



**Copenhagen  
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# **An Empirical Study of the Current State of B2B Integration in Practice**

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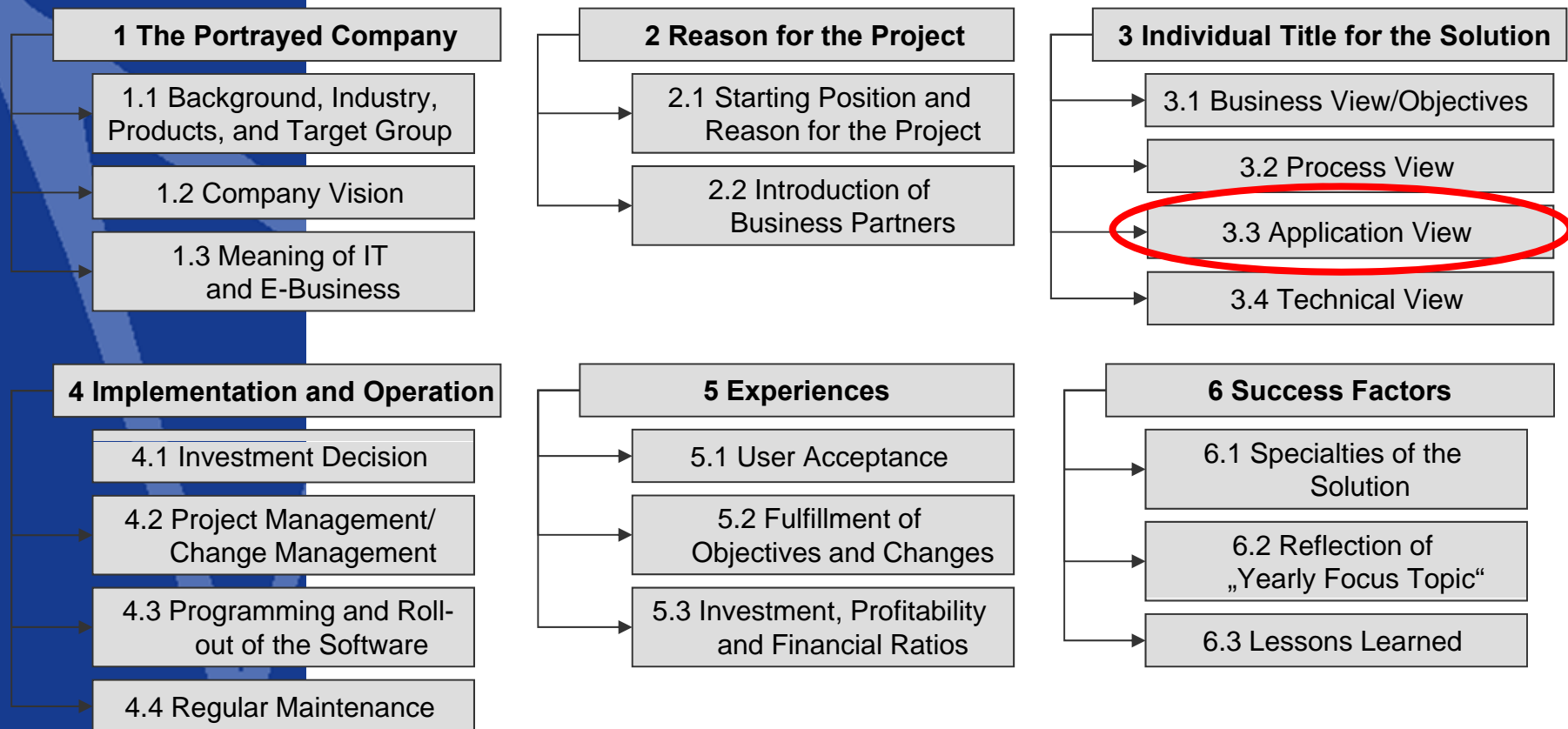


## Research Question / Motivation

- **Is there a relationship between the industry sector/position in the supply chain of a company and the choice of the technical integration of the information systems?**



# Uniform Case Structure





## Criterion 1: Direction of Integration

- **Vertical Integration**
  - The partners are in the same industry sector but at different positions in the supply chain
- **Horizontal Integration**
  - The partners are in the same industry sector and at the same position in the supply chain
- **Diagonal Integration**
  - The partners are in different industry sectors and at different positions in the supply chain

