

The way medium and large companies operate has changed considerably in recent years. Initially, globalization was an opportunity. Then it became a necessity. Today, companies need to adapt to changing market conditions more quickly than ever before. On the flip side, new challenges emerged. Many are related to cultural issues, complexity and information overload. Overcoming these challenges is not straightforward. It appears, however, there is one "thing" that connects the entities of a company across those challenges: strategies, together with their implementation instructions. In other words, the company that has strong, healthy strategies and is able to drive target audiences for execution should be in a better competitive position. Enabling strong, healthy strategies and driving for execution is what the Information Technology (IT) Strategy Management Process is about.



Table of Contents

Introduction	1
Encountering the hurdles	1
The solution proposal	2
The problem analysis – IT area	2
The solution for the IT area	3
Process layers	3
The solution elements	4
Element 1 – The technology repository	4
Element 2 – The technical community	5
Element 3 — Incentive techniques	7
Element 4 – Integration between the elements	8
Element 5 – The right balance	9
Element 6 – Ground rules	9
Why the IT Strategy	
Management Process is a process	10
Implementation pitfalls	10
Considerations when adapting	
the process to non-IT areas	11
Finding additional details	11
Conclusion	11
References	12
About the authors	13

Authors

Stephanie Case Managing Consultant EDS The Netherlands

Contributing Authors

Stef Devos Enterprise Consultant EDS Belgium Nigel Cresswell Enterprise Architect EDS United Kingdom Eugen Oetringer Infrastructure Consultant EDS The Netherlands

Paulena McAnderson-Weathers Solutions Consultant EDS United States

Introduction

Amid the globalization that has taken place in recent years, corporate dynamics and internal structures have changed substantially. Organizational or process structures largely operating within a location or country now may have to function across many locations and countries. What may have been solvable through colleagues nearby is quite different if the colleagues are 1,000 miles away, speak a different language and are used to a different culture. Resulting problems can include bureaucracy, slow decision-making, late-to-market products, increased costs, poorer competitive position and shareholder pressure for corrective actions.

During the same period, fraud led to corporate failures and bankruptcies. Consequently, regulatory documents such as Sarbanes-Oxley (relevant for companies listed at U.S. stock exchanges) or Basel II (relevant for the banking industry) appeared, enforcing stricter rules worldwide. Other regulatory documents such as ISO 9001, CAD II and COSO also are becoming increasingly important. Executing those regulations and controlling compliance are at the top of corporate agendas. As a result, companies must implement standards and solutions that deliver to the regulatory requirements.

In today's environment, the management aspects of low cost, competitive position, agility and regulatory requirements have to overcome culture issues, complexity and information overload. With that understanding, the following questions must be asked: Are the strategies and their implementation instructions executable? *Are target audiences in a position to be compliant?* What if the colleagues in different parts of the world have difficulty finding the implementation instructions to the strategies, or if the instructions are unclear or outdated? What if important feedback from the experts in the field is lost?

Many solutions have been proposed to help enterprises address these issues. Most notable are those known as knowledge management, change management, risk management, governance and quality management/ISO. Other solutions include content management tools and IT processes such as those defined under the umbrella of IT Infrastructure Library (ITIL®). All address specific areas; however, there are nontrivial challenges integrating them with each other, with organizations and with processes. Clearly, something is needed to simplify things and to "glue" the parts together while culture, complexity and overload issues are overcome.

Encountering the hurdles

Strategies and their implementation instructions (such as standards, directions and implementation guides) have always been important. However, with the changes that have taken place in the previous decade, the authors of this paper believe strategies, along with their implementation instructions, have become far more important than they used to be. They are *the vehicle* that moves the company in one direction. Hence, it is far more important today that they are healthy, up-to-date and effective.

On the other hand, the introduction cites a few examples illustrating why it can be extremely difficult – even impossible – for target audiences to be compliant with the strategies and implementation instructions. It appears there are more than 40 possible issues (summarized in the six root causes on page 2) that can stand in the way. Any project that is supposed to "make strategies deliver their value" or "deliver high levels of compliance" but misses even a few of those issues is in a rather difficult position. This can result in a break in the information flow between the development and production environments. So it is no surprise when such a project becomes a target for elimination, and questions such as, "Will we ever be able to overcome the cultural barrier, complexity and information overload?" are raised.

Interestingly enough, what may be perceived as a cultural barrier may actually be an obstacle that can be overcome. For example, expecting colleagues in another country to execute a strategy when the instructions are out of date or unclear is a major obstacle that has little to do with culture. It's a matter of making sure the instructions can be found easily, are up-todate and are concise. Apart from removing the underlying problems, incentive techniques can be highly effective in overcoming many remaining cultural barriers – at no cost or a fraction of the cost of alternative solutions. In our experience, organizational changes often are seen as the solution to making strategies deliver their value and to making compliance work. But many of the issues mentioned before exist among organizations, processes and locations. This means they cannot be fixed by a reorganization or a traditional process approach. Consequently, it may take a long time to find out that the issues mentioned earlier remain unsolved, and that the real solution still needs to be found.

Another discovery was related to the skills and experiences of those expected to implement international projects. Few colleagues may speak at least two languages, have more than five years of multicultural living and working experiences, and have recent "workshop floor" experience. It is the combination of those skills and experiences that enable individuals to distinguish, early on, the successful solutions from those that won't work.

