RESEARCH NOTES

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PATTERNS OF INTEREST AROUND ISSUES:
THE ROLE OF UNCERTAINTY AND FEASIBILITY

JANE E. DUTTON
JANE WEBSTER
New York University

Decision makers in organizations are confronted with a variety of issues that activate their attention. Issues are events, developments, or trends that have potential consequence for an organization. Consciously or unconsciously, decision makers become interested in and involved with some issues and ignore others. Their interest is manifested in written or verbal discussions about an issue, collecting information relevant to it, and other concrete behaviors. Interest in an issue represents a type of investment in understanding and potentially acting on that issue. Given that decision makers have only a limited supply of time, energy, and money, interest can only be allocated across a finite issue set. In an organization, such individual investments create patterns across members of wide and diverse interest in some issues and limit the breadth and diversity of interest in others.

Decision makers’ interests in issues are consequential for both the processes and the outcomes of decision making. Individuals’ interests in issues mark the beginning of commitments that facilitate or block action on an issue (Brunsson, 1982). Once activated, collective interest in an issue serves as a reservoir of knowledge resources that people can draw on to understand and resolve the issue. Finally, decision makers’ collective interests in issues can provide a basis for coalition formation so that issue outcomes can be influenced “outside of the formally constructed, legitimate structure” (Stevenson, Pearce, & Porter, 1985: 262).

This research employed a management simulation to explore what kinds of contexts and what types of issues attract decision makers’ interests. In particular, it examined empirically how general levels of environmental uncertainty and of the perceived feasibility of resolving an issue are related to the number and diversity of decision makers interested in that issue. The research represents an empirical test of the relationship between issue judgments (feasibility) in particular contexts (certainty-uncertainty) and issue-related behavior (breadth and diversity of issue interest).

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THEORETICAL BACKGROUND

Uncertainty and Issue Interest

Decision makers experience different levels of uncertainty depending on the firm they are employed by (Thompson, 1967), the unit they reside in (Crozier, 1964), the role they inhabit (Bacharach & Lawler, 1981), and the issue they face (Astley, Axelsson, Butler, Hickson, & Wilson, 1982). Levels of uncertainty or individuals' perceptions of whether they can accurately predict conditions around them (Milliken, 1987) in a particular setting affect whether or not decision makers can readily determine a desired course of action. Where high levels of uncertainty exist, there are multiple paths for achieving ends, ends are unknown, and the probabilities that any paths will achieve a desired end are difficult to determine (March & Olsen, 1972).

The presence of uncertainty could affect decision makers' willingness to get involved or express interest in an issue in two very different ways. One line of argument suggests that high levels of uncertainty motivate decision makers to act collectively on an issue. Consistent with this perspective is the notion that collective interest in an issue affords the possibility of pooling resources and collective clout, thus improving the knowledge and influence base for resolving an issue. That is typically the rationale coalition theorists provide in explaining why coalitions of certain sizes and diversity form. Also consistent with this line of reasoning is the idea that, in situations in which uncertainty from either tasks or general environmental conditions is high, many individuals are motivated to join coalitions, as bureaucratic methods of influence are ineffective (Tushman, 1977), conflicting goals may be apparent (Cyert & March, 1963), and precedents and payoffs for knowing how to interpret or resolve an issue alone are few (Gandz & Murray, 1980).

An argument can also be made that supports the opposite relationship between uncertainty and the breadth and diversity of issue interest. High levels of certainty may encourage issue interest, as individuals in such contexts can predict that their investment will have some sort of personal payoff. Such logic assumes that in certain contexts, any issue can be more easily understood, prioritized, and resolved than it could be if it were to arise in a more uncertain context (McCall & Kaplan, 1985). Thus, interest in issues in certain contexts is a less personally risky strategy. Compared to the situation in an uncertain context, in a more certain context, the probability of failing to resolve an issue is lower, as individuals have access to more information and can more easily discern relationships between ends and means. According to the second scenario, issue interest will be far greater and more diverse in certain than in uncertain contexts.

