

## A MULTILEVEL MODEL FOR MEASURING FIT BETWEEN A FIRM'S COMPETITIVE STRATEGIES AND INFORMATION SYSTEMS CAPABILITIES

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### Appendix A

#### Prior Approaches for Measuring the Strategic Fit of a Firm's Information Systems

Authors	Competitive Strategy Measures	Information Systems Measures	Strategic Fit of IS Measures	Insights for Measuring Strategic Fit of IS	Utility for Measuring Strategic Fit of IS
Chan et al. (1997)	<ul style="list-style-type: none"> <li>Respondents rate how well they agree to statements from Venkatraman's (1989b) 6-dimension business strategic orientation (STROBE) measure of aggressiveness, analysis, defensiveness, futurity, proactiveness, risk aversion (e.g., "We sacrifice short-term profitability to gain market share").</li> </ul>	<ul style="list-style-type: none"> <li>Measures apply to firm's IS portfolio, not specific IS</li> <li>Respondents rate how well their firm's IS support each of the 8 STROBE dimensions (e.g., "The systems help us monitor changes in our market share").</li> </ul>	<ul style="list-style-type: none"> <li>Fit modeled as match between STROBE items and IS support for each STROBE dimension.</li> <li>Results suggest IS support for STROBE dimensions moderated impact of STROBE items on business performance.</li> </ul>	<ul style="list-style-type: none"> <li>Supports measuring fit using multidimensional configurations rather than contingency relationships.</li> <li>Advocates modeling strategies as realized patterns of activity rather than intended plans.</li> </ul>	<ul style="list-style-type: none"> <li>STROBE measures suitable for measuring fit of firm's IS portfolio, but not adapted for specific IS.</li> <li>Requires 40 to 60 questions to operationalize STROBE and IS support for STROBE constructs.</li> <li>Does not examine prescriptive utility of approach for measuring and improving fit.</li> </ul>