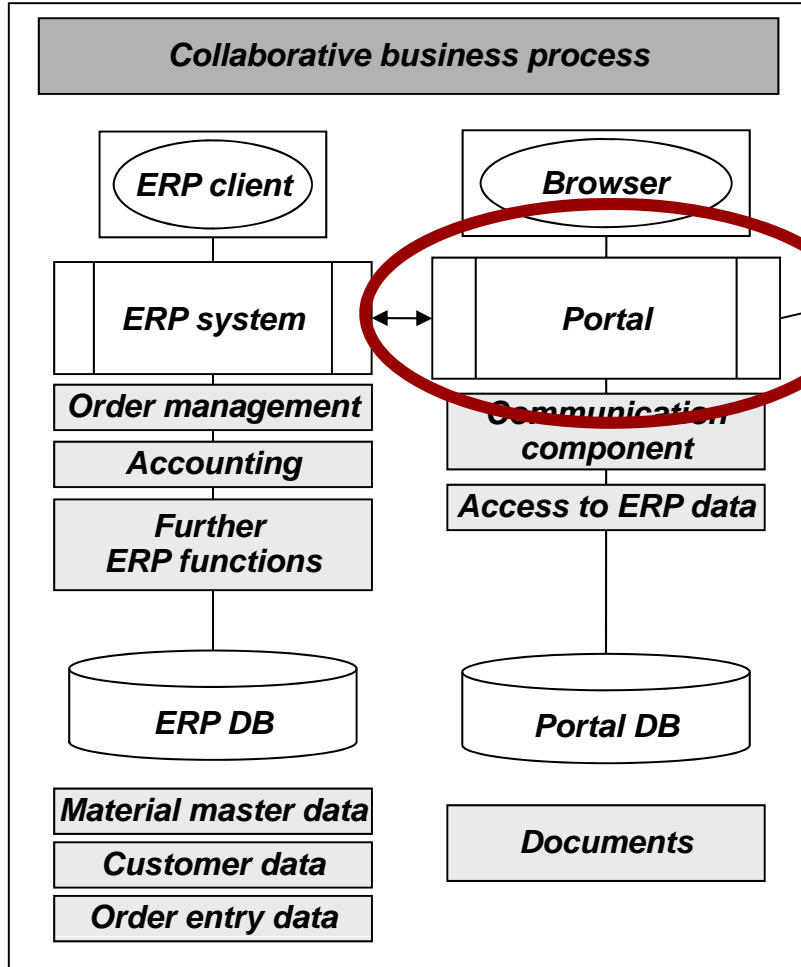


## Criterion 2: Integration Scenarios

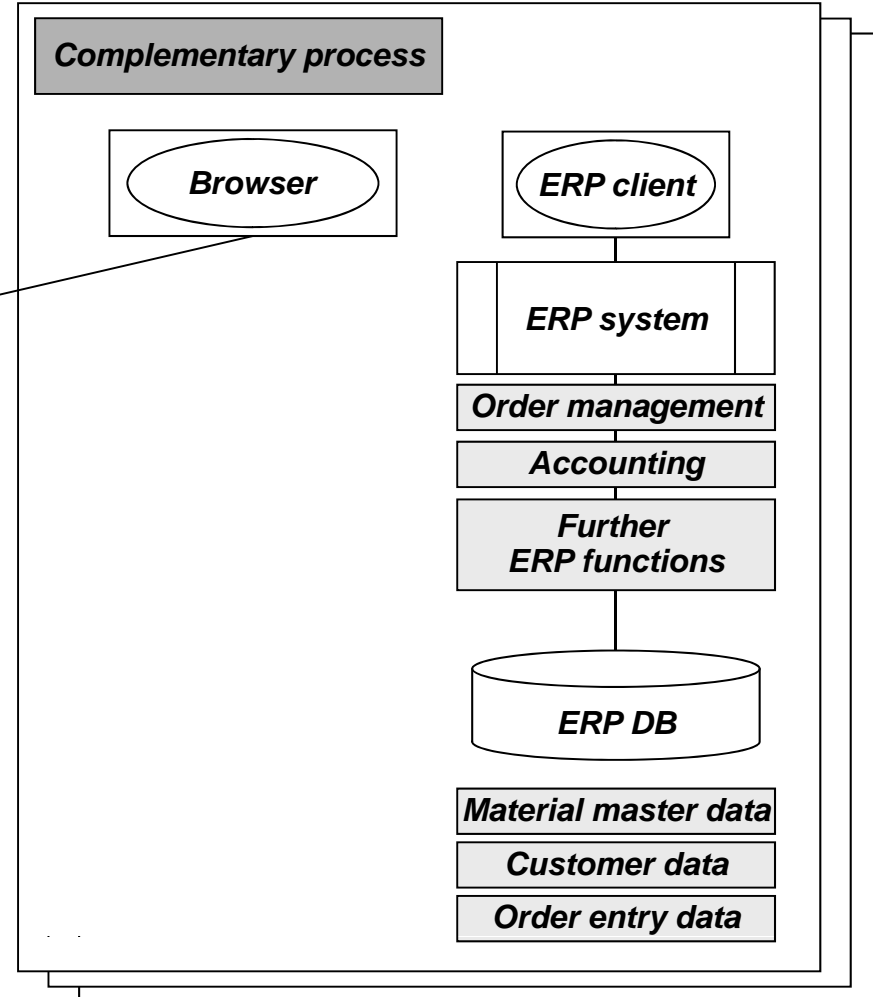
- 1. Parallel use of different information systems, manual external system access**
- 2. Parallel use of different information systems,  
EDI with direct partner integration**
- 3. Parallel use of different information systems,  
EDI provided by an intermediary**
- 4. Joint use of a self-operated, central ERP system**
- 5. Joint use of a central system operated by an intermediary**