The solution proposal

In the international environment in particular, the main areas of a company (such as human resources, finance, legal, real estate, purchasing and IT) suffer from similar issues. However, IT is further complicated by the speed at which hardware and software change, and by an extremely high number of interdependencies among applications, hardware and software. The speed of change requires "ongoing" changes to the IT strategies and to their underlying implementation instructions. The interdependencies make this challenging. On the positive side, it means once a solution is found for the IT area, it can be used as a framework for the other areas.

This document introduces the solution for the IT area – the IT Strategy Management Process – and provides considerations for adapting the process to areas beyond IT. The IT Strategy Management Process was developed from many lessons learned pertaining to IT strategies, their implementation instructions and international projects. From the lessons, it became clear that too many times, traditional approaches had been tried but failed. What was needed was a fresh and relatively simple approach, positioned between the entities.

The IT Strategy Management Process consists of a central repository through which IT strategies, their implementation instructions (standards, directions, process descriptions, implementation guides, alerts, etc.) and best practices are stored and managed. Document owners are driven to keep their papers current. Target audiences are driven toward compliance with the strategies and for the use of best practices. Corrective actions are triggered as issues emerge. At any time, executives can see the health of their strategies through a dashboard.

The problem analysis - IT area

Creating value is what strategies are about. This means they must do more than address high-level technology. They must also address and encompass people, processes and the implementation details. Following are the six root causes – comprising more than 40 issues – that can prevent strategies from being successful:

Too many repositories – The target audience may have great difficulty finding the important documents in the different repositories, directories and Web pages. When they do find information, the level of trust they have in it may be low.

Poor quality of documentation – IT strategies may fail to include clear, concise instructions or miss answers to fundamental questions that would ensure a successful implementation and execution.

Lack of process – The strategy might be developed in a central department in which developers are unaware of important conflicts/ problems in the field; the feedback process might be broken and important feedback lost; and the people infrastructure and/or communications may not exist to push for compliance with the strategy and standards.

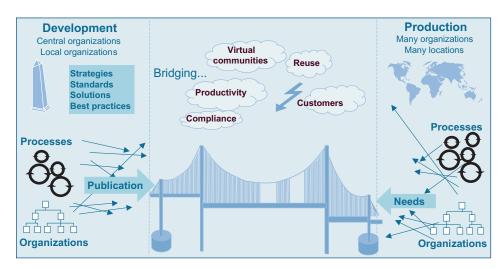


Figure 1: Development and Production trying to "bridge the gap" to each other

Information overload – There simply may be too much information floating around in e-mail, Web pages and repositories, making it difficult to separate the important information from the less important. Tools created to ease this situation often fall short; for example, search functions deliver far too many results.

Cultural differences – IT solutions may fail to take into account the role culture plays in how new solutions will be accepted. There is, for example, the "not invented here" syndrome.

Lack of investment – The budget is insufficient for strategic investment in skills, resources, technology and so forth. Although listed here as a root cause, this can be a consequence of other root causes, creating business pressures that demand cost savings.

As Figure 1 illustrates, IT departments today face numerous complex challenges. The left side, Development, illustrates the development of strategies and their implementation instructions, such as standards and standard solutions. Development can take place in the central department or in any local organization that develops a best practice that should be made available for reuse elsewhere. The right side, Production, illustrates the people in the many organizations and companywide locations who are expected to execute the strategy or install the standard solution. Each site has its own processes, procedures and organizations. The processes and the organizations from both sides need to directly connect to their counterparts.

The picture can be further complicated by shareholder and leadership pressures for productivity improvement, compliance and, perhaps, for the latest industry hype. This is illustrated through the "virtual communities" example in Figure 1. Customer requirements create additional complications. From this picture, it becomes obvious this business model ceases to be effective after the links needed between Development and Production exceed a critical level of complexity. This leads to the question, "when will things become critical in my company?" It depends on the individual situation. But here are some strong indications that the critical level has been reached or passed, implying it is time to view this scenario as the real problem:

- There are difficulties getting the target audience to execute strategies or standards, resulting in low compliance.
- Multiple projects involving multiple organizations have been substantially delayed or failed.
- One cost-savings initiative is followed by another.
- One reorganization is followed by another.

Obviously, the larger the company, the faster this scenario becomes a reality. With a properly built bridge between Development and Production, a real solution to complex relationships between these departments must be possible. Many companies realize they need to create that bridge but don't know how.

The solution for the IT area

First and foremost, one needs to think about the scope of the solution. A solution that will solve nearly all the issues identified from the root causes could be developed, but does this make sense? A strong argument against this approach is that such a solution would become rather large and complex. The implications are that it would be a high-cost, multiyear implementation project, the value of which may not be apparent for several years. Plus, there is a high risk for the solution itself. Will the competition and shareholders allow this? Obviously, the most desired solution would avoid these issues, so the main design criteria become:

- Keep it simple to make it powerful.
- Include only the most fundamental structures.
- Get the solution exactly to the point at which things happen – as much as needed, as little as possible.

This implies the root causes will not be fixed completely; however, the solution should deliver sufficient functionality to overcome several root causes, to make the information flow work in both directions, and to push for compliance and use of best practices. One can address remaining issues through add-on solutions built on top of the core solution, which offers another advantage: As long as the core solution remains intact, the failure of an add-on solution has a less dramatic impact than before – the bridge still can be crossed. Actually, one or more add-on solutions may already be in production, but require the foundations of this bridge to be successful.

