Dutch FADN: Integrating variables from multiple sources in electronic way

Koen Boone and Krijn Poppe

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Content

- Dutch Farm Accountancy Data Network
- Linking with other databases
- EDI Circle
- Standard Business Reporting
- Conclusions

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Introduction Dutch FADN

- Data networks for agriculture, fisheries (including aquaculture) and nature management
- Agriculture: 1,500 farms
  - 1,100 farms: full detail
  - 400 farms: limited dataset (EU: economics/structure)
- Randomly selected from farm census and representative for 80% of farms and >90% production
- Regional offices for data assembling full detail farms
- Accountancy offices for assembling EU farms

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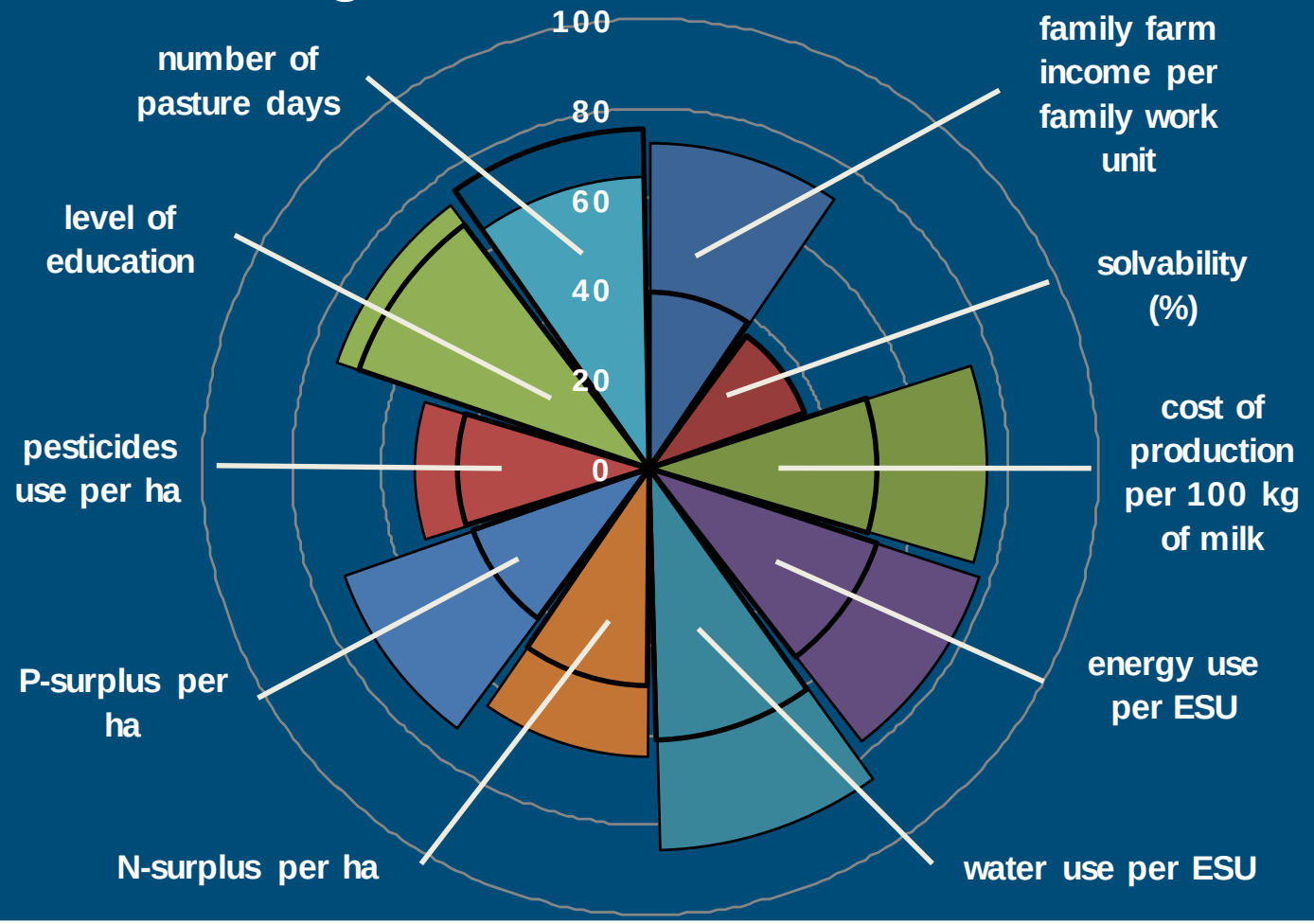
Data collection methods (full detail farms)

