



# An Evolution of IT-Business Strategic Alignment Maturity at Ciba Speciality Chemicals

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## EXECUTIVE SUMMARY

This is an evaluative teaching case study describing the use of an innovative management process and assessment tool that can help to promote long-term IT-business strategic alignment. The Strategic Alignment Maturity (SAM) assessment (Luftman, 2000) is used as a framework to demonstrate the evolution of an international specialty chemicals manufacturer's IT-business alignment practices to enable the achievement of their corporate goals. The primary goals of this case are twofold - to encourage students to critically think about how IT-business strategic alignment can be facilitated by informing them of a management process and assessment tool that help measure alignment maturity, and to help them identify management practices and strategic choices that organizations can implement to improve IT-business alignment.

## ORGANIZATION BACKGROUND

To understand the improvements Ciba Specialty Chemicals (Ciba) made to their IT-business alignment practices to enable the achievement of their corporate goals, it is necessary to recognize the changes the company has undertaken as it evolved into the corporation it is today. (A snapshot of the AS-IS state of affairs for Ciba's business and IT is provided in Appendix A; it describes the organization in terms of the twelve components of the Strategic Alignment Model listed in Appendix B.)

Ciba is a Swiss based international developer and manufacturer of specialty chemicals. Ciba estimates the global specialty chemicals market is valued at around \$76 billion and consists of approximately 40 market segments. At the initial time of this case (May 2001), Ciba employed over 20,000 people worldwide, with sales in 117 countries, 58 production sites in 29 countries, and research centers in 10 countries. At the end of the case timeframe (May 2003), Ciba employed about 19,000 people worldwide, with sales in 120 countries, 60 production sites in 23 countries, and research centers in 11 countries.

Ciba's merger and acquisition activity as well as the global expansion from Basel, Switzerland into countries all over the world had resulted in redundant and complex business and IT processes and infrastructures throughout the organization.

## SETTING THE STAGE

### A New Business Strategy Program: "Fit for Growth!"

On the heels of Ciba Specialty Chemical's collapsed merger plans with Clariant AG, a Swiss-based global chemical company, and less than expected returns from a major acquisition of a water treatment business, Chairman of the Board Armin Meyer took over as CEO in early 2001, with Ciba facing very competitive global market conditions and negative currency effects. Shortly thereafter, Meyer announced a new corporate vision, mission, and business initiatives. He launched the company's "Fit for Growth!" business strategy, steering the company strategically and structurally to its customers' industries and the challenges ahead.

With a vision to become a global business and market innovator providing "value beyond chemistry" with high value-added products and services for customers, CEO Meyer wanted to become a company that can, "identify customers' needs before they do so themselves."

With the new "Fit for Growth!" business strategy, Armin Meyer reorganized the company from its divisional structure with nine business units, into a new structure with five business segments (plastic additives, coating effects, water and paper treatment, textile effects, and home and personal care). Each business segment was given responsibility for marketing, research and development, technology, production, and sales. Non-operational core support functions such as supply chain replenishment and distribution, finance, and human resources were grouped and provided through central support services on a global basis.

An important aspect of the "Fit for Growth" program is that best practices and systems would be taken from the previous organizational structure of nine decentralized business units and integrated into one set of best practices utilized by the entire company. Identifying and implementing best practices should increase efficiency by streamlining and simplifying processes.

The "Fit for Growth" program aimed to provide:

- increased speed of decision-making by eliminating the divisional layer
- alignment of business operational activities along customer industries with identification of best practices resulting in simplified processes
- improved efficiencies by simplifying processes and aligning several support areas, including the integration of the existing three supply chains into one coordinated global supply chain system

## CASE DESCRIPTION

### IT-Business Alignment Assessment Process

Implementation of the "Fit for Growth" business strategy would require alignment with the IT strategies. For an organization to successfully align its IT strategies with its business strategies, specific management practices and strategic IT choices need to be considered that help facilitate integration. Luftman et al (2004, pp 89-90) discuss a six-step process (see Figure 1) to assess strategic alignment. This process is demonstrated using Ciba as an example.