The proposed solution consists of the six elements shown in Figure 2:

- 1. The **technology repository** is the single place through which the IT strategies, standards, solutions and best practices are stored and managed.
- The technical community is the place through which individuals, organizations, processes and locations connect regarding technical matters.
- Incentive techniques are used to overcome obstacles that are particularly relevant when departmental, country, culture and language boundaries must be crossed.
- Integration between all process elements is required to achieve the full value.
- The right balance is required to compromise between conflicting needs. Conflicts and out-of-balance situations are likely to show up in the quality reporting, triggering corrective actions.

6. **Ground rules** put the Strategy Management Process in production and guide individuals as they take part in the process.

These six elements provide sufficient functionality to make the information flow work in both directions, plus the foundation to make the strategies and underlying details deliver value. Best practices also fit nicely into this solution. Before we delve into each element, let's take a look into the process layers.

Process layers

In bigger companies, the number of processes can become large and their relationships complex. This often leads to confused users and disconnected processes. Categorizing processes into core processes and other processes/ procedures helps, but relationships still can be complex. Moreover, implementation and deliverables derived from the same process can vary in different locations. That's why some form of lead process is needed. For the IT area, the IT Strategy Management Process provides this lead. Figure 3 illustrates the positioning and how the different Strategy Management Processes are expected to fit next to each other. The one process that is for the company products (pSMP) has an elevated position. This is needed to ensure all areas line up to support the product strategies.

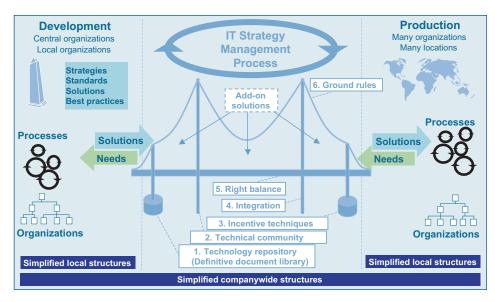


Figure 2: The IT Strategy Management Process and its elements

Looking into the IT area, instead of the lower-level processes trying to connect with each other, common needs between processes are taken over by the IT Strategy Management Process. This provides the functionality that enables IT strategies, standards and solutions to be managed properly and to be trusted. It includes functionality that shows the current status of the strategies/standards, corrections to instructions given in an already-published document, and functionality that triggers corrective actions as issues emerge. Compare this, for example, with a situation in which the individual processes determine whether or not to list this kind of information. With these mechanisms in place, the **IT Strategy Management Process enables** organizations to achieve high levels of compliance with common sets of strategies and standards. The same principle applies to the other areas.

At the same time, it promotes the use of best practices. People who work with multiple processes, organizations or locations can directly engage with the lead process. For example, project owners can go directly to the IT Strategy Management Process to get their best practices approved and published for potential reuse anywhere in the IT area. What works for the best practice also works for higher compliance needs. This means intellectual IT capital contained anywhere in the IT area can be translated into technology guidance, direction and even strategy.

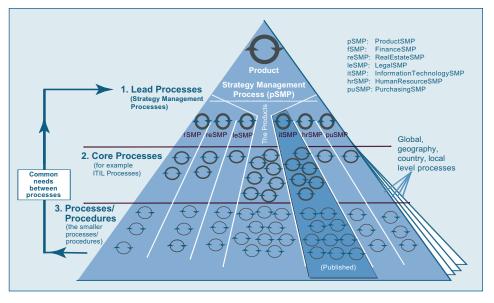


Figure 3: Process layers

This way, it is brought to a level at which it can compete with business pressures such as vendor marketing demands, emotions, hype and other IT strategies. Compare this with a situation in which subject-matter experts on the production side have evidence that the latest industry trend doesn't provide value, but their voices aren't heard from the other side of the bridge.

The solution elements

Let's take a look into the solution elements.

Element 1 – The technology repository

This is the single place through which the IT strategies, standards, solutions and best practices are stored and managed. It can be a stand-alone repository or an interface into a document management system. Users enter the repository through a graphical interface that separates multiple levels of documents from each other and defines the applicability for each document. Through this approach, users have a clear view of the general documentation structures in the company, which helps alleviate users' initial feeling/reaction of "information overload." Figure 4 provides an example of a Web-based repository entry page.

The structure depicted in Figure 4 offers many advantages to help users determine the information most relevant to their job or location. For example, the various levels of "geography" form dimensions that qualify the documents. A document in the global dimension applies companywide. A document in the UK dimension of industry group X applies within that industry group in the UK. A second level into the repository extends the documentation structure to provide document types and IT areas.

