

by Terry Blevins,
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The Open Group
Architecture Forum

guide

Manager's Guide to Business Scenarios

- Getting IT — getting it right
- Aligning business value and technology
- Reducing the risk of IT projects

THE *Open* GROUP



*Boundaryless
Information Flow*

*Boundaryless Information Flow™
achieved through global interoperability
in a secure, reliable and timely manner*

vision



Business Scenarios

Business Scenarios provide a mechanism to fully understand the requirements of information technology and align it with business needs. This is accomplished through the analysis of business processes, supporting IT components, and information flow requirements. Business Scenarios are an essential tool used by the successful manager to achieve **Boundaryless Information Flow**.



Manager's Guide to
Business Scenarios

Getting IT — getting it right

By Terry Blevins, John Spencer and
The Open Group Architecture Forum

THE *Open* GROUP

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Manager's Guide to Business Scenarios

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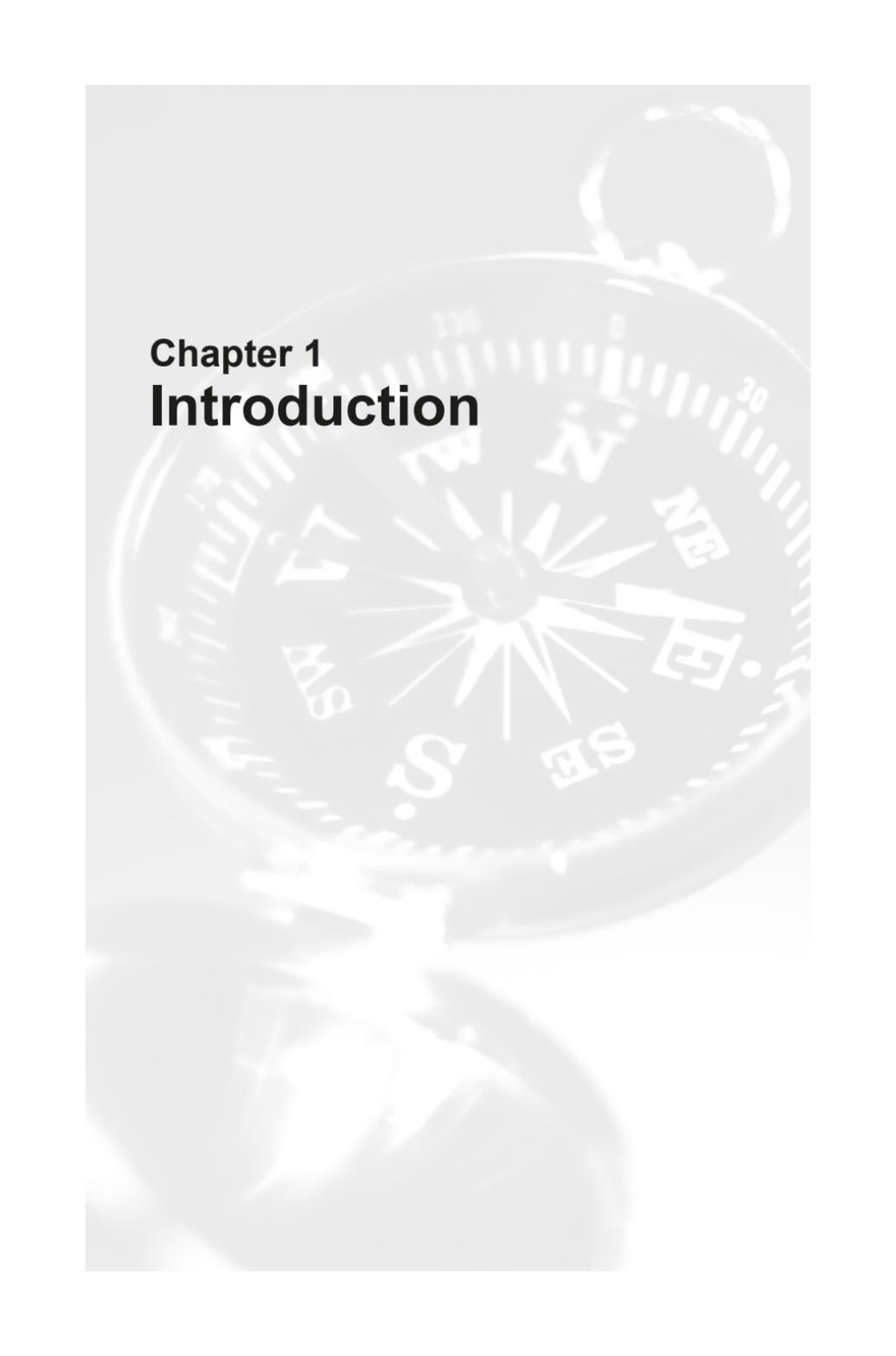
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Chapter 1
Introduction

Introduction

A key factor in the success of developing an enterprise architecture, or any other major project, is the extent to which it is linked to business requirements, and demonstrably supports and enables the enterprise to achieve its business objectives.

A good Business Scenario is representative of a significant business need or problem. It enables vendors to understand the value of a developed solution to the customer organization.

Business Scenarios were developed as part of The Open Group Architecture Framework (TOGAF), in order to quantify and document business processes. As well as playing a key part in defining and developing an enterprise architecture, Business Scenarios have value as a tool in their own right. This guide explains them in that context. You do not need to be developing an architecture (though that always improves the prospect of a successful outcome for an IT project) in order to derive value from Business Scenarios.

TOGAF is a framework — a detailed method and a set of supporting tools for developing an IT architecture. It is described in a document published by The Open Group on its public web site, and may be used freely by any organization wishing to develop an information systems architecture. Details may be found at www.opengroup.org/architecture/togaf/.

Business Scenarios are an important technique that may be used at various stages of developing the enterprise architecture, principally the Architecture Vision and the Business Architecture, but in other architecture domains, as well, if required to derive the characteristics of the architecture directly from the high-level requirements of the business. They are used to help identify and understand business needs and, thereby, to derive the business requirements that the architecture development must address.

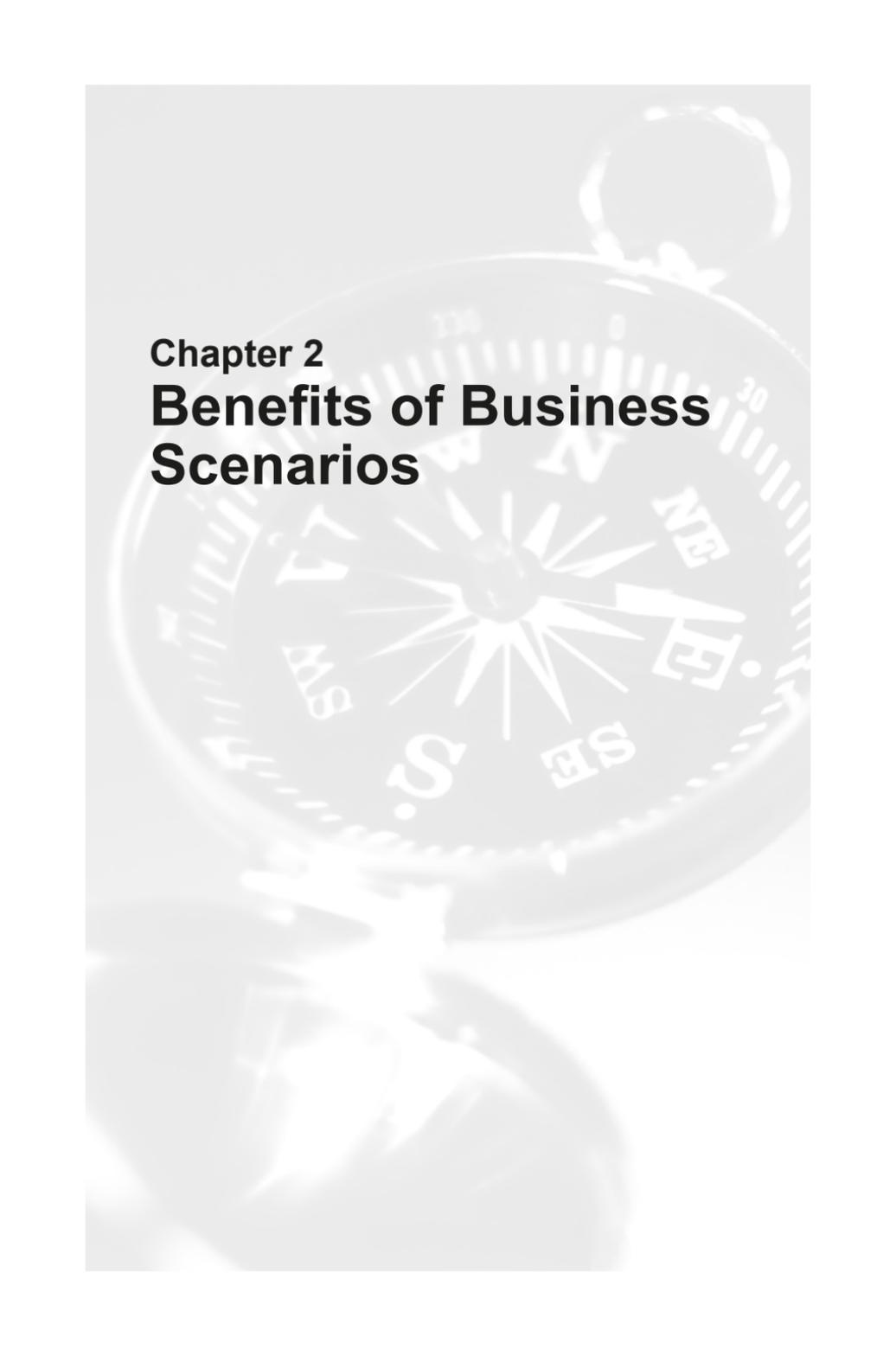
A Business Scenario describes:

