

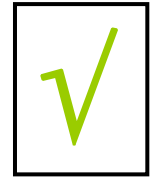
# Planning model supporting information and service agency in meat chains designing services in chain oriented health management

**Verena Schütz and Brigitte Petersen**

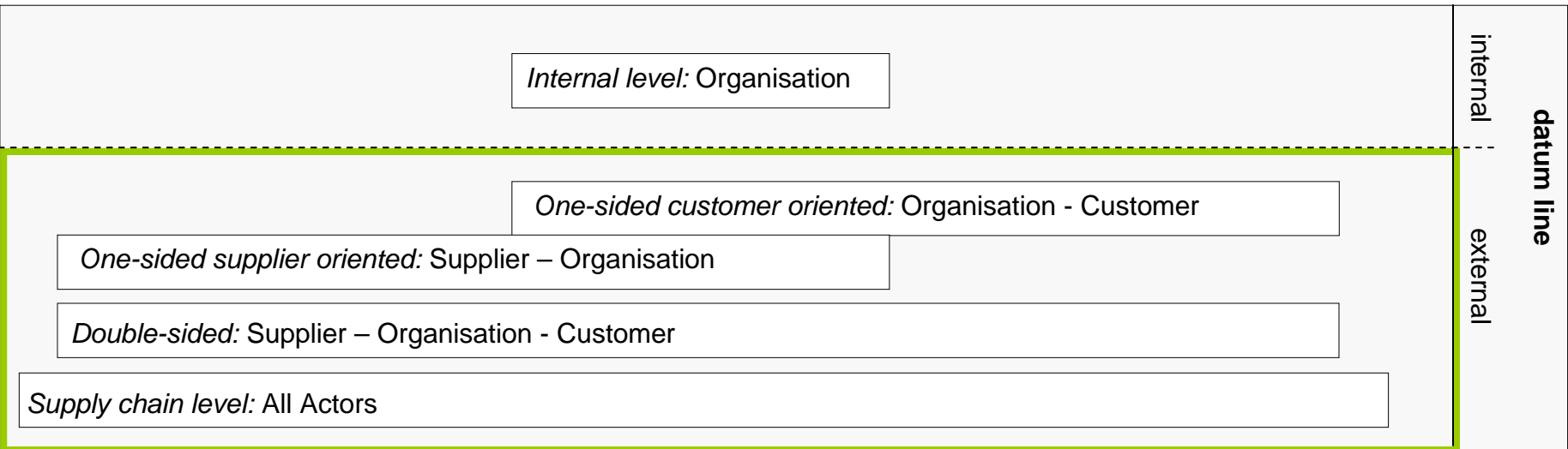
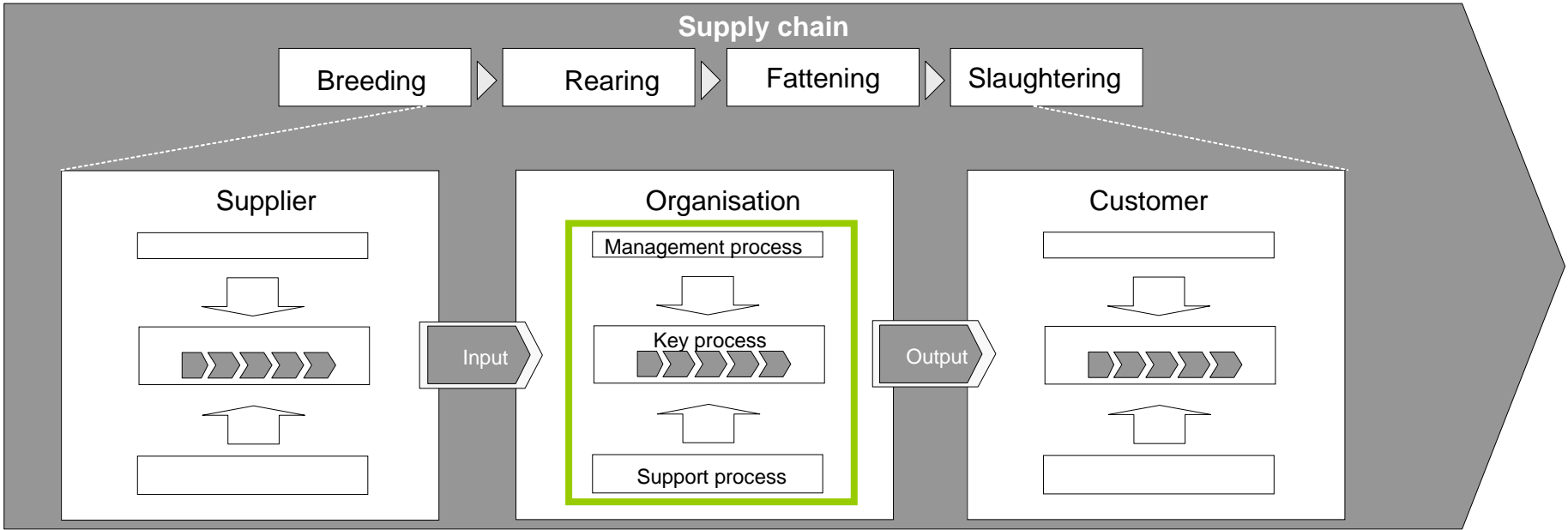
*Institut für Tierwissenschaften,  
Abt. Präventives Gesundheitsmanagement*