Authors	Competitive Strategy Measures	Information Systems Measures	Strategic Fit of IS Measures	Insights for Measuring Strategic Fit of IS	Utility for Measuring Strategic Fit of IS
Sabherwal & Chan (2001)	<ul style="list-style-type: none"> <li>Responses to Venkatraman's (1989b) 6-dimension STROBE measure are used to assign a firm to one of Miles et al.'s (1978) Defender, Prospector, or Analyzer strategic archetypes. A review of literature is used to support the mapping of STROBE responses to the strategic archetype.</li> </ul>	<ul style="list-style-type: none"> <li>Measures apply to firm's IS portfolio, not specific IS.</li> <li>Respondents rate how well their firm's IS support four strategic attributes of IS (monitoring and controlling operations, market surveillance, strategic decision-making, and interorganizational coordination).</li> </ul>	<ul style="list-style-type: none"> <li>Fit modeled as profile deviation between theoretically ideal IS profile for the firm's strategic archetype and respondent's ratings of support provided by the firm's IS for each of the four strategic attributes of the IS.</li> <li>Results suggest strategic fit of IS influenced business performance for prospectors and analyzers, but not defenders.</li> </ul>	<ul style="list-style-type: none"> <li>Supports measuring strategic fit using profile deviation approach to measure misalignment between ideal and realized support provided by a firm's IS.</li> <li>Advocates analyzing previous literature to determine theoretically ideal IS attributes for a given Miles and Snow (1978) competitive strategy type.</li> </ul>	<ul style="list-style-type: none"> <li>Attributes of a firm's IS strategies were used to assess fit of firm's IS portfolio, but did not focus on specific types of IS.</li> <li>STROBE measure apparently more valid than Miles et al.'s (1978) paragraph-style measure, but does not operationalize all dimensions of Miles and Snow archetypes.<sup>1</sup></li> <li>Does not examine prescriptive utility of the approach for measuring and improving fit.</li> </ul>
Avison et al. (2004)	<ul style="list-style-type: none"> <li>Intended strategies are inferred from documentation of business scope, distinctive competencies, and business governance (after Henderson and Venkatraman 1992).</li> </ul>	<ul style="list-style-type: none"> <li>Intended and realized IS strategies are inferred from documentation of existing and proposed IS (after Henderson et al. 1996; Luftman 1996; Papp 2001).</li> </ul>	<ul style="list-style-type: none"> <li>Fit modeled using strategic alignment model (SAM) proposed by Henderson et al. (1996) and extended by Luftman (1996) and Papp (2001).</li> <li>Fit measured qualitatively as match between information systems and competitive strategies.</li> </ul>	<ul style="list-style-type: none"> <li>Positions strategic fit of IS as a subset of a broader strategic alignment model containing business and IS strategies, structures, and processes, each of which can be the focal point for initiating alignment.</li> </ul>	<ul style="list-style-type: none"> <li>Illustrates how SAM could be used to assess strategic fit of IS. Little guidance on determining competitive strategies or IS capabilities.</li> <li>Provides an illustrative example of how to apply SAM to assess fit. Does not examine prescriptive utility directly.</li> </ul>
Oh & Pinsonneault (2007)	<ul style="list-style-type: none"> <li>Respondents rate the relative importance of 34 strategic actions (after Miller and Chen 1996), which are used to determine how strongly the firm follows three generic strategies: revenue growth, quality improvement, and cost reduction.</li> </ul>	<ul style="list-style-type: none"> <li>Measures apply to firm's IS portfolio, not specific IS.</li> <li>Respondents indicate how many different types of IS are used at their firm from a list of 32 types of IS (e.g., order management). The percentage of potential IS that are used at the firm is used to infer how strongly the firm's IS portfolio supports revenue growth, quality improvement, and cost reduction strategies.</li> </ul>	<ul style="list-style-type: none"> <li>Fit modeled as match between importance of business strategy actions (revenue growth, quality improvement, and cost reduction) and percentage of potential IS for supporting each strategy that are used at the firm.</li> <li>Results suggest usage of cost reduction IS moderated impact of fit on business performance in area of cost reduction.</li> </ul>	<ul style="list-style-type: none"> <li>Indicates that relationship between strategic fit of IS and business performance is nonlinear and requires careful attention to measures, contingency theories, and inter-relationships between variables.</li> </ul>	<ul style="list-style-type: none"> <li>IS usage measures suitable for determining the composition of a firm's portfolio of IS and how well it supports the three generic strategies.</li> <li>Does not examine prescriptive utility of the approach for measuring and improving fit.</li> </ul>

<sup>1</sup>Miles et al.'s (1978) strategic archetype construct contains 11-dimensions (product-market breadth, market leadership, market surveillance, growth, process goals, competency breadth, adaptability, administrative focus, planning, organizational structure, and control) which are not fully operationalized in the paragraph-style measure originally proposed to measure the Miles and Snow archetype (Conant et al. 1990; Segev 1987).

Authors	Competitive Strategy Measures	Information Systems Measures	Strategic Fit of IS Measures	Insights for Measuring Strategic Fit of IS	Utility for Measuring Strategic Fit of IS
This study	<ul style="list-style-type: none"> <li>Miles and Snow (1978) archetype determined using responses to Conant et al.'s (1989) 11-dimension questionnaire.</li> </ul>	<ul style="list-style-type: none"> <li>Generic IS capabilities adapted to measure capabilities of SCM.</li> <li>Respondents rate how well their firm's IS support five SCM capabilities (operational efficiency, operational flexibility, planning, internal analysis, and external analysis).</li> </ul>	<ul style="list-style-type: none"> <li>Fit modeled as profile deviation between theoretically ideal SCM capabilities profile for the firm's strategic archetype and respondent's ratings of support provided by firm's SCM for each of five SCM capabilities.</li> <li>Results suggest outputs have strong face validity for assessing strategic fit as multiple levels.</li> </ul>	<ul style="list-style-type: none"> <li>Describes the theoretical and empirical justification for a more fine-grained model for measuring the strategic fit of a firm's IS so that the outputs that are more actionable and readily corroborated.</li> </ul>	<ul style="list-style-type: none"> <li>Strong theoretical and empirical support for measures used to operationalize strategic fit for SCM.</li> <li>Utility and content validity of measurement model demonstrated through an iterative prototyping approach using an analysis of multiple case study interviews, questionnaires, and archival documents.</li> </ul>