- The business processes, applications or sets of applications that can be enabled by the architecture
- The business and technology environment

- The people and computing components (called “actors”) who execute the processes in the scenario
- The desired outcome of proper execution

A good Business Scenario is also “SMART”:

- **S**pecific, by defining what needs to be done in the business
- **M**easurable, through clear metrics for success
- **A**ctionable, by
 - clearly segmenting the problem, and
 - providing the basis for determining elements and plans for the solution
- **R**ealistic, in that the problem can be solved within the bounds of physical reality, time and cost constraints
- **T**ime-sensitive, in that there is a clear statement of when the solution opportunity expires



Chapter 2

Benefits of Business Scenarios

Benefits of Business Scenarios

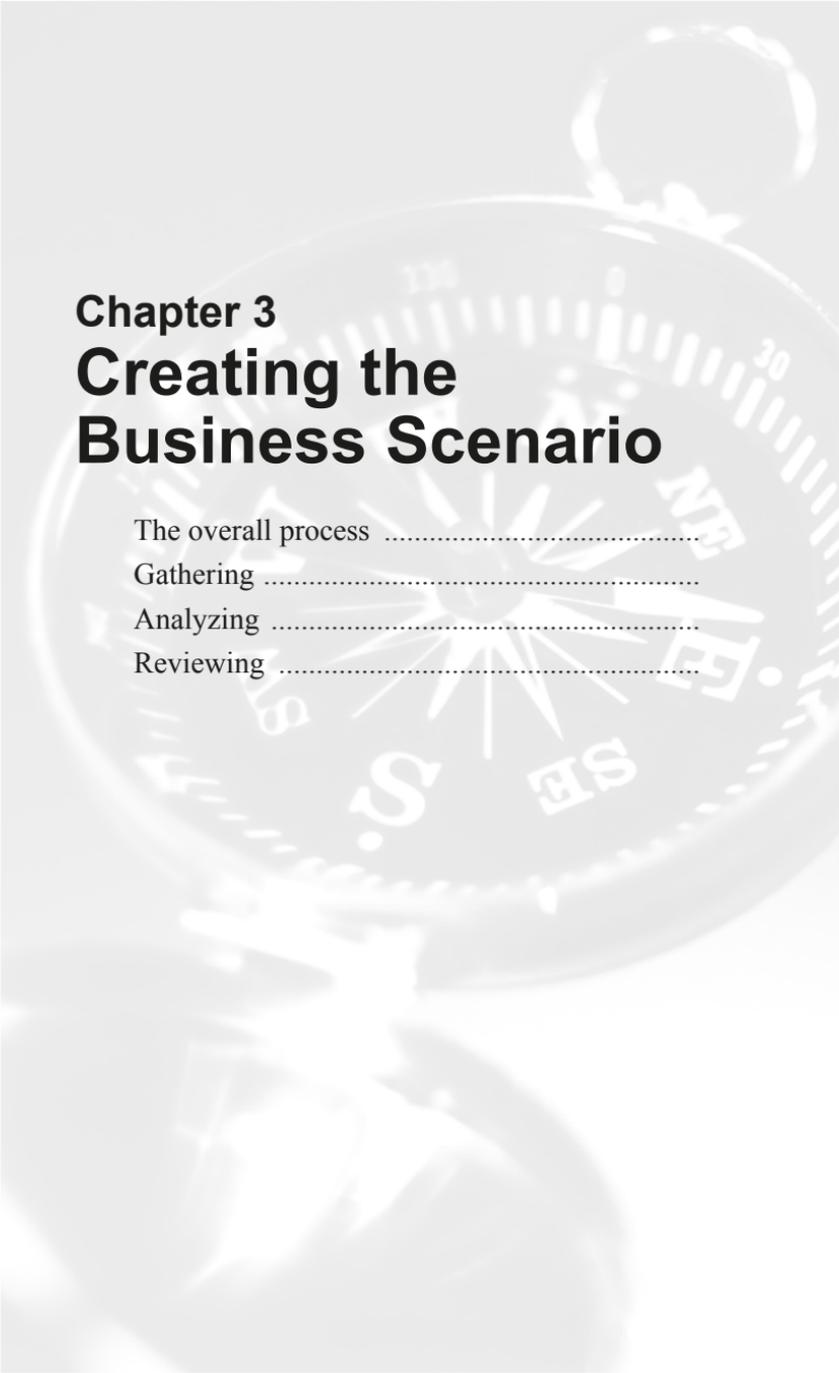
The section entitled “Guidelines on Goals and Objectives” provides detailed examples of objectives that might be considered. Whatever objectives you use, the idea is to make those objectives SMART.

A Business Scenario is a description of a business problem, in both business and architectural terms, which enables individual requirements to be viewed in relation to one another, in the context of the overall problem. Without such a description to serve as context:

- There is a danger of the solution being based on an inadequate set of requirements that do not add up to a whole problem description and can, therefore, misdirect the architecture and subsequent solution.
- The business value of solving the problem is unclear.
- The relevance of potential solutions is unclear.

Because a Business Scenario requires the involvement of business line managers and other stakeholders at an early stage in the project, it plays an important role in gaining the buy-in of key personnel to the overall project.

An additional advantage of Business Scenarios is in communication with vendors. Today, solutions are implemented by making maximum use of commercial off-the-shelf software (COTS) solutions, often from multiple vendors, procured in the open market. The use of Business Scenarios by a customer can be an important aid to IT vendors in delivering appropriate solutions. Vendors need to ensure that their solution components add value to an open solution and are marketable. Business Scenarios provide a language with which the vendor community can link customer problems and technical solutions. Besides making obvious what is needed and why, Business Scenarios allow vendors to solve problems optimally, using open standards and leveraging each other’s skills.



Chapter 3

Creating the Business Scenario

| | |
|---------------------------|--|
| The overall process | |
| Gathering | |
| Analyzing | |
| Reviewing | |

The overall process

Creating a Business Scenario involves the following, as illustrated in Figure 1:

- 1 Identifying, documenting and ranking the problem driving the scenario
- 2 Identifying the business and technical environment of the scenario and documenting it in scenario models
- 3 Identifying and documenting desired objectives (the results of handling the problems successfully) — get “SMART”
- 4 Identifying the human actors (participants) and their places in the business model
- 5 Identifying computer actors (computing elements) and their places in the technology model
- 6 Identifying and documenting roles, responsibilities and measures-of-success per actor; documenting the required scripts per actor and the results of handling the situation
- 7 Checking for fitness for purpose and refining as necessary

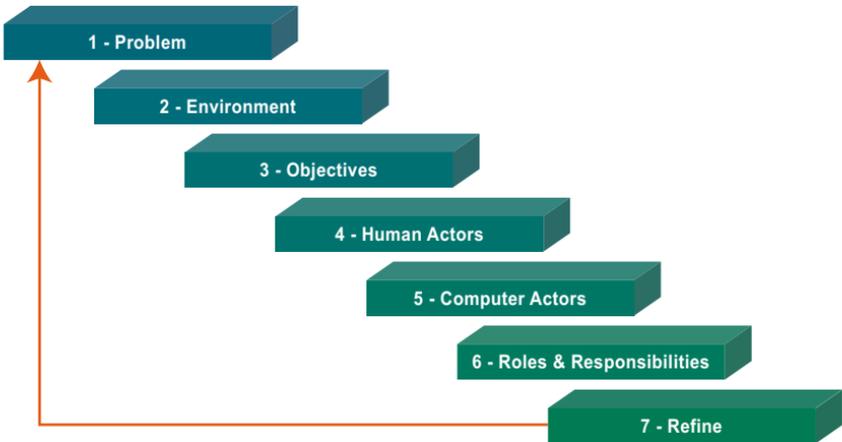


Figure 1: Creating a Business Scenario

A Business Scenario is developed over a number of iterative phases of Gathering, Analyzing and Reviewing the information.

In each Phase, each of the areas above is successively improved. The refinement step involves deciding whether to consider the scenario complete and go to the next phase, or whether further refinement is needed. This is accomplished by asking whether the current state of the Business Scenario is fit for the purpose of carrying requirements downstream in the process.