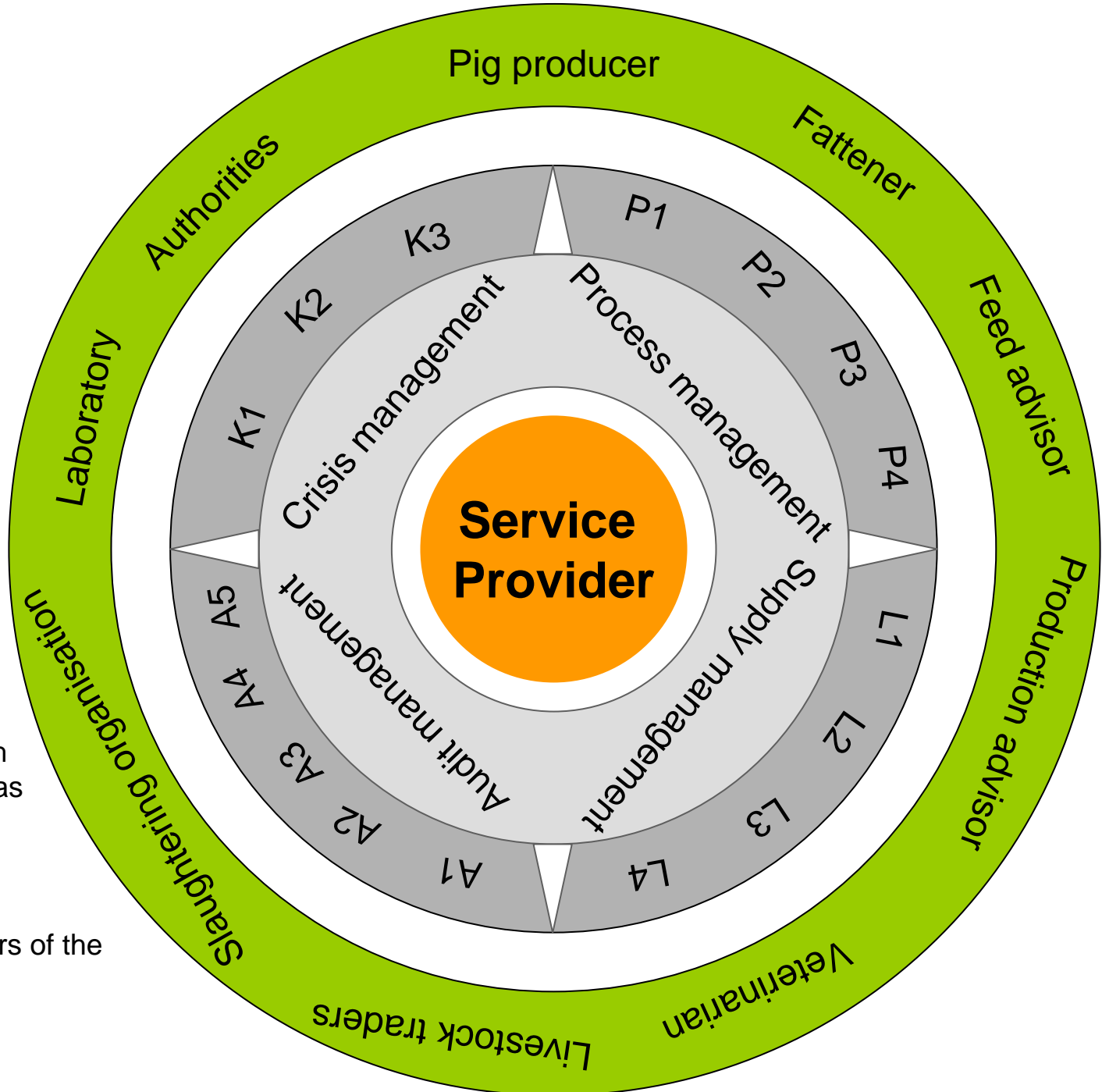
# Hypothesis

- Actors of the meat production chains demand specialised information and communication services for interplant health management
- Planning models for services can be adapted to organisations in meat sector
- Provider ship for interplant health management enlarges the portfolio of cooperative services



# Service levels





Quality and health management areas

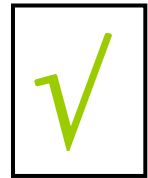
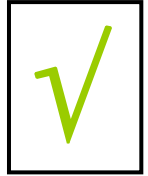
Specific software tools

