Research on Management of Emerging Strategic Issues

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Dealing with emerging issues is often a non-structured process.

Cohen, March, and Olsen (1972) comment on organizational decision making in an analysis of organizational decision making processes as follows:

“In a garbage can process there are exogenous time-dependent arrivals of choice opportunities, problems, solutions, and decision makers.

The logic of ordering is temporal rather than consequential. Problems and solutions are attached to choices, and thus to each other, not only because of their means-ends linkages but also because of their simultaneity.

At the limit, almost any solution can be associated with almost any problem – provided they are contemporaries. This limiting case is, however, normally not observed in pure form. The process functions, but it functions within a structure of constraints on linkages between problems and solutions.”

Is the commonly observed non-structured process optimal?

If not, how should firms deal with issues that emerge outside regular strategy processes?
Origins of Strategic Issue Management

- Ansoff (1984) defined strategic issue as “a forthcoming development, either inside or outside of the organization, which is likely to have an important impact on the ability of the enterprise to meet its objectives”.

- The primary collection of these issues is the key strategic issues list. For Ansoff, a strategic issue was something that needed management attention both inside and outside the annual planning cycle.

- Dutton & Duncan (1987) discuss a strategic issue array, a set of strategic issues that emerge as a result of strategic planning and as input to initiation and implementation of strategic change.

- As a system to process strategic issues, Ansoff (1984) proposed the concept of strategic issue management system (SIMS).
Origins of Strategic Issue Management

• Since Ansoff, strategic issues and their management have been extensively studied by Dutton et al. (1986; 1993; 1997; 1987a; 1983; 1987c; 1987d).

• Dutton et al’s studies have included strategic issue diagnosis (Dutton et al., 1983); strategic issues categorization (Dutton et al., 1987c); influence of the strategic planning process on strategic change (Dutton et al., 1987b); forms, functions, and contexts of strategic management systems (Dutton et al., 1987d); the role of uncertainty and feasibility on the patterns of interest around issues (Dutton et al., 1988); discerning threats and opportunities (Jackson et al., 1988); and selling issues to top management (Dutton et al., 1993).

• Whilst Ansoff’s research was prescriptive, Dutton’s research has contributed in a more interpretive manner to the development of theories concerning the underlying factors and dependencies in issue management.
Attention-based view

• Research on environmental scanning and the attention-based view (Ocasio, 1997) complements the existing research on strategy processes and strategic issue management systems.

• Organizations can be regarded as systems of structurally distributed attention (Ocasio, 1997). According to Ocasio, cognition and action of individuals are not predictable from the knowledge of individual characteristics. Instead they are derived from the specific organizational context and situations that individual decision makers are.

• The dynamics of attention focusing and issue strengthening are related to how an organization distributes and controls the allocation of issues, answers, and decision makers within firm’s activities, communications, and procedures.
Methodology and approach

• So far we have examined the corporate level strategic issue management practices of major technology-based firms in the information and communications technology sectors.

• Our analyses are based on both primary and secondary material. In terms of primary material, we have carried out a one-year long extensive in-depth case study of one major firm’s corporate strategic planning and issue management practices with monthly or bi-weekly two to three hour taped and transcribed interviews with managers involved with the development and management of the corporate level strategic planning practices.

• To complement our analyses, we have interviewed representatives of other firms’ as benchmarks and studied the secondary material that is publicly available on the strategic planning practices of Hewlett-Packard and IBM.
All potential organizational and environmental stimuli

'Cognitive base'

Values

Limited vision
Selective perception

Interpretation

Strategic choice

Source: Modified from Hambrick and Mason, 1984
All potential organizational and environmental stimuli

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Source: Modified from Hambrick and Mason, 1984
Attention allocation structure: Strategic Issue
Management Systems, Strategic Agenda

' Cognitive base'

Values

Limited vision  Selective perception  Interpretation

Strategic choice

Source: Modified from Hambrick and Mason, 1984
Origins of strategic issue management