# Scenario 1: Parallel use of different information systems, manual external system access

*Initiating partner*

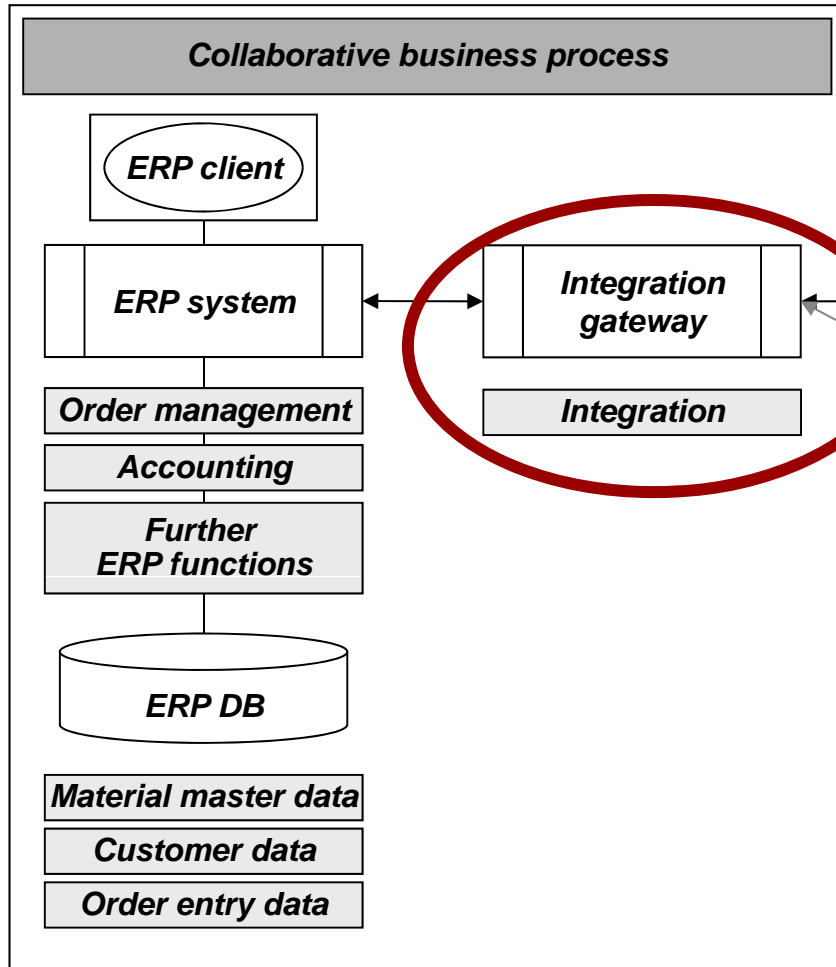


*Connected partner*

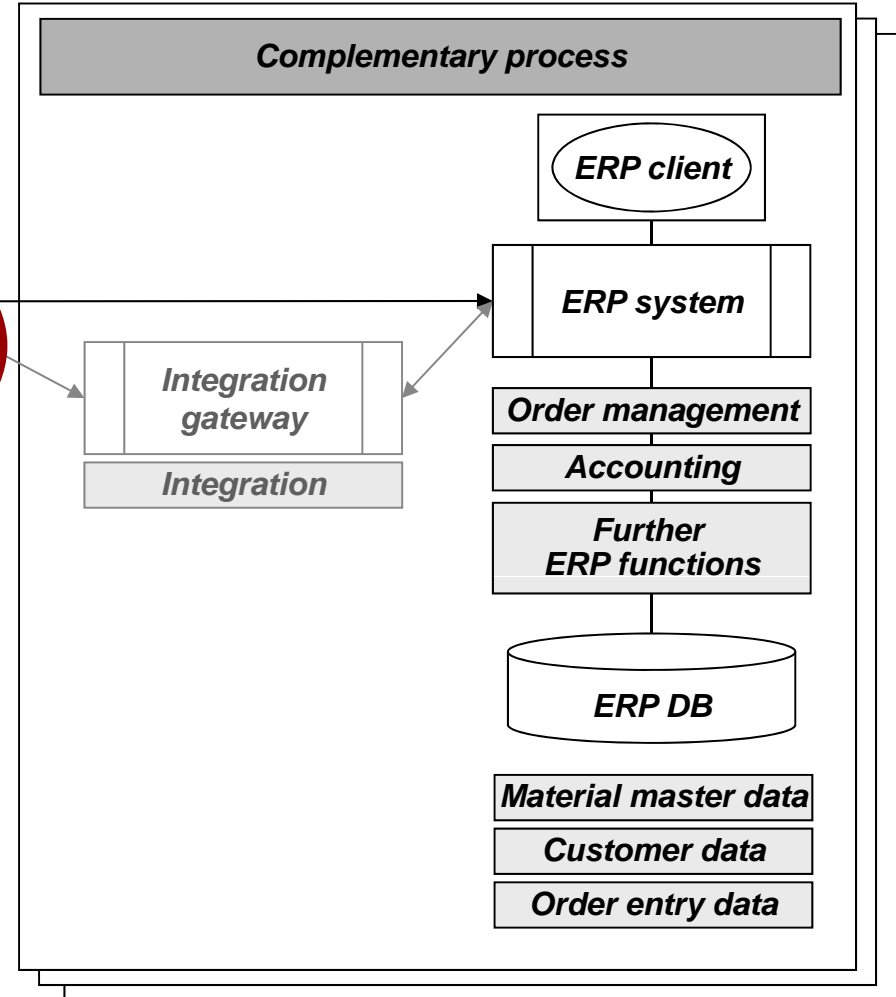


