Environmental Scanning for Better Communication with Organizations’ External Environments and Better Performance

----- Towards a Refined Model

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What is Environmental Scanning (ES)?

- Aguilar (1967) defines environmental scanning as acquiring information about events and relationships in a company’s outside environment, the knowledge of which would assist top management in its task of charting the company’s future course of action.

- Subsequent studies reinforced Aguilar’s definition without substantially altering this perspective (e.g. Daft and Weick, 1984; Lester and Waters, 1989; Choo, 1993; Albright, 2004).

- The process of environmental scanning was gradually extended and has been conceptualized as an integrated information management system (e.g. Aaker, 1983; Costa, 1995; Albright; 2004; Lonnqvist and Pirttumaki, 2006).
External Environments
Remote Environment

Task Environment of OA

- Retailer A
- Customers Retailer 1
- End Users
- Retailer 1
- Investors A
- Supplier1
- Supplier2
- Bank
- Competitors
- C1
- C2

Task Environment of OB

- Retailer B
- Customers Retailer 2
- Investors B
- Supplier2

Task Environment of Oc

- Customers
- Resources
- Competitors
- Oc
PEU, ES and Organizational Performance

- **Perceived Environmental Uncertainty (PEU)**
  - PEU is the unpredictability of an organization’s external environment based on the perceptions of strategic decision-makers.
  - PEU triggers the need for environmental scanning.

- **ES and Organizational Performance ---- INDIRECT**
  - Organisations conducting effective ES activities would be more likely to achieve strategic alignment with external environment.
### PSU, ES and Organizational Performance

#### Measurement

<table>
<thead>
<tr>
<th>PSU</th>
<th>Measurement</th>
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</thead>
<tbody>
<tr>
<td>PEU</td>
<td>PI \times (C+R)</td>
<td>AVAIL &amp; PREDICT</td>
<td>EU \times I</td>
<td>Rate by levels</td>
</tr>
<tr>
<td>ES</td>
<td>Frequency of scanning &amp; Degree of interest</td>
<td>Use of info sources</td>
<td>Scope of scanning</td>
<td>Type and role of scanning unit</td>
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<td>(Hambrick, 1982; Boyd &amp; Fulk, 1996; Strandholm &amp; Kumar, 2003; McGee &amp; Sawyerr, 2003)</td>
<td>(Brush, 1992; Daft et al., 1988; May et al., 2000; Stewart et al., 2008)</td>
<td>(Beal, 2000; Strandholm &amp; Kumar, 2003)</td>
<td>(Olsen et al., 1994)</td>
</tr>
<tr>
<td>OP</td>
<td>Financial performance: profitability (return on assets), return on sales, growth in sales</td>
<td>Subjective approach through self-reporting measures</td>
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<td>(Ahituv et al., 1998; Brush, 1992; Daft et al., 1988; McGee &amp; Sawyerr, 2003; Olsen et al., 1994; Subramanian et al., 1993a; West, 1988)</td>
<td>(Kumar et al., 2001a; Garg et al., 2003; Beal, 2000)</td>
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PEU, ES and Organizational Performance

- Relationships

- PEU and ES
  - A linear positive relationship (Sawyerr, 1993; Ebrahimi, 2000; McGee and Sawyerr, 2003).
  - Failed to establish a positive relationship (Elenkov, 1997a).
  - More complex relationship (Choo, 1993; Stewart and Sweo, 2000; Boynton, Gales and Blackburn, 1993).

- ES and Organizational Performance
  - Positive relationship (West, 1988; Subramanian et al., 1993a; Garg et al., 2003; Strandholm and Kumar, 2003).
  - Failed to establish a link (Brush, 1992; Sawyerr et al., 2000; Beal, 2000).
Problem Statement

- In prior literature, besides information gathering, insufficient attention has been paid to the other steps of ES.

- For studies investigating environmental scanning’s impact on organizational performance, it may be proper to use financial measure and quantitative test only.

It is, therefore, desirable to study ES as a systematic process and its indirect impact to organizational performance in a more proper manner.
Refined Models

- PSU, ES and Organizational Performance
- Environmental Scanning Process
Remote Environment

Task Environment

Performance

Alignment

Organization Knowledge Repository

Environmental Scanning

Implement Adaptive Behavior (Strategic or Tactical)

Formulate Adaptive Behavior (Strategic or Tactical)

PEU = PI \times (PR + PC)
Revised Environmental Scanning Process

- Scanning Need Identification
- Information Collection
- Information Processing & Synthesizing
- Information Distribution
- Information Storage

- Users’ Information Evaluation & Interpretation
- Formulate Adaptive Behavior

Strategic or Tactical Decision-Making (Information Use)

Environmental Scanning Process
Proposed Research Methodology

- **PEU and ES ------ Quantitative Methods**
  - Frequency and attached importance for all ES steps

- **Contribution of ES**
  - **Direct Contribution ------ Quantitative Methods**
    - Dependent Variable: Quality of information ready for use;
  - **Indirect Contribution ------ Qualitative Methods**
    - Five perspectives for measuring organization performance
      - Financial (increase shareholder value, increase ROI…)
      - Customer (increase customer satisfaction, attract new customer…)
      - Internal Business Process (improve operation effectiveness and efficiency)
      - Employee (improve job satisfaction, reduce employee turnover rate…)
      - Growth (develop new product and services…)
Phrase 1: Questionnaire Survey
Verify the proposed model statistically regarding the environmental scanning process under different uncertainty levels

Selection of two leading companies from each industry

Phrase 2: Interview and Focus Group
- Reveal the indirect impact of the overall environmental scanning process on organization performance;
- Refine the proposed models through more profound information obtained from various levels of scanning participants
Significance of the Research

- From a Theoretical Perspective
  ✓ This research aims to address the knowledge gaps and build up a new model of ES as a systematic process and its indirect impact to organization performance

- From a Practical Perspective
  ✓ Reveal their ES mechanisms, detect the problems they may encountered, and generate implications on how to improve the current situation.

- From a Methodological Perspective
  ✓ Explore the feasibility of adopting both quantitative and qualitative methods to generate a quality set of findings and to cross validate them.
Thank you!