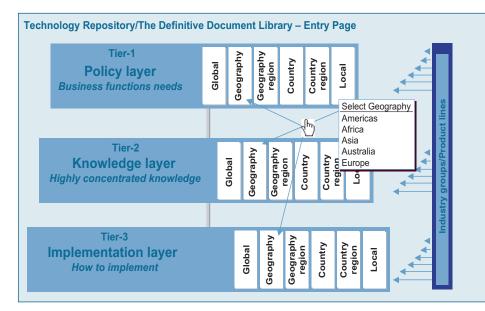


Figure 4: The central repository - entry page

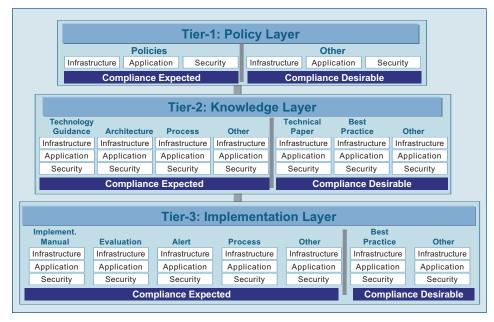


Figure 5: The central repository - second-level page

Additionally, users are informed about compliance expectations. The "compliance expected" part of the repository contains the strategies, standards, process descriptions, implementation guides and so forth. "Compliance desirable" contains the best practices, white papers and so forth. Figure 5 shows an example of a second-level page. Depending on the number of in-scope documents, one or two more levels into the repository may be needed.

An initial search result is returned at "document" level, and a click on an icon in the Document Set cell lists all documents that belong together (see Figure 6). This dramatically simplifies search challenges.

Next to the general information for each document are fields listing the review status. There are three types of status indicators. First there is the document owner flag. Second, there is the age flag, which is set automatically. And third, there are the flags from the user community. All three provide important information regarding the current status of the document. For example, "green" or no flag implies the document is fine. "Yellow" can imply "use with care," and "red" indicates "use with extreme care." More information or even instructions can be provided with each flag, for example, to correct an issue that emerged after release of the document. The amendment can be displayed like the

"errata" in a book. This can be done quickly, without going through the delays of updating the document and without going through lengthy approval workflows before an updated version can be released.

In addition to providing corrections for the users, the status flags are an ideal way to trigger corrective actions by the document owners and to measure the quality or health of strategies and their implementation instructions. This can easily be summarized for executive reporting in the form of a "dashboard" and can be a strong base/ indicator for budget allocation. All in all, this strongly supports the concepts of the agile enterprise.

Further repository functionality includes:

- Review and approval workflow based on the importance of the documents
- Strategy, standard and solution request functionality also dashboard based
- Aging and archiving

Of course, providing a repository tool doesn't mean the strategies are all moved into the central repository. Nor can one expect that flags are kept current, or that yellow and red flags will be resolved. This requires functionality from the other process elements.

Element 2 – The technical community

Figure 1 shows the difficulty connecting development organizations and processes with production processes and organizations in multiple locations. The communities provide the governance and ways of working together that hierarchical structures cannot compete with. Subject-matter experts located in different locations and organizations are brought together in subject-matter expert communities. Here they can share experiences and help each other solve problems, create new standards and initiate innovative solutions. In fact, communities are at the heart of knowledge sharing and intellectual capital management.

Traditionally, communities have some disadvantages, such as endless debates that lead nowhere. For example, a subject-matter expert may have a technical guideline or direction ready for publication, and either lacks the authority to publish it or there are company issues that prevent approval. But why keep this intellectual capital away from those who need it? Why not enable it to be brought directly for consideration by the company's experts? Why not give the experts the authority to make decisions on matters in which they are the experts? The technical community provides the forum for these technical assets to be evaluated and approved in light of other internal and external business pressures.

Through the structures introduced by the IT Strategy Management Process, communities are formalized and brought to a higher level. They become part of the companywide business model. The model includes provisioning multiple levels of communities for different needs and embedding communities in the decision-making process. The value of a more formalized subject-matter expert network is much greater than that of an informal/discussion type of network. And along with the other elements of the IT Strategy Management Process, the technical community acts as an enabler to release and effectively use certain intellectual capital.

The review flags discussed in the Repository section illustrate the connection between the elements of the IT Strategy Management Process. Without authority and without embedding communities into the company's Multi-

Global

Your selections:

Tier:	
Applicability:	
Product line:	
Chapter:	

Section: Version: Approva

Section: Infrastructure Version: Current Approval status: All documents Document review status:

- 🔰 = Owner message Click to see more
- Green Click to see more
- = Yellow Click to see more
- Red Click to see more

To show all documents that belong to a Document Set: Click on

Technology guidance

									Do	nt Re	nt Review Status			
Document Set	Document Title & Description	Version and Date	Tier	Applicability	Document Type and Area	Compliance	Confidentiality	Status	Owner	Age	Asia	Europe	Americas	Overall
	Server Directions Operating systems to use; their strong points and weak points	1.2 Current 4-3-04	2	Global	Technology Guidance Infra- structure	Expected	Company Confidential	Pending Approval	βų.	•			•	
High Availability	High Availability <u>Directions</u> A description of High Availability, what to do and what to avoid	1.4 Current 12-1-04	2	Global	Technology Guidance Infra- structure	Expected	Company Confidential	Approved		•	•	•		-
	<u>High Availability</u> Implementation <u>Guide</u> For vendor X hardware	1.4 Current 12-5-04	3	Global	Implemen- tation Manual Infra- structure	Expected	Company Confidential	Approved	þ					

Figure 6: Example of a repository screen

business model, the review flags shown in Figure 6 would be informal only. This implies they can be used at anybody's discretion. So as different people use them differently, their credibility fades, and the repository's quality reporting loses meaning. Compare this with the IT Strategy Management Process, in which the flags are set with the authority of the technical community, are used to trigger corrective actions, and are integrated into balanced scorecards or bonus assignments.