# Scenario 2: Parallel use of different information systems, EDI with direct partner integration

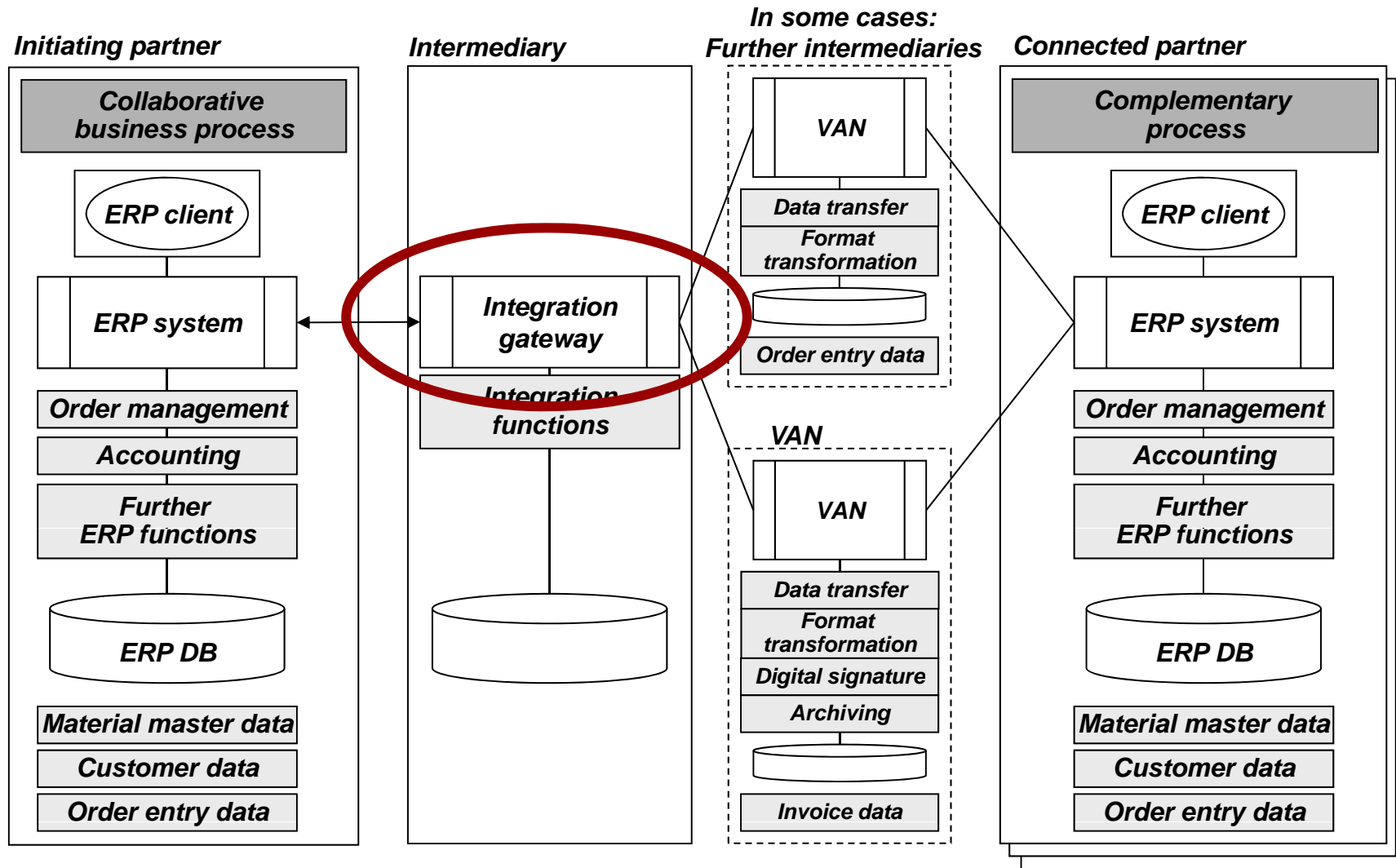
*Initiating partner*



*Connected partner*