- Nearly all available data on individual invoices
  - Value
  - Name product (>2,000 pesticides)
  - Quantity (kg, liters, ha)
  - Quality (fat content milk, capacity waterpump)
  - Date
  - Supplier/buyer
- Bank transactions (electronic)
- Inventory/questions
- Linking of databases

Research themes

- Off farm income
- Environment (water, minerals, energy, pesticides)
- Animal health (medical treatment and use of medicines)
- Nature management
- Other gainful activities (tourism, energy production etc.)
- Innovation
- Production chain (suppliers/buyers)

Comparison of the scores of the most sustainable farms with the average farm



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Why linking of databases?

- Selection of farms and weighting (census)
- Efficiency
- Data hard to assemble in a different way
- No expertise about how to assemble data
- Quality
- Timeliness

Linkages with databases

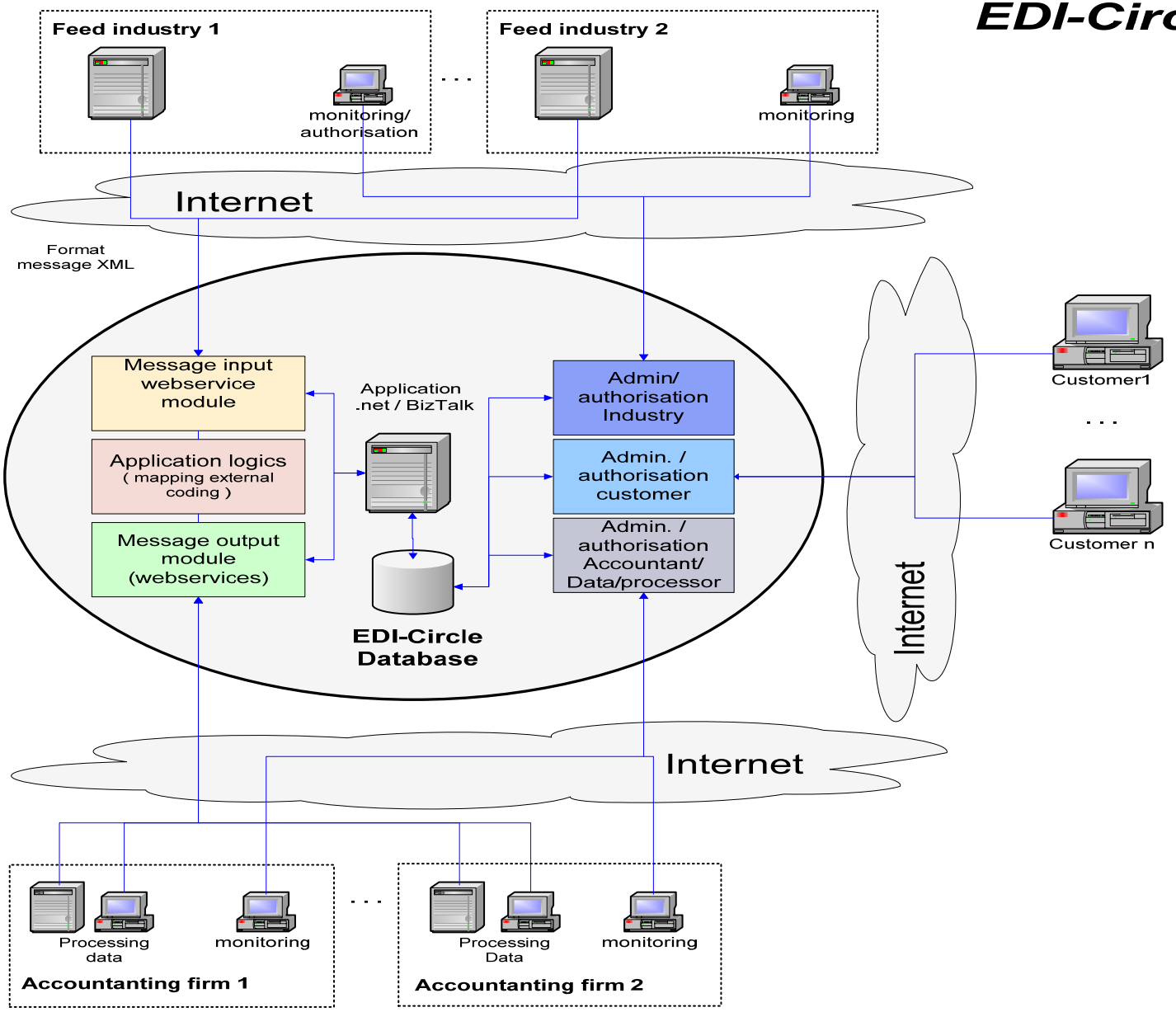
- Quality of soil and stock of roughage
- Water quality around the farm
- Animal health
- Food safety
- Bank transactions
- Administrative data (Census, nature management subsidies, identification and registration of animals, direct payments)
- Experiments with management software and nature quality