Figure 7 illustrates the principle of the IT Strategy Management Process communities model. There are multiple community levels for different needs, with one IT technical community model integrated in the decisionmaking process. Every colleague can join the community at Level 1, but there is no authority to make decisions at that level; however, at level 6, only a few colleagues will be allowed to join, and they have approval authority for IT strategies.

With this model in place, members of the virtual community can, for example, advise a forum on issues that emerged pertaining to a strategy and its underlying documentation. The forum can then establish a small work group that prepares the issues, develops corrective instructions and proposes flags to include in the repository. With one expert making a proposal and by using collaborative screen-sharing tools, the subject-matter experts involved can quickly agree on the flags, issues and corrective instructions for a complete document set. The next step is for the forum to review and approve it. After a flag is set, the flag – in conjunction with other process functionality – triggers corrective actions toward the strategy owners and advises users to be careful when using the strategy. It then becomes a matter of resolving the flag. One can accomplish this by having the strategy owner provide an updated strategy or by convincing the forum the flag may be inappropriate and should be downgraded. Of course, documents within the forum's scope must be reviewed periodically to ensure they are current.

There are additional benefits to flagging documentation. The technical authorities who participate in project and investment approvals will use the flagging information

Community Level and Name		Tasks	Approval Authority	Membership			
6.	Council(s)	Review of IT strategies	IT strategy Flagging	Senior managers and top-level subject- matter experts/technical leaders			
5.	Forums	Review of technical directions Review of IT strategies Flagging and issue listing	Technical direction Flagging	Top-level subject-matter experts/technical leaders			
4.	Technical authorities	Technical verification of projects and investments Noncompliance approval reporting Specific types of papers (for example, evaluations)	Technical approval For example, evaluation papers	Top-level subject-matter experts/technical leaders			
3.	Work groups	Prepare community output (for example, technical directions) Prepare forum or council decisions Propose flagging and corrective instructions for the repository (Established for a specific task; will be abandoned when the task is finished.)		Subject-matter experts Usually initiated by technical authorities, forums or councils			
2.	Technical leaders	Information sharing across subject areas Networking Problem-solving		Strong technical background and leadership behavior By nomination and acceptance			
1.	Virtual communities	Information sharing by subject-matter Problem-solving Networking		By self-registration			

Figure 7: The community model

as part of their decision-making. Of course, they will argue that full compliance with a red-flagged strategy cannot be expected. It's through this level of integration the flags take on considerable weight, and colleagues throughout the company begin to understand the importance of flags as a strong steering mechanism.

Element 3 - Incentive techniques

When a situation such as the one illustrated in Figure 1 exists, business pressures can be high. For example, cost-saving pressures may be intense in such situations, and management may be tempted to introduce control mechanisms, such as only allowing orders to be placed after they have been checked for compliance with a standard order list. In most cases, management is aware of similar control techniques – for example, from financial approval procedures and audits – and figures what works in those areas might also work in the IT strategy area. But is this really the case?

In the IT area, control mechanisms are often associated with words such as "policing,"

"mandatory dictate of strategy" or "enforcement." However, implementing such techniques isn't straightforward. One reason is that the techniques are usually too late to be effective: Implementation deadlines are typically too tight to rework the solution design. Moreover, by the time detailed order lists have been developed for the standard solution, they are probably outdated, because the vendors have moved on to newer models. And yet, those trying to implement control mechanisms may miss the real point: Control mechanisms are counterproductive if the real obstacles to compliance are missed. One cannot expect compliance from a target audience if the strategy cannot be found in the tangle of Web pages, if its current status is unclear, or if the strategy is too high-level or outdated. By the time executives realize the control mechanisms have little or no effect, months have passed, salaries have been paid and the real solution to the obstacles still needs to be developed.

A better technique is to first understand the real issues and obstacles. Then it's a matter of providing a common solution to common obstacles. The IT Strategy Management Process provides many solutions to common obstacles; however, it cannot assume an unlimited budget. Additionally, some obstacles – particularly those from crossing departmental, country, culture and language barriers – still can prevent a particular strategy, standard or solution from succeeding.

So the question becomes, "Is there a simple solution for every strategy, standard, etc., that is particularly effective in resolving those obstacles?" The answer is yes. Often, it's a matter of finding and using incentive techniques to get a target audience on board. It may come as a surprise, but the cost of incentives can be a small fraction of alternative solutions. For example, guick technical approval of projects or investments that are compliant with the strategy can be a highly effective incentive technique. Also, integrating the repository's flagging with budget allocation, balanced scorecards and bonuses can be extremely productive. This doesn't necessarily require higher budgets or bonuses. It's often a matter of integration with the existing budgets or bonuses.

The technique illustrated in Figure 8 can be applied to any IT strategy, standard or standard solution before it enters the approval procedure.

Element 4 – Integration between the elements

When implementing the IT Strategy Management Process, management may be tempted to implement only individual elements or even a stripped-down version of the full process. Although it makes sense to tailor the process to the company's specific needs, too much paring down or implementing one element at a time endangers the process as a whole. In fact, it could end up like other well-intended initiatives that failed and possibly created the need for the Strategy Management Process in the first place. In other words, it can become difficult to measure and see the value of the individual elements. A potential consequence is the individual element's becoming a target for elimination during the next cost-cutting exercise. Moreover, even if value can be shown, it may be relatively small compared to what one would achieve by implementing all six elements.

