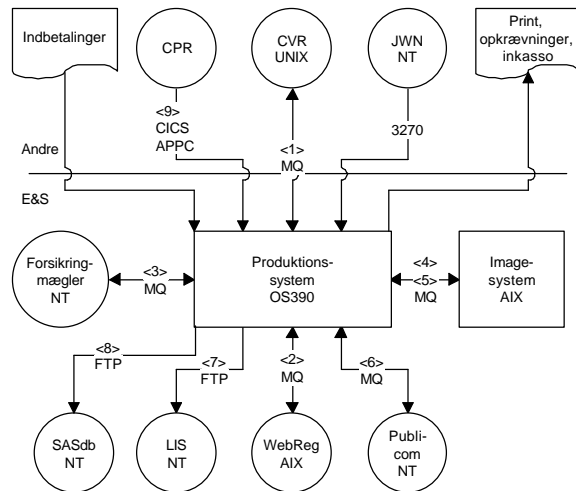
■ ESDH to offer the following functionality:



- Central document store for all business processes - approx. 4.000.000 docs
- Central registry for all records (Case work) – complex case/doc hierarchy
- Support for certain business processes not supported by the MPS
- Support for ad-hoc business processes (new projects)
- Support for certain administrative business processes
- Central source of knowledgesharing (The eKnowledge concept)
- Publication of certain case files and certain case documents

The vision (To Be)

The Main production system



■ Functionality

- Registration of business events for all privately held companies
- Main source of information for all privately held companies – using ESDH services

■ Service enabling

- Reusability
- Maintainability
- Flexibility

■ Data quality

- Unified database



So far ...

Experiences so far (Implementation)

- Technical complexity has been reduced
- A higher degree of flexibility has been achieved
- Uniform IT coverage for central business processes
- The project is currently converting Point to Point interfaces

- The Danish Commerce and Companies Agency is renowned within the Central Administration for its strategic use of IT and serves on the Danish government Enterprise Architecture board among other positions.

Experiences so far (Implementation)

■ The Danish Commerce and Companies Agency – Sample services

The screenshot shows the homepage of the Danish Commerce and Companies Agency (Erhvervs- og Selskabsstyrelsen). The header features the agency's name and logo. Below the header, there is a navigation menu with links for 'Forside', 'Viden om...', 'Sagsbehandling og Tjen', 'Publikationer', 'Der er', 'Følg os', 'Hjælp', 'Kontakt', and 'Om os'. The main content area is titled 'Digitale løsninger' and includes a sub-section 'Digital Signatur'. Below this, there are four service tiles: 'webreg', 'revireg', 'publi.com', and 'digi+regn'. Each tile provides a brief description of the service and a link to learn more.

This screenshot shows a different section of the website, featuring a grid of service tiles. The tiles include 'publi.com', 'digi+regn', 'VIRK.dk', 'CVR.dk', 'Søndagsabent', and 'HS-LetRet'. Each tile contains a short description of the service and a link to learn more. The layout is clean and organized, with a consistent color scheme and font style.