User groups/Actors of the meat chain

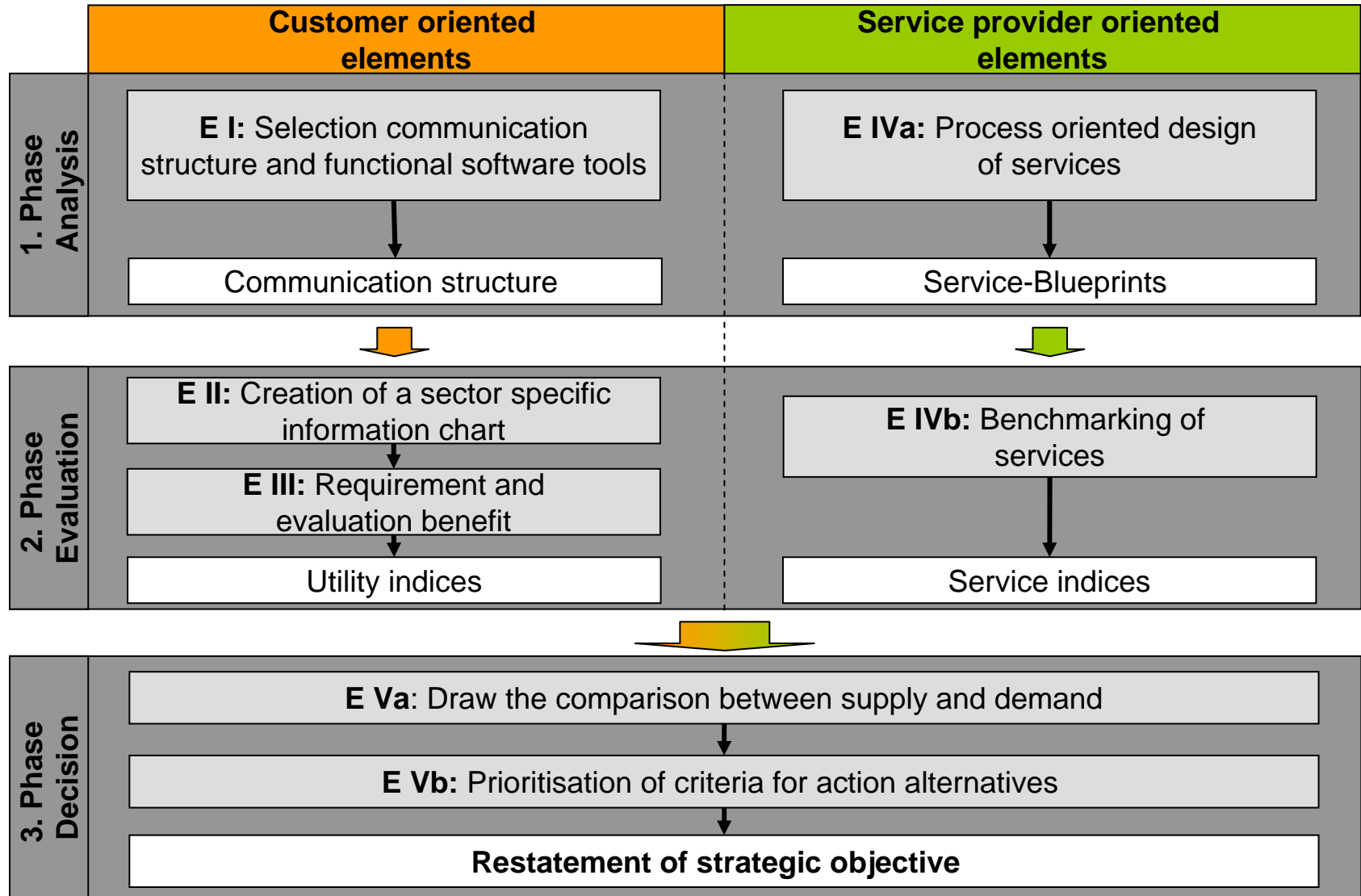


# Hypothesis

- Actors of the meat production chains demand specialised information and communication services for interplant health management
- Planning models for services can be adapted to organisations in meat sector



# AED-Model



Legend:

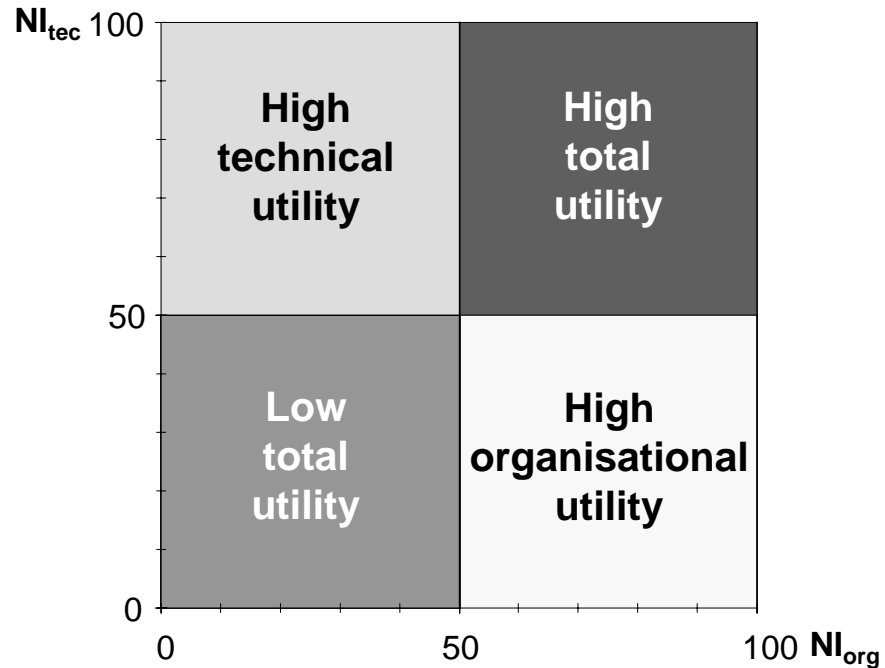
Phase
  Element
  Result
 E = Element



## Technical utility ( $NI_{tec}$ )

- Temporization (ZG)
- Information increase (IZ)
- Period for decision making (ZE)

$$NI_{tec} = \frac{1}{3}(ZG + ZE + IZ)$$



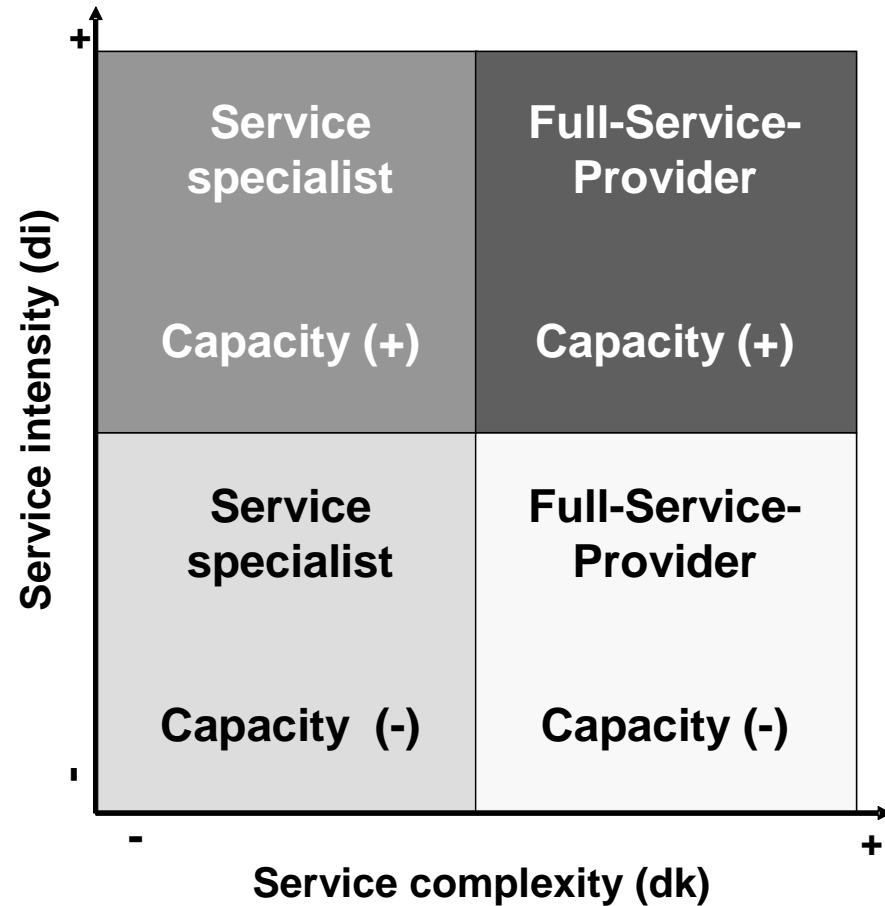
## Organisation utility ( $NI_{org}$ )