The example in Element 2 – the technical community – shows how the value of a

The Incentive Technique	Example
1. List the issues	Document owners don't like to put their documents into the central repository.
2. List the obstacles	Emotions Fear of losing control Fear of bureaucracy Fear of being controlled through the flagging Fear of sharing their expertise
3. List solutions to the obstacles	Provide a user-friendly repository Provide a strong process around the repository Create expert communities
4. List incentive techniques to the remaining obstacles	 Communicate the benefits to the document owners so they understand why it makes their job easier: Automatically communicates new documents to the target audience Automatically includes new strategies in project and investment approvals The repository quality reporting provides strong evidence for budget assignment to document developers Criteria for career advancement Make it a top priority for central departments to publish through the central repository Reward the subject-matter experts for sharing their expertise and saving the company money This should be sufficient. If not: "Why fund a department that is disconnected from its customers?"
5. Understand the remaining risks and include them in further decision-making	

Figure 8: The incentive technique

Control mechanisms are counterproductive if the real obstacles to compliance are missed. supposedly small piece (the flagging) can range from no value at all to extremely high value. Although the repository provides the functionality, the integration provides the value. The virtual community triggers the need for the flagging, the work group researches it, the forum gives the authority to set the flag, and the technical authorities give the flag setting weight during project and investment approvals. The further integration of incentive techniques in balanced scorecards, bonus assignment and budget assignment gives it the real power and speed, enabling the agile enterprise.

Element 5 - The right balance

In today's IT environments, it is tempting to jump from one extreme to the other. To implement the IT Strategy Management Process, and also for the strategies and standard solutions, it is critical to address each piece from the question, "Are we achieving the right balance?" For example, when executing the IT Strategy Management Process, if there is too little community involvement in strategy or standard solution reviews, local needs may be missed and, therefore, not reflected in the final version. This can result in a strategy or a standard that does not meet local requirements. These are costly mistakes, because IT standards and the overall strategy are jeopardized if expensive reengineering becomes necessary. On the other hand, too much community involvement in approving strategies and standard solutions can lead to costly delays or outdated and ineffective solutions.

The Strategy Management Process automatically drives IT organizations toward a balanced solution. Remember, if there is an issue with a strategy, standard or standard solution, a flag will be set in the repository, which triggers corrective action to resolve the flag. So attention is concentrated on the real issues.

Element 6 - Ground rules

Although the technology repository solves the issue of where to find what, colleagues throughout the company may still be confused as to how the whole process works, what they should do and when. Additionally, they might ask, "Why should I follow this process in the first place?"

It is evident something is required to tell them this process is extremely important

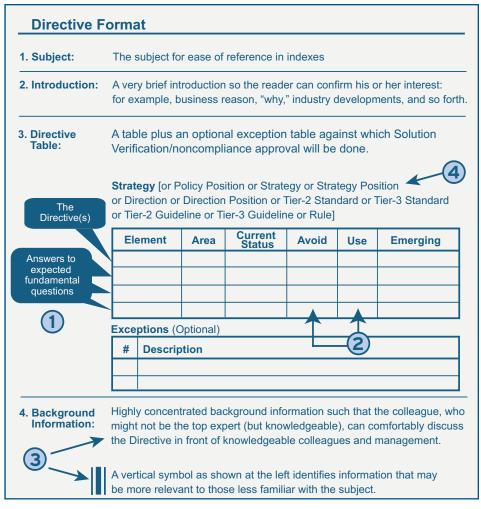


Figure 9: Directive Format

to the company. Additionally, they need answers to fundamental questions pertaining to the process. On the other hand, it is not necessary for everyone to understand how the entire process works. What matters is that the different process elements are linked in the real world. Additionally, the users need to be aware of when they must use a part of the process. The solution is a set of ground rules that apply to everyone in the company who supports IT. The ground rules should contain only the most important matters with clear "use" and "avoid" types of instructions and should be less than 60 pages, including background information supporting the instructions. Here are examples of ground rules:

- The documentation structure per Figure 4
- Basic compliance and deviation instructions, written in a way everyone will understand

- Compliance verification against the content of the central repository as part of every significant project or investment approval
- A single format for instructions (see Figure 9) from which compliance is expected, so the target audience clearly sees when compliance is expected, regardless of document type
- Multiple levels of compliance and deviation instructions – for example, guideline, standard, technical direction, strategy and policy (also see Figure 10)
- Figure 8: The incentive technique

Figure 9 is an example of a Directive Format – a single format for all instructions from which compliance is expected. In addition to listing the main instructions, it answers these questions:

1. What fundamental questions exist out in the field?

- 2. With what am I expected to be compliant?
- 3. What is the reasoning behind it so I can explain it to my management and to my customers?
- 4. How important are the instructions? Who can approve deviation?

This format implies that, no matter what the document type is, everybody understands where to find the instructions within a document. Equally important, it is intended to concentrate the instructions, making it easier for target audiences and others, such as auditors, to understand exactly where compliance is required.

One more thing needs to be explained. Although the name on top of the table tells how important the instructions are, it doesn't tell yet how it works. An oftenused approach is to define the importance of the different levels and to communicate it. However, such definitions are difficult to communicate and are often ignored. Hence, this approach doesn't make much sense.