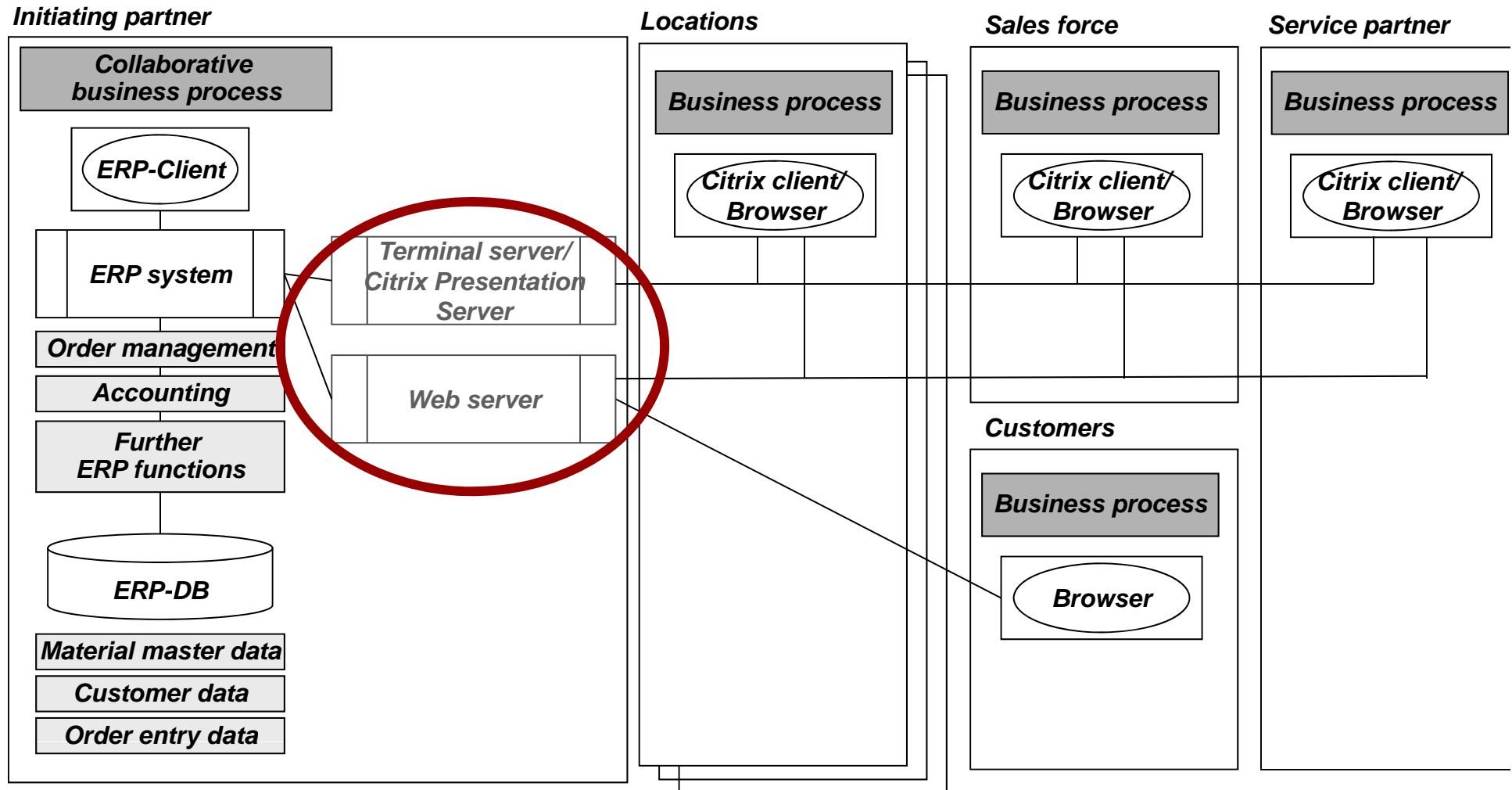


# Scenario 3: Parallel use of different information systems, EDI provided by intermediaries

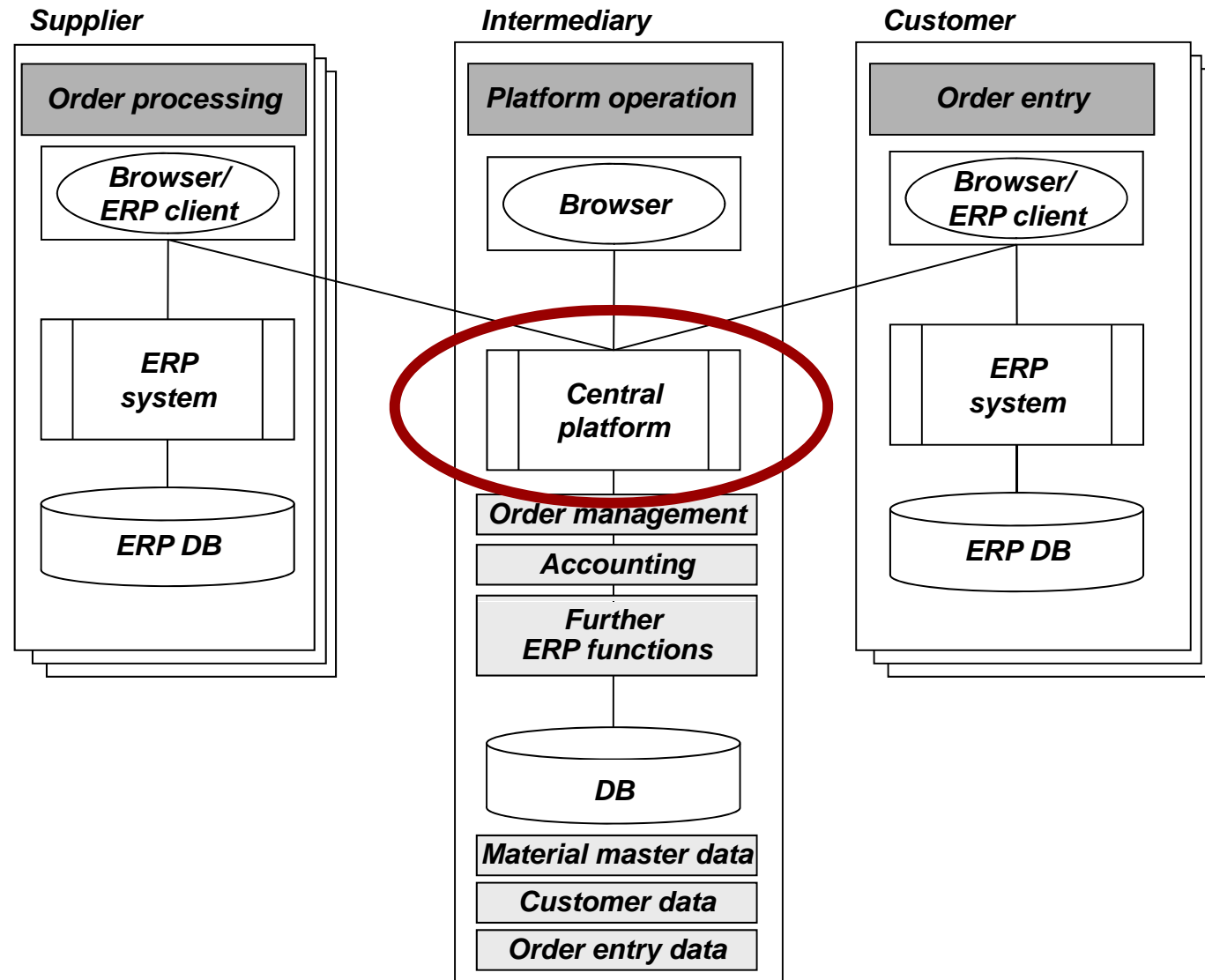




# Scenario 4: Joint use of a self-operated, central ERP system



# Scenario 5: Joint use of a central system operated by an intermediary





## Case Profiles

### ■ Industry

- 44 “Wholesale and Retail Trade”
- 30 “Manufacturing”