The three phases of developing a Business Scenario are described below and depicted in Figure 2.

| | Gather | Analyze | Review |
|------------------------------|---------------------|---------------------|---------------------|
| 1 - Problem | | | |
| 2 - Environment | | | |
| 3 - Objectives | | | |
| 4 - Human Actors | | | |
| 5 - Computer Actors | | | |
| 6 - Roles & Responsibilities | | | |
| | Refine if necessary | Refine if necessary | Refine if necessary |

Figure 2: Phases of developing Business Scenarios

Gathering

The Gathering phase is where information is collected on each of the areas in Figure 1. Multiple techniques can be used in this phase, such as basic research, qualitative analysis, quantitative analysis, surveying, calls for information, etc. As much information as possible should be gathered and pre-processed “off-line,” prior to face-to-face workshops (described

below). As an example, a call for information in the Gathering phase may include requesting strategic and operational plans that provide great insights. This information should be pre-processed, creating an initial draft of the Business Scenario prior to a workshop, if possible. Doing so builds confidence.

A very useful way to gather information is to hold Business Scenario workshops led by a Business Scenario consultant. A small, select group of business representatives is led through a number of questions to elicit the information surrounding the problem being addressed by the architecture effort. The workshop attendees must be carefully selected from high levels of the business and technical sides of the organization. It is important to get people who can and will provide information openly and honestly. A workshop may also be used to review the state of a Business Scenario.

Sometimes it is necessary to conduct multiple workshops: in some cases, to separate the gathering of information on the business side from the gathering of information on the technical side; in other cases, simply to get more information from more people.

When gathering information in workshops or off-line through research and/or surveys, it is particularly valuable to obtain “real-world examples.” Real-world examples strengthen the Business Scenario by providing case studies that are relevant to the reader. It is important, when citing real-world examples, to preserve the anonymity of the parties involved, in order to avoid finger-pointing or blame!

Analyzing

The Analyzing phase is where a great deal of real Business Scenario work is actually done. This is where the information that has been gathered is processed and documented, and where the models are created to represent that business information, typically visually.

The Analyzing phase takes advantage of the knowledge and experience of the Business Scenario consultant, who uses past work and experience to develop the models necessary to depict the information captured. Note that the models and documentation produced are not necessarily verbatim

reproductions of interviews but are, rather, filtered and translated to ensure that the real underlying needs are identified.

In the Analyzing phase, it is important to maintain linkages between the key elements of the Business Scenario. One technique that assists in maintaining linkages is creating matrices used to relate business processes to each of the following:

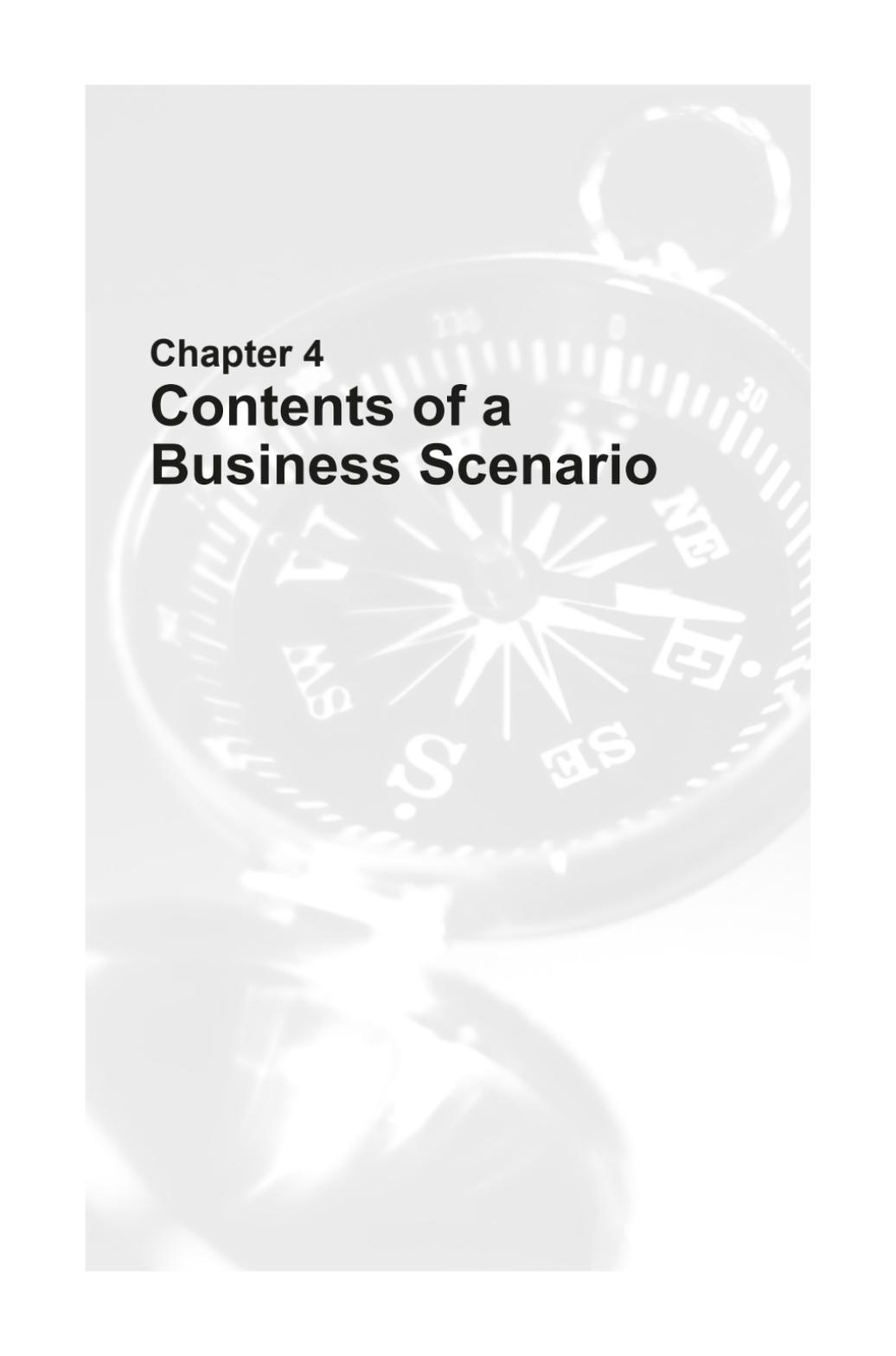
- Constituencies
- Human actors
- Computer actors
- Issues
- Objectives

The business process becomes the focal point, which makes a great deal of sense since, in most cases, it is business process improvement that is being sought.

Reviewing

The Reviewing phase is where the results are fed back to the sponsors of the project to ensure that there is a shared understanding of the full scope of the problem and the potential depth of the technical impact. Multiple Business Scenario workshops or readout meetings with the sponsors and involved parties are recommended. These meetings should be set up to be open and interactive. It is recommended that exercises be built into meeting agendas to test the attendees' understanding and interest levels, as well as to test the assumptions and results.

This phase is extremely important, as the absence of shared goals and expectations is, in many cases, the root cause of project failures. The documentation of a Business Scenario should contain all the important details about the scenario. It should capture and sequence the critical steps and interactions between actors, that address the situation. It should also declare all the relevant information about all actors, specifically: the different responsibilities of the actors, the key pre-conditions that must be met prior to proper system functionality and the technical requirements for the service to be of acceptable quality.



Chapter 4

**Contents of a
Business Scenario**

Contents of a Business Scenario

There are two main types of content: graphics (models) and descriptive text. Both have a part to play.

Business Scenario models capture business and technology views in a graphical form, in order to aid comprehension. Specifically, they relate actors and interactions and provide a starting point for confirming specific requirements.

Business Scenario descriptions capture details in a textual form. A typical format for a Business Scenario is given below.

Preface

- Executive summary
- Document road map

Business Scenario

- Business Scenario overview
 - Background of scenario
 - Purpose of scenario
- Definitions/descriptions of terms used

Views of environments and processes

- Business environment
- Constituencies
- Process descriptions
 - Process “a”
 - ...
- Technical environment
 - Technical environment “a”
 - ...