#### 1. Set Goals and Establish the Team

Ciba has already set their goal - to implement the "Fit for Growth" business strategy using best practices from the newly formed business segments. They now need to ensure that there is an executive sponsor and champion for the alignment assessment. They then need to form

a team of senior decision-makers from the newly formed business segments and the IT organization.

## 2. Understand IT-business Linkage

The purpose of the assessment team is to assess Ciba's IT-business alignment maturity. The team can use the SAM assessment as a tool to do this. Details of Ciba's assessment are described in the next section. Once an organization's SAM level is understood, the assessment method provides a roadmap that identifies opportunities for enhancing the harmonious relationship of business and IT. It is not the actual "maturity level number" that matters, it is what the organization does to improve the IT-business relationship. After the initial maturity level is established, Ciba can use this as a baseline to determine best practices for facilitating alignment.

## 3. Analyze and Prioritize Gaps

The completed questionnaires are analyzed and consensus reached by the team as to the organization's current maturity level based on existing practices identified by the SAM assessment. The purpose of this step is to determine best practices and understand the activities necessary to improve IT-business alignment. The gaps between Ciba's current SAM level and where the team believes they need to be to achieve best practices need to be prioritized. The management practices and strategic IT choices identified by the SAM framework as being the next higher maturity level can be used as a roadmap to identify additional best practices to strive for.

## 4. Specify the Actions (Project Management)

After priorities are established, the team needs to assign tasks and their ownership, with clearly defined deliverables and timeframes for each of the prioritized gaps. A project management perspective should be utilized to implement the actions.

## 5. Choose and Evaluate Success Criteria

This step calls for the Ciba assessment team to regularly revisit the original goals of the assessment and discuss the measurement criteria to evaluate the implementation of the previously specified actions. The review of the measurements should serve as a learning tool for Ciba to understand how and why their objectives are or are not being met.

## 6. Sustain Alignment

The criteria describing the Strategic Alignment Maturity assessment provide characteristics of organizations that link IT and business strategies. By adopting these management practices and strategic choices, Ciba can increase their potential for a more mature alignment assessment and improve their ability to gain business value from

investments in IT. To sustain alignment, Ciba should continue to focus on understanding alignment maturity and take the necessary actions for continuous improvement.

## Ciba's IT-Business Alignment Maturity

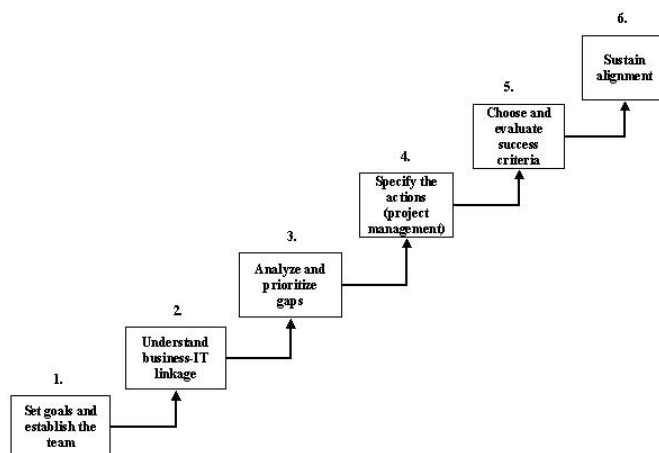
The SAM assessment undergone by Ciba consisted of a questionnaire comprised of 42 items measuring the degree to which specific management practices and strategic IT choices were demonstrated within the organization. The SAM framework classifies the assessment items into six criteria (Communications, Competency/Value Measurement, Governance, Partnership, Scope and Architecture, and Skills), each with five levels of alignment maturity ranging from a maturity of Level 1 being none or an ad-hoc existence of the practice to a maturity of Level 5 being a pervasive existence of the practice throughout the firm and with business partners and alliances. The SAM assessment instrument is based on best practices for IT-business strategic alignment derived from literature reviews of the extant literature, practitioner input, and evaluation of management practices and strategic choices employed by over 50 Global 2000 organizations. A summary of Luftman's (2000) SAM assessment model, used as the basis of the assessment tool, is presented in Figure 2.

