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James R. Coakley
College of Business, Oregon State University

Mark K. Fiegenger
College of Business, Oregon State University

David M. White
College of Business, Oregon State University

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Assessing Strategic IT Alignment in a Transforming Organization

James R. Coakley, Mark K. Fiegenger, David M. White
College of Business, Oregon State University IBM United States

Introduction

It has been widely reported in the literature that business and Information Systems Group (ISG) executives are concerned with aligning Information Technology to support corporate business strategies (Chan and Huff, 93; Gaiber, 95; Halloran, 93; Henderson and Venkatraman, 93; Woolfe, 93). Gaiber (95) believes that misalignment is common within today's organizations, as evinced by the technology-focused ISGs that have pushed deployment of state-of-the-art IT that does not serve business needs and the proliferation of "islands of automation" that do not focus on the collective needs of the organization. When discussing this issue with executives, we found that they were able to relate a feeling of uneasiness regarding IT investments, but were not certain exactly why they felt uneasy. They were concerned that major ISG decisions and on-going activities may be pulling the organization in directions that were opposed to what Top Management intends, and that this divergence may remain undetected because of the lack of valid measures for IT alignment.

Definition and Measures of Strategic IT Alignment

Numerous terms and definitions have been used in the IS literature to describe the concept of strategic IT alignment: "strategic alignment" (Henderson and Venkatraman, 1993; Luftman, Lewis and Oldach, 1993), "coordination" (Lederer and Mendelow, 1989), "fit" (Venkatraman, 1989), "linkage" (Reich and Benbasat, 1994), and "harmony" (Woolfe, 1993).

A common theme in the above definitions appears to be the "linkage" of ISG strategies and plans with organizational strategies and plans. This is based on the concept that low-level activities must be guided by high-level planning. Thus, if the ISG strategies and plans are consistent with the strategies and plans of the organization, the low-level ISG activities can be guided to ensure alignment of IT to support those business activities which achieve the strategic vision and goals of the organization.

One proposed measurement for strategic alignment involves looking into the contents of written business and ISG plans to identify the degree that they are complementary. While this measure may be intuitively pleasing, the absence of written plans, for both business and/or the ISG, is a problem (Lederer & Mendelow, 86).

Wolfe (93) criticizes the reliance on plans as an indicator of strategic alignment. Ambiguities and changes in the business plans make it difficult for the ISG to keep up. Business plans are changing at a rapid rate as result of competitive and economic pressures, and many of these changes may not be reflected in the documented plan. When business plans exist, they may not be well communicated throughout the organization. And even when clean plans exist and are well communicated, they may be subject to radical change following acquisition, merger, or sudden change in strategic direction.

Lederer and Mendelow (89) also suggest there are difficulties with coordinating ISG plans with business plans. Sometimes top business executives have no clearly defined mission, objectives, and priorities. Even if executives do know their plans, they might not have thought them out in sufficient detail. In this case, the objectives may be too general to provide practical guidance. And, an unstable business environment might render plans inapplicable. In addition, they cite that the lack of communication of well-defined plans from top management to the ISG can impede the coordination of ISG plans with corporate plans.

Chan and Huff (1993) used the Venkatraman (1989) instrument for measuring the Strategic Orientation of a Business Enterprise (STROBE), which attempts to define distinguish strategies along the dimensions of aggressiveness, analysis, defensiveness, futurity, innovativeness, proactiveness and riskiness. Chan and Huff developed a similar measure for IS strategies, and then defined strategic alignment as the degree to which resources being directed to each of the seven dimensions of IS strategy are consistent with strength of organization's emphasis on each of the corresponding seven dimensions of business strategy. For example, if company is high on the aggressiveness scale, it should also be high on the degree of IS support for aggressiveness. This measure of alignment relies on key executives' perceptions of business and IS activities. Since many organizations do not make verbal or written plans, the focus on activities provides information on realized strategies regardless of the formalization of the planning process within the organization.

Coakley and Fiegenger (1995) proposed a measure of strategic IT alignment based on "strategic consensus". Strategic consensus refers to the shared understanding among executives of the strategic priorities of the organization, the contribution IT can make to the strategic priorities, and the organizational impacts of ISG projects and operations. Low levels of strategic consensus indicates a lack of understanding between business executives, which increases the likelihood that subsequent decisions made by those executives will be inconsistent. High levels of strategic consensus between business executives would suggest agreement on the strategic priorities and directions of the firm, which is a prerequisite to attaining strategic IT alignment.

In a dynamic and changing business environment, linking business and ISG plans can only provide an assessment of strategic alignment in the past. A more relevant issue is whether business executives can maintain strategic alignment dynamically, even as the strategies and priorities of the business are changing. This study extends earlier work on perception-based measures of strategic IT alignment.

The Study

The survey was completed by 29 executives within the organization. A proportional number of responses was received from each of the four functional areas. The sample included 3 of the 4 direct-reports to the CEO, 13 second-level, and 12 third and fourth-level executives.