Actors and their roles and responsibilities

- Computer actors and roles

 - Relationship of components and processes

- Human actors and roles

 - Relationship of humans and processes

- Information flow analysis

- Principles and constraints

 - IT principles

- Constraints

- Requirements

Business Scenario analysis

- Problem summary

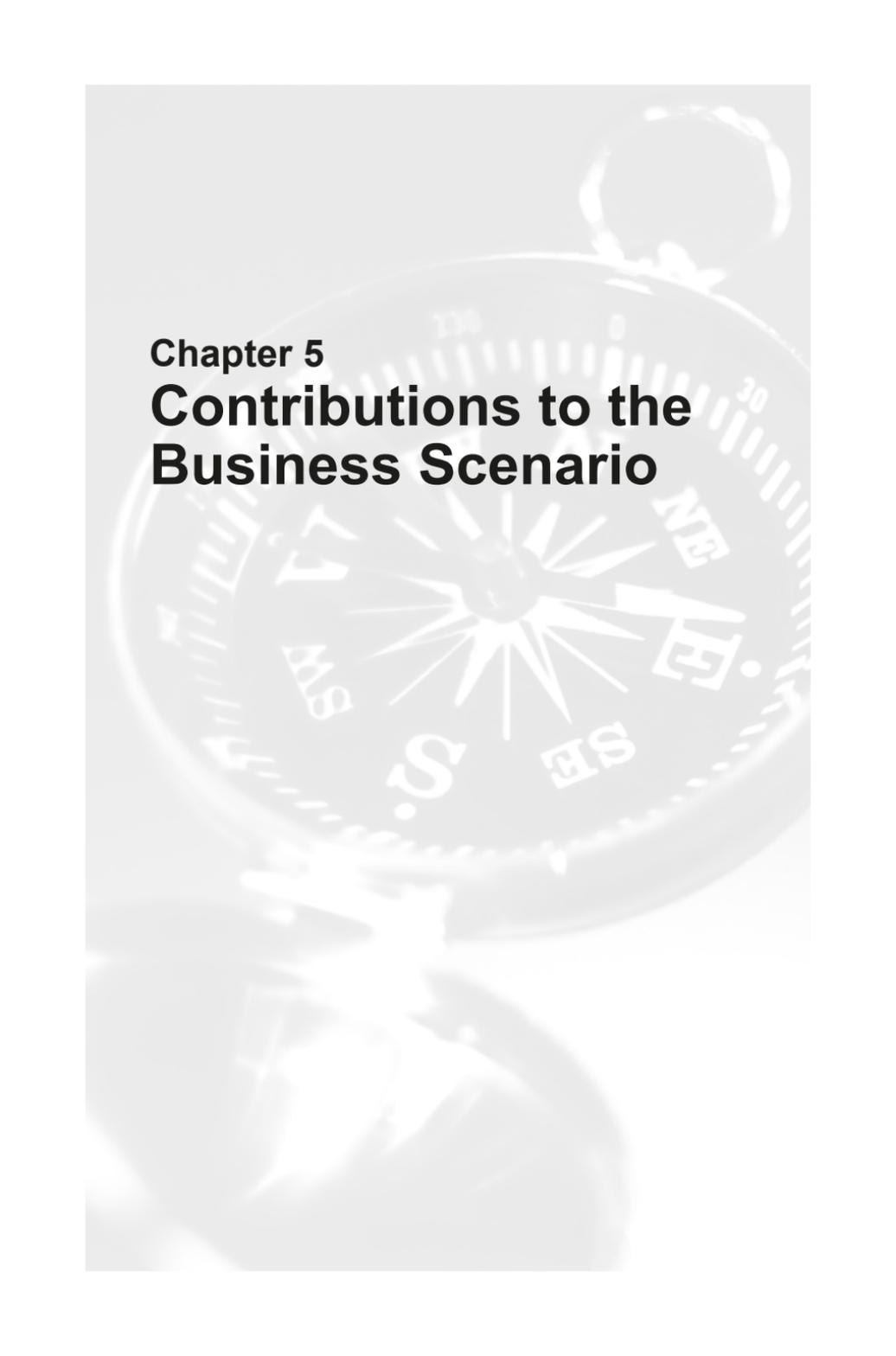
 - Issues

 - Objectives

Summary

Appendix a: Business Scenarios — additional information

Appendix b-n: Business Scenario workshop notes



Chapter 5

**Contributions to the
Business Scenario**

Contributions to the Business Scenario

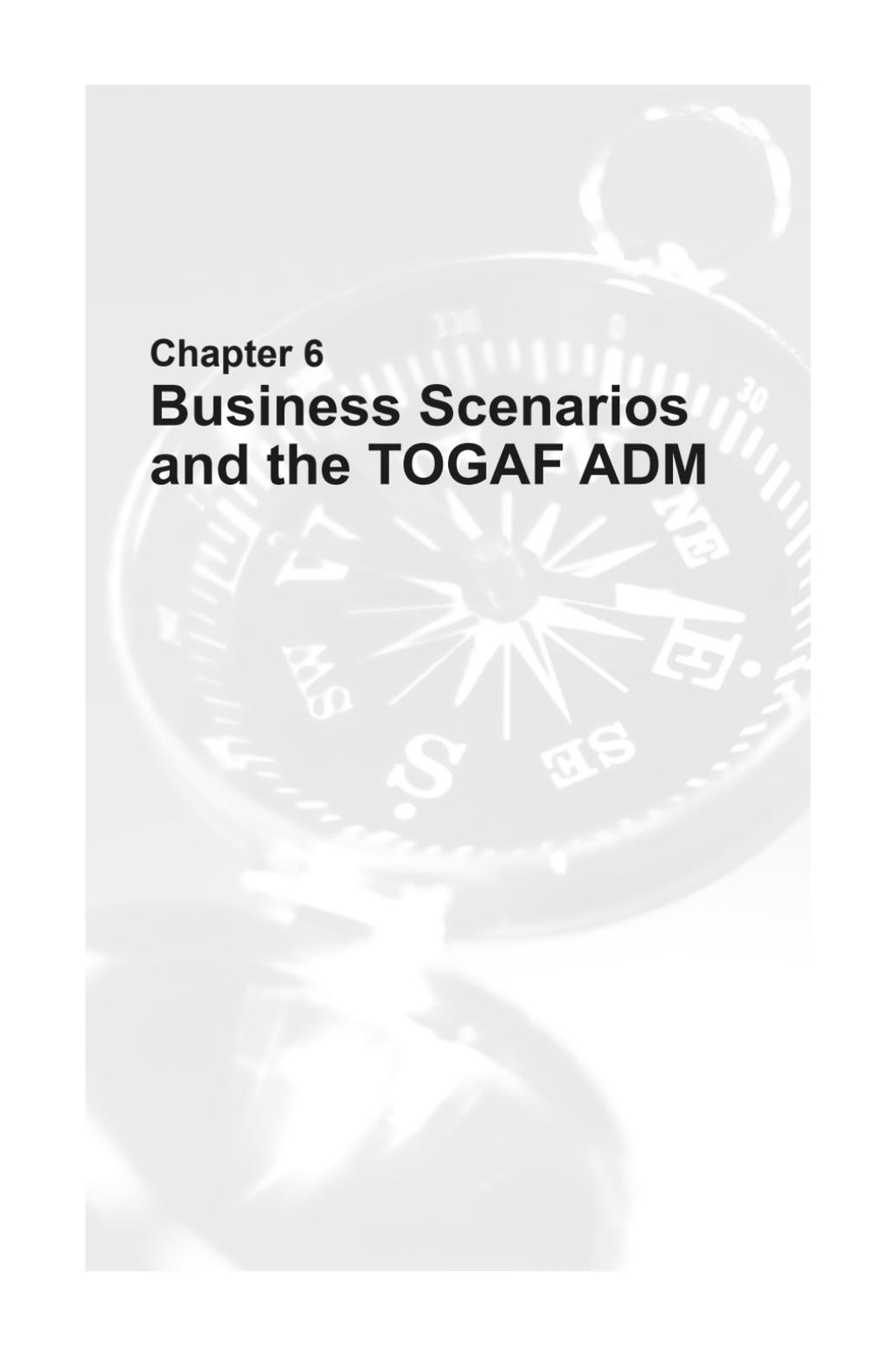
It is important to realize that the creation of a Business Scenario is not solely the province of the architects. As mentioned previously, business line management and other stakeholders in the enterprise are involved, to ensure that the business goals are accurately captured. In addition, depending on the relationship that an organization has with its IT vendors, the latter may also be involved to assure that the roles of technical solutions are accurately captured, as well as to ensure communication with the vendors.

Typically, the involvement of business management is greatest in the early stages, while the business problems are being explored and captured. The involvement of the architect is greatest in the later stages, when solutions are being described. Similarly, if vendors are involved in the Business Scenario process, the involvement of the customer side (business management plus enterprise architects) is greatest in the early stages, while that of the vendors is greatest in the later stages, when the role of specific technical solutions is being explored and captured. This concept is illustrated in Figure 3.



Figure 3: Relative contributions to a Business Scenario

Vendor IT architects might be able to assist enterprise IT architects with integration of the vendor's products into the enterprise architecture. This assistance most probably falls in the middle of the timeline in Figure 3.



Chapter 6

Business Scenarios and the TOGAF ADM

Business Scenarios and the TOGAF ADM

Business Scenarios feature most prominently in the initial phase of executing an Architecture Development Method (ADM), usually when creating the Architecture Vision, when they are used to define relevant business requirements and to build consensus with business management and other stakeholders.

However, the business requirements are referred to throughout all phases of an ADM life cycle, as illustrated in Figure 4.

Business requirements are important throughout all phases of the ADM life cycle. So the Business Scenario technique has an important role to play in the TOGAF (The Open Group Architecture Framework) ADM, ensuring that the business requirements themselves are complete and correct.