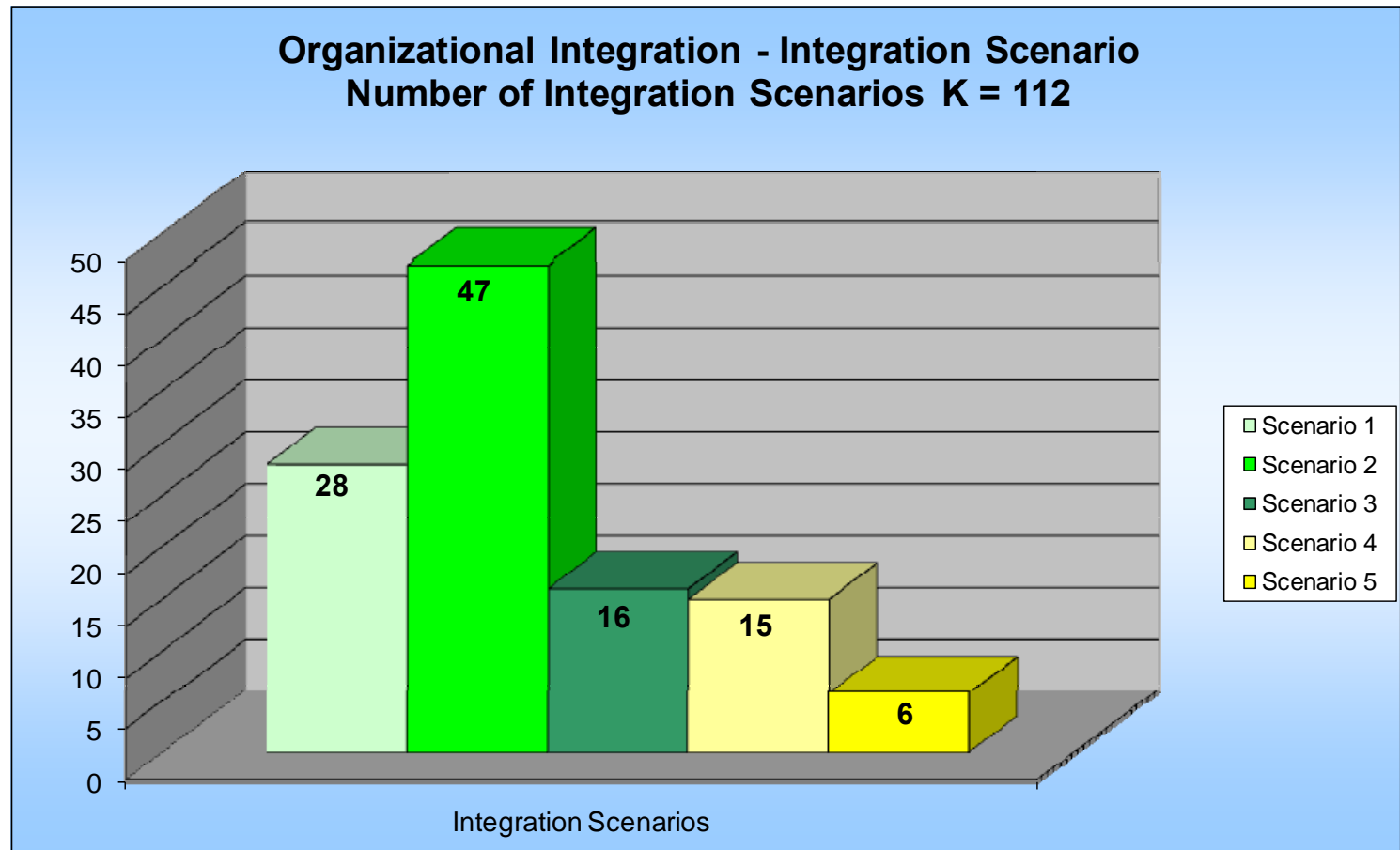
### ■ Direction of integration

- 82 vertical integration
- 14 horizontal integration
- 16 diagonal integration

| Case         | Industry Sector*          | Relation-ship | Main Role*   | Partner                       | Partner Role*       |
|--------------|---------------------------|---------------|--------------|-------------------------------|---------------------|
| Cegelec      | C<br>MANUFACTURING        | B2B           | Manufacturer | Carlson<br>Wagonlit<br>Travel | Service<br>Provider |
| WyserAG      | G WHOLESALE AND<br>RETAIL | B2B           | Wholesaler   | Retail,<br>Customer           | Retail,<br>Customer |
| ottomobil.de | G WHOLESALE AND<br>RETAIL | B2C           | Wholesaler   | Customer                      | Customer            |



# Integration Scenarios





## Direction of Integration

| Integration scenario | Total (Percent) | Vertical | Vertical (Percent) | Difference | Horizontal | Horizontal (Percent) | Difference | Diagonal | Diagonal (Percent) | Difference |
|----------------------|-----------------|----------|--------------------|------------|------------|----------------------|------------|----------|--------------------|------------|
| 1.                   | 28 (25%)        | 24       | 29%                | 4%         | 0          | 0%                   | -25%       | 4        | 22%                | -3%        |
| 2.                   | 47 (42%)        | 31       | 38%                | -4%        | 6          | 43%                  | 1%         | 10       | 62%                | 20%        |
| 3.                   | 16 (14%)        | 15       | 19%                | 5%         | 1          | 7%                   | -7%        | 0        | 0%                 | -14%       |
| 4.                   | 15 (14%)        | 10       | 12%                | -2%        | 4          | 28%                  | 14%        | 1        | 8%                 | -6%        |
| 5.                   | 6 (5%)          | 2        | 2%                 | -3%        | 3          | 22%                  | 17%        | 1        | 8%                 | 3%         |