Electronic assembling of data: EDI-Circle

- Co-operation of 5 accounting offices, 5 feed producers, IT company and LEI
- Fixed electronic format for invoices
- Feed producer sends invoice to central database
- Access of database by internet for farmer

  …and with authorisation from farmer for accounting office, LEI and others.
- Every morning system checks if new invoices are available and imports data in FADN database

EDI-Circle



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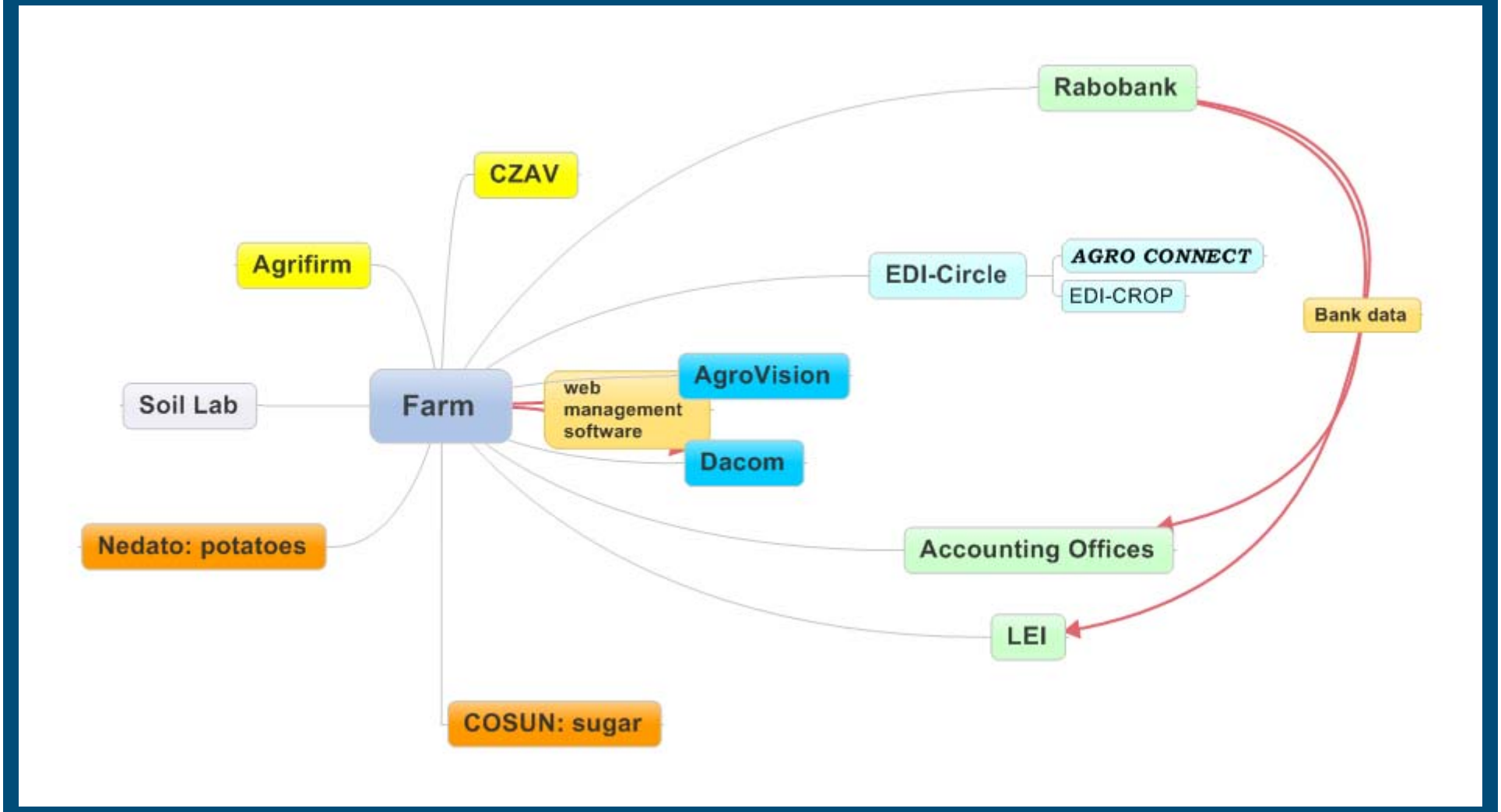
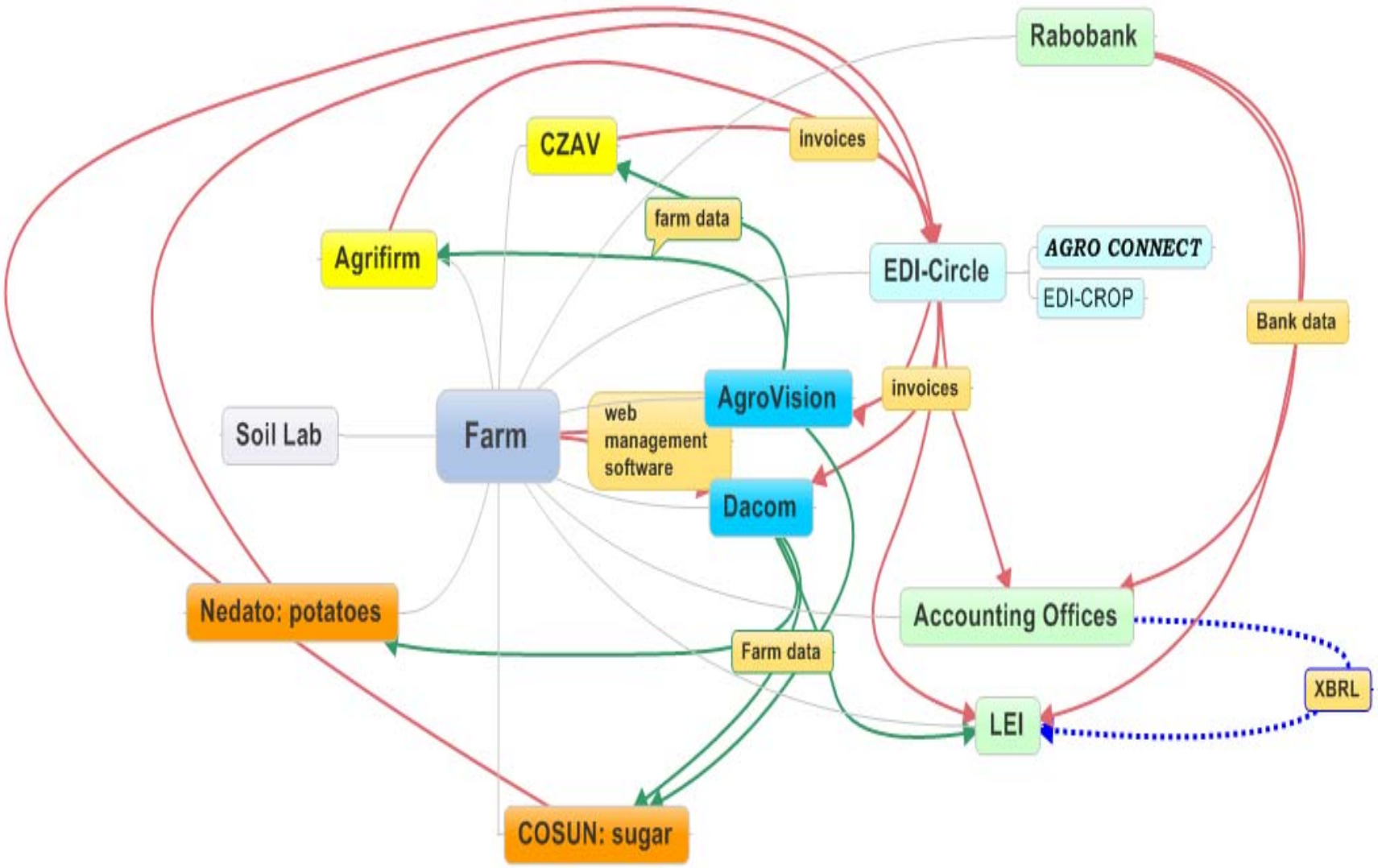
Organisations in the arable sector