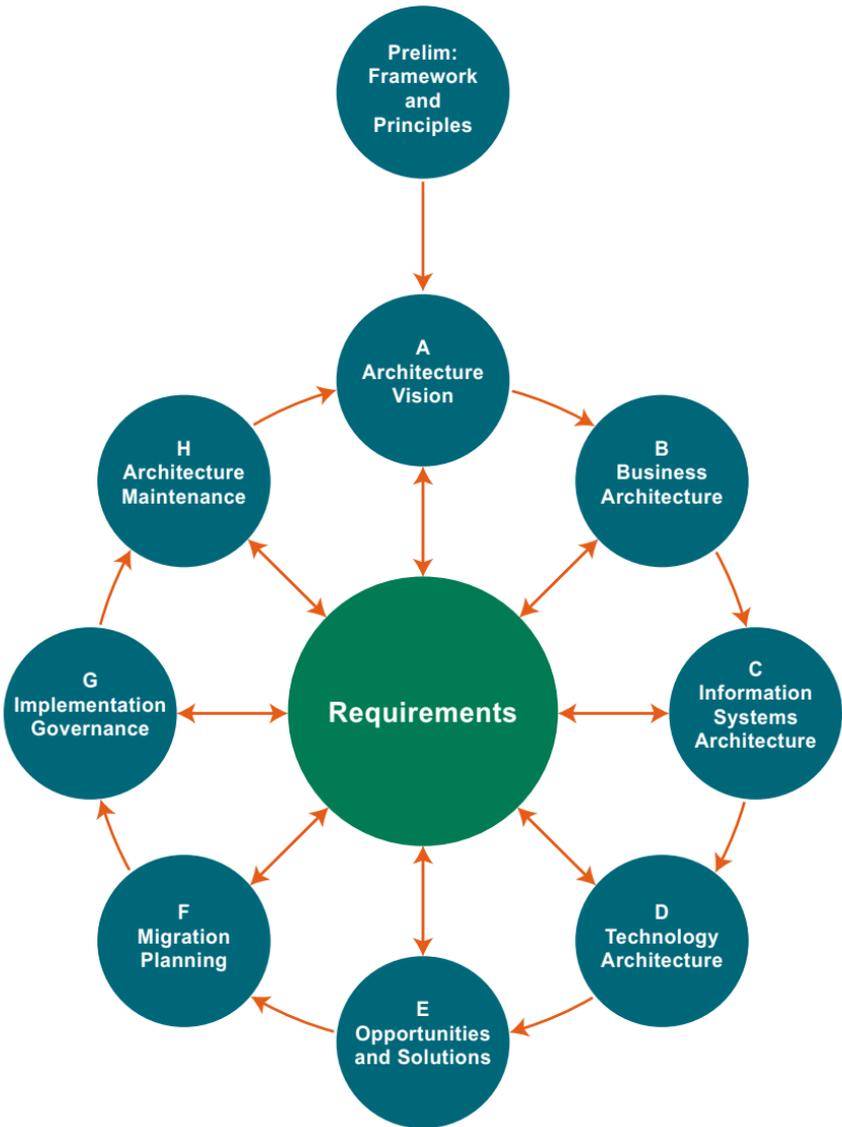
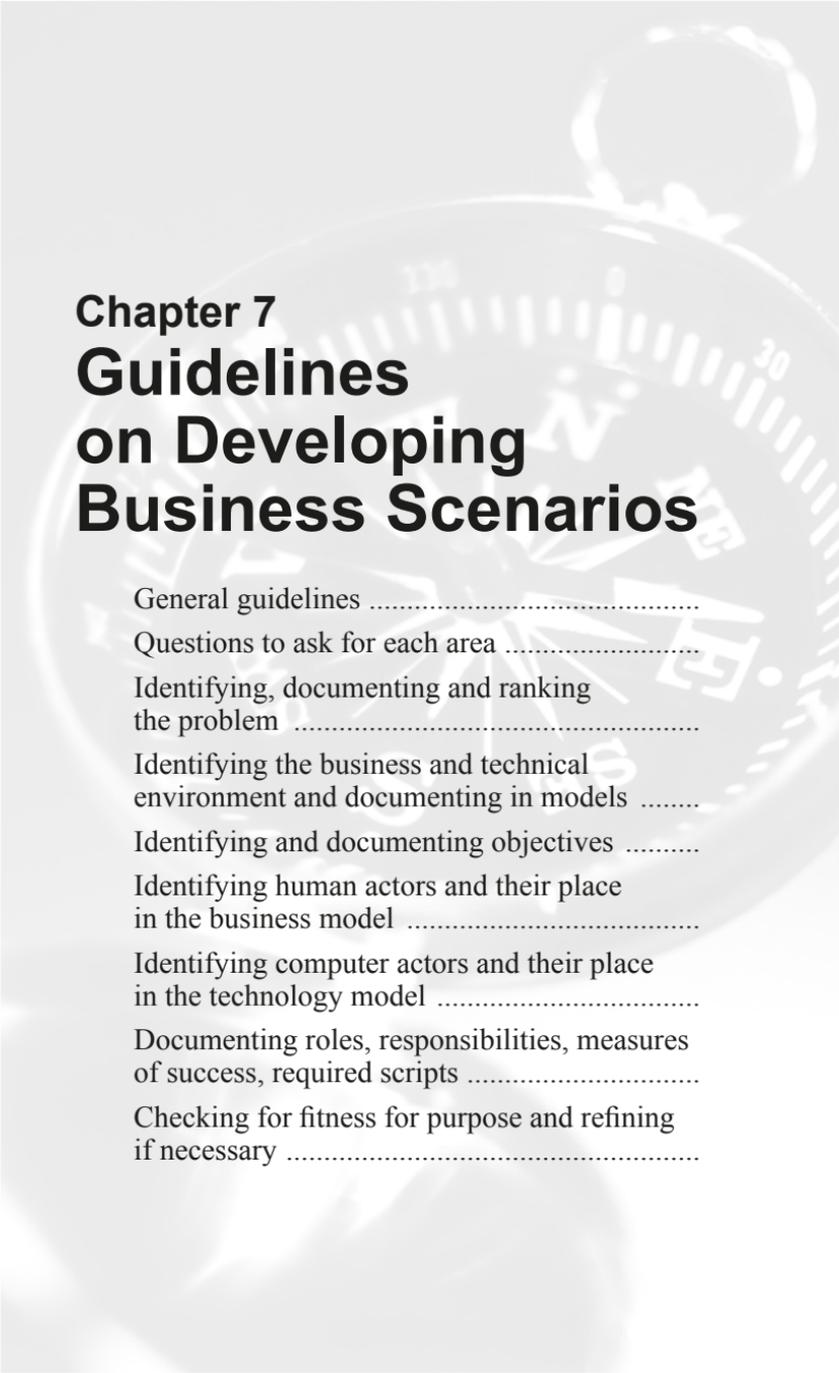


Figure 4: Relevance of requirements throughout The Open Group Architecture Framework ADM



Chapter 7

Guidelines on Developing Business Scenarios

| | |
|---|--|
| General guidelines | |
| Questions to ask for each area | |
| Identifying, documenting and ranking the problem | |
| Identifying the business and technical environment and documenting in models | |
| Identifying and documenting objectives | |
| Identifying human actors and their place in the business model | |
| Identifying computer actors and their place in the technology model | |
| Documenting roles, responsibilities, measures of success, required scripts | |
| Checking for fitness for purpose and refining if necessary | |

General guidelines

The stakeholders (e.g., business managers, end-users) may well be able to describe what they need, but often that is not the case. In order to gain a complete understanding of the business, you must identify the most important actors in the system.

If the stakeholders do not know what they want:

- Take time to observe and record how they are working today.
- Structure information so that it can be used later.
- Uncover critical business rules from domain experts.
- Stay focused on what needs to be accomplished and how it is to be accomplished.

This effort provides the anchor for a chain of reason, from business requirements through technical solutions. Being diligent and critical at the start will pay off later.

Questions to ask for each area

The Business Scenario workshops mentioned in the Gathering phase are really structured interviews. While there is no single set of appropriate questions to ask in all situations, the following provides some guidance to help Business Scenario consultants ask good questions.

Identifying, documenting and ranking the problem

Is the problem described as a statement of WHAT needs to be accomplished, like steps in a process, and not HOW (with technology “push”)?

If the problem is too specific or a “how”:

- Raise a red flag.
- Ask questions, such as: Why do you need to do it that way?

If the problem is too vague or unactionable:

- Raise a red flag.
- Ask questions, such as: What is it you need to do? What will you be able to do if this problem is solved?

Ask questions that help identify where and when the problem exists:

- Where are you experiencing this particular problem? In what business process?
- When do encounter these issues? During the beginning of the process, the middle, the end?

Ask questions that help identify the costs of the problem:

- Do you account for the costs associated with this problem? If so, what are they?
- Are there hidden costs? If so, what are they?
- Is the cost of this problem covered in the cost of something else? If so, what and how much?
- Is the problem manifested in terms of poor quality or a perception of an ineffective organization?

Identifying the business and technical environment and documenting in models

Questions to ask about the business environment:

- What key processes suffer from the issues? What are the major steps that need to be processed?
- Location/scale of internal business departments?
- Location/scale of external business partners?
- Any specific business rules and regulations related to the situation?

Questions to ask about the current technology environment:

- What technology components are already pre-supposed to be related to this problem?

- Are there any technology constraints?
- Are there any technology principles that apply?

Identifying and documenting objectives

Is the “what” sufficiently backed up with the rationale for “why”? If not, ask for measurable rationale in the following areas:

- Return on investment
- Scalability
- Performance needs
- Compliance to standards
- Ease-of-use measures

Identifying human actors and their place in the business model

An actor represents anything that interacts with or within the system. This can be a human or a machine or a computer program. Actors initiate activity with the system, e.g.:

- Computer user with the computer
- Phone user with the telephone
- Payroll clerk with the payroll system
- Internet subscriber with the web browser

An actor represents a role that a user plays. In other words, a user is someone playing a role while using the system — e.g., John (user) is a dispatcher (actor). Each actor uses the system in different ways (otherwise they should be identified as the same actor). Ask about the humans who will be involved, from different viewpoints, such as:

- Developer
- Maintainer

- Operator
- Administrator
- User

Identifying computer actors and their place in the technology model

Ask about the computer components likely to be involved, again from different points of view. What must they do?