The questionnaire was used to assess Ciba's Strategic Alignment Maturity both before the "Fit for Growth!" initiatives were implemented, to provide a baseline measure, and afterwards, to provide a longitudinal perspective of their IT-business strategic alignment maturity evolution. The original assessment was conducted in May of 2001 with seven senior IT and business executives. After best practices were determined and a gap analysis performed, action plans were developed and implemented to execute the "Fit for Growth" program. A follow-up assessment was conducted in January of 2003 to measure whether the SAM level was sustained.

Ciba's maturity assessment results are listed in Table 1. Overall maturity (which is an average of the 42 individual assessment items) increased by one maturity level since the initial assessment. There were across-the-board maturity increases in all criteria, with the greatest increases in the Scope/Architecture and the Skills criteria.

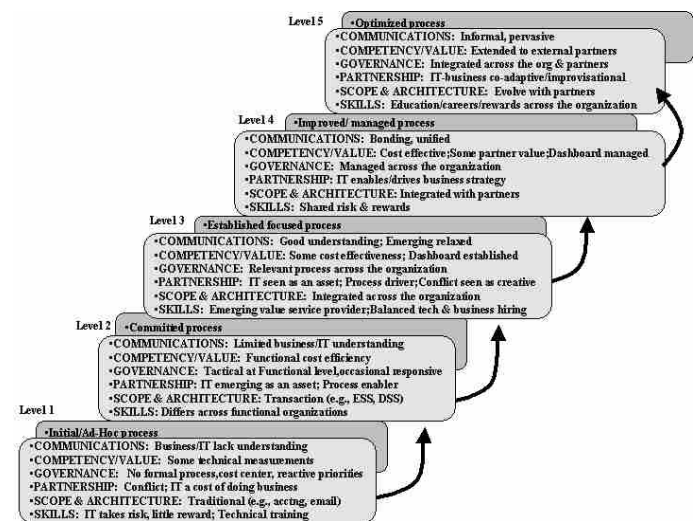
The following section describes some of the key management practices and IT choices of Ciba that demonstrate their evolution from an overall alignment maturity of Level 2 to an overall Level of 3, helping facilitate the IT-business strategic alignment that was necessary to implement their "Fit for Growth!" initiatives.

Figure 1 Strategic Alignment as a Process



Source: Luftman, J., *Addressing Business-IT Alignment Maturity*; Communications of the Association for Information Systems, December 2000

Figure 2 Strategic Alignment Maturity Summary



Source: Luftman, J., *Addressing Business-IT Alignment Maturity*; Communications of the Association for Information Systems, December 2000

Table 1: Ciba's Initial and Follow-up Maturity Assessments

	Communication (1 to 5)	Competency/ Value Measurement (1 to 5)	Partnership (1 to 5)	Governance (1 to 5)	Scope/ Architecture (1 to 5)	Skills (1 to 5)	Overall Maturity (1 to 5)
Initial Assessment	2.5	2.3	2.7	2.1	3.0	1.9	Level 2
Follow-up Assessment	3.1	2.5	3.1	2.8	3.8	2.7	Level 3

### Communication

The SAM assessment describes Communication as the sharing of information for mutual understanding between the IT and business functions, and the methods used to promote this. Prior to the "Fit for Growth" program, the Ciba SAM assessment team determined their strategic alignment maturity for Communication was at a Level 2. Ciba's, IT-business communications were primarily at the divisional level. There was a limited understanding of what IT can do for the business, resulting in information systems being underutilized. No formal knowledge sharing mechanisms existed.

The follow-up assessment of Ciba's strategic alignment maturity revealed an increase to a Level 3 for Communication. Ciba demonstrated some strong improvements in their business communications process, which is now systemic throughout the organization, to increase communication and share knowledge. Since taking office as CEO, Meyer has advocated a culture change to value frequent and open communication. Rich communication with supervisors and department heads occurs regularly, including twice a year performance reviews and regular staff meetings; both business and IT initiatives are discussed. Frequent e-mail communiqué are distributed to both business and IT employees, to update them on the objectives, status, and achievements of major IT projects and initiatives.

**Major Insight:** Open communication requires an organizational culture that fosters communication by ensuring that it is ingrained as a fundamental task of every manager and employee.

**SAM Best Practice:** Communication between IT and business should be pervasive throughout the organization, informal, regularly occurring, and use rich methods such as e-mail, videoconferencing, and face-to-face.