A simpler approach is to integrate the importance (bullet 4 in Figure 9) into the noncompliance approval needs. Figure 10 illustrates the noncompliance principle. If the applicability of the paper is companywide and the table is headed by "Guideline," the employee can decide about a deviation. If the table is entitled "Strategy," the employee needs to seek the approval of a company technical authority and a global senior manager. In case they don't come to an agreement, they can go to the company technical body.

Why the IT Strategy Management Process is a process

The traditional approach to process is to define the process step by step and to integrate it into other processes and organizations. However, for a lead process, there would be far too many steps and integration needs, making things extremely complex. For this reason, integration needs, process descriptions and



Figure 10: The deviation approval principle

culture change needs have been moved as far into the background as possible. Instead, the process functions through natural flows and steering techniques. Nonetheless, the IT Strategy Management Process meets the ITIL criteria for process. Through this approach, the process becomes relatively easy to implement and to execute, which also means substantially lower costs than would be possible with the traditional approach.

Figure 11 illustrates the life cycle of strategies and underlying implementation instructions with repeatable inputs and outputs. The IT Strategy Management Process takes the strategy from the owner, runs it through an approval workflow, publishes it to the target audience, drives for compliance, takes the feedback from the user communities, provides the feedback to the owner and drives the owner to release an updated version in a central repository.

Implementation pitfalls

The design criteria listed under "The Solution for the IT Area" imply the IT Strategy Management Process contains only the most fundamental functionality of the bridge between Development and Production. In other words, taking a piece away, weakening an element or moving the bridge to the right or left will create a gap and break the solution. The nature of the root causes and the nature of the solution make it either a solution that delivers high value or one that delivers marginal value at best. There isn't much room in between. Although tailoring to specific environments is fine, extreme care must be taken not to break the process as a whole.

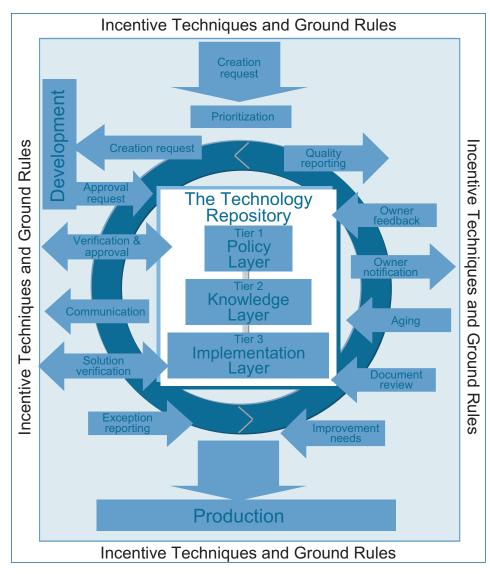


Figure 11: The life cycle of strategies and implementation instructions

Considerations when adapting the process to non-IT areas

The main criterion to be considered in applying the IT Strategy Management Process to non-IT areas is that different people with different skills are involved. So it is extremely important to build the strategy management processes around areas in which people need to work together. Of course, there is overlap between organizational areas and key business processes, and one may be tempted to fully integrate multiple areas into a single strategy management process. But does this make sense? Not really, because covering multiple areas in one process complicates the solution significantly. Instead, we find that a small number of strategy management process implementations focused on strategic business areas provide greater value than one complex overall process.

There is also the matter of documentation structures. These can require a slightly different repository structure, and some document types – for example, human resources documentation – can demand higher levels of security.

Another thing to consider is the elevated position of the product-related strategy management process for a company's products. The other strategy management processes probably will need to be loosely linked to it. For example, the technical authorities (see Figure 6) in the IT area may need to do technical verification not only against the IT strategies but also against product strategies. These links, however, should be small in number and should not create too much of a burden.

Finding additional details

The IT Strategy Management Process is further outlined in the publication "The IT Strategy Management Process: Supporting IT Services through Effective Knowledge Management," by Eugen Oetringer, Van Haren Publishing (http://www.vanharen.net), ISBN 90-77212-26-4.

Conclusion

Today's business environment is more complex and difficult to manage than ever before. It is further complicated because individuals are required to work together efficiently – no matter how many language, country, cultural, organizational or distance barriers must be overcome. The larger the company or government organization, the greater the challenges.

When implemented properly, the IT Strategy Management Process addresses a subset of those challenges. The process provides the foundations of the bridge, the "glue" that connects the entities and individuals. Through the functionality it provides, the IT Strategy Management Process makes strong, healthy strategies possible and drives for their execution, all of which are important criteria for an agile organization and a better competitive position.

References

Distefano, John. "The Decisioning Frontier: Operationalizing Your Business Strategy," *DM Review Magazine*, January 2000. http://www.dmreview.com/article_sub.cfm?articleId=1758

Gerrits, Han. "Komt het nog goed met kennismanagement?," Emerce Magazine, June 2004.

Verhoef, Chris. "290 miljard dollar kwijt aan falende IT," Automatisering Gids, May 21, 2004.

Oetringer, Eugen. The IT Strategy Management Process: Supporting IT Services through Effective Knowledge Management, Van Haren Publishing, ISBN 90-77212-26-4.

Kemmerling, Georges; Pondman, Dick. IT Service Management – An Introduction, Van Haren Publishing, ISBN 9080671363.