Documenting roles, responsibilities, measures of success, required scripts

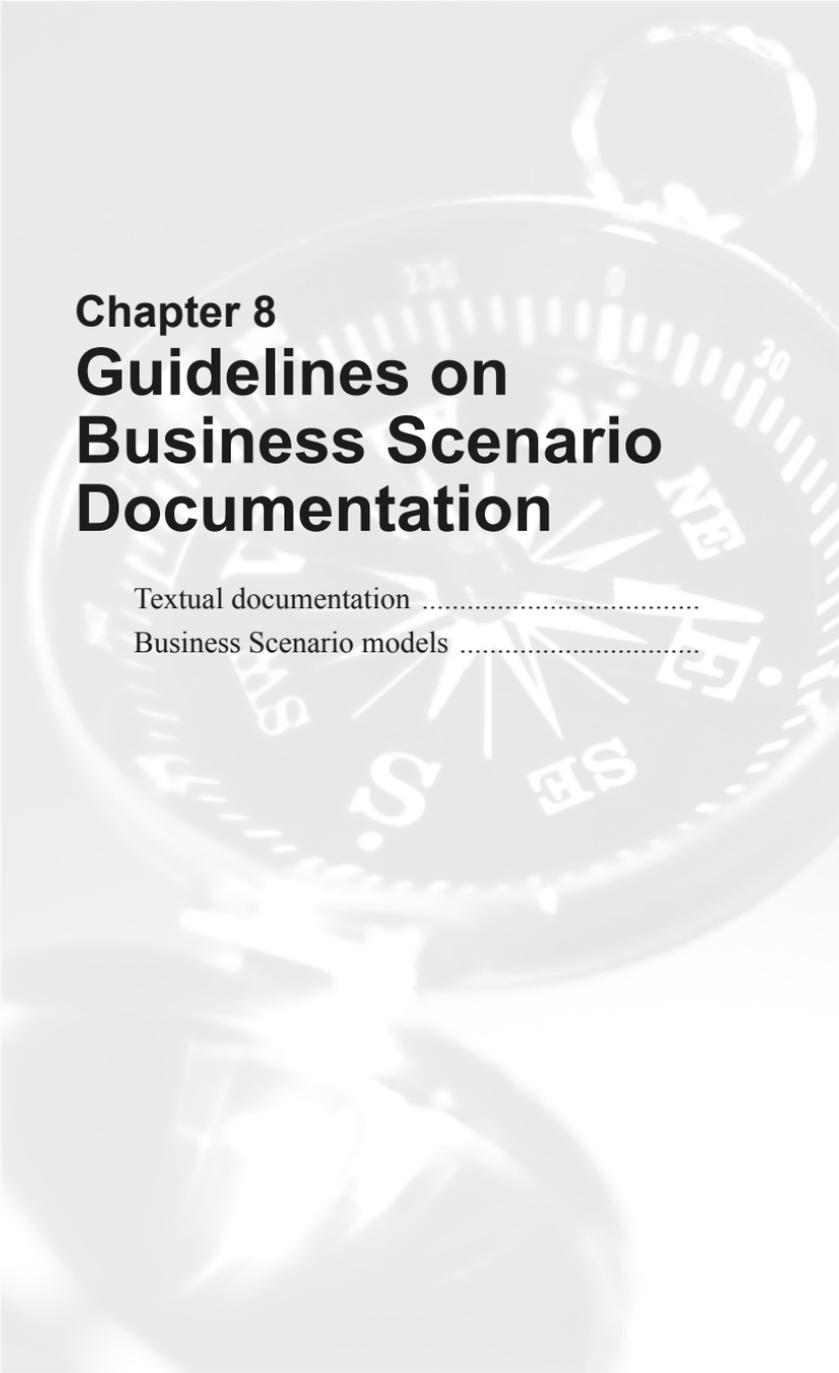
When defining roles, ask questions like:

- What are the main tasks of the actor?
- Will the actor have to read/write/change any information?
- Will the actor have to inform the system about outside changes?
- Does the actor wish to be informed about unexpected changes?

Checking for fitness for purpose and refining if necessary

Is there enough information to identify who/what could fulfill the requirement? If not, probe more deeply.

Is there a description of when and how often the requirement needs to be addressed? If not, ask about timing.



Chapter 8

Guidelines on Business Scenario Documentation

| | |
|--------------------------------|--|
| Textual documentation | |
| Business Scenario models | |

Textual documentation

Documentation must be effective. This requires a balance of ensuring that the detail is accessible, but that it does not overshadow the results or overwhelm the reader. To accomplish this, the generalized findings should be in the main body of the Business Scenarios document and the details should be covered in appendices.

Capture all the important details about a Business Scenario and put them in appendices:

- Situation description and rationale
- All measurements
- All actor roles and sub-measurements
- All services required
- Critical steps between actors that address the situation and sequence the interactions
- Relevant information about all actors
 - Partition the responsibility of the actors.
 - List pre-conditions that have to be met prior to proper system functionality.
 - Provide technical requirements for the service to be of acceptable quality.

Generalize all the relevant data from the detail and document the generalizations in the main body of the Business Scenario.

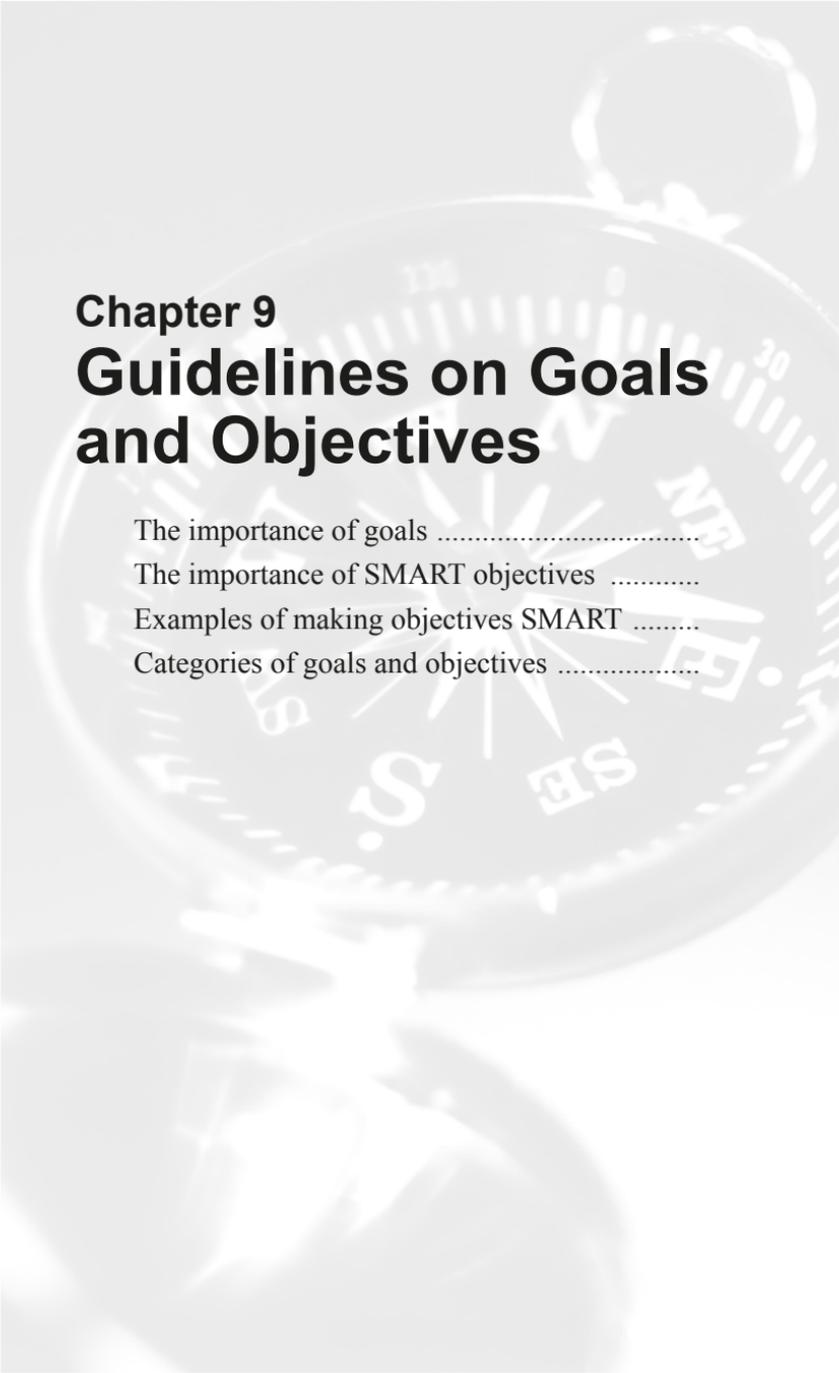
Business Scenario models

Business Scenario models are fundamentally pictures. As they say, a picture is worth a thousand words. The purpose of using models is to:

- Capture business and technology views in a graphical form
- Aid in comprehension
- Provide a starting point for confirming requirements
- Relate actors and interactions

To achieve the objectives of using models:

- Keep drawings clear and neat.
- Avoid putting too much detail in one diagram; simpler diagrams are easier to understand.
- Models should be numbered for easy reference.