### Competency/Value Measurement

The SAM assessment describes Competency/Value Measurement as the management practices and strategic IT choices an organization makes when determining the importance and contribution of IT to the firm. Ciba's assessment for this criterion did not substantially change from a Level 2 after the "Fit for Growth" program. Ciba has Service Level Agreements (SLAs) between the IT function and business for both global and regional services. They apply a portfolio of services to indicate agreements with the business owners of the service. Supporting the SLAs are Operational Level Agreements (OLAs), which are the technical performance measurements. The service levels and operational levels are monitored and reported through a Service Level Management Process. The IT groups have to measure the performance of the service they provide against the expectations of their customers (customer satisfaction) and against similar services provided in other companies (internal and external benchmarking of selected services).

Prior to the "Fit for Growth" program, Ciba's SLA focused primarily on servicing a particular division's IT needs and did not focus on relationship management.

**Major Insight:** Include business-related metrics, such as user satisfaction and IT's responsiveness to the business, with technical SLAs, such as computer response time and minimum downtime, to help form more of a partnership between IT and the business.

Additionally, measurements like contribution to profits, quality, and productivity improvements should be applied whenever possible.

### Governance

Governance is the choices organizations make when allocating decision rights for IT activities such as selecting and prioritizing projects, assuming ownership of technology, and controlling budgets and IT investments.

Prior to the 2001 "Fit for Growth" program, Ciba's Governance was assessed at a low Level 2. Ciba's Information Technology function utilized a decentralized structure at the business unit level. The individual business units owned, funded, and determined the priorities of their IT departments. Each division and geographic region had its own supply chain system. Worldwide there were 87 BPCS ERP systems and five SAP R/3 ERP systems.

Since the "Fit for Growth" program, Ciba's SAM approached Level 3. The new information technology structure is centralized with an expanded role for BSC information technology providing 24x7 global support. An important change was centralizing supply chain systems including the elimination of multiple vendors to one vendor, and the reduction in number of systems to 33 worldwide. To oversee all significant IT decisions, an Information Technology Steering Committee was formed, led by the head of Corporate Information Technology, reporting to the CFO, Michael Jacobi, who acts as the committee sponsor. The committee is comprised of the heads of the three IT organizations.

**SAM Best Practice:** Executive steering committees should include both senior IT and business executives that share decision-making responsibilities

### Partnership

Partnership refers to how each the IT and business functions perceive the contribution of each other. It includes the trust that develops among the participants, and the sharing of risks and rewards. Ciba's SAM assessment for Partnership improved slightly, from a high Level 2 to a low Level 3. At the operational level, Ciba utilizes champions to act as a link between their e-business platform, the local Ciba organization, and their customers. Ciba e-champions are used to help the global Ciba organization to understand local e-business needs and to roll out global projects quickly. All countries and regions have an e-champion. The champions are responsible for collecting and communicating new customer requests, communicating e-business initiatives and enhancements, and coordinating training and education programs both internally and to external customers and business partners.

**Major Insight:** Use global champions to both locally promote IT initiatives and act as global liaisons.

### Scope and Architecture

SAM defines Scope and Architecture as the management decisions and strategic choices an organization makes when allocating resources toward its information technology infrastructure, including its reach and range. Scope and Architecture has become one of Ciba's most mature alignment facilitators since the "Fit for Growth!" initiative was launched. Ciba has demonstrated a high level of strategic alignment maturity in their global integration projects of supply chain replenishment and inventory planning. Their implementation of an integrated IT infrastructure provides the pervasive transparency and flexibility necessary to enable this global integration. The use of global integrated standards for hardware and software solutions enabled standardized processes that facilitated the improved customer relationships aspect of the "Fit for Growth" program.

**Major Insight:** A single one-company solution with common processes, data and systems provides a common language to facilitate common understanding across countries, functions, and segments resulting in significant cost savings for both Customer Order Desks and IT.

**SAM Best Practice:** Leverage IT assets on an enterprise-wide basis to extend the reach (the IT infrastructure) of the organization into supply chains of customers and suppliers.

### Skills

Skills refer to the management practices and strategic IT choices an organization makes concerning IT human resource considerations such as the cultural and social environment it cultivates.