Source: Chase, 1984
## Strategic issue management system archetypes

<table>
<thead>
<tr>
<th></th>
<th>Detailed analysis of strategic issues</th>
<th>Facilitated group work on issues</th>
<th>On-going strategic issue management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic assumption</strong></td>
<td>Fast, in-depth analysis is the key</td>
<td>Efficiency in team work is the key</td>
<td>Preserving valuable options is the key</td>
</tr>
<tr>
<td><strong>Main emphasis</strong></td>
<td>Analysis</td>
<td>Implementation</td>
<td>Both</td>
</tr>
<tr>
<td><strong>Issue identification</strong></td>
<td>Emergent, one-time</td>
<td>Emergent, one-time</td>
<td>Emergent and cumulative</td>
</tr>
<tr>
<td><strong>Issue analysis</strong></td>
<td>Detailed analysis practices and tools</td>
<td>Utilizing team’s analysis intelligence</td>
<td>Varying profiles of resource use</td>
</tr>
<tr>
<td><strong>Implementation plan</strong></td>
<td>Part of the analysis recommendations</td>
<td>Emerges as a result of the group work</td>
<td>Sensemaking result emerging over time</td>
</tr>
<tr>
<td><strong>Speed of action</strong></td>
<td>Relatively fast after the analysis results</td>
<td>Determined at the initiation of work</td>
<td>Non-determinable, options preservation</td>
</tr>
<tr>
<td><strong>Potential challenges</strong></td>
<td>Analysis cannot always imply optimal implementation plan</td>
<td>Team self-sufficiency, team member choice, limited time frame</td>
<td>Saturation of the process and rejection of new issues, speed</td>
</tr>
</tbody>
</table>
Uncertainty of whether any action should be taken

Assign a task force to analyze the recognized strategic issue, e.g. IBM’s Deep Dive analysis process.
- 90 Days of intensive analysis providing a recommendation on how to proceed with the issue
Uncertainty of whether any action should be taken

Low uncertainty → High uncertainty

Assign a task force to analyze the recognized strategic issue, e.g. IBM’s Deep Dive analysis process.
- 90 Days of intensive analysis providing a recommendation on how to proceed with the issue
Difficulty of the action that should be taken

- High complexity
  - Set up a team to decide on the organizational action and agree on the implementation details, e.g. 'war room' type of task forces that through an intensive process analyses and resolves implementation details.

- Low complexity
Difficulty of the action that should be taken

High complexity

Set up a team to oversee the gradual organizational sensemaking and planning of implementation details.

Low complexity
Combining the alternative situations...

- High complexity
- Low uncertainty
- High uncertainty
- Low complexity
Combining the alternative situations...

High complexity

Set up a team to oversee the gradual organizational sensemaking and planning of implementation details.

Low uncertainty

Set up a team to decide on the organizational action and agree on the implementation details, e.g. ‘war room’ type of task forces that through an intensive process analyses and resolves implementation details.

Low complexity
Combining the alternative situations...

High complexity

- Set up a team to oversee the gradual organizational sensemaking and planning of implementation details.
- On-going, ’options-preserving’ strategic issue processing.

Low uncertainty

- Set up a team to decide on the organizational action and agree on the implementation details, e.g. ’war room’ type of task forces that through an intensive process analyses and resolves implementation details.
- Enactment of the environment facilitated by the ease of implementation.

Low complexity
### Analysis and implementation challenges

<table>
<thead>
<tr>
<th>IMPLEMENTATION CHALLENGE</th>
<th>TYPE OF UNCERTAINTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamental</td>
<td>It is procedurally possible to recognize the impossibility and abandon the strategic issue.</td>
</tr>
<tr>
<td>Structural</td>
<td>Structures inhibit us from seeing the impossibility of implementation.</td>
</tr>
<tr>
<td>Fundamental</td>
<td>It is fundamentally impossible to see the impossibility of implementation.</td>
</tr>
<tr>
<td>Procedural</td>
<td>Procedurally recognizable, but structures inhibit implementation.</td>
</tr>
<tr>
<td>Structural</td>
<td>Structures inhibit recognition and implementation.</td>
</tr>
<tr>
<td>Procedural</td>
<td>It is fundamentally impossible to see and structurally difficult to implement.</td>
</tr>
<tr>
<td>Procedural</td>
<td>Procedurally recognizable and implementable.</td>
</tr>
<tr>
<td>Structural</td>
<td>Structures inhibit recognition, but otherwise implementation procedurally feasible.</td>
</tr>
<tr>
<td>Fundamental</td>
<td>It is fundamentally impossible to see, but only procedurally difficult to implement.</td>
</tr>
</tbody>
</table>

