STRATEGIC ALIGNMENT: ANALYSIS OF PERSPECTIVES

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Abstract

This paper focuses on the strategic alignment model and how it has been operationalized to enable assessment of an organization's business and technology strategies into one of twelve defined alignment perspectives using a web-based model. Analysis of data from a multi-year study suggests that certain industries favor specific alignment perspectives. Further analysis of longitudinal data appears to yield distinct patterns of strategy development among industries.

Keywords: strategic alignment

Introduction

While the original concept of strategic alignment was developed more than a decade ago (McLean and Soden, 1977; IBM, 1981; Earl, 1983; Mills, 1986; Brancheau and Wetherbe, 1987; Parker and Benson, 1988; Henderson and Venkatraman, 1990 and 1996; Dixon and John, 1991; Niederman, et. al., 1991; Watson and Brancheau, 1991; Liebs, 1992; Luftman, Lewis & Oldach, 1993; Chan and Huff, 1993), it remains valuable to corporate executives looking to achieve alignment of their business and technology strategies (Robson, 1994; Rogers, 1997; Papp, 1995; Luftman, Papp, & Brier, 1995; Papp, 2001 and 2004).

The Strategic Alignment Model

The Strategic Alignment Model is composed of four quadrants that consist of three components each. These twelve components define what each quadrant is as far as alignment is concerned. All of the components working together determine the extent of alignment for the company being assessed (Henderson and Venkatraman, 1990; Papp, 2001). The model is divided into two distinct areas, business and information technology. Each area has two quadrants that define that part of the business (see Figure 1).

Business Strategy

In the business area the two quadrants are business strategy and organizational infrastructure. The components that make up business strategy are business scope, distinctive competencies, and business governance. Business scope refers to everything that might effect the business environment. This includes markets, products, services, customers/clients, and the location of the business as well as buyers, competitors, suppliers, and potential competitors. The distinctive competencies component refers to all the things that make the business a success in the market place. This includes the core competencies of the business that allows it to compete with other businesses. This also includes the brand, research, manufacturing and product development, the cost and pricing structure, and the sales and distribution channels used by the business. The third component of business strategy is the business governance component. This component refers to the relationships that exist between the stockholders of the company and senior management, mainly the board of directors. This also includes any governmental regulations and relations between other strategic business partners (Papp, 2004).
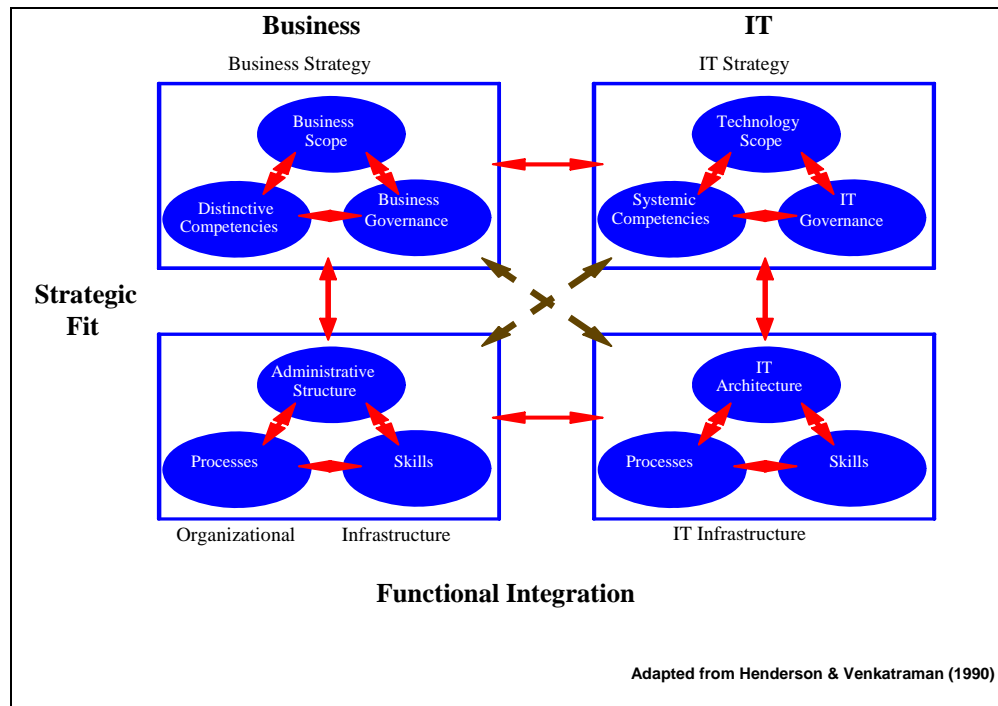
Figure 1: The Strategic Alignment Model