|                      | 112 (100%)      | 82       | 100%               |            | 14         | 100%                 |            | 16       | 100%               |            |

**Table 2:** Patterns emerging from different directions of integration



## Industry Analysis

| Industry Sector and Integration Scenario | Manufacturing | Wholesale and retail |
|--|---------------|----------------------|
| Scenario 1                               | 8 (27 %)      | 12 (27 %)            |
| Scenario 2                               | 12 (40 %)     | 22 (50 %)            |
| Scenario 3                               | 4 (13 %)      | 5 (11 %)             |
| Scenario 4                               | 6 (20 %)      | 5 (11 %)             |
| Scenario 5                               | 0 (0 %)       | 0 (0 %)              |

**Table 3: Scenarios found in manufacturing and wholesale/retail**



## Conclusions 1/2

### ■ Integration Scenario and Direction of Integration

- For all directions of integration scenario 2 is the most commonly adopted.
- For vertical integration projects scenario 1 and 2 are the most common.
- For horizontal integration projects scenario 2 is the most common. In addition horizontal integration projects also appear more likely to implement scenarios 4 and 5 more often than vertical or diagonal integration project
- Diagonal integration projects prefer scenario 2



## Conclusions 2/2

### ■ Integration Scenario and Industry Sector

- Wholesale/retail companies use integration scenario 2 slightly more than manufacturing companies
- Manufacturing on the other hand shows a slight preference for scenario 4 in comparison to wholesale/retail
- There is no evidence from the current study that wholesale/retail nor manufacturing companies use scenario 5. It will be interesting to look for the reasons for this in future research.





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**Thank you for your attention.**

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