That argument leads to a prediction identical with Bacharach and Lawler's (1981) proposition that certain contexts offer greater incentives than uncertain contexts for individuals to join coalitions. Bacharach and Lawler argued that in certain contexts individuals form coalitions to mutually influence outcomes as they do not have a basis for gaining personal power on their own.
Feasibility and Issue Interest

Decision makers' interests in an issue are also related to assessments about the probability of issue resolution, which are captured by the concept of an issue's feasibility (Dutton & Duncan, 1987; Hawley & Nichols, 1982). Those studies have defined perceived feasibility as an individual's assessment of the probability of resolving or being able to take action on an issue. Perceived feasibility is issue-specific, distinguishing it from the more general state of environmental or task uncertainty that characterizes a unit or organizational context. Perceived feasibility depends on levels of perceived understanding and perceived control over the means for resolving an issue (Dutton & Duncan, 1987).

If an issue is perceived as infeasible to resolve, decision makers can have two conflicting responses. On the one hand, a logic similar to the first type described in the preceding section suggests that an issue decision makers perceive as infeasible to resolve—because their control or understanding is inadequate—may motivate them to band together to involve themselves in understanding and working on the issue. By collectively working on the issue, they may give it a higher chance of resolution because of the pooling of talents and influence. Using this logic, infeasible issues should be associated with interest from a broader and more diverse set of decision makers than feasible issues.

The counterpoint to this position is the claim that decision makers are intensely concerned with maintaining their credibility and track records. They therefore may wish to avoid issues that are intractable, wishing instead to associate themselves with feasible issues. Such associations may boost or at least should not damage their credibility. As McCall and Kaplan concluded in their treatise on managerial decision making, "Managers are prone to act more quickly on issues that look easy to solve and procrastinate over tackling issues that are ambiguous" (1985: 44). Thus, according to this perspective, feasible issues should draw the interest of a greater number and a more diverse set of decision makers than infeasible issues.

The arguments developed above reveal two conflicting logics for predicting the conditions and types of issue that activate decision makers' interests. Although both perspectives suggest decision makers act to maximize expected utility from issue involvement, each emphasizes a different source of utility as motivating their interest. This study provided empirical support for one set of relationships over another.

METHODS AND ANALYSIS

Patterns of decision makers' interest in issues were investigated in a six-hour management simulation, developed by the Center for Creative Leadership, referred to as Looking Glass, Inc. (McCall & Lombardo, 1982; Kaplan, Lombardo, & Mazique, 1985). The simulation allowed for control over the issues decision makers faced but placed them in a very realistic setting, giving the research context many of the desirable attributes of a field.
study (Jenkins, 1986). At the beginning of the simulation, each participant chose 1 of 20 roles ranging from that of plant manager to that of president. Figure 1 diagrams the roles. The roles were organized into three divisions according to the three major product markets served by the company, commercial glass, industrial glass, and advanced glass products.

During the simulation, decision makers in the 20 roles were free to work on whatever issues they wanted. At the end of the simulation, participants recorded decisions made by their division. Although the monetary allocations were inconsequential for affecting any participant’s future credibility or career, Looking Glass, Inc. participants have attested to the lifelike pressures experienced in the simulation that made them behave in a manner very similar to how they would have behaved in their real-life jobs (Petre, 1984).

The Issues

A broad range of strategic and tactical issues was built into the simulation—more than 12 issues per division. For this study, two experts selected a set of issues that varied in terms of their perceived feasibility of resolution. They agreed 100 percent on which issues should be studied intensively. The experts selected issues on the basis of data in the simulation training manual, which provided descriptive facts on each issue, and observations about how participants interpreted the issues accumulated from observing more than 20 trials.

Four issues were selected for each division. They ranged from broad, future-oriented issues such as “changes in the markets served by auto glass” (relatively low feasibility), to pressing, operational issues such as the “underutilization of capacity at two plants” (relatively high feasibility). Table 1 briefly describes the set of issues investigated.