Business Infrastructure

The second quadrant of the business area is organizational infrastructure. The components in this quadrant are administrative structure, business processes, human resource skills. Administrative structure refers to how the organization runs its business. This includes questions regarding centralized, decentralized, matrix, vertical, geographic, and functional organization types. The business process component refers to just that, all of the activities and how they operate. Concepts like value added activities and process improvement apply here. The human resource skills component involves all the considerations made for how to hire/fire, motivate, train, educate and culture their employees (Papp, 2004).

Information Technology Strategy

The first quadrant involving the information technology area is information technology strategy. This quadrant consists of the technology scope, systematic competencies, and information technology governance components. Information technology scope is simply all of the essential information applications and technologies that the business uses. The systematic competencies component is the all capabilities that set the information technology services apart from the rest. This involves how much access the business has to information that is important to the business's strategies. The information technology governance component describes the makeup of the authority behind the information technology and how the resources, risk and responsibility, are distributed between the business partners, information technology management, and the service providers. Selecting and prioritizing of information technology projects in the business are a part of this component (Papp, 2004).

Information Technology Infrastructure

The last quadrant in the strategic alignment model is the information technology infrastructure. The components here are architecture, processes, and skills. The architecture component is the technological priorities, policies, and choices that drive the integration of applications, software, hardware, networks, and data management into a single business platform. The processes component here is similar to the process component in the organization

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infrastructure quadrant only information technology based. It refers to the actual practices and activities that the personnel do to develop and maintain applications and manage the information technology infrastructure. The last component is the skills component, which simply refers to the human resource activities done for information technology (Papp, 2004).

Strategic Fit & Functional Integration

The next part of the strategic alignment model is the linkages that exist. These linkages are necessary because the all the quadrants and components have to work as a whole unit. The first linkage is that of strategic fit. This is the vertical linkage in the model. This linkage explains the need of the business to make decisions that will dictate their position in the marketplace. Strategic fit refers to the use of strategy to determine the infrastructure of the business. The second linkage is functional integration. This is the linkage that is most directly related to information technology and the alignment of the business. As the business changes the technology must change to keep up with the business processes. This linkage describes the ability of the business to successfully position itself in the marketplace by leveraging the use of information technology. This linkage can bring about competitive advantage and it maximizes the value of information technology (Henderson & Venkatraman, 1990 and 1996; Ives, Jarvenpaa, & Mason, 1993; Papp 2004).