- Level of willingness exchanging information (GB)
- Level of traceability (GIR)
- Level benefit increase (GNE)

$$NI_{org} = \frac{1}{3}(GB + GIR + GNE)$$



# Service indices



$$di_P = \frac{m_P * W_P}{m_{P \max} * W_{P \max}}$$

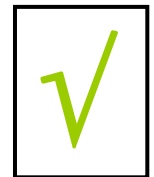
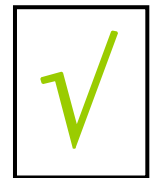
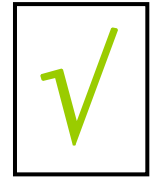
$$dk_{(P)} = \frac{t_P (k_P + d_P)}{t_{P \max} * (k_{P \max} + d_{P \max})}$$

- $di_P$  = Service intensity each production field
- $di_{ges}$  = Service intensity of the service provider
- $dk_P$  = Service complexity each production field
- $dk_{ges}$  = Service complexity of the service provider
- d = Document
- m = Number of user
- k = Service combination
- P = Production field
- t = Service typology
- w = Repetition of service combination per organisation and year

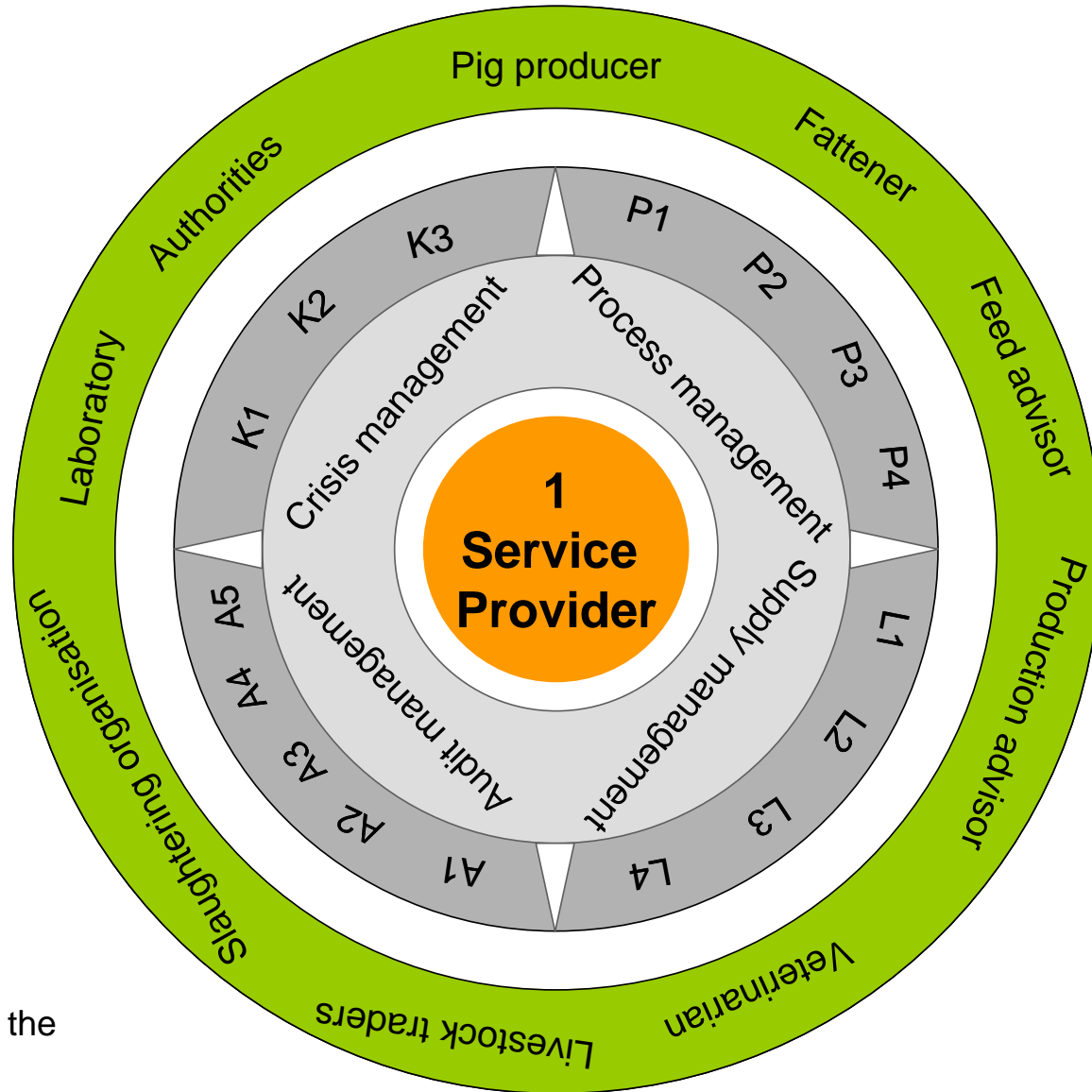


# Hypothesis

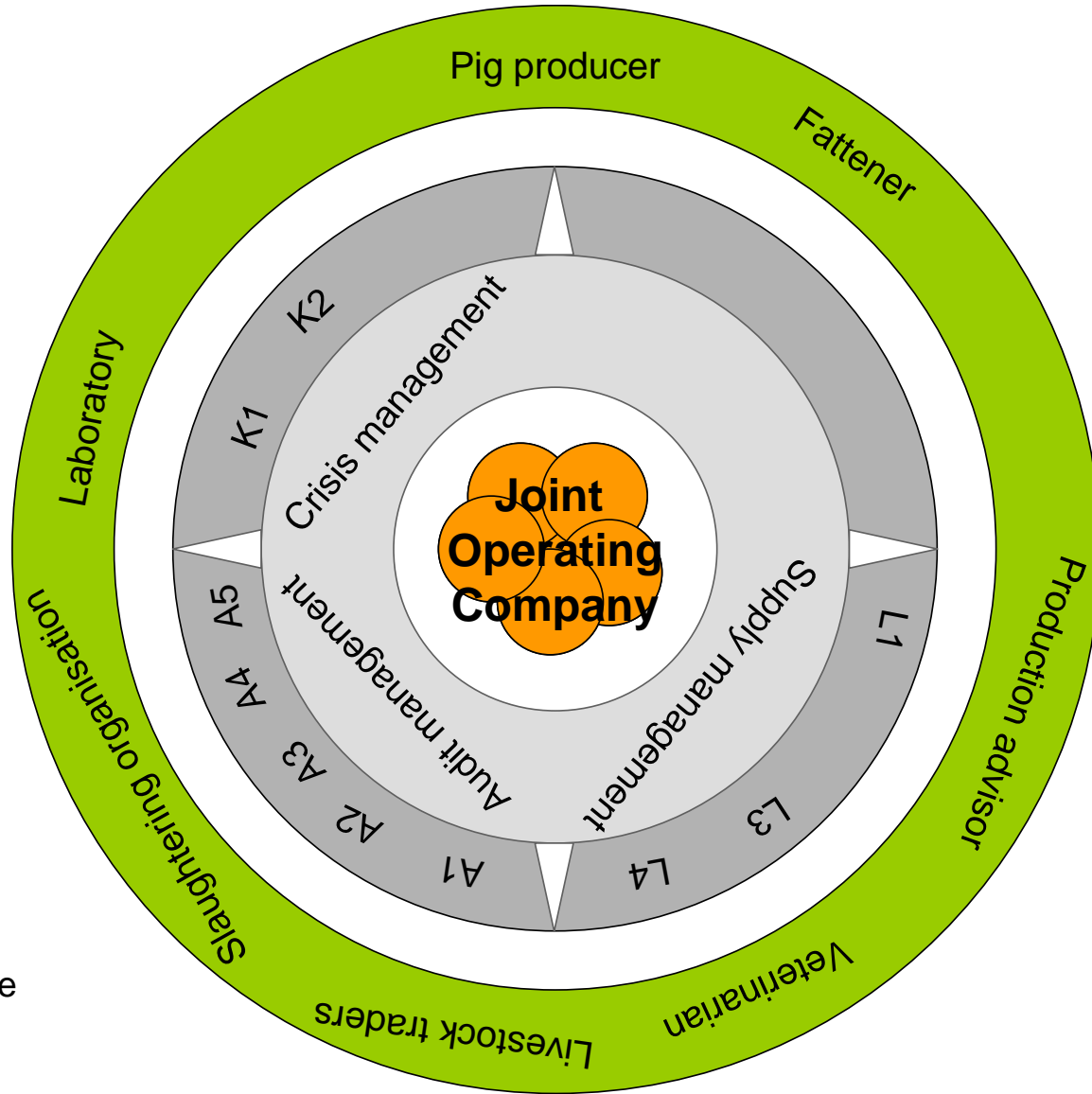
- Actors of the meat production chains demand specialised information and communication services for interplant health management
- Planning models for services can be adapted to organisations in meat sector
- Provider ship for interplant health management enlarges the portfolio of cooperative services