Chapter 9

Guidelines on Goals and Objectives

| | |
|---|--|
| The importance of goals | |
| The importance of SMART objectives | |
| Examples of making objectives SMART | |
| Categories of goals and objectives | |

The importance of goals

One of the first steps in the development of an architecture is to define the overall goals and objectives for the development. The objectives should be derived from the business goals of the organization, and the way in which information technology is seen to contribute to meeting those goals should be clear.

Every organization behaves differently in this respect, some seeing IT as the driving force for the enterprise and others seeing IT in a supporting role, simply automating the business processes that already exist. It is essential is that the architectural objectives be very closely aligned with the business goals and objectives of the organization.

The importance of SMART objectives

Not only must goals be stated in general terms, but also specific measures need to be attached to them to make them SMART, as described earlier.

The amount of effort spent in doing this will lead to greater clarity for the sponsors of the architecture evolution cycle. It will pay off by driving proposed solutions much closer to the goals, at each step of the cycle. It is extremely helpful for the different stakeholders inside the organization, as well as for suppliers and consultants, to have a clear yardstick for measuring fitness for purpose. If done well, the architecture development method can be used to trace specific decisions back to criteria, thus yielding their justification.

The goals below have been adapted from experience in developing previous scenarios. These are categories of goals, each with a list of possible objectives. Each of these objectives should be made SMART, with specific measures and metrics for the task. However, since the actual work to be done will be specific to the architecture project concerned, it is not possible to provide a list of generic SMART objectives that will relate to every project.

Instead, we provide here some example SMART objectives.

Examples of making objectives SMART

Under the following general goal heading “Improve user productivity,” there is an objective to provide a “consistent user interface.” It is described like this:

“A consistent user interface will ensure that all user-accessible functions and services will appear and behave in a similar, predictable fashion, regardless of application or site. This will lead to better efficiency and fewer user errors which, in turn, may result in lower recovery costs.”

To make this objective SMART, one asks whether the objective is specific, measurable, actionable, realistic and time-bound, and if it augments the objective appropriately.

The following captures an analysis of these criteria for the stated objective.

- **Specific** — The objective of providing “a consistent user interface that will ensure all user-accessible functions and services will appear and behave in a similar, predictable fashion regardless of application or site” is pretty specific. However, the measures listed in the second sentence could be more specific.
- **Measurable** — As stated above, the objective is measurable, but could be more specific. The second sentence could be amended to read (for example): “This will lead to 10% greater user efficiency and 20% fewer order-entry user errors which, in turn, may result in 5% lower order-entry costs.”
- **Actionable** — The objective does appear to be actionable. It seems clear that consistency of the user interface must be provided and could be handled by whoever is responsible for providing the user interface to the user device.
- **Realistic** — The objective of providing “a consistent user interface that will ensure all user-accessible functions and services will appear and behave in a similar, predictable fashion regardless of application or site” might not be realistic. Considering the use of PDAs today, at the user end, might lead one to augment this objective to assure that the downstream developers don’t unduly create designs that hinder

the use of new technologies. The objective could be re-stated as “a consistent user interface, across user-interface devices that provide similar functionality, to ensure ...” etc.

- **Time-bound** — the objective as stated is not time-bound. To be time-bound the objective could be re-stated as “By the end of Quarter 3, provide a consistent....”

Putting all of the above together results in a SMART objective that reads more like this (again remember this is an example):

“By the end of Quarter 3, provide a consistent user interface across user-interface devices that provide similar functionality, to ensure all user-accessible functions and services appear and behave in a similar manner when using those devices in a predictable fashion, regardless of application or site. This will lead to 10% greater user efficiency and 20% fewer order-entry user errors which, in turn, may result in 5% lower order-entry costs.”

Categories of goals and objectives

Although every organization will have its own set of goals, some examples may help in the development of an organization-specific list. The goals given below are categories of goals, each with a list of possible objectives, which have been adapted from the goals given in previous versions of TOGAF.

Each of the objectives given below should be made SMART with specific measures and metrics for the task involved, as illustrated in the preceding example. However, the actual work to be done will be specific to the architecture project concerned. It is not possible to provide a list of generic SMART objectives that will relate to every project.

Goal: Improve business process performance

Business process improvements can be realized through the following objectives:

- Increased process throughput

- Consistent output quality
- Predictable process costs
- Increased re-use of existing processes
- Reduced time sending business information from one process to another

Goal: Decrease costs

Cost reductions can be realized through the following objectives:

- Reduced levels of redundancy and duplication in assets throughout the enterprise
- Decreased reliance on external IT service providers for integration and customization
- Reduced costs of maintenance

Goal: Improve business operations

Business operations improvements can be realized through the following objectives:

- Increased budget available for new business features
- Reduced costs of running the business
- Shorter time to market for products or services
- Improved quality of services to customers
- Improved quality of business information

Goal: Improve management efficacy

Management efficacy improvements can be realized through the following objectives:

- Increased flexibility of business
- Shorter time to make decisions
- Better quality decisions

Goal: Reduce risk

Risk reductions can be realized through the following objectives:

- Ease of implementing new processes
- Fewer errors introduced into business processes through complex and faulty systems
- Fewer real-world safety hazards (including hazards that cause loss of life)

Goal: Improve effectiveness of IT organization

IT organization effectiveness can be improved through the following objectives:

- Increased number of new projects
- Shorter time to rollout new projects
- Reduced costs for rolling out new projects
- Reduced loss-of-service continuity when rolling out new projects
- Common development — Applications that are common to multiple business areas will be developed or acquired once and re-used, rather than separately developed by each business area.
- Open systems environment — A standards-based common operating environment that accommodates the injection of new standards, technologies and applications on an organization-wide basis will be established. This standards-based environment will provide the basis for development of common applications and facilitate software reuse.
- Use of products — As far as possible, hardware-independent, off-the-shelf items should be used to satisfy requirements in order to reduce dependence on custom developments and to reduce development and maintenance costs.
- Software reuse — For those applications that must be custom developed, development of portable applications will reduce the amount of software developed and add to the inventory of software suitable for reuse by other systems.
- Resource sharing — Data-processing resources (hardware, software and data) will be shared by all users requiring the services of those

resources. Resource sharing will be accomplished in the context of security and operational considerations.

Goal: Improve user productivity

User productivity improvements can be realized through the following objectives:

- **Consistent user interface** — A consistent user interface will ensure that all user-accessible functions and services will appear and behave in a similar, predictable fashion regardless of application or site. This will lead to better efficiency and fewer user errors which, in turn, may result in lower recovery costs.
- **Integrated applications** — Applications available to the user will behave in a logically consistent manner across user environments, which will lead to the same benefits as a consistent user interface.
- **Data sharing** — Databases will be shared across the organization in the context of security and operational considerations, leading to increased ease of access to required data.

Goal: Improve portability and scalability

The portability and scalability of applications will be realized through the following objectives:

- **Portability** — Applications that adhere to open systems standards will be portable, leading to ease of movement across heterogeneous computing platforms. Portable applications can allow sites to upgrade their platforms as technological improvements occur, with minimal impact on operations.
- **Scalability** — Applications that conform to the model will be configurable, allowing operation on the full spectrum of platforms required.

Goal: Improve interoperability

Interoperability improvements across applications and business areas can be realized through the following objectives:

- **Common infrastructure** — The architecture should promote a communications and computing infrastructure based on open systems

and systems transparency including, but not limited to, operating systems, database management, data interchange, network services, network management and user interfaces.

- Standardization — By implementing standards-based platforms, applications will be provided with and will be able to use a common set of services that improve the opportunities for interoperability.

Goal: Increase vendor independence

Vendor independence can be increased through the following objectives:

- Interchangeable components — Only hardware and software that has standards-based interfaces will be selected, so that upgrades or the insertion of new products will result in minimal disruption to the user's environment.
- Non-proprietary specifications — Capabilities will be defined in terms of non-proprietary specifications that support full and open competition and are available to any vendor for use in developing commercial products.

Goal: Reduce life-cycle costs

Life-cycle costs can be reduced through most of the objectives identified above. In addition, the following objectives directly address reduction of life-cycle costs:

- Reduced duplication — Replacement of isolated systems and islands of automation with interconnected open systems will lead to reductions in overlapping functionality, data duplication and unnecessary redundancy, because open systems can share data and other resources.
- Reduced software maintenance costs — Reductions in the quantity and variety of software used in the organization will lead to reductions in the amount and cost of software maintenance. Use of standard, off-the-shelf software will lead to further reductions in costs since vendors of such software distribute their product-maintenance costs across a much larger user base.
- Incremental replacement — Interfaces common to shared infrastructure components allow for phased replacement or upgrade with minimal operational disturbance.

- Reduced training costs — Common systems and consistent human computer interfaces will lead to reduced training costs.