Prior to the "Fit for Growth" program, the Ciba SAM assessment team determined their strategic alignment maturity for the Skills criteria was at a high Level 1. As an inventor of specialty chemicals, innovation has long been part of the Ciba culture, but at the business unit level. A

global management program, implemented as an extension of “Fit for Growth”, has been launched to push out a process for innovation to all positions within the company. Each employee is required to participate in a workshop where everyone takes personal responsibility and ownership for growth. This program represents a more mature IT-business alignment by encompassing an organization-wide scope.

Additionally, Ciba’s management development program evolved from an exclusive executive management program to one that encompasses other management and knowledge workers at the business segment level to provide career opportunities for employees and provide an experienced and skilled pool of candidates within the company.

**Major Insight:** Provide multiple methods for development of IT and business managers, including methods of on-the-job training, job rotation, job enrichment, international assignment, and coaching.

### What Was Done and Its Significance

This case study demonstrates the use of a strategic alignment maturity process and assessment tool that can help to promote long-term IT-business strategic alignment.

Best practices were culled from Ciba’s previous organizational structure of nine decentralized business units and integrated into one set practiced by all. Increased alignment of IT and business strategies was fundamental to Ciba’s success.

The Strategic Alignment Maturity assessment provides a framework and benchmark of leading management practices and strategic choices that can guide management’s thinking in integrating information technology and business initiatives. This framework provides best practices in IT-business communications, measuring competency and value of IT, IT governance, IT-business partnerships, IT scope and architecture, and IT skills.

### CURRENT CHALLENGES FACING THE ORGANIZATION

Although Ciba achieved decisive financial success with the “Fit for Growth!” business program, with substantial improvements in cash generation, cost reduction and earnings, they cannot rest on their laurels, so, a new initiative has been launched for 2003 to focus on profitable growth. The “Managing for Growth” program is a logical continuation of the “Fit for Growth” program with an aim to generate a culture of performance and successful implementation of new ideas that will generate profitable growth. A primary component of the “Managing for Growth” program is the implementation of key projects identified by the Executive Committee to promote growth. Workshops are currently underway to engage all employees in developing and implementing growth projects. Many of these projects will leverage information technology to enable and drive the resulting business strategies. What specific management practices and strategic IT choices can Ciba implement to further improve their IT-business alignment to

ensure the success of the new “Managing for Growth” program? What processes could Ciba adopt to ensure continuous improvement of their IT-business strategic alignment? What are some possible enablers and inhibitors to alignment that Ciba may face? What are some possible enablers and inhibitors to Ciba’s IT-business strategic alignment?

### TEACHING APPROACH

This case was developed primarily for use in upper-level undergraduate and graduate courses in strategic issues in information management, covering topics such as business strategy, business infrastructure, IT strategy, IT infrastructure, strategic alignment, and methods/metrics for building strategies and achieving alignment. It encourages students to think about the optimal management practices necessary to facilitate IT-business alignment in order for a company to achieve its strategic goals. The following concepts are discussed and explored:

- IT-business strategic alignment
- using a process to assess IT-business alignment maturity
- assessing the maturity of IT-business alignment using the Strategic Alignment Maturity assessment (Luftman, 2000)
- management practices and strategic IT choices that facilitate alignment

This case provides students with an opportunity to see how one company implements management practices and strategic IT choices pertaining to strategic alignment maturity such as open communications, implementing service level agreements, and use of steering committees and liaisons. Students can use this case as a guide in conducting Strategic Alignment Maturity assessments of their own organizations or of other case studies.

### Suggested Assignment Questions and Exercises

1. What specific management practices and strategic IT choices can Ciba implement to further improve their IT-business alignment? Conduct a TO-BE analysis to determine the desired state of affairs then conduct a gap analysis to develop action plans to get there.
2. What processes should one consider in maintaining strategic alignment?
3. Do you believe any of the six strategic Alignment Maturity criteria are more important than the others? If so, why?
4. Prepare a Strategic Alignment Maturity assessment for your own organization. How can alignment be improved?

### REFERENCES

References available upon request from deb.sledgianowski@hofstra.edu

### APPENDIX

Appendices available upon request from deb.sledgianowski@hofstra.edu



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