Strategic Alignment Perspectives

Now that the design of the strategic alignment model has been explained, the strategic alignment perspectives can now be discussed. The alignment of a business is described by a perspective that is based on that business' assessment according to the strategic alignment model. These perspectives occur when strategic fit and functional integration are assessed simultaneously. There are eight different perspectives that are formed from the different quadrant combinations of the strategic alignment model (see Figure 2). These perspectives are constructed in a type of triangular format based on that simultaneous assessment. Every perspective is made up of three components that are simply designations for the quadrant and how it is affected in that particular assessment. The components are the anchor, pivot, and area of impact. The anchor is considered the area or quadrant that is the strongest area of the business. It directs the change that business is to undergo based on the perspective. The pivot is the designation for the weak area that is to be changed through the re-alignment. The area of impact is the area that will be directly affected through the changes made in the pivot area through the re-alignment (Henderson & Venkatraman, 1990; Luftman, Lewis, and Oldach, 1993; Papp, 1995 & 2004).
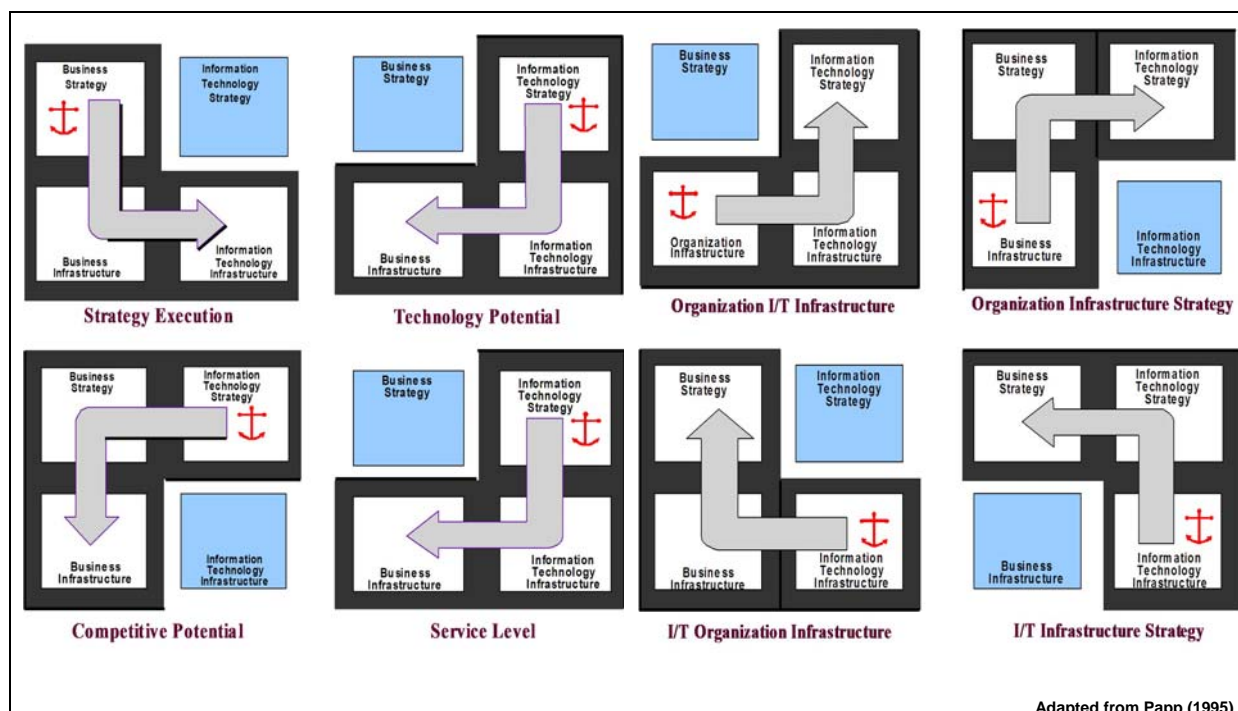

Adapted from Papp (1995)

Figure 2: Alignment Perspectives

Strategy Execution

The first perspective is the strategy execution perspective. In this perspective, the anchor area is business strategy. The weak area is the business infrastructure, which is what needs to be changed. The resulting area of impact is the information technology infrastructure. This means that the information technology architecture is going to undergo changes that must happen because of changes in the business processes. This perspective focuses on information technology planning or transformation of the business. The goals of this perspective include reducing delays and errors, enhancing services and saving time (e.g. paperwork routing or task redefinition) (Henderson & Venkatraman, 1990).

Technology Potential

The next perspective is the technology potential perspective. This perspective is also driven by business strategy but the pivot is information technology strategy. This results in the information technology infrastructure as the area of impact. This shows the value of information technology and that its value is its main contribution to the business' final product or service. The relationship that exists between the business and its customers is vital and the information technology strategy drives the perspective (Henderson & Venkatraman, 1990 and 1996).