Goal: Improve security

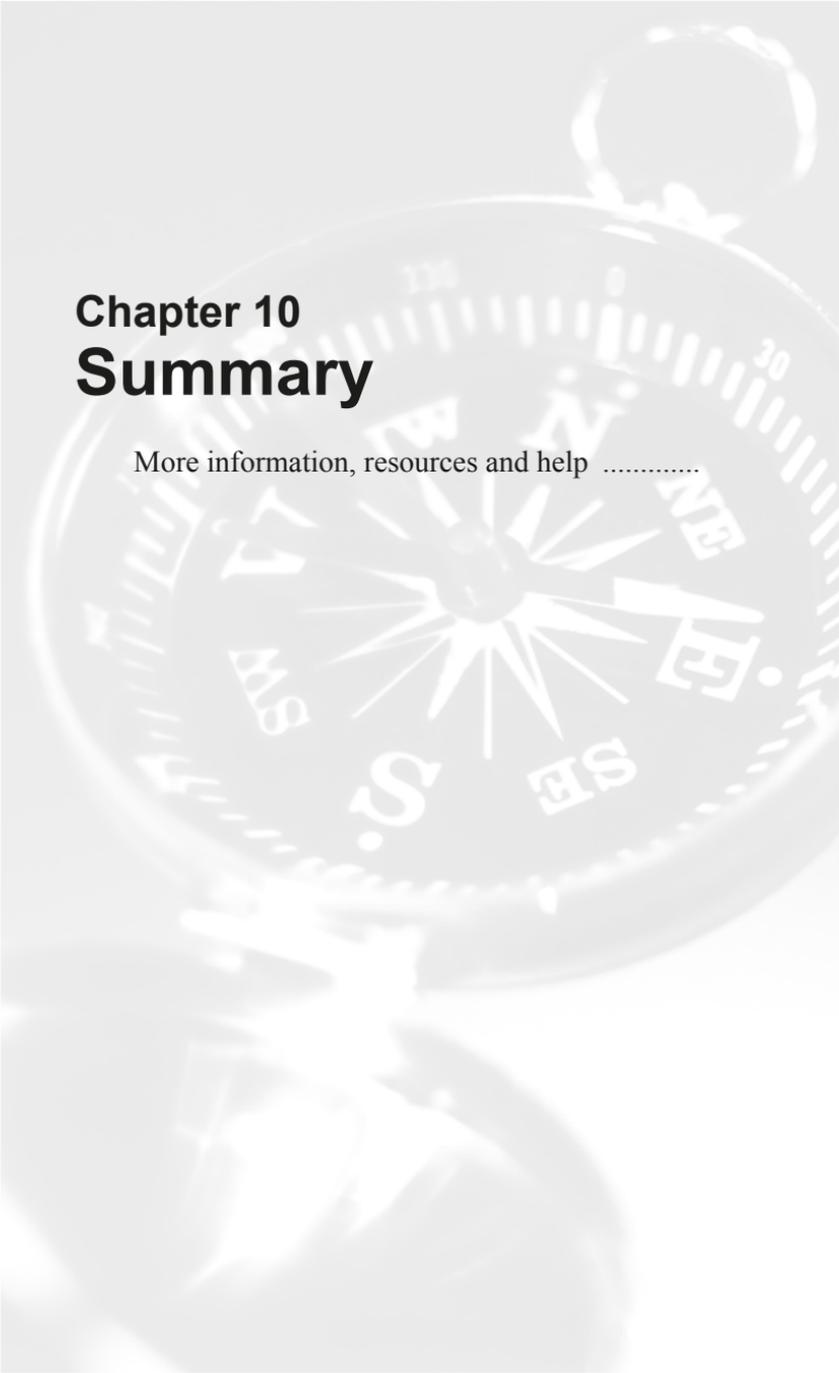
Security can be improved in the organization’s information systems through the following objectives:

- Consistent security interfaces for applications — Consistent security interfaces and procedures will lead to fewer errors when developing applications, as well as to increased application portability. Not all applications will need the same suite of security features, but any features used will be consistent across applications.
- Consistent security interfaces for users — A common user interface for security features will lead to reduced learning time when moving from system to system.
- Security independence — Application deployment can use the security policy and mechanisms appropriate to the particular environment, if there is good layering in the architecture.
- A 25% reduction in calls to the Help desk relating to security issues
- A 20% reduction in “false positives” detected in the network (a “false positive” is an event that appears to be an actionable security event but, in fact, is a false alarm)

Goal: Improve manageability

Management improvement can be realized through the following objectives:

- Consistent management interface — Consistent management practices and procedures will facilitate management across all applications and their underlying support structures. A consistent interface can simplify the management burden, leading to increased user efficiency.
- Reduced operation, administration and maintenance costs — Operation, administration and maintenance costs may be reduced through the availability of improved management products and increased standardization of the objects being managed.



Chapter 10 Summary

More information, resources and help

Summary

Business Scenarios help address one of the most common issues facing IT executives:

Aligning information technology with the business!

Success of any major project is measured by the extent to which it is linked to business requirements, and demonstrably supports and enables the enterprise to achieve its business objectives. Business Scenarios are an important technique that may be used at various stages of defining enterprise architecture, or any other major IT project, to derive the characteristics of the solution directly from the high-level requirements of the business. Business Scenarios are used to help identify and understand business needs and, thereby, to derive the business requirements that the architecture development and, ultimately, the information technology, must address.

Using Business Scenarios can deliver real value to an organization:

- Reducing time, cost and risk in the development of an IT architecture and solution
- Avoiding lock-in to proprietary architecture methodologies and products
- Reducing time, cost and risk in the procurement of conforming products to implement an IT solution
- Realizing business benefits from IT infrastructure development faster
- Delivering greater freedom and flexibility to respond to changing business needs

By following this guide you will be able to create a Business Scenario that helps align your information technology project with the needs of your business.

It is important to remember that Business Scenarios are just a tool, not the objective. They are a part of, and enable, the larger process of architecture development. The architect should use them, but not get lost in them. The key is to stay focused. Watch out for “feature creep,” and address the most important issues that promise to return the greatest value.

More information, resources and help

More information is available, along with a number of tools, guides and other resources, at www.opengroup.org/architecture/.

About the Authors

Terence (Terry) Blevins is Vice President and CIO of The Open Group. Terry has two major roles within The Open Group. First, he works with the customer community to better understand key business-oriented issues, while driving programs to address those issues. Second, Terry oversees the internal information technology strategy, applying the same principles and techniques from The Open Group Architecture Framework that he used to help develop the concept of **Boundaryless Information Flow**.

Previously, Terry was with the NCR Corporation, as Director of Strategic Architecture. Terry chaired NCR's Architecture Council and was Co-chair of The Open Group's Architecture Program Group in 1999 and 2000. Terry has BA and MS degrees in Mathematics from Youngstown State University.

John Spencer is the Director of The Open Group's Architecture Forum, which provides a worldwide forum for IT architects in customer, solutions vendor, tool vendor, integrator, and academic and research organizations. In particular, the Architecture Forum is the home of TOGAF – The Open Group Architecture Framework – an industry consensus framework and method for developing IT architectures based on open industry standards, which is completely neutral with respect to technologies, tools and vendors, and is available from The Open Group at: www.opengroup.org/architecture/.

John has over 30 years of experience in the computer industry, including supplier, service and customer environments. Prior to joining The Open Group in 1989, John was responsible for corporate IT standards in three large, international IT customer organizations in Europe and the Middle East. Previously, he was a director of Infotech Limited, a leading UK computer training, conference and technology reporting company.

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The Open Group's Architecture Forum

Today's CEOs know that the effective management and exploitation of information technology is the key to business success. An IT architecture provides a strategic context for the evolution of information technology within the enterprise, in response to the constantly changing needs of the business environment. Business Scenarios are a tool that can be used to increase the effectiveness of technology.

An effective IT architecture also enables managed innovation within the enterprise, by enabling the right balance to be achieved between IT efficiency and business innovation, so that individual business units can innovate safely in their pursuit of competitive advantage. At the same time, the needs of the organization for an integrated IT strategy are assured, permitting the closest possible synergy across the extended enterprise.

The Architecture Forum enables all constituencies and stakeholders in IT architecture to come together to develop open methods and tools for IT architecture, at the enterprise level.

The mission of The Open Group is to drive the creation of **Boundaryless Information Flow™** achieved by:

- Working with customers to capture, understand and address current and emerging requirements, to establish policies and to share best practices;
- Working with suppliers, consortia and standards bodies to develop consensus and facilitate interoperability and to evolve and integrate open specifications and Open Source technologies;
- Offering a comprehensive set of services to enhance the operational efficiency of consortia; and
- Developing and operating the industry's premier certification service and encouraging procurement of certified products.

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Manager's Guide to Business Scenarios

A Business Scenario is a complete description of a business problem, both in business and architectural terms, which enables individual requirements to be viewed in relation to one another, in the context of the overall problem.

Without such a complete description to serve as context:

- The business value of solving the problem is unclear
- The relevance of potential solutions is unclear
- There is a danger of the implementation being based on an incomplete understanding or on requirements that do not solve the whole problem, with the result that the project falls short of expectations or, worse, fails.

Because the technique requires the involvement of business line management and other stakeholders at an early stage in the architecture project, it also gains the buy-in of key personnel to the overall project and its end-result.

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