## Appendix B

### Summary of Case Descriptions

**Case A** produces and distributes energy products primarily in Canada. Throughout the firm, a centralized EDI-enabled ERP application is used for supply chain management, financial analysis, and procurement. For the corporate business unit represented by Case A1, the SCMs are primarily used for internal supply chain transactions, planning, and analyses, with some usage for external procurement transactions and analyses. For the retail business unit represented by Case A2, the SCMs are used more for external market scanning, product pricing analyses, and managing relationships and transactions with retail dealers and logistics providers.

**Case B** is a global contract manufacturer of electronic devices and components. Case B fulfils the various manufacturing, design, and supply chain management requirements that its clients desire to outsource. Although Case B tends to have long-term relationships and contracts with its large clients, there are typically several other global contract manufacturers that compete for the same clients. The SCMs used by Case B have advanced capabilities for coordinating and optimizing the supply chain. However, the diversity of product lines, geographic dispersion of the facilities, and frequency of mergers and acquisitions has resulted in Case B having a large number of different SCMs, which are not always well integrated.

**Case C** designs and manufactures integrated circuits (electronics chips) for use in electronics products that are manufactured by other firms. The relatively small size of the company Case C and the limited breadth of products has made it easier for them to deploy a fairly simple, integrated, and centralized SCM portfolio. Although there is interest in collaborative supply chain capabilities, the relatively low-volume, high-margin transactions have not required Case C to invest heavily in supply chain collaboration systems to date.

**Case D** is involved in the sales, service, manufacturing, and distribution of innovative high-end equipment for long-haul telecommunication networks. Case D outsources much of the product manufacturing to contract manufacturers including Case B and hence utilizes SCM primarily for order management and finance, rather than manufacturing and distribution. A centralized SCM is used throughout the firm to manage purchasing and to aggregate demand for supplied parts from the different business units of the firm.

**Case E** sells, services, manufacturers, and distributes equipment for long haul telecommunication networks. Case E outsources product manufacturing to contract manufacturers including Case B. However, the proportion of manufacturing outsourced by Case E is less than Case D. Although Case E’s SCMs are used primarily for order management and finance, manufacturing and distribution functionality is used more extensively than at Case D. In addition, Case E generally has a larger product and geographic range than Case D and has operated the business for a much longer period. Case E uses a variety of SCM including several different ERP systems, which are partially integrated with an enterprise-wide advanced planning and scheduling SCM. Separate order management, finance, and product life cycle management information systems are used to manage order fulfillment, product development, customer service, and market intelligence. There is some process integration with customers and suppliers; however, the information exchanged is limited mostly to capturing customer requirements and aggregating purchase orders.

## Appendix C

### Questionnaire Items Used in the Measurement of Strategic Fit of SCM ██████████

#### C1. Multi-Item Scale for Identification of Realized Competitive Strategies

The following measure is adapted from Conant et al. (1990). Test-retest reliability of Conant et al.’s original scale items 1 to 11 and the overall instrument are:

1	2	3	4	5	6	7	8	9	10	11	Intrument
.63	.73	.72	.62	.82	.75	.67	.70	.66	.73	.56	0.74

The letters in italics and brackets identify the response characteristic of a (D) = defender, (P) = prospector, (A) = analyzer, and (R) = reactor. These letters and the item titles are for description and analysis purposes only and were removed from the questions given to respondents. The 11 scale items comprising the instrument correspond to the 11 competitive strategy dimensions in the Miles and Snow (1978) typology. The order presented was 1,5,8,7,4,2,10,3,9,11,6 to decrease the risk of hypothesis guessing and reduce risk of recency effects for related items.