Competitive Potential

The third perspective is the competitive potential perspective. The anchor in this perspective is information technology strategy and the pivot area is business strategy and organization infrastructure is the impacted domain. This perspective focuses on how emerging new information technologies can influence and enable new business strategies. These new business strategies bring a competitive advantage to the business in the marketplace (Henderson & Venkatraman, 1990 and 1996).

Service Level

The service level perspective is the fourth individual perspective. In this perspective the anchor is information technology strategy, the pivot information technology infrastructure, and the area of impact is organizational infrastructure. The focus of this perspective is how information technology can improve the how the products and services are delivered. This perspective also assesses how information technology can improve the businesses own processes. Prolonging this perspective can result in information technology outsourcing (Henderson & Venkatraman, 1990 and 1996).

Organization IT Infrastructure

The next perspective is the organization information technology infrastructure perspective. The anchor is organization infrastructure, the pivot is information technology infrastructure, and the impacted domain is information technology strategy. This perspective results in process improvements from information technology and the application of value to the business processes (Papp, 2004).

IT Infrastructure Strategy

Information technology infrastructure strategy is the next perspective. The focus of this perspective is the improvement of information technology strategy based on the implementation of emerging and existing information technology infrastructures. The anchor of this perspective is information technology infrastructure, which drives the pivot, information technology strategy, and thus impacting business strategy (Papp, 2004).

IT Organization Infrastructure

The seventh perspective is the information technology organization infrastructure perspective. The anchor of this perspective is also IT infrastructure, with the pivot being organizational infrastructure and the impact area being business strategy. Although similar to IT infrastructure strategy, IT in this perspective is the driving force and architect by which the visions and processes are carried out (Papp, 2004).

Organization Infrastructure Strategy

The final individual perspective is the organization infrastructure strategy perspective. Business infrastructure is the anchor, business strategy the pivot, and IT strategy the affected area. This final perspective exploits the capabilities to enhance new products and services, influence strategy, and develop new relationships. It also enables enhancement to business strategy (the pivot) thus changing the IT strategy (Papp, 2004).

Fusion (Combined perspectives)

