Case study research design and methods

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What is a case study?

A case study is an empirical inquiry that

• Investigates a contemporary phenomenon (the “case”) in depth and within its real-world context, especially when

• The boundaries between phenomenon and context may not be clearly evident

(Yin 2014)
What is a case study?

• Is an experiment a case study?

• Is a history a case study?

• Is a survey a case study?

• Are interviews case studies?
What is a case study?

A case study inquiry

• Relies on **multiple source** of evidence, with data needing to converge in a triangulation fashion

• Benefits from the prior development of theoretical propositions to guide data collection and analysis
Triangulation

The convergence of data collected from different sources, to determine the consistency of a finding

Published reports and industry data

Articles, websites, reports

Primary research data
How to conduct a case study?
Conducting case study research

Step 1: Designing case studies

Step 2: Preparing to collect case study evidence

Step 3: Collecting case study evidence

Step 4: Analysing case study evidence

Step 5: Reporting case studies
Conducting case study research

Step 1: Designing case studies
Designing case studies

• Research questions ("who", "what", "where", "how", "why")
  • Use literature to narrow your interest

• Identifying units of analysis
  • Select the case(s)
  • One or multiple case studies?
  • Replication, not sampling logic

• Identifying data collection ‘tools’
  • Qualitative, quantitative, mixed
What are the practices needed to support lamb meat supply chains?

• Innovation?
• How important is collaboration?
• Is there anything that market players should learn?
• How to support farmers?
• What marketing channel(s)?
• How to improve supply chain alignment?
Conducting case study research

Step 1: Designing case studies

Step 2: Preparing to collect case study evidence
Preparing to collect case study evidence

• Case study protocol
  • Overview of the case study
  • Data collection procedure
    • Gaining access to key organisations or interviewees
    • Who to interview?
    • Data collection questions
    • Guide for the case study report
  • The pilot case study
Conducting case study research

- Step 1: Designing case studies
- Step 2: Preparing to collect case study evidence
- Step 3: Collecting case study evidence
Collecting evidence

- Use multiple source of evidence
- Create a case study database
- Maintain a chain of evidence
Maintain a chain of evidence

Case study report

Case study database

Citations to evidentiary sources in the case study database

Case study protocol

Case study questions
Use multiple source of evidence

The Cost of Production for lamb meat case study (UK)

SMKT gives cost of production (CoP) contracts for British lamb farmers. Is CoP a best practice for lamb meat supply chain?
Use multiple source of evidence

The Cost of Production for lamb meat case study (UK)

SMKT says the contract provides a unique opportunity for SC alignment

Farmer A says it is a ‘win-win’ opportunity

Farmer B says the farm price is low, but he stays in the CoP scheme…

What is the difference between farmer A and farmer B then?

Is CoP a ‘best practice’ for supply chain?
Conducting case study research

Step 1: Designing case studies

Step 2: Preparing to collect case study evidence

Step 3: Collecting case study evidence

Step 4: Analysing case study evidence
Analysing case study evidence

- Relying on theoretical propositions
- Working your data from the ‘ground up’
- Examining plausible rival explanations
Cross-case analysis

• First, analyse each individual case as an individual case
• Identify patterns across cases
• Grouping and pattern matching to reduce the amount of data

Inventory of practices that have contributed to improving the supply chain performance
## Pattern matching example

<table>
<thead>
<tr>
<th>Practice</th>
<th>Number of replication engaged in practice</th>
<th>Case study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information sharing</td>
<td>4</td>
<td>A, B, C, H</td>
</tr>
<tr>
<td>Cost sharing</td>
<td>2</td>
<td>A, D</td>
</tr>
<tr>
<td>Buying on cost of production</td>
<td>1</td>
<td>A</td>
</tr>
<tr>
<td>Providing quick feedback on carcase</td>
<td>4</td>
<td>A, C, H, L</td>
</tr>
<tr>
<td>Differentiation of target markets</td>
<td>8</td>
<td>......</td>
</tr>
<tr>
<td>Sourcing alignment with branding</td>
<td>2</td>
<td>......</td>
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</table>
Rearranging individual practices into ‘meta’ constructs

<table>
<thead>
<tr>
<th>Practice</th>
<th>Number of replication engaged in practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Establishment of key learning points:</em></td>
<td></td>
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<tr>
<td>Feedback on carcase</td>
<td>4</td>
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<tr>
<td>Cost of production</td>
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<tr>
<td>Drafting animals</td>
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<tr>
<td><em>Collaborative planning</em></td>
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<tr>
<td>Information sharing</td>
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<tr>
<td>Benefit sharing</td>
<td>4</td>
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<tr>
<td>Cost benefit</td>
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</tr>
<tr>
<td><em>Buying on cost of production</em></td>
<td>1</td>
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</table>
Generalisation?

Analytic generalisation versus statistical generalisation

Statistical generalisation is used to extrapolate probabilities from sample/population

Analytic generalisation is used to generalise theories as well as generalise to other concrete situations
Some conclusions (as an example of iSAGE SC case studies)

• Marketing and branding strategies require strategic sourcing to reduce lamb meat supply inconsistency and uncertainty

• Working relationship between downstream and upstream actors is recommended to identify quality specification of lamb, develop and market a range of products that optimise the use of that specification and reduce waste

• …….
Thank you!