Units of Analysis and Participants

Issues were our chosen units of analysis because we sought to identify judgments (perceptions of feasibility) and behaviors (the breadth and diversity of issue interest) specific to particular issues in particular divisions. The study involved measuring interest breadth and diversity and perceptions of feasibility for the 12 issues (4 in each division). Five groups participated in the simulation. Thus, the analysis was based on 60 issue episodes (4 issues × 3 divisions × 5 replications). Participants were three groups of middle-level managers from a midsize information services firm (N = 55) and two classes of students registered in an upper-level business policy course (N = 38). A one-way analysis of variance revealed that whether participants were managers or students had no significant effect on judgments of issue feasibility, interest breadth, or diversity, so we combined the manager and student data.

Measures

Following the simulation, each participant completed a series of questionnaires that were used both to give feedback to the participants on such concerns as their style of managing and to compute the issue-level measures.
FIGURE 1
Organizational Chart for the Simulation
LOOKING GLASS, INC.*

President

Vice-President
Advanced Products
2

Vice-President
Commercial Glass
9

Director
Sales and Marketing
APD 3

Director
Manufacturing
APD 4

Director
Product Development
APD 5

Director
Sales and Marketing
CGD 10

Director
Manufacturing
CGD 11

Director
Product Development
CGD 12

Director
Sales and Marketing
IGD 16

Director
Manufacturing
IGD 17

Director
Product Development
IGD 18

Plant Manager
Capacitors
APD 6

Plant Manager
Integrated Circuits
APD 7

Plant Manager
Optical Fibers
APD 8

Plant Manager
Lighting Products
CGD 13

Plant Manager
Flat Glass
CGD 14

Plant Manager
Auto Glass
IGD 19

Plant Manager
Specialty Glass
IGD 20

Plant Manager
Glass Piping
IGD

*APD = advanced products division, CGD = commercial glass division; and IGD = industrial glass division.

b In the simulation, this role is a legitimate vacancy to be filled.

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TABLE 1
The 12 Strategic Issues Studied and Their Average Perceived Feasibility

<table>
<thead>
<tr>
<th>Divisions</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial glass</td>
<td>Energy. The type, amount, and availability of energy will affect future production costs (3.5)</td>
</tr>
<tr>
<td></td>
<td>Flat glass. Insufficient production capacity in the Flat Glass Plant (3.9)</td>
</tr>
<tr>
<td></td>
<td>New products. Product development has lost several scientists to other divisions. Current staff lack up-to-date technical training; vision is short-range and noninnovative (4.1)</td>
</tr>
<tr>
<td></td>
<td>Lighting products. Equipment is causing poor quality in products and customer complaints. Plant also has Occupational and Safety Hazard Administration and Environmental Protection Agency problems (4.2)</td>
</tr>
<tr>
<td>Industrial glass</td>
<td>Auto glass. Plant is operating at full capacity and there is natural market growth; a large market exists if truck window and car contracts can be secured (3.5)</td>
</tr>
<tr>
<td></td>
<td>Energy. Type, amount, and availability of energy used in production is crucial to this division, which has the largest production volume in the country (3.7)</td>
</tr>
<tr>
<td></td>
<td>Hiring practices. Failure to meet affirmative action guidelines in hiring and promoting women and minorities; ongoing nepotism in hiring practices (3.9)</td>
</tr>
<tr>
<td></td>
<td>Production capacity. Apparent underutilization of capacity at two plants (4.5)</td>
</tr>
<tr>
<td>Advanced products</td>
<td>Integrated circuits. Product has a $4.2 million loss over last two years; successful marketing of a newly developed chip would turn the product around (3.7)</td>
</tr>
<tr>
<td></td>
<td>Equal employment opportunity policy. Failure to meet guidelines in hiring and promotion of women coupled with an antagonistic posture toward EEO (3.9)</td>
</tr>
<tr>
<td></td>
<td>Marketing. Market research activities are inadequate for the division’s product lines; staff of only three analysts (4.2)</td>
</tr>
<tr>
<td></td>
<td>Bond telephone. Optical fibers are extremely profitable, but sales are dependent on two main customers; Bond, one of the customers, is demanding a price cut (4.3)</td>
</tr>
</tbody>
</table>

*Values for average perceived feasibility are in parentheses. For each division, \(N = 20\) issue episodes (4 issues \(\times\) 5 replications); total \(N = 60\) issue episodes (3 divisions \(\times\) 4 issues \(\times\) 5 replications).