In addition to these eight perspectives, there are also four fusion perspectives that are formed from the combination of two of the individual perspectives. This combination of perspectives results in two pivots or weak areas (see Figure 3). Since there is more than one pivot and both impact the same quadrant, the weakest pivot of the two must be identified and handled first. Previous research has shown that more than one-third of businesses studied had displayed this dichotomous tendency. This tendency is assessed through the fusion perspectives (Papp, 1995).
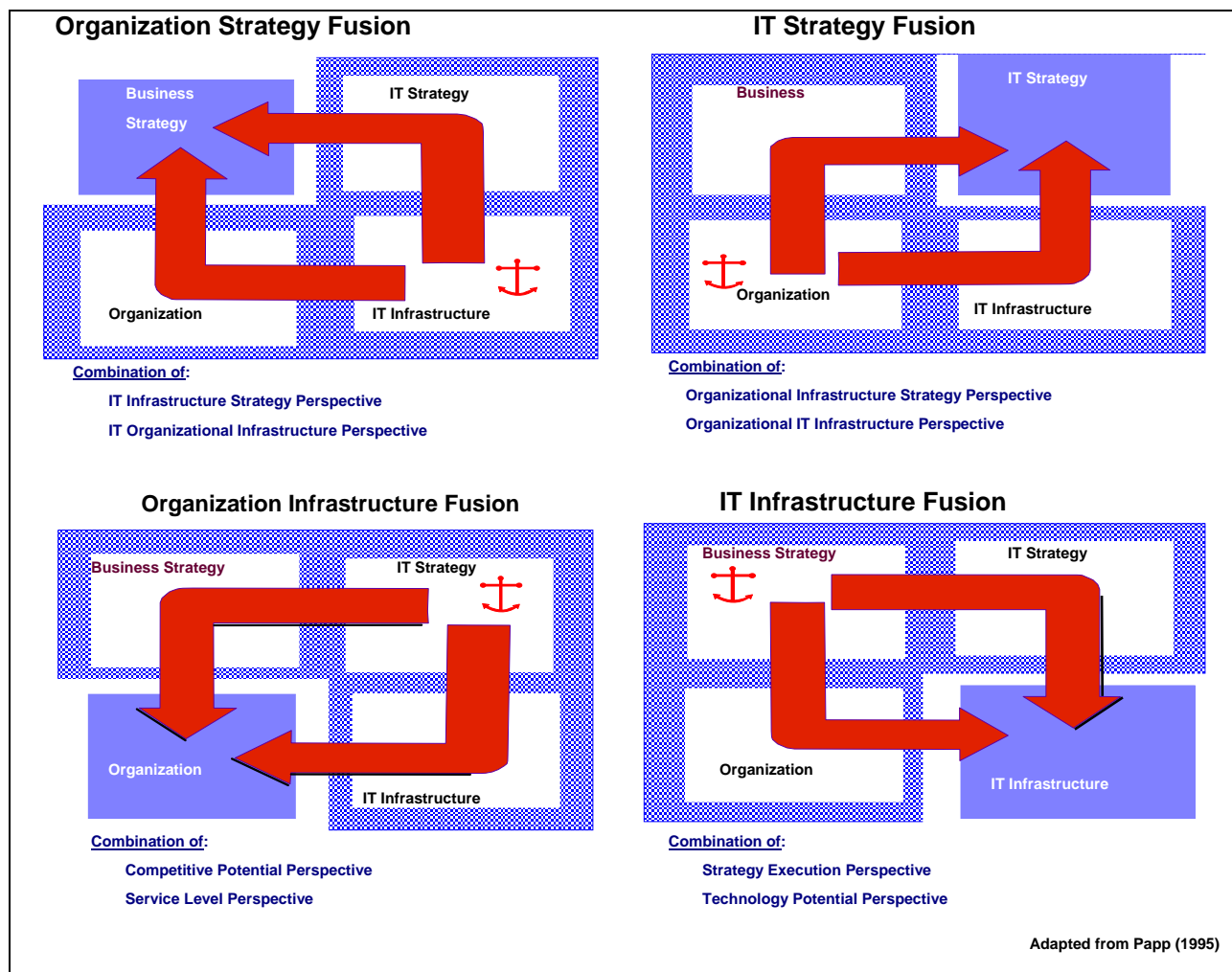

Figure 3: Fusion Perspectives

Organization strategy fusion is the first fusion perspective. This perspective results from the combination of IT organization infrastructure and IT infrastructure strategy perspectives, which both impact business strategy. The areas of focus in this perspective are the two weak points, IT strategy and organization infrastructure, anchored by IT infrastructure. The basis of this fusion perspective is that it is technology driven, that IT a solution and that it has a dominant role in the business.

The next fusion perspective is the organization infrastructure fusion perspective. This fusion combines the competitive potential and service level perspectives which results with an anchor of IT strategy and organization infrastructure is the impact area. The weak points are IT infrastructure and business strategy. This fusion perspective is based on the performance of IT and the organization's determination of its value.

Information technology strategy fusion is the third fusion perspective. It is the result of combining organizational IT infrastructure and organizational infrastructure strategy. It is anchored by organization infrastructure with business strategy and IT infrastructure as the weak points. This perspective describes to top level management how IT must be developed to effect strategic change on the business.

The final fusion perspective is the information technology infrastructure fusion perspective. It results from the combination of the strategy execution and technology potential perspectives. The anchor of this perspective is business strategy with the pivots being organization infrastructure IT strategy. The impact area is IT infrastructure. The focus of this perspective is new and emerging IT architecture as a cost of success in the future of the business (Papp, 1995).

