Accounting in Networks

Håkan Håkansson
Norwegian School of Management, BI
New trend

• An increased interest in the interface between accounting and inter-organizational issues (articles, books, accounting methods)

• Goes in both directions – accounting as a factor influencing inter-organizational solutions (IMP research) and the importance of inter-organizational dimensions in accounting (Hopwood 1996)
New book: ”Accounting in Networks”

• The book is a result of a couple of seminars taking up both different approaches and different types of accounting practises in ”networks”
• Edited volume consisting of 14 chapters by 22 authors mostly from Europe
• Published by Routledge
Two types of explanations

• Important changes in the use of theories – theories that gives inter-organizational dimensions a more important role

• Important changes in the business landscape – companies are facing a changed environment
But they are embedded

• Two phrases to illustrate the problem of theory and practise

• “I believe it when I see it”.

• “I see it when I believe it”.
## Framework

### BUSINESS LANDSCAPES

<table>
<thead>
<tr>
<th>THEORIES</th>
<th>Landscape A</th>
<th>Landscape B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory M</td>
<td>SITUATION 1</td>
<td>SITUATION 2</td>
</tr>
<tr>
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<td>SITUATION 3</td>
<td>SITUATION 4</td>
</tr>
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Accounting in the world of the market

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Situation 1: Accounting in the world of the market

• Old landscape and established theory
• They have over time become highly embedded
• Concepts such as demand, market and competition have become "black-boxed"
• Important assumptions have been more or less forgotten
Important assumptions

• The importance and function of the boundary
• The role of the transactions and thereby how they can be evaluated
• The way resources can be valued – what is an asset?
• Perfect harmony between the theory and the way accounting is developed
A changed business landscape?

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Changes in the business landscape

• There might be changes in the business landscape
• They can appear both due to for the company internal or external changes
• New legislation, new technologies, changes in the population, where they live etc,
• New ways to manage, to specialize or to handle activities/resources
Ducati

- Italian producer of motorbikes
- Had severe problems in the late 1990s.
- Bad productivity and bad economic performance
- What can Ducati do? What regards
  - Marketing
  - Production
  - Purchasing
Production

• An internal investigation showed that the internal productivity could be increased with 20%.

• All were happy before a calculation was made how much that influenced the total product cost.

• How much?
Production’s share of total cost

- Own production stands for 20% of product cost before marketing
- Bought components stand for 80%
- Thus, the product cost is reduced with 4% when the internal productivity is increased with 20%!!
Suppliers have to be involved

• In order to reach substantial cost reductions the suppliers have to be involved in the process.
• This was also the way Ducati identified as the only possible!
• The question is now ”in what way”? 
Alt 1: Buying on markets

• Let us assume that a motorbike can be decomposed into five major components that in turn can be divided into five sub-components each.

• Let us also assume that each of these five major as well as each of the twenty five (5x5) sub-components can be bought on existing markets (thus there has to be identical alternatives)
Results: A highly standardised product

• For each of the major components we will get the same solution as other buyers (producers of motorbikes)
• We will also get them to the same conditions (price)
• Furthermore each of the five will also consists of the same sub-components
Alt 2: Buying through business relationships

• In a relationship the two parties can choose how much to "standardize".

• This is the case for the relationships for the major components as well as for the 25 sub-components.

• There will in this case be an enormous number of possible co-operation possibilities.

• But we need to develop the “right” relationship.
Organization – before the change

- AD
  - R&D
  - Operations
  - Sales
  - Purchasing
    - Direct iron materials
    - Direct non iron materials
    - Electric materials, plastics, commercials...
    - Indirect materials, services, plants
  - Finance
  - Personnel
  - Quality
  - I.T.
Organization – after the change

AD

R&D
Operations
Sales

Suppliers Development

1 Colour
Buyer
Logistics
Product Dev.
Quality Inspector

2 Electronic
Buyer
Logistics
Product Dev.
Quality Inspector

3 Engine
Buyer
Logistics
Product Dev.
Quality Inspector

4 Functional Groups
Buyer
Logistics
Product Dev.
Quality Inspector

5 Commodities
Buyer
Logistics
Product Dev.
Quality Inspector

Finance
Personnel
Quality
I.T.
A supplier development group

- Colour
  - Buyer
  - Logistics
  - Product Development
  - Quality inspection
Economic tools

• DESMO – Ducati Evolution & Supply Management Optimisation
  – Costs analysis, identify and exploit interdependencies over the boundaries,
  – Process analysis, over the boundaries
  – Product simplifications, over the boundaries
  – Network data interchange platform
Supplier base

• Reduced number of qualified suppliers from 380 to 170
• 9 account for 40% and 36 for 80%
• Of the total; 60 are located in the Bologna district, 80 in Italy, 20 in EU and only 10 outside EU
• Today suppliers stand for 92% of the total product costs
So what?

• The importance of interaction for any specialized company
• Changed interaction the main means
• To change interaction require internal changes including accounting
• To change interaction require changes in the counterparts including their accounting
Consequences for accounting

- The tools developed for situation 1 of little help in situation 2
- The company has to find alternatives that include the counterparts (suppliers)
- But even worse the theory from situation 1 spills over to influence some of the identified problems as they are seen from theory M (for example control problems)
New theories identifying new issues in the old landscape

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New theories will give new insights

- A new theory may give a new picture of the old landscape.
- For example, the development of transaction cost theory gives the researcher a new tool to understand what is going on in the business landscape.
- New theories in physics or psychology have changed our view of the world – not the world itself.
Four examples of new theories in accounting

- Transaction cost theory
- Institutional theory
- Actor Network Theory
- Industrial network theory
- The major difference between them is how easy they are to combine with the old theory (the market theory)
Transaction cost theory

- Close and complementary to the ”old” model
- Identifies some situation with ”market failures”
- Identifies what causes these failures
- Suggests alternative governance modes which creates less transaction costs
New theory based on a new landscape

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Important ingredients in a new theory

- There is at present no such theory and it will take a long time to develop
- But we can identify some key aspects that must be include
- Most of these can be connected to the term
  
  ”RELATEDNESS”
Relatedness

• The impact of having some few important counterparts
• The impact of having limited capabilities
• The impact of time
• The impact of redefined assets
Conclusion - alternative 1

The contemporary changes are just a small deviation from Situation 1. We can continue to do minor adjustments because the market model will continue to be our best base – both for research and for practise.
Conclusion – alternative 2

There are major changes in how the business landscape should be described and analysed. This affects the role and the function of accounting in a very distinct way. Thus, there are important reasons to develop accounting what concerns both the theory it is building on and how it is practised.
Conclusions - alternative 2 (cont)

- Accounting has to handle the fact the economic flows within the company is an integrated part of the flows between the companies.
- Accounting has to be built on relationships instead of transactions.
- Accounting has to develop a theory to relate flows, assets and corporate positions across the wider network.