Rabobank
CZAV
invoices
farm data
Agrifirm
EDI-Circle
AGRO CONNECT
EDI-CROP
Bank data
AgroVision
invoices
Soil Lab
Farm
web management software
Dacom
Nedato: potatoes
Accounting Offices
Farm data
XBRL
LEI
COSUN: sugar

Standard Business Reporting (XBRL)

Firms deliver three times financial data to:

- Chamber of Commerce
- Central Statistical Office
- Tax authority

SBR: Development of dictionary of financial terms and format (XML)

Result:

- Only one dataset has to be delivered
- Harmonisation of definitions between 3 organisations
- Financial software of accounting offices is adapted so that dataset is automaticly created from own financial administration.

SBR extension for agriculture

- Extend taxonomy with agricultural specific variables
  - EU-FADN farm return
- Co-operation between
  - LEI Wageningen UR (FADN data)
  - Accounting offices (exchange of data)
  - Banks (applications for loans)
  - Government (administrative burden)
- Adapt software of all parties

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Advantages and risks for LEI

- Costs for accounting offices approach zero
  - Include more farms in FADN
  - Ask on ad hoc base for extra farms
- Timeliness/Quality
- EU standard?
- SBR data use for “full detail farms”?

Risks:

- Harmonisation of definitions (including farm)
- Adaptation of SBR by all accounting offices
- Not all data available in electronic format at accounting offices

Innovation in FADN

- Pacioli (www.Pacioli.org)
  - 19th Workshop 2-5 October 2011 Estonia
  - +/- 40 participants from 20 countries
- EDI Circle/SBR
- Internetsite farmers: Use of face-it tool
- Remote Access
- Use of fiscal data: Couple with yearly census
- Intelligent Data Processing
- Sustainability

Conclusions linking databases

- Great potential for efficiency gains
- Next to successes, failures
- Needs large investment (Co-ordination)
- Less flexibility and greater dependence on others
- Co-operation leads to other advantages (knowledge sharing etc.)

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Thank you for your attention

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