**TYPE OF UNCERTAINTY**
## Analysis and implementation challenges

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<tr>
<th>IMPLEMENTATION CHALLENGE</th>
<th>TYPE OF UNCERTAINTY</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Fundamental</td>
<td>Fundamental</td>
<td>Internal in-depth analysis + Issue abandonment</td>
</tr>
<tr>
<td>Fundamental</td>
<td>Structural</td>
<td>Internal and external in-depth analysis + Option preservation</td>
</tr>
<tr>
<td>Structural</td>
<td>Structural</td>
<td>Internal deep dive + Structural &quot;sense making&quot; implementation process</td>
</tr>
<tr>
<td>Structural</td>
<td>Procedural</td>
<td>Internal and external in-depth analysis + Structural &quot;sense making&quot; imple-</td>
</tr>
<tr>
<td>Procedural</td>
<td>Procedural</td>
<td>mentation process</td>
</tr>
<tr>
<td>Procedural</td>
<td>Fundamental</td>
<td>Internal and external in-depth analysis + Option preservation</td>
</tr>
<tr>
<td>Procedural</td>
<td>Procedural</td>
<td>Internal in-depth analysis + Transfer to implementation, e.g. intensive</td>
</tr>
<tr>
<td>Procedural</td>
<td>Procedural</td>
<td>group work or divisional actions</td>
</tr>
<tr>
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<td>Internal and external in-depth analysis + Transfer to</td>
</tr>
<tr>
<td>Procedural</td>
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<td>implementation, e.g. intensive group work or divisional actions</td>
</tr>
<tr>
<td>Procedural</td>
<td>Procedural</td>
<td>Internal and external in-depth analysis + Option preservation</td>
</tr>
</tbody>
</table>
Theme 6

X: Uncertainty: 1 (Procedural), 2 (Organizational), 3 (Fundamental)
Y: Implementation Challenge: 1 (Procedural), 2 (Organizational), 3 (Fundamental)
Bubble Size: Value at Stake: 1 (Low), 3 (Medium), 5 (High)
Bubble Color: Rightness of Decision: Green (+2), Light Green (+1), Yellow (0), Orange (-1)
Bubble Pattern: Nature of Work: Confetti (Undirected Scanning), Grid (Directed Scanning), Brick (Planning for Action)
Bubble Border Thickness: Impact: Dotted (None), Thin (Limited), Thick (Wide)
Label Font: Resource: Italic (Low), Regular (Medium), Bold (High)
Label Border: Source of Topic: Red (Top Management), Yellow (Escalated from IG), Pale (from Strategy Process)
Theme 12

X: Uncertainty: 1 (Procedural), 2 (Organizational), 3 (Fundamental)
Y: Implementation Challenge: 1 (Procedural), 2 (Organizational), 3 (Fundamental)
Bubble Size: Value at Stake: 1 (Low), 3 (Medium), 5 (High)
Bubble Color: Rightness of Decision: Green (+1), Light Green (+1), Yellow (0), Orange (-1)
Bubble Pattern: Nature of Work: Confetti (Undirected Scanning), Grid (Directed Scanning), Brick (Planning for Action)
Bubble Border Thickness: Impact: Dotted (None), Thin (Limited), Thick (High)
Label Font: Resourcing: Italic (Low), Regular (Medium), Bold (High)
Label Border: Source of Topic: Red (Top Management), Yellow (Escalated from BG), Pale (from Strategy Process)
Theme 5

X: Uncertainty: 1 (Procedural), 2 (Organizational), 3 (Fundamental)
Y: Implementation Challenge: 1 (Procedural), 2 (Organizational), 3 (Fundamental)
Bubble Size: Value at Stake: 1 (Low), 3 (Medium), 5 (High)
Bubble Color: Rightness of Decision: Green (+), Light Green (+1), Yellow (0), Orange (-1)
Bubble Pattern: Nature of Work: Confetti (Undirected Scanning), Grid (Directed Scanning), Brick (Planning for Action)
Bubble Border Thickness: Impact: Dotted (None), Thin (Limited), Thick (Wide)
Label Font: Resourcing: Italic (Low), Regular (Medium), Bold (High)
Label Border: Source of Topic: Red (Top Management), Yellow (Escalated from BG), Pale (from Strategy Process)
Theme 10