1. *Entrepreneurial: Product–Market Focus*

In comparison to our competitors, the products and services that we provide to our customers are best characterized as

- (a) More innovative; continually changing; and broader in scope. (*P*)
- (b) Fairly stable in certain markets while innovative in other markets. (*A*)
- (c) Well focused; relatively stable; and consistently defined throughout the marketplace. (*D*)
- (d) In a state of transition, and largely based on responding to opportunities or threats from the marketplace or environment. (*R*)

2. *Entrepreneurial: Market Leadership*

In contrast to our competitors, my organization has an image in the marketplace as one which

- (a) Offers fewer, selective products and services that are high in quality. (*D*)
- (b) Adopts new ideas and innovations, but only after careful analysis. (*A*)
- (c) Reacts to opportunities or threats in the marketplace to maintain or enhance our position. (*R*)
- (d) Has a reputation for being innovative and creative. (*P*)

3. *Entrepreneurial: Market Surveillance*

The amount of time my organization spends on monitoring changes and trends in the marketplace can best be described as

- (a) Lengthy: We are continuously monitoring the marketplace. (*P*)
- (b) Minimal: We really do not spend much time monitoring the marketplace. (*D*)
- (c) Average: We spend a reasonable amount of time monitoring the marketplace. (*A*)
- (d) Sporadic: We sometimes spend a great deal of time and at other times spend little time monitoring the marketplace. (*R*)

4. *Entrepreneurial: Market Growth*  
 In comparison to our competitors, the increase or losses in demand that we have experienced are due most probably to
  - (a) Our practice of concentrating on more fully developing those markets that we currently serve. (D)
  - (b) Our practice of responding to the immediate needs of the marketplace. (R)
  - (c) Our practice of aggressively entering into new markets with new types of product and service offerings. (P)
  - (d) Our practice of assertively penetrating more deeply into markets we currently serve, while offering new products and services only after a very careful review of their potential. (A)
  
5. *Engineering: Process Goals*  
 One of the most important goals in this organization in comparison to our competitors is our dedication and commitment to
  - (a) Keep costs under control. (D)
  - (b) Analyze our costs and revenues carefully to keep costs under control and to selectively generate new products and services or enter new markets. (A)
  - (c) Insure that the people, resources, and equipment required to develop new products and services and new markets are available and accessible. (P)
  - (d) Make sure that we guard against critical threats by taking whatever action is necessary. (R)
  
6. *Engineering: Competency Breadth*  
 In contrast to our competitors, the competencies (skills) that our managerial employees possess can best be characterized as
  - (a) Analytical: their skills enable them to both identify trends and then develop new product or service offerings or markets. (A)
  - (b) Specialized: their skills are concentrated into one, or a few, specific areas. (D)
  - (c) Broad and entrepreneurial: their skills are diverse, flexible, and enable change to be created. (P)
  - (d) Fluid: their skills are related to the near-term demands of the marketplace. (R)
  
7. *Engineering: Infrastructure Adaptability*  
 The one thing that protects my organization from competitive failure is that we
  - (a) Are able to carefully analyze emerging trends and adopt only those that have proven potential. (A)
  - (b) Are able to do a limited number of things exceptionally well. (D)
  - (c) Are able to respond to trends as they arise even though they may possess only moderate potential. (R)
  - (d) Are able to consistently develop new products and services and new markets. (P)
  
8. *Administrative: Administrative Focus*  
 More so than many of our competitors, our management staff tends to concentrate on
  - (a) Maintaining a secure financial position through cost and quality control measures. (D)
  - (b) Analyzing opportunities in the marketplace and selecting only those opportunities with proven potential, while protecting a secure financial position. (A)
  - (c) Activities or business functions which most need attention given the opportunities or problems we currently confront. (R)
  - (d) Developing new products and services and expanding into new markets or market segments. (P)
  