**Issue feasibility.** Each participant rated two of the four issues for their division in terms of its perceived feasibility of resolution. Incumbents of each role were asked to make judgments on the two issues that, by design of the simulation, they would have some minimum level of familiarity with. Thus, the most informed individuals in a division made the judgments of feasibility. For all five replications, incumbents of the same roles made judgments on the same issues.
An individual’s perception of issue feasibility was computed as the average response to three items: “Was it possible for management to take actions to begin to resolve this issue?” “Was it feasible to attack this issue?” and “Was management able to take action on this issue?” Responses were measured on 5-point Likert scales ranging from “a little or no extent” to “a great extent” ($\alpha = .75$). We computed an issue-level measure of feasibility by taking the mean rating across individuals making judgments on an issue during each simulation. Using James, Demaree, and Wolf’s (1984) method for estimating within-group interrater reliability, we found that the reliability of the issue-level measure of feasibility averaged .70.

**Issue interest.** Each participant was asked to identify which decision makers were interested in a particular issue for the four issues relevant to their division. Interest was assessed by asking participants to circle, from a list of all Looking Glass, Inc. titles, which role incumbents were members of the coalition concerned with an issue. The questionnaire explicitly defined a coalition as “the individuals who became part of a group interested in an issue.” All divisional roles were listed, in addition to that of the president. Breadth of issue interest, measured as the number of different roles circled on the role list, could range from 0 to 7 (mean = 2.4, s.d. = 1.6.). Across the five replications, interest in particular issues varied, indicating that issue interest was partially determined by the dynamics of a specific simulation, was not restricted to particular roles for particular simulations, and was not restricted to particular roles for particular issues.

A role incumbent was rated as interested in an issue if at least 50 percent of a division’s members indicated that the individual was part of the interested group. The use of that criterion eliminated the possibility that someone could be randomly identified as interested but was not so stringent as to require complete consensus across all division members. We assessed reliability by computing the average level of agreement across division members on whether individuals were judged as interested (67.9% agreement on 140 judgments) or not interested (87.4% agreement on 300 judgments).

**Interest diversity.** Diversity of issue interest was measured by identifying the two decision makers interested in a particular issue during a particular simulation who were the furthest away from one another in terms of vertical and horizontal distance in the organizational hierarchy. We gave one point for the distance between each of the four levels in the vertical hierarchy and one point for the distance between two departments at a particular horizontal level. Following Bacharach and Lawler’s (1981) ideas for measuring ideological distance in a coalition, we computed diversity as the summed vertical and horizontal distance between the two most distant decision makers interested in an issue. The possible range for interest diversity in this study was 0 to 3 (mean = 1.1, s.d. = 0.8).

**Uncertainty.** The creators of the simulation designed the three divisions to face different levels of environmental uncertainty.

Each of Looking Glass’s three divisions was designed to face a different environment. Conceptually, the environment of the Advanced Products Division is the most uncertain, while that of
Commercial Glass is most certain. Industrial Glass falls between the two. . . . The major elements used to create this variation in Looking Glass include the nature and diversity of customers and competitors, the sophistication and likelihood of change in technologies, the predictability of future markets, financial stability, etc. (McCall & Lombardo, 1982: 538).

In this study, we used the three divisions to approximate differences in uncertainty, with the Commercial Glass Division representing the most certain context, the Advanced Products Division the least, and the Industrial Glass Division falling between the two extremes.