# I. Full-Service-Approach



# II. Joint Cooperation Company Approach



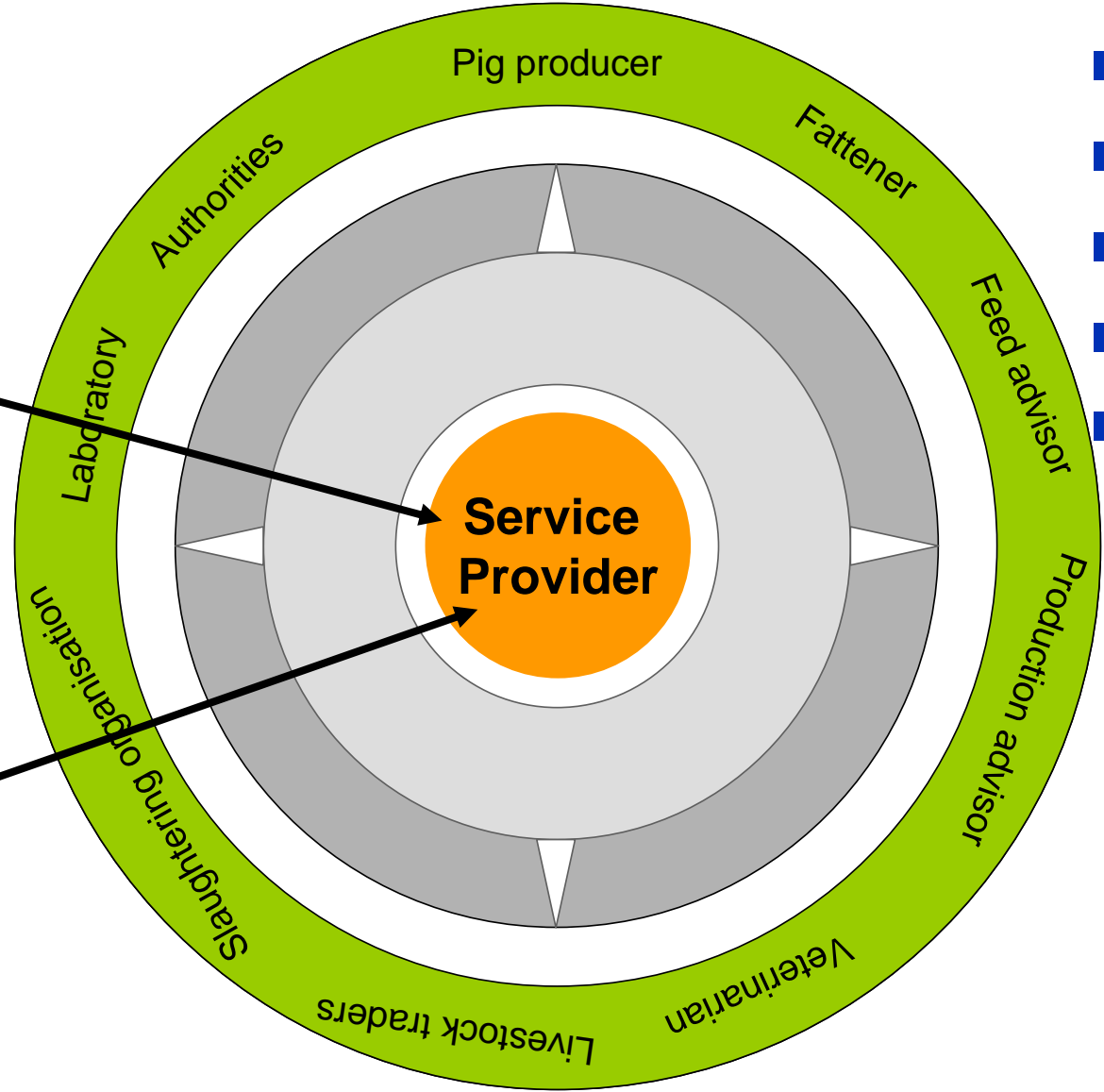
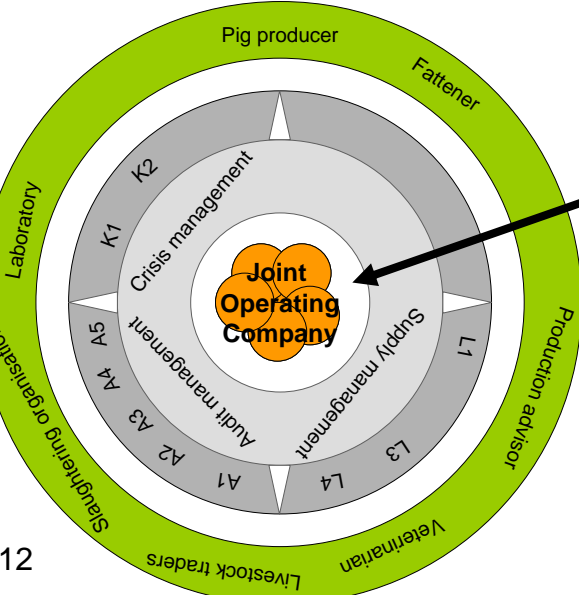
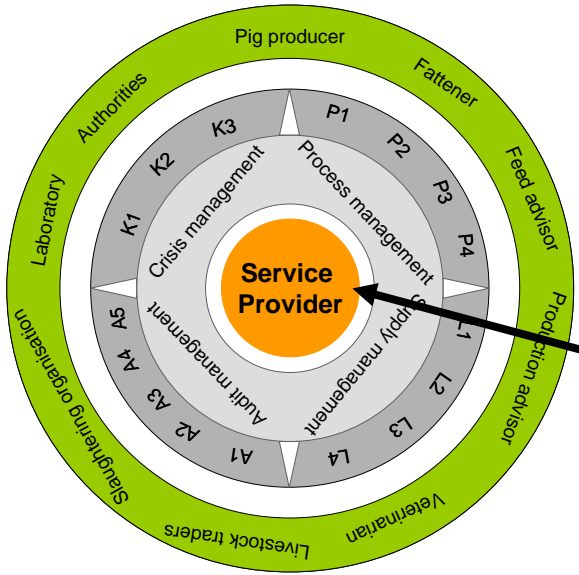
Quality and health management areas

Specific software tools

User groups/Actors of the meat chain



# III. Outsourcing-Approach



# Conclusion

- The model combines 9 actors, service provider and four coordinative quality management tasks supported by 16 specific software tools
- Indices summarize the analysed information and simplify the decision making
- The implementation of adapted or new services results in one of three different business approaches



This project is sponsored by the Federal Ministry for Food, Agriculture and Consumer Protection (BMEL) as a part of the program to promote innovation. This program is executed by the Federal Agency for Agriculture and Food (BLE).



Thank you  
for your attention

M. Sc. Verena Schütz  
University of Bonn  
Institute of Animal Science  
Preventive Health Management Group  
Katzenburgweg 7 – 9  
D-53115 Bonn  
Tel.: 0049(0)228 / 73 19 77  
Fax: 0049 (0) 228 / 736515  
E-Mail: [vschuetz@uni-bonn.de](mailto:vschuetz@uni-bonn.de)