9. *Administrative: Planning*  
 In contrast to many of our competitors, my organization prepares for the future by
  - (a) Identifying the best possible solutions to those problems or challenges that require immediate attention. (R)
  - (b) Identifying trends and opportunities in the marketplace which can result in the creation of product or service offerings which are new to the marketplace or which reach new markets. (P)
  - (c) Identifying those problems that, if solved, will maintain and then improve our current product and service offerings and market position. (D)
  - (d) Identifying those trends in the industry that other firms have proven possess long-term potential while also solving problems related to our current product and service offerings and our current customers needs. (A)
  
10. *Administrative: Organizational Structure*  
 In comparison to our competitors, the structure of my organization is
  - (a) Functional in nature (i.e., organized by department — marketing, accounting, personnel, etc.). (D)
  - (b) Product- or market-oriented (for example, business units are organized by product or market and handle functions like marketing and accounting internally). (P)
  - (c) Primarily functional (departmental) in nature; however, a product- or market-oriented structure does exist in newer or larger product or service offering areas. (A)
  - (d) Continually changing to enable us to meet opportunities and solve problems as they arise. (R)

11. *Administrative: Control*

Unlike many of our competitors, the procedures my organization uses to evaluate our performance are best described as

- (a) Decentralized and participatory encouraging many organizational members to be involved. (*P*)
- (b) Heavily oriented toward those reporting requirements which demand immediate attention. (*R*)
- (c) Highly centralized and primarily the responsibility of senior management. (*D*)
- (d) Centralized in more established service areas and more participatory in newer product or service areas. (*A*)

## **C2. Paragraph-Style Scale for Identification of Realized Competitive Strategies**

This measure is from Miles and Snow (1978) and is used as a supplementary measure to the preceding 11-item scale developed by Conant et al. (1990). To reduce hypothesis guessing and biasing the responses with the Miles and Snow competitive strategy type names, the archetype names were removed and the order of presentation was changed.

**Prospector:** A firm with this type of strategy typically operates within a broad product-market domain that undergoes periodic redefinition. The organization values being “first in” in new product and market areas even if some of these efforts prove not to be highly profitable. The organization responds rapidly to early signals concerning areas of productivity, and these responses often leads to a new round of competitive actions. However, a firm with this type of strategy may not maintain market strength in all of the areas it enters.

**Reactor:** A firm with this type of strategy does not appear to have a consistent product-market orientation. The organization is usually not as aggressive in maintaining established products and markets as some of its competitors, nor is it willing to take as many risks as other competitors. Rather, the organization responds in those areas where it is forced to by environmental pressures.

**Defender:** A firm with this type of strategy attempts to locate and maintain a secure niche in a relatively stable product or service area. The organization tends to offer a more limited range of products or services than its competitors, and it tries to protect its domain by offering higher quality, superior service, lower prices, and so forth. Often a firm with this type of strategy is not at the forefront of developments in the industry; it tends to ignore industry changes that have no direct influence on current areas of operations and concentrates instead on doing the best job possible in a limited area.

**Analyzer:** A firm with this type of strategy attempts to maintain a stable, limited line of products or services, while at the same time moving out quickly to follow a carefully selected set of the more promising new developments in the industry. The organization is seldom “first in” with new products or services. However, by carefully monitoring the actions of major competitors in areas compatible with its stable product-market base, the organization can frequently be “second in” with a more cost-efficient product or service.

## **C3. Realized SCM Capabilities Assessment Instrument**

Since an instrument for measuring these constructs did not already exist, this study combined items from preexisting and previously validated measures as shown in the notes following the items. A Likert-type scale was used where 1 = to a much lesser degree, 3 = to the same degree, and 5 = to a much greater degree.