Although the study did not include direct measures of levels of uncertainty experienced by decision makers in each division, several pieces of data suggest that the levels of uncertainty in the divisions approximated the desired contrasts. For each division, we measured the average number of phone calls made by individuals and the average number of memos written as indirect indications of levels of uncertainty. We expected that the number of phone calls to seek information would be greater in the uncertain context, and that the number of written memos would be greater in the certain context. The rationale for this relationship came from Daft and Lengel’s (1984) argument that in uncertain contexts there is a high need for information richness in communication. The pattern of results for the average number of phone calls by division (means = 3.3, 4.2, and 5.3, respectively, for the commercial, industrial, and advanced divisions) and the average number of written memos by division (means = 7.9, 6.8, and 6.3) matched the desired contrasts, but the differences across divisions were not statistically significant. We also computed the average amount of information known by participants in each division, expecting that the level would be highest in commercial glass, the most certain context, and lowest in advanced glass, the least certain context. The level was computed by counting the number of yes responses to a series of 75 questions asking if participants knew specific items of information (e.g., “Did you know that the capacitors market may be shrinking?”). Again, the average scores across the three divisions mirrored the expected patterns (means = 41.9, 42.7, and 43.0% for advanced, industrial, and commercial). However, as in the previous case, differences were not significant (Kruskall-Wallis one-way ANOVA).

**Observed Behavior: Validity Checks**

Trainers responsible for debriefing the simulation participants observed the behavior of individuals who were interested in the issues. Early in the simulation, a great deal of talking about an issue evidenced the development of issue interest; participants discussed an issue’s meaning, its significance, what could be done about it, and so forth. The conversations were sometimes heated and facts and evidence surrounding an issue were often vigorously debated.

Observations on the number of meetings that took place about the issues helped validate the measures of interest breadth and diversity. A greater number of formal and informal meetings took place when issue interest was
broad and diverse. One trainer-observer was assigned to each division for a subset of the simulations. Each trainer-observer noted the number of minutes that division members spent in informal and formal meetings discussing the four issues for their division. For the subset of 32 issue-episodes for which data were available, breadth of interest correlated positively and significantly with the number of minutes the issue was discussed in total \( r = .42, p < .005 \), both in formal meetings \( r = .27, p < .05 \) and in informal meetings \( r = .46, p < .002 \).

RESULTS

Analysis of variance and correlation analyses were performed to assess how uncertainty, feasibility, and issue interest were related. Table 1 presents the average ratings of issue feasibility for the 12 issues. As planned, the perceived feasibility of issues varied, although the set was skewed in favor of feasibility. Table 2 presents the means for breadth of issue interest and diversity across the three divisions. As Table 3 shows, one-way ANOVAs revealed that the more certain the context, the greater the breadth and diversity of issue interest.

Table 3 also shows Pearson product-moment correlation coefficients. The overall correlations between issue feasibility and interest breadth \( r = .38 \) and interest breadth and diversity \( r = .87 \) suggest that the relationship between perceived feasibility and diversity may be an artifact of the correlation between perceived feasibility and interest breadth. Holding interest breadth constant, we examined the partial correlation coefficient between feasibility and diversity, and found that it was not significant (partial \( r = -.08, p < .26 \)). In contrast, when we correlated interest breadth and perceived feasibility, controlling for interest diversity, the result remained significant (partial \( r = .27, p < .02 \)).

DISCUSSION

This study's results suggest that uncertainty may repel rather than encourage broad and varied interest in issues. Further, issues whose resolution is perceived as feasible also attract wider interest, or a greater number of decision makers, than infeasible issues. Consistent with the view that decision makers are opportunists (Kotter, 1982) and "sure-bettors," our findings suggest that people gravitate toward issues more easily when they perceive the issues as having a high probability of resolution and that they take up issues more readily in certain contexts than in uncertain contexts.

The study has implications for researchers considering a simulation methodology for studying decision making. The findings are also suggestive for theories of coalition formation and participation in decision making.

The type of simulation used here has several strengths and drawbacks for examining decision-making processes. Although previous researchers have called for the use of simulations in studies of decision making (e.g., Nees, 1983), very few studies have actually used them (cf. Nees, 1979; Steufert,
TABLE 2
Means and Standard Deviations Across the Three Divisions<sup>a</sup>

<table>
<thead>
<tr>
<th>Variables</th>
<th>Commercial Glass (Most Certainty)</th>
<th>Industrial Glass (Intermediate Certainty)</th>
<th>Advanced Products (Least Certainty)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>s.d.</td>
<td>Means</td>
</tr>
<tr>
<td>Issue breadth</td>
<td>3.0</td>
<td>1.4</td>
<td>2.2</td>
</tr>
<tr>
<td>Issue diversity</td>
<td>1.6</td>
<td>0.8</td>
<td>0.9</td>
</tr>
<tr>
<td>Perceived feasibility</td>
<td>3.8</td>
<td>0.6</td>
<td>4.0</td>
</tr>
</tbody>
</table>

<sup>a</sup> *N* = 20 for all divisions.