Six strategic priorities were identified by the CEO: Improving our responsiveness to customer requests/inquiries; Attracting, developing, and retaining highest quality human resources; Increasing speed and accuracy of the processing of claims payments; Reducing administrative costs; Improving internal coordination and control; and Establishing effective marketing programs to expand the customer base. The respondents were presented with a list of these priorities and asked to allocate 100 points in a way that reflected their organization's relative emphasis on each of these priorities. Business executives do not think in the same terms that strategy scholars use (Lederer and Mendelow, 1988), and so survey responses may be confounded by the confusing terminology. Wooldridge and Floyd (1989, 1990) argue that talking about "strategic priorities" is a superior way of capturing information about managers' understanding of strategy, as priorities are observable from decisions made and are not biased by documented strategy statements that may or may not reflect the actual operating strategy.

The respondents also rated the contribution that IT makes to effecting each of these seven strategic priorities (using a 7-point Likert-type scale ranging from "IT makes no contribution to this strategic priority" to "IT makes a critical contribution to this strategic priority"), the emphasis that has been placed on using IT to accomplish the priority (ranging from "far too much emphasis" to "not nearly enough emphasis"), the emphasis placed on using continual improvement efforts to accomplish the priority, and the degree of their involvement in different aspects of the business strategic planning process (7-point scale, ranging from "not at all involved" to "leadership role").

Findings

An assessment of IT alignment can be made by comparing the emphasis of the various strategic priorities to the contributions from IT to those priorities (See Table 1). Alignment is suggested when the more important priorities receive higher contribution ratings, and less important priorities receive lower contribution ratings. The results from this organization show overall alignment. Potential misalignments exist between the strategies of "reducing costs" and "establishing marketing programs". The relatively high contribution of IT towards "reducing costs" is most likely a delayed effect. In the recent past, there was an increased emphasis on reducing costs and IS projects were effected to achieve those goals.

Cluster analysis was applied to categorize the individuals according to their emphasis on the various strategic priorities. This produced two groups (See Tables 2 and 3). In one group, the greatest emphasis was placed on increasing the speed and accuracy of processing claims payments. The priorities of improving response to customer requests and establishing effective marketing programs to expand the customer base were also considered important. Very little emphasis was given to human resources, reducing administrative costs, or improving coordination and control. We labeled this group as being "Customer Focused".

In the other group, the greatest emphasis was balanced between improving response to customer requests and establishing effective marketing programs to expand the customer base. The priorities of increasing speed and accuracy of processing claims payments and reducing administrative costs were also considered important. Very little emphasis given to human resources or improving coordination and control. We labeled this group as being "Volume Focused".

The volume focused group represented the "new" vision within the organization. The organization is known for maintaining premium products with differentiated services. However, these executives felt the need to respond to perceived competitive pressures to position company for the future by expanding customer base, increasing internal efficiencies and reducing internal costs. Thus, a transformation within the strategic priorities of the organization was underway.

Individuals in the volume focused group tended to be the higher-level executives (direct reports and second-level executives), encompassed all functional areas, had a higher level of involvement in planning and implementing strategic business options, tended to have more longevity in their positions, and had a greater knowledge of continual improvement projects. Climate variables indicate that the volume focused group is becoming more internally and efficiency focused within the business unit. These "shifts" are consistent with an organization undergoing a transition in strategies. The organization needs to be more structured and top-down driven until the transition is complete and the new priorities are accepted and understood. Then, a transition back to the open, harmonious, participative management style may be warranted.

However, the customer focused group retains the climate consistent with the past vision. Based on Table 2, we would also expect that customer-focused executives would be clamoring for IT resources to be devoted to the processing claims priority, contrary to the best interests of the organization. Hence, there is a significant risk of mis-alignment of IT resources.

Conclusions

The purpose of this study was to develop an instrument to help executives determine the nature and degree of potential strategy mis-alignments within their organization. Perhaps the most important challenge for executives during an Organizational Transformation is to direct the different parts of the company to shift in concert with one another. When this doesn't happen, there is a greater risk that IT resources will be allocated to the wrong strategic priorities. Unless these mis-alignments in strategic priorities are uncovered and remedied, the entire IT alignment effort will be jeopardized.

References available upon request.

Table 1. Comparison of IT contribution with emphasis

Strategic Priority	Emphasis	IT Contribution
Improve Customer Responsiveness	25.36	5.07
Human Resources	8.69	3.17
Processing Claims	24.87	5.83
Reduce Cost	12.02	4.07
Improve Coordination	6.82	3.69
Expand Markets	22.23	3.93

Table 2. Volume versus Customer-focused group differences in emphasis on current strategic priorities

	Current Strategic Priority		
	Volume-Focused	Customer-Focused	t Value
Customer Responsiveness	25.16	25.62	-0.11
Human Resources	9.06	8.23	0.30
Processing Claims	14.76	37.31	-6.01*
Reduce Cost	16.79	6.15	3.64*
Improve Coordination	7.99	5.38	1.37
Expand Market	26.24	17.31	1.88

Table 3. Volume versus Customer-focused group differences in emphasis on future strategic priorities

	Future Strategic Priority		
	Volume-Focused	Customer-Focused	t Value
Customer Responsiveness	27.00	26.50	0.15

Human Resources	9.33	10.50	-0.70
Processing Claims	15.00	33.50	-7.24*
Reduce Cost	17.67	5.00	4.18*
Improve Coordination	5.67	5.50	0.05
Expand Market	25.33	19.00	1.62

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