Evidence of Support for	“My overall perception is that compared to our competitors’, our supply chain management information systems...”
Operational Efficiency	1. improve the efficiency of our day-to-day business operations. <sup>1</sup> 2. provide timely information for cost control. <sup>2</sup>
Operational Flexibility	3. provide the flexibility to adapt to unanticipated changes. <sup>3</sup> 4. make it easy to switch to another supplier or customer to supply or purchase the same product or service. <sup>4</sup>
Planning	5. facilitate <i>long-term</i> strategic business planning. <sup>1</sup> 6. provide us with the data we need to support our day-to-day decision-making. <sup>1</sup>
Internal Analysis	7. enable us to develop detailed analyses of our present business situation. <sup>1</sup> 8. provide reliable information on the organization’s financial situation. <sup>2</sup>
External Analysis	9. assist us in setting our prices <i>or value proposition</i> relative to the competition. <sup>1</sup> 10. provide information on competitive products and services. <sup>2</sup>

Notes:

<sup>1</sup>Adapted from Sabherwal and Chan (2001); the words in italics were added for clarity.

<sup>2</sup>Adapted from Zviran (1990).

<sup>3</sup>Adapted from Venkatraman and Ramanujam (1987).

<sup>4</sup>Adapted from Bensaou (1997).

An additional Likert-type questionnaire item measured the perceived strategic fit of the firm’s IS capabilities (where 1 = very low and 5 = very high). This questionnaire item was used to provide a parsimonious measure for triangulation with the qualitative evidence and the MSF model’s calculated (Euclidean Distance) level of strategic fit for the case studies.

11. “I feel that the degree to which the capabilities of our supply chain management information system support our business needs is...”

## Appendix D

### Excerpts of Reports Prepared from Quantitative Analyses

Summary reports were prepared for each case based on the qualitative analysis of interview transcripts and archival documents. The analyses identified the capabilities that appeared to need improvement to increase the overall strategic fit of each case’s SCM. The following excerpts from the reports highlight some of the findings and recommendations for each case.

In general, **Case A**’s information systems appear to have adequate support for the capabilities required for the defender-type competitive strategy of the corporate business unit (Case A1). However, for the retail business unit (Case A2), the level of support for operational flexibility and external analysis capabilities appear to be insufficient for their analyzer-type competitive strategy. Thus, while Case A’s centralized IS infrastructure fits well with the corporate business unit, it has a poor strategic fit for the retail business unit. This highlights the need for IS planners to ensure various business units in a firm share the same competitive strategies before implementing a homogenous IS infrastructure across the firm.

**Case B**’s IS appears to provide the theoretically ideal level of support required for operational flexibility and external analysis. However, the strategic fit of Case B’s IS can be improved by increasing the level of support for operational efficiency, planning, and internal analysis capabilities. It appears that Case B’s IS is poorly suited to a defender-type strategy. This may be because Case B inherited many of its systems from the parent company it was spun off from and from several companies it has acquired.

Case C can improve the strategic fit of its IS by focusing on increasing the level of support they provide for operational flexibility and external analysis capabilities. Case C’s IS consists primarily of a commercial ERP package that was implemented to improve operational efficiency and internal information sharing rather than operational flexibility or external analysis. However, the lack of strategic fit with Case C’s prospector-like competitive strategies may be the primary reason why Case C’s users have been unsatisfied with the performance of their organizational IS and have had to rely heavily on the use of less automated information systems such as standalone spreadsheets and databases.

For **Case D**, the lack of fit in external analysis capabilities is expected to hinder their prospector-like competitive strategy. Indeed, Case D's parent firm recently suffered large inventory write-offs due in part to an inability to coordinate supply and demand information with its supply chain partners. The firm is currently making large investments in collaborative SCM to address the shortcomings of their external analysis capabilities.

For **Case E**, the level of support for internal analysis met the theoretically ideal level. However, support for operational flexibility and external analysis capabilities appeared to be insufficient. A respondent noted that although Case E's IS was adequate when economic conditions were very favorable, the need for improving the ability to integrate and analyze information becomes more apparent during the recent economic downturn. This suggests strategic fit may be more important in lean economic times than in periods of robust profitability. Case E's SCM consisted primarily of packaged and custom-built ERP and APS software that traditionally have not been designed for the external analysis or operational flexibility capabilities required by Case E's prospector-type strategy. We expect Case E's lagging operational performance can be greatly improved by implementing IS that better fit their competitive strategies (Cragg et al. 2002; Henderson et al. 1996).