Assessing Alignment

Now there must be consideration for how alignment is assessed. The perspectives described above are used to assess the alignment inside a particular organization. They point out how much attention needs to be paid to the business processes, information technology, and how well harmonized they are together within the organization. If a company is misaligned there are problems that will occur. These problems will prevent the company from being as competitive as it should be.

A company that desires to be assessed needs to know where it is headed with regard to their business and IT strategy. The two most qualified management personnel to conduct an assessment are the CEO (or the highest ranking business executive) and the CIO (or the highest ranking technology executive).The strategic alignment model is a tool that they can use to successfully determine the alignment, e.g. the weak areas within the company, through individual analysis by the company's top level management. Once that has been done and the company's alignment perspective has been identified the company must then determine where future iterations will lead to facilitate long-range planning and strategy formation. The ultimate goal is to move the company into alignment, which is achieved through continual reassessment and adjustments made to the perspectives that result from the reassessment (Papp, 1995 & 2004).

Methodology

The purpose of this study was to determine if there was any significance or correlation between the companies and industries represented and their respective alignment perspective.

The first step includes a brief introduction to the strategic alignment model. The website, which is capable of completing a full assessment, can be found at http://strategic-aligment.com (Papp, 2001). This site has log-in capabilities that allow executives to come back and continually reassess their firm. This website was developed to facilitate the assessment of a business's alignment. The website contains the actual assessment itself as well as the means to collect background information on users. The online model is both a tool and a service that is provided for executives and all results and suggestion should be verified with the author before instituting changes.

The website itself was developed using active server pages (ASP) for the user interface and it incorporated an relational database. The ASP code allows the user to only see the HTML and not the programming or database processes. That is all done on the server which will only interact through the HTML coding. The database is housed on the server and collects the information entered by the user. There are three major interactions that occur on the site:

- Pages that provide background information
- Pages for answering questions concerning assessment
- Pages for feedback and analysis based on the answers to assessment questions provided by the user

Once the data has been collected, the user will then answer some questions regarding their organization. After this is done, an algorithm performs a calculation which will yield an alignment perspective. Some information on the perspective is presented to the user with which to initiate a more formal assessment of their organization (Papp, 2005).

Results & Discussion

The data collected from the website contains the strategic alignment perspectives from multinational corporations completing the assessment over a multi-year period. This research aims to determine whether changes in the global business market place have affected strategic alignment and whether the alignment perspectives these companies have followed are the results of their industry classification. An analysis of alignment perspectives indicates that the most common perspectives are strategy execution, technology potential and IT infrastructure fusion (see Table 1).

Table 1: Perspectives by Industry

Alignment Perspective	Percentage
Strategy Execution	20%
Technology Potential	16%
Competitive Potential	5%
Service Level	6%
Organization IT Infrastructure	7%
Organization Infrastructure Strategy	3%
IT Organization Infrastructure	8%
IT Infrastructure Strategy	6%
Organization Strategy Fusion	5%
Organization Infrastructure Fusion	6%
IT Strategy Fusion	5%
IT Infrastructure Fusion	14%