Berkhout, Michiel; Harrow, Roy; Johnson, Brian; Lacy, Shirley; Lloyd, Vernon; Page, Don; van Goethem, Marc; van den Bent, Hans; Welter, Guus. *ITIL Best Practice – Service Support*, Office of Government Commerce, ISBN 0-11-330015-8.

Barlett, John; Hinley, David; Johnson, Brian; Johnston, David; Keeling, Chris; Lloyd, Vernon; MacDonald, Ian; Mather, John; McLaughlin, Gerry; Rudd, Colin; Wheeldon, David; Young, Rob. *ITIL Best Practice – Service Delivery*, Office of Government Commerce, ISBN 0-11-330017-4.

Graham, Paul; Hulzinga, Sjoerd; Rudd, Colin; van Dijk, Annemieke; van Winden, Rob. *ITIL Best Practice – ICT Infrastructure Management*, Office of Government Commerce, ISBN 0-11-330865-5.

Brand, Koen; Boonen, Harry. IT Governance - A Pocket Guide, Van Haren Publishing, ISBN 90-77212-19-1.

The official ITIL Web site: http://www.ogc.gov.uk/ (click on ITIL under "I" in the OGC A-Z index).

Drucker, Peter F.; Dorothy, Leonard; Straus, Susan; Brown, John Seely; Garvin, David A.; Leonard, Dorothy. *Harvard Business Review on Knowledge Management* (Harvard Business Review Series), Harvard Business School Press; 1st edition (September 1998), ISBN: 0875848818.

Davenport, Thomas H.; Prusak, Laurence; Wilson, H. James (contributor). *What's the Big Idea? Creating and Capitalizing on the Best New Management Thinking*, Harvard Business School Press, ISBN: 1578519314.

About the authors

Stephanie Case

Stephanie Case is a managing consultant for EDS and has more than 11 years of international consulting experience spanning the core competencies of strategy, technology, change management, and human capital/ knowledge management. Stephanie has extensive international experience creating and implementing corporate change and human capital/knowledge management strategies in the United States, Europe, the Middle East, India and Africa. During her two years at EDS, Stephanie has initiated and managed the knowledge management practice area and co-led the enterprise content management and digital learning practice areas for Europe North. Stephanie earned two degrees from the University of Notre Dame in the United States.

Nigel Cresswell

Nigel Cresswell is an enterprise architect for EDS and has more than 10 years experience in applying architectural disciplines in the enterprise IT/systems management area. His work encompasses all aspects of this topic, including functional structure, process/procedures, organization, location specialization, technology and management infrastructure. During his 27 years with EDS, Nigel has been responsible for application design and development, data center management, technical sales support, and technology management and architecture. Nigel holds a degree in civil engineering from Imperial College London.

Eugen Oetringer

Eugen Oetringer is an infrastructure consultant for EDS and has more than 12 years of experience supporting large EDS and client data centers throughout Europe. His areas of expertise are wide-ranging - from capacity, availability and configuration management to problem and change management. He also has extensive experience in storage management, project management, IT architectures and IT strategies. Eugen enjoys the challenges of working with central departments and data centers to bring global technology strategies in line with local needs, and getting those strategies executed by the local organizations. He integrated the effective techniques into the solution outlined in this publication. Eugen holds a degree of Diplom Mathematiker from Fachhochschule Giessen-Friedberg in Germany.

Contact Stephanie Case EDS – The Netherlands phone: +31 6 2505 3957 e-mail: stephanie.case@eds.com

Nigel Cresswell EDS – United Kingdom phone: +44 1372 468036 e-mail: nigel.cresswell@eds.com

Eugen Oetringer EDS – The Netherlands phone: +31 181 50 2013 e-mail: eugen.oetringer@eds.com

About EDS

EDS provides a broad portfolio of business and technology solutions to help its clients worldwide improve their business performance. EDS' core portfolio comprises information-technology, applications and business process services, as well as information-technology transformation services. EDS' A.T. Kearney subsidiary is one of the world's leading high-value management consultancies. With more than \$20 billion in annual revenue, EDS is ranked 87th on the *Fortune 500*. The company's stock is traded on the New York (NYSE: EDS) and London stock exchanges. Learn more at **eds.com**.

Let's begin the conversation

Corporate Headquarters United States 5400 Legacy Drive Plano, Texas 75024

5400 Legacy Drive Plano, Texas 75024 USA 1 800 566 9337

Regional Headquarters

Asia Pacific Asia Pacific South Level 1, The Bond 30 Hickson Road Millers Point New South Wales 2000 Australia 612 9025 0777

Asia Pacific North 28/F Cambridge House Taikoo Place 979 King's Road Hong Kong 852 2867 9888

1800 814 9038 (in Canada only)

Canada 33 Yonge Street Toronto, Ontario M5E 1G4 Canada 1 416 814 4500

Europe, Middle East and Africa 2nd Floor Lansdowne House Berkeley Square London W1J 6ER 44 20 7569 5100

Latin America

Avenida Presidente Juscelino Kubitschek, 1830 5th Floor – Tower 4 04543-900 São Paulo Brazil 55 11 3707 4100

EDS

EDS and the EDS logo are registered trademarks of Electronic Data Systems Corporation. All other brand or product names are trademarks or registered marks of their respective owners. EDS is an equal opportunity employer and values the diversity of its people. Copyright © 2005 Electronic Data Systems Corporation. All rights reserved. 03/2005 4GCPH4447 Version 1.1