## Appendix E

### Design Knowledge for the Multilevel Strategic Fit Measurement Model

In order to generate the design knowledge for a new measurement model, the design science research approach cycled through the following steps: clarifying the purpose and scope of the design, identifying the theoretical basis or justificatory knowledge for the design as well as the underlying theoretical constructs, determining the principles of form and function of successive prototypes, and developing testable propositions and evaluating each prototype (Gregor and Jones 2007). These six core components of the design knowledge for the MSF measurement model are shown in the columns in Table E1. The purpose and scope explains why strategic fit is measured the way it is. The constructs describe how the strategic fit of a firm's IS is conceptualized in the MSF model. The justificatory knowledge is the theoretical basis for the components of the model and is described in the section called the "MSF Measurement Model." The principles of form and function of the MSF model are the steps used to obtain the assessments of strategic fit at any of the three levels (see Table E1). Artifact mutability outlines the extent to which the measurement instruments generated using the MSF measurement model can be changed. For example, the relevant set of IS capabilities to be analyzed can readily be changed according to the type of IS. Finally, the testable propositions are statements that can be tested to ensure the MSF model fulfills its intended purpose.

Purpose and Scope	Assess how well a firm's realized IS capabilities support the firm's realized competitive strategies.
Constructs	Strategic fit is conceptualized as the match between a firm's realized IS capabilities and theoretically ideal IS capabilities.
Justificatory Knowledge (Theoretical Basis for Design)	<p>A firm's realized IS capabilities may differ from intended designs due to constant readjustments to design and implementation (Markus and Robey 1998; Truex et al. 1999).</p> <p>A firm's competitive strategies emerge from the interplay between intended and realized strategies (Mintzberg 1978). Configurational theories can reduce the complexity of measuring fit between two multidimensional profiles, while providing a more holistic analysis than contingency theories (Doty et al. 1993).</p> <p>Prior research can be used to prescribe theoretically ideal levels of a variable such as IS capabilities according to the firm's competitive strategy type (Venkatraman 1989a).</p> <p>A profile deviation approach is useful for both researchers and practitioners for assessing the overall fit between two multidimensional constructs such as a firm's realized and ideal IS capabilities profiles (Venkatraman 1989a).</p>
Principles of Form and Function	<p>Step (1) Identify the set of IS capabilities to be measured according to the type of IS.</p> <p>Step (2) Measure the firm's realized level of support for each IS capability.</p> <p>Step (3) Identify the firm's realized competitive strategy archetype.</p> <p>Step (4) Determine the theoretically ideal level of support for each IS capability according to the firm's competitive strategy archetype.</p> <p>Step (5) Calculate the overall (Type B) strategic fit of the firm's IS as the overall deviation between the firm's ideal and realized level of support for each IS capability.</p> <p>Step (6) Calculate the detailed (Type C) strategic fit of the firm's IS as the difference between the firm's ideal and realized level of support for each IS capability .</p> <p>Step (7) Check for corroboration of the overall and detailed assessment of strategic fit of the firm's IS using interviews and archival documents</p>
Artifact Mutability (how it handles changes)	<p>The relevant set of IS capabilities to be analyzed can readily be changed according to the type of IS and the needs of the firm.</p> <p>A firm's realized competitive strategies could be described in more precise terms than Miles and Snow's (1978) generic strategic archetypes. For example, a firm could be described as having a specific mix of strategic archetypes or patterns.</p> <p>The theoretically ideal IS capabilities prescribed for a given realized strategy type could be expanded if more research is done on other types of IS or other types of strategic patterns.</p> <p>The method of calculating overall fit could be refined with further study. For example, different weights could be assigned to each capability depending on its relative impact on performance.</p>
Testable Propositions	<p>The overall assessment of strategic fit of a firm's IS (Step 5) has utility for explaining or predicting relationship between strategic fit and organizational performance.</p> <p>The detailed overall assessment of strategic fit of a firm's IS (Step 6) has utility for describing and prescribing the IS capabilities that a firm needs to improve to support the firm's realized competitive strategies.</p>

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