TABLE 3
Results of One-Way ANOVAs, Pearson Product-Moment Correlations, Means, and Standard Deviations for the Three Variables<sup>a</sup>

<table>
<thead>
<tr>
<th>Variables</th>
<th>Means</th>
<th>s.d.</th>
<th>Correlations</th>
<th>One-Way ANOVAs with Uncertainty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1. Issue breadth</td>
<td>2.4</td>
<td>1.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Issue diversity</td>
<td>1.1</td>
<td>0.8</td>
<td>.87&lt;sup&gt;*&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>3. Perceived feasibility</td>
<td>3.9</td>
<td>0.7</td>
<td>.38&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.30&lt;sup&gt;*&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> *N* = 60.

<sup>*</sup>p < .01
Clardy, Driver, Karlins, Schroder, & Suefield, 1965). Yet, as this research reveals, a behavioral simulation is useful for studying the processes underlying strategic and operational decisions and for understanding leadership and management processes in general (McCall & Lombardo, 1982; Schneider, 1985). The simulation allowed for unrestricted interaction of multiple decision makers over a wide range of issues, which facilitated measurement and observation at the level of issues as opposed to individuals, units, or organizations. Using the issue as the unit of analysis illuminates how motivations and commitments are organized across decision makers. Although not explicitly measured in this study, the motivations and commitments built around issues have major implications for policy and decision outcomes (Dutton, 1986; Kingdon, 1984).

At the same time, simulations have their limitations. For example, participants may not have had adequate time to develop an interaction history that would allow political processes like coalition side payments (Cyert & March, 1963) to take place. In this study in particular, the issue set included only issues whose resolutions participants perceived as rather feasible. It is impossible to determine if the nature of the issue set or overconfidence among the managers and students was responsible for these feasibility perceptions. Future research should consider the patterns of interests around a broader range of issues. It should also measure the mediating processes through which interest patterns are created, for although this study demonstrated that patterns existed, it did not show why those patterns were observed.

Where great breadth and variety of issue interest is interpreted as evidence of large, diverse coalitions, the findings run counter to assumptions common to political models of organizations. Although numerous theorists have argued that uncertainty creates conditions for extensive coalition formation (Pfeffer, 1981), the results of this study modify those arguments, suggesting that uncertain contexts and infeasibility discourage interest in issues. Although individuals are little motivated to join coalitions under such conditions, those who do are in the position to gain substantial power. Future research needs to clarify the effects of different contexts and issue types on motivation for cooperative action. The results of this study suggest that this relationship is important.

The findings also suggest that theorists need to examine the context in which decision and coalition groups form. Context may enter decision makers' assessments of the expected utility of issue involvement in ways that coalition theorists have not considered (see Murnighan, 1978, for a comprehensive review). The results reported here suggest that both certainty in an issue's context and perceptions of an issue's feasibility relate to patterns and degrees of decision makers' interest in it.

These findings have practical implications for encouraging participation in decision making. In particular, the results suggest that increasing the certainty decision makers experience in a job, unit, or general environment or enhancing perceptions of an issue's feasibility will naturally attract more
decision makers to an issue. Where such conditions do not exist, those responsible for encouraging participation may need to add incentives to activate the interest of decision makers in particular issues.

REFERENCES


Jane E. Dutton is an associate professor of management at New York University. Her M.S. and Ph.D. degrees are from the Kellogg Graduate School of Management at Northwestern University. Her current research interests focus on the interpretation of issues and on agenda building processes and their relationship to organizational change.

Jane Webster is a Ph.D. candidate in the Department of Management at New York University. Her current research interests include human-computer interactions and the impacts of information systems. Her dissertation explores playfulness in computers at work.