Further analysis by industry suggests that specific industries follow certain alignment perspectives more often than others (see Figure 4). Furthermore, the individuals completing the assessment each have their own viewpoint when it comes to strategic planning. Information technology executives see the importance of integrating the business plans into the technology strategies as do the business executives, who emphasize the importance of IT. Each side clearly sees the need to integrate their strategies to achieve alignment within their respective industries.
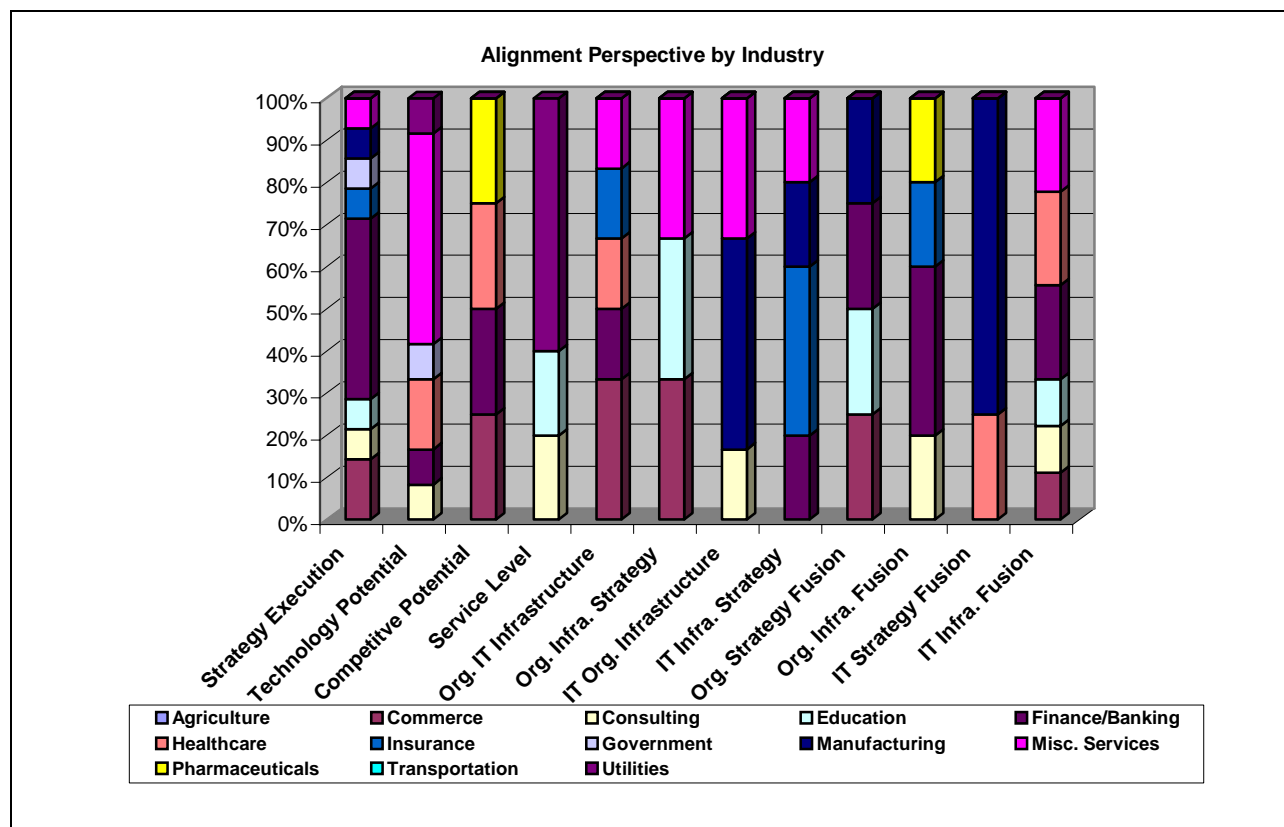
Figure 4: Perspectives by Industry

Management Implications

The twelve alignment perspectives can be used to assess the level and type of strategic alignment within an organization. They underscore the need to carefully examine both the business and information technology strategies and infrastructures to determine whether they are working in harmony or whether they are working in opposition.

Inappropriate alignment can cause problems not only with the development and integration of business and information technology strategies, but actually prevent technology from being leveraged to its maximum potential in the firm. Since information technology plays an increasingly vital role in corporate decision-making, its correct application will facilitate both a more competitive and profitable organization. Implementation of the model to determine which perspective a company is following yields important insights with which they can maximize their information technology investment and develop their business and technology strategies.

This research focused on the assessment of alignment within corporations by both business and technology executives and suggests the each side views corporate strategy differently, however both recognize the need to align strategies to achieve synergies that will foster competitive advantage within their industries. A further, more in-depth look into which perspectives are dominant in which industries would enable corporations to assess how they compare with their competition. A longitudinal investigation may also benefit firms in determining what the long-term strategic implications are with respect to strategy formulation. Nevertheless, the importance of achieving alignment has never been more important than in today's global, dynamic, intensely competitive world.

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