X: Uncertainty: 1 (Procedural), 2 (Organizational), 3 (Fundamental)
Y: Implementation Challenge: 1 (Procedural), 2 (Organizational), 3 (Fundamental)
Bubble Size: Value at Stake: 1 (Low), 3 (Medium), 5 (High)
Bubble Color: Rightness of Decision: Green (+2), Light Green (+1), Yellow (O), Orange (-1)
Bubble Pattern: Nature of Work: Condict (Undirected Scanning), Cond (Directed Scanning), Brick (Planning for Action)
Bubble Border Thickness: Impact: Dotted (None), Thin (Limited), Thick (Wide)
Label Font: Resourcing: Italic (Low), Regular (Medium), Bold (High)
Label Border: Source of Topic: Red (Top Management), Yellow (Escalated from BG), Pale (from Strategy Process)
Theme 1

X: Uncertainty: 1 (Procedural), 2 (Organizational), 3 (Fundamental)
Y: Implementation Challenge: 1 (Procedural), 2 (Organizational), 3 (Fundamental)
Bubble Size: Value at Stake: 1 (Low), 2 (Medium), 3 (High)
Bubble Color: Rightness of Decision: Green (+2), Light Green (+1), Yellow (0), Orange (-1)
Bubble Pattern: Nature of Work: Confetti (Undirected Scanning), Grid (Directed Scanning), Brick (Planning for Action)
Bubble Border Thickness: Impact: Dotted (None), Thin (Limited), Thick (Wide)
Label Font: Resourcing: Italic (Low), Regular (Medium), Bold (High)
Label Border: Source of Topic: Red (Top Management), Yellow (Escalated from BG), Pale (from Strategy Process)
Theme 1

Value at Stake: Low (1), Medium (3), High (5)
Resourcing: Low (1), Medium (3), High (5)
Impact: Low (1), Medium (3), High (5)
Rightness: Right (5), somewhat right (4), Neutral (3), Somewhat wrong (2), Wrong (1)
Nature of Work: Undirected scanning (1), Directed scanning (3), Planning for Action (5)
Internal strategic networks in strategic issue management

• **Individual centrality.** The size of the node illustrates the (Bonacich) centrality of the individual in the collaboration network related to the NBDF work on theme level (weighing both the number of direct collaborators and the network centrality of the collaborators, aggregated on theme level).

• **Collaborative relationships.** The strength of the line illustrates the number of themes the two individuals connected by the line have worked together on.

Source: Kajanto, Keijola, Laamanen, Maula, 2004
On-going management of strategic agenda

1 Receptivity to new agenda items
   • Internal and external information
   • Continuous scanning with a special focus on disruption
   • Organisation of responsibilities and processes

2 Selection of issues to be included
   • Emergent or analytical selection processes
   • Potential biases in the selection of issues
   • The number of items can be flexible or fixed

Source: Keijola, Laamanen, Maula, 2003
On-going management of strategic agenda

3 Item structure
- Item type
- Underlying assumptions,
- Objectives and constraints,
- Priorities

4 Intelligence support
- Intelligence requirements
- Organisational responsibilities and processes

5 Keeping the agenda up-to-date over time
- Priority management
- Update frequency and triggers
- Organisational responsibilities and processes

Source: Keijola, Laamanen, Maula, 2003
Summary and practical implications

• Three archetypes of strategic issue management systems
  – Detailed analysis of strategic issues
  – Facilitated group work on strategic issues
  – On-going strategic issue management

• Applicability of the strategic issue management systems for different issues
  – Procedural, structural, and fundamental uncertainty
  – Procedural, structural, and fundamental implementation challenge

• Guidance for top management teams and managers in charge of corporate intelligence and strategy processes on how to develop their approaches and systems for managing issues